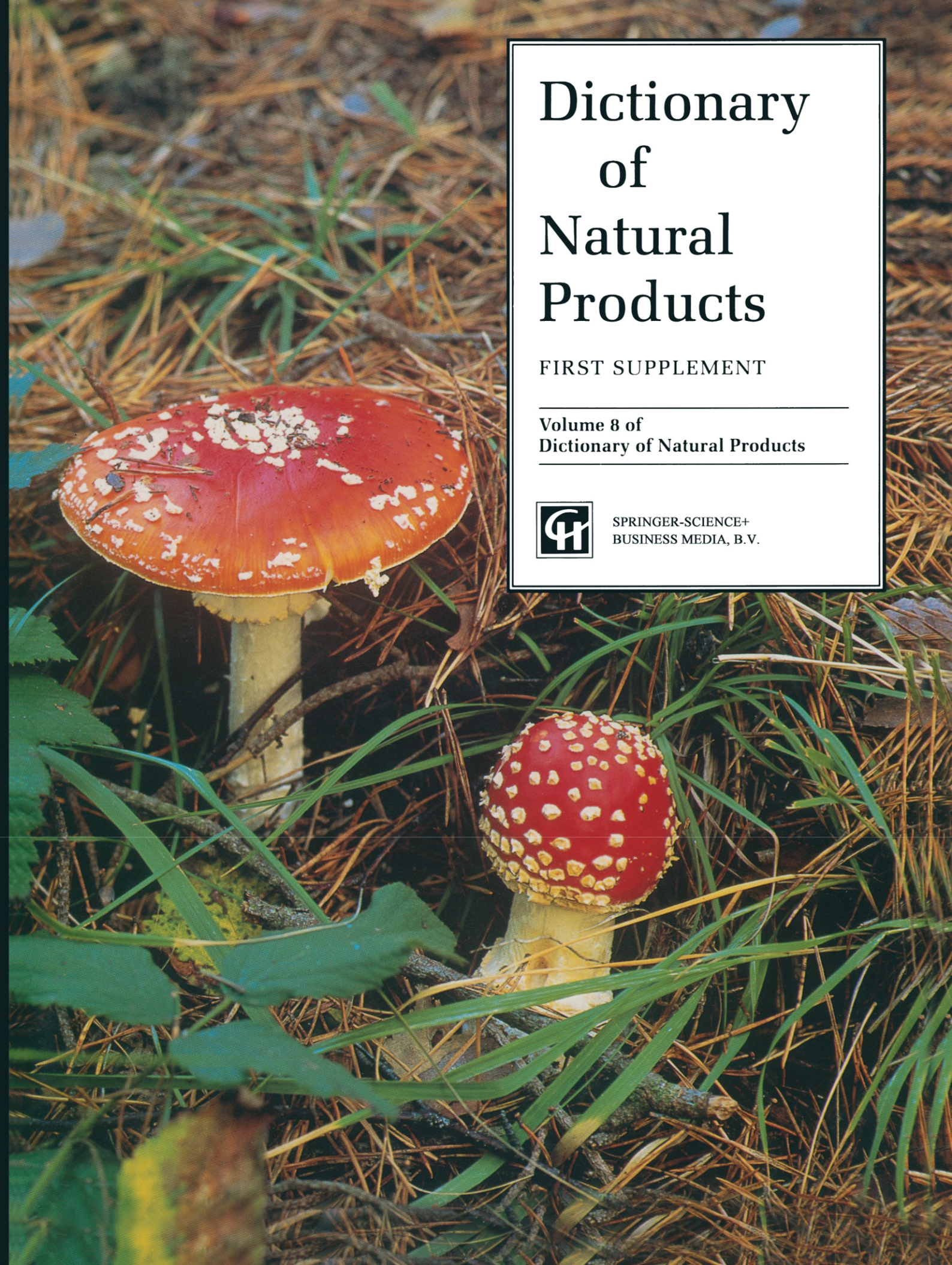

Dictionary of Natural Products

FIRST SUPPLEMENT

Volume 8 of
Dictionary of Natural Products

SPRINGER-SCIENCE+
BUSINESS MEDIA, B.V.

Dictionary of Natural Products

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VOLUME 8 OF DICTIONARY OF NATURAL PRODUCTS

SPRINGER-SCIENCE+BUSINESS MEDIA, B.V.

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The specific information in this publication on the hazardous and toxic properties of certain substances is included to alert the reader to possible dangers associated with the use of those compounds. The absence of such information should not however be taken as an indication of safety in use or misuse.

First Supplement

1. Introduction

For detailed information about how to use the *Dictionary of Natural Products* (DNP) see the Introduction in Volume 1 of the Main Work.

1. Using DNP Supplements

As in the Main Work volumes, every Entry is numbered to assist ready location. The DNP Number consists of a letter of the alphabet followed by a five-digit number. In this First Supplement the first digit is invariably 1. Cross-references within the text to Entries having numbers beginning with zero refer to Main Work Entries.

Where a Supplement Entry contains additional or corrected information referring to an Entry in the Main Work the whole Entry is reprinted, with the accompanying statement "Updated Entry replacing ...". In such cases, the new Entry contains all of the information which appeared in the former Entry, except for any which has been deliberately deleted. Therefore there is no necessity for the user to consult the Main Work or previous supplements.

2. Literature coverage

In compiling this Supplement the primary literature has been surveyed to the end of 1993. The printed supplement concentrates principally on important new natural products isolated during the period in question. A considerable number of amendments have been made during the review period to entries which have not been reprinted in the Supplement owing to space limitations. All of these can be accessed via the CD-ROM version.

3. Indexes

The indexes in the Supplement consist of Name, Molecular Formula and CAS Registry Number Index.

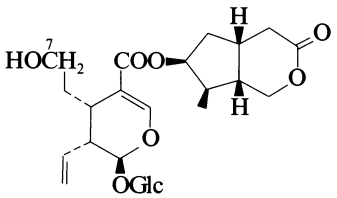
Contents

A

Abelioside B A-10001

Updated Entry replacing A-00009

[99891-73-3]



$C_{25}H_{36}O_{12}$ M 528.552

Constit. of *Abelia grandiflora*.

Penta-Ac: Cryst. (EtOH). Mp 211-213°. $[\alpha]_D^{22}$ −38° (c, 0.5 in $CHCl_3$).

7-Aldehyde: [99891-69-7]. ***Abelioside A. Laciniatoside II***

$C_{25}H_{34}O_{12}$ M 526.536

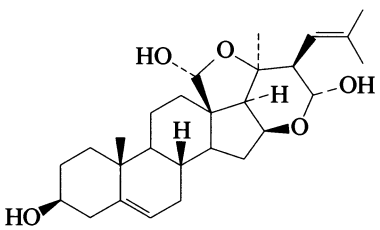
From *A. grandiflora* and *Dipsacus laciniatus*. Powder. $[\alpha]_D^{22}$ −38° (c, 1.3 in MeOH), $[\alpha]_D^{25}$ −57° (c, 0.98 in MeOH). Abelioside and Laciniatoside II assigned identical structs., not compared.

7-Aldehyde, Tetra-Ac: Cryst. (EtOH). Mp 170-172°. $[\alpha]_D^{22}$ −41° (c, 0.5 in $CHCl_3$).

Murai, F. *et al*, *Phytochemistry*, 1985, **24**, 2329.

Kocsis, A. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 1486 (*Laciniatoside II*)

24(23→22)-Abeo-16,23:18,20-diepoxycholesta-5,24-diene-3,18,23-triol A-10002



$C_{28}H_{42}O_5$ M 458.637

(3β,16β,18R,20R,22R,23R)-form

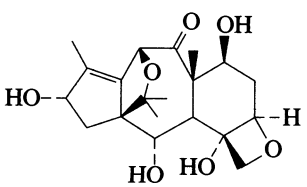
18-Me ether 3-O-[α-L-*rhamnopyranosyl*-(1→2)-β-D-*glucopyranosyl*-(1→2)-β-D-*glucopyranoside*]: [151392-07-3].

$C_{46}H_{72}O_{19}$ M 929.063

Constit. of *Ornithogalum saundersiae*. Amorph. powder. $[\alpha]_D$ −78° (MeOH).

Kuroda, M. *et al*, *Tetrahedron Lett.*, 1993, **34**, 6073 (*isol, pmr, cmr*)

11(15→1)-Abeo-5,20:10,5-diepoxy-2,4,7,13-tetrahydroxy-11-taxen-9-one A-10003



$C_{20}H_{28}O_7$ M 380.437

(2α,4α,5β,7β,10β,13α)-form

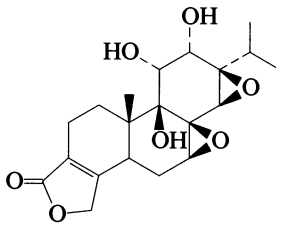
2-Benzoyl, 4-Ac: [150621-50-4].

$C_{29}H_{34}O_9$ M 526.582

Constit. of *Taxus wallichiana*. Oil. $[\alpha]_D^{25}$ −26° (c, 1 in CH_2Cl_2).

Appendino, G. *et al*, *J. Chem. Soc., Perkin Trans. 1*, 1993, 1563 (*isol, pmr, cmr*)

18(4→3)-Abeo-7,8:13,14-diepoxy-9,11,13-trihydroxy-4-abieten-18,19-olide A-10004



$C_{20}H_{26}O_7$ M 378.421

(7β,8β,9β,11α,12α,13β,14β)-form [147809-20-9] ***13,14-Epoxy-9,11,12-trihydroxytriptolide***

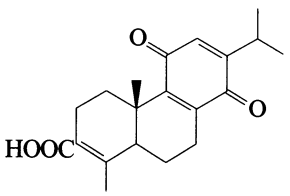
Constit. of *Tripterygium wilfordii*. Cryst. (Me_2CO). Mp 268-270°.

Zhang, C.P. *et al*, *Acta Pharm. Sin.*, 1993, **28**, 110 (*isol, pmr, cmr*)

18(4→3)-Abeo-11,14-dioxo-3,8,12-abietatrien-18-oic acid A-10005

Tryptoquinone A

[146389-40-4]

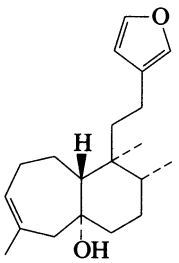


$C_{20}H_{24}O_4$ M 328.407

Constit. of *Tripterygium wilfordii*. Cryst. Mp 179-182°. $[\alpha]_D$ +296° (c, 0.14 in $CHCl_3$).

Takaishi, Y. *et al*, *Tetrahedron Lett.*, 1992, **33**, 7177 (*isol, pmr, cmr, cryst struct*)

5(4→19)-Abeo-15,16-epoxy-3,13(16),14-clerodatrien-5-ol A-10006



$C_{20}H_{30}O_2$ M 302.456

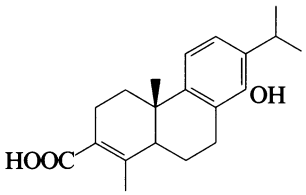
(ent-5β)-form

5,10-Dihydro-5α-hydroxy-10βH-printziane

Constit. of *Croton cortesianus*.

Kastner, U. *et al*, *Phytochemistry*, 1992, **31**, 4361 (*isol, pmr, cmr*)

18(4→3)-Abeo-14-hydroxy-3,8,11,13-abietatetraen-18-oic acid A-10007



$C_{20}H_{26}O_3$ M 314.424

Me ether: 18(4→3)-Abeo-14-methoxy-3,8,11,13-abietatetraen-18-oic acid. ***Triptoditerpenic acid B***

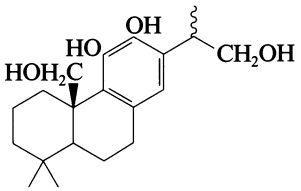
$C_{21}H_{28}O_3$ M 328.450

Constit. of *Tripterygium hypoglaucum*. Cryst. Mp 209-211°.

Zhang, L. *et al*, *Acta Pharm. Sin.*, 1993, **28**, 32 (*isol, pmr, cmr*)

8,11,13-Abietatriene-11,12,16,20-tetrol A-10008

[150065-59-1]



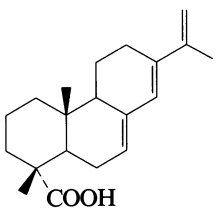
$C_{20}H_{30}O_4$ M 334.455

Constit. of *Salvia mellifera*. Amorph. solid.

Luis, J.G. *et al*, *Phytochemistry*, 1993, **33**, 635 (*isol, pmr, cmr*)

7,13,15-Abietatrien-18-oic acid A-10009

[83905-82-2]



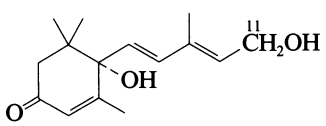
$C_{20}H_{28}O_2$ M 300.440

Constit. of *Pinus massonia*.

Cheung, H.T.A. *et al*, *Tetrahedron*, 1993, **49**, 7903 (*isol, pmr, cmr*)

Abscisic alcohol A-10010

[113472-20-1]



$C_{15}H_{22}O_3$ M 250.337

Constit. of quince (*Cydonia oblonga*) fruit.

11-O-β-D-Glucopyranoside: [145153-00-0].

$C_{21}H_{32}O_8$ M 412.479

Constit. of quince (*C. oblonga*) fruit.

Lutz, A. *et al*, *J. Agric. Food Chem.*, 1992, **40**, 116 (*isol, pmr, cmr*)

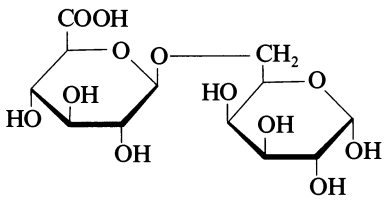
Lutz, A. *et al*, *Phytochemistry*, 1993, **32**, 57 (*isol, pmr, cmr, cd*)

Acaciabiuronic acid A-10011

Updated Entry replacing A-00104

6-O-β-D-Glucopyranuronosyl-D-galactose, 9CI, 8CI

[7264-19-9]



α-Pyranose-*form*

$C_{12}H_{20}O_{12}$ M 356.283

Probably the commonest aldobiouronic acid present as a structural unit in plant gums. Isol. from partial acid hydrolysates from the following plants; black wattle (*Acacia mollissima*), *A. senegal*, *A. pycnantha*, *A. karroo*, *A. cyanophylla*, egg plum (*Prunus domestica*), almond (*P. amygdalus*), peach (*P. persica*), *Anogeissus lattifolia* (gum ghatti), *Vigilia oroboides*, *Afraege pariculata*, *Ferula* and *Chorisia* spp. Also isol. from hydrolysates of maritime pine (*Pinus pinaster*) hemicellulose and wheat straw. Mp 118-119° (hydrate). $[\alpha]_D$ +11.6° → −8.6° (H_2O).

Ca salt: $[\alpha]_D$ +2° (H_2O).

Ba salt: $[\alpha]_D$ −3° to +2° (H_2O).

Me ester:

$C_{13}H_{22}O_{12}$ M 370.310

Mp 119°. $[\alpha]_D$ −9° (H_2O).

Hepta-Ac, Me ester:

$C_{27}H_{36}O_{19}$ M 664.570

Mp 202-203°. $[\alpha]_D$ −17.5° ($CHCl_3$).

α-Pyranose-form [52554-59-3]

$[\alpha]_D$ +2° (in H_2O).

1,2:3,4-Di-O-isopropylidene, 2',3',4'-tri-Ac, Me ester: [35906-41-3].

$C_{25}H_{36}O_{15}$ M 576.550

Mp 114-115°. $[\alpha]_D$ −65° (c, 4.5 in $CHCl_3$).

Me glycoside, hexa Me, Me ester:

$C_{20}H_{36}O_{12}$ M 468.497

$[\alpha]_D$ +42° ($CHCl_3$).

β-Pyranose-form [52554-60-6]

Me glycoside, hexa-Me, Me ester: [22854-45-1].

Mp 86-90°. $[\alpha]_D$ −35° ($CHCl_3$).

Me glycoside, hexa-Ac, Me ester:

$C_{26}H_{36}O_{18}$ M 636.560

Mp 140°. $[\alpha]_D$ −54° ($CHCl_3$).

[1693-80-7]

Hotchkiss, R.D. *et al*, *J. Biol. Chem.*, 1936, **115**, 285 (*deriv*)

Goebel, W.F. *et al*, *J. Biol. Chem.*, 1938, **124**, 207 (*isol*)

Jackson, J. *et al*, *J. Chem. Soc.*, 1940, 74 (α *Me gly*)

Aspinall, G.O. *et al*, *J. Chem. Soc.*, 1955, 1160; 1961, 3461 (*isol*)

Mukherjee, S. *et al*, *J. Am. Chem. Soc.*, 1958, **80**, 2536 (*isol*)

Jones, J.K.N. *et al*, *Can. J. Chem.*, 1961, **39**, 162 (*isol*)

Bailey, R.W., *Oligosaccharides*, Pergamon Press, London, 1965, **4**, 134 (*occur*)

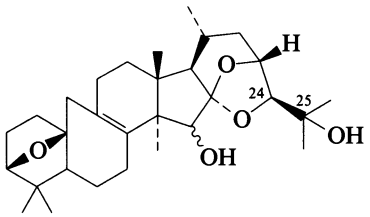
Dee, K.K. *et al*, *Carbohydr. Res.*, 1967, **4**, 177.

Peciar, C. *et al*, *Chem. Zvesti*, 1974, **28**, 83 (*config, pmr*)

DiFabio, J.L. *et al*, *Carbohydr. Res.*, 1982, **99**, 41 (*isol*)

Acerinol A-10012

[19902-53-5]



$C_{30}H_{46}O_5$ M 486.690
Constit. of *Cimicifuga acerina.*

25-Ac: [59665-60-0]. ***25-Acetylacerinol***
$C_{32}H_{48}O_6$ M 528.728
Constit. of *C. acerina.*

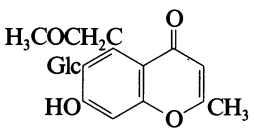
25-Me ether: [59665-58-6]. ***25-Methylacerinol***
$C_{31}H_{48}O_5$ M 500.717
Constit. of *C. acerina.*

24-Epimer: [151061-95-9]. ***24-Epiacerinol***
$C_{30}H_{46}O_5$ M 486.690
Constit. of *C. heracleifolia.* Needles. Mp 230-231°. $[\alpha]_D$ +59.23° (c, 0.27 in $CHCl_3$).

Takemoto, T. *et al, CA,* 1969, **69**, 30278k (*isol*)
Kusano, G. *et al, CA,* 1976, **85**, 5907r (*struct*)
Li, J.X. *et al, Chem. Pharm. Bull.,* 1993, **41**, 832 (*24-Epiacerinol*)

5-Acetonyl-6-glucosyl-7-hydroxy-2-methyl-4*H*-1-benzopyran-4-one A-10013

[84375-47-3]



$C_{19}H_{22}O_9$ M 394.377
Isol. from *Cassia multijuga* and *C. spectabilis.* Cryst. (EtOAc/pet. ether). Mp 190° dec.

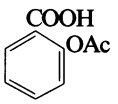
2″-O-β-D-Glucopyranoside: [94443-29-5].
$C_{25}H_{32}O_{14}$ M 556.519
Isol. from the seeds of *C. spectabilis.* Mp 290°.

Singh, J., *Phytochemistry,* 1982, **21**, 1177 (*isol*)
Singh, M. *et al, Z. Naturforsch., B,* 1984, **39**, 1425 (*isol, deriv*)

2-Acetoxybenzoic acid A-10014

2-Acetyloxybenzoic acid, 9CI. Salicylic acid acetate, 8CI. Acetylsalicylic acid. Aspirin, USAN

[50-78-2]



$C_9H_8O_4$ M 180.160
Constit. of *Glycyrrhiza glabra* var. *typica* roots. Produced industrially by acetylation of 2-Hydroxybenzoic acid, H-01254. Analgesic, antipyretic and antiinflammatory agent. Used as soln. in 10% ammonia for photometric detn. of Mn (λ_{max} 385 nm; in the presence of H_2O_2). Cryst. Mp 135° (rapid heat), Fp 118°. pK_a 3.38 (25°, 1.0*M* KCl). Ca salt used in combination with urea as Carbaspirin calcium, USAN.

▷ Mod. toxic. Exp. teratogen. VO0700000.

Me ester: [580-02-9].
$C_{10}H_{10}O_4$ M 194.187
Cryst. (pet. ether). Mp 49°.

Et ester: [529-68-0].
$C_{11}H_{12}O_4$ M 208.213
Liq. Bp 289°, Bp 272°.

Propyl ester: [60310-03-4].
$C_{12}H_{14}O_4$ M 222.240
Light yellow liq. Bp 289°, Bp_{10} 162-164°.

Butyl ester: [52602-16-1].
$C_{13}H_{16}O_4$ M 236.267
Liq. Bp_1 128-130°.

Ph ester: [134-55-4]. *Acetylsalol. Phennin. Spiroform. Vesipyrin*
$C_{15}H_{12}O_4$ M 256.257
Analgesic, antipyretic, and antibacterial agent. Cryst. (EtOH). Mp 97°. Bp_{11} 197-198°.

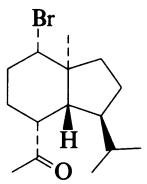
[5749-67-7]

Aldrich Library of Infrared Spectra, 3rd edn., **1**, 315D (*ir*)
Ciusa, R. *et al, Chem. Zentralbl.,* 1943, **2**, 615 (*synth*)
Henriques, H.P. *et al, Mikrochim. Acta,* 1971, 807 (*detn, Mn*)
Scott, K., *J. Magn. Reson.,* 1972, **6**, 55 (*nmr*)
Ali, S.L., *Pharm. Ztg.,* 1976, **121**, 621 (*esters, synth, ir, pmr*)
Florey, K., *Anal. Profiles Drug Subst.,* 1979, **8**, 1 (*rev*)
Mitscher, L.A. *et al, J. Nat. Prod.* (*Lloydia*), 1980, **43**, 259 (*occur*)
Barnett, H.J.M. *et al, Acetylsalicylic Acid,* Raven Press, N.Y., 1982 (*book*)
Martindale, The Extra Pharmacopoeia, 28th/29th Ed., Pharmaceutical Press, London, 1982/1989, 2601.
Rainsford, K.D., *Aspirin and the Salicylates,* Butterworths, London, 1984 (*book*)
Collier, H.O.J. *et al, Discoveries Pharmacol.,* 1984, **2**, 555 (*rev, pharmacol*)
Hallam, J. *et al, Int. Congr. Symp. Ser. R. Soc. Med.,* 1984 (*rev*)
Kim, Y. *et al, Chem. Pharm. Bull.,* 1985, **33**, 2641 (*cryst struct*)
Chang, C.J. *et al, Magn. Reson. Chem.,* 1986, **24**, 768 (*cmr*)
Pelz, J., *Pharmazie,* 1986, **41**, 733 (*history*)
Negwer, M., *Organic-Chemical Drugs and their Synonyms,* 6th Ed., Akademie-Verlag, Berlin, 1987, 1120 (*synonyms*)
Bundgaard, H. *et al, J. Med. Chem.,* 1989, **32**, 727 (*esters, synth, props*)
Vane, J.R. *et al, Aspirin and the Salicylates,* Ed., Chapman and Hall, 1992 (*book*)
Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials,* 8th Ed., Van Nostrand-Reinhold, 1992, ADA725.

7-Acetyl-4-bromo-1-isopropyl-3*a*-methylindane A-10015

1-(7-Bromo-7a-methyl-3-(1-methylethyl)octahydro-1H-inden-4-yl)ethanone

[149492-40-0]

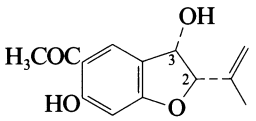


$C_{15}H_{25}BrO$ M 301.266
Constit. of *Laurencia marianensis.* Cryst. Mp 49-53°. $[\alpha]_D$ −13.0° (c, 0.1 in $CHCl_3$).

de Nys, R. *et al, Aust. J. Chem.,* 1993, **46**, 933 (*isol, pmr, cmr*)

5-Acetyl-2,3-dihydro-3,6-dihydroxy-2-isopropenylbenzofuran A-10016

1-[2,3-Dihydro-3,6-dihydroxy-2-(1-methylethenyl)-5-benzofuranyl]ethanone, 9CI



$C_{13}H_{14}O_4$ M 248.235

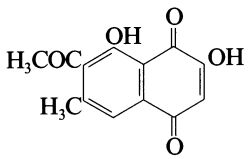
(2S,3S)-form [143381-65-1]

Constit. of *Senecio desfontainei.*

Hussein, N.S. *et al*, *Pharmazie*, 1992, **47**, 468 (*isol*)

7-Acetyl-2,8-dihydroxy-6-methyl-1,4-naphthoquinone A-10017

[80597-54-2]



$C_{13}H_{10}O_5$ M 246.219

Yellow solid. Mp 206-209° dec.

2-Me ether: [64756-97-4]. *7-Acetyl-8-hydroxy-2-methoxy-6-methyl-1,4-naphthoquinone.* ***Orientalone***

$C_{14}H_{12}O_5$ M 260.246

Constit. of *Prunus cerasoides, Rumex nepalensis* and *R. orientalis.* Yellow-orange cryst. (C_6H_6/petrol). Mp 191-192°.

8-Me ether: [95455-42-8]. *7-Acetyl-2-hydroxy-8-methoxy-6-methyl-1,4-naphthoquinone*

$C_{14}H_{12}O_5$ M 260.246

Yellow solid. Mp 173-177° dec.

Di-Me ether: [80597-53-1]. *7-Acetyl-2,8-dimethoxy-6-methyl-1,4-naphthoquinone*

$C_{15}H_{14}O_5$ M 274.273

Yellow solid. Mp 182-184°.

Sharma, M. *et al*, *Indian J. Chem., Sect. B*, 1977, **15**, 544; 1978, **16**, 289 (*Orientalone*)

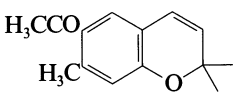
Jung, M.E. *et al*, *Tetrahedron*, 1984, **40**, 4751 (*synth, pmr, cmr*)

Garg, M. *et al*, *Proc. Natl. Acad. Sci., India, Sect. A*, 1985, **55**, 95 (*Orientalone*)

6-Acetyl-2,2,7-trimethyl-2*H*-1-benzopyran A-10018

1-(2,2,7-Trimethyl-2H-1-benzopyran-6-yl)ethanone, 9Cl. ***Gleucolin***

[76470-14-9]

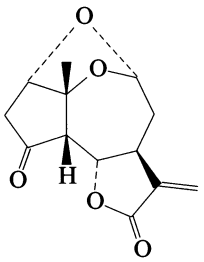


$C_{14}H_{16}O_2$ M 216.279

Constit. of the stems and leaves of *Eupatorium glechonophyllum.*

Becerra, J. *et al*, *Rev. Latinoam. Quim.*, 1980, **11**, 148 (*isol*)

Achilleppolide A-10019



$C_{13}H_{14}O_5$ M 250.251

Constit. of *Achillea pseudoaleppica.* Oil. $[\alpha]_D^{25}$ +2° (c, 0.3 in MeOH).

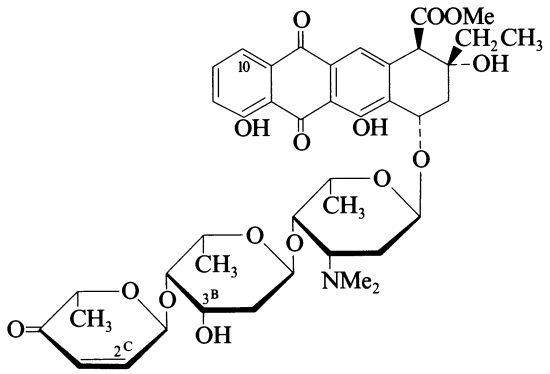
Appendino, G. *et al*, *Phytochemistry*, 1993, **34**, 1171 (*isol, pmr, cmr*)

Aclacinomycin Y A-10020

Updated Entry replacing A-00297

MA 144Y. Antibiotic MA 144Y

[66789-14-8]



$C_{42}H_{51}NO_{15}$ M 809.863

Anthracycline antibiotic. Isol. from *Streptomyces galilaeus.* Antitumour antibiotic. Mp 153-155°. $[\alpha]_D^{22}$ +66° (c, 1 in $CHCl_3$).

▷ QI9279700.

10-Hydroxy: [88477-80-9]. ***Pyrraculomycin.*** *10-Hydroxyaclacinomycin Y. Cinerubin Y*†

$C_{42}H_{51}NO_{16}$ M 825.862

Isol. from *S.* sp. JA 6705. Active against gram-positive bacteria and mycobacteria. Dark red cryst. (C_6H_6/MeOH). Mp 160-167°.

10-Hydroxy, 3^B-deoxy: ***Cinerubin R***

$C_{42}H_{51}NO_{15}$ M 809.863

Prod. by *Streptomyces eurythermus.* Active against gram-positive bacteria. Mp 158-162°.

10-Hydroxy, 2^C,3^C-dihydro: ***Spartanamicin B***

$C_{42}H_{53}NO_{16}$ M 827.878

Prod. by a *Micromonospora* sp. Antifungal agent. Orange-red solid.

Yoshimoto, A. *et al*, *J. Antibiot.*, 1979, **32**, 472 (*isol*)

Oki, T. *et al*, *J. Antibiot.*, 1979, **32**, 791, 801 (*isol, uv, ir, pmr, cmr*)

Hoshino, T. *et al*, *J. Antibiot.*, 1983, **36**, 1458 (*synth*)

Tresselt, D. *et al*, *Z. Chem.*, 1987, **27**, 444 (*deriv*)

Nakata, M. *et al*, *J. Antibiot.*, 1992, **45**, 1599 (*Cinerubin R*)

Nair, M.G. *et al*, *J. Antibiot.*, 1992, **45**, 1738 (*Spartanamicin B*)

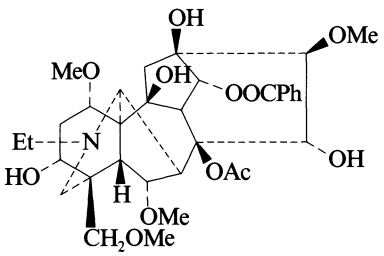
Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th Ed., Van Nostrand-Reinhold, 1992, ADG425.

Aconifine A-10021

Updated Entry replacing A-00302

Nagarine†

[41849-35-8]



$C_{34}H_{47}NO_{12}$ M 661.745

Alkaloid from tubers of *Aconitum karakolicum* and roots of *A. nagarum* var. *lasiandrum* (Ranunculaceae). Mp 198-200°. $[\alpha]_D^{19}$ +30.6° (c, 1.10 in $CHCl_3$).

B,HBr: Mp 209°.

Tetra-Ac: Mp 227°.

N-*De-Et*, N-*Me:* [76918-93-9]. ***Beiwutine***

$C_{33}H_{45}NO_{12}$ M 647.718

Alkaloid from *A. kusnezoffii* (Ranunculaceae). Mp 196-198°.

N-*De-Et*, N-*Me*, O^3-*Ac:* ***3-O-Acetylbeiwutine***

$C_{35}H_{47}NO_{13}$ M 689.755

Alkaloid from roots of *A. liaotungeuse* (Ranunculaceae). Cryst. Mp 187°. $[\alpha]_D$ +25.8° (c, 0.95 in EtOH).

Sultankhodzhaev, M.N. *et al*, *Khim. Prir. Soedin.*, 1973, **9**, 127; 1980, **16**, 665; *Chem. Nat. Compd.* (*Engl. Transl.*), 129, 481 (*Aconifine*)

Wang, Y.-G. *et al*, *Yaoxue Xuebao*, 1980, **15**, 526; *CA*, **94**, 117772k (*Beiwutine*)

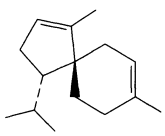
Wang, H. *et al*, *Huaxue Xuebao*, 1981, **39**, 869; *CA*, **97**, 107080f (*Aconifine*)

Zhu, Y. *et al*, *Heterocycles*, 1982, **17**, 607 (*struct, rev*)

Zhu, D.-Y. *et al*, *Phytochemistry*, 1993, **32**, 767 (*3-O-Acetylbeiwutine*)

3,9-Acoradiene A-10022

[55781-50-5]



$C_{15}H_{24}$ M 204.355

Constit. of Vetiver oil (*Vetivera zizanoides*). Oil.

[35944-18-4, 38229-83-3, 59573-57-8]

Demole, E. *et al*, *Helv. Chim. Acta*, 1971, **54**, 1845 (*synth*)

Kaiser, R. *et al*, *Tetrahedron Lett.*, 1972, 2009, 2013 (*isol, struct*)

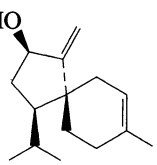
Zalkow, L.H. *et al*, *Tetrahedron Lett.*, 1975, 75 (*abs config*)

Chen, Y.-J. *et al*, *Tetrahedron*, 1993, **49**, 10263 (*synth*)

3,10(14)-Acoradien-9-ol A-10023

Rosaacorenol

[138867-22-8]



$C_{15}H_{24}O$ M 220.354

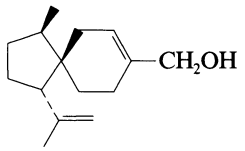
Constit. of *Rosa rugosa*. Syrup.

Hashidoko, Y. *et al*, *Phytochemistry*, 1991, **30**, 3729; 1993, **32**, 387 (*isol, synth, pmr, cmr*)

3,11-Acoradien-15-ol A-10024

β-Acoradienol

[149496-35-5]



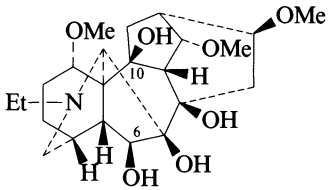
$C_{15}H_{24}O$ M 220.354

Constit. of *Neocallitropsis pancheri*. Oil. $[\alpha]_D^{25}$ +3° (c, 0.37 in $CHCl_3$).

Raharivelomanana, P. *et al*, *Phytochemistry*, 1993, **33**, 235 (*isol, pmr, cmr*)

Acoseptrine A-10025

[146028-66-2]



$C_{23}H_{37}NO_7$ M 439.548

Alkaloid from roots of *Aconitum septentrionale* (Ranunculaceae). Cryst. (Me_2CO/hexane). Mp 105-107°. $[\alpha]_D$ +19.6° (c, 0.245 in $CHCl_3$).

10-Deoxy: [144049-71-8]. ***Acosepticine***

$C_{23}H_{37}NO_6$ M 423.548

Alkaloid from roots of *A. septentrionale* (Ranunculaceae). Amorph. solid. $[\alpha]_D$ +23.4° (c, 0.385 in $CHCl_3$).

10-Deoxy, O^6-*Ac:* [144074-85-1]. ***6-O-Acetylacosepticine***

$C_{25}H_{39}NO_7$ M 465.586

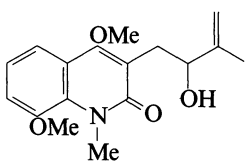
Alkaloid from roots of *A. septentrionale* (Ranunculaceae). Cryst. (Et_2O). Mp 168.5-170.5°. $[\alpha]_D$ −1.2° (c, 0.2 in $CHCl_3$).

Sayed, H.M. *et al*, *J. Nat. Prod.* (*Lloydia*), 1992, **55**, 1595 (*isol, ir, pmr, cmr, ms, struct*)

Ross, S.A. *et al*, *Tetrahedron*, 1992, **48**, 1183 (*6-O-Acetylacosepticine*)

Acutifolin A-10026

[145237-07-6]



$C_{17}H_{21}NO_4$ M 303.357

Alkaloid from the leaves of *Zanthoxylum acutifolium* (Rutaceae). Viscous oil. $[\alpha]_D$ +40° (c, 0.00025 in $CHCl_3$).

O-*Hexadecanoyl:* [145204-98-4]. *Acutifolin palmitate*

$C_{33}H_{51}NO_5$ M 541.770

Alkaloid from leaves of *Z. acutifolium* (Rutaceae). Viscous oil. $[\alpha]_D$ +15° (c, 0.00066 in $CHCl_3$).

N-*De-Me:* [145237-08-7]. ***Acutifolidin***

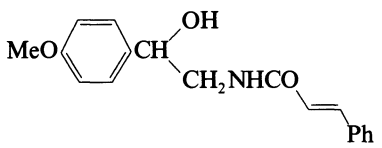
$C_{16}H_{19}NO_4$ M 289.330
Alkaloid from leaves of *Z. acutifolium* (Rutaceae). Amorph. solid. Mp 121-123°. $[\alpha]_D$ +18.6° (c, 0.00053 in $CHCl_3$).

Me ether: [145204-97-3]. **O-*Methylacutifolin***
$C_{18}H_{23}NO_4$ M 317.384
Alkaloid from leaves of *Z. acutifolium* (Rutaceae). Viscous oil. $[\alpha]_D$ −6.4° (c, 0.00156 in $CHCl_3$).

Arruda, M.S.P. *et al*, *Phytochemistry*, 1992, **31**, 3617 (*isol, uv, ir, pmr, cmr, ms, struct*)

Aegeline A-10027

Updated Entry replacing A-00488
N-[*2-Hydroxy-2-(4-methoxyphenyl)ethyl*]-*3-phenyl-2-propenamide*, *9CI. Egeline*, *8CI.* N-*β-Hydroxy-β*-p-*methoxyphenethylcinnamamide.* N-*Cinnamoyl-2-hydroxy-2-(4-methoxyphenyl)ethylamine. Cinnamic acid 2-hydroxy-2-*(p-*methoxyphenyl)ethylamide*
[456-12-2]



$C_{18}H_{19}NO_3$ M 297.353
Originally assigned the formula $C_{18}H_{18}O_4$.

(+)-***form*** [15298-36-9]
Synthetic. Cryst. (EtOH). Mp 196-197°. $[\alpha]_D^{22}$ +36.0° (c, 0.4 in $CHCl_3$), $[\alpha]_D^{21}$ −48.1° (c, 0.5 in EtOH).

(−)-***form*** [15298-37-0]
Synthetic. Cryst. (EtOH). Mp 196-197°. $[\alpha]_D$ −35.1° ($CHCl_3$), $[\alpha]_D$ +47.5° (c, 0.5 in EtOH).

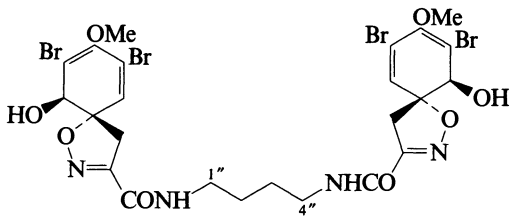
(±)-***form*** [37791-13-2]
Alkaloid from the leaves of *Aegle marmelos*, *Zanthoxylum coriaceum* and *Z. ocumarense* (Rutaceae). Cryst. (EtOH/EtOAc). Mp 176° (173-175°).

Ac: Plates (EtOAc). Mp 124°.
Dihydro: Plates (EtOH/EtOAc). Mp 140°.
Me ether: [70546-93-9]. N-[*2-Methoxy-2-(4-methoxyphenyl) ethyl*]*cinnamide.* Aegle marmelos *Alkaloid D*
$C_{19}H_{21}NO_3$ M 311.380
Isol. from *A. marmelos*. Cryst. (C_6H_6/hexane). Mp 135° Artifact.
Et ether: [70546-94-0]. N-[*2-Ethoxy-2-(4-methoxyphenyl) ethyl*]*cinnamide.* Aegle marmelos *Alkaloid B*
$C_{20}H_{23}NO_3$ M 325.407
Isol. from *A. marmelos*. Cryst. (C_6H_6/hexane). Mp 99-100°. Artifact.

Chatterjee, A. *et al*, *J. Indian Chem. Soc.*, 1952, **29**, 425 (*isol*)
Chakravarti, R.N. *et al*, *Chem. Ind. (London)*, 1955, 1632 (*struct*)
Chatterjee, A. *et al*, *J. Org. Chem.*, 1959, **24**, 687 (*isol, uv, ir, struct, synth*)
Albónico, S.M. *et al*, *J. Chem. Soc. C*, 1967, 1327 (*synth*)
Della Casa de Marcano, D. *et al*, *Phytochemistry*, 1972, **11**, 1531 (*isol*)
Manandhar, M.D. *et al*, *Phytochemistry*, 1978, **17**, 1814 (*derivs*)
Patra, A. *et al*, *Indian J. Chem., Sect. B*, 1979, **17**, 385 (*isol, uv, ir*)
Swinehart, J. *et al*, *Phytochemistry*, 1980, **19**, 1219 (*isol*)
Patra, A. *et al*, *Org. Magn. Reson.*, 1981, **16**, 65 (*cmr*)
Sharma, B.R. *et al*, *Phytochemistry*, 1981, **20**, 2606 (*isol*)
Somanathan, R. *et al*, *Synth. Commun.*, 1983, **13**, 273 (*synth, ir, ms, pmr, cmr*)

Aerothionin A-10028

Updated Entry replacing A-00501
[28714-26-3]



$C_{24}H_{26}Br_4N_4O_8$ M 818.107
Metab. from the sponges *Aplysina aerophoba* (*Verongia aerophoba*), *A. fistularis* and *A. thiona*. Plates (Me_2CO/C_6H_6). Mp 134-137° dec. $[\alpha]_D$ +252° (Me_2CO).

Di-Ac: Needles (Me_2CO). Mp 206-208°. $[\alpha]_D$ +236° ($CHCl_3$).

2″-Hydroxy: ***11-Hydroxyaerothionin***
$C_{24}H_{26}Br_4N_4O_9$ M 834.107
Metab. from the verongid sponge *Pseudoceratina durissima*. Glass. $[\alpha]_D$ +189° (c, 0.15 in MeOH).

2″,3″-Dihydroxy: [122759-72-2]. ***Dihydroxyaerothionin***
$C_{24}H_{26}Br_4N_4O_{10}$ M 850.106
Metab. of *Verongula rigida*. Powder. Mp 162-164°. $[\alpha]_D^{25}$ −64.2° (c, 0.1 in MeOH).

2″-Oxo: ***11-Oxoaerothionin***
$C_{24}H_{24}Br_4N_4O_9$ M 832.091
Metab. from the Caribbean sponge *Aplysina lacunosa*. Exhibits pronounced and selective antitumour activity against human colon (HCT116) cell line. Powder. Mp 174.6-176.6° dec. $[\alpha]_D^{25}$ +181.15° (c, 2.17 in DMSO).

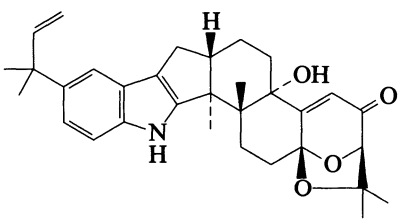
Homologue: [34232-66-1]. ***Homoaerothionin***
$C_{25}H_{28}Br_4N_4O_8$ M 832.134
Constit. of the sponge *A. aerophoba*. Amorph. solid. Has a C_5 bridging chain instead of C_4.

Homologue, di-Ac: [35036-48-7].
Mp 166-167°. $[\alpha]_D$ +191.5° ($CHCl_3$).

Fattorusso, E. *et al*, *J. Chem. Soc., Chem. Commun.*, 1970, 752 (*uv, ir, pmr, struct*)
Fattorusso, E. *et al*, *Gazz. Chim. Ital.*, 1971, **101**, 61 (*Homoaerothionin*)
Moody, K. *et al*, *J. Chem. Soc., Perkin Trans. 1*, 1972, 18 (*isol, uv, ir, pmr, struct*)
Forrester, A.R. *et al*, *Justus Liebigs Ann. Chem.*, 1978, 66 (*synth*)
McMillan, J.A. *et al*, *Tetrahedron Lett.*, 1981, **22**, 39 (*cryst struct, uv, pmr, cd, abs config*)
Nishiyama, S. *et al*, *Bull. Chem. Soc. Jpn.*, 1985, **58**, 3453 (*synth*)
Gunasekera, M. *et al*, *J. Nat. Prod. (Lloydia)*, 1989, **52**, 753 (*Dihydroxyaerothionin*)
Kernan, M.R. *et al*, *J. Nat. Prod. (Lloydia)*, 1990, **53**, 615 (*11-Hydroxyaerothionin*)
Acosta, A.L. *et al*, *J. Nat. Prod. (Lloydia)*, 1992, **55**, 1007 (*11-Oxoaerothionin*)

β-Aflatrem A-10029

[144446-23-1]



$C_{32}H_{39}NO_4$ M 501.664

Metab. from the sclerotia of *Aspergillus flavus*. Also present in extracts of *A. parasiticus* and *A. subolivaceus*. Exhibits anti-insect acitivity. Yellow cryst. Mp 188-190°. $[\alpha]_D$ +77.9° (c, 0.011 in $CHCl_3$).

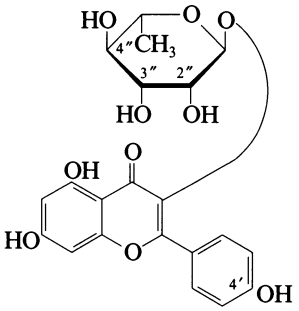
TePaske, M.R. *et al*, *J. Nat. Prod.* (*Lloydia*), 1992, **55**, 1080 (*isol, uv, pmr, cmr, ms, struct*)

Afzelin A-10030

Updated Entry replacing A-00540

3-O-α-L-Rhamnopyranosyloxy-4',5,7-trihydroxyflavone. Kaempferol 3-α-L-rhamnoside. Afzeloside. Kaempferin

[482-39-3]



$C_{21}H_{20}O_{10}$ M 432.383

Isol. from *Afzelia* sp. heartwood and many other plant spp. Yellow prisms + $1\frac{1}{2}H_2O$ (EtOH aq.). Mp 172-174°.

4''-O-β-D-Glucopyranoside: [52657-01-9]. ***Multiflorin B***
$C_{27}H_{30}O_{15}$ M 594.525
Isol. from *Rosa multiflora, Prunus persica* and *P. japonica.*

2'' or 3''-O-Ac, 4''-O-β-D-glucopyranoside: [61358-52-9]. ***Multiflorin A***
$C_{29}H_{32}O_{16}$ M 636.562
Isol. from *R. multiflora* and *P. persica.*

O''-β-D-Xylopyranoside:
$C_{26}H_{28}O_{14}$ M 564.499
Isol. from *Woodsia polysticoides.*

7-O-α-L-Rhamnopyranoside: [482-38-2]. ***Kaempferitrin.*** *Kaempferol 3,7-dirhamnoside. Lespedin*
$C_{27}H_{30}O_{14}$ M 578.526
Isol. from *Indigofera arrecta, Lespedeza cyrtobotrya* and many other plant spp. Needles + $4H_2O$. Mp 202-203° (185-186°).
▷ DJ2977500.

O''-Sulfate: [62794-01-8].
$C_{21}H_{20}O_{13}S$ M 512.447
Isol. from *Davidsonia pruriens.*

7-O-α-L-Arabinopyranoside: [71801-95-1].
$C_{26}H_{28}O_{14}$ M 564.499
Isol. from *Asplenium trichomanes.*

2''-Ac: [135618-15-4]. ***2''-O-Acetylafzelin***
$C_{23}H_{22}O_{11}$ M 474.420
Constit. of *Zingiber zerumbet.* Yellow amorph. solid. $[\alpha]_D^{20}$ −93° (c, 1 in Me_2CO).

3''-Ac: [135618-16-5]. ***3''-O-Acetylafzelin***
$C_{23}H_{22}O_{11}$ M 474.420
Constit. of *Z. zerumbet.* Yellow powder. Mp 117°. $[\alpha]_D^{20}$ −126.0° (c, 1 in Me_2CO).

4''-Ac: [135618-17-6]. ***4''-O-Acetylafzelin***
$C_{23}H_{22}O_{11}$ M 474.420
Constit. of *Z. zerumbet.* Yellow powder. Mp 199-201°. $[\alpha]_D^{14}$ −119.0° (c, 1 in MeOH).

2'',4''-Di-Ac: [133882-73-2]. ***2'',4''-Diacetylafzelin***
$C_{25}H_{24}O_{12}$ M 516.457
Isol. from *Z. zerumbet.* Pale yellow amorph. solid. Mp 111°. $[\alpha]_D^{18}$ −95.0° (c, 1.0 in Me_2CO).

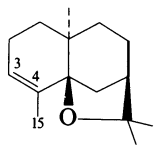
3'',4''-Di-Ac: [77307-50-7]. ***3'',4''-Diacetylafzelin***
$C_{25}H_{24}O_{12}$ M 516.457
Isol. from *Z. zerumbet.* Pale yellow amorph. solid. Mp 154°. $[\alpha]_D^{18}$ −125.4° (c, 0.7 in Me_2CO).

King, F.E. *et al*, *J. Chem. Soc.*, 1950, 168 (*isol*)
Vermes, B. *et al*, *Phytochemistry*, 1976, **15**, 1320 (*synth*)
Takagi, S. *et al*, *Yakugaku Zasshi*, 1976, **96**, 1217; 1977, **97**, 109; 1979, **99**, 439 (*Multiflorin*)
Wilkins, C.K. *et al*, *Phytochemistry*, 1977, **16**, 144 (*sulfate*)
Yamasaki, K. *et al*, *Tetrahedron Lett.*, 1977, 1231 (*cmr, Multiflorin*)
Hiraoka, A. *et al*, *Biochem. Syst. Ecol.*, 1978, **6**, 171 (*O''-xyloside*)
Imperato, F., *Experientia*, 1979, **35**, 1134 (*7-arabinoside*)
Itokawa, H. *et al*, *Chem. Lett.*, 1982, 49 (*ms*)
Zapesochnaya, G.G., *Khim. Prir. Soedin.*, 1982, **18**, 695; *Chem. Nat. Compd.* (*Engl. Transl.*), 658 (*pmr*)
Nakatani, N. *et al*, *Agric. Biol. Chem.*, 1991, **55**, 455 (*diacetates*)
Masuda, T. *et al*, *Phytochemistry*, 1991, **30**, 2391 (*acetates*)

α-Agarofuran A-10031

Updated Entry replacing A-00544

[5956-12-7]



$C_{15}H_{24}O$ M 220.354

Constit. of Agar wood oil (from fungus infected *Aquilaria agallocha*). Oil. Bp_6 134°. $[\alpha]_D$ +37.1° (c, 6.1 in $CHCl_3$).

3α,4α-Epoxide: [73465-83-5].
$C_{15}H_{24}O_2$ M 236.353
Constit. of *Alpinia japonica.* Oil. $[\alpha]_D^{25}$ −20.8° (c, 0.4 in EtOH).

3β,4β-Epoxide: [60064-95-1].
$C_{15}H_{24}O_2$ M 236.353
Constit. of *A. japonica.* Needles. Mp 90-91°. $[\alpha]_D$ −48.2° (c, 0.36 in $CHCl_3$).

3,4β-Dihydro: [5956-09-2]. ***Dihydroagarofuran***
$C_{15}H_{26}O$ M 222.370
Constit. of *A. japonica* and *Ferula* spp. Oil. $Bp_{0.8}$ 82°. $[\alpha]_D$ −79.4° (c, 0.75 in $CHCl_3$).

3,4-Dihydro, 4α-hydroxy: [15052-76-3]. ***4α-Hydroxydihydroagarofuran***
$C_{15}H_{26}O_2$ M 238.369
Constit. of *A. japonica.* Needles (hexane). Mp 128-129.5°. $[\alpha]_D$ −71.6° (c, 0.16 in EtOH).

$\Delta^{4,15}$-Isomer: [6040-08-0]. ***β-Agarofuran***
$C_{15}H_{24}O$ M 220.354
Constit. of Agar wood oil (*A. agallocha*). Oil. Bp_8 130°. $[\alpha]_D^{30}$ −127.1° (c, 8.3 in $CHCl_3$). n_D^{28} 1.4973.

3,4β-Dihydro, 10-epimer: **cis-*Dihydroagarofuran***
$C_{15}H_{26}O$ M 222.370
Constit. of a *Prostanthera* sp. Waxy solid. Mp 20-22°. $[\alpha]_D^{25}$ −87.6° (neat).

[20053-66-1]

Maheshwari, M.L. *et al*, *Tetrahedron*, 1963, **19**, 1077 (*isol*)
Barrett, H.C. *et al*, *J. Am. Chem. Soc.*, 1967, **89**, 5665 (*struct*)
Marshall, J.A. *et al*, *J. Org. Chem.*, 1968, **33**, 435 (*synth*)
Huffmann, J.W. *et al*, *J. Org. Chem.*, 1976, **41**, 3705 (*synth*)
Thomas, A.F., *Tetrahedron Lett.*, 1976, 1717 (*isol*)
Büchi, G. *et al*, *J. Org. Chem.*, 1979, **44**, 54 (*synth*)
Itokawa, H. *et al*, *Chem. Pharm. Bull.*, 1980, **28**, 681; 1985, **33**, 1148 (*isol, derivs, cryst struct*)
Huffman, J.W. *et al*, *J. Org. Chem.*, 1982, **47**, 3254 (*synth*)
Southwell, I.A. *et al*, *Phytochemistry*, 1993, **33**, 857 (*cis-Dihydroagarofuran*)

ω-Agatoxin A-10032

A series of peptides. ω-Agatoxin IA is a 66-aminoacid polypeptide. Isol. from the venom of the funnel-web spider *Agelenopsis aperta*. Calcium channel antagonists.

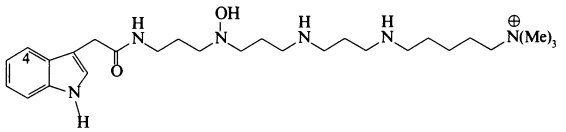
[121889-77-8, 124758-89-0, 124860-33-9, 124860-34-0, 137094-79-2, 137094-80-5, 137094-81-6, 137094-82-7]

Adams, M.E. *et al*, *J. Biol. Chem.*, 1990, **265**, 861 (*isol*)

α-Agatoxin AG 488 A-10033

Agel 489a

[129724-53-4]



$C_{27}H_{49}N_6O_2$ M 489.723

Struct. revised in 1992. Isol. from the venom of the funnel-web spider *Agelenopsis aperta*.

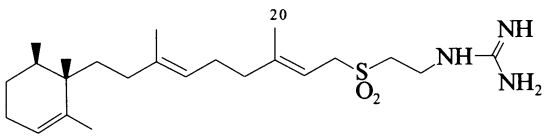
4-Hydroxy: [129724-54-5]. *α-Agatoxin AG 504. Agel 505a*
$C_{27}H_{49}N_6O_3$ M 505.722
Isol. from the venom of *A. aperta*.

Quistad, G.B. *et al*, *Biochem. Biophys. Res. Commun.*, 1990, **169**, 51 (*isol*)

Jasys, V.J. *et al*, *J. Org. Chem.*, 1992, **57**, 1814 (*isol, synth*)

Agelasidine C A-10034

Updated Entry replacing A-00556



(+)-*form*

$C_{23}H_{41}N_3O_2S$ M 423.662

(+)-***form*** [96617-52-6]
Isol. from the Okinawan sea sponge *Agelas nakamurai*. Shows antispasmodic and antibacterial activity.

B,HCl: Syrup. $[\alpha]_D^{25}$ +8.5° (c, 2.0 in MeOH).

(−)-***form***
Isol. from *A. clathrodes*. Oil. $[\alpha]_D^{29}$ −5.6° (c, 7.2 in MeOH).

20-Hydroxy: ***Agelasidine D***
$C_{23}H_{41}N_3O_3S$ M 439.661
Isol. from *A. clathrodes*. Oil. $[\alpha]_D^{29}$ −3.6° (c, 2.75 in MeOH).

[96617-52-6]

Nakamura, H. *et al*, *J. Org. Chem.*, 1985, **50**, 2494 (*isol, uv, ir, pmr, cmr, struct*)

Asao, K. *et al*, *Chem. Lett.*, 1989, 1813 (*synth*)

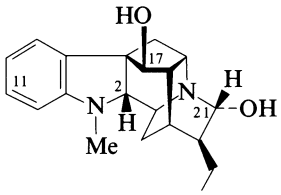
Morales, J.J. *et al*, *J. Nat. Prod.* (*Lloydia*), 1992, **55**, 389 (*isol*)

Ajmaline, BAN A-10035

Updated Entry replacing A-00610

Ajmalan-17,21-diol, 9CI. Raugalline. Rauwolfine. Gilurytmal. Tachmalin

[4360-12-7]



$C_{20}H_{26}N_2O_2$ M 326.438

Alkaloid from *Rauwolfia serpentina* and most *R.* spp., *Melodinus balansae* and *Tonduzia longifolia* (Apocynaceae). Antiarrhythmic drug which functions by inhibition of glucose uptake by heart tissue mitochondria. Mp 158-160° (MeOH solvate), Mp 205-207° (anhyd.).

▷ AX8050000.

B,HCl: [4410-48-4].
Amber prisms + $2H_2O$. Mp 133-134°, Mp 253-255° (anhyd.).

▷ AX8100000.

B,2HCl: Plates. Mp 305-306° dec.

O^{17}-*Ac:* [19918-92-4].
Rods (Et_2O), cryst. (EtOH). Mp 150° (rods), Mp 214-215° (cryst.).

O^{21}-*Ac:* Needles (EtOAc). Mp 190-192°.

Di-Ac: [19775-56-5].
Needles (metastable) or rods. Mp 132°, Mp 187-189° (double Mp).

Picrate: Plates (EtOH). Mp 126-127°, Mp 223° (anhyd.).

B,MeI: Mp 229° dec.

N-*Propyl, hydrogen tartrate:* [2589-47-1]. *Prajmalium bitartrate, BAN, INN. GT 1012. NPAB*
$C_{27}H_{38}N_2O_8$ M 518.606
Cardiac antiarrhythmic drug. Cryst. (EtOH/Et_2O). Mp 149-152°.

▷ AX7750000.

O^{17}-*Chloroacetyl:* [47562-08-3]. ***Lorajmine*, INN**
$C_{22}H_{27}ClN_2O_3$ M 402.920
Cardiac depressant, antiarrhythmic. Cryst. Mp 232-235°. $[\alpha]_D$ +27.5° ($CHCl_3$).

O^{17}-*Chloroacetyl; B,HCl:* [40819-93-0]. *Lorajmine hydrochloride, USAN. Nevergor. Ritmos. Ritmosel. Viaductor. Win 11831*
Cryst. Mp 230-235°. $[\alpha]_D$ +40° ($CHCl_3$).

N-*De-Me:* [23944-24-3]. ***Norajmaline***
$C_{19}H_{24}N_2O_2$ M 312.411
Alkaloid from *R. macrophylla, R. obscura* and *R. suaveolens* (Apocynaceae). Yellow-grey amorph. powder. $[\alpha]_D$ +36° (c, 0.67 in $CHCl_3$).

11-Hydroxy: [73012-74-5]. ***Ajmalinol.*** *Ajmalan-11,17-21-triol, 9CI*
$C_{20}H_{26}N_2O_3$ M 342.437
Alkaloid from *R. vomitoria* (Apocynaceae).

2-Epimer: [51019-46-6].
Noncryst. $[\alpha]_D$ +55° (c, 1 in $CHCl_3$).

17-Epimer: [509-37-5]. ***Sandwicine.*** *Epiajmaline*
$C_{20}H_{26}N_2O_2$ M 326.438
Alkaloid from *R. sandwicensis, R. mauiensis* and *R. vomitoria* (Apocynaceae). Antiarrhythmic agent. Amorph. (MeOH aq. or Me_2CO/hexane). $[\alpha]_D^{20}$ +174° (c, 1 in MeOH).

17-Epimer; B,2HCl: Cryst. (Me_2CO). Mp 210-213°. $[\alpha]_D$ +129° (MeOH).

17-Epimer; B,2HI: Cryst. (Me_2CO). Mp 238-240°. $[\alpha]_D$ +84° ($CHCl_3$).
17-Epimer, O^{17}*-Ac:* Cryst. (MeOH). $[\alpha]_D^{20}$ +188.5° (c, 1 in $CHCl_3$).
17-Epimer, di-O-Ac: Cryst. (pet. ether). Mp 105-108°. $[\alpha]_D^{20}$ +104° (c, 1 in $CHCl_3$).
20,21-Diepimer: see *Isoajmaline, I-00272*
17-O-(3,4,5-Trimethoxybenzoyl): [59846-31-0]. ***Willicourtine***
$C_{30}H_{36}N_2O_6$ M 520.624
Alkaloid from *R. obscura* and *R. vomitoria* (Apocynaceae).
21-O-(3,4,5-Trimethoxybenzoyl): [110941-51-0]. ***Ajmalimine***
$C_{30}H_{36}N_2O_6$ M 520.624
Alkaloid from the roots of *R. serpentina* (Apocynaceae). Needles (MeOH/EtOAc). Mp 188-189°. $[\alpha]_D^{20}$ +105°.

[31081-68-2, 35080-11-6, 110906-81-5]

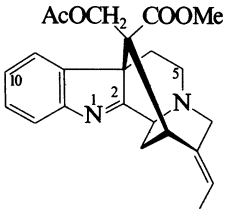
Anet, F.A.L. *et al, J. Chem. Soc.*, 1954, 1242 (*isol, uv, struct*)
Woodward, R.B., *Angew. Chem.*, 1956, **68**, 13 (*rev, struct*)
Gorman, M. *et al, Tetrahedron*, 1957, **1**, 328 (*Sandwicine*)
Bartlett, M.F. *et al, J. Am. Chem. Soc.*, 1962, **84**, 622 (*abs config*)
Bonati, A. *et al, Farmaco, Ed. Sci.*, 1963, **18**, 851 (*Prajmalium*)
Keck, J., *Z. Naturforsch., B*, 1963, **18**, 177 (*Prajmalium*)
Biemann, K. *et al, J. Am. Chem. Soc.*, 1964, **86**, 4624 (*ms*)
Masamune, S. *et al, J. Am. Chem. Soc.*, 1967, **89**, 2506 (*synth*)
Ronchetti, F. *et al, Phytochemistry*, 1971, **10**, 1385 (*Sandwicine*)
Koch, M. *et al, Arzneim.-Forsch.*, 1972, **22**, 2079, 2085; 1973, **23**, 642 (*Prajmalium*)
Ahmad, V. *et al, Pak. J. Sci. Ind. Res.*, 1972, **15**, 249 (*synth*)
Majumdar, S.P. *et al, Phytochemistry*, 1973, **12**, 1167 (*Norajmaline*)
Petter, A. *et al, Arzneim.-Forsch.*, 1974, **24**, 873, 874, 876 (*rev, pharmacol, props*)
Timmins, P. *et al, Phytochemistry*, 1974, **13**, 281 (*Norajmaline*)
Hubert-Brierre, Y. *et al, Tetrahedron*, 1975, **31**, 3049 (*synth, epimer*)
Kuhnert-Brandstaetter, M. *et al, Arch. Pharm. (Weinheim, Ger.)*, 1976, **309**, 699 (*polymorphs*)
van Tamelen, E.E. *et al, Bioorg. Chem.*, 1976, **5**, 309 (*synth*)
Timmins, P. *et al, Planta Med.*, 1976, **29**, 283 (*Willicourtine*)
Prewo, R. *et al, Acta Crystallogr., Sect. B*, 1978, **34**, 454 (*cryst struct*)
Chatterjee, A. *et al, Tetrahedron Lett.*, 1978, 3879 (*cmr*)
Siddiqui, S. *et al, J. Chem. Soc. Pak.*, 1979, **1**, 1; *CA*, **92**, 111204p (*Ajmalinol*)
Capra, C. *et al, Farmaco, Ed. Prat.*, 1980, **35**, 49 (*Lorajmine*)
Iwu, M.M., *Planta Med.*, Suppl, 1980, 13 (*Willicourtine*)
Martindale, The Extra Pharmacopoeia, 28th/29th Ed., Pharmaceutical Press, London, 1982/1989, 7777-78, 7787-88.
Danieli, B. *et al, Tetrahedron*, 1984, **40**, 5255 (*cmr*)
Negwer, M., *Organic-Chemical Drugs and their Synonyms*, 6th Ed., Akademie-Verlag, Berlin, 1987, 5833, 6564, 6995 (*synonyms*)
Siddiqui, S. *et al, Planta Med.*, 1987, **53**, 288 (*Ajmalimine*)
Johnston, M.D. *et al, J. Heterocycl. Chem.*, 1988, **25**, 1803 (*cmr*)
Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th Ed., Van Nostrand-Reinhold, 1992, AFH250, AFH280, DNB000, PNC875.

Akuammiline A-10036

Updated Entry replacing A-00634

Methyl 17-(acetyloxy)akuammilan-16-carboxylate, 10CI.
Methyl 16-[(acetyloxy)methyl]akuammilan-17-oate, 9CI

[1897-26-3]



$C_{23}H_{26}N_2O_4$ M 394.469

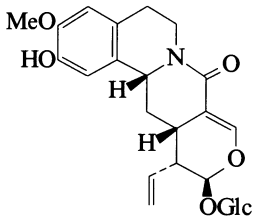
Alkaloid from *Picralima nitida, Conopharyngia durissima, Vinca minor, Rauwolfia oreogiton* and *R. vomitoria* (Apocynaceae). Cryst. (Et_2O). Mp 157-161°. $[\alpha]_D^{24}$ +83° (c, 0.5 in $CHCl_3$).
B,HCl: Cryst. + $1H_2O$ (H_2O or EtOH). Mp 196°. $[\alpha]_D^{20}$ −29.6° (c, 3.84 in H_2O).
B,HI: Needles (EtOH aq.). Mp 210°.
B,HNO_3*:* Prisms (H_2O). Mp 204°.
B,MeI: Needles (H_2O). Mp 233°. $[\alpha]_D^{20}$ −83° (c, 1.36 in EtOH).
O-*De-Ac:* [1897-30-9]. ***Rhazimol.*** *Deacetylakuammiline. Ercinaminine*
$C_{21}H_{24}N_2O_3$ M 352.432
Alkaloid from *V. minor, P. nitida, R. vomitoria, R. oreogiton* and *Rhazya stricta* (Apocynaceae). Pale-yellow amorph. powder. $[\alpha]_D^{21}$ +19.7° (MeOH).
1,2β-Dihydro: [77485-26-8]. ***1,2β-Dihydroakuammiline***
$C_{23}H_{28}N_2O_4$ M 396.485
Alkaloid from the leaves of *Rauwolfia oreogiton* (Apocynaceae). Off-white amorph. powder. $[\alpha]_D^{21}$ −9.4° (MeOH).
1,2β-Dihydro, O-*de-Ac:* [77485-27-9]. ***Deacetyl-1,2β-dihydroakuammiline***
$C_{21}H_{26}N_2O_3$ M 354.448
Alkaloid from the leaves of *R. oreogiton* (Apocynaceae). Mp 228-230°. $[\alpha]_D^{21}$ +99° (MeOH).
10-Methoxy: [38734-62-2]. ***Raufloricine***
$C_{24}H_{28}N_2O_5$ M 424.496
Alkaloid from *V. minor* and from the root bark of *R. confertiflora* (Apocynaceae). Cryst. (Me_2CO/hexane or EtOAc). Mp 190-193°. $[\alpha]_D^{20}$ +129° (c, 1.5 in $CHCl_3$).
10-Hydroxy, O-*de-Ac:* [85783-98-8]. ***Ercinamine.*** *10-Hydroxydeacetylakuammiline*
$C_{21}H_{24}N_2O_4$ M 368.432
Alkaloid from *Catharanthus roseus* and *V. erecta.* Mp 238-240°. $[\alpha]_D$ +53°.
10-Methoxy, O-*de-Ac:* [38734-63-3]. ***Nervobscurine.*** *10-Methoxydeacetylakuammiline*
$C_{22}H_{26}N_2O_4$ M 382.458
Alkaloid from *V. minor.* Amorph. $[\alpha]_D^{25}$ +83° (c, 0.72 in EtOH).
5β-Hydroxymethyl: [77485-24-6]. ***5β-Hydroxymethylakuammiline***
$C_{24}H_{28}N_2O_5$ M 424.496
Alkaloid from the leaves of *R. oreogiton* (Apocynaceae). Off-white amorph. powder. $[\alpha]_D^{21}$ −141° (MeOH).

Henry, T.A., *J. Chem. Soc.*, 1932, 2759 (*isol*)
Dugan, J.J. *et al, Helv. Chim. Acta*, 1969, **52**, 701 (*isol, uv, ir, pmr, ms*)
Savaşkan, S. *et al, Helv. Chim. Acta*, 1972, **55**, 2861 (*Akuammiline, Raufloricine, Nervobscurine*)
de Maindreville, M.D. *et al, C. R. Hebd. Seances Acad. Sci. Ser. C*, 1975, **280**, 131 (*config*)
Akinloye, B.A. *et al, Phytochemistry*, 1980, **19**, 2741 (*Dihydroakuammiline, Rhazimol, Deacetyldihydroakuammiline*)
Gueritte, F. *et al, J. Nat. Prod. (Lloydia)*, 1983, **46**, 144 (*Ercinamine*)
Yagudaev, M.R. *et al, Khim. Prir. Soedin.*, 1983, **19**, 483; *Chem. Nat. Compd. (Engl. Transl.)*, 454 (*Ercinamine, Ercinaminine*)

Alangiside A-10037

Updated Entry replacing A-00650

[34482-51-4]



$C_{25}H_{31}NO_{10}$ M 505.521

Alkaloid from the roots, leaves and fruit of *Alangium lamarckii* (best source unripe fruit) (Alangiaceae). Amorph. powder + 2.5 H_2O. Mp 187° dec. (shrinks at 164°). $[\alpha]_D^{26}$ −105° (c, 1.0 in MeOH).

Tetra-Ac: Amorph. powder. $[\alpha]_D^{21}$ −50.4° (c, 1.81 in $CHCl_3$).

Me ether: Needles + 1.5 H_2O (EtOAc). Mp 236°.

O-*De-Me:* [47763-23-5]. ***Demethylalangiside***

$C_{24}H_{29}NO_{10}$ M 491.494

Alkaloid from the roots of *Cephaelis ipecacuanha* (Rubiaceae) and leaves of *Alangium platanifolium* var. *trilobum* (Alangiaceae). Needles (MeOH aq.). Mp 180-182°. $[\alpha]_D^{24}$ −73° (c,0.2 in MeOH).

O-*De-Me, 6′-(4-hydroxy-3-methoxycinnamoyl):* ***6′-O-Feruloyldemethylalangiside***

$C_{34}H_{37}NO_{13}$ M 667.665

Alkaloid from leaves of *A. platanifolium* var. *trilobum* (Alangiaceae). Powder. Isol. as a mixt. of *cis-* and *trans-* forms.

O-*De-Me, 6′-(4-hydroxy-3,5-dimethoxycinnamoyl):* ***6′-Sinapoyldemethylalangiside***

$C_{35}H_{39}NO_{14}$ M 697.691

Alkaloid from leaves of *A. platanifolium* var. *trilobum* (Alangiaceae). Powder. Isol. as mixt. of *cis-* and *trans-* isomers.

Kapil, R.S. *et al, J. Chem. Soc., Chem. Commun.*, 1971, 904 (*ir, pmr, struct, abs config*)

Shoeb, A. *et al, J. Chem. Soc., Perkin Trans. 1*, 1975, 1245 (*isol, uv, ir, pmr, ms, struct*)

Nagakura, N. *et al, J. Chem. Soc., Chem. Commun.*, 1978, 896 (*cmr*)

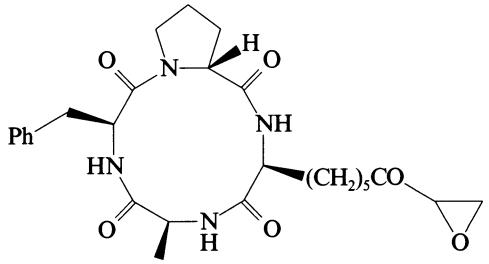
Höfle, G. *et al, Chem. Ber.*, 1980, **113**, 566 (*synth, uv, ir, pmr, cmr, ms*)

Itoh, A. *et al, Phytochemistry*, 1991, **30**, 3117; 1992, **31**, 1037 (*Demethylalangiside, 6′-O-Feruloyldemethylalangiside, 6′-O-Sinapoyldemethylalangiside*)

1-Alaninechlamydocin A-10038

Cyclo(L-alanyl-D-phenylalanyl-D-prolyl-η-oxo-L-α-aminooxiraneoctanoyl), 9CI

[141446-96-0]



$C_{27}H_{36}N_4O_6$ M 512.605

Cyclic peptide antibiotic. Metab. of *Diheterospora chlamydosporia*. Antitumour agent. Alanine analog. of Chlamydocin, C-00930.

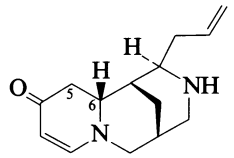
Kim, S.D. *et al, CA*, 1992, **116**, 231433 (*isol*)

Albine A-10039

Updated Entry replacing A-00676

Dehydroalbine

[53915-26-7]



Absolute configuration

$C_{14}H_{20}N_2O$ M 232.325

Alkaloid from *Lupinus albus* and *L. termis* seeds (Leguminosae). Mp 50°. $[\alpha]_D^{25}$ −103°. The *N*-Methyl deriv. was formerly reported erroneously (see Alkaloid LC2, A-10048).

B,HClO₄: Mp 253°. $[\alpha]_D^{25}$ −76° (H_2O).

N-*Formyl:* **N-*Formylalbine***

$C_{15}H_{20}N_2O_2$ M 260.335

Trace alkaloid in seeds and leaves of *L. albescens* (Leguminosae). Provisional identification.

5,6-Didehydro: ***Δ⁵-Dehydroalbine***

$C_{14}H_{18}N_2O$ M 230.309

Alkaloid from seeds of *L. termis* (Leguminosae). Oil. $[\alpha]_D^{25}$ −44.6° (c, 0.02 in MeOH).

Wiewiórowski, M. *et al, Bull. Acad. Pol. Sci., Ser. Sci. Chim.*, 1964, **12**, 213, 217 (*isol, ir*)

Chekhlov, A.N. *et al, J. Struct. Chem.* (*Engl. Transl.*), 1974, **15**, 848 (*cryst struct*)

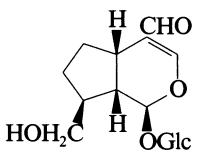
Wolínska-Mocydlarz, J. *et al, Bull. Acad. Pol. Sci., Ser. Sci. Chim.*, 1976, **24**, 613 (*ir, struct*)

Mohamed, M.H. *et al, Phytochemistry*, 1991, **30**, 3111 (Δ⁵-*Dehydroalbine*)

Planchuelo-Ravelo, A.M. *et al, Z. Naturforsch., C*, 1993, **48**, 414 (*N-Formylalbine*)

Aldoxoside A-10040

[142905-20-2]



$C_{16}H_{24}O_9$ M 360.360

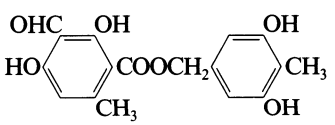
Constit. of *Cordylanthus tenuis* and *C. kingii*. Gum. $[\alpha]_D$ −47° (c, 0.07 in MeOH).

Justice, M.R. *et al, Phytochemistry*, 1992, **31**, 2021.

Alectorialin A-10041

Decarboxyalectorialic acid

[55483-02-8]



$C_{17}H_{16}O_7$ M 332.309

Constit. of lichen *Alectoria nigricans*. Needles (Me_2CO/cyclohexane). Mp 200-201° dec.

Solberg, Y., *Acta Chem. Scand., Ser. B*, 1975, **29**, 145 (*isol*)
Elix, J.A. *et al*, *Aust. J. Chem.*, 1987, **40**, 1841 (*synth, pmr*)

Alfalfone A-10042

$C_{21}H_{42}O$ M 310.562
Ketone of unknown struct. Constit. of the meal of *Medicago sativa*. Powder. Mp 88.5-88.8°.

Jacobson, C.A., *J. Am. Chem. Soc.*, 1912, **34**, 300 (*isol*)

Crotalaria retusa Alkaloid A-10043

Struct. unknown. Isol. from *Crotalaria retusa*. Cryst. (Me_2CO). Mp 130-132°.

Culvenor, C.C.J. *et al*, *Aust. J. Chem.*, 1957, **10**, 464 (*isol*)

Thermopsis lanceolata Alkaloid A A-10044

[78040-76-3]
Struct. unknown. Constit. of *Thermopsis lanceolata*.

Chao, K.-S. *et al*, *CA*, 1981, **95**, 35461q (*isol, props*)

Sophora griffithii Alkaloid B A-10045

Struct. unknown. Constit. of *Sophora griffithii*.

Primukhamedov, I. *et al*, *Rastit. Resur.*, 1969, **5**, 572; *CA*, **72**, 118549.

Thermopsis lanceolata Alkaloid B A-10046

[78040-77-4]
Struct. unknown. Constit. of *Thermopsis lanceolata*.

Chao, K.-S. *et al*, *CA*, 1981, **95**, 35461q (*isol, props*)

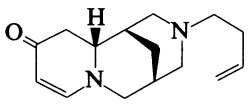
Burkea africana Alkaloid E A-10047

Struct. unknown. It may be Harmalan N_b oxide (see 3,4-Dihydro-1-methyl-β-carboline, D-01331). Isol. from stem bark of *Burkea africana*.

Ferreira, M.A., *Garcia de Orta, Ser. Farmacogn.*, 1973, **2**, 23; *CA*, **81**, 166304z (*isol*)

Alkaloid LC2 A-10048

Updated Entry replacing A-00973
3-(3-Butenyl)-1,2,3,4,5,6,11,11a-octahydro-1,5-methano-10H-pyrido[1,2-a][1,5]diazocin-10-one, 9CI. 1,13-Didehydro-10,11-secomultiflorine. 11,12-Seco-12-dehydromultiflorine. N-*Methylalbine (incorr.)*
[71635-26-2]



$C_{15}H_{22}N_2O$ M 246.352
Struct. revised in 1988. Some isolates were prev. reported erroneously as *N*-methylalbine (see Albine, A-10039). Alkaloid from the leaves and seeds of *Lupinus cosentinii, L. albus* and *L. formosus* (Leguminosae). Cryst. (cyclohexane). Mp 60°. $[\alpha]_D^{25}$ −520° (c, 1.0 in MeOH).

[6822-63-5, 97906-66-6]

Beck, A.B. *et al*, *J. Nat. Prod.* (*Lloydia*), 1979, **42**, 385 (*isol, uv, ir, pmr, ms, struct*)
Wysocka, W. *et al*, *Planta Med.*, 1988, **54**, 522 (*cmr, ms, struct*)
Brukwicki, T. *et al*, *J. Mol. Struct.*, 1989, **196**, 343 (*cmr, conform, bibl*)
Wyrzykiewicz, E. *et al*, *Org. Mass Spectrom.*, 1990, **25**, 453 (*ms*)

Baptisia Alkaloid P_2 A-10049

$C_{11}H_{18}N_2O$ M 194.276
Struct. unknown. Isol. from *Baptisia australis* and *B. perfoliata*. Cryst. ($MeOH/Et_2O$). Mp 300°.
B,HClO₄: Needles (MeOH). Mp 198°.

Marion, L. *et al*, *J. Am. Chem. Soc.*, 1948, **70**, 691, 3253 (*isol*)
Oung-Buran, *Planta Med.*, 1969, **17**, 301 (*isol*)

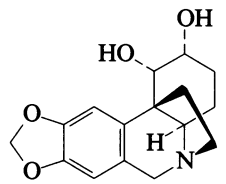
Baptisia Alkaloid P_4 A-10050

Struct. unknown. Isol. from *Baptisia minor*. Oil. $Bp_{0.05}$ 175-200°.
B,HClO₄: Needles. Mp 286°.

Marion, L. *et al*, *J. Am. Chem. Soc.*, 1948, **70**, 3472 (*isol*)

Amabiline† A-10051

Crinan-1,2-diol, 9CI
[151204-56-7]

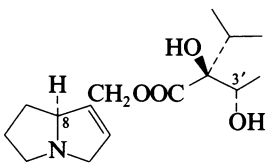


$C_{16}H_{19}NO_4$ M 289.330
Alkaloid from bulbs of *Crinum amabile* (Amaryllidaceae). Mp 210° dec. $[\alpha]_D^{20}$ −32° (c, 0.3 in EtOH).

Likhitwitayawuid, K. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 1331 (*isol, uv, ir, pmr, cmr, ms, struct*)

Amabiline† A-10052

Updated Entry replacing A-01159
[17958-43-9]



$C_{15}H_{25}NO_4$ M 283.367
Ester of (−)-supinine with (−)-viridifloric acid. Alkaloid from *Cynoglossum amabile* dried whole plants and from whole plants of *Neatostema apulum* (Boraginaceae). Noncryst. $[\alpha]_D^{20}$ −7.1° (c, 2.02 in EtOH). Cryst. derivs. could not be obt.

N-*Oxide:* ***Amabiline* N-*oxide***
$C_{15}H_{25}NO_5$ M 299.366
Alkaloid from whole plants of *N. apulum* (Boraginaceae). $[\alpha]_D$ −12° (c, 1.4 in EtOH).

8-Epimer: [17958-39-3]. ***Cynaustine***
$C_{15}H_{25}NO_4$ M 283.367
Minor alkaloid from *Cynoglossum australe* dried plants (Boraginaceae). Pale-yellow gum. $[\alpha]_D^{20}$ +13.2° (c, 1.59 in EtOH). Ester of (+)-supinine with (−)-viridifloric acid.
▷ EK7792000.

8-Epimer, picrate: Yellow plates (EtOH). Mp 135-136°.

3′-Epimer: [551-58-6]. ***Supinine.*** *Base F*
$C_{15}H_{25}NO_4$ M 283.367
Alkaloid from *Heliotropium supinum* and *H. europaeum* (Boraginaceae). Shows tumour-inhibiting props. Needles (Me_2CO). Mp 148-149° (146-147.5°). $[\alpha]_D$ −23.8° (EtOH), $[\alpha]_D$ −12.1° (c, 1.98 in EtOH). Ester of (−)-Supinine with Trachelanthic acid.

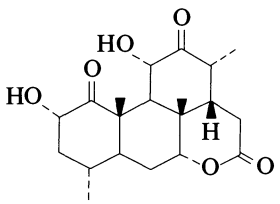
▷ Hepatotoxin. WU2050000.

Men'shikov, G.P. *et al*, *J. Gen. Chem. USSR* (*Engl. Transl.*), 1949, **19**, 1382; *CA*, **44**, 3486 (*isol, Supinine*)
Culvenor, C.C.J. *et al*, *Aust. J. Chem.*, 1954, **7**, 287; 1967, **20**, 2499 (*isol, struct, Supinine, Amabiline, Cynaustine*)
Culvenor, C.C.J. *et al*, *Chem. Ind.* (*London*), 1959, 20 (*synth, Supinine*)
Mattocks, A.R., *Nature* (*London*), 1968, **217**, 723 (*tox, Supinine*)
Šimánek, V. *et al*, *Collect. Czech. Chem. Commun.*, 1969, **34**, 1832 (*uv, Supinine*)
Culvenor, C.C.J. *et al*, *J. Chem. Soc. C*, 1971, 3653 (*cd*)
Mackay, M.F. *et al*, *Acta Crystallogr., Sect. C*, 1985, **41**, 722 (*cryst struct, Supinine*)
Roeder, E. *et al*, *Phytochemistry*, 1992, **31**, 3613 (*oxide*)
Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th Ed., Van Nostrand-Reinhold, 1992, SOW500.

Amarolide A-10053

Updated Entry replacing A-01165

[29913-86-8]



$C_{20}H_{28}O_6$ M 364.438

Constit. of *Ailanthus glandulosa* and *A. altissima*. Cryst. Mp 253-255°.

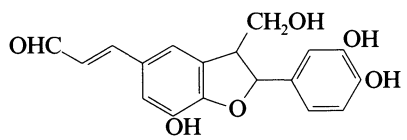
2-O-β-D-Glucopyranoside: [93789-26-5]. ***Shinjuglycoside D***
$C_{26}H_{38}O_{11}$ M 526.580
Constit. of *A. altissima*. Needles (MeOH). Mp 282-284° dec. $[\alpha]_D^{20}$ −42° (c, 1 in MeOH).

2-O-β-D-Glucopyranoside, 11-Ac: [93789-25-4]. ***Shinjuglycoside C***
$C_{28}H_{40}O_{12}$ M 568.617
Constit. of *A. altissima*. Amorph. solid. Mp 180-185° dec. $[\alpha]_D^{23}$ −37° (c, 6.1 in MeOH).

Casinovi, C.G. *et al*, *Tetrahedron Lett.*, 1965, 2273 (*isol, ir, pmr*)
Stöcklin, W. *et al*, *Tetrahedron Lett.*, 1970, 2399.
Yoshimura, S. *et al*, *Bull. Chem. Soc. Jpn.*, 1984, **57**, 2496 (*Shinjuglycosides*)
Hirota, H. *et al*, *J. Org. Chem.*, 1991, **56**, 1119 (*synth*)

Americanin D A-10054

[77053-45-3]



$C_{18}H_{16}O_6$ M 328.321

Constit. of *Phytolacca americana*. Cryst. Mp 197-200°.

[106622-79-1]

Woo, W.S. *et al*, *Tetrahedron Lett.*, 1980, **21**, 4255 (*isol, pmr, cmr*)

2-Aminoacetophenone, 8CI A-10055

2-Amino-1-phenylethanone, 9CI. Phenacylamine. Phenomydrol. Benzoylmethylamine

[613-89-8]

$PhCOCH_2NH_2$

C_8H_9NO M 135.165

▷ AM5775000.

B,HCl: [5468-37-1].
Needles (Me_2CO/EtOH). Mp 188°.

N-*Formyl:* [73286-37-0].
$C_9H_9NO_2$ M 163.176
Cryst. (Me_2CO/hexane). Mp 80-82°.

N-*Ac:* [1846-33-9].
$C_{10}H_{11}NO_2$ M 177.202
Mp 85°.

Oxime:
$C_8H_{10}N_2O$ M 150.180
Mp 140°.

2,4-Dinitrophenylhydrazone: Mp 221°.

Di-Et ketal:
$C_{12}H_{19}NO_2$ M 209.288
Liq. $Bp_{0.5}$ 68°.

N-*Me:* [35534-19-1]. α-*Methylaminoacetophenone*
$C_9H_{11}NO$ M 149.192
Yellow oil.

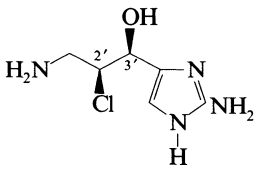
N-*Me; B,HCl:* [23826-47-3].
Plates. Mp 219° dec.

N-*Me*, N-*Ac:*
$C_{11}H_{13}NO_2$ M 191.229
Mp 156°.

N,N-*Di-Me:* [3319-03-7]. *2-*(N,N-*Dimethylamino*) *acetophenone*
$C_{10}H_{13}NO$ M 163.219
Isol. from *Desmodium gangeticum*. Liq. Bp_{20} 130-132°.

Tiffeneau, M. *et al*, *Bull. Soc. Chim. Fr.*, 1931, **49**, 1761 (*rev*)
Stalham, F.S., *J. Chem. Soc.*, 1951, 213 (*synth*)
Chapman, N.B. *et al*, *J. Chem. Soc.*, 1963, 1385 (*synth, deriv*)
Tanaka, H. *et al*, *CA*, 1971, **75**, 147849 (*struct*)
Ghosal, S. *et al*, *Planta Med.*, 1972, **22**, 434 (*isol, deriv*)
Bellamy, L.J. *et al*, *Spectrochim. Acta, Part A*, 1972, **28**, 1869 (*ir*)
Muchowski, J.M. *et al*, *J. Org. Chem.*, 1986, **51**, 3374 (*N*-formyl)
Abdalla, G.M. *et al*, *J. Heterocycl. Chem.*, 1987, **24**, 297 (*synth, ir, pmr*)
Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th Ed., Van Nostrand-Reinhold, 1992, AHR250.

2-Amino-α-(2-amino-1-chloroethyl)-1*H*-imidazole-4-methanol, 9CI A-10056



$C_6H_{11}ClN_4O$ M 190.632

(2'RS,3'SR)-form
erythro-*form*

B,2HCl: [127909-96-0].
Mp 191-193°.

(2'RS,3'RS)-form [110883-46-0]
threo-*form*. ***Giracodazole, INN.*** *Girolline*
Isol. from the sponge *Pseudaxinyssa cantharella*.
Antineoplastic agent.

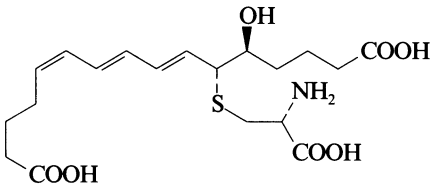
[117678-06-5]

Ahond, A. *et al*, *C. R. Hebd. Seances Acad. Sci. Ser. 2*, 1988, **307**, 145 (*isol*)
Bedoya Zurita, M. *et al*, *Tetrahedron*, 1989, **45**, 6713 (*synth, pmr*)

11-[(2-Amino-2-carboxyethyl)thio]-12-hydroxy-5,7,9-hexadecatrienedioic acid A-10057

16-Carboxy-17,18,19,20-tetranor-14,15-dihydroleukotriene E_4

[122069-63-0]



$C_{19}H_{29}NO_7S$ M 415.507

Found in the bile and urine of primates. β-Oxidation prod. of Leukotriene E_4, L-00504. Uv λ_{max} 279 nm (MeOH).

N-*Ac:* [114115-52-5].

$C_{21}H_{31}NO_8S$ M 457.544

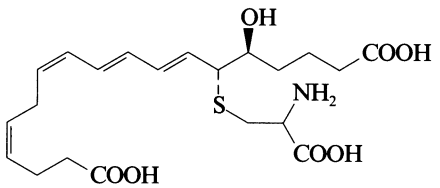
Present in rat bile. β-Oxidation prod. of Leukotriene E_4, L-00504. Uv λ_{max} 279 nm (MeOH).

Delorme, D. *et al*, *Prostaglandins*, 1988, **36**, 291 (*synth, biosynth*)
Keppler, D. *et al*, *Adv. Enzyme Regul.*, 1989, **28**, 307 (*biosynth*)
Delorme, D. *et al*, *J. Org. Chem.*, 1989, **54**, 3635 (*synth, uv, pmr*)
Perrin, P. *et al*, *Prostaglandins*, 1989, **37**, 53 (*synth, biosynth*)
Jedlitschky, G. *et al*, *J. Biol. Chem.*, 1991, **266**, 24763 (*biosynth*)

13-[(2-Amino-2-carboxyethyl)thio]-14-hydroxy-4,7,9,11-octadecatetraenedioic acid A-10058

5-Hydroxy-6-cystein-S-yl-7,9,11,14-octadecatetraenedioic acid. 18-Carboxydinorleukotriene E_4

[122069-58-3]



$C_{21}H_{31}NO_7S$ M 441.544

LTE_4 and LTC_4 metab. Uv_{max} 280 nm (MeOH).

N-*Ac:* [114115-51-4].

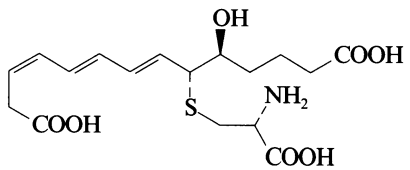
$C_{23}H_{33}NO_8S$ M 483.582

LTE_4 and LTC_4 metab. Uv λ_{max} 280 nm (MeOH).

Delorme, D. *et al*, *Prostaglandins*, 1988, **36**, 291; 1989, **37**, 629 (*synth*)
Delorme, D. *et al*, *J. Org. Chem.*, 1989, **54**, 3635 (*synth, uv, pmr*)
Huber, M. *et al*, *Eur. J. Biochem.*, 1990, **194**, 309 (*biochem*)

9-[(2-Amino-2-carboxyethyl)thio]-10-hydroxy-3,5,7-tetradecatrienedioic acid A-10059

14-Carboxyhexanorleukotriene E_3



$C_{17}H_{25}NO_7S$ M 387.453

Urinary metab. of Leukotriene E_4, L-00504 in humans.

.*14*N-*Ac:* [114115-54-7].

$C_{19}H_{27}NO_8S$ M 429.490

Metab. of Leukotriene E_4, L-00504.

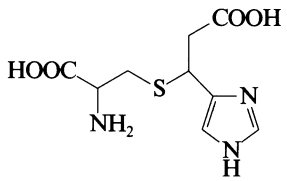
[137625-92-4]

Stene, D.O. *et al*, *J. Biol. Chem.*, 1988, **263**, 2773 (*biosynth*)
Sala, A. *et al*, *J. Biol. Chem.*, 1990, **265**, 21771 (*biosynth*)
Jedlitschky, G. *et al*, *J. Biol. Chem.*, 1991, **266**, 24763 (*biosynth*)

β-[(2-Amino-2-carboxyethyl)thio]-1*H*-imidazole-4-propanoic acid A-10060

S-[*2-Carboxy-1-(1H-imidazol-4-yl)ethyl*]*cysteine*

[134381-43-4]



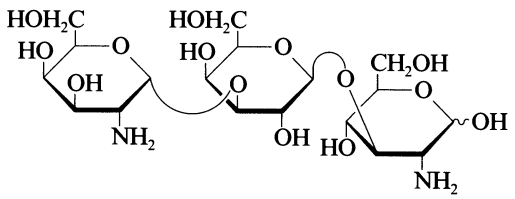
$C_9H_{13}N_3O_4S$ M 259.285

Constit. of human urine.

Kinuta, M. *et al*, *Amino Acids, Pept., Proteins*, 1991, **1**, 259.

2-Amino-2-deoxy-α-D-galactopyranosyl-(1→3)-β-D-galactopyranosyl-(1→3)-2-amino-2-deoxy-D-glucose A-10061

3^2-α-Galactosaminyl-3-β-galactosylglucosamine



Pyranose-*form*

$C_{18}H_{34}N_2O_{14}$ M 502.472

N,N′-*Di-Ac: 2-Acetamido-2-deoxy-α-D-galactopyranosyl-(1→3)-β-D-galactopyranosyl-(1→3)-2-acetamido-2-deoxy-D-glucose. 3^2-α-N-Acetylgalactosaminyl-3-β-galactosyl*-N-*acetylglucosamine*

$C_{22}H_{38}N_2O_{16}$ M 586.546

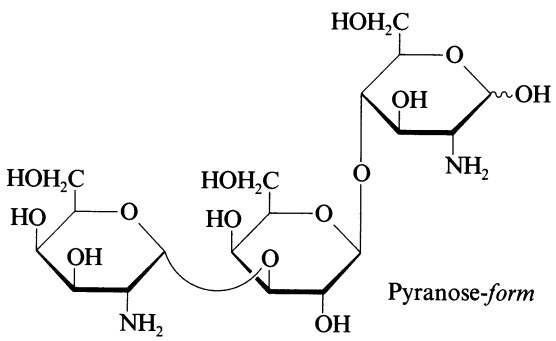
Isol. from the partial acid hydrolysates of human ovarian cyst blood-group A substance and human blood-group A substance. $[\alpha]_D$ +136° (H_2O) (+110°).

[5536-47-0, 85304-86-5]

Lister-Cheese, I.A.F. *et al*, *Nature (London)*, 1961, **191**, 149 (*isol*)
Schiffman, G. *et al*, *J. Am. Chem. Soc.*, 1962, **84**, 73 (*isol*)
Bovin, N.Y. *et al*, *Bioorg. Khim.*, **7**, 1271; *CA*, 1981, **95**, 204316d (*synth*)

2-Amino-2-deoxy-α-D-galactopyranosyl-(1→3)-β-D-galactopyranosyl-(1→4)-2-amino-2-deoxy-D-glucose A-10062

3^2-β-Galactosaminyl-4-galactosylglucosamine



Pyranose-*form*

$C_{18}H_{34}N_2O_{14}$ M 502.472

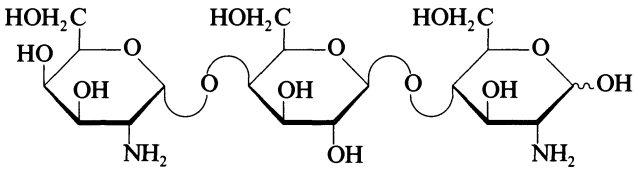
N,N′-*Di-Ac:* [62897-09-0]. *2-Acetamido-2-deoxy-α-D-galactopyranosyl-(1→3)-β-D-galactopyranosyl-(1→4)-2-acetamido-2-deoxy-D-glucose.* 3^2-*β*-N-*Acetylgalactosaminyl-4-β-galactosyl*-N-*acetylglucosamine*

$C_{22}H_{38}N_2O_{16}$ M 586.546

Isol. from the partial acid hydrolysate of human blood group A substance. $[\alpha]_D$ +147° (H_2O).

Lister-Cheese, I.A.F. *et al, Nature (London)*, 1961, **191**, 149 (*isol*)
Donald, A.S.R., *J. Chromatogr.*, 1977, **134**, 199 (*chromatog*)

2-Amino-2-deoxy-α-D-galactopyranosyl-(1→4)-β-D-galactopyranosyl-(1→4)-2-amino-2-deoxy-D-glucose A-10063



Pyranose-*form*

$C_{18}H_{34}N_2O_{14}$ M 502.472

N,N′-*Di-Ac: 2-Acetamido-2-deoxy-α-D-galactopyranosyl-(1→4)-β-D-galactopyranosyl-(1→4)-2-acetamido-2-deoxy-D-glucose.* 4^2-*α-D-Acetylgalactosaminyl-4-β-galactosyl*-N-*acetylglucosamine. Gastro*-N-*trisaccharide*

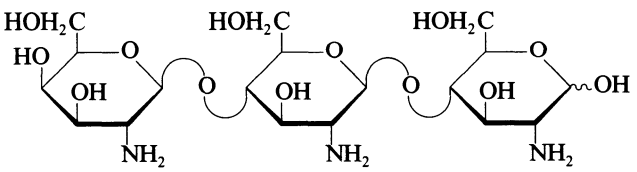
$C_{22}H_{38}N_2O_{16}$ M 586.546

Isol. from the partial acetolysate of hog gastric mucin. Mp 273-275°. $[\alpha]_D$ +140° (H_2O).

Masamune, H. *et al, Tohoku J. Exp. Med.*, 1956, **64**, 257; 1958, **69**, 65 (*isol*)

2-Amino-2-deoxy-β-D-glucopyranosyl-(1→4)-2-amino-2-deoxy-β-D-glucopyranosyl-(1→4)-2-amino-2-deoxy-D-glucose A-10064

4^2-*β-Glucosaminyl-4-β-glucosaminylglucosamine*



Pyranose-*form*

$C_{18}H_{35}N_3O_{13}$ M 501.487

N,N′,N″-*Tri-Ac:* [38864-21-0]. *2-Acetamido-2-deoxy-β-D-glucopyranosyl-(1→4)-2-acetamido-2-deoxy-β-D-glucopyranosyl-(1→4)-2-acetamido-2-deoxy-D-glucose.* 4^2-*β*-N-*Acetylglucosaminyl-4-β*-N-*acetylglucosaminyl*-N-*acetylglucosamine*

$C_{24}H_{41}N_3O_{16}$ M 627.598

The simplest member of the *N*-acetylchitodextrins obt. as intermeds. in the degradn. of chitin by endochitinases. Mp 309-311°. $[\alpha]_D$ +2.5° (H_2O).

Pyranose-form

Octa-Ac:

$C_{34}H_{51}N_3O_{21}$ M 837.784

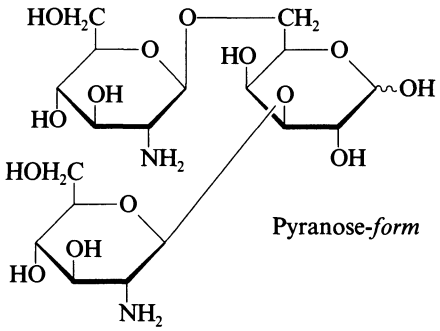
Mp 304-305°. $[\alpha]_D$ +30° ($CHCl_3$).

[2624-24-0]

Berger, L.R. *et al, Biochim. Biophys. Acta*, 1958, **29**, 522 (*isol*)
Dierickx, L. *et al, Biochim. Biophys. Acta*, 1962, **58**, 7 (*isol*)
Boyd, J. *et al, Carbohydr. Res.*, 1985, **139**, 35 (*pmr, cmr*)

2-Amino-2-deoxy-β-D-glucopyranosyl-(1→3)-[2-amino-2-deoxy-β-D-glucopyranosyl-(1→6)]-D-galactose A-10065

6′-β-Glucosaminyllacto-N-*biose II. 3,6-Diglucosaminylgalactose*



Pyranose-*form*

$C_{18}H_{34}N_2O_{14}$ M 502.472

N,N′-*Di-Ac:* [55612-66-3]. *2-Acetamido-2-deoxy-β-D-glucopyranosyl-(1→3)[2-acetamido-2-deoxy-β-D-glucopyranosyl-(1→6)]-D-glucose. 6′-β*-N-*Acetylglucosaminyllacto*-N-*biose II*

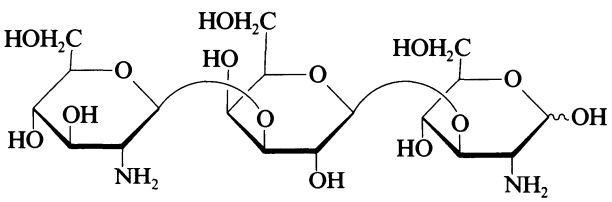
$C_{22}H_{38}N_2O_{16}$ M 586.546

Isol. from the partial acid hydrolysate of the hydrazinolysate of blood group A mucopolysaccharide from hog gastric mucin. $[\alpha]_D$ +6.5° (H_2O).

Yosizawa, Z., *J. Biochem. (Tokyo)*, 1962, **51**, 145.
Blanken, W.M. *et al, Anal. Biochem.*, 1985, **145**, 322 (*hplc*)
Seppo, A. *et al, Biochem. Cell. Biol.*, 1990, **68**, 44 (*synth*)

2-Amino-2-deoxy-β-D-glucopyranosyl-(1→3)-β-D-galactopyranosyl-(1→3)-2-amino-2-deoxy-D-glucose A-10066

3^2-*β*-N-*Glucosaminyllacto*-N-*biose I*



Pyranose-*form*

$C_{18}H_{34}N_2O_{14}$ M 502.472

N,N′-*Di-Ac: 2-Acetamido-2-deoxy-β-D-glucopyranosyl-(1→3)-β-D-galactopyranosyl-(1→3)-2-acetamido-2-deoxy-D-glucose.* 3^2-*β*-N-*Acetylglucosaminyllacto*-N-*biose I*

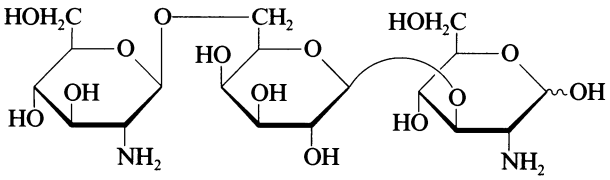
$C_{22}H_{38}N_2O_{16}$ M 586.546

Isol. from the partial hydrolysate of hog gastric mucin. $[\alpha]_D$ +19.5° (H_2O).

Okuyama, T., *CA*, 1961, **55**, 88817; 1962, **57**, 1880 (*isol*)

2-Amino-2-deoxy-β-D-glucopyranosyl-(1→6)-β-D-galactopyranosyl-(1→3)-2-amino-2-deoxy-D-glucose A-10067

6^2-N-Glucosaminyllacto-N-biose I



Pyranose-*form*

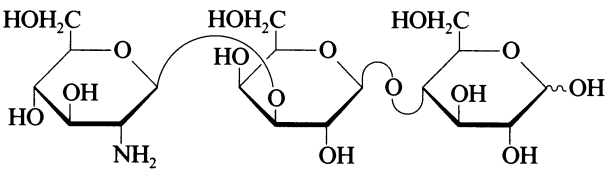
$C_{18}H_{34}N_2O_{14}$ M 502.472

N,N'-*Di-Ac: 2-Acetamido-2-deoxy-β-D-glucopyranosyl-(1→6)-β-D-galactopyranosyl-(1→3)-2-acetamido-2-deoxy-D-glucose. 6^2-β-N-Acetylglucosaminyllacto-N-biose I*
$C_{22}H_{38}N_2O_{16}$ M 586.546
Isol. from the partial hydrolysate of hog gastric mucin. $[\alpha]_D$ +51.6° (H_2O).

Okuyama, T., *CA*, 1961, **55**, 18817; 1962, **57**, 8880 (*isol*)

2-Amino-2-deoxy-β-D-glucopyranosyl-(1→3)-β-D-galactopyranosyl-(1→4)-D-glucose A-10068

3^2-Glucosaminyllactose



Pyranose-*form*

$C_{18}H_{33}NO_{15}$ M 503.456

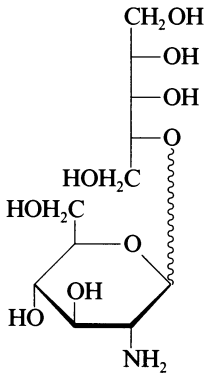
N-*Ac:* [75645-27-1]. *2-Acetamido-2-deoxy-β-D-glucopyranosyl-(1→3)-β-D-galactopyranosyl-(1→4)-D-glucose. 3^2-β-N-Acetylglucosaminyllactose. Lacto-N-triose II*
$C_{20}H_{35}NO_{16}$ M 545.494
Isol. from the partial acid hydrolysates of the tetra and higher saccharides obt. from human milk; does not itself occur free in milk. Mp 201-202°. $[\alpha]_D$ +40.7° (in H_2O).

N-*Ac, phenylosazone:* Mp 230°.

[24741-60-4]

Kuhn, R. *et al, Chem. Ber.*, 1958, **91**, 364; 1960, **93**, 647; 1962, **95**, 513, 518 (*isol*)
Okuyama, T., *CA*, 1961, **55**, 18817; 1962, **57**, 8880 (*isol*)
Acher, A.J. *et al, J. Org. Chem.*, 1970, **35**, 2436 (*synth*)
Koenderman, A.H.L. *et al, Biomed. Chromatogr.*, 1986, **1**, 104; *CA*, **106**, 191579k (*synth*)

4-O-(2-Amino-2-deoxy-D-glucopyranosyl)-D-ribitol A-10069



$C_{11}H_{23}NO_9$ M 313.304

N-*Ac: 4-N-Acetylglucosaminylribitol*
$C_{13}H_{25}NO_{10}$ M 355.341
The phosphate of this disaccharide is the repeating unit of *Staphylococcus aureus* techoic acid from which it is obt. by mild alkaline hydrolysis followed by dephosphorylation. On isol. the disaccharide is a mixt. of 1→4 linked α and β isomers, the proportions varying from sample to sample of techoic acid. $[\alpha]_D$ +12° (H_2O).

Baddiley, J. *et al, Biochim. Biophys. Acta*, 1961, **52**, 406 (*isol*)

2-Amino-3-hydroxy-2-(hydroxymethyl) propanoic acid A-10070

2-(Hydroxymethyl)serine, 9CI. 2,2-Bis(hydroxymethyl) glycine

[17149-11-0]

$(HOCH_2)_2C(NH_2)COOH$

$C_4H_9NO_4$ M 135.119
Constit. of *Trichosanthes kirilowii* and *Vicia pseudo-orobus*. Cryst. (EtOH aq.). Mp 242-243°.

Christensen, H.N., *Biochem. Prep.*, 1958, **6**, 49 (*synth*)
O'Connor, M.J. *et al, Aust. J. Chem.*, 1977, **30**, 683 (*synth*)
Jin, X. *et al, Huaxue Xuebao*, 1985, **43**, 5; *CA*, **102**, 123485 (*cryst struct*)
Saito, K. *et al, Phytochemistry*, 1985, **24**, 853 (*isol*)
Guo, R. *et al, Huaxue Xuebao*, 1987, **45**, 1180; *CA*, **108**, 147161 (*isol*)

4-Amino-4-methyl-2-pentanone, 9CI A-10071

Diacetonamine. 2-Aminoisobutyl methyl ketone

[625-04-7]

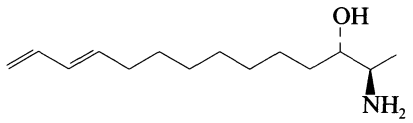
$(H_3C)_2C(NH_2)CH_2COCH_3$

$C_6H_{13}NO$ M 115.175
Isol. from *Genista hystrix, G. hystrix* ssp. *hystrix* and *G. hystrix* ssp. *legionensis*. Mod. sol. H_2O. Bp 178-181°, $Bp_{0.2}$ 25°. Prob. an artifact.

Oxime: [69151-99-1].
$C_6H_{14}N_2O$ M 130.189
Needles. Mp 58°. Bp_{14} 130°.

Haeseler, P.R., *J. Am. Chem. Soc.*, 1925, **47**, 1195 (*synth*)
Org. Synth., Coll. Vol., 1, 1932, 191 (*synth*)
Smith, M.E. *et al, J. Am. Chem. Soc.*, 1938, **60**, 408 (*synth*)
U.S. Pat., 2 497 548, (1950); *CA*, **44**, 4494 (*synth*)
Steinegger, E. *et al, Pharm. Acta Helv.*, 1976, **51**, 172, 203 (*isol*)

2-Amino-11,13-tetradecadien-3-ol A-10072



Relative configuration

$C_{14}H_{27}NO$ M 225.373

(2R*,3S*,11E)-form [129825-27-0] ***Xestoaminol B***

Isol. from the marine sponge *Xestospongia* sp. Oil. $[\alpha]_D$ +6.0° (c, 0.06 in MeOH).

13,14-Dihydro: [129825-26-9]. *2-Amino-11-tetradecen-3-ol.* ***Xestoaminol A***

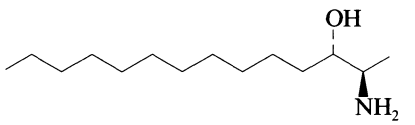
Isol. from *X.* sp. Oil. $[\alpha]_D$ +7.7° (c, 0.26 in MeOH).

Tetrahydro: see *2-Amino-3-tetradecanol, A-10073*

Jimenez, C. *et al, J. Nat. Prod.* (*Lloydia*), 1990, **53**, 978 (*isol*)

2-Amino-3-tetradecanol A-10073

[72530-18-8]



(2R,3S*)-form*

$C_{14}H_{31}NO$ M 229.405

(2R*,3S*)-form [129825-28-1] ***Xestoaminol C***

Isol. from the marine sponge *Xestospongia* sp. Oil. $[\alpha]_D$ +7.0° (c, 0.14 in MeOH).

(2ξ,3ξ)-(±)-form

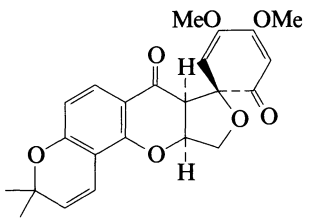
Cryst. (MeOH). Mp 99-101°.

Turel, R.J. *et al, Indian J. Chem., Sect. B*, 1979, **18**, 219 (*synth*)
Jimenez, C. *et al, J. Nat. Prod.* (*Lloydia*), 1990, **53**, 978 (*isol*)

Amorphispironone A-10074

10′,10′a-Dihydro-4,5-dimethoxy-3′,3′-dimethylspiro[3,5-cyclohexadiene-1,8′-[3H,8H]furo[3,4-e′]benzo[1,2-b:3,4-b′]dipyran]-2,7′(7aH)-dione, 9CI

[139006-28-3]

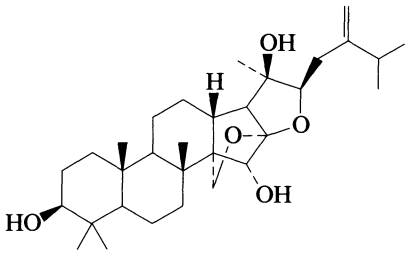


$C_{23}H_{22}O_7$ M 410.423

Constit. of the leaves of *Amorpha fruticosa*. Cytotoxic. Cryst. (MeOH aq.). Mp 152-152.5°. $[\alpha]_D$ −61.6° (c, 0.162 in MeOH).

Li, L. *et al, J. Chem. Soc., Chem. Commun.*, 1991, 1652 (*isol, struct*)

Ampelozigenin A-10075



$C_{31}H_{50}O_5$ M 502.733

Sapogenin from *Ampelozizyphus amazonicus*. Needles. Mp 268-270°. $[\alpha]_D$ −25.0° (c, 1 in Py).

3-O-[α-L-Rhamnopyranosyl-(1→2)-β-D-glucopyranoside], 15-Ac:

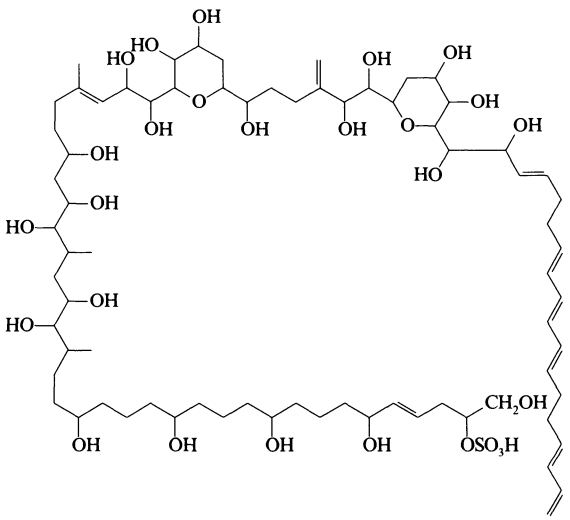
$C_{45}H_{72}O_{15}$ M 853.055

Constit. of *A. amazonicus*. Amorph. powder. Mp 204-208°. $[\alpha]_D$ −35.0° (c, 1 in EtOH).

Brandao, M.G.L. *et al, Phytochemistry*, 1993, **34**, 1123 (*isol, pmr, cmr*)

Amphidinol A-10076

[132930-70-2]

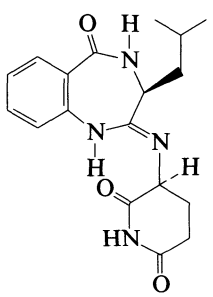


$C_{73}H_{126}O_{27}S$ M 1467.848

Constit. of the dinoflagellate *Amphidinium klebsii*. Antifungal agent. Pale yellow solid (as Na salt). $[\alpha]_D^{23}$ −25° (c, 0.18 in MeOH).

Satake, M. *et al, J. Am. Chem. Soc.*, 1991, **113**, 9859 (*isol, struct*)

Anacine A-10077



$C_{18}H_{22}N_4O_3$ M 342.397

Metab. of *Penicillium aurantiogriseum* produced in submerged fermentation. Amorph. solid.

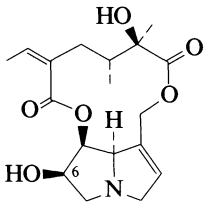
Boyes-Korkis, J.M. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 1707 (*isol, uv, ir, pmr, cmr, ms, struct*)

Anacrotine A-10078

Updated Entry replacing A-01642

6,12-Dihydroxysenecionan-11,16-dione, 9CI. Crotalaburnine

[5096-49-1]



Absolute configuration

$C_{18}H_{25}NO_6$ M 351.399

Cyclic diester of Crotanecine, C-02032 with senecic acid. Alkaloid from *Crotalaria laburnifolia* (Leguminosae). Mp 191-192°. $[\alpha]_D$ +30° (EtOH).

▷ Hepato- and pneumotoxin. VT5707000.

O^6-*Ac:* ***Acetylanacrotine***
$C_{20}H_{27}NO_7$ M 393.436
Alkaloid from *C. agatiflora* (Leguminosae). Mp 106-107°. $[\alpha]_D$ +74° (c, 0.4 in EtOH).

6-Epimer: [98264-41-6]. ***Uspallatine***
Alkaloid from the roots of *Senecio uspallatensis* (Compositae). Cryst. (MeOH/$CHCl_3$). Mp 205-207°. $[\alpha]_D^{20}$ +4.11° (c, 0.0764 in MeOH).

(E)-*Isomer:* **trans-*Anacrotine***
$C_{18}H_{25}NO_6$ M 351.399
Minor alkaloid from seeds of *C. capensis* (Leguminosae). $[\alpha]_D^{22}$ +11° (c, 1.7 in $CHCl_3$).

(E)-*Isomer*, O^6-*Ac:* ***Acetyl*-trans-*anacrotine***
$C_{20}H_{27}NO_7$ M 393.436
Alkaloid from *C. agatiflora* (Leguminosae). Prisms (EtOH). Mp 96-97°. $[\alpha]_D$ +65° (c, 1.37 in EtOH).

(E)-*Isomer*, O^6-*angeloyl*, N-*oxide:* ***Angeloyl*-trans-*anacrotine* N-*oxide.*** *Base C*
$C_{23}H_{31}NO_8$ M 449.500
Alkaloid from *C. agatiflora* (Leguminosae). Mp 175-176°.

Atal, C.K. *et al*, *Tetrahedron Lett.*, 1966, 537 (*isol, struct, pmr*)
Culvenor, C.C.J. *et al*, *An. Quim.*, 1972, **68**, 883 (*derivs*)
Crout, D.H.G., *J. Chem. Soc., Perkin Trans. 1*, 1972, 1602 (*isol*)
Culvenor, C.C.J. *et al*, *Chem. Biol. Interact.*, 1976, **12**, 299 (*tox*)
Jones, A.J. *et al*, *Aust. J. Chem.*, 1982, **35**, 1173 (*cmr*)
Mackay, M.F. *et al*, *Acta Crystallogr., Sect. C*, 1984, **40**, 1073 (*cryst struct*)
Pestchanker, M.J. *et al*, *Phytochemistry*, 1985, **24**, 1622 (*Uspallatine*)
Verdoorn, G.H. *et al*, *Phytochemistry*, 1992, **31**, 369 (*trans-Anacrotine*)

Anacycline A-10079

Updated Entry replacing A-01643

N-(2-Methylpropyl)-2,4-tetradecadiene-8,10-diynamide, 9CI. 2,4-Tetradecadiene-8,10-diynoic acid isobutylamide

[502-57-8]

$H_3CCH_2CH_2C{\equiv}CC{\equiv}CCH_2CH_2CH{=}CHCH{=}CHCONHCH_2CH(CH_3)_2$

$C_{18}H_{25}NO$ M 271.402

(*E,E*)-*form* [94413-18-0]
Alkaloid from the roots of *Anacyclus pyrethrum* (Compositae) and *Achillea* spp. Cryst. (Et_2O/pet. ether). Mp 122°.

Maleic anhydride adduct: Cryst. (Et_2O/pet. ether). Mp 196°.

N-*Me:* [38340-83-9]. N-*Methyl*-N-(*2-methylpropyl*)-*2,4-tetradecadiene-8,10-diynamide.* **N-*Methylanacycline***
$C_{19}H_{27}NO$ M 285.428
Constit. of the roots of *Anacyclus pyrethrum* (Compositae). Oil. λ_{max} 251 nm.

Tetrahydro: Waxy needles. Mp 40°.

12,13-Didehydro: [29428-83-9]. N-*Isobutyl-2,4,12-tetradecatriene-8,10-diynamide. Dehydroanacycline. 12,13-Didehydroanacycline*
$C_{18}H_{23}NO$ M 269.386
Alkaloid from *A. fuscata* and *Achillea* spp. (Compositae). Cryst. (pet. ether). Mp 150.5°.

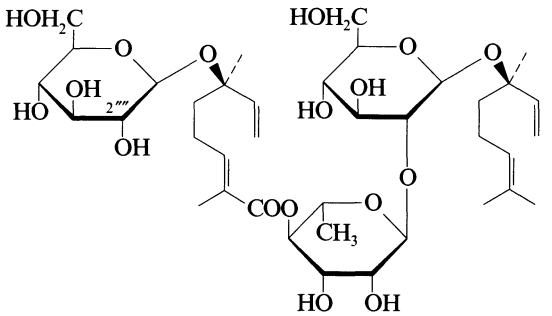
(*E,Z*)-*form* [37064-16-7]
Synthetic. Cryst. (Et_2O/pet. ether). Mp 85.5°.

[94481-83-1, 112711-13-4]

Crombie, L. *et al*, *J. Chem. Soc.*, 1955, 999 (*isol, uv, ir, struct*)
Bohlmann, F. *et al*, *Chem. Ber.*, 1956, **89**, 1276; 1970, **103**, 2856; 1974, **107**, 2120 (*synth, biosynth, uv, ir, Didehydroanacycline*)
Crombie, L. *et al*, *Chem. Ind.* (*London*), 1956, 409 (*synth, uv*)
Crombie, L. *et al*, *J. Chem. Soc.*, 1957, 2767 (*synth*)
Jente, R. *et al*, *Chem. Ber.*, 1972, **105**, 1694 (*isol, synth, ir, pmr, uv*)
Kuropka, G. *et al*, *Planta Med.*, 1987, **53**, 440 (*isol*)
Crombie, L. *et al*, *Tetrahedron Lett.*, 1987, **28**, 4875 (*synth*)
Greger, H. *et al*, *Phytochemistry*, 1989, **28**, 2363 (*isol*)

Anatolioside B A-10080

[147612-77-9]



$C_{38}H_{62}O_{17}$ M 790.898

Constit. of *Viburnum orientale*. Amorph. powder. $[\alpha]_D^{20}$ −50.3° (c, 0.39 in MeOH).

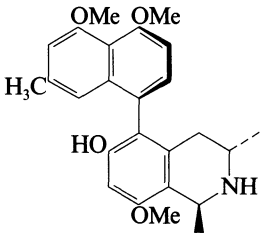
3''''-Ketone: [147612-78-0]. ***Anatolioside C***
$C_{38}H_{60}O_{17}$ M 788.882
Constit. of *V. orientale*. Amorph. powder. $[\alpha]_D^{20}$ −49.4° (c, 0.37 in MeOH).

2''''-(6-Hydroxy-2,6-dimethyl-2,7-octadienoyl): [147612-79-1]. ***Anatolioside D***
$C_{48}H_{76}O_{19}$ M 957.117
Constit. of *V. orientale*. Amorph. powder. $[\alpha]_D^{20}$ −45° (c, 0.4 in MeOH).

Çaliş, İ. *et al*, *Helv. Chim. Acta*, 1993, **76**, 416 (*isol, pmr, cmr*)

Ancistrobrevine B A-10081

[146471-74-1]

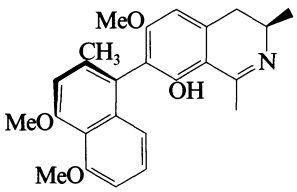


$C_{25}H_{29}NO_4$ M 407.508

Alkaloid from *Ancistrocladus abbreviatus* (Ancistrocladaceae). Amorph. powder ($MeOH/Me_2CO$). Mp 122-124°. $[\alpha]_D$ −68° (c, 0.81 in $CHCl_3$).

Bringmann, G. *et al*, *Phytochemistry*, 1992, **31**, 4011 (*isol, ir, cd, pmr, ms, struct*)

Ancistrobrevine C A-10082



$C_{25}H_{27}NO_4$ M 405.493

Alkaloid from stem bark and roots of *Ancistrocladus abbreviatus* (Ancistrocladaceae). Amorph. yellow solid. Mp 180-183°. $[\alpha]_D^{25}$ +13° (c, 0.69 in $CHCl_3$).

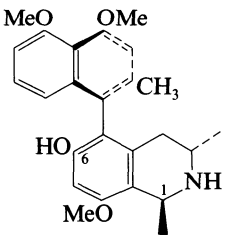
Bringmann, G. *et al*, *Phytochemistry*, 1993, **33**, 1511 (*isol, ir, cd, pmr, ms, struct*)

Ancistrocladine A-10083

Updated Entry replacing A-01663

5-(4,5-Dimethoxy-2-methyl-1-naphthalenyl)-1,2,3,4-tetrahydro-8-methoxy-1,3-dimethyl-6-isoquinolinol, 9CI

[32221-59-3]



Absolute configuration

$C_{25}H_{29}NO_4$ M 407.508

Diastereoisomer of Hamatine, H-00062. Alkaloid from *Ancistrocladus heyneanus*, *A. congolensis*, *A. hamatus* and *A. tectorius* (Ancistrocladaceae). Cryst. (MeOH). Mp 265-267° dec.

B,HCl: Needles ($MeOH/Me_2CO$). Mp 220-224° dec. $[\alpha]_D^{25}$ −25.5° (c, 2.3 in MeOH).

B,HBr: Needles (MeOH). Mp 229-231° dec.

Me ether: [32215-20-6]. **O-*Methylancistrocladine***

$C_{26}H_{31}NO_4$ M 421.535

Alkaloid from the root and stem bark of *A. congolensis* (Ancistrocladaceae). Fluffy needles (MeOH). Mp 200-202°.

Me ether; B,HCl: Needles (Me_2CO). Mp 315-317° dec. $[\alpha]_D^{25}$ −56.1° (c, 1.9 in $CHCl_3$).

O,N-*Di-Me:* Prisms (Et_2O). Mp 183-185°. $[\alpha]_D^{25}$ −21° (c, 2.55 in $CHCl_3$). Same plane struct. as Ancistrocladonine, A-10084.

O,N-*Dibenzoyl:* Cubes (MeOH). Mp 228-230°.

N-*Ac:* Cryst. (Et_2O). Mp 277-279°.

N-*Formyl:* Needles (Me_2CO). Mp 232-234°. $[\alpha]_D^{25}$ −126.8° (c, 1.57 in $CHCl_3$).

1,2-Didehydro: [36209-87-7]. ***Ancistrocladinine***

$C_{25}H_{27}NO_4$ M 405.493

Minor alkaloid from the roots of *A. heyneanus* (Ancistrocladaceae). Mp 235-238° dec. $[\alpha]_D^{25}$ −321.8° (c, 1.06 in Py).

1,2,3,4-Tetradehydro: [58738-34-4]. ***Ancistrocladeine***

$C_{25}H_{25}NO_4$ M 403.477

Alkaloid from roots of *A. ealaensis* and *A. tectorius* (Ancistrocladaceae). Cryst. (Me_2CO). Mp 275-277°.

N-*Me, 1-epimer:* ***Anistrocline.*** N-*Methyl-1*-epi-*ancistrocladine*

$C_{26}H_{31}NO_4$ M 421.535

Alkaloid from *A. tectorius* (Ancistroladaceae). Mp 223-224°. $[\alpha]_D^{25}$ +59.1° (c, 0.23 in $CHCl_3$).

Me ether, 1 and/or 3 epimers: [54382-93-3]. ***Ancistroealaensine.*** *5-(4,5-Dimethoxy-2-methyl-1-naphthalenyl)-1,2,3,4-tetrahydro-6,8-dimethoxy-1,3-dimethylisoquinoline, 9CI*

$C_{26}H_{31}NO_4$ M 421.535

Alkaloid from the roots of *Ancistrocladus ealaensis* (Ancistrocladaceae). Mp 84° (softens). $[\alpha]_D^{20}$ −26° (c, 1 in MeOH). Config. unknown.

Me ether; 1 and/or 3 epimers; B,HClO₄: Cryst. (MeOH). Mp 132-135°. $[\alpha]_D^{20}$ −84° (c, 1 in MeOH). Config. unknown.

Me ether; 1 and/or 3 epimers; B,MeI: Mp 170-172°. $[\alpha]_D^{20}$ −85° (c, 1 in MeOH). Config. unknown.

Me ether; 1 and/or 3 epimers; N-*Ac:* Mp 102-104°. $[\alpha]_D^{20}$ −34° (c, 1 in MeOH).

Me ether; 1 and/or 3 epimers; N-*formyl:* $[\alpha]_D^{20}$ −18° (c, 1 in MeOH). Config. unknown.

Me ether; 1 and/or 3 epimers; N-*Me:* Mp 115-117°. $[\alpha]_D^{20}$ −20° (c, 1 in MeOH). Config. unknown. Same plane struct. as Ancistrocladonine, A-10084.

Govindachari, T.R. *et al*, *Indian J. Chem.*, 1971, **9**, 931, 1421 (*uv, pmr, struct, Ancistrocladine, Ancistrocladinine*)

Govindachari, T.R. *et al*, *Tetrahedron*, 1971, **27**, 1013 (*isol, uv, ir, pmr, struct*)

Govindachari, T.R. *et al*, *J. Chem. Soc., Perkin Trans. 1*, 1974, 1413 (*config, cryst struct, pmr*)

Foucher, J.P. *et al*, *Phytochemistry*, 1974, **13**, 1253 (*Ancistroealaensine*)

Foucher, J.P. *et al*, *Phytochemistry*, 1975, **14**, 2699 (*isol, uv, pmr, ms, Ancistrocladeine*)

Bringmann, G. *et al*, *Angew. Chem., Int. Ed. Engl.*, 1982, **21**, 200; 1986, **25**, 913 (*synth, biosynth*)

Bringmann, G. *et al*, *Heterocycles*, 1989, **28**, 137 (*synth*)

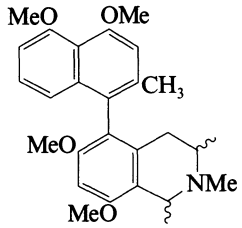
Bringmann, G. *et al*, *Phytochemistry*, 1992, **31**, 3297 (*Ancistrocline*)

Ancistrocladonine A-10084

Updated Entry replacing A-01665

5-(4,5-Dimethoxy-2-methyl-1-naphthalenyl)-1,2,3,4-tetrahydro-6,8-dimethoxy-1,2,3-trimethylisoquinoline, 9CI

[54382-91-1]



$C_{27}H_{33}NO_4$ M 435.562

Alkaloid from the roots of *Ancistrocladus ealaensis* (Ancistrocladaceae). Needles (Et_2O). Mp 82-83°. $[\alpha]_D^{20}$ +20° (c, 1 in MeOH).

B,HClO₄: Cryst. (MeOH). Mp 256-258°. $[\alpha]_D^{20}$ +71° (c, 1 in MeOH).

B,MeI: Yellow cryst. (Me_2CO). Mp 186-188°.

O⁶-*De-Me:* [82189-88-6]. ***Ancistrocline***

$C_{26}H_{31}NO_4$ M 421.535

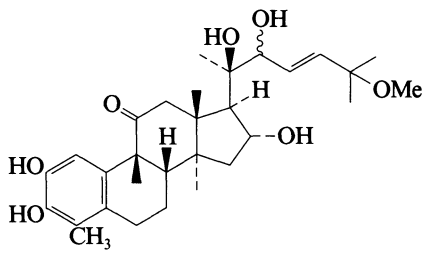
Alkaloid from *A. tectorius* (Ancistrocladaceae). Mp 227-228°. $[\alpha]_D^{33.5}$ +61.7° ($CHCl_3$).

▷ Config. unknown.

Foucher, J.P. *et al*, *Phytochemistry*, 1974, **13**, 1253 (*isol, uv, ir, pmr, ms, struct*)

Chen, Z. *et al*, *Yaoxue Xuebao*, 1981, **16**, 519; *CA*, **97**, 20737 (*Ancistrocline*)

Andirobicin A A-10085



$C_{30}H_{44}O_7$ M 516.673

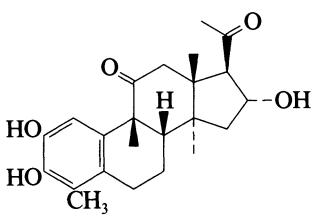
2-O-β-D-Glucopyranoside:

$C_{36}H_{54}O_{12}$ M 678.815

Constit. of *Fevillea trilobata*. Amorph. powder. $[\alpha]_D$ −9° (c, 4 in MeOH).

Valente, L.M.M. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 1772 (*isol, pmr, cmr*)

Andirobicin B A-10086



$C_{23}H_{30}O_5$ M 386.487

2-O-β-D-Glucopyranoside:

$C_{29}H_{40}O_{10}$ M 548.629

Constit. of *Fevillea trilobata*. Amorph. powder. $[\alpha]_D$ +31° (c, 1.7 in MeOH).

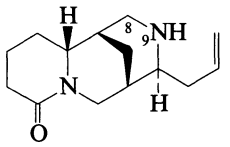
Valente, L.M.M. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 1772 (*isol, pmr, cmr*)

Angustifoline† A-10087

Updated Entry replacing A-01730

Decahydro-4-(2-propenyl)-1,5-methano-8H-pyrido[1,2-a][1,5] diazocin-5-one, 9CI. Jamaicensine

[550-43-6]



(−)-*form*

$C_{14}H_{22}N_2O$ M 234.341

Alkaloid from *Lupinus angustifolius, L. polyphyllus, L. albus, Ormosia jamaicensis* and *O. panamensis* (Leguminosae). Mp 80.5-81°. $[\alpha]_D$ −7.5° (+5.2°) (EtOH).

B,HCl: Mp 96-97°.

Picrate: Mp 182-185°.

N-*Ac:* Mp 151-152°.

Dihydro: Mp 82-83°. $[\alpha]_D$ +37° (EtOH).

N-*Me:* [4697-79-4]. **N-*Methylangustifoline***

$C_{15}H_{24}N_2O$ M 248.367

A principle alkaloid of the oil of *L. mutabilis* (Leguminosae). Mp 86° (synthetic). $[\alpha]_D^{21}$ +7.24° (c, 2.35 in EtOH) (synthetic). Isoln. is poorly documented.

8,9-Didehydro: ***Dehydroangustifoline.*** *Alkaloid W102*

$C_{14}H_{20}N_2O$ M 232.325

Alkaloid from *L. albus* and *L. angustifolius* (Leguminosae). Mp 105°.

Deoxo: ***Deoxoangustifoline.*** *Deoxyangustifoline*

$C_{14}H_{24}N_2$ M 220.357

Alkaloid from *Thermopsis mongolica* (Leguminosae).

N-*Formyl:* **N-*Formylangustifoline***

$C_{15}H_{22}N_2O_2$ M 262.351

Alkaloid from combined leaf and hypocotyl extracts of *L. polyphyllus* (Leguminosae).

N-*Methoxycarbonyl:* ***Angustifoline* N-*carboxymethyl ester***

$C_{16}H_{24}N_2O_3$ M 292.377

Alkaloid from combined leaf and hypocotyl extracts of *L. polyphyllus* (Leguminosae).

N-*Ethoxycarbonyl:* ***Angustifoline* N-*carboxyethyl ester***

$C_{17}H_{26}N_2O_3$ M 306.404

Alkaloid from combined leaf and hypocotyl extracts of *L. polyphyllus* (Leguminosae).

Bohlmann, F. *et al*, *Chem. Ber.*, 1960, **93**, 1956; 1962, **95**, 944 (*ir, isol, struct, synth*)

Lloyd, H.A. *et al*, *J. Org. Chem.*, 1960, **25**, 1959 (*isol*)

Marion, L. *et al*, *Tetrahedron Lett.*, 1960, **no. 19**, 1 (*struct, Angustifoline, Dehydroangustifoline*)

Fales, H.M. *et al*, *J. Am. Chem. Soc.*, 1970, **92**, 1590 (*ms*)

Lloyd, H.A. *et al*, *Phytochemistry*, 1975, **14**, 155 (*biosynth*)

Bratek-Wiewiorowska, M.D. *et al*, *Pol. J. Chem.* (*Rocz. Chem.*), 1979, **55**, 69 (*ir, pmr, conformn*)

Hatzold, T. *et al*, *Fette, Seifen, Anstrichm.*, 1982, **84**, 59 (*isol, N-Methylangustifoline*)

Fraser, A.M. *et al*, *J. Chem. Soc., Chem. Commun.*, 1984, 1477 (*biosynth*)

Christov, V. *et al*, *J. Nat. Prod.* (*Lloydia*), 1991, **54**, 1413 (*Deoxoangustifoline*)

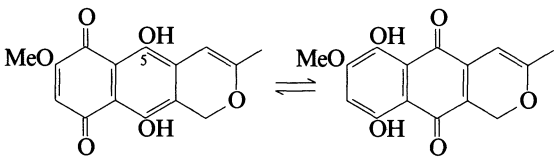
Veen, G. *et al*, *Phytochemistry*, 1992, **31**, 4343 (*derivs*)

Anhydrofusarubin A-10088

Updated Entry replacing A-01758

5,10-Dihydroxy-7-methoxy-3-methyl-1H-naphtho[2,3-c] pyran-6,9-dione

[79383-28-1]



$C_{15}H_{12}O_6$ M 288.256

Isol. from cultures of *Nectria haematococca*. Violet-black needles (MeOH). Mp 193-201°.

O-*De-Me:* [28125-57-7]. **O-*Demethylanhydrofusarubin***
$C_{14}H_{10}O_6$ M 274.229
Isol. from cultures of *Gibberella fujikuroi*. Purple needles (Me_2CO). Mp 202-204°.

5-*Deoxy:* [99088-27-4]. ***Anhydro-5-deoxyfusarubin.*** *5-Deoxyanhydrofusarubin*
$C_{15}H_{12}O_5$ M 272.257
Isol. from cultures of *N. haematococca*. Vermilion needles. Mp 205°, Mp 210-213° (double Mp). Also called 4-deoxy.

6-*Deoxy:* [132899-06-0]. ***6-Deoxyanhydrofusarubin***
$C_{15}H_{12}O_5$ M 272.257
Isol. from *N. haematococca*. Dark violet cryst. (EtOAc/heptane). Mp 124-128°. Also called 5-deoxy.

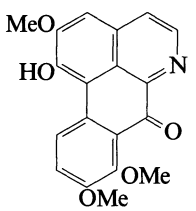
Cross, B.E. *et al*, *J. Chem. Soc. C*, 1970, 930 (*isol, uv, ir, pmr, ms, struct*)

Parisot, D. *et al*, *Phytochemistry*, 1985, **24**, 1977 (*biosynth, struct, deriv*)

Parisot, D. *et al*, *J. Antibiot.*, 1992, **45**, 1799 (*5-Deoxyanhydrofusarubin, 6-Deoxyanhydrofusarubin*)

Annolatine A-10089

[149998-52-7]



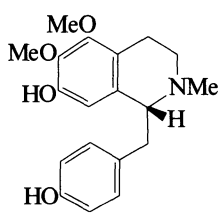
$C_{19}H_{15}NO_5$ M 337.331

Alkaloid from leaves of *Annona montana* (Annonaceae). Green amorph. powder.

Wu, Y.-C. *et al*, *Phytochemistry*, 1993, **33**, 497 (*isol, uv, ir, pmr, ms, struct*)

Annonelliptine A-10090

Updated Entry replacing A-01821



$C_{19}H_{23}NO_4$ M 329.395

(*R*)-*form* [96400-46-3]

Alkaloid from the leaves and stems of *Annona elliptica* (Annonaceae). Needles (MeOH). Mp 198-200°. $[\alpha]_D^{22}$ −101.0° (c, 0.38 in $CHCl_3$/MeOH 1:1).

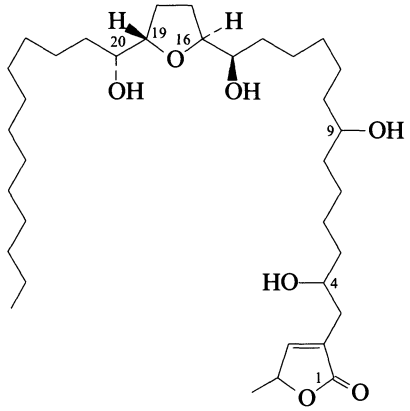
N-*De-Me:* [142287-93-2]. ***Anomoline***
$C_{18}H_{21}NO_4$ M 315.368
Alkaloid from stems of *A. cherimola* (Annonaceae). Mp 193-194.5°. $[\alpha]_D^{25}$ +27.82° (MeOH).

Sandoval, D. *et al*, *Phytochemistry*, 1985, **24**, 375 (*isol, uv, ir, pmr, cmr, ms, ord, struct*)

Yang, T.H. *et al*, *Zhonghua Yaoxue Zazhi*, 1991, **43**, 457; *CA*, **117**, 44523m (*Anomoline*)

Annoreticuin A-10091

[142488-56-0]



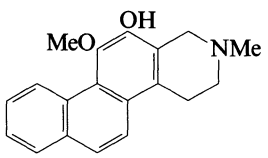
$C_{35}H_{64}O_7$ M 596.886

Acetogenin isol. from *Annona reticulata*. Cytotoxic. Amorph. powder. $[\alpha]_D^{24}$ +10.5° (c, 0.02 in $CHCl_3$).

Wu, Y.-C. *et al*, *Heterocycles*, 1992, **34**, 667 (*isol, pmr, cmr*)

Annoretine A-10092

[149998-37-8]



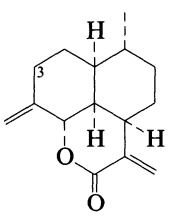
$C_{19}H_{19}NO_2$ M 293.365

Alkaloid from leaves of *Annona montana* (Annonaceae). Exhibits significant cytotoxicity. Purple oil.

Wu, Y.-C. *et al*, *Phytochemistry*, 1993, **33**, 497 (*isol, uv, ir, pmr, cmr, ms, struct*)

Annulide A-10093

[103739-95-3]



$C_{15}H_{20}O_2$ M 232.322

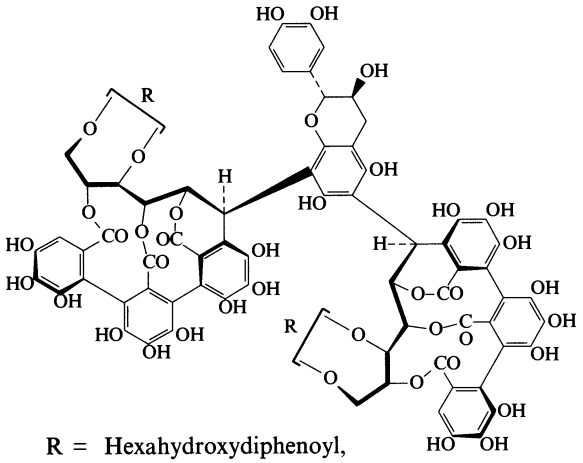
Constit. of *Artemisia annua*. Oil.

Δ^3-*Isomer:* [103739-94-2]. ***Isoannulide***

$C_{15}H_{20}O_2$ M 232.322
Constit. of *A. annua*.

Brown, G.D., *Phytochemistry*, 1993, **32**, 391.

Anogeissinin A-10094

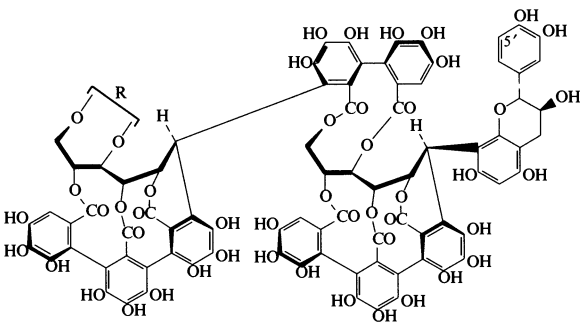


R = Hexahydroxydiphenoyl, $C_{14}H_8O_8$

$C_{97}H_{62}O_{56}$ M 2123.523
A flavano-ellagitannin constit. of the bark of *Anogeissus acuminata*. Tan amorph. powder + $3H_2O$. $[\alpha]_D^{20}$ +6.5° (c, 1.1 in MeOH).

Lin, T.-C. *et al*, *Chem. Pharm. Bull.*, 1991, **39**, 1144 (*struct, pmr, cmr, synth*)

Anogeissusin A A-10095



R = Hexahydroxydiphenoyl, $C_{14}H_8O_8$

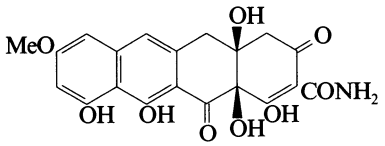
$C_{97}H_{62}O_{56}$ M 2123.523
A flavano-ellagitannin from the bark of *Anogeissus acuminata*. Tan amorph. powder + $3H_2O$. $[\alpha]_D^{20}$ +15.3° (c, 1.0 in MeOH).

5'-Hydroxy: ***Anogeissusin B***
$C_{97}H_{62}O_{57}$ M 2139.523
Isol. from the bark of *A. acuminata* var. *lanceolata*. Tan powder + $3H_2O$. $[\alpha]_D^{21}$ +10.1° (c, 1 in MeOH).

Lin, T.-C. *et al*, *Chem. Pharm. Bull.*, 1991, **39**, 1144 (*struct, pmr, cmr, synth*)

Anthrotainin A-10096

[148084-40-6]

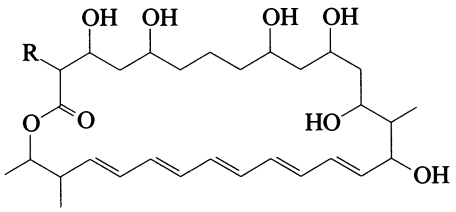


$C_{20}H_{17}NO_9$ M 415.356
Tetracycline antibiotic related to Viridicatumtoxin, V-00367. Prod. by *Gliocladium catenulatum*. Substance P binding inhibitor. V. unstable.

Wong, S.M. *et al*, *J. Antibiot.*, 1993, **46**, 214 (*isol, pmr, cmr, struct, props*)

Antibiotic AB 023 A-10097

AB 023



Antibiotic AB 023A R = CH_3
Antibiotic AB 023B R = CH_2CH_3

Polyene antibiotic complex. Prod. by *Streptomyces* sp. SD581. Antifungal agent.

Antibiotic AB 023A [141443-39-2]
AB 023A
$C_{31}H_{50}O_8$ M 550.731

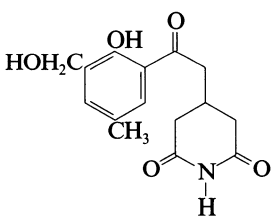
Antibiotic AB 023B [141443-40-5]
AB 023B
$C_{32}H_{52}O_8$ M 564.758

Cidaria, D. *et al*, *J. Antibiot.*, 1993, **46**, 251, 255 (*isol, pmr, cmr, ms, struct*)

Antibiotic AH 135Y A-10098

AH 135Y

[145066-21-3]



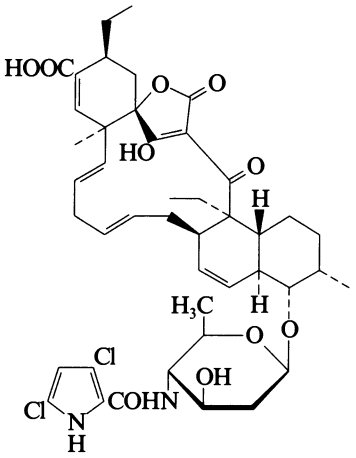
$C_{15}H_{17}NO_5$ M 291.303
Glutarimid antibiotic. Prod. by *Streptomyces albovinaceus*. Antiherpetic agent. Powder. Mp 220°.

Uyeda, M. *et al*, *J. Antibiot.*, 1992, **45**, 1370 (*isol, struct, props*)

Antibiotic BMY 42448 A-10099

BMY 42448

[140395-71-7]



$C_{45}H_{56}Cl_2N_2O_9$ M 839.851

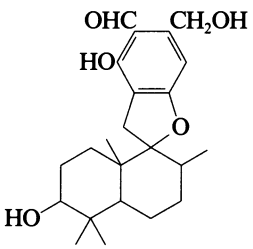
Prod. by *Micromonospora narashinoensis*. Antitumour agent. Solid.

U.S. Pat., 5 082 933, (1992); *CA*, **116**, 190938w (*ir, uv, pmr, cmr*)

Antibiotic L 671776 A-10100

L 671776

[134313-74-9]



$C_{23}H_{32}O_5$ M 388.503

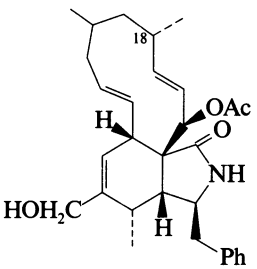
Isol. from the hyphomycete, *Memnoniella echinata*. Inositol monophosphatase inhibitor.

Lam, Y.K.T. *et al*, *J. Antibiot.*, 1992, **45**, 1397 (*isol, pmr, props*)

Antibiotic L 697318 A-10101

Updated Entry replacing A-02167

L 697318



$C_{30}H_{39}NO_4$ M 477.642

Metab. of *Hypoxylon fragiforme*. Amorph.

Deoxy: ***Antibiotic L 696475.*** *L 696475*

$C_{30}H_{39}NO_3$ M 461.643

Metab. of *H. fragiforme*. Amorph.

18β-Hydroxy: ***Cytochalasin U***

$C_{30}H_{39}NO_5$ M 493.642

Isol. from a *Pestalolia* sp. Immunosuppressant.

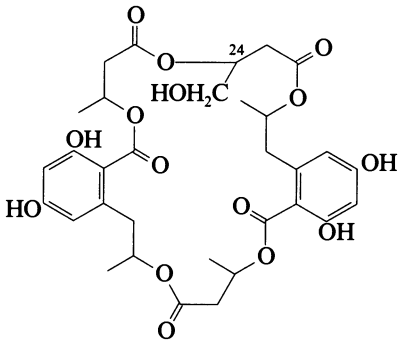
Burres, N.S. *et al*, *J. Antibiot.*, 1992, **45**, 1367 (*Cytochalasin U*)

Ondeyka, J. *et al*, *J. Antibiot.*, 1992, **45**, 679, 686 (*isol, pmr, cmr, struct*)

Antibiotic NG 011 A-10102

NG 011

[141731-75-1]



$C_{32}H_{38}O_{15}$ M 662.643

Prod. by *Penicillium verruculosum*. Potentiator of nerve growth factor. Powder. Mp 85-100°. $[\alpha]_D^{26}$ −7.2° (c, 0.25 in EtOH).

24-Epimer: [141731-76-2]. ***Antibiotic NG 012.*** *NG 012*

$C_{32}H_{38}O_{15}$ M 662.643

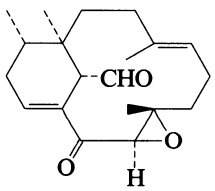
From *P. verruculosum*. Potentiator of nerve growth factor. Powder. Mp 113-120°. $[\alpha]_D^{26}$ −25.2° (c, 0.25 in EtOH).

Ito, M. *et al*, *J. Antibiot.*, 1992, **45**, 1559, 1566 (*isol, pmr, cmr, struct, props*)

Antibiotic Sch 47918 A-10103

Sch 47918

[143903-06-4]



$C_{20}H_{28}O_3$ M 316.439

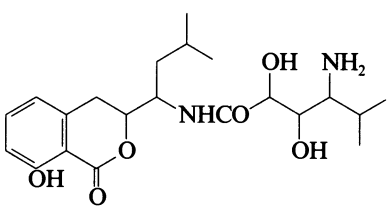
Prod. by a *Phoma* sp. Platelet activating factor antagonist. Cryst. Mp 204-205°. $[\alpha]_D^{22}$ +22.4° (c, 0.34 in $CHCl_3$).

Chu, M. *et al*, *J. Org. Chem.*, 1992, **57**, 5817 (*isol, pmr, cmr, cryst struct*)

Antibiotic Y 05460MA A-10104

Y 05460MA

[126262-07-5]



$C_{21}H_{32}N_2O_6$ M 408.494

Prod. by a *Bacillus* sp. Y-05460M. Active against gram-positive and -negative bacteria. Shows antitumour and antiulcer activities. Powder. Mp 104-106°. Related to Amicoumacin B, A-01202.

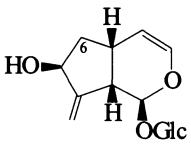
Sato, T. *et al*, *J. Antibiot.*, 1992, **45**, 1949.

Antirride A-10105

Updated Entry replacing A-02521

1,4a,5,6,7,7a-Hexahydro-6-hydroxy-7-methylenecyclopenta[c] *pyran-1-yl-β-D-glucopyranoside, 9CI. Antirrhide*

[27935-00-8]



$C_{15}H_{22}O_8$ M 330.334

Constit. of *Antirrhinum tortusum* and of *Linaria japonica*. Cryst. Mp 85-87°. $[\alpha]_D^{23}$ −116° (c, 0.42 in dioxan).

Penta-Ac: Mp 154-155°. $[\alpha]_D^{23}$ −155° (c, 1.05 in dioxan).

6β-Hydroxy: ***6β-Hydroxyantirride***

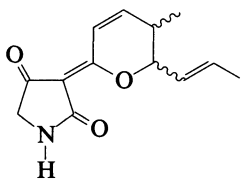
$C_{15}H_{22}O_9$ M 346.333

Constit. of *L. japonica*, *L. genistifolia* and *L. peloponnesiaca*. Amorph. powder. $[\alpha]_D^{20}$ −85.7° (MeOH), $[\alpha]_D$ −125° (c, 0.88 in MeOH).

Scarpati, M.L. *et al*, *Gazz. Chim. Ital.*, 1969, **99**, 807; *CA*, **72**, 90815 (*isol, struct*)
Kitagawa, I. *et al*, *Chem. Pharm. Bull.*, 1973, **21**, 1978 (*isol, struct*)
Otsuka, H., *Phytochemistry*, 1993, **33**, 617 (*isol, pmr, cmr*)
Handjieva, N.V. *et al*, *Tetrahedron*, 1993, **49**, 9261 (*6β-Hydroxyantirride*)

Apiodionene A-10106

[142808-38-6]



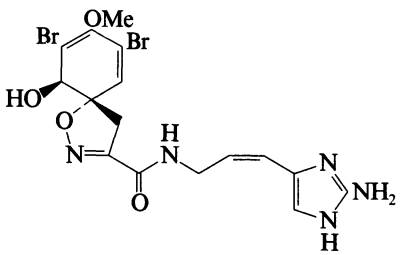
$C_{13}H_{15}NO_3$ M 233.266

Isol. from *Apiosordaria effusa*. Antiinflammatory and anticancer agent. Mp 190-192°. $[\alpha]_D^{25}$ +155.4°.

Japan. Pat., 92 49 289, (1992); *CA*, **117**, 88730 (*isol, ir, uv, pmr, cmr*)

Aplysinamisine I A-10107

[150417-67-7]



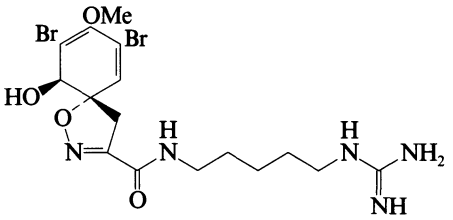
$C_{16}H_{17}Br_2N_5O_4$ M 503.149

Alkaloid from the Caribbean sponge *Aplysina cauliformis*. Oil. $[\alpha]_D^{26}$ +121.9° (c, 5.7 in MeOH).

Rodríguez, A.D. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 907 (*isol, uv, ir, pmr, cmr, ms, struct*)

Aplysinamisine II A-10108

[150417-68-8]



$C_{16}H_{23}Br_2N_5O_4$ M 509.197

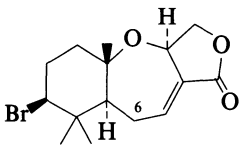
Alkaloid from the Caribbean sponge *Aplysina cauliformis*. Semisolid. $[\alpha]_D^{26}$ +47.0° (c, 7.9 in MeOH).

Rodríguez, A.D. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 907 (*isol, uv, ir, pmr, cmr, ms, struct*)

Aplysistatin A-10109

Updated Entry replacing A-02588

[62003-89-8]



$C_{15}H_{21}BrO_3$ M 329.233

Constit. of *Aplysia angasi*. Cryst. Mp 173-175°. $[\alpha]_D^{25}$ −375° (MeOH).

12-Deoxo: [77249-86-6]. *12-Deoxyaplysistatin.* ***Palisadin A***

$C_{15}H_{23}BrO_2$ M 315.249

Constit. of *Laurencia palisada*. Oil. $[\alpha]_D$ +19.5° (c, 1.5 in $CHCl_3$). Slowly oxid. to Aplysistatin in air.

6β-Hydroxy: ***6β-Hydroxyaplysistatin***

$C_{15}H_{21}BrO_4$ M 345.232

Constit. of *L. filiformis*. Cryst. (MeOH). Mp 153.5-155.5°. $[\alpha]_D^{25}$ +130° (c, 0.4 in MeOH).

12-Deoxo, 3ξ,4ξ-epoxide: ***3,4-Epoxypalisadin A***

$C_{15}H_{23}BrO_3$ M 331.249

Constit. of *L. flexilis*. Cryst. Mp 119-122°. $[\alpha]_D^{25}$ +10° (c, 0.1 in $CHCl_3$).

12-Deoxy, 5β-acetoxy: ***5β-Acetoxypalisadin A***

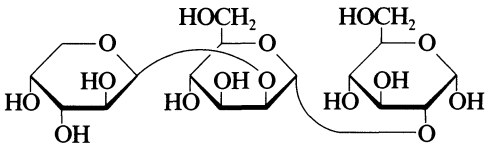
$C_{17}H_{25}BrO_4$ M 373.286

Constit. of *L. flexilis*. Oil. $[\alpha]_D^{25}$ −45° (c, 0.1 in $CHCl_3$).

Pettit, G.R. *et al*, *J. Am. Chem. Soc.*, 1977, **99**, 262.
Paul, V.J. *et al*, *Tetrahedron Lett.*, 1980, 2787 (*deriv*)
Capon, R. *et al*, *Tetrahedron*, 1981, **37**, 1613 (*6β-Hydroxyaplysistatin, cryst struct, abs config*)
White, J.D. *et al*, *J. Am. Chem. Soc.*, 1982, **104**, 3923 (*synth*)
Hoye, T.R. *et al*, *J. Am. Chem. Soc.*, 1982, **104**, 6704 (*synth*)
Shieh, H.-M. *et al*, *Tetrahedron Lett.*, 1982, **23**, 4643 (*synth*)
Kraus, G.A. *et al*, *J. Org. Chem.*, 1983, **48**, 5356 (*synth*)
Gosselin, P. *et al*, *Tetrahedron Lett.*, 1983, **24**, 5515 (*synth*)
Tanaka, A. *et al*, *Agric. Biol. Chem.*, 1984, **48**, 2535; 1986, **50**, 1069 (*synth*)
De Nys, R. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 877 (*isol, derivs, pmr, cmr*)

β-D-Arabinopyranosyl-(1→2)-α-D-mannopyranosyl-(1→2)-D-glucose A-10110

Ristriose



α-Pyranose-*form*

$C_{17}H_{30}O_{15}$ M 474.415

Formed by the acetolysis of Ristomycin A, R-00299.

α-Pyranose-form

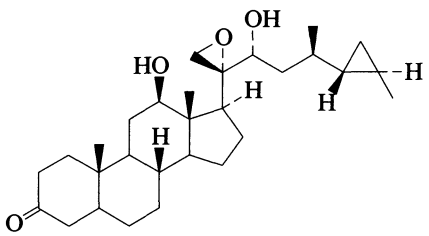
Deca-Ac: [68787-45-1].

$C_{37}H_{50}O_{25}$ M 894.787

Mp 84-87°.

Neszmelyi, A. *et al*, *J. Antibiot.*, 1978, **31**, 974 (*cmr*)
Sztaricskai, F. *et al*, *J. Am. Chem. Soc.*, 1980, **102**, 7093 (*isol, pmr*)

Aragusterol A-10111

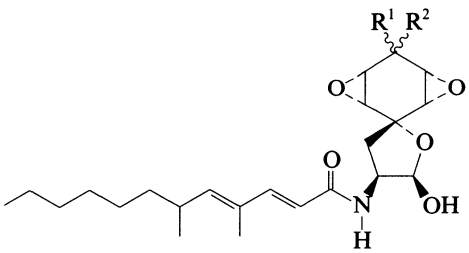


$C_{29}H_{46}O_4$ M 458.680

Constit. of a *Xestospongia* sp. Needles. Mp 157-158°. $[\alpha]_D$ +37.6° (c, 1.06 in $CHCl_3$).

Iguchi, K. *et al*, *Tetrahedron Lett.*, 1993, **34**, 6277 (*isol, pmr, cmr*)

Aranorosinol A A-10112



R^1 = OH, R^2 = H

$C_{23}H_{35}NO_6$ M 421.533

Prod. by *Pseudoarachniotus roseus*. Powder + $1H_2O$. Mp 133-135°. $[\alpha]_D$ −25.06° (c, 7.82 in MeOH).

Roy, K. *et al*, *J. Antibiot.*, 1992, **45**, 1592 (*isol, pmr, cmr, struct*)

Aranorosinol B A-10113

[145147-05-3]

As Aranorosinol A, A-10112 with

R^1 = OH, R^2 = $-CH_2COCH_3$

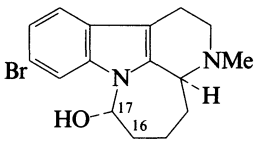
$C_{26}H_{39}NO_7$ M 477.597

Prod. by *Pseudoarachniotus roseus*. Powder. Mp 84-85°. $[\alpha]_D$ −9.3° (c, 0.4 in $CHCl_3$).

Roy, K. *et al*, *J. Antibiot.*, 1992, **45**, 1592 (*isol, pmr, cmr, struct*)

Arborescidine C A-10114

[147395-94-6]



$C_{16}H_{19}BrN_2O$ M 335.243

Alkaloid from the marine tunicate *Pseudodistoma arborescens*. Cryst. (MeOH). Mp 172-173°. $[\alpha]_D$ +3° (c, 1 in $CHCl_3$).

17-Epimer: [147512-45-6]. ***Arborescidine D***

$C_{16}H_{19}BrN_2O$ M 335.243

Alkaloid from the marine tunicate *P. arborescens*. Exhibits moderate cytotoxicity *in vitro* against KB human buccal carcinoma. Amorph. solid.

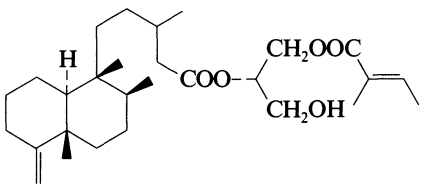
17-Deoxy, 16,17-didehydro: [147395-93-5]. ***Arborescidine B***

$C_{16}H_{17}BrN_2$ M 317.228

Alkaloid from *P. arborescens*. Oil. $[\alpha]_D$ +70° (c, 0.6 in $CHCl_2$).

Chbani, M. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 99 (*isol, uv, ir, pmr, cmr, ms, cd, struct*)

Archidorin A-10115



$C_{28}H_{46}O_5$ M 462.668

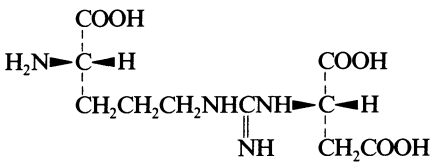
Constit. of *Archidoris tuberculata*. Amorph. powder. $[\alpha]_D^{25}$ +12.1° (c, 0.3 in $CHCl_3$).

Cimino, G. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 1642 (*isol, pmr, cmr*)

Argininosuccinic acid A-10116

N-[[(*4-Amino-4-carboxybutyl*)*amino*]*iminomethyl*]*aspartic acid, 9CI.* N-[(*4-Amino-4-carboxybutyl*)*amidino*]*aspartic acid, 8CI*

[2387-71-5]

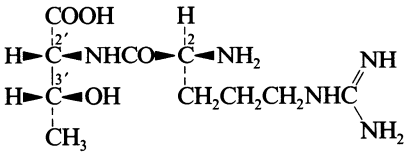


$C_{10}H_{18}N_4O_6$ M 290.275

Abnormal metab. in some cases of mental disease. Intermd. in biosynth. of Arginine from Citrulline and of Urea. $[\alpha]_D^{24}$ +16.4° (c, 0.29 in H_2O), $[\alpha]_D$ +5.2° (c, 0.29 in 0.5*M* HCl), $[\alpha]_D$ +26.6° (c, 0.29 in 0.5*M* NaOH).

Ratner, S. *et al*, *J. Biol. Chem.*, 1953, **204**, 95 (*isol*)
Westall, R.G., *Biochem. J.*, 1960, **77**, 135 (*isol, synth*)
Ratner, S. *et al*, *Biochemistry*, 1966, **5**, 1821 (*biosynth*)
Kowalsky, A. *et al*, *Biochemistry*, 1969, **8**, 899 (*pmr*)
Japan. Pat., 71 37 868, (1971); *CA*, **76**, 32892c (*manuf*)
Japan. Pat., 72 37 032, (1972); *CA*, **78**, 2748j (*manuf*)

Arginylthreonine A-10117



$C_{10}H_{21}N_5O_4$ M 275.307

(2S,2'S,3'R)-form [106326-78-7]

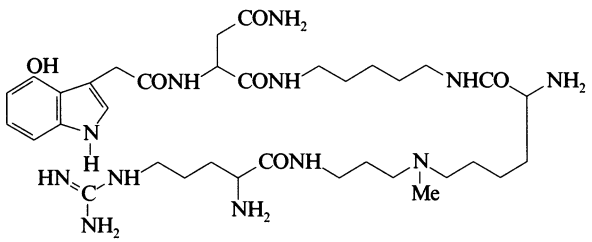
L,L-form

N^2-*(2,3-Dihydroxybenzoyl):* [143651-45-0]. ***Benarthin***
$C_{17}H_{25}N_5O_7$ M 411.414
Prod. by *Streptomyces xanthophaeus*. Inhibitor of pyroglutamyl peptidase. Powder + $\frac{1}{2}H_2O$ (as monohydrochloride). Mp 178-180° (monohydrochloride). $[\alpha]_D^{24}$ −2.5° (c, 1 in H_2O).

Aoyagi, T. *et al*, *J. Antibiot.*, 1992, **45**, 1079, 1084, 1088 (*Benarthin*)

Argiopinin II A-10118

[117233-42-8]



$C_{35}H_{60}N_{12}O_6$ M 744.936

Isol. from the venom of the *Argiope lobatum* spider. An *N*-methylated cationic form, Argiopinin I, was also isol.

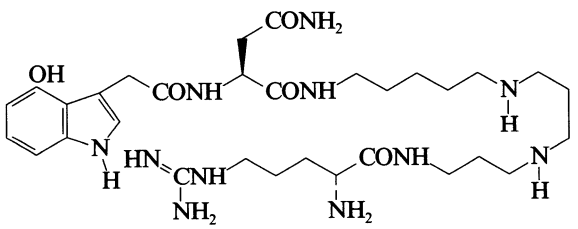
[117233-41-7]

Grishin, E.V. *et al*, *Toxicon*, 1989, **27**, 541 (*isol*)

Argiotoxin 659 A-10119

Argiopinin III

[111944-83-3]



$C_{31}H_{53}N_{11}O_5$ M 659.830

Argiopinin III had unspecified stereochem. and the two substances may not therefore be identical. Isol. from the venom of *Argiope aurantia* spider and (as Argiopinin III) from *A. lobatum* venom.

[117306-99-7]

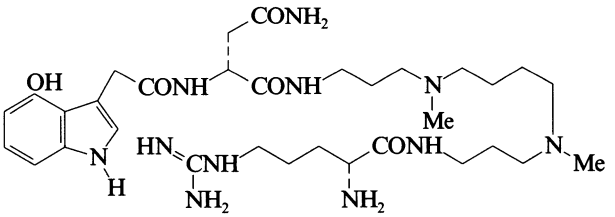
Adams, M.E. *et al*, *Biochem. Biophys. Res. Commun.*, 1987, **148**, 678 (*isol*)

Jasys, V.J. *et al*, *Tetrahedron Lett.*, 1988, **29**, 6223 (*synth, cmr, pmr*)

Grishin, E.V. *et al*, *Toxicon*, 1989, **27**, 541 (*Argiopinin III*)

Argiotoxin 673 A-10120

[111924-44-8]



$C_{32}H_{55}N_{11}O_5$ M 673.857

Isol. from the venom of *Argiope aurantia* spider.

Adams, M.E. *et al*, *Biochem. Biophys. Res. Commun.*, 1987, **148**, 678 (*isol*)

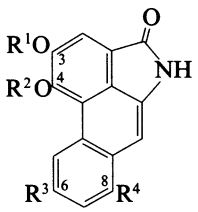
Jasys, V.J. *et al*, *Tetrahedron Lett.*, 1988, **29**, 6223 (*synth, cmr, pmr*)

Aristolactam BII A-10121

Updated Entry replacing A-02736

Cepharanone B. O-Methylaristolactam AII. Alkaloid Y

[53948-09-7]



$R^1 = R^2 = Me$,
$R^3 = R^4 = H$

$C_{17}H_{13}NO_3$ M 279.295

Alkaloid from the roots of *Aristolochia argentina*, the bark of *Schefferomitra subaequalis* and the callus tissue of *Stephania cepharantha* (Aristolochiaceae, Annonaceae, Menispermaceae). Also isol. from stem bark of *Goniothalamus velutinus* (Annonaceae). Cryst. (MeOH, Me_2CO or butanol). Mp 247-250°, Mp 257-258°, Mp 264-265°.

2-Hydroxy: [128718-51-4]. ***Piperolactam B***
$C_{17}H_{13}NO_4$ M 295.294
Alkaloid from *Piper attenuatum* and *P. boehmerifolium* (Piperaceae). Yellow cryst. (C_6H_6/MeOH). Mp 226-227°. This struct. was originally assigned to Piperolactam D by Desai *et al* (1990).

8-Hydroxy: ***Velutinam***
$C_{17}H_{13}NO_4$ M 295.294
Alkaloid from stem bark of *G. velutinus* (Annonaceae). Brownish-yellow needles. Mp 267-270°.

Gellert, E. *et al*, *Aust. J. Chem.*, 1972, **25**, 2477 (*isol, uv, pmr, ms*)

Crohare, R. *et al*, *Phytochemistry*, 1974, **13**, 1957 (*isol, uv, ir, pmr, ms, struct*)

Akasu, M. *et al*, *Tetrahedron Lett.*, 1974, 3609 (*uv, ir, pmr, ms, struct*)

Dyke, S.F. *et al*, *Phytochemistry*, 1978, **17**, 599 (*ir, ms, struct*)

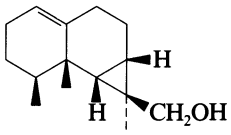
Priestap, H.A., *Phytochemistry*, 1985, **24**, 849 (*pmr, cmr*)

Desai, S.J. *et al*, *J. Nat. Prod.* (*Lloydia*), 1990, **53**, 496 (*Piperolactam B*)

Omar, S. *et al*, *Phytochemistry*, 1992, **31**, 4395 (*Velutinam*)

Olsen, C.E. *et al*, *Phytochemistry*, 1993, **33**, 518 (*struct, Piperolactam B*)

1(10)-Aristolen-12-ol A-10122



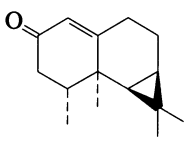
$C_{15}H_{24}O$ M 220.354

Ac: [148371-05-5].
$C_{17}H_{26}O_2$ M 262.391
Constit. of *Lemnalia africana*. Oil. $[\alpha]_D$ −62° (c, 1 in $CHCl_3$).

Jurek, J. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 508 (*isol, pmr, cmr*)

1(10)-Aristolen-2-one A-10123

[28398-06-3]

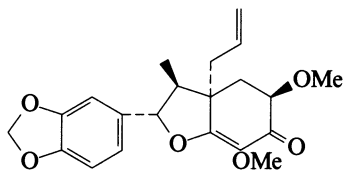


$C_{15}H_{22}O$ M 218.338
Constit. of *Aristolochia longa* and *Nardostachys jatamansi*. Solid. Mp 41°.

Fernandez, A. *et al*, *Phytochemistry*, 1983, **22**, 2753 (*isol, pmr*)

Armenin B A-10124

[70561-33-0]

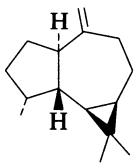


$C_{21}H_{24}O_6$ M 372.417
Constit. of *Licaria armeniaca* and *Ucotea aciphylla*. Cryst. (Me_2CO). Mp 122-125°.

Aiba, C.J. *et al*, *Phytochemistry*, 1978, **17**, 2038 (*isol, pmr*)
D'A Felicio, J. *et al*, *Phytochemistry*, 1986, **25**, 1707 (*isol*)

10(14)-Aromadendrene A-10125

Updated Entry replacing A-02793



(1α,4α,5β,6α,7α)-*form*

$C_{15}H_{24}$ M 204.355

(1α,4α,5β,6α,7α)-form [14682-34-9] (−)-***Aromadendrene***. *β-Diploalbicene*
Constit. of *Bixa orellana* and *Eucalyptus sideroxylon*. Oil. $[\alpha]_D$ −11° (EtOH).

10β,14-Epoxide: [85710-39-0]. *10,14-Epoxyaromadendrane*. ***Aromadendrene epoxide***
$C_{15}H_{24}O$ M 220.354
Constit. of *Thymus borgiae* and hops.

(1β,4α,5β,6β,7β)-form [25246-27-9] ***Alloaromadendrene***. *α-Aromadendrene*
Constit. of many essential oils incl. *Ledum palustre, Croton* spp. *E. globulus, Metrosideros scandens, Perovskia scrophulariaefolia, Glycyrrhiza triphylla*. Oil. Bp_2 96°. $[\alpha]_D^{20}$ −21.6°. n_D^{18} 1.5010.

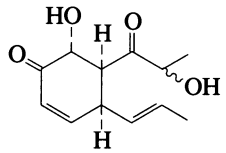
10β,14-Epoxide: [85760-81-2]. ***Alloaromadendrene epoxide***
$C_{15}H_{24}O$ M 220.354
Constit. of *T. borgiae*.

(1β,4β,5α,6β,7β)-form [489-39-4] (+)-***Aromadendrene***
Constit. of *Agathis australis, Artemisia vestita* and *E.* oils. Oil. Bp 260-265°. $[\alpha]_D$ +24.5°.

Dolejš, L. *et al*, *Collect. Czech. Chem. Commun.*, 1960, **25**, 1483 (*isol*)
Büchi, G. *et al*, *J. Am. Chem. Soc.*, 1969, **91**, 6473 (*synth, abs config, bibl*)
Tressl, R. *et al*, *J. Agric. Food Chem.*, 1983, **31**, 892 (*Aromadendrene epoxide*)
Bohlmann, F. *et al*, *Planta Med.*, 1984, **50**, 1950 (*Alloaromadendrene epoxide*)
Zafra-Polo, M.C. *et al*, *J. Chromatogr.*, 1990, **518**, 230 (*Aromadendrene epoxide*)

Arthropsadiol B A-10126

[144447-85-8]

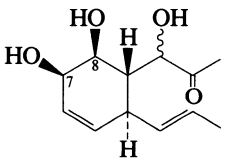


$C_{12}H_{16}O_4$ M 224.256
Metab. of *Arthropsis truncata*. Oil. $[\alpha]_D^{25}$ −389° (c, 0.32 in MeOH).

Ayer, W.A. *et al*, *Can. J. Chem.*, 1992, **70**, 1338 (*isol, pmr, cmr*)

Arthropsatriol A A-10127

[144539-80-0]



$C_{12}H_{18}O_4$ M 226.272
Metab. of *Arthropsis truncata*. Oil.

7-Epimer: [144447-87-0]. ***Arthropsatriol B***
$C_{12}H_{18}O_4$ M 226.272
Metab. of *A. truncata*. Oil. $[\alpha]_D^{25}$ −216° (c, 1 in MeOH).

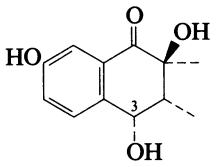
7-Ketone: [144447-84-7]. ***Arthropsadiol A***
$C_{12}H_{16}O_4$ M 224.256
Metab. of *A. truncata*. Needles. Mp 78-79°. $[\alpha]_D$ −245.7° (c, 1.05 in MeOH).

Ayer, W.A. *et al*, *Can. J. Chem.*, 1992, **70**, 1338, 1348 (*isol, pmr, cmr, biosynth*)

Arthropsatriol C A-10128

3,4-Dihydro-2,4,7-trihydroxy-2,3-dimethyl-1(2H)-naphthalenone, 9CI

[144540-59-0]



$C_{12}H_{14}O_4$ M 222.240
Metab. of *Arthropsis truncata.*

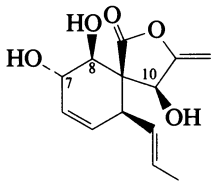
3-Epimer: ***Arthropsatriol D***
$C_{12}H_{14}O_4$ M 222.240
Metab. of *A. truncata.*

[144447-88-1]

Ayer, W.A. *et al, Can. J. Chem.*, 1992, **70**, 1338, 1348 (*isol, pmr, cmr, biosynth*)

Arthropsolide D A-10129

[144447-90-5]



$C_{13}H_{16}O_5$ M 252.266
Metab. of *Arthropsis truncata.* Oily solid. $[\alpha]_D^{25}$ −239° (c, 1.09 in MeOH).

7-Ketone: [144606-10-0]. ***Arthropsolide A.*** *Paecilospirone. MA 638-2-B. Antibiotic MA 638-2-B*
$C_{13}H_{14}O_5$ M 250.251
Metab. of *A. truncata* and a *Paecilomyces* sp. Also from *Fusarium* sp. Needles (EtOAc/hexane). Mp 128° (142-145°). $[\alpha]_D$ −302.4° (c, 1 in MeOH), $[\alpha]_D^{23}$ −322.7° (c, 0.022 in MeOH). Identities of Arthropsolide A and MA 638-2-B not confirmed.

7,10-Diketone: [144447-89-2]. ***Arthropsolide B***
$C_{13}H_{12}O_5$ M 248.235
Metab. of *A. truncata.*

7,10-Diketone,8-epimer: [144539-81-1]. ***Arthropsolide C***
$C_{13}H_{12}O_5$ M 248.235
Metab. of *A. truncata.*

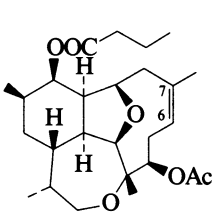
[135048-14-5, 142507-24-2]

Hirota, A. *et al, Agric. Biol. Chem.*, 1991, **55**, 187 (*Paecilospirone*)
Ayer, W.A. *et al, Can. J. Chem.*, 1992, **70**, 1338, 1348 (*isol, pmr, cmr, cryst struct, biosynth*)

Asbestinin 2 A-10130

Updated Entry replacing A-02853

[74145-73-6]



$C_{26}H_{40}O_6$ M 448.598
Constit. of *Briareum asbestinum.* Cryst. (hexane). Mp 184-186°. $[\alpha]_D^{20}$ −48.2° (c, 1.7 in $CHCl_3$).

6β,7β-Epoxide: [75961-66-9]. ***Asbestinin epoxide***
$C_{26}H_{40}O_7$ M 464.598
Constit. of *B. asbestinum.* Oil. $[\alpha]_D^{25}$ −21° (c, 0.3 in MeOH).

6E-Isomer: [74219-41-3]. ***Asbestinin 1***
$C_{26}H_{40}O_6$ M 448.598
Isol. from *B. asbestinum.* Oil. $[\alpha]_D^{20}$ −26.3° (c, 3.3 in $CHCl_3$).

6E-Isomer, O-de-Ac: [74145-72-5]. ***Asbestinin 3***
$C_{24}H_{38}O_5$ M 406.561
Idol. from *B. asbestinum.* Cryst. (Et_2O/hexane). Mp 156-158°. $[\alpha]_D^{20}$ −39.4° (c, 3.4 in $CHCl_3$).

4-Deacetoxy: [137419-51-3]. *4-Deacetoxyasbestinin 2.* ***4-Deoxyasbestinin C***
$C_{24}H_{38}O_4$ M 390.562
Constit. of *B. asbestinum.* Oil. $[\alpha]_D^{29}$ −1.2° (c, 0.84 in $CHCl_3$).

4-Deacetoxy, 11-deacyl, 11-Ac: [137419-52-4]. *11-Acetyl-4-deacetoxy-11-deacylasbestinin 2.* ***11-Acetoxy-4-deoxyasbestinin D***
$C_{22}H_{34}O_4$ M 362.508
Constit. of *B. asbestinum.* Oil. $[\alpha]_D^{29}$ −2.29° (c, 1.3 in $CHCl_3$).

6E-Isomer, 4-deacetoxy: [137767-97-6]. *4-Deacetoxyasbestinin 1.* ***4-Deoxyasbestinin A***
$C_{24}H_{38}O_4$ M 390.562
Constit. of *B. asbestinum.* Oil. $[\alpha]_D^{29}$ −6.6° (c, 1.6 in $CHCl_3$).

6E-Isomer, 4-deacetoxy, 11-deacyl, 11-Ac: [137767-98-7]. *11-Acetyl-4-deacetoxy-11-deacylasbestinin 1.* ***11-Acetoxy-4-deoxyasbestinin B***
$C_{22}H_{34}O_4$ M 362.508
Constit. of *B. asbestinum.* Cryst. Mp 150-152°. $[\alpha]_D^{29}$ −8.9° (c, 0.34 in $CHCl_3$). The trivial name given is confusing.

6E-Isomer, 11-deacyl, 11-octanoyl: [146471-82-1]. ***Asbestinin 6***
$C_{30}H_{48}O_6$ M 504.706
Constit. of *B. asbestinum.* Oil. $[\alpha]_D^{25}$ −75.9° (c, 4.08 in $CHCl_3$).

$\Delta^{7(19)}$-Isomer, 11-deacyl, 11-(2-hydroxyoctanoyl): [146471-83-2]. ***Asbestinin 7***
$C_{30}H_{48}O_7$ M 520.705
Constit. of *B. asbestinum.* Oil. $[\alpha]_D^{25}$ +5.0° (c, 3.2 in $CHCl_3$).

6E-Isomer, 11-ketone, 4-de-Ac, 4-octanoyl: [146471-84-3]. ***Asbestinin 8***
$C_{28}H_{44}O_5$ M 460.653
Constit. of *B. asbestinum.* Oil. $[\alpha]_D^{25}$ −49.0° (c, 3.9 in $CHCl_3$).

$\Delta^{7(19)}$-Isomer, 4-ketone: [146471-85-4]. ***Asbestinin 9***
$C_{24}H_{36}O_5$ M 404.545
Constit. of *B. asbestinum.* Oil. $[\alpha]_D^{27}$ −78.0° (c, 2 in $CHCl_3$).

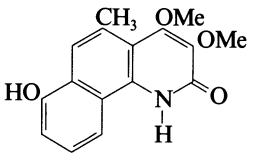
$\Delta^{7(19)}$-Isomer, 4-ketone, 11-deacyl, 11-Ac: [146471-86-5]. ***Asbestinin 10***
$C_{22}H_{32}O_5$ M 376.492
Constit. of *B. asbestinum.* Oil. $[\alpha]_D^{25}$ −81.5° (c, 0.76 in $CHCl_3$).

Stierle, D.B. *et al, J. Am. Chem. Soc.*, 1980, **102**, 5088 (*isol*)
Selover, S.J. *et al, J. Org. Chem.*, 1981, **46**, 964 (*isol*)
Morales, J.J. *et al, J. Nat. Prod. (Lloydia)*, 1991, **54**, 1368 (*derivs*)
Rodriguéz, A.D. *et al, Tetrahedron*, 1993, **49**, 319 (*Asbestinins 6-10*)

Asimicilone A-10131

7-Hydroxy-3,4-dimethoxy-5-methylbenzo[h]*quinolin-2(1H)-one, 9CI*

[145701-06-0]



$C_{16}H_{15}NO_4$ M 285.299

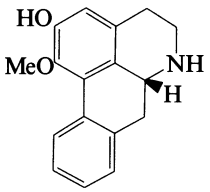
Alkaloid from twigs of *Asimina parviflora* (Annonaceae). Mp 191° (with dec. at 151°).

Ratnayake, S. *et al, J. Nat. Prod.* (*Lloydia*), 1992, **55**, 1462 (*isol, uv, ir, pmr, cmr, ms, struct*)

Asimilobine A-10132

Updated Entry replacing A-02875

2-Hydroxy-1-methoxynoraporphine



Absolute configuration

$C_{17}H_{17}NO_2$ M 267.327

(R)-form [6871-21-2]

Alkaloid from a wide variety of genera in the Annonaceae (*Anaxagorea, Annona, Asimina, Melodorum, Desmos, Guatteria, Hexalobus, Mitrella, Monanthotaxis, Popowia, Polyalthia, Schefferomitra, Xylopia, Uvaria*), Aristolochiaceae (*Aristolochia*), Magnoliaceae (*Liriodendron, Magnolia*), Atherospermataceae (*Laurelia*), Nelumbonaceae (*Nelumbo*), Lauraceae (*Ocotea*) and Rhamnaceae (*Zizyphus*). Mp 177-179°. $[\alpha]_D^{14}$ −213° (c, 0.64 in $CHCl_3$).

N-*Ac:* [60031-90-5]. **N-*Acetylasimilobine.*** *6-Acetyl-2-hydroxy-1-methoxynoraporphine*

$C_{19}H_{19}NO_3$ M 309.364

Alkaloid from the heartwood and discoloured sapwood of *Liriodendron tulipifera* (Magnoliaceae). Needles ($CHCl_3$). Mp 281-283°. $[\alpha]_D^{25}$ −405° (c, 0.595 in Py).

N-*Carbamoyl:* [83459-47-6]. **N-*Carbamoylasimilobine.*** *6-Carbamoyl-2-hydroxy-1-methoxynoraporphine*

$C_{18}H_{18}N_2O_3$ M 310.352

Alkaloid from the stem bark and root bark of *Hexalobus crispiflorus* (Annonaceae). Cryst. (MeOH). Mp 218° dec. $[\alpha]_D^{20}$ −373° (c, 0.06 in MeOH).

N-*Me:* see N-*Methylasimilobine, M-00797*

O-*β-D-Glucoside:* ***Asimilobine 2-O-β-D-glucoside***

$C_{23}H_{27}NO_7$ M 429.469

Alkaloid from tubers of *Stephania pierrei* (Menispermaceae). Mp 158°. $[\alpha]_D^{20}$ −107° (c, 0.1 in MeOH).

Tomita, M. *et al, Yakugaku Zasshi*, 1965, **85**, 77 (*isol, uv, ir, pmr*)
Johns, S.R. *et al, Aust. J. Chem.*, 1970, **23**, 363 (*isol, pmr*)
Guinaudeau, H. *et al, J. Nat. Prod.* (*Lloydia*), 1975, **38**, 276 (*rev*)
Hufford, C.D., *Phytochemistry*, 1976, **15**, 1169 (*N-Acetylasimilobine*)
Chen, C.-L. *et al, Phytochemistry*, 1976, **15**, 547, 1161 (*N-Acetylasimilobine*)
Ricca, G.S. *et al, Gazz. Chim. Ital.*, 1979, **109**, 1 (*cmr*)
Achenbach, H. *et al, Justus Liebigs Ann. Chem.*, 1982, 1623 (*N-Carbamoylasimilobine*)
Likhitwitayawuid, K. *et al, J. Nat. Prod.* (*Lloydia*), 1993, **56**, 1468 (*glucoside*)

Aspergillomarasmine A A-10133

N-[*2-(2-Amino-2-carboxyethyl)amino*]-*2-carboxyaspartic acid, 9CI. Toxin C*

[3484-65-9]

$HOOCCH_2CH(COOH)NHCH_2CH(COOH)$
$NHCH_2CH(NH_2)COOH$

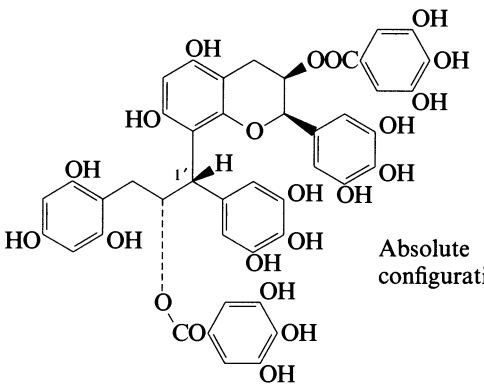
$C_{10}H_{17}N_3O_8$ M 307.260

Metab. of *Aspergillus flavus*, found only in young cultures. Pytotoxic to cotton and tomato plants. Mp 230-236° dec. $[\alpha]_D^{20}$ −48° (phospate buffer, pH 7).

Barter, M. *et al, Bull. Soc. Chim. Fr.*, 1962, 187.
Bogdanovsky, O. *et al, Bull. Soc. Chim. Fr.*, 1965, 832 (*synth*)
Haenni, A.L. *et al, Helv. Chim. Acta*, 1965, **48**, 729 (*struct*)
Mikami, Y. *et al, Agric. Biol. Chem.*, 1983, **47**, 2693.

Assamicain A A-10134

[121795-66-2]



Absolute configuration

$C_{44}H_{36}O_{22}$ M 916.755

Isol. from the leaves of *Camellia sinensis* var. *assamica*. Off-white amorph. powder + $3H_2O$. $[\alpha]_D^{17}$ −120.0° (c, 1.0 in Me_2CO).

1'-Epimer: [121844-27-7]. ***Assamicain B***

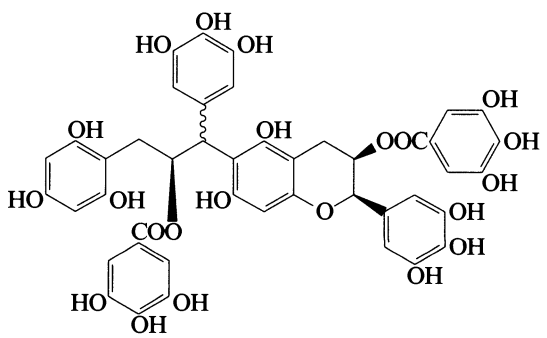
$C_{44}H_{36}O_{22}$ M 916.755

Isol. from leaves of *C. sinensis* var. *assamica*. Off-white amorph. powder + $5H_2O$. $[\alpha]_D^{17}$ −54.3° (c, 1.0 in Me_2CO).

Hashimoto, F. *et al, Chem. Pharm. Bull.*, 1989, **37**, 77 (*isol, pmr, cmr*)

Assamicain C A-10135

[121795-67-3]



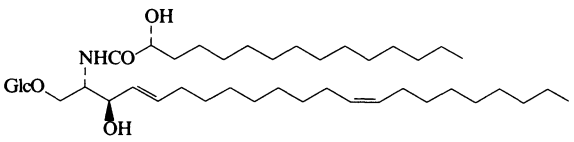
$C_{44}H_{36}O_{22}$ M 916.755

Derived from the leaves of *Camellia sinensis* var. *assamica*. Off-white amorph. powder + $5H_2O$. $[\alpha]_D^{17}$ +60.5° (c, 1.3 in Me_2CO).

Hashimoto, F. *et al*, *Chem. Pharm. Bull.*, 1989, **37**, 77 (*isol, pmr, cmr, synth*)

Asteriacerebroside A A-10136

[134178-88-4]



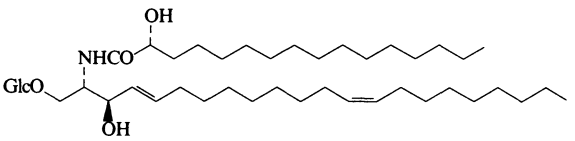
$C_{43}H_{81}NO_9$ M 756.114

Glycosphingolipid. Isol. from the starfish *Asterias amurensis versicolor*. Needles + $4H_2O$ (MeOH). Mp 182-184°. $[\alpha]_D^{25}$ +8.5° (c, 0.27 in 1-propanol).

Higuchi, R. *et al*, *Justus Liebigs Ann. Chem.*, 1991, 745 (*isol, pmr, cmr, struct*)

Asteriacerebroside B A-10137

[134178-89-5]



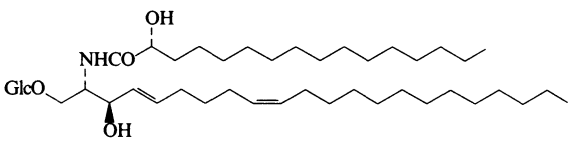
$C_{44}H_{83}NO_9$ M 770.141

Glycosphingolipid. Isol. from the starfish *Asterias amurensis versicolor*. Needles + $3H_2O$ (MeOH). Mp 178-180°. $[\alpha]_D^{25}$ +8.3° (c, 0.28 in 1-propanol).

Higuchi, R. *et al*, *Justus Liebigs Ann. Chem.*, 1991, 745 (*isol, pmr, cmr, struct*)

Asteriacerebroside C A-10138

[134178-90-8]



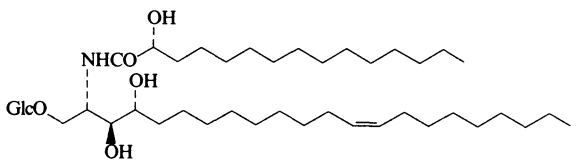
$C_{44}H_{83}NO_9$ M 770.141

Glycosphingolipid. Isol. from the starfish *Asterias amurensis versicolor*. Needles + $3H_2O$ (MeOH). Mp 183-186°. $[\alpha]_D^{25}$ +9.4° (c, 0.28 in 1-propanol).

Higuchi, R. *et al*, *Justus Liebigs Ann. Chem.*, 1991, 745 (*isol, pmr, cmr, struct*)

Asteriacerebroside D A-10139

[134178-91-9]



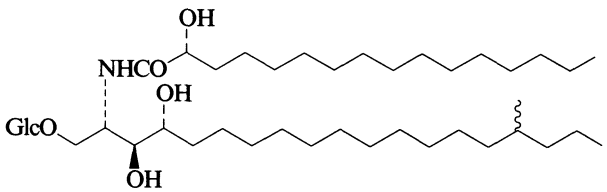
$C_{43}H_{83}NO_{10}$ M 774.129

Glycosphingolipid. Isol. from the starfish *Asterias amurensis versicolor*. Needles + $2H_2O$ (MeOH). Mp 174-176°. $[\alpha]_D^{25}$ +10.5° (c, 0.4 in 1-propanol).

Higuchi, R. *et al*, *Justus Liebigs Ann. Chem.*, 1991, 745 (*isol, pmr, cmr, struct*)

Asteriacerebroside E A-10140

[134178-92-0]



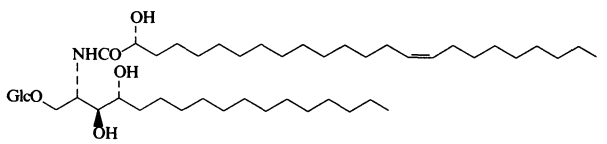
$C_{42}H_{83}NO_{10}$ M 762.118

Glycosphingolipid. Isol. from the starfish *Asterias amurensis versicolor*. Needles + $1H_2O$ (MeOH). Mp 216-218°. $[\alpha]_D^{25}$ +12.2° (c, 0.32 in 1-propanol).

Higuchi, R. *et al*, *Justus Liebigs Ann. Chem.*, 1991, 745 (*isol, pmr, cmr, struct*)

Asteriacerebroside F A-10141

[134178-93-1]

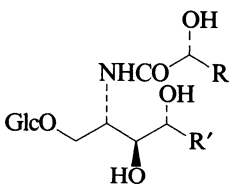


$C_{47}H_{91}NO_{10}$ M 830.237

Glycosphingolipid. Isol. from the starfish *Asterias amurensis versicolor*. Needles + $4H_2O$ (MeOH). Mp 167-169°. $[\alpha]_D^{25}$ +12.6° (c, 0.33 in 1-propanol).

Higuchi, R. *et al*, *Justus Liebigs Ann. Chem.*, 1991, 745 (*isol, pmr, cmr, struct*)

Astrocerebrosides A-10142



Astrocerebroside

A, R = $(CH_2)_{12}CH_3$, R′ = $(CH_2)_4CH{=}CH(CH_2)_{11}CH_3$ (*Z*-)
B, R = $(CH_2)_{13}CH_3$, R′ = $(CH_2)_4CH{=}CH(CH_2)_{11}CH_3$ (*Z*-)
C, R = $(CH_2)_{21}CH_3$, R′ = $(CH_2)_{10}CH(CH_3)_2$

Isol. from $CHCl_3$/MeOH extract of the starfish *Astropecten latespinosus*.

Astrocerebroside A [126665-07-4]
$C_{43}H_{83}NO_{10}$ M 774.129
Needles + $1H_2O$ (MeOH). Mp 188-192°. $[\alpha]_D^{25}$ +10.3° (c, 1 in 1-propanol).

Astrocerebroside B [122823-41-0]
$C_{44}H_{85}NO_{10}$ M 788.156
Needles + $3H_2O$ (MeOH). Mp 198-202°. $[\alpha]_D^{25}$ +10.8° (c, 1 in 1-propanol).

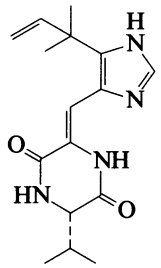
Astrocerebroside C [122823-47-6]

$C_{47}H_{93}NO_{10}$ M 832.252
Needles + $2H_2O$ (MeOH). Mp 218-219°. $[\alpha]_D^{25}$ +10.7° (c, 1 in 1-propanol).

Higuchi, R. *et al*, *Justus Liebigs Ann. Chem.*, 1990, 659.

Aurantiamine A-10143

[143085-86-3]

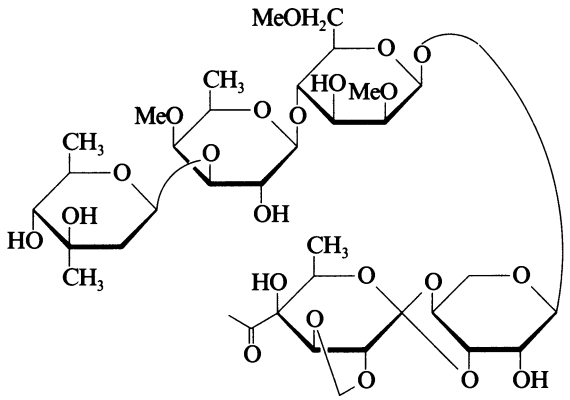


$C_{16}H_{22}N_4O_2$ M 302.375
Metab. from *Penicillium aurantiogriseum* var. *aurantiogriseum* and *P. aurantiogriseum* var. *neoechinulatum*. Mp 238-239°. $[\alpha]_D^{23}$ −116° (c, 0.5 in MeOH).

Larsen, T.O. *et al*, *Phytochemistry*, 1992, **31**, 1613 (*isol*, *uv*, *pmr*, *cmr*, *ms*, *struct*)

Avileurekanose A A-10144

[82278-46-4]



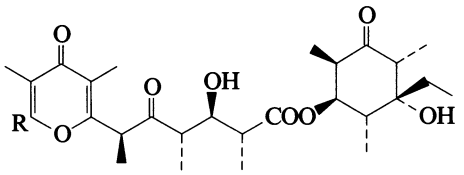
$C_{36}H_{58}O_{22}$ M 842.841
Metab. product of microorganisms. Needles (Me_2CO/Et_2O). Mp 180°.

Kupfer, E. *et al*, *Helv. Chim. Acta*, 1982, **65**, 3.

B

Baconipyrone A B-10001

[123003-45-2]



R = CH_2CH_3

$C_{29}H_{44}O_8$ M 520.662

Constit. of the pulmonate mollusc *Siphonaria baconi*. Oil. $[\alpha]_D$ −82.0° (c, 0.47 in $CHCl_3$).

Manker, D.C. *et al*, *J. Org. Chem.*, 1989, **54**, 5371 (*isol, pmr, cmr, struct*)

Baconipyrone B B-10002

[123003-46-3]

As Baconipyrone A, B-10001 with

R = -CH_3

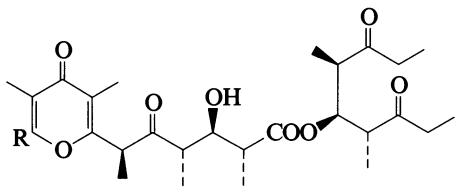
$C_{28}H_{42}O_8$ M 506.635

Constit. of the pulmonate mollusc *Siphonaria baconi*. Oil. $[\alpha]_D$ −65.9° (c, 0.66 in $CHCl_3$).

Manker, D.C. *et al*, *J. Org. Chem.*, 1989, **54**, 5371 (*isol, pmr, cmr, struct*)

Baconipyrone C B-10003

[123003-47-4]



R = CH_2CH_3

$C_{29}H_{44}O_8$ M 520.662

Constit. of the pulmonate mollusc *Siphonaria baconi*. Oil. $[\alpha]_D$ −19.0° (c, 0.9 in MeOH).

Manker, D.C. *et al*, *J. Org. Chem.*, 1989, **54**, 5371 (*isol, pmr, cmr, struct*)

Baconipyrone D B-10004

[123003-48-5]

As Baconipyrone C, B-10003 with

R = —CH_3

$C_{28}H_{42}O_8$ M 506.635

Constit. of the pulmonate mollusc *Siphonaria baconi*. Oil. $[\alpha]_D$ −61.7° (c, 1.17 in MeOH).

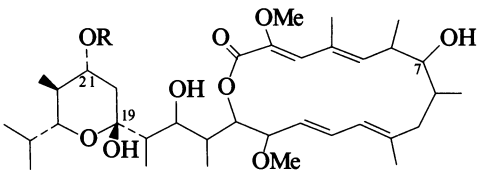
Manker, D.C. *et al*, *J. Org. Chem.*, 1989, **54**, 5371 (*isol, pmr, cmr, struct*)

Bafilomycin A_1 B-10005

Updated Entry replacing B-00063

21-O-De(3-carboxy-1-oxo-2-propenyl)-2-demethyl-2-methoxy-21-methylhygrolidin

[88899-55-2]



R = H

$C_{35}H_{58}O_9$ M 622.838

Macrolide antibiotic. Prod. by *Streptomyces griseus* ssp. *sulphuris*. Active against gram-positive bacteria, yeasts and fungi. Amorph. powder. Mp 103-106° dec.

O^{19}-*Me:* [88899-54-1]. *Bafilomycin* A_2

Artifact formed during isolation procedure. Mp 116-119° dec.

O^{21}-*Me:* [82620-99-3]. ***Antibiotic L 681110*** B_1. *L 681110* B_1

$C_{36}H_{60}O_9$ M 636.865

Prod. by *S.* sp. MA5038. Active against insects, worms and nematodes.

O^{21}-*Ac:* [88899-58-5]. *Bafilomycin* D_1

Semisynthetic. Shows some antibiotic activity.

O^7,O^{21}-*Di-Ac:* [88899-57-4]. *Bafilomycin* $D_{1'}$

Semisynthetic. Shows some antibiotic activity.

O^{19}-*Me*, O^{21}-*Ac:* [93460-68-5]. *Bafilomycin* D_2

Semisynthetic. Inactive.

O^{19}-*Me*, O^7,O^{21}-*di-Ac:* [90042-92-5]. *Bafilomycin* $D_{2'}$

Semisynthetic. Inactive.

O^{21}-(α-L-*Rhamnopyranoside):*

$C_{41}H_{68}O_{13}$ M 768.980

Prod. by *S. olivaceus*. Shows antifungal props. Powder. Mp 128-131°. $[\alpha]_D^{24}$ −39.2° (c, 1.83 in CH_2Cl_2).

O^{19}-*Me*, O^{21}-(*2-O-methyl-*α-L-*rhamnopyranoside):* [140681-83-0]. ***Antibiotic NK 155141.*** *NK 155141*

$C_{43}H_{72}O_{13}$ M 797.034

Prod. by *Streptomyces* sp. NK155141. Antitumour agent. Mp 130-131°.

Eur. Pat., 50 964, (1982); *CA*, **97**, 90425 (*isol, props*)

Heusers, O.D. *et al*, *J. Am. Chem. Soc.*, 1983, **105**, 3672 (*struct*)

Werner, G. *et al*, *Tetrahedron Lett.*, 1983, **24**, 5193.

Ger. Pat., 3 310 533, (1984); *CA*, **102**, 22799 (*props*)

Werner, G. *et al*, *J. Antibiot.*, 1984, **37**, 110 (*isol, struct, props, ms, nmr*)

Huang, L. *et al*, *J. Antibiot.*, 1984, **37**, 970 (*isol*)

Meyer, M. *et al*, *Helv. Chim. Acta*, 1985, **68**, 83 (*isol*)

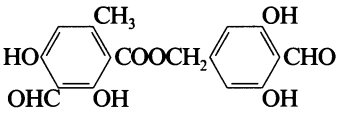
Baker, G.H. *et al*, *Tetrahedron Lett.*, 1987, **28**, 5565 (*cryst struct*)

Everett, J.R. *et al*, *J. Chem. Soc., Perkin Trans. 2*, 1990, 717 (*pmr, cmr*)

Japan. Pat., 91 191 788, (1991); *CA*, **116**, 192621 (*NK 155141*)

Barbatolin B-10006

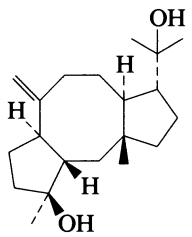
[114973-13-6]



$C_{17}H_{14}O_8$ M 346.293
Constit. of the lichen *Bryoria nadvornikiana*. Hydrol. prod. of Barbatolic acid, B-00099. Needles ($Me_2CO/CHCl_3$/hexane). Mp 219-221° dec.

Elix, J.A. *et al*, *Aust. J. Chem.*, 1987, **40**, 1841 (*isol, synth*)

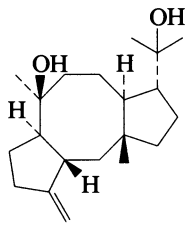
Barbifusicoccin A B-10007



$C_{20}H_{34}O_2$ M 306.487
Constit. of *Barbilophozia floerkei*. Oil. $[\alpha]_D^{22}$ −2.0° (c, 0.77 in $CHCl_3$).

Tori, M. *et al*, *Phytochemistry*, 1993, **34**, 181 (*isol, pmr, cmr*)

Barbifusicoccin B B-10008

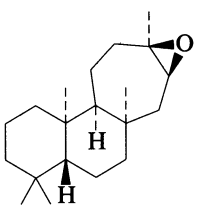


$C_{20}H_{34}O_2$ M 306.487
Constit. of *Barbilophozia floerkei*. Oil. $[\alpha]_D^{22}$ +45.0° (c, 1.27 in $CHCl_3$).

Tori, M. *et al*, *Phytochemistry*, 1993, **34**, 181 (*isol, pmr, cmr*)

Barekoxide B-10009

[145458-09-9]

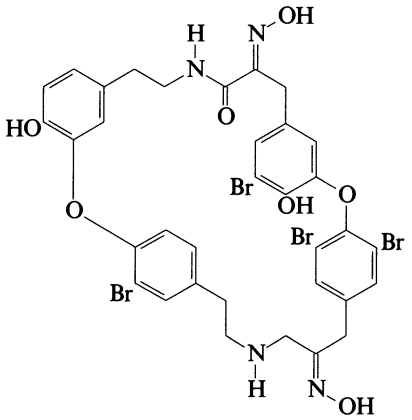


$C_{20}H_{34}O$ M 290.488
Constit. of *Chelonaplysilla erecta*. Oil.

Rudi, A. *et al*, *J. Nat. Prod.* (*Lloydia*), 1992, **55**, 1408 (*isol, pmr, cmr*)

Bastadin 12 B-10010

[134981-78-5]



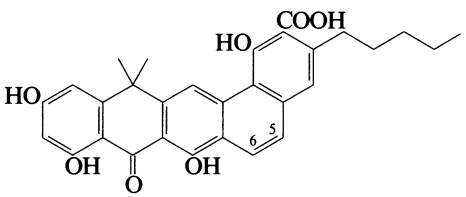
$C_{34}H_{30}Br_4N_4O_7$ M 926.250
Constit. of the sponge *Ianthella basta*. Powder. Mp 177-179°.

Butler, M.S. *et al*, *Aust. J. Chem.*, 1991, **44**, 287 (*isol, pmr, cmr*)

Benastatin A B-10011

8,13-Dihydro-1,7,9,11-tetrahydroxy-13,13-dimethyl-8-oxo-3-pentylbenzo[a]*naphthacene-2-carboxylic acid*

[138968-85-1]

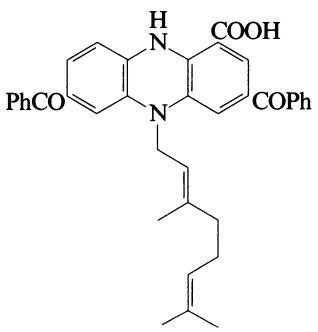


$C_{30}H_{28}O_7$ M 500.547
Prod. by *Streptomyces* sp. MI384-DF12. Inhibitor of glutathione *S*-transferase. Yellow powder + $1H_2O$ (as Ca salt). Mp 170-173° dec. (Ca salt).

5,6-Dihydro: [138968-86-2]. ***Benastatin B***
$C_{30}H_{30}O_7$ M 502.563
From *S* sp. MI384-DF12. Inhibitor of glutathione *S*-transferase. Yellow powder + $\frac{1}{2}H_2O$ (as Ca salt). Mp 210-212° dec. (Ca salt).

Aoyagi, T. *et al*, *J. Antibiot.*, 1992, **45**, 1385, 1391 (*isol, pmr, cmr, cryst struct, props*)

Benthophoenin B-10012



$C_{37}H_{34}N_2O_4$ M 570.687

Isol. from the mycelium of *Streptomyces prunicolor*. Free radical scavenger. Red powder. Mp 189-190°.

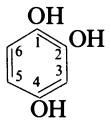
Shin-ya, K. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 1255 (*isol, uv, ir, pmr, cmr, struct*)

1,2,4-Benzenetriol, 9CI, 8CI B-10013

Updated Entry replacing B-00234

1,2,4-Trihydroxybenzene. Hydroxyhydroquinone. Hydroxyquinol

[533-73-3]



$C_6H_6O_3$ M 126.112

Constit. of the sponge *Axinella polycapella*. Also isol. from the fruiting bodies of *Gomphidius* spp. Antibacterial agent. Used as 1% aq. soln. for photometric detn. of Os. Plates (Et_2O). Sol. H_2O. Mp 140.5° subl. pK_{a1} 9.08; pK_{a2} 11.82 (20°).

▷ DC4200000.

Picrate: Orange-red needles. Mp 96°.

Tri-Ac: [613-03-6].
$C_{12}H_{12}O_6$ M 252.223
Cryst. (EtOH). Mp 96-97°.

1-Me ether: [6100-60-3]. *4-Methoxy-1,3-benzenediol. 4-Methoxyresorcinol*
$C_7H_8O_3$ M 140.138
Prisms (C_6H_6). Mp 66-67°.

1-Me ether, 2,4-di-Ac:
$C_{11}H_{12}O_5$ M 224.213
Prisms (MeOH). Mp 62-64°.

2-Me ether: [824-46-4]. *2-Methoxy-1,4-benzenediol. Methoxyhydroquinone. Methoxyquinol*
$C_7H_8O_3$ M 140.138
Plates (H_2O or C_6H_6). Mp 88° (84°).

2-Me ether, 1,4-di-Ac:
$C_{11}H_{12}O_5$ M 224.213
Needles (MeOH). Mp 93-94°.

2-Me ether, 1-O-β-D-glucopyranoside: [31427-08-4].
$C_{13}H_{18}O_8$ M 302.280
Found in oat seedings. Mp 202°. The struct. of this as the 1- rather than the 4-glucoside has been disputed.

2-Me ether, 1-O-(6-O-3,4,5-trihydroxybenzoyl-β-D-glucopyranoside): [125288-20-2]. *2-Methoxy-4-hydroxyphenyl 1-O-(6-O-galloyl-β-D-glucopyranoside)*
$C_{20}H_{22}O_{12}$ M 454.387
Isol. from leaves of *Mallotus japonicus*. Amorph. powder + $1\frac{1}{2}H_2O$. $[\alpha]_D^{13}$ −36.6° (c, 1.3 in Me_2CO aq.).

2-Me ether, 4-O-(6-O-3,4,5-trihydroxybenzoyl-β-D-glucopyranoside): [109194-55-0]. *3-Methoxy-4-hydroxyphenyl 1-O-(6-O-galloyl-β-D-glucopyranoside)*
$C_{20}H_{22}O_{12}$ M 454.387
Tannin constit. of *M. japonicus*, *Quercus mongolica* and *Q. acutissima*. Amorph. powder + $1H_2O$. $[\alpha]_D^{25}$ −31.3° (c, 0.5 in Me_2CO).

2-Me ether, 4-O-[2,6-bis(3,4,5-trihydroxybenzoyl)-β-D-glucopyranoside]: [125288-21-3]. *3-Methoxy-4-hydroxyphenyl 1-O-2,6-di-O-galloyl-β-D-glucopyranoside*
$C_{27}H_{26}O_{16}$ M 606.493
Constit. of the leaf of *M. japonicus*. Cryst. powder + $3H_2O$ (H_2O). Mp 244-246°. $[\alpha]_D^{26}$ −46.3° (c, 0.5 in Me_2CO).

2-Me ether, 4-O-[2,3,6-tris(3,4,5-trihydroxybenzoyl)-β-D-glucopyranoside]: [125288-22-4]. *3-Methoxy-4-hydroxyphenyl 1-O-(2,3,6-tri-O-galloyl-β-D-glucopyranoside)*
$C_{34}H_{30}O_{20}$ M 758.599
Tannin constit. of the leaf of *M. japonicus*. Amorph. powder. $[\alpha]_D^{26}$ −103.5° (c, 0.5 in Me_2CO).

2-Me ether, 4-O-(6-O-D-apio-β-D-furanosyl-β-D-glucopyranoside): [137319-13-2]. ***Osmantolide***
$C_{18}H_{26}O_{12}$ M 434.396
Isol. from the leaves of *Osmanthus asiaticus*. Amorph. powder. $[\alpha]_D$ −70.1° (c, 1.9 in MeOH).

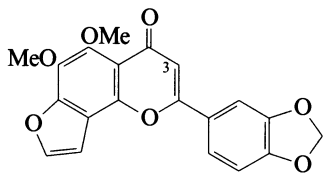
Tri-Me ether: [135-77-3]. *1,2,4-Trimethoxybenzene*
$C_9H_{12}O_3$ M 168.192
Liq. Bp 247°.

Org. Synth., Coll. Vol., 1, 1932, 317 (*deriv*)
Kirk-Othmer Encycl. Chem. Technol., 2nd Ed., Wiley, N.Y., 1963-1971, **16**, 190 (*rev*)
Wawrzyczek, W. *et al*, *Fresenius' Z. Anal. Chem.*, 1967, **228**, 433 (*detn, Os*)
von Ardenne, R. *et al*, *Z. Naturforsch., C*, 1974, **29**, 446; 1981, **36**, 488 (*isol*)
Chatterjee, A. *et al*, *Tetrahedron*, 1976, **32**, 2407 (*synth*)
Wratten, S.J. *et al*, *Experientia*, 1981, **37**, 13 (*isol*)
Saijo, R. *et al*, *Phytochemistry*, 1989, **28**, 2443 (*galloylglucosides*)
Kikuchi, M. *et al*, *Phytochemistry*, 1991, **30**, 3147 (*Osmantolide*)
Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th Ed., Van Nostrand-Reinhold, 1992, BBU250.

2-(1,3-Benzodioxol-5-yl)-5,6-dimethoxy-4*H*-furo[2,3-*h*]-1-benzopyran-4-one, 9CI B-10014

5,6-Dimethoxy-3',4'-methylenedioxyfurano[7,8:2'',3'']flavone

[77970-09-3]



$C_{20}H_{14}O_7$ M 366.326

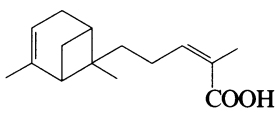
Isol. from the roots of *Derris araripensis*. Cryst. (EtOH). Mp 233°.

3-Methoxy: [77970-08-2]. *3,5,6-Trimethoxy-3',4'-methylenedioxyfurano[2'',3'':7,8]flavone*. ***5,6-Dimethoxypongapin***
$C_{21}H_{16}O_8$ M 396.353
Isol. from the roots of *D. araripensis*. Cryst. (EtOH). Mp 212°.

do Nascimento, M.C. *et al*, *Phytochemistry*, 1981, **20**, 147 (*isol*)

α-Bergamotenic acid B-10015

[124439-27-6]

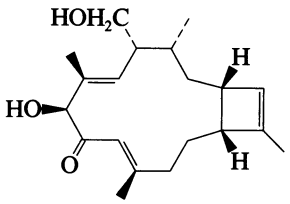


$C_{15}H_{22}O_2$ M 234.338

Constit. of East Indian sandalwood oil. Oil.

Nikiforov, A. *et al*, *Justus Liebigs Ann. Chem.*, 1990, 119 (*isol, pmr*)

Bershacolone B-10016

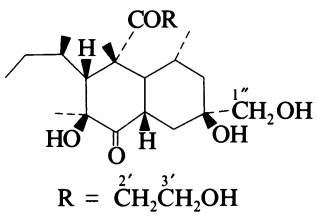


$C_{20}H_{30}O_3$ M 318.455
Constit. of *Maprounea africana*. Glass. $[\alpha]_D^{24}$ +370° (c, 0.2 in $CHCl_3$).

Bernart, M.W. *et al*, *Tetrahedron Lett.*, 1993, **34**, 4461 (*isol, pmr, cmr*)

Betaenone D B-10017

Updated Entry replacing B-00306
[88899-16-5]



R = $\overset{2'}{C}H_2\overset{3'}{C}H_2OH$

$C_{21}H_{36}O_6$ M 384.512
Metab. of *Phoma betae*. Phytotoxin. Syrup. $[\alpha]_D^{24}$ 0° (c, 0.98 in EtOH).

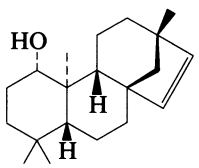
1″-Deoxy, 3′-Ac: [85269-24-5]. ***Betaenone F***
$C_{23}H_{38}O_6$ M 410.550
Metab. of *P. betae*. Syrup.

2′,3′-Didehydro, 1″-deoxy: [85269-25-6]. ***Betaenone C***
$C_{21}H_{34}O_5$ M 366.497
Metab. of *P. betae*. Phytotoxin. Powder. $[\alpha]_D^{26}$ −38.6° (c, 4.15 in $CHCl_3$).

Ichihara, A. *et al*, *Agric. Biol. Chem.*, 1983, **47**, 2965.
Oikawa, H. *et al*, *Agric. Biol. Chem.*, 1984, **48**, 2603 (*abs config*)
Ichihara, A. *et al*, *Tetrahedron Lett.*, 1989, **30**, 4551 (*synth, deriv*)

15-Beyeren-1-ol B-10018

Updated Entry replacing B-00339



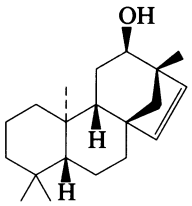
$C_{20}H_{32}O$ M 288.472
(ent-1β)-form
Constit. of *Erythroxylon australe*. Cryst. (MeOH). Mp 119-121°. $[\alpha]_D$ +23° (CH_2Cl_2).

1-Ketone: [39056-75-2]. **ent-*15-Beyeren-1-one.*** *15-Stachen-1-one*
$C_{20}H_{30}O$ M 286.456
Constit. of the root of *E. australe*. Cryst. (MeOH). Mp 77-78°. $[\alpha]_D$ −114° (c, 1.88 in $CHCl_3$).

1-Ketone, 15β,16β-epoxide: [39036-23-2]. **ent-*15α,16α-Epoxy-1-beyeranone***
$C_{20}H_{30}O_2$ M 302.456
Minor constit. of the roots of *E. australe*. Needles (petrol). Mp 131-132°. $[\alpha]_D$ −36° (c, 1.72 in $CHCl_3$).

Connolly, J.D. *et al*, *J. Chem. Soc., Perkin Trans. 1*, 1972, 1996.
Ansell, S.M. *et al*, *Phytochemistry*, 1993, **32**, 937.

15-Beyeren-12-ol B-10019

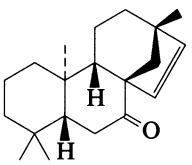


$C_{20}H_{32}O$ M 288.472
(ent-12α)-form [150036-04-7]
Constit. of *Erythroxylon zambesiacum*. Gum. $[\alpha]_D$ +1° (CH_2Cl_2).

Ac: Cryst. (MeOH). Mp 114-116°. $[\alpha]_D$ −56° (CH_2Cl_2).

Ansell, S.M. *et al*, *Phytochemistry*, 1993, **32**, 953 (*isol, pmr, cmr*)

15-Beyeren-7-one B-10020

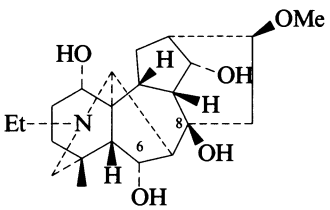


$C_{20}H_{30}O$ M 286.456
ent-form [150134-36-4]
Constit. of *Erythroxylon argentinum* and *E. rotundifolium*. Needles (MeOH). Mp 152-154°. $[\alpha]_D$ −12° (CH_2Cl_2).

Ansell, S.M. *et al*, *Phytochemistry*, 1993, **32**, 953 (*isol, pmr, cmr*)

Bicolorine B-10021

Updated Entry replacing B-00353
Alkaloid B
[41478-10-8]



$C_{22}H_{35}NO_5$ M 393.522
Minor alkaloid from *Delphinium bicolor* (Ranunculaceae). Hydrol. prod. of Bicoloridine. Mp 190-191°. $[\alpha]_D^{24}$ +16° ($CHCl_3$).

O^6-*Ac:* ***Bicolorine 6-O-acetate***
$C_{24}H_{37}NO_6$ M 435.559
Alkaloid from *D. bicolor* (Ranunculaceae). Cryst. (CH_2Cl_2/hexane). Mp 165-167°. $[\alpha]_D$ +19° (c, 0.2 in $CHCl_3$).

O^{14}-*Ac:* [130774-04-8]. ***Bicolorine 14-O-acetate.*** *Alkaloid H*
$C_{24}H_{37}NO_6$ M 435.559
Alkaloid from *D. nuttallianum* (Ranunculaceae).

O^1-*Me:* [119459-58-4]. ***Regaline***
$C_{23}H_{37}NO_5$ M 407.549

Alkaloid from epigeal parts of *Consolida regalis* ssp. *paniculata* (Ranunculaceae). The CA abstr. diag. omits the 14-OH group.

O^8-*Me*, O^6-*Ac:* [41710-20-7]. ***Bicoloridine.*** *Alkaloid A*
$C_{25}H_{39}NO_6$ M 449.586
Minor alkaloid from *D. bicolor* (Ranunculaceae). Also isol. from the aerial parts of *D. peregrinum* var. *elongatum* collected during flowering. Noncryst. $[\alpha]_D^{24}$ +10° ($CHCl_3$).

O^8-*Me*, O^6-*Ac; B,HI:* Cryst. (MeOH/Et_2O). Mp >240°.

6-Epimer, O^6-*Me:* [84306-88-7]. ***Dihydropentagynine***
$C_{23}H_{37}NO_5$ M 407.549
Alkaloid from *D. pentagynum* (Ranunculaceae). Mp 150-154°. $[\alpha]_D$ +43° (c, 0.12 in EtOH).

6-Epimer, O^6-*Me*, O^1,O^{14}-*dibenzoyl:* Mp 178-181°.

O^1,O^8-*Di-Me*, O^6-*Ac:* [113689-38-6]. ***Peregrine***
$C_{26}H_{41}NO_6$ M 463.613
Alkaloid from aerial parts of *D. peregrinum* var. *elongatum* (Ranunculaceae). Cryst. (EtOAc/hexane). Mp 124-125°. $[\alpha]_D$ +12° (c, 0.34 in EtOH).

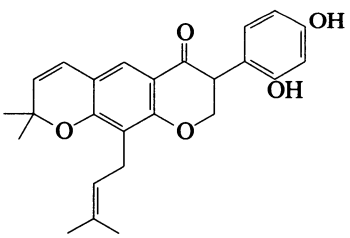
O^1,O^8,O^{14}-*Tri-Me*, O^6-*Ac:* ***14-O-Methylperegrine***
$C_{27}H_{43}NO_6$ M 477.640
Alkaloid from aerial parts of *D. gueneri* (Ranunculaceae). $[\alpha]_D^{22}$ −28.9° (c, 0.2 in MeOH).

O^1,O^8,O^{14}-*Tri-Me*, O^6-*Ac*, N-*de-Et:* ***N-Deethyl-14-O-methylperegrine***
$C_{25}H_{39}NO_6$ M 449.586
Alkaloid from aerial parts of *D. gueneri* (Ranunculaceae). $[\alpha]_D^{22}$ −38.4° (c, 0.1 in MeOH).

Jones, A.J. *et al*, *Tetrahedron Lett.*, 1972, 4351 (*isol*)
Jones, A.J. *et al*, *Can. J. Chem.*, 1973, **51**, 486 (*isol*)
Pelletier, S.W. *et al*, *Tetrahedron Lett.*, 1976, 3025 (*cmr, struct*)
Codding, P.W. *et al*, *Tetrahedron Lett.*, 1980, **21**, 127 (*config*)
Codding, P.W. *et al*, *Acta Crystallogr., Sect. B*, 1981, **37**, 379 (*cryst struct, Bicoloridine*)
González, A.G. *et al*, *Phytochemistry*, 1982, **21**, 1781 (*Dihydropentagynine*)
Kulanthaivel, P. *et al*, *Phytochemistry*, 1986, **25**, 1511 (*Bicolorine 6-O-acetate*)
Sener, B. *et al*, *CA*, 1988, **110**, 111674g (*Regaline*)
de la Fuente, G. *et al*, *Heterocycles*, 1988, **27**, 1 (*Bicoloridine, Peregrine*)
Bai, Y. *et al*, *Heterocycles*, 1990, **31**, 1233 (*Bicolorine 14-O-acetate*)
Ulubelen, A. *et al*, *Phytochemistry*, 1993, **33**, 213 (*14-O-Methylperegrine, N-Deethyl-14-O-methylperegrine*)

Bidwillon B B-10022

2′,4′-Dihydroxy-6″,6″-dimethyl-8-prenylpyrano(2″,3″:7,6) isoflavanone



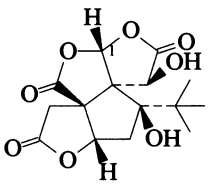
$C_{25}H_{26}O_5$ M 406.477

(±)-***form*** [147742-11-8]
Constit. of the root bark of *Erythrina* x *bidwilli*. Amorph. powder.

Iinuma, M. *et al*, *Chem. Pharm. Bull.*, 1992, **40**, 2749 (*isol, struct*)

Bilobalide A B-10023

Updated Entry replacing B-00397
Bilobalide
[33570-04-6]

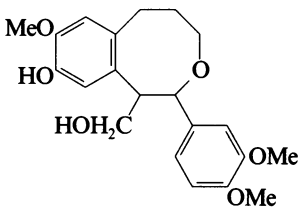


$C_{15}H_{18}O_8$ M 326.302
Constit. of leaves of *Ginkgo biloba*. Cryst. (H_2O). Mp >300°. $[\alpha]_D^{20}$ −66.6°. Component of commercially available *Ginkgo biloba* extract (GBE).

Weinges, K. *et al*, *Justus Liebigs Ann. Chem.*, 1969, **724**, 214; 1972, **759**, 158 (*isol, pmr*)
Nakanishi, K. *et al*, *J. Am. Chem. Soc.*, 1971, **93**, 3544 (*isol, struct*)
Corey, E.J. *et al*, *J. Am. Chem. Soc.*, 1987, **109**, 7534 (*synth*)
Corey, E.J. *et al*, *Tetrahedron Lett.*, 1988, **29**, 3423 (*synth*)
Crimmins, M.T. *et al*, *J. Am. Chem. Soc.*, 1992, **114**, 5445; 1993, **115**, 3146 (*synth*)

Biondinin A B-10024

[142942-84-5]

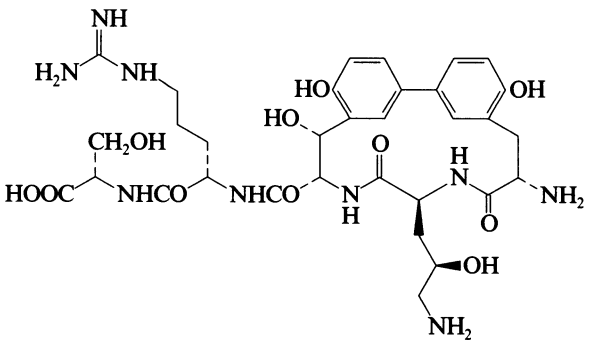


$C_{21}H_{26}O_6$ M 374.433
Neolignan. Isol. from the flower buds of *Magnolia biondii*. Oil.

Ma, Y. *et al*, *Chin. Chem. Lett.*, 1992, **3**, 121 (*isol, ms, ir, pmr, cmr*)

Biphenomycin C B-10025

[147139-55-7]

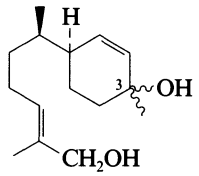


$C_{32}H_{45}N_9O_{11}$ M 731.761
Cyclic peptide antibiotic. Incorrect MF given in paper. Prod. by *Steptomyces griseorubiginosus*. Precursor of Biphenomycin A, B-00406.

B,3HCl: Needles. Mp 195-198° dec. $[\alpha]_D^{20}$ −32.0° (c, 0.1 in 0.1*M* HCl).

Ezaki, M. *et al*, *J. Antibiot.*, 1993, **46**, 135 (*isol, pmr, cmr, struct*)

1,10-Bisaboladiene-3,12-diol B-10026



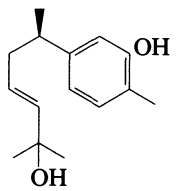
$C_{15}H_{26}O_2$ M 238.369

12-Ac: [147783-27-5].
$C_{17}H_{28}O_3$ M 280.406
Constit. of *Cousinia canescens*. Oil. $[\alpha]_D$ −20° (c, 2.8 in $CHCl_3$).

3-Epimer, 12-Ac: [147743-23-5].
$C_{17}H_{28}O_3$ M 280.406
Constit. of *C. canescens*. Oil. $[\alpha]_D$ −14.2° (c, 3.8 in $CHCl_3$).

Marco, J.A. *et al*, *Phytochemistry*, 1993, **32**, 395 (*isol, pmr, cmr*)

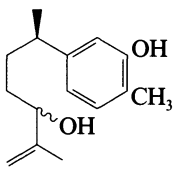
1,3,5,9-Bisabolatetraene-2,11-diol B-10027



$C_{15}H_{22}O_2$ M 234.338
Constit. of *Iostephane heterophylla*. Yellow oil. $[\alpha]_D$ −20° (c, 0.21 in MeOH).

Aguilar, M.I. *et al*, *Phytochemistry*, 1993, **33**, 1161 (*isol, pmr, cmr*)

1,3,5,11-Bisabolatetraene-2,10-diol B-10028



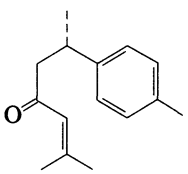
$C_{15}H_{22}O_2$ M 234.338
Constit. of *Iostephane heterophylla*. Yellow oil. $[\alpha]_D$ −5° (c, 0.6 in MeOH).

Aguilar, M.I. *et al*, *Phytochemistry*, 1993, **33**, 1161 (*isol, pmr, cmr*)

1,3,5,10-Bisabolatetraen-9-one B-10029

Updated Entry replacing B-00457

2-Methyl-6-(4-methylphenyl)-2-hepten-4-one, 9CI. **ar-*Turmerone.*** *Dehydroturmerone*



$C_{15}H_{20}O$ M 216.322

(R)-form [532-65-0]
Constit. of essential oil from *Curcuma longa, C. amada* and *C. domestica*. Pale-yellow oil. Bp_{10} 159-160°. $[\alpha]_D^{20}$ +82.21°.

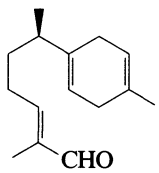
Semicarbazone: Cryst. (C_6H_6). Mp 106°.

9,10-Dihydro: [4179-20-8]. *2-Methyl-6-(4-methylphenyl)-4-heptanone. 1,3,5-Bisabolatrien-9-one. Dihydro-*ar-*turmerone*
$C_{15}H_{22}O$ M 218.338
Oil. Bp_1 115°. $[\alpha]_D$ +31° (c, 7.2 in $CHCl_3$).

Rupe, H. *et al*, *Helv. Chim. Acta*, 1936, **19**, 569 (*isol*)
Honwad, V.K. *et al*, *Tetrahedron*, 1964, **20**, 2921; 1965, **21**, 2593 (*abs config, synth, pmr*)
Rao, G.S.K. *et al*, *Can. J. Chem.*, 1968, **46**, 1467 (*synth*)
Grieco, P.A. *et al*, *J. Org. Chem.*, 1973, **38**, 2909 (*synth*)
Kashima, C. *et al*, *Bull. Chem. Soc. Jpn.*, 1979, **52**, 1735 (*synth, pmr*)
Gosselin, P. *et al*, *J. Org. Chem.*, 1979, **44**, 2807 (*synth*)
Meyers, A.I. *et al*, *Tetrahedron Lett.*, 1979, 2749 (*synth*)
El Jazouli, M. *et al*, *J. Chem. Soc., Chem. Commun.*, 1985, 1598 (*synth*)
Motoyoshiya, J. *et al*, *J. Org. Chem.*, 1985, **50**, 1326 (*synth*)
Gharpure, M.M. *et al*, *Indian J. Chem., Sect. B*, 1986, **25**, 1214 (*synth*)
Strunz, G.M. *et al*, *Can. J. Chem.*, 1992, **70**, 1317 (*synth*)

2,5,10-Bisabolatrien-12-al B-10030

Julaceal



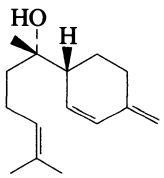
$C_{15}H_{22}O$ M 218.338
Constit. of *Anthelia julacea*. Oil. $[\alpha]_D$ −24.4° (c, 0.74 in $CHCl_3$).

Nagashima, F. *et al*, *Phytochemistry*, 1993, **34**, 1341 (*isol, pmr, cmr*)

1,3(15),10-Bisabolatrien-7-ol B-10031

Sesquiphellandren-7-ol

[149067-96-9]



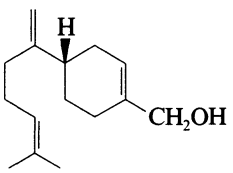
$C_{15}H_{24}O$ M 220.354
Constit. of *Artemisia sieberi*.

Weyerstahl, P. *et al*, *Justus Liebigs Ann. Chem.*, 1993, 111 (*isol, pmr, cmr*)

2,7(14),10-Bisabolatrien-15-ol B-10032

β-Bisabolenol

[147126-90-7]



$C_{15}H_{24}O$ M 220.354
Constit. of *Neocallitropis pancheri*. Oil. $[\alpha]_D^{25}$ −52° (c, 0.31 in $CHCl_3$).

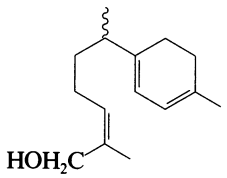
15-Aldehyde: [147029-14-9]. *2,7(14),10-Bisabolatrien-15-al.* ***β-Bisabolenal***

$C_{15}H_{22}O$ M 218.338
Constit. of *N. pancheri*. Oil. $[\alpha]_D^{25}$ −45° (c, 0.28 in $CHCl_3$).

Raharivelomanana, P. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 272 (*isol, pmr, cmr*)

3,5,10-Bisabolatrien-12-ol B-10033

γ-Curcumen-12-ol



$C_{15}H_{24}O$ M 220.354
Constit. of *Pulicaria gnaphaloides*. Oil.

Ac:
$C_{17}H_{26}O_2$ M 262.391
Constit. of *P. gnaphaloides*.

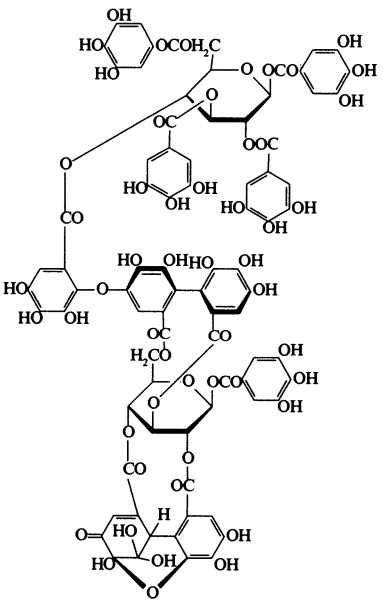
2-Methylpropanoyl:
$C_{19}H_{30}O_2$ M 290.445
Constit. of *P. gnaphaloides*.

2-Methylbutanoyl:
$C_{20}H_{32}O_2$ M 304.472
Constit. of *P. gnaphaloides*.

3-Methylbutanoyl:
$C_{20}H_{32}O_2$ M 304.472
Constit. of *P. gnaphaloides*.

Weyerstahl, P. *et al*, *Justus Liebigs Ann. Chem.*, 1993, 1117 (*isol, pmr, cmr*)

Bischofianin B-10034

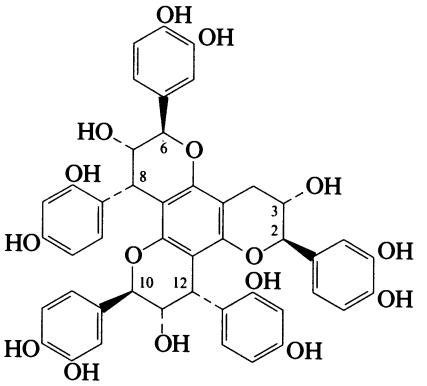


$C_{82}H_{58}O_{53}$ M 1891.328
In equilib. with the alternative dibenzofuranoid isomer.
Ellagitannin from *Bischofia javanica*.

Okuda, T. *et al*, *Heterocycles*, 1990, **30**, 1195 (*struct*)

4,8-Bis(2,4-dihydroxyphenyl)2,6,10-tris(3,4-dihydroxyphenyl)-3,4,7,8,11,12-hexahydro-2*H*,6*H*,10*H*-benzo[1,2-*b*,3,4-*b*′,5,6-*b*″]tripyran-3,7,11-triol, 9CI B-10035

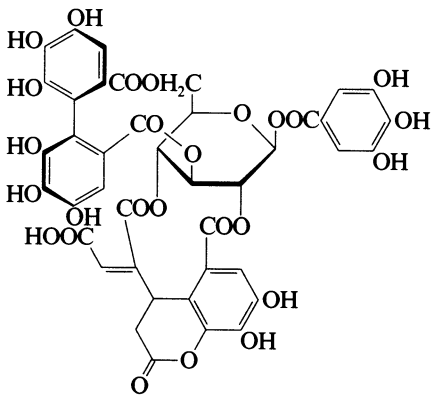
[102258-24-2]



$C_{45}H_{38}O_{16}$ M 834.786
Constit. of heartwood of *Colophospermum mopane*.

Steynberg, J.P. *et al*, *J. Chem. Soc., Perkin Trans. 1*, 1990, 235 (*isol*)

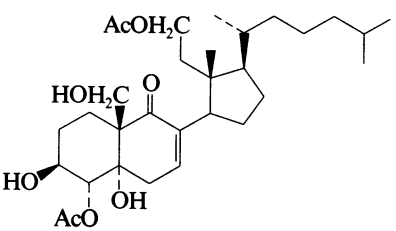
Bixanin B-10036



$C_{41}H_{28}O_{26}$ M 936.657
Isol. from *Euphorbia thymifolia*. Off-white amorph. powder. $[\alpha]_D^{20}$ −63.9° (c, 0.8 in MeOH).

Lee, S.-H. *et al*, *Phytochemistry*, 1990, **29**, 3621 (*struct, pmr*)

Blancasterol B-10037



$C_{31}H_{50}O_8$ M 550.731
Constit. of a *Pleraplysilla* sp. Amorph. solid.

Pika, J. *et al*, *Tetrahedron*, 1993, **49**, 8757 (*isol, pmr, cmr*)

Borovoluboside B-10038

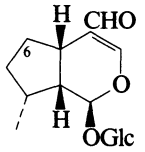
$C_{37}H_{54}O_{14}$ M 722.825

Struct. unknown. Prob. steroidal glycoside. Isol. from bulbs of *Bowiea volubilis*. Mp 308-314°. $[\alpha]_D^{25}$ +24° (MeOH).

Tschesche, R. *et al*, *Justus Liebigs Ann. Chem.*, 1964, **674**, 176.

Boschnaloside B-10039

[72963-55-4]



$C_{16}H_{24}O_8$ M 344.361

Isol. from *Boschniakia rossica*. Cryst. (Me_2CO). Mp 102-103°. $[\alpha]_D^{16}$ −134.5° (c, 1 in MeOH).

Murai, F. *et al*, *Chem. Pharm. Bull.*, 1980, **28**, 1730 (*isol, struct*)
Damtoft, S. *et al*, *Phytochemistry*, 1981, **20**, 2717 (*cmr*)

Bovocryptoside B-10040

$C_{31}H_{42}O_{11}$ M 590.666

Struct. not fully known. A bufadienolide glycoside containing L-thevetose. MF may be $C_{31}H_{44}O_{11}$. Isol. from bulbs of *Boweia volubilis*. Mp 334-339°. $[\alpha]_D^{21}$ +31° (MeOH).

Tschesche, R. *et al*, *Justus Liebigs Ann. Chem.*, 1964, **674**, 176.

Bovoneoside B-10041

$C_{31}H_{44}O_{11}$ M 592.682

Struct. unknown. Steroidal glycoside. Isol. from bulbs of *Bowiea volubilis*. Mp 300-308°. $[\alpha]_D^{26}$ +65° (Py).

Tschesche, R. *et al*, *Justus Liebigs Ann. Chem.*, 1964, **674**, 176.

Bovoruboside B-10042

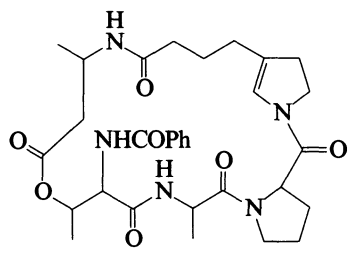
$C_{31}H_{42}O_{11}$ M 590.666

Struct. unknown. Prob. steroidal glycoside. Isol. from bulbs of *Boweia volubilis*. Mp 222-230°. $[\alpha]_D^{26}$ +5° (MeOH).

Tschesche, R. *et al*, *Justus Liebigs Ann. Chem.*, 1964, **674**, 176.

Brevigellin B-10043

[79432-16-9]



$C_{31}H_{41}N_5O_7$ M 595.694

Cyclodepsipeptide antibiotic. Prod. by *Penicillium brevicompactum*. Glass, powder or gel. Mp 209-212°.

McCorkindale, N.J. *et al*, *Tetrahedron*, 1981, **37**, 1795 (*isol*)

1-Bromo-1,3-dichloro-2-propanone, 9CI B-10044

1-Bromo-1,3-dichloroacetone

[1578-17-2]

$ClCH_2COCHBrCl$

$C_3H_3BrCl_2O$ M 205.866

(±)-form

Component of the red alga *Asparagopsis armata*. Liq. Bp_{11} 80-82°. n_D^{25} 1.5296.

Rappe, C. *et al*, *Ark. Kemi*, 1965, **24**, 105 (*synth*)
McConnell, O. *et al*, *Phytochemistry*, 1977, **16**, 367 (*isol, glc*)

3-Bromo-1,1-dichloro-2-propanone, 9CI B-10045

3-Bromo-1,1-dichloroacetone

[1578-16-1]

$Cl_2CHCOCH_2Br$

$C_3H_3BrCl_2O$ M 205.866

Component of the red algae *Asparagopsis armata* and *Falkenbergia rufolanosa*. Needles. Mp 30-31°. Bp_{25} 92-93°, Bp_9 78°. n_D^{25} 1.5197.

Hydrate: Mp 54-57°.

Semicarbazone: Prisms (EtOH aq.). Mp 131°.

King, F.E. *et al*, *J. Chem. Soc.*, 1952, 2144 (*synth*)
Polaczkowa, W. *et al*, *Pol. J. Chem.* (*Rocz. Chem.*), 1956, **30**, 119 (*synth*)
Rappe, C. *et al*, *Ark. Kemi*, 1965, **24**, 105 (*synth*)
Mironov, V.F. *et al*, *Izv. Akad. Nauk SSSR, Ser. Khim.*, 1965, 2193 (*synth, ir*)
McConnell, O. *et al*, *Phytochemistry*, 1977, **16**, 367 (*isol, gc-ms*)
Combaut, G. *et al*, *Phytochemistry*, 1978, **17**, 1661 (*isol, gc-ms*)

1-Bromo-3-iodo-2-propanone, 9CI B-10046

1-Bromo-3-iodoacetone

[59227-98-4]

$BrCH_2COCH_2I$

C_3H_4BrIO M 262.873

Minor component of the essential oil of the edible Hawaiin red alga, *Asparagopsis taxiformis*.

Burreson, B.J. *et al*, *J. Agric. Food Chem.*, 1976, **24**, 856 (*synth, gc-ms, isol*)

1-Bromo-1,3,3-trichloro-2-propanone, 9CI B-10047

1-Bromo-1,3,3-trichloroacetone

[62874-82-2]

$Cl_2CHCOCHBrCl$

$C_3H_2BrCl_3O$ M 240.310

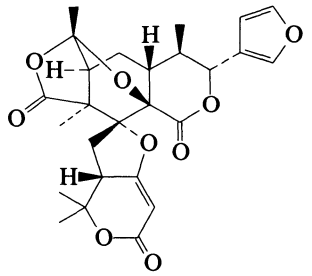
Hydrate: Scaly cryst. Mp 52-53°.

(±)-form

Minor component of the red algae *Asparagopsis armata* and *Falkenbergia rufolanosa*. Liq. Bp_{17} 85-95°.

U.K. Pat., 823, 827, (1959); *CA*, **54**, 5713c (*synth*)
McConnell, O. *et al*, *Phytochemistry*, 1977, **16**, 367 (*isol, glc*)
Combaut, G. *et al*, *Phytochemistry*, 1978, **17**, 1661 (*isol, glc*)

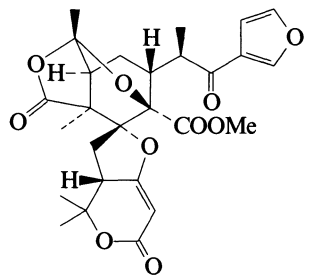
Brownin D B-10048



$C_{26}H_{28}O_9$ M 484.502
Constit. of *Harrisonia brownii*. Prisms (MeOH). Mp >300°. $[\alpha]_D^{20}$ +40.5° (c, 1.2 in Py).

Mitsunaga, K. *et al*, *Tetrahedron Lett.*, 1993, **34**, 6415 (*isol, pmr, cmr, cryst struct*)

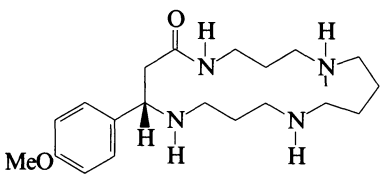
Brownin E B-10049



$C_{27}H_{30}O_{10}$ M 514.528
Constit. of *Harrisonia brownii*. Prisms (MeOH). Mp >300°. $[\alpha]_D^{20}$ +40.6° (c, 1 in Py).

Mitsunaga, K. *et al*, *Tetrahedron Lett.*, 1993, **34**, 6415 (*isol, pmr, cmr*)

Buchnerine B-10050



$C_{20}H_{34}N_4O_2$ M 362.514
Trace alkaloid from leaves of *Clerodendrum buchneri* (Verbenaceae). Oil. $[\alpha]_D^{22}$ −26° (c, 0.5 in MeOH).

N^1-(Z)-*4-Methoxycinnamoyl:* **N^1-(Z)-p-*Methoxycinnamoylbuchnerine***
$C_{30}H_{42}N_4O_4$ M 522.686
Trace alkaloid from leaves of *C. buchneri* (Verbenaceae). Oil. $[\alpha]_D^{22}$ −28° (c, 1.2 in MeOH).

Lumbu, S. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 1418 (*isol, ir, pmr, cmr, ms, struct*)

1,4-Butanediamine, 9CI B-10051

Updated Entry replacing B-01088
1,4-Diaminobutane. Tetramethylenediamine. Putrescine
[110-60-1]

$H_2NCH_2CH_2CH_2CH_2NH_2$

$C_4H_{12}N_2$ M 88.152
Product of dec. of excreta, dead animal matter etc. Isol. in small amts. from plants, e.g. *Datura stramonium*, and *esp. from fungi. Anal sac secretion of the red fox Vulpes vulpes*. Manuf. by amination of 1,4-dihalobutanes. Cross-linking agent for epoxy resins. Comonomer with adipic acid for manuf. of nylon 46. Cryst. with strong odour. Mp 27-28°. Bp 158-159°. pK_a 5.29. Absorbs CO_2 from air.

▷ EJ6800000.

B,2HCl: [333-93-7].
Needles (H_2O). Mp 290°.
▷ EJ7280000.

N,N′-*Di-Ac:* [3073-57-2]. N,N′-*1,4-Butanediylbisacetamide, 9CI*
$C_8H_{16}N_2O_2$ M 172.227
Cryst. (Me_2CO). Mp 137°.

N,N′-*Dibenzoyl:* [31991-78-3]. N,N′-*1,4-Butanediylbisbenzamide, 9CI.* ***Haplamide***
$C_{18}H_{20}N_2O_2$ M 296.368
Isol. from *Haplophyllum latifolium*. Cryst. (EtOH). Mp 176-177° (172-173°).

Bis(4-methylbenzenesulfonyl): Mp 224°.

N-*Benzoyl*, N′-*cinnamoyl* (E-): ***Pyramidatine***
$C_{20}H_{22}N_2O_2$ M 322.406
Alkaloid from leaves of *Aglaia pyramidata* (Meliaceae). Cryst. (Me_2CO). Mp 173-174°.

N-*Me:* [14475-60-6].
$C_5H_{14}N_2$ M 102.179
Constit. of tobacco.

N-*Me; B,2HCl:* [89690-09-5].
Cryst. Mp 177-179°.

N-*Me, dibenzoyl:*
$C_{19}H_{22}N_2O_2$ M 310.395
Mp 115.5°.

N,N′-*Di-Me:* [16011-97-5].
$C_6H_{16}N_2$ M 116.206
Bp 168°.

N,N′-*Di-Me, dibenzoyl:* [16012-03-6]. N,N*p-1,4-Butanediylbis*[N-*methylbenzamide*], *9CI*
$C_{20}H_{24}N_2O_2$ M 324.422
Mp 117°.

N,N′-*Di-Me, bis(3-nitrobenzoyl):* Cryst. (MeOH). Mp 118°.

N-*Et:* [89690-10-8].
$C_6H_{16}N_2$ M 116.206
Cryst. Mp 220-221° (as dihydrochloride).

N-(*3-Methyl-2-butenyl*): N-(*3-Methyl-2-butenyl*)*putrescine*. N-*Prenylputrescine*
$C_9H_{20}N_2$ M 156.270
Bp_{10} 105-106°. Probable struct. Struct. revised here from that originally proposed, *N*-(3-methyl-1-butenyl) putrescine.

Chambret, F. *et al*, *Bull. Soc. Chim. Fr.*, 1947, 1023 (*synth*)
Schultz, H.P., *J. Am. Chem. Soc.*, 1948, **70**, 2666 (*synth*)
Merlis, V.M., *CA*, 1952, **46**, 7289 (*isol, derivs*)
Lunsford, C.D. *et al*, *J. Org. Chem.*, 1957, **22**, 1225 (*deriv*)
Org. Synth., Coll. Vol., 4, 1963, 819 (*synth*)
Smith, T.A. *et al*, *Phytochemistry*, 1964, **3**, 23 (*biosynth*)
Morris, D.R. *et al*, *J. Biol. Chem.*, 1966, **241**, 3129 (*biosynth*)
Roberts, J.D. *et al*, *J. Am. Chem. Soc.*, 1972, **94**, 2495 (*N-15 nmr*)
Aldrich Library of NMR Spectra, 1974, **2**, 10A (*pmr*)
Sarneski, J.E. *et al*, *Anal. Chem.*, 1975, **47**, 2116 (*cmr*)
Mayerl, F. *et al*, *Helv. Chim. Acta*, 1976, **59**, 127 (*ms*)
Albone, E.S. *et al*, *J. Chem. Ecol.*, 1976, **2**, 167.
Nesmelova, E.F. *et al*, *Khim. Prir. Soedin.*, 1978, **14**, 749; *Chem. Nat. Compd.* (*Engl. Transl.*), 637 (*Haplamide*)
Jones, R.A. *et al*, *J. Chem. Soc., Perkin Trans. 2*, 1984, 1089 (*benzoyl derivs*)
Frydman, B. *et al*, *J. Org. Chem.*, 1984, **49**, 2021 (*N-alkyl derivs*)
Aldrich Library of FT-IR Spectra, 1st edn., 1985, **1**, 291D (*ir*)

Saifah, E. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 473 (*Pyramidatine*)
Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th Ed., Van Nostrand-Reinhold, 1992, BOS000, POK325.

3-Butenoic acid, 9CI B-10052

Updated Entry replacing B-01103

Vinylacetic acid. Propene-3-carboxylic acid. Ethenylacetic acid

[625-38-7]

$H_2C{=}CHCH_2COOH$

$C_4H_6O_2$ M 86.090
Constit. of tobacco smoke. Liq. d_4^{20} 1.01. Mp −39°. Bp 163°, Bp_{12} 69-70°. n_D^{15} 1.4257.

Me ester: [3724-55-8].
$C_5H_8O_2$ M 100.117
Liq. Bp 108-109°.

Et ester: [1617-18-1].
$C_6H_{10}O_2$ M 114.144
Liq. Bp 119°.

Chloride: [1470-91-3].
C_4H_5ClO M 104.536
Liq. Bp 95-96° (98-105°).

Amide: [28446-58-4]. *3-Butenamide*
C_4H_7NO M 85.105
Plates (pet. ether). Mp 72-73°.

Anhydride: [1760-48-1]. *Vinylacetic anhydride*
$C_8H_{10}O_3$ M 154.165
Liq. Bp_{35} 105-110°.

Anilide: [13140-15-3]. N-*Phenyl-3-butenamide*, *9CI*
$C_{10}H_{11}NO$ M 161.203
Needles (EtOH aq.). Mp 58°.

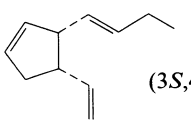
Nitrile: [109-75-1]. *3-Butenenitrile*, *9CI. Allyl cyanide. Vinylacetonitrile. 3-Cyano-1-propene*
C_4H_5N M 67.090
Constit. of mustard oil. Liq. with odour of onions. d_4^{20} 0.834. Mp −87°. Bp 119°. n_D^{20} 1.4060.
▷ Skin irritant. LD_{50} (rat, orl) 115 mg/kg.

Houben, J., *Ber.*, 1903, **36**, 2897 (*synth*)
Org. Synth., Coll. Vol., 1, 1932, 46 (*nitrile*)
Linstead, R.P. *et al*, *J. Chem. Soc.*, 1933, 560 (*synth*)
Org. Synth., Coll. Vol., 3, 1955, 851 (*synth*)
Griffith, G.H. *et al*, *J. Mol. Struct.*, 1969, **4**, 255 (*ir, raman, nitrile*)
Yonemoto, T. *et al*, *J. Magn. Reson.*, 1973, **12**, 93 (*cmr, nitrile*)
Aldrich Library of NMR Spectra, 1974, **2**, 157D (*pmr*)
Zevenhuizen, L.P.T.M., *Anal. Biochem.*, 1974, **58**, 146 (*uv*)
Simchev, G., *Synthesis*, 1975, **9**, 605 (*nitrile*)
Bigley, D.B. *et al*, *Org. Mass Spectrom.*, 1976, **11**, 352 (*ms*)
Brambilla, R. *et al*, *Tetrahedron*, 1981, **37**, 3615 (*anhydride*)
Schei, S.H. *et al*, *J. Mol. Struct.*, 1983, **98**, 141 (*struct*)
Alvhaell, J. *et al*, *Chem. Scr.*, 1984, **24**, 170 (*chloride*)
Vogl, O. *et al*, *J. Polym. Sci., Polym. Chem. Ed.*, 1984, **22**, 2501 (*Me ester, cmr*)
Aldrich Library of FT-IR Spectra, 1st edn., 1985, **1**, 498D (*ir*)
Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th Ed., Van Nostrand-Reinhold, 1992, BOX500.

3-(1-Butenyl)-4-vinylcyclopentene B-10053

Updated Entry replacing B-01114

3-(1-Butenyl)-4-ethenylcyclopentene, *9CI*. ***Multifidene***



(3*S*,4*S*,*E*)-*form*

$C_{11}H_{16}$ M 148.247

(*3S,4S*)-(*E*)-*form* [78038-46-7]
Isol. from *Dictyopteris acrostichoides.*

1',2'-Dihydro: [143615-93-4]. *3-Butyl-4-vinylcyclopentene*
$C_{11}H_{18}$ M 150.263
Constit. of *D. acrostichoides.*

(*3S,4S*)-(*Z*)-*form* [52886-04-1]
Gamete attractant of the brown alga *Cutleria multifida.* $[\alpha]_D^{23.5}$ +28° (c, 0.0036 in CCl_4).

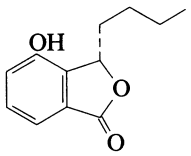
[78038-45-6, 92998-67-9]

Jaenicke, L. *et al*, *J. Am. Chem. Soc.*, 1974, **96**, 3324 (*glc, ms, nmr*)
Jaenicke, L. *et al*, *Angew. Chem., Int. Ed. Engl.*, 1982, **21**, 643 (*rev*)
Boland, W. *et al*, *Helv. Chim. Acta*, 1982, **65**, 2355; 1983, **66**, 1905 (*synth, abs config*)
Paquette, L.A. *et al*, *J. Org. Chem.*, 1984, **49**, 4516 (*synth, abs config*)
Burks, J.E. *et al*, *J. Org. Chem.*, 1984, **49**, 4663 (*synth, bibl*)
Wirth, D. *et al*, *Helv. Chim. Acta*, 1992, **75**, 734 (*synth, occur*)

3-Butyl-4-hydroxy-1(3*H*)-isobenzofuranone, 9CI B-10054

3-Butyl-4-hydroxyphthalide. ***Chuangxinol***

[74459-23-7]



$C_{12}H_{14}O_3$ M 206.241

(*S*)-*form* [74459-24-8]
Isol. from *Ligusticum wallichii* and *L. chuanxing.* Cryst. (C_6H_6). Mp 188-190°. $[\alpha]_D$ −88.7° (c, 0.38 in EtOH).

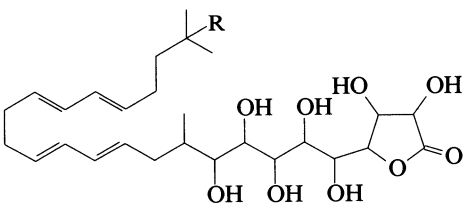
[87421-30-5]

Peking Inst. Pharm. Ind., *CA*, 1980, **93**, 114227e (*isol*)
Ogawa, Y. *et al*, *Heterocycles*, 1989, **29**, 865 (*synth*)
Naito, T. *et al*, *Phytochemistry*, 1992, **31**, 639 (*isol*)

Butyrolactol A B-10055

BU 4408A. Antibiotic BU 4408A

[145144-32-7]



R = CH_3

$C_{28}H_{46}O_9$ M 526.666
Prod. by *Streptomyces rochei.* Active against fungi and yeasts. Amorph. powder + $\frac{1}{2}H_2O$. Mp 139.4-139.8° dec. $[\alpha]_D^{26}$ −25.5° (c, 2 in DMSO).

Kotake, C. *et al*, *J. Antibiot.*, 1992, **45**, 1442 (*isol, pmr, cmr, struct, props*)

Butyrolactol B B-10056

BU 4408B. Antibiotic BU 4408B

[145144-33-8]

As Butyrolactol A, B-10055 with

R = H

$C_{27}H_{44}O_9$ M 512.639

Prod. by *Streptomyces rochei*. Active against fungi and yeasts. Amorph. powder + $1H_2O$.

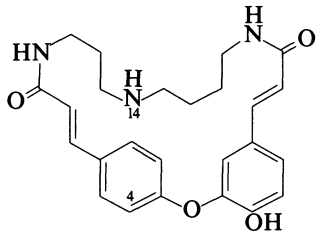
Kotake, C. *et al*, *J. Antibiot.*, 1992, **45**, 1442 (*isol, pmr, cmr, struct, props*)

C

Cadabicine C-10001

Updated Entry replacing C-00019

[99964-83-7]



$C_{25}H_{29}N_3O_4$ M 435.522

Alkaloid from the stem bark of *Cadaba farinosa* and *Crataeva nurvala* (Capparidaceae). Mp 270-272° dec.

N^{14},O-*Di-Ac:* [99964-84-8]. ***Cadabicine diacetate***

$C_{29}H_{33}N_3O_6$ M 519.596

Alkaloid from *C. nurvala* (Capparidaceae). Rods (MeOH). Mp 265-268°.

4-Methoxy: [126431-38-7]. ***Isocodonocarpine***

$C_{26}H_{31}N_3O_5$ M 465.548

Alkaloid from root bark of *Capparis decidua* (Capparidaceae). Off-white cryst. (MeOH). Mp 220-222° dec. CA gives incorrect name.

4-Methoxy, N^{14}-*Ac:* ***14-N-Acetylisocodonocarpine***

$C_{28}H_{33}N_3O_6$ M 507.585

Alkaloid from root bark of *C. decidua* (Capparidaceae). Amorph. powder. Mp 234-236°.

4-Methoxy, N^{14},O-*di-Ac:* Cryst. (MeOH). Mp 205-207°.

Me ether: ***Cadabicine methyl ether.*** O-*Methylcadabicine*

$C_{26}H_{31}N_3O_4$ M 449.549

Alkaloid from stem bark of *Cadaba farinosa* and *Crataeva nurvala* (Capparidaceae).

Ahmad, V.U. *et al, Phytochemistry*, 1985, **24**, 2709; 1989, **28**, 2493 (*isol, uv, ir, pmr, cmr, ms, cryst struct*)

Ahmad, V.U. *et al, J. Nat. Prod.* (*Lloydia*), 1987, **50**, 1186 (*isol, Cadabicine, Cadabicine diacetate*)

Ahmad, V.U. *et al, J. Nat. Prod.* (*Lloydia*), 1992, **55**, 1509 (*14-N-Acetylisocodonocarpine*)

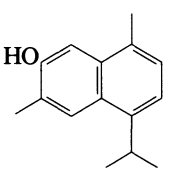
Ahmad, V.U. *et al, Pak. J. Sci. Ind. Res.*, 1992, **35**, 475; *CA*, **119**, 177556n (*Cadabicine methyl ether*)

3-Cadalenol C-10002

Updated Entry replacing C-00025

3,8-Dimethyl-5-(1-methylethyl)-2-naphthalenol, 9CI. 5-Isopropyl-3,8-dimethyl-2-naphthol. 3-Hydroxycadalene. 7-Hydroxycadalene

[2102-75-2]



$C_{15}H_{18}O$ M 214.307

Constit. of various heartwoods. Cryst. (pet. ether). Mp 118-119.5°.

Picrate: Reddish-brown needles. Mp 138.5-139.5°.

Me ether: ***3-Methoxycadalene.*** *7-Methoxycadalene*

$C_{16}H_{20}O$ M 228.333

Constit. of *Heteroscyphus planus.*

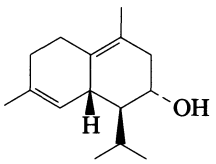
Briggs, L.H. *et al, J. Chem. Soc.*, 1949, 1098 (*synth*)

Gallagher, M.J. *et al, Aust. J. Chem.*, 1965, **18**, 1111 (*synth, uv*)

Alexander, J. *et al, Tetrahedron*, 1971, **27**, 645 (*synth, ir, uv*)

Naketa, K. *et al, Phytochemistry*, 1993, **32**, 117 (*deriv*)

1(10),4-Cadinadien-8-ol C-10003



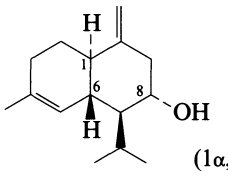
$C_{15}H_{24}O$ M 220.354

8α-form

Constit. of *Pulicaria gnaphaloides.* Oil. $[\alpha]_D^{20}$ +29° (c, 1 in $CHCl_3$).

Weyerstahl, P. *et al, Justus Liebigs Ann. Chem.*, 1993, 1117 (*isol, pmr, cmr*)

4,10(14)-Cadinadien-8-ol C-10004



(1α,6β,8α)-*form*

$C_{15}H_{24}O$ M 220.354

(1α,6β,8α)-form

Constit. of *Pulicaria gnaphaloides.* Oil.

(1α,6β,8β)-form

Constit. of *P. gnaphaloides.* Oil.

(1β,6β,8α)-form

4,10(14)-Muuroladien-8α-ol

$C_{15}H_{24}O$ M 220.354

Constit. of *P. gnaphaloides.* Oil.

(1β,6β,8β)-form

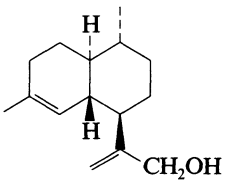
4,10(14)-Muuroladien-8β-ol

Constit. of *P. gnaphaloides.* Oil.

Weyerstahl, P. *et al, Justus Liebigs Ann. Chem.*, 1993, 1117 (*isol, pmr, cmr*)

4,11(13)-Cadinadien-12-ol C-10005

[147648-62-2]



$C_{15}H_{24}O$ M 220.354

Constit. of *Nolana coelestis*. Oil. $[\alpha]_D^{25}$ −177.3° (c, 1 in $CHCl_3$).

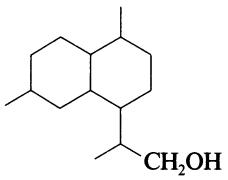
Ac: [147568-32-9]. *12-Acetoxy-4,11(13)-cadinadiene*
$C_{17}H_{26}O_2$ M 262.391
Constit. of *N. coelestis*. Oil. $[\alpha]_D^{25}$ −179.1° (c, 1 in $CHCl_3$).

Garbarino, J.A. *et al*, *Phytochemistry*, 1993, **32**, 987 (*isol, pmr, cmr*)

12-Cadinanol C-10006

Artemisinol

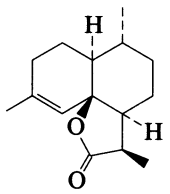
[82890-78-6]



$C_{15}H_{28}O$ M 224.386
Constit. of *Artemisia annua*.

Zhu, D. *et al*, *CA*, 1982, **97**, 107028v.

4-Cadinen-12,6-olide C-10007



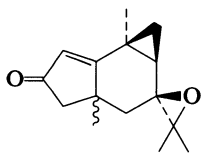
$C_{15}H_{22}O_2$ M 234.338

(6β,10βH,12αH)-form [104196-16-9]
Dihydroepideoxyarteannuin B
Constit. of *Artemisia annua*. Oil.

Brown, G.D., *J. Nat. Prod.* (*Lloydia*), 1992, **55**, 1576 (*isol, pmr, cmr*)

Caespitenene C-10008

[73935-94-1]



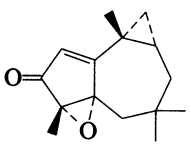
$C_{15}H_{22}O_2$ M 218.338
Constit. of *Porella caespitans*.

Asakawa, Y. *et al*, *J. Hattori Bot. Lab.*, 1980, **47**, 153.

Caespitenone C-10009

Updated Entry replacing C-00071

[73019-81-5]



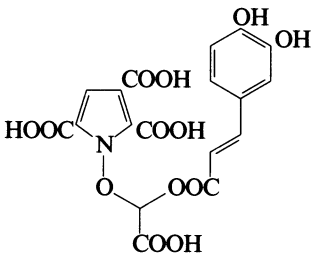
$C_{15}H_{20}O_2$ M 232.322

Struct. revised in 1993. Constit. of *Porella* spp. Oil. $[\alpha]_D$ −34° (c, 0.2 in $CHCl_3$).

Asakawa, Y. *et al*, *Phytochemistry*, 1980, **19**, 603 (*isol*)
Tori, M. *et al*, *Tetrahedron Lett.*, 1993, **34**, 3751 (*struct*)

1-[Caffeoyloxy(carboxy)methoxy]-1*H*-pyrrole-2,3,5-tricarboxylic acid C-10010

[133084-32-9]



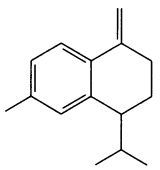
$C_{18}H_{13}NO_{13}$ M 451.300
Alkaloid from *Parietaria officinalis* (Urticaceae). Off-white granules. Mp >360°.

Budzianowski, J. *et al*, *Phytochemistry*, 1990, **29**, 3299 (*isol, pmr, uv, cmr*)

β-Calacorene C-10011

1,2,3,4-Tetrahydro-6-methyl-1-methylene-4-(1-methylethyl) naphthalene. 1,2,3,4-Tetrahydro-4-isopropyl-6-methyl-1-methylenenaphthalene

[50277-34-4]

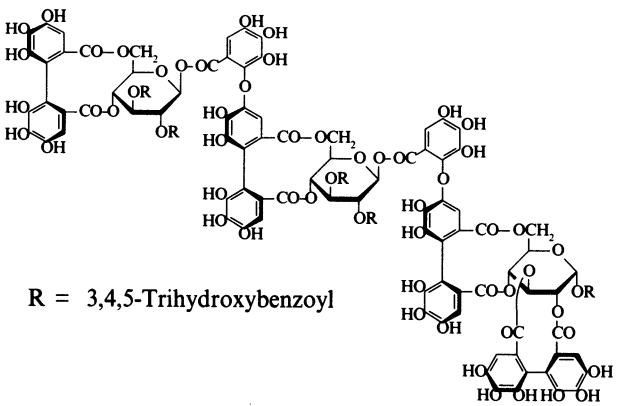


$C_{15}H_{20}$ M 200.323
Constit. of *Cryptomeria japonica* and *Teucrium polium*. Oil.

Vokov, D. *et al*, *J. Nat. Prod.* (*Lloydia*), 1985, **48**, 498 (*isol*)
Gupta, K. *et al*, *J. Indian Chem. Soc.*, 1987, **64**, 66 (*isol, glc*)

Calamanin C C-10012

[135382-90-0]



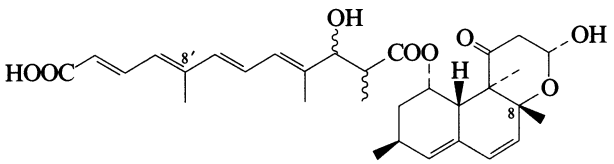
R = 3,4,5-Trihydroxybenzoyl

$C_{123}H_{84}O_{78}$ M 2809.969

A trimeric ellagitannin from the leaf of *Terminalia calamansanai*. Tan amorph. powder. $[\alpha]_D^{25}$ +131.0° (c, 1.1 in MeOH). Ref. appears to incorrectly give the formula $C_{123}H_{84}O_{77}$.

Tanaka, T. *et al*, *Chem. Pharm. Bull.*, 1991, **39**, 60 (*struct, pmr, cmr*)

Calbistrin A C-10013



$C_{31}H_{40}O_8$ M 540.652

Prod. by *Penicillium restrictum*. Antifungal agent. Active against *Candida albicans*. Related to Versiol, V-00213.

8′Z-Isomer: ***Calbistrin B***

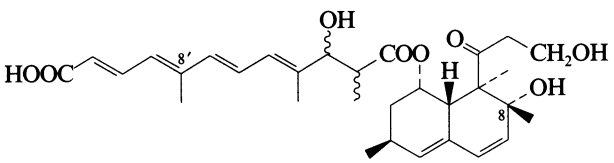
$C_{31}H_{40}O_8$ M 540.652

Prod. by *P. restrictum*. Antifungal agent. Active against *C. albicans*.

[145594-76-9, 145679-02-3, 147384-55-2, 147384-56-3]

Jackson, M. *et al*, *J. Antibiot.*, 1993, **46**, 34 (*isol, props*)
Brill, G.M. *et al*, *J. Antibiot.*, 1993, **46**, 39 (*uv, ir, pmr, cmr, struct*)

Calbistrin C C-10014



$C_{31}H_{42}O_8$ M 542.668

Prod. by *Penicillium restrictum*. Antifungal agent. Active against *Candida albicans*.

8′Z-Isomer: ***Calbistrin D***

$C_{31}H_{42}O_8$ M 542.668

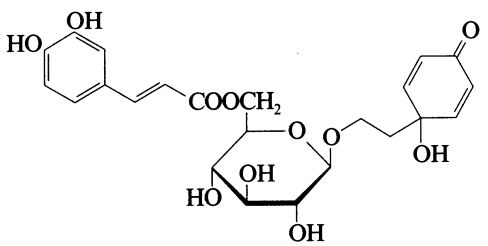
Prod. by *P. restrictum*. Antifungal agent. Active against *C. albicans*.

[147385-34-0]

Jackson, M. *et al*, *J. Antibiot.*, 1993, **46**, 34 (*isol, props*)
Brill, G.M. *et al*, *J. Antibiot.*, 1993, **46**, 39 (*uv, ir, pmr, cmr, struct*)

Calceolarioside D C-10015

[114217-05-9]

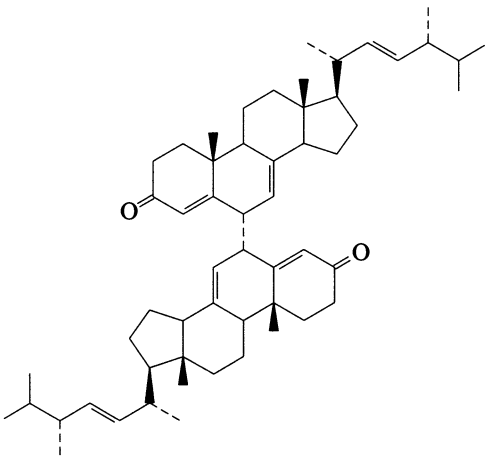


$C_{23}H_{26}O_{11}$ M 478.452

Isol. from aerial parts of *Calceolaria hypericina*. Amorph. powder. $[\alpha]_D^{25}$ −21.5° (c, 2.0 in MeOH).

Nicoletti, M. *et al*, *Phytochemistry*, 1988, **27**, 639 (*isol, pmr, cmr*)

Calvasterone C-10016

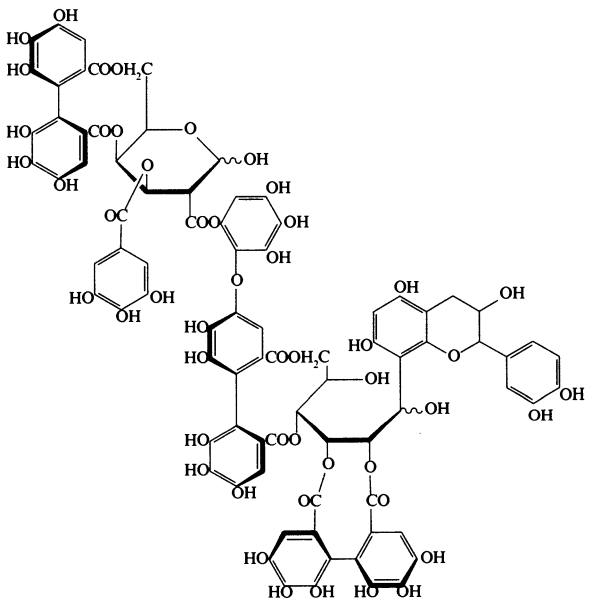


$C_{56}H_{82}O_2$ M 787.263

Metab. of *Calvatia cyathiformis*. Cryst. (Me_2CO). Mp 202-204°. $[\alpha]_D$ +58.2° (c, 1.2 in $CHCl_3$).

Kawahara, N. *et al*, *Chem. Pharm. Bull.*, 1993, **41**, 1318 (*isol, pmr, cmr*)

Camellianin D C-10017



$C_{83}H_{62}O_{50}$ M 1859.373

Exists as an equilibrated mixt. of α- and β-anomers. Tannin constit. of *Camellia japonica*.

Okuda, T. *et al*, *Heterocycles*, 1990, **30**, 1195 (*struct*)

Canavalmine C-10018

N,N″-*1,3-Propanediylbis*[*1,4-butanediamine*]. *1,13-Diamino-5,9-diazatridecane*

[70862-15-6]

$H_2N(CH_2)_4NH(CH_2)_3NH(CH_2)_4NH_2$

$C_{11}H_{28}N_4$ M 216.369

Isol. from the seeds of *Canavalia gladiata*.

N′-*(3-Aminopropyl)*: [129225-31-6]. ***N′-(3-Aminopropyl) canavalmine.*** *1,17-Diamino-4,9,13-triazaheptadecane*

$C_{14}H_{35}N_5$ M 273.464

Constit. of *C. gladiata*.

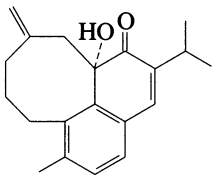
N′-(*4-Aminobutyl*): [129225-32-7]. **N′-(*4-Aminobutyl*) *canavalmine.*** *1,18-Diamino-5,9,14-triazaoctadecane*
$C_{15}H_{37}N_5$ M 287.491
Constit. of *C. gladiata.*

[107886-53-3, 107886-65-7]

Fujihara, S. *et al, Biochem. Biophys. Res. Commun.*, 1982, **107**, 403 (*isol, synth, ir*)
Aikens, D. *et al, Biophys. Chem.*, 1983, **17**, 67 (*cmr*)
Samejima, K. *et al, Chem. Pharm. Bull.*, 1984, **32**, 3428 (*synth*)
Niitsu, M. *et al, Chem. Pharm. Bull.*, 1986, **34**, 1032 (*deriv*)
Matsuzaki, S. *et al, Phytochemistry*, 1990, **29**, 1311 (*derivs*)

Candidissiol C-10019

[145706-88-3]



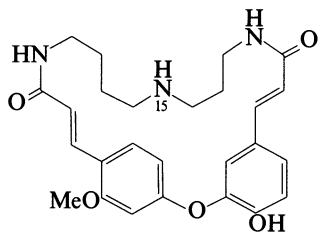
$C_{20}H_{24}O_2$ M 296.408
Constit. of *Salvia candidissima.* Cryst. (MeOH). Mp 72-73°. $[\alpha]_D^{25}$ +38.5° (c, 0.1 in MeOH).

Ulubelen, A. *et al, Tetrahedron Lett.*, 1992, **33**, 7241 (*isol, pmr, cmr*)

Capparisine C-10020

Updated Entry replacing C-00314

[104899-66-3]



$C_{26}H_{31}N_3O_5$ M 465.548
Alkaloid from the root bark of *Capparis decidua* (Capparidaceae). Cryst. (MeOH). Mp 160-162°.

N^{15}-*Ac:* ***15*-N-*Acetylcapparisine***
$C_{28}H_{33}N_3O_6$ M 507.585
Alkaloid from root bark of *C. decidua* (Capparidaceae). Amorph. powder. Mp 178-180°.

N^{15},O-*Di-Ac:* Amorph. Mp 223-224°.

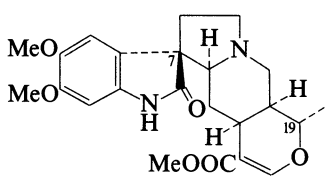
Ahmad, V.U. *et al, Z. Naturforsch., B*, 1986, **41**, 1033 (*isol, uv, ir, pmr, cmr, ms, struct*)
Ahmad, V.U. *et al, J. Nat. Prod.* (*Lloydia*), 1992, **55**, 1509 (*15-N-Acetylcapparisine*)

Carapanaubine C-10021

Updated Entry replacing C-00343

Isoreserpiline oxindole B

[1255-02-3]



$C_{23}H_{28}N_2O_6$ M 428.484
Alkaloid from *Aspidosperma carapanauba, Rauwolfia vomitoria, Cabucala madagascariensis* var. *amygdalifolia* (Apocynaceae). Cryst. (EtOAc/hexane or EtOH aq.). Mp 221-223°. $[\alpha]_D^{30}$ −101° (c, 1.0 in $CHCl_3$).

N-*Oxide:* [64675-22-5]. ***Carapanaubine* N-*oxide***
$C_{23}H_{28}N_2O_7$ M 444.483
Alkaloid from *R. vomitoria* (Apocynaceae).

7-Epimer: [17391-09-2]. ***Isocarapanaubine.*** *Isoreserpiline oxindole A*
$C_{23}H_{28}N_2O_6$ M 428.484
Alkaloid from *R. vomitoria, R. salicifolia* and *Ochrosia moorei* (Apocynaceae). Amorph. $[\alpha]_D^{20}$ −64° ($CHCl_3$).

3-Epimer: see *Rauvoxine, R-00070*

7,19-Diepimer: [122923-45-9]. ***Neisosposinine***
$C_{23}H_{28}N_2O_6$ M 428.484
Alkaloid from the stem bark of *Neisosperma oppositifolia.* Plates (Me_2CO). Mp 228-230°.

Finch, N. *et al, J. Am. Chem. Soc.*, 1963, **85**, 1520 (*synth*)
Gilbert, B. *et al, J. Am. Chem. Soc.*, 1963, **85**, 1523 (*isol, uv, pmr, ms, struct*)
Pousset, J.-L. *et al, Bull. Soc. Chim. Fr.*, 1967, 2766 (*epimer, synth, uv, ir, pmr, config*)
Poisson, J. *et al, Tetrahedron Lett.*, 1967, 1919 (*config*)
Iwu, M.M. *et al, Planta Med.*, 1977, **32**, 88 (*oxide*)
Sierra, P. *et al, Collect. Czech. Chem. Commun.*, 1982, **47**, 2912 (*epimer, isol*)
Verpoorte, R. *et al, Org. Magn. Reson.*, 1984, **22**, 328 (*cmr*)
Gunatilaka, A.A. *et al, Heterocycles*, 1989, **28**, 999 (*Neisosposinine*)

Carbon monoxide C-10022

Updated Entry replacing C-00375

[630-08-0]

CO

CO M 28.010
Interatomic distance C—O 112.8 pm. Manuf. by partial oxidn. of hydrocarbon gases from natural gas, or gasification of coke and coal. Synth. from HCO_2H + H_2SO_4. Prod. in traces by algae and higher plants. Prod. in the body by haem oxygenase-catalysed breakdown of haem into biliverdin. Reducing agent, used in Fischer-Tropsch processes for petroleum-type products, manuf. of metal carbonyls. Carbonylates organoboranes. Commercially available. Appears to be a hormonal messenger involved in cyclic GMP regulation. Vasodilator. Odourless, tasteless, colourless gas. V. spar. sol. H_2O; sol. AcOH, MeOH, EtOH. Mp −213°. Bp −190°. Crit. point −114.1° (−138.7°)/35.9 atm. Readily absorbed by conc. solns. of Cu_2Cl_2 in aq. NH_3 or HCl. Exhaust gas, air pollutant.

▷ Extremely flammable, forms highly explosive mixtures with air. High conc. cause unconsciousness due to anoxia which results form the formation of carboxyhaemoglobin. Lower atm. conc. can cause headaches, nausea. Chronic effects include, headache, nausea and weakness. LC_{50} (rat, ihl) 1807 ppm (4 hour exposure). Exp. reprod. and teratogenic effects. Autoignition temp. 570°. FG3500000.

Mellor, J.W., *Mellor Compr. Treat. Inorg. Theor. Chem.*, Longman, London, 1922, **5**, 921, 925, 945 (*bibl*)
Inorg. Synth., 1946, **2**, 81 (*synth*)
Weinhouse, S., *J. Am. Chem. Soc.*, 1948, **70**, 442 (*synth*)
Wilks, S.S., *Science* (*Washington, D.C.*), 1959, **129**, 964 (*occur*)
Siegel, S.M. *et al, Science* (*Washington, D.C.*), 1962, **137**, 683 (*occur*)
Fieser and Fieser's Reagents for Organic Synthesis, Wiley, 1969, **2**, 60, 204; 1972, **3**, 41; 1975, **5**, 96; 1979, **7**, 53; 1980, **8**, 76; 1981, **9**, 95; 1984, **11**, 111 (*uses*)
Brauer, G., *Handbuch Präp. Anorg. Chem.*, 3rd Ed., Ferdinand Enke Verlag, 1975-1981, **2**, 621 (*synth*)

Fieser and Fieser's Reagents for Organic Synthesis, Wiley, 1980, **8**, 76.
Kirk-Othmer Encycl. Chem. Technol., 4th edn., Wiley, New York, 1991, **5**, 97 (*rev*)
Martindale, The Extra Pharmacopoeia, 30th edn., Pharmaceutical Press, London, 1993, 864-2.
Synder, S. *et al*, *Science* (*Washington, D.C.*), 1993, **259**, 381 (*pharmacol*)
Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th Ed., Van Nostrand-Reinhold, 1992, CBW750.
Bretherick, L., *Handbook of Reactive Chemical Hazards*, 4th edn., Butterworth, London and Boston, 1990, 0527.
Luxon, S.G., *Hazards in the Chemical Laboratory*, 5th edn., Royal Society of Chemistry, Cambridge, 1992, 257.

(2-Carboxy-2-hydroxyethyl) trimethylarsonium hydroxide inner salt, 9CI C-10023

β-Trimethylarsonium lactate

[68688-60-8]

$Me_3As^{\oplus}CH_2CH(OH)COO^{\ominus}$

$C_6H_{13}AsO_3$ M 208.088

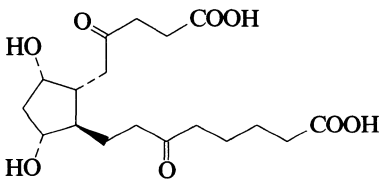
Occurs as an *O*-phospholipid in marine algae e.g. *Dunaliella tertiolecta*. Prod. from inorganic arsenate. Also occurs as a *O*-phosphatidyl deriv. in the marine diatom *Chaetoceros concavicornis*. Occurs free in the lobster *Homarus americanus*. White plates ($EtOH/Et_2O$). Mp 199-201°.

Cooney, R.V. *et al*, *Proc. Natl. Acad. Sci. U.S.A.*, 1978, **75**, 4262.
Cooney, R.V. *et al*, *Chemosphere*, 1980, **9**, 335 (*biosynth*)
Summons, R.E. *et al*, *Phosphorus Sulfur Relat. Elem.*, 1982, **13**, 133 (*synth, ms, ir*)

2-(4-Carboxy-2-oxobutyl)-3,5-dihydroxy-2-oxocyclopentaneoctanoic acid C-10024

Dinor-4,13-diketo-7,9-dihydroxy-1,18-prostandioic acid

[68340-29-4]



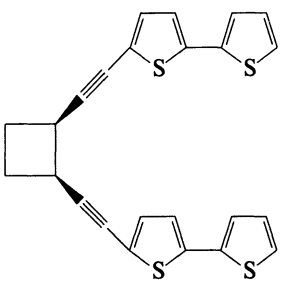
$C_{18}H_{28}O_8$ M 372.414

Prostacyclin metab. in bile.

Rosenkranz, B. *et al*, *J. Biol. Chem.*, 1980, **255**, 10194 (*biosynth*)
Taylor, B.M. *et al*, *J. Pharmacol. Exp. Ther.*, 1980, **214**, 24; 1983, **224**, 692 (*biosynth*)

Cardopatine C-10025

5,5″-(1,2-Cyclobutanediyldi-2,1-ethynediyl)bis-2,2′-bithiophene, 9CI



$C_{24}H_{16}S_4$ M 432.654

(Z)-form [70607-89-5]

Constit. of *Cardopatium corymbosum*. Yellow plates (EtOH). Mp 123-125°.

(±)-(E)-form [70607-88-4]

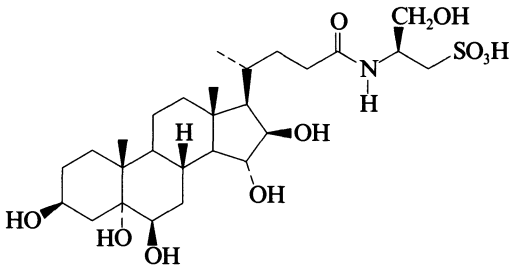
Isocardopatine

Pale-yellow plates (EtOH). Mp 79-80°.

Selva, A. *et al*, *Phytochemistry*, 1978, **17**, 2097.

Carolisterol A C-10026

[151171-32-3]



$C_{27}H_{47}NO_{10}S$ M 577.735

Constit. of *Styracaster caroli*.

6-Ketone: [151171-33-4]. ***Carolisterol B***

$C_{27}H_{45}NO_{10}S$ M 575.719

Constit. of *S. caroli*.

6-Epimer, 5-deoxy: [151171-34-5]. ***Carolisterol C***

$C_{27}H_{47}NO_9S$ M 561.736

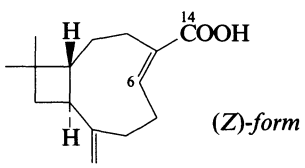
Constit. of *S. caroli*.

De Riccardis, F. *et al*, *Tetrahedron Lett.*, 1993, **34**, 4381 (*isol, pmr, cmr*)

3(15),6-Caryophylladien-14-oic acid C-10027

Updated Entry replacing C-00484

15-Caryophyllenoic acid



$C_{15}H_{22}O_2$ M 234.338

(Z)-form

Constit. of *Lychnophora salicifolia*. Gum.

Me ester: Oil. $[\alpha]_D^{24}$ +2.8° (c, 3.2 in $CHCl_3$).

6,7-Dihydro: ***3(15)-Caryophyllen-14-oic acid***

$C_{15}H_{24}O_2$ M 236.353

Constit. of *L. salicifolia*. Oil (as Me ester). $[\alpha]_D^{24}$ −4.4° (c, 10.4 in $CHCl_3$) (Me ester).

14-Alcohol, 6ξ,7ξ-epoxide: [94901-71-0]. ***6,7-Epoxy-3(15)-caryophyllen-14-ol.*** *14-Hydroxycaryophyllene-4,5-oxide*

$C_{15}H_{24}O_2$ M 236.353

Constit. of *Betula pubescens*. Oil. $[\alpha]_D^{18}$ −34.6° (c, 0.5 in $CHCl_3$).

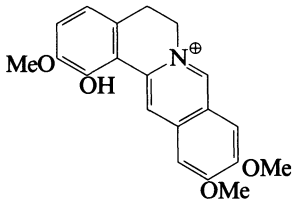
(E)-form

14-Aldehyde: 3(15),6-Caryophylladien-14-al. 13-Isocyaryophyllenal. ***β-Betulenal***

Constit. of *Cunila speciosa*. $[\alpha]_D^{20}$ −31.8° (c, 0.69 in $CHCl_3$).

Bohlmann, F. *et al*, *Phytochemistry*, 1980, **19**, 2381.
Pokhilo, N.D. *et al*, *Khim. Prir. Soedin.*, 1984, **20**, 598; *Chem. Nat. Compd.* (*Engl. Transl.*), 563.
Manns, D. *et al*, *Planta Med.*, 1992, **58**, 442 (*β-Betulenal*)

Caseadinium(1+) C-10028



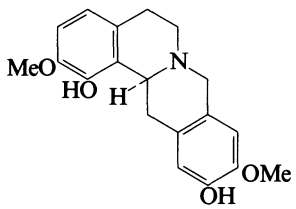
$C_{20}H_{20}NO_4^{\oplus}$ M 338.382 (ion)
Alkaloid from *Ceratocapnos heterocarpa* (Papaveraceae).

Chloride:
$C_{20}H_{20}ClNO_4$ M 373.835
Yellowish solid. Mp 192°.

Suau, R. *et al*, *Phytochemistry*, 1993, **34**, 559 (*isol, uv, pmr, ms, struct*)

Caseamine C-10029

Updated Entry replacing C-00502
Alkaloid F33
[27498-04-0]



$C_{19}H_{21}NO_4$ M 327.379
Struct. revised in 1988. Alkaloid from *Corydalis caseana* (Fumariaceae). Major alkaloid from the whole plant of *Ceratocapnos heterocarpa* (Fumariaceae). Cryst. ($CHCl_3$/MeOH). Mp 246-247° (257°). $[\alpha]_D$ −365° (c, 0.04 in $CHCl_3$), $[\alpha]_D$ −406° (c, 0.12 in $CHCl_3$).

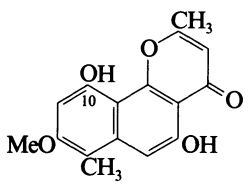
Di-Me ether: Cryst. Mp 186°. $[\alpha]_D$ −360° (c, 0.4 in $CHCl_3$).

α-N-*Oxide:* **cis-*Caseamine* N-*oxide***
$C_{19}H_{21}NO_5$ M 343.379
Alkaloid from *Ceratocapnos heterocarpa* (Papaveraceae). Pale yellowish cryst. (MeOH). Mp 244-246°. $[\alpha]_D$ −216° (c, 0.05 in MeOH).

Manske, R.H.F. *et al*, *Can. J. Res., Sect. B*, 1938, **16**, 153 (*isol*)
Chen, C.-Y. *et al*, *Tetrahedron Lett.*, 1968, 349 (*uv, ms*)
Suau, R. *et al*, *Phytochemistry*, 1988, **27**, 1920; 1993, **34**, 559 (*isol, uv, ir, pmr, cmr, ms, synth, struct, oxide*)

Cassiapyrone C-10030

*5,10-Dihydroxy-8-methoxy-2,7-dimethyl-4*H*-naphtho[1,2-*b*]pyran-4-one, 9CI*
[132922-78-2]



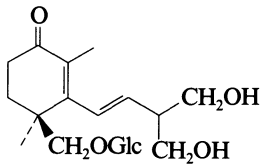
$C_{16}H_{14}O_5$ M 286.284
Amorph. powder.

10-O-Sulfate: [132922-77-1]. *Cassiapyrone 10-sulfate*
$C_{16}H_{14}O_8S$ M 366.348
Constit. of the roots of *Cassia pudibunda*. Amorph. powder.

Messana, I. *et al*, *Heterocycles*, 1990, **31**, 1847 (*isol*)

Cassioside† C-10031

4-[(β-D-Glucopyranosyloxy)methyl]-3-[4-hydroxy-3-(hydroxymethyl)-1-butenyl]-2,4-dimethyl-2-cyclohexen-1-one, 9CI
[108543-38-0]



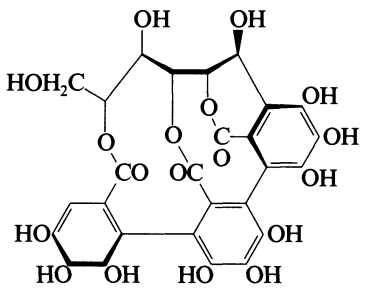
$C_{20}H_{32}O_9$ M 416.467
Isol. from the stem bark of *Cinnamonum cassia*. Antiulcerogenic. Syrup. $[\alpha]_D$ −25.2° (c, 0.5 in MeOH).

Aglycone: [117479-71-7]. *Cassiol*
$C_{14}H_{22}O_4$ M 254.325
Hydrol. prod. of parent. Antiulcerogenic. $[\alpha]_D^{20}$ +8.5° (c, 0.37 in MeOH).

Shiraga, Y. *et al*, *Tetrahedron*, 1988, **44**, 4703 (*isol, pmr, cmr*)
Uno, T. *et al*, *Tetrahedron*, 1990, **46**, 5563 (*synth, Cassiol*)

Castalin C-10032

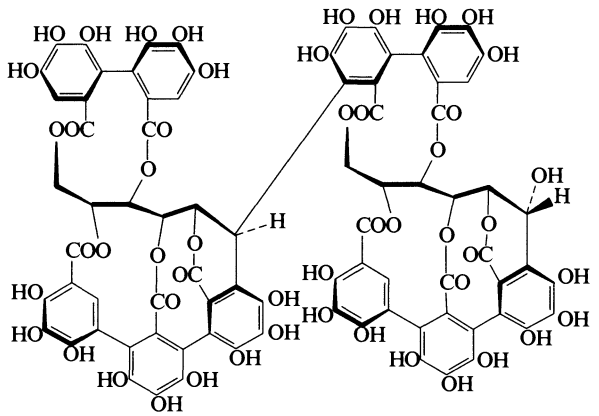
[19086-75-0]



$C_{27}H_{20}O_{18}$ M 632.444
Isol. from wood of *Castanea sativa* and *Quercus sessiliflora*. Off-white amorph. powder. $[\alpha]_D^{17}$ +14.4° (c, 0.46 in H_2O). Gives Vescalin, V-00232 on heating in aq. soln.

Mayer, W. *et al*, *Justus Liebigs Ann. Chem.*, 1967, **707**, 177 (*isol, struct*)
Nonaka, G. *et al*, *J. Chem. Soc., Perkin Trans. 1*, 1985, 163 (*pmr, cmr*)

Castamollinin C-10033

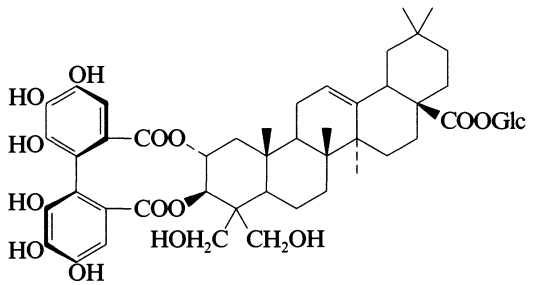


$C_{82}H_{50}O_{51}$ M 1851.266
Ellagitannin constit. of *Anogeissus acuminata* var. *lanceolata*.

Lin, T.-C. *et al*, *Chem. Pharm. Bull.*, 1991, **39**, 1144 (*struct*)

Castanopsinin CA C-10034

[116810-75-4]

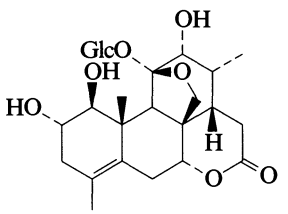


$C_{50}H_{64}O_{19}$ M 969.044
A tannin constit. isol. from the fresh leaf of *Castanopsis cuspidata* var. *sieboldii*. Off-white amorph. powder + $2H_2O$. $[\alpha]_D^{18}$ +13.5° (c, 0.85 in MeOH).

Ageta, M. *et al*, *Chem. Pharm. Bull.*, 1988, **36**, 1646 (*struct, pmr, cmr*)

Casteloside C C-10035

[147526-83-8]



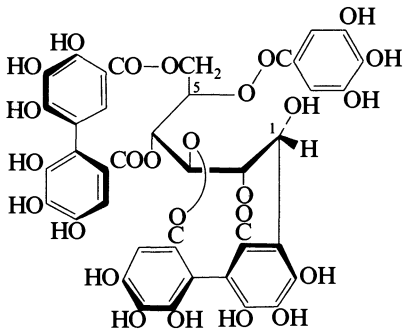
$C_{26}H_{38}O_{12}$ M 542.579
Constit. of *Castela tortuosa*. Cryst. (MeOH). Mp 290-292°.

Kubo, I. *et al*, *Phytochemistry*, 1993, **32**, 215 (*isol, pmr, cmr*)

Casuarinin C-10036

Updated Entry replacing C-00544

[79786-01-9]



$C_{41}H_{28}O_{26}$ M 936.657
Isol. from the leaf of *Casuaria stricta*, *Stachyurus praecox* and *Corylus heterophylla*. Pale yellow amorph. powder + $7H_2O$. $[\alpha]_D$ +43.6° (c, 1 in MeOH).

1-Epimer: [81739-27-7]. *Stachyurin*
$C_{41}H_{28}O_{26}$ M 936.657
Tannin from *C. stricta* and *S. praecox*. Off-white amorph. powder + $5H_2O$. $[\alpha]_D$ +39° (c 0.4 in MeOH).

5-Degalloyl: [79786-04-2]. *Casuariin*
$C_{34}H_{24}O_{22}$ M 784.550
Tannin from *C. stricta* and *S. praecox*. Pale-yellow amorph. powder + $4H_2O$. $[\alpha]_D$ +162° (c, 0.5 in MeOH).

1-Epimer, 5-O-degalloyl: [115406-24-1]. ***Castanin.*** *5-Desgalloylstachyurin*
$C_{34}H_{24}O_{22}$ M 784.550
Isol. from *Euphorbia thymifolia* and *Castanea mollissima*. Pale brown amorph. powder. $[\alpha]_D^{20}$ −26.5° (c, 0.8 in MeOH).

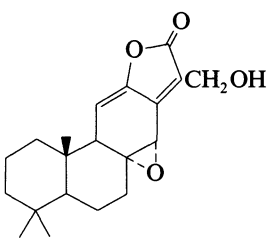
Okuda, T. *et al*, *Chem. Pharm. Bull.*, 1982, **30**, 766 (*struct, uv, pmr*)
Okuda, T. *et al*, *J. Chem. Soc., Perkin Trans. 1*, 1983, 1765 (*ir, uv, cd, pmr*)
Feng, H. *et al*, *Phytochemistry*, 1988, **27**, 1185 (*Castanin*)
Nonaka, G. *et al*, *Chem. Pharm. Bull.*, 1990, **38**, 2151 (*struct, abs config*)
Lee, S.H. *et al*, *Phytochemistry*, 1990, **29**, 3621 (*5-Desgalloylstachyurin*)

Caudicifolin C-10037

Updated Entry replacing C-00586

8,14-Epoxy-17-hydroxy-11,13(15)-abietadien-15,12-olide. Fischeriana A

[65388-16-1]



$C_{20}H_{26}O_4$ M 330.423
Constit. of *Euphorbia caudicifolia*, *E. acaulis* and *E. fischeriana*. Cryst. Mp 177-182°. $[\alpha]_D^{25}$ +94.4° (c, 0.7 in $CHCl_3$).

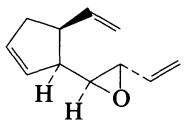
17-O-β-D-Glucopyranoside: [124681-12-5]. ***Fischeriana B***
$C_{26}H_{36}O_9$ M 492.565
Constit. of *E. fischeriana*.

Ahmad, S. *et al*, *Phytochemistry*, 1977, **16**, 1844 (*isol*)
Satti, N.K. *et al*, *Phytochemistry*, 1986, **25**, 1411 (*cryst struct, cmr, pmr*)
Liu, G. *et al*, *CA*, 1990, **112**, 52194s (*Fischerianas*)

Caudoxirene C-10038

Updated Entry replacing C-00588

[117415-46-0]



Absolute configuration

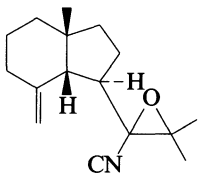
$C_{11}H_{14}O$ M 162.231

Metab. of *Perithalia caudata*. Gamete releasing factor (threshold conc. = 30 pmol). Oil.

Muller, D.G. *et al*, *Biol. Chem. Hoppe-Seyler*, 1988, **369**, 655 (*ms, pharmacol*)
Wirth, D. *et al*, *Helv. Chim. Acta*, 1990, **73**, 916; 1992, **75**, 751 (*isol, pmr, cmr, ms, ir, synth, abs config*)

Cavernoisonitrile C-10039

[145543-56-2]



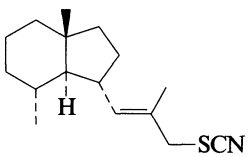
$C_{16}H_{23}NO$ M 245.364

Constit. of *Acanthella* cf. *cavernosa*. $[\alpha]_D$ +27° (c, 0.17 in MeOH).

Fusetani, N. *et al*, *Tetrahedron Lett.*, 1992, **33**, 6823 (*isol, pmr, cmr*)

Cavernothiocyanate C-10040

[145543-57-3]

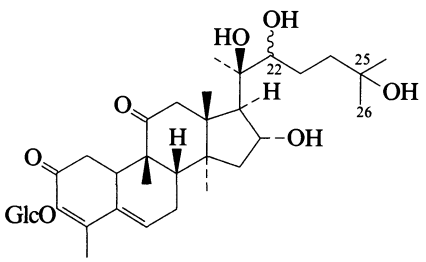


$C_{16}H_{25}NS$ M 263.446

Constit. of *Acanthella* cf. *cavernosa* and *Phyllidia ocellata*. $[\alpha]_D$ −37.8° (c, 0.037 in $CHCl_3$).

Fusetani, N. *et al*, *Tetrahedron Lett.*, 1992, **33**, 6823 (*isol, pmr, cmr*)

Cayaponoside D_{3b} C-10041



$C_{35}H_{54}O_{12}$ M 666.804

Constit. of *Cayaponia tayuya*. Amorph. powder.

22-Ketone: ***Cayaponoside*** C_3

$C_{35}H_{52}O_{12}$ M 664.789

Constit. of *C. tayuya*. Amorph. powder.

22-Ketone, 25-Ac: ***Cayaponoside*** A_1

$C_{37}H_{54}O_{13}$ M 706.826

Constit. of *C. tayuya*. Amorph. powder.

23,24-Didehydro (E-)*:* ***Cayaponoside*** D_{3a}

$C_{35}H_{52}O_{12}$ M 664.789

Constit. of *C. tayuya*. Amorph. powder.

25-Deoxy, 24,25-didehydro: ***Cayaponoside*** B_{6a}

$C_{35}H_{52}O_{11}$ M 648.789

Constit. of *C. tayuya*. Amorph. powder.

25-Deoxy, 25,26-didehydro: ***Cayaponoside*** B_{6b}

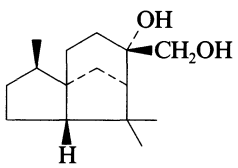
$C_{35}H_{52}O_{11}$ M 648.789

Constit. of *C. tayuya*. Amorph. powder.

Himeno, E. *et al*, *Chem. Pharm. Bull.*, 1993, **41**, 986 (*isol, pmr, cmr*)

3,15-Cedranediol C-10042

8,12-Cedranediol



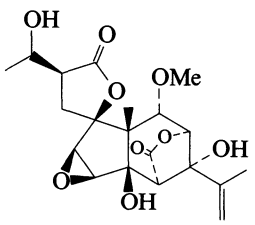
$C_{15}H_{26}O_2$ M 238.369

3α-form [144841-13-4]

Constit. of *Juniperus chinensis*. Cryst. Mp 136-138°. $[\alpha]_D$ +7.8° (c, 0.5 in MeOH).

Kuo, Y.-H. *et al*, *J. Chem. Res., Synop.*, 1992, 382 (*isol, pmr, cmr*)

Celaenodendrolide I C-10043



$C_{20}H_{26}O_9$ M 410.420

Constit. of *Celaenodendron mexicanum*. Needles. Mp 255°. $[\alpha]_D^{20}$ +18° (c, 1 in MeOH).

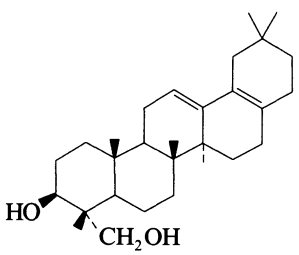
Castañeda, P. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 1575 (*isol, pmr, cmr*)

Celsiogenin A C-10044

Updated Entry replacing C-00662

28-Nor-12,17-oleanadiene-3β,23-diol

[53095-34-4]



$C_{29}H_{46}O_2$ M 426.681

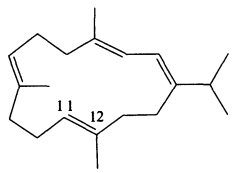
Genin from *Celsia coromandeliana*. Cryst. Mp 170-172°. $[\alpha]_D$ +86.8° (c, 1 in Py).

23-Deoxy: [6040-30-8]. *28-Nor-12,17-oleanadien-3β-ol.* ***Egiceradienol.*** *Aegiceradienol. Norechinocystachenol*
Genin from *Aegiceras major*. Cryst. ($CHCl_3$/MeOH). Mp 189-191°. $[\alpha]_D$ +79° (c, 3.7 in $CHCl_3$). Poss. artifact.

Noller, C.R. *et al, J. Am. Chem. Soc.*, 1941, **63**, 2238 (*synth*)
Rao, V.K. *et al, J. Org. Chem.*, 1962, **27**, 1470 (*isol*)
Hensens, O.D. *et al, Tetrahedron Lett.*, 1965, 4639.
Agarwal, S.K. *et al, Indian J. Chem.*, 1974, **12**, 907.
Corey, E.J. *et al, J. Am. Chem. Soc.*, 1993, **115**, 8873 (*synth*)

1,3,7,11-Cembratetraene C-10045

Updated Entry replacing C-00666



(*all-E*)-*form*

$C_{20}H_{32}$ M 272.473

(***All-E*)-*form*** [64363-64-0] ***Cembrene C.*** *Isoneocembrene A.* α-*Pinacene*
Constit. of *Sarcophyton ehrenbergi* and *Nephthea* spp. Oil.

11,12-Epoxide: [68043-37-8]. *11,12-Epoxy-1,3,7-cembratriene.* ***Epoxyisoneocembrene A***
$C_{20}H_{32}O$ M 288.472
Constit. of *Sinularia grayi*. Oil. $[\alpha]_D$ +117°.

(7S,8S:11S,12S)-*Diepoxide:* ***7,8:11,12-Diepoxy-1,3-cembradiene***
$C_{20}H_{32}O_2$ M 304.472
Constit. of a *Eunicea* sponge. Cryst. (CH_2Cl_2). Mp 99-101°. $[\alpha]_D$ −76.4° (c, 0.4 in MeOH).

(***1Z,3E,7E,11E*)-*form*** [37905-11-6] ***γ-Pinacene***
Constit. of *Pinus koraiensis* and *P. sibirica*. Oil.

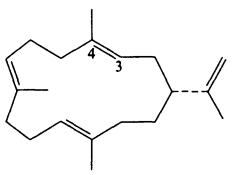
(***1Z,3Z,7E,11E*)-*form*** [37905-10-5] ***β-Pinacene***
Constit. of *P. koraiensis* and *P. sibirica*. Oil.

[69743-88-0]

Raldugin, V.A. *et al, Khim. Prir. Soedin.*, 1971, **7**, 604; *Chem. Nat. Compd.* (*Engl. Transl.*), 582 (*isol, ir, pmr*)
Bowden, B.F. *et al, Aust. J. Chem.*, 1978, **31**, 2707 (*isol*)
Vanderah, D.J. *et al, J. Org. Chem.*, 1978, **43**, 1614 (*isol*)
Raldugin, V.A. *et al, CA*, 1985, **102**, 149548s (*pmr, cmr, struct*)
Shin, J. *et al, Tetrahedron*, 1993, **49**, 515 (*diepoxide*)

3,7,11,15-Cembratetraene C-10046

Updated Entry replacing C-00669



$C_{20}H_{32}$ M 272.473

(***all-E*)-*form*** [31570-39-5] ***Cembrene A.*** *Neocembrene. Neocembrene A*
Widespread in nature. Oil. $Bp_{0.8}$ 150-152°. $[\alpha]_D$ −19.7° ($CHCl_3$).

3S,4S-*Epoxide:* ***3,4-Epoxy-7,11,15-cembratriene***
$C_{20}H_{32}O$ M 288.472
Isol. from *Sinularia facile*. Oil. $[\alpha]_D$ +49° (c, 0.22 in $CHCl_3$).

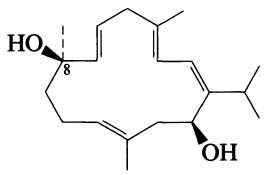
3R,4R:15ξ,16-*Diepoxide:* ***3,4:15,16-Diepoxy-7,11-cembradiene***
$C_{20}H_{32}O_2$ M 304.472
Constit. of *Eunicea mammosa*. Oil. $[\alpha]_D^{25}$ −23.97° (c, 1.46 in $CHCl_3$).

(***3Z,7E,11E*)-*form*** [71213-92-8]
Isol. from *Cubitermes umbratus*.

[65622-51-7]

Kitahara, Y. *et al, Chem. Lett.*, 1976, 219 (*synth*)
Ravi, B.N. *et al, J. Org. Chem.*, 1978, **43**, 2127 (*isol, pmr, cmr*)
Wiemer, D.F. *et al, J. Org. Chem.*, 1979, **44**, 3950 (*struct*)
Kato, T. *et al, J. Org. Chem.*, 1980, **45**, 1126 (*synth*)
Bowden, B.F. *et al, Aust. J. Chem.*, 1981, **34**, 1551 (*epoxide*)
Vig, O.P. *et al, Indian J. Chem., Sect. B*, 1985, **24**, 918 (*synth*)
Ghisalberti, E.L. *et al, Aust. J. Chem.*, 1986, **39**, 1703 (*synth*)
Schwabe, R. *et al, Helv. Chim. Acta*, 1988, **71**, 292 (*synth*)
Forkas, I. *et al, Helv. Chim. Acta*, 1990, **73**, 1980 (*synth*)
Rodriguez, A.D. *et al, J. Nat. Prod.* (*Lloydia*), 1993, **56**, 1101 (*diepoxide*)

1,3,6,11-Cembratetraene-8,14-diol C-10047



(1*Z*,3*E*,6*E*,8*R*,11*E*,14*S*)-*form*

$C_{20}H_{32}O_2$ M 304.472

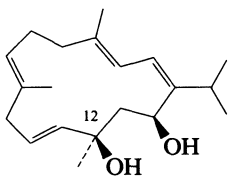
(***1Z,3E,6E,8R,11E,14S*)-*form*** [123853-58-7] ***Sarcophytol R***
Constit. of *Sarcophyton glaucum*. Oil. $[\alpha]_D^{22}$ +12° (c, 0.6 in $CHCl_3$).

(***1Z,3E,6E,8S,11E,14S*)-*form*** [123930-90-5] ***Sarcophytol S***
Constit. of *S. glaucum*. Oil. $[\alpha]_D^{20}$ +57° (c, 0.60 in $CHCl_3$).

Kobayashi, M. *et al, Chem. Pharm. Bull.*, 1989, **37**, 2053 (*isol, pmr, cmr*)

1,3,7,10-Cembratetraene-12,14-diol C-10048

Updated Entry replacing C-00670



(1*Z*,3*E*,7*E*,10*E*,12*R*,14*S*)-*form*

$C_{20}H_{32}O_2$ M 304.472

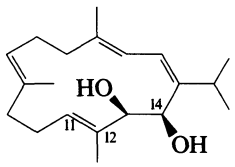
(***1Z,3E,7E,10E,12R,14S*)-*form*** [77394-00-4] ***Sarcophytol D***
Constit. of *Sarcophyton glaucum*. Cryst. Mp 131-134°. $[\alpha]_D$ +125° (c, 0.94 in $CHCl_3$).

(***1Z,3E,7E,10E,12S,14S*)-*form*** [121421-64-5] ***Sarcophytol G***
Constit. of *S. glaucum*. Cryst. Mp 122-123°. $[\alpha]_D$ +109° (c, 3.17 in $CHCl_3$).

Nakagawa, T. *et al, Chem. Pharm. Bull.*, 1981, **29**, 82.
Kobayashi, M. *et al, Chem. Pharm. Bull.*, 1989, **37**, 631 (*Sarcophytol G*)

1,3,7,11-Cembratetraene-13,14-diol C-10049

Updated Entry replacing C-00671



$C_{20}H_{32}O_2$ M 304.472

(1Z,3E,7E,11E,13R,14R)-form [72629-68-6] ***Sarcophytol B***
Constit. of *Sarcophyton glaucum* and the coral *Alcyonium flaccidum*. Cryst. (Me_2CO). Mp 125-126.5°. $[\alpha]_D$ +164° (c, 1 in $CHCl_3$).

14-Ac: [145900-94-3]. ***14-Acetylsarcophytol B***
$C_{22}H_{34}O_3$ M 346.509
Constit. of a *Sinularia* sp. Oil. $[\alpha]_D$ +235.2° (c, 0.6 in $CHCl_3$).

(1Z,3E,7E,13ξ,14ξ)-form

11ξ,12ξ-Epoxide, 14-Ac: [77965-78-7]. *14-Acetoxy-11,12-epoxy-1,3,7-cembratrien-13-ol.* ***Flaccidoxide***
$C_{22}H_{34}O_4$ M 362.508
Isol. from *A. flaccidum*. Oil. $[\alpha]_D^{24}$ +118° (c, 2.4 in $CHCl_3$).

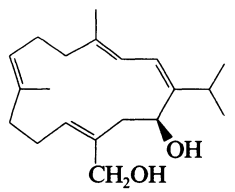
(1Z,3Z,7E,11E,13R,14R)-form [121421-67-8] ***Sarcophytol J***
Constit. of *Sarcophyton glaucum*. Cryst. Mp 115-116°. $[\alpha]_D$ −277° (c, 1.5 in $CHCl_3$).

14-Ac: [145986-76-1]. ***14-Acetylsarcophytol J***
$C_{22}H_{34}O_3$ M 346.509
Constit. of a *Sinularia* sp. $[\alpha]_D$ −85.6° (c, 0.21 in $CHCl_3$).

(1E,3Z,7E,11E,13R,14R)-form [123931-78-2] ***Sarcophytol K***
Constit. of *S. glaucum*. Oil. $[\alpha]_D^{20}$ +20° (c, 0.77 in $CHCl_3$).

Kobayashi, M. *et al*, *Chem. Pharm. Bull.*, 1979, **27**, 2382; 1989, **37**, 631, 2053 (*Sarcophytols*)
Kashman, Y. *et al*, *J. Org. Chem.*, 1981, **46**, 3592 (*isol*)
Czarkie, D. *et al*, *Tetrahedron*, 1985, **41**, 1049 (*isol*)
McMurry, J.E. *et al*, *Tetrahedron Lett.*, 1989, **30**, 1173 (*synth, cryst struct*)
Iguchi, K. *et al*, *J. Nat. Prod.* (*Lloydia*), 1992, **55**, 1779 (*14-Acetylsarcophytol B*)

1,3,7,11-Cembratetraene-14,20-diol C-10050



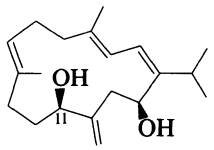
$C_{20}H_{32}O_2$ M 304.472

(1Z,3Z,7E,11Z,14S)-form [123853-57-6] ***Sarcophytol P***
Constit. of *Sarcophyton glaucum*. Oil. $[\alpha]_D^{28}$ −66° (c, 0.84 in $CHCl_3$).

Kobayashi, M. *et al*, *Chem. Pharm. Bull.*, 1989, **37**, 2053 (*isol, pmr, cmr*)

1,3,7,12(20)-Cembratetraene-11,14-diol C-10051

Updated Entry replacing C-00672



(1Z,3E,7E,11R,14S)-form

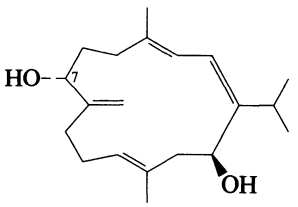
$C_{20}H_{32}O_2$ M 304.472

(1Z,3E,7E,11R,14S)-form [121421-65-6] ***Sarcophytol I***
Constit. of *Sarcophyton glaucum*. Oil. $[\alpha]_D$ −31° (c, 1.3 in $CHCl_3$).

(1Z,3E,7E,11S,14S)-form [77393-99-8] ***Sarcophytol E***
Constit. of *S. glaucum*. Oil. $[\alpha]_D$ +160° (c, 1 in $CHCl_3$).

Nakagawa, T. *et al*, *Chem. Pharm. Bull.*, 1981, **29**, 82 (*Sarcophytol E*)
Kobayashi, M. *et al*, *Chem. Pharm. Bull.*, 1989, **37**, 631 (*Sarcophytol I*)

1,3,8(19),11-Cembratetraene-7,14-diol C-10052



(1Z,3E,7R,11E,14S)-form

$C_{20}H_{32}O_2$ M 304.472

(1Z,3E,7R,11E,14S)-form [121421-66-7] ***Sarcophytol H***
Constit. of *Sarcophyton glaucum*. Cryst. Mp 143-145°. $[\alpha]_D$ +147° (c, 0.86 in $CHCl_3$).

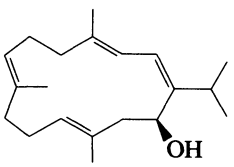
Di-Ac:
$C_{24}H_{36}O_4$ M 388.546
Constit. of *S. glaucum*. Oil. $[\alpha]_D$ +195° (c, 0.85 in $CHCl_3$).

(1Z,3E,7S,11E,14S)-form [121340-71-4] ***Sarcophytol O***
Constit. of *S. glaucum*. Oil. $[\alpha]_D$ +124° (c, 1.02 in $CHCl_3$).

Kobayashi, M. *et al*, *Chem. Pharm. Bull.*, 1989, **37**, 631 (*isol, pmr, cmr*)

1,3,7,11-Cembratetraen-14-ol C-10053

Updated Entry replacing C-00680



(1Z,3E,7E,11E,14S)-form

$C_{20}H_{32}O$ M 288.472

(1Z,3E,7E,11E,14S)-form [72629-69-7] ***Sarcophytol A***
Constit. of *Sarcophyton* sp. Oil. $[\alpha]_D$ +115°.

Ac: [72629-72-2].
$C_{22}H_{34}O_2$ M 330.509
Constit. of *S.* spp. Oil. $[\alpha]_D$ +206.5° (c, 1.72 in $CHCl_3$) (+127°).

(1Z,3E,7E,11E,14R)-form
Constit. of *Plexaura flexuosa*. Oil. $[\alpha]_D^{29}$ −190.4° (c, 1 in $CHCl_3$).

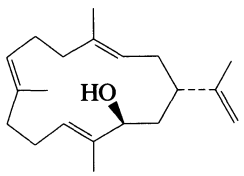
(*1Z,3Z,7E,11E,14S*)-*form* [121421-68-9] ***Sarcophytol N***
Constit. of *S. glaucum*. Oil. $[\alpha]_D$ −280° (c, 0.77 in $CHCl_3$).

(*1E,3E,7E,11E,14S*)-*form* [123930-91-6] ***Sarcophytol F***
Constit. of *S. glaucum*. Oil. $[\alpha]_D$ +57° (c, 0.99 in $CHCl_3$).

Kobayashi, M. *et al*, *Chem. Pharm. Bull.*, 1979, **27**, 2387; 1988, **36**, 2331; 1989, **37**, 631, 2053 (*isol, struct, abs config, Sarcophytols*)
Blackman, A.J. *et al*, *Aust. J. Chem.*, 1982, **35**, 1873 (*isol*)
Takayanegi, H. *et al*, *Tetrahedron Lett.*, 1990, **31**, 3317 (*synth*)
Peniston, M. *et al*, *J. Nat. Prod.* (*Lloydia*), 1991, **54**, 1009 (*isol, pmr, cmr*)
Takahashi, T. *et al*, *J. Org. Chem.*, 1992, **57**, 3521 (*synth*)

3,7,11,15-Cembratetraen-13-ol C-10054

Updated Entry replacing C-00685



$C_{20}H_{32}O$ M 288.472

(*1S,3E,7E,11E,13S*)-*form* [118628-93-6] ***13-Hydroxyneocembrene***
Constit. of *Sarcophyton trocheliophorum*. Oil. $[\alpha]_D^{20}$ −150° (c, 0.2 in MeOH).

11S,12S-Epoxide: 11,12-Epoxy-3,7,15-Cembratrien-13-ol. ***11,12-Epoxy-13-hydroxyneocembrene***
$C_{20}H_{32}O_2$ M 304.472
Constit. of *S. trocheliophorum*. Oil. $[\alpha]_D^{20}$ −85° (c, 0.5 in MeOH).

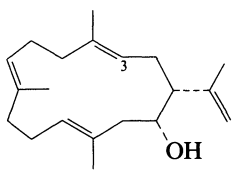
Ketone: [65622-49-3]. ***3,7,11,15-Cembratetraen-13-one***
$C_{20}H_{30}O$ M 286.456
Constit. of an unidentified soft coral.

(*1S,3E,7E,11Z*)-*form*
13-Ketone: Constit. of an unidentified soft coral. Oil. $[\alpha]_D$ −20.56° (c, 5.3 in CCl_4).

Ravi, B.N. *et al*, *J. Org. Chem.*, 1978, **43**, 2127 (*ketones*)
Suleimenova, A.M. *et al*, *Khim. Prir. Soedin.*, 1988, **24**, 535; *Chem. Nat. Compd.* (*Engl. Transl.*), 453 (*isol, pmr, cmr, cryst struct*)

3,7,11,15-Cembratetraen-14-ol C-10055

Updated Entry replacing C-00686



(1α,3*E*,7*E*,11*E*,14α)-*form*

$C_{20}H_{32}O$ M 288.472

(*1α,3E,7E,11E,14α*)-*form*

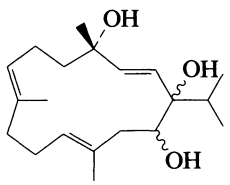
3α,4α-Epoxide: [65622-50-6]. ***3,4-Epoxy-7,11,15-cembratrien-14-ol***
$C_{20}H_{32}O_2$ M 304.472
Constit. of an unidentified soft coral.

3α,4α-Epoxide, 14-ketone: [65622-48-2]. ***3,4-Epoxy-7,11,15-cebratrien-14-one***
$C_{20}H_{30}O_2$ M 302.456
Constit. of an unidentified soft coral. Cryst. (Et_2O). Mp 66°. $[\alpha]_D$ +38.65° (c, 4.16 in $CHCl_3$).

(*1ξ,3E,7E,11E,14ξ*)-*form* [95772-53-5] ***14-Hydroxyneocembrene***
Constit. of *Sinularia mayi*. Oil. $[\alpha]_D$ −30.3° (c, 0.9 in $CHCl_3$).

Ravi, B.N. *et al*, *J. Org. Chem.*, 1978, **43**, 2127 (*epoxides*)
Aoki, M. *et al*, *Bull. Chem. Soc. Jpn.*, 1985, **58**, 779.

2,7,11-Cembratriene-1,4,14-triol C-10056

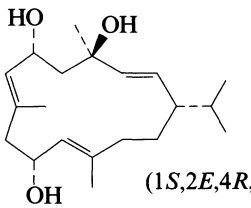


$C_{20}H_{34}O_3$ M 322.487

(*1ξ,2E,4S,7E,11E,14ξ*)-*form* [123931-77-1] ***Sarcophytol Q***
Constit. of *Sarcophyton glaucum*. Oil. $[\alpha]_D^{26}$ +79° (c, 4.18 in $CHCl_3$).

Kobayashi, M. *et al*, *Chem. Pharm. Bull.*, 1989, **37**, 2053 (*isol, pmr, cmr*)

2,7,11-Cembratriene-4,6,10-triol C-10057



(1*S*,2*E*,4*R*,6*R*,7*E*,10*R*,11*E*)-*form*

$C_{20}H_{34}O_3$ M 322.487

(*1S,2E,4R,6R,7E,10R,11E*)-*form* [149403-69-0]
Constit. of Greek tobacco. Oil. $[\alpha]_D$ +102° (c, 0.85 in $CHCl_3$).

10-Ketone: [149403-72-5]. *4,6-Dihydroxy-2,7,11-cembratrien-10-one*
$C_{20}H_{32}O_3$ M 320.471
Constit. of Greek tobacco. Oil. $[\alpha]_D$ +307° (c, 0.92 in EtOH).

(*1S,2E,4R,6R,7E,10S,11E*)-*form* [149403-70-3]
Constit. of Greek tobacco. Cryst. Mp 107-108°. $[\alpha]_D$ +33° (c, 0.83 in $CHCl_3$).

(*1S,2E,4R,6R,7E,10S,11Z*)-*form* [149403-71-4]
Constit. of Greek tobacco. Oil. $[\alpha]_D$ +102° (c, 0.87 in $CHCl_3$).

(*1S,2E,4S,6R,7E,10R,11E*)-*form* [149403-68-9]
Constit. of Greek tobacco. Oil. $[\alpha]_D$ +111° (c, 0.92 in $CHCl_3$).

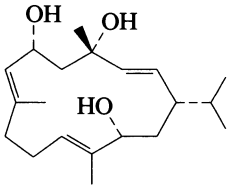
10-Ketone: [149312-89-0].
$C_{20}H_{32}O_3$ M 320.471
Constit. of Greek tobacco. Oil. $[\alpha]_D$ +383° (c, 0.83 in $CHCl_3$).

(*1S,2E,4S,6R,7E,10S,11E*)-*form* [149403-67-8]
Constit. of Greek tobacco. Cryst. Mp 92-93.5°. $[\alpha]_D$ +36° (c, 0.63 in $CHCl_3$).

6-Ketone: [149312-90-3]. *4,10-Dihydroxy-2,7,11-cembratrien-6-one*
$C_{20}H_{32}O_3$ M 320.471
Constit. of Greek tobacco. Oil. $[\alpha]_D$ −45° (c, 0.22 in $CHCl_3$).

Olsson, E. *et al*, *Tetrahedron*, 1993, **49**, 4975 (*isol, pmr, cmr, cryst struct*)

2,7,11-Cembratriene-4,6,13-triol C-10058



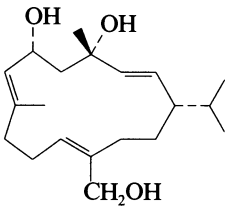
$C_{20}H_{34}O_3$ M 322.487

(1S,2E,4R,6R,7E,11E,13R)-form [146564-66-1]
Constit. of the flowers of Greek tobacco. Cryst. Mp 127-129°. $[\alpha]_D$ +136° (c, 0.2 in $CHCl_3$).

[146609-89-4, 146609-95-2, 146609-96-3]

Forsblom, I. *et al*, *Acta Chem. Scand.*, 1993, **47**, 80 (*isol, pmr, cmr, cryst struct*)

2,7,11-Cembratriene-4,6,20-triol C-10059



$C_{20}H_{34}O_3$ M 322.487

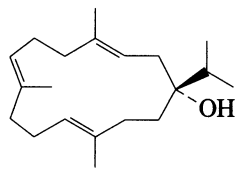
(1S,2E,4S,6R,7E,11Z)-form [146609-90-7]
Constit. of the flowers of Greek tobacco. Oil. $[\alpha]_D$ +105° (c, 0.92 in $CHCl_3$).

[146564-67-2]

Forsblom, I. *et al*, *Acta Chem. Scand.*, 1993, **47**, 80 (*isol, pmr, cmr*)

3,7,11-Cembratrien-1-ol C-10060

Updated Entry replacing C-00704



(1*R*,3*E*,7*E*,11*E*)-*form*

$C_{20}H_{34}O$ M 290.488

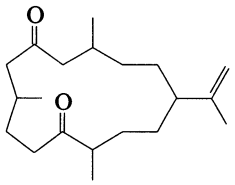
(1R,3E,7E,11E)-form [66648-97-3] ***Sarcophytol M***
Constit. of *Sarcophyton glaucum*. Oil. $[\alpha]_D$ +57° (c, 0.94 in $CHCl_3$).

(1S,3E,7E,11E)-form [67814-27-1] ***Serratol.*** *Cembrenol*
Constit. of *Boswellia carteri* and *B. serrata*. Oil. Bp_1 150°. $[\alpha]_D^{20}$ −152.2° (c, 0.4 in EtOH).

[67921-02-2]

Pardhy, R.S. *et al*, *Indian J. Chem., Sect. B*, 1978, **16**, 171 (*isol*)
Klein, E. *et al*, *Tetrahedron Lett.*, 1978, 349 (*abs config*)
Kobayashi, M. *et al*, *Chem. Pharm. Bull.*, 1989, **37**, 631 (*Sarchophytol M*)

15-Cembrene-6,11-dione C-10061



$C_{20}H_{34}O_2$ M 306.487
Constit. of *Eunicea mammosa*. Semisolid. $[\alpha]_D^{25}$ −9.09° (c, 0.44 in $CHCl_3$).

Rodríguez, A.D. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 1101 (*isol, pmr, cmr*)

Cephalaroside C C-10062

Dipsacoside A

[60454-64-0]

$C_{41}H_{66}O_{12}$ M 750.965
Triterpenoid glycoside of unknown struct. Constit. of flowers of *Cephalaria kotchyi*. Cryst. (EtOH). Mp 226-230°. $[\alpha]_D^{20}$ +13° (c, 2.4 in EtOH).

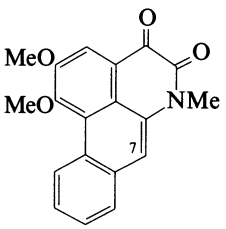
Aliev, A.M. *et al*, *Khim. Prir. Soedin.*, 1976, **12**, 264; *Chem. Nat. Compd.* (*Engl. Transl.*), 238 (*isol*)
Aliev, A.M. *et al*, *Rastit. Resur.*, 1981, **17**, 602 (*occur*)

Cepharadione B C-10063

Updated Entry replacing C-00739

*1,2-Dimethoxy-6-methyl-4*H*-dibenzo*[de,g]*quinoline-4,5(6*H*)-dione, 9CI*

[55610-02-1]



$C_{19}H_{15}NO_4$ M 321.332
Alkaloid from the callus tissue of *Stephania cepharantha* and the woody roots of *Piper auritum*. Also detected in the woody roots of *P. sanctum* (Menispermaceae, Piperaceae). Possible biogenetic intermediate of Aristololactams. Orange needles (EtOH). Mp 267-268° (255-262°, 263-264°).

N-*De-Me:* [57576-41-7]. ***Norcepharadione B***
$C_{18}H_{13}NO_4$ M 307.305
Alkaloid from the callus tissue of *S. cepharantha* (Menispermaceae). Mp 304-307° dec.

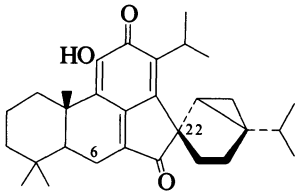
7-Chloro, N*-de-Me:* ***7-Chloro-6-demethylcepharadione B***
$C_{18}H_{12}ClNO_4$ M 341.750
Alkaloid from *Houttuynia cordata* (Sauruaceae).

Akasu, M. *et al*, *Tetrahedron Lett.*, 1974, 3609 (*uv, ir, pmr, ms, struct*)
Hänsel, R. *et al*, *J. Nat. Prod.* (*Lloydia*), 1975, **38**, 529 (*isol, uv, ir, pmr, ms*)
Akasu, M. *et al*, *Phytochemistry*, 1975, **14**, 1673 (*uv, ir, pmr, ms, struct, Norcepharadione B*)
Hänsel, R. *et al*, *Phytochemistry*, 1976, **15**, 1323 (*occur*)
Saá, J.M. *et al*, *Tetrahedron Lett.*, 1976, 601 (*synth, uv, ir, ms*)
Kunitomo, J. *et al*, *Yakugaku Zasshi*, 1980, **100**, 337; *CA*, **93**, 95454h (*synth*)
Jong, T.T. *et al*, *J. Chin. Chem. Soc.* (*Taipei*), 1993, **40**, 301; *CA*, **119**, 135624c (*7-Chloro-6-demethylcepharadione B*)

Chamaecydin C-10064

Updated Entry replacing C-00832

[86746-82-9]



Absolute configuration

$C_{30}H_{40}O_3$ M 448.644

Constit. of seed of *Chamaecyparis obtusa* and *Cryptomeria japonica*. Yellow prisms. Mp 196-197°. $[\alpha]_D^{25}$ +40° (c, 0.96 in $CHCl_3$).

22-Epimer: [86699-53-8]. ***Isochamaecydin***

$C_{30}H_{40}O_3$ M 448.644

From *Chamaecyparis obtusa*. Yellow needles. Mp 213-214°. $[\alpha]_D^{25}$ +226° (c, 0.74 in $CHCl_3$).

6α-Hydroxy: [86699-52-7]. ***Chamaecydinol.*** *6α-Hydroxychamaecydin*

$C_{30}H_{40}O_4$ M 464.644

From *Chamaecyparis obtusa* and *Cryptomeria japonica*. Yellow prisms. Mp 220-221°. $[\alpha]_D^{25}$ −113.8° (c, 0.91 in $CHCl_3$).

6β-Hydroxy: ***6β-Hydroxychamaecydin***

$C_{30}H_{40}O_4$ M 464.644

Constit. of *Cryptomeria japonica*. Orange cryst. Mp 206-208°. $[\alpha]_D^{25}$ +100° (c, 0.8 in $CHCl_3$).

6-Oxo, 21α-alcohol: ***10′α-Hydroxycryptoquinone***

$C_{30}H_{40}O_4$ M 464.644

Constit. of *Cryptomeria japonica*. Orange cryst. Mp 210-212°. $[\alpha]_D^{25}$ +40° (c, 0.5 in $CHCl_3$).

6-Oxo, 21β-alcohol: 10′β-Hydroxycryptoquinone

$C_{30}H_{40}O_4$ M 464.644

Constit. of *Cryptomeria japonica*. Orange cryst. Mp 202-203°.

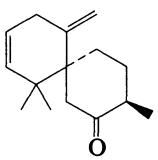
Hirose, Y. *et al*, *Tetrahedron Lett.*, 1983, **24**, 1535 (*isol, cryst struct*)

Shibuya, T., *Phytochemistry*, 1992, **31**, 4289 (*isol, pmr, cmr*)

Su, W.-C. *et al*, *Phytochemistry*, 1993, **34**, 779 (*isol, pmr, cmr*)

7(14),9-Chamigradien-2-one C-10065

2,5(14)-Chamigradien-8-one



$C_{15}H_{22}O$ M 218.338

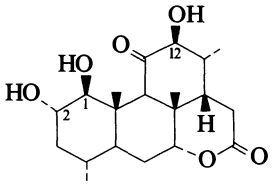
Constit. of *Laurencia flexilis*. Oil. $[\alpha]_D^{25}$ −28.0° (c, 0.25 in $CHCl_3$).

De Nuys, R. *et al*, *Phytochemistry*, 1993, **34**, 725 (*isol, pmr, cmr*)

Chaparrolide C-10066

Updated Entry replacing C-00853

[33512-38-8]



$C_{20}H_{30}O_6$ M 366.453

Bitter principle from *Castela nicholsoni*. Cryst. + $1H_2O$ (EtOH or Me_2CO). Mp 125-130°.

1-Ketone: [4283-48-1]. ***Shinjulactone H***

$C_{20}H_{28}O_6$ M 364.438

Isol. from *Ailanthus altissima*. Cryst. Mp 135-139°. $[\alpha]_D^{21}$ −14° (c, 3.9 in EtOH).

1-Ketone, 12-Ac: [4283-49-2]. ***Shinjulactone L***

$C_{22}H_{30}O_7$ M 406.475

Constit. of *A. altissima*. Cryst. (Me_2CO/C_6H_6). Mp 261-262°. $[\alpha]_D^{26}$ −41° (c, 0.65 in $CHCl_3$).

1-Epimer: ***Castelalin***

$C_{20}H_{30}O_6$ M 366.453

Constit. of *Castela tortuosa*. Amorph. powder (EtOAc/hexane). Mp 205-207°.

2-Ketone, 1,12-diepimer: [145204-90-6]. ***Chaparramarin***

$C_{20}H_{28}O_6$ M 364.438

Constit. of *C. tortuosa*. Amorph. powder. Mp 284-290°.

Mitchell, R.E. *et al*, *Phytochemistry*, 1971, **10**, 411 (*Chaparrolide*)

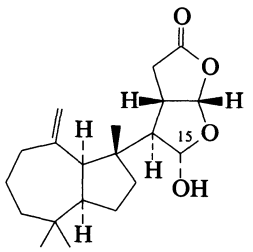
Ishibashi, M. *et al*, *Bull. Chem. Soc. Jpn.*, 1984, **57**, 2013 (*Shinjulactones*)

Nakamura, H. *et al*, *J. Org. Chem.*, 1992, **57**, 2223 (*synth*)

Kubo, I. *et al*, *Phytochemistry*, 1992, **31**, 3262; 1993, **33**, 461 (*Castelalin, Chaparramarin*)

Cheloviolene A C-10067

[135886-54-3]



$C_{20}H_{30}O_4$ M 334.455

Constit. of *Chelonaplysilla violacea*. Cryst. (EtOAc/hexane). Mp 161-163°. $[\alpha]_D$ +6° (c, 1 in $CHCl_3$).

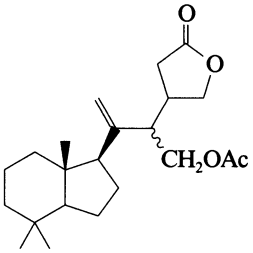
15-Epimer: [149952-32-9]. ***Cheloviolene B***

$C_{20}H_{30}O_4$ M 334.455

Constit. of *C. violacea*. Cryst. (hexane). Mp 200°.

Bergquist, P.R. *et al*, *Aust. J. Chem.*, 1993, **46**, 623 (*isol, pmr, cmr*)

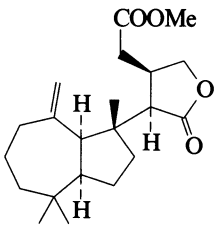
Cheloviolene C C-10068



$C_{22}H_{34}O_4$ M 362.508
Constit. of *Chelonaplysilla violacea*. Gum.
Bergquist, P.R. *et al*, *Aust. J. Chem.*, 1993, **46**, 623 (*isol, pmr, cmr*)

Cheloviolene D C-10069

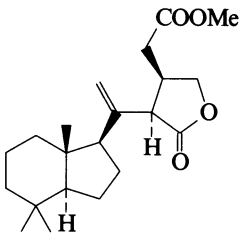
[149864-70-0]



$C_{21}H_{32}O_4$ M 348.481
Constit.of *Chelonaplysilla violacea*. Gum.
Bergquist, P.R. *et al*, *Aust. J. Chem.*, 1993, **46**, 623 (*isol, pmr, cmr*)

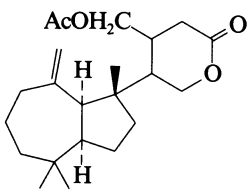
Cheloviolene E C-10070

[149952-33-0]



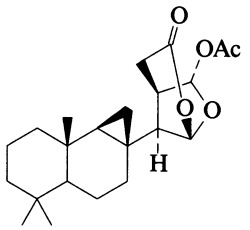
$C_{21}H_{32}O_4$ M 348.481
Constit. of *Chelonaplysilla violacea*. Oil.
Bergquist, P.R. *et al*, *Aust. J. Chem.*, 1993, **46**, 623 (*isol, pmr, cmr*)

Cheloviolene F C-10071



$C_{22}H_{34}O_4$ M 360.492
Constit. of *Chelonaplysilla violacea*. Oil.
Bergquist, P.R. *et al*, *Aust. J. Chem.*, 1993, **46**, 623 (*isol, pmr, cmr*)

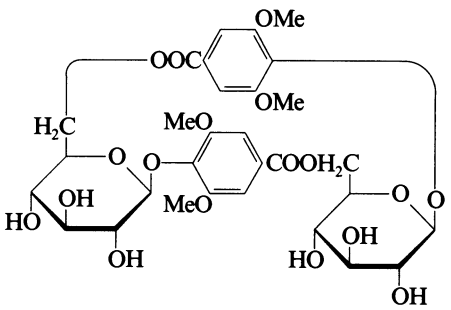
Cheloviolin C-10072



$C_{22}H_{32}O_5$ M 376.492
Constit. of *Chelonaplysilla violacea*. Oil.
Bergquist, P.R. *et al*, *Aust. J. Chem.*, 1993, **46**, 623 (*isol, pmr, cmr*)

Chemochinenoside A C-10073

[142937-46-0]

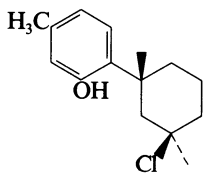


$C_{30}H_{36}O_{18}$ M 684.604
Constit. of *Clematis chinensis*.
Song, C. *et al*, *Chin. Chem. Lett.*, 1992, **3**, 119 (*isol, pmr, ms, struct*)

2-(3-Chloro-1,3-dimethylcyclohexyl)-5-methylphenol C-10074

1-Chloro-3-(2-hydroxy-4-methylphenyl)-1,3-dimethylcyclohexane

[145382-77-0]

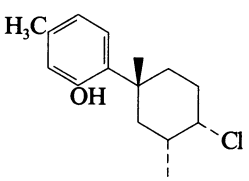


$C_{15}H_{21}ClO$ M 252.783
Constit. of *Laurencia majuscula*. Yellow oil. $[\alpha]_D$ +14° (c, 1 in $CHCl_3$).
de Nys, R. *et al*, *Aust. J. Chem.*, 1992, **45**, 1611 (*isol, pmr, cmr*)

2-(4-Chloro-1,3-dimethylcyclohexyl)-5-methylphenol C-10075

4-Chloro-1-(2-hydroxy-4-methylphenyl)-1,3-dimethylcyclohexane

[145382-78-1]

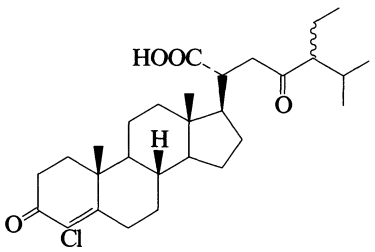


$C_{15}H_{21}ClO$ M 252.783

Constit. of *Laurencia majuscula*. Brown oil. $[\alpha]_D$ +47° (c, 0.1 in $CHCl_3$).

de Nys, R. *et al*, *Aust. J. Chem.*, 1992, **45**, 1611 (*isol, pmr, cmr*)

4-Chloro-3,23-dioxostigmast-4-en-21-oic acid C-10076



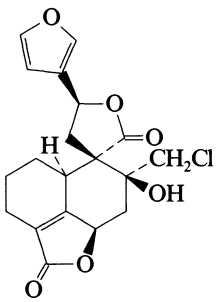
$C_{29}H_{43}ClO_4$ M 491.109

24ξ-form [149260-75-3] ***Kiheisterone E***

Constit. of a *Strongylacidon* sp.

Carney, J.R. *et al*, *J. Org. Chem.*, 1993, **58**, 3460 (*isol, pmr, cmr*)

17-Chloro-15,16-epoxy-8-hydroxy-19-nor-4,13(16),14-clerodatriene-18,6:20,12-diolide C-10077



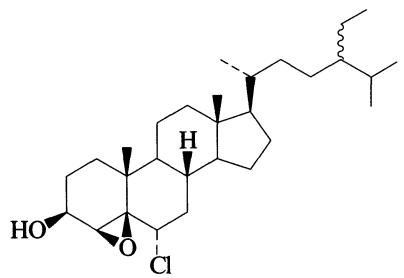
$C_{19}H_{19}ClO_6$ M 378.808

(ent-6α,8α,10β,12βH)-form [140369-33-1] ***Teupernin D***†

Constit. of *Teucrium pernyi*. Cryst. Mp 205-207°.

Xie, N. *et al*, *Chin. Chem. Lett.*, 1991, **2**, 845 (*isol, pmr, cryst struct*)

6-Chloro-4,5-epoxystigmastan-3-ol C-10078



$C_{29}H_{49}ClO_2$ M 465.158

(3β,4β,5β,7α,24ξ)-form

3-O-β-D-Glucopyranoside: [149864-63-1]. ***Blattellastanoside A***

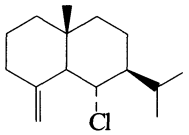
$C_{35}H_{59}ClO_7$ M 627.300

Constit. of the aggregation pheromone of cockroach *Blattella germanica*.

Mori, K. *et al*, *Justus Liebigs Ann. Chem.*, 1993, 665 (*synth*)

Sakuma, M. *et al*, *Tetrahedron Lett.*, 1993, **34**, 6059 (*isol, pmr, cmr*)

6-Chloro-4(15)-eudesmene C-10079



$C_{15}H_{25}Cl$ M 240.815

6α-form [149725-06-4] ***Acanthene A***

Constit. of an *Acanthella* sp. and *Cadlina luteomarginata*. Oil.

Burgoyne, D.L. *et al*, *Tetrahedron*, 1993, **49**, 4503 (*isol, pmr, cmr*)

10-Chloro-1-heptadecene-4,6-diyne-3,9-diol C-10080

Panaxydol chlorohydrin

[111103-92-5]

$H_2C{=}CHCH(OH)C{\equiv}CC{\equiv}CCH_2CH(OH)CHCl(CH_2)_6CH_3$

$C_{17}H_{25}ClO_2$ M 296.836

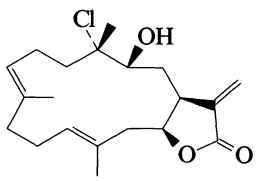
Isol. from Korean ginseng root. Show cytotoxic activity against L1210 cells. λ_{max} 266nm, 255, 242, 229, 219 (EtOH).

Kitagawa, I. *et al*, *Yakugaku Zasshi*, 1987, **107**, 495 (*synth*)

Ahn, B.Z. *et al*, *Arch. Pharm.* (*Weinheim, Ger.*), 1989, **322**, 223 (*isol, props, cmr, uv, ir*)

Hirakura, K. *et al*, *Phytochemistry*, 1991, **30**, 3327 (*isol, pmr*)

4-Chloro-3-hydroxy-7,11,15(17)-cembratrien-16,14-olide C-10081



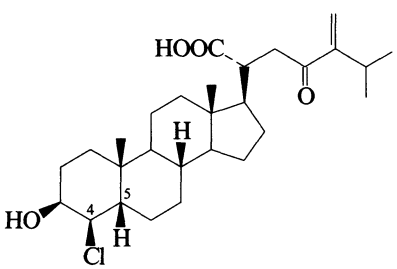
$C_{20}H_{29}ClO_3$ M 352.900

(3S,4S,7E,11E,14S)-form

Constit. of *Eunicea mammosa*. Cryst. $[\alpha]_D^{25}$ −22.36° (c, 0.76 in $CHCl_3$).

Rodriguez, A.D. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 1101 (*isol, pmr, cmr, cryst struct*)

4-Chloro-3-hydroxy-23-oxoergost-24(28)-en-21-oic acid C-10082



$C_{28}H_{43}ClO_4$ M 479.098

(3β,4β,5β)-form [149260-74-2] ***Kiheisterone D***

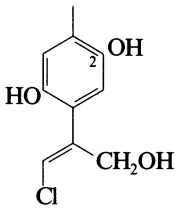
Constit. of a *Strongylacidon* sp. $[\alpha]_D$ +46° (c, 0.57 in $CHCl_3$).

4,5-Didehydro: [149260-73-1]. *4-Chloro-3,23-dioxoergosta-4,24(28)-dien-21-oic acid.* ***Kiheisterone C***

$C_{28}H_{41}ClO_4$ M 477.082
Constit. of a *S.* sp. $[\alpha]_D$ +71° (c, 0.55 in $CHCl_3$).

Carney, J.R. *et al, J. Org. Chem.*, 1993, **58**, 3460 (*isol, pmr, cmr*)

9-Chloro-*p*-mentha-1,3,5,8-tetraene-2,5,10-triol C-10083

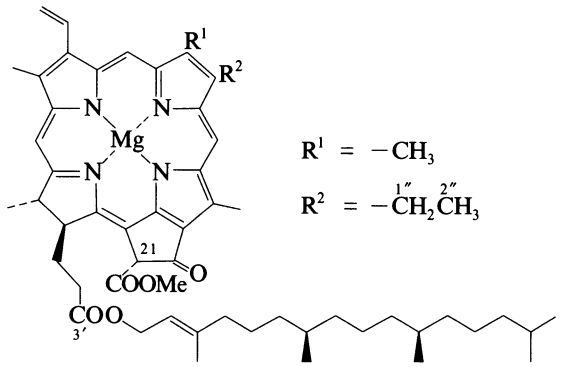


$C_{10}H_{11}ClO_3$ M 214.648
2-Me ether: [150641-33-1]. *9-Chloro-6-methoxy-*p*-mentha-1,3,5,8-tetraene-3,10-diol*
$C_{11}H_{13}ClO_3$ M 228.675
Constit. of *Inula crithmoides*. Oil.
2-Me ether, 10-Ac: [150641-32-0].
$C_{13}H_{15}ClO_4$ M 270.712
Constit. of *I. crithmoides*. Oil.

Marco, J.A. *et al, Phytochemistry*, 1993, **33**, 875 (*isol, pmr, cmr*)

Chlorophyll a C-10084

Updated Entry replacing C-01047
[*3,7,11,15-Tetramethyl-2-hexadecenyl 9-ethenyl-14-ethyl-21-(methoxycarbonyl)-4,8,13,18-tetramethyl-20-oxo-3-phorbinepropanoato(2−)-*N^{23},N^{24},N^{25},N^{26}]*magnesium, 9CI*
[479-61-8]

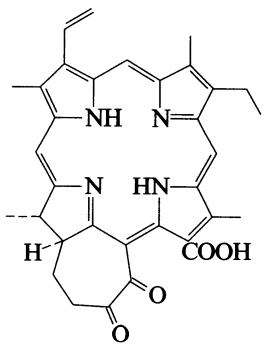


$C_{55}H_{72}MgN_4O_5$ M 893.503
Green pigment of leaves of plants, occurring together with Chlorophyll b. Can be obt. readily in pure form from the blue-green alga *Anacystis nidulans*. Photosynthetic pigment. Dark-green greasy powder (pet. ether) or leaflets. Mp 117-120°. $[\alpha]_D^{20}$ −262° (Me_2CO). Dilute acid removes Mg to form Phaeophytin a, P-00902. Hydrol. by Chlorophyllase (or warm acid) → Phaeophorbide a, P-10092. Acid catalysed methanolysis → see Phaeophorbide a, P-10092. Alkaline hydrol. → Chlorin e_6, C-00939. Other esters e.g. geranylgeranyl are found in various microorganisms.
21-Epimer: [22309-13-3]. ***Chlorophyll a'***
$C_{55}H_{72}MgN_4O_5$ M 893.503
Isol. from chlorophyll extracts.
3'-Free acid: [14897-06-4]. ***Chlorophyllide a***
$C_{35}H_{34}MgN_4O_5$ M 614.982
Pigment from various spp. Intermed. in chlorophyll biosynthesis.
21-Hydroxy: [71699-04-2]. ***13²-Hydroxychlorophyll a***
$C_{55}H_{72}MgN_4O_6$ M 909.502
Isol. from chlorophyll extracts. Artifact.
6-Chloro, 21-hydroxy: [91488-37-8]. *20-Chloro-13²-hydroxychlorophyll a.* ***Chlorophyll RCI***
$C_{55}H_{71}ClMgN_4O_6$ M 943.947
Isol. from chlorophyll extracts. Probable artifact.
1",2"-Didehydro: 4-Vinyl-4-desethylchlorophyll a
$C_{55}H_{70}MgN_4O_5$ M 891.487
Major chlorophyll from maize mutant.

[117288-86-5, 118626-30-5]

Woodward, R.B. *et al, J. Am. Chem. Soc.*, 1960, **82**, 3800 (*synth*)
Fleming, I., *Nature (London)*, 1967, **216**, 151 (*abs config*)
Brockman, H. *et al, Justus Liebigs Ann. Chem.*, 1974, 1007.
Chow, H.C. *et al, J. Am. Chem. Soc.*, 1975, **97**, 7230 (*cryst struct*)
Chem. Biochem. Plant Pigm., (Ed. Goodwin, T.W.), Academic Press, London, 1976 (*book*)
Schoch, S. *et al, Z. Pflanzenphysiol.*, 1977, **83**, 427 (*isol*)
Gleixner, G. *et al, Experientia*, 1982, **38**, 303 (*purifn*)
Bazzaz, M.B. *et al, Tetrahedron Lett.*, 1982, **23**, 1211 (*Divinylchlorophyll a*)
Lotjonen, S. *et al, Org. Magn. Reson.*, 1983, **21**, 757 (*cmr*)
Smith, K.M. *et al, Org. Magn. Reson.*, 1984, **22**, 779 (*pmr*)
Leeper, F.J., *Nat. Prod. Rep.*, 1985, **2**, 19, 561; 1987, **4**, 441; 1989, **6**, 171 (*rev, biosynth*)
Grotemeyer, J. *et al, J. Am. Chem. Soc.*, 1986, **108**, 4233 (*ms*)
Fujiwara, M. *et al, J. Phys. Chem.*, 1986, **90**, 250, 5646 (*ir, raman*)
Tasumi, M. *et al, Adv. Spectrosc.* (*Chichester, U.K.*), 1987, **14**, 407 (*rev, ir, raman*)
Senge, M. *et al, FEBS Lett.*, 1988, **234**, 215 (*Chlorophyll RCI*)
Senge, M. *et al, Z. Naturforsch., C*, 1988, **43**, 515 (*13²-Hydroxychlorophyll a*)
Okazaki, T. *et al, Chem. Pharm. Bull.*, 1990, **38**, 3303 (*biosynth*)
Grese, R.P. *et al, J. Am. Soc. Mass Spectrom.*, 1990, **1**, 72 (*Chlorophyll RCI*)
Woodward, R.B. *et al, Tetrahedron*, 1990, **46**, 7599 (*synth, rev*)
Giacometti, G. *et al, Gazz. Chim. Ital.*, 1991, **121**, 457 (*pmr*)

Chlorophyllonic acid a C-10085

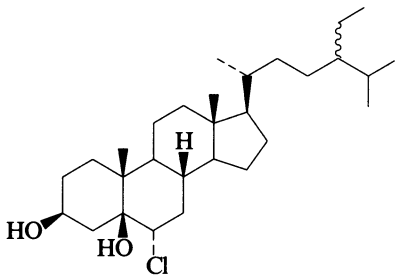


Relative configuration

$C_{33}H_{32}N_4O_4$ M 548.640
Me ester: [143070-43-3].
$C_{34}H_{34}N_4O_4$ M 562.667
Isol. from the clam *Ruditapes philippinarum*. Brown plates ($CHCl_3$/MeOH).

Yamamoto, K. *et al, Tetrahedron Lett.*, 1992, **33**, 2587 (*struct*)

6-Chlorostigmastane-3,5-diol C-10086



$C_{29}H_{51}ClO_2$ M 467.173

(3β,5β,6α,24ξ)-form

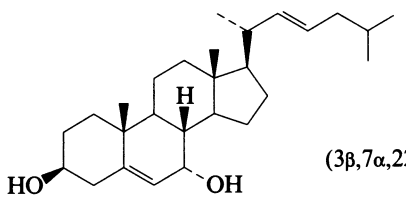
3-O-β-D-Glucopyranoside: [151397-98-7]. ***Blattellastanoside B***

$C_{35}H_{61}ClO_7$ M 629.315

Constit. of the aggregation pheromone of cockroach *Blattella germanica.*

Mori, K. *et al, Justus Liebigs Ann. Chem.*, 1993, 665 (*synth*)
Sakuna, M. *et al, Tetrahedron Lett.*, 1993, **34**, 6059 (*isol, pmr, cmr*)

Cholesta-5,22-diene-3,7-diol C-10087



(3β,7α,22*E*)-*form*

$C_{27}H_{44}O_2$ M 400.643

(3β,7α,22E)-form [145075-03-2]

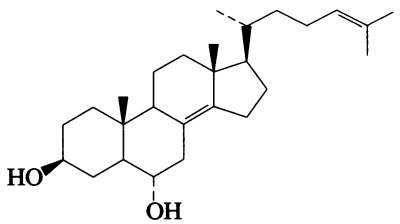
Constit. of *Cliona copiosa.*

(3β,7β,22E)-form [145075-02-1]

Constit. of *C. copiosa.*

Notaro, G. *et al, J. Nat. Prod.* (*Lloydia*), 1992, **55**, 1588 (*isol, pmr, ms*)

Cholesta-8(14),24-diene-3,6-diol C-10088



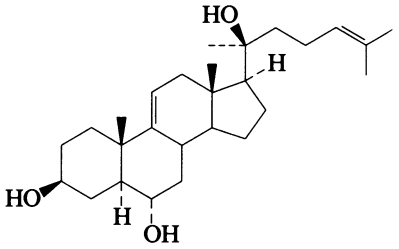
$C_{27}H_{44}O_2$ M 400.643

(3β,7α)-form [147395-09-3]

Constit. of a *Dysidea* sponge from the South China Sea. Cryst. Mp 184-185°. $[\alpha]_D^{35}$ +16.7° (c, 0.036 in MeOH).

Zhang, Y.L. *et al, Chin. Chem. Lett.*, 1992, **3**, 981 (*isol, pmr, cmr*)

Cholesta-9(11),24-diene-3,6,20-triol C-10089



$C_{27}H_{44}O_3$ M 416.643

(3β,5α,6α,20S)-form

3-O-Sulfate:

$C_{27}H_{44}O_6S$ M 496.707

Isol. from the starfish *Asterias amurensis* (as Na salt).

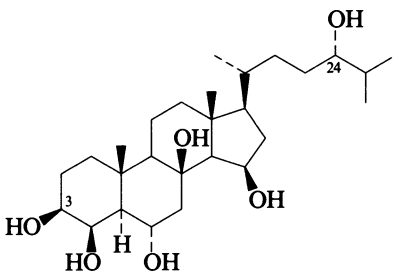
6-O-[6-Deoxy-β-D-glucopyranosyl-(1→2)[β-D-galactopyranosyl-(1→3)-6-deoxy-β-D-galactopyranosyl-(1→2)-6-deoxy-β-D-galactopyranosyl-(1→4)]-α-L-arabinopyranosyl-(1→3)-6-deoxy-β-D-glucopyranoside], 3-O-sulfate: [136803-86-6]. ***Forbeside D***

$C_{62}H_{102}O_{31}S$ M 1375.535

Isol. from *A. forbesi.* Powder (as Na salt). Mp 213° dec. (Na salt). $[\alpha]_D$ −4.7° (c, 0.6 in H_2O).

Riccio, R. *et al, J. Chem. Soc., Perkin Trans. 1*, 1988, 1337 (*isol, sulfate*)
Findlay, J.A. *et al, Can. J. Chem.*, 1991, **69**, 1134 (*Forbeside D*)

Cholestane-3,4,6,8,15,24-hexol C-10090



$C_{27}H_{48}O_6$ M 468.673

(3β,4β,5α,6α,15β,24S)-form

24-O-β-D-Xylopyranoside, 3-O-Sulfate: [117585-46-3]. ***Glacialoside B***

$C_{32}H_{56}O_{13}S$ M 680.853

Isol. from the starfish *Marthasterias glacialis* (as Na salt). $[\alpha]_D$ +2° (c, 0.1 in MeOH).

(3β,4β,5α,6α,15β,24ξ)-form

24-O-[2,4-Di-O-methyl-β-D-xylopyranosyl-(1→2)-α-L-arabinofuranoside]: [102130-11-0]. ***Culcitoside C_1***

$C_{39}H_{68}O_{14}$ M 760.958

Isol. from the starfishes *Culcita novaeguineae* and *Linckia guildingi.* Mp 245-248°. $[\alpha]_D$ −35.8° (c, 0.6 in MeOH).

(3β,4β,5α,6β,15α,24S)-form [99481-54-6]

Isol. from the starfish *Gomophia watsoni.*

3-O-(2,4-Di-O-methyl-β-D-xylopyranoside): [129369-40-0]. ***Forbeside I.*** *Laeviuscoloside I*

$C_{34}H_{60}O_{10}$ M 628.842

Isol. from the starfish *Asterias forbesi* and *Henricia laeviuscola.* Powder. Mp 214° dec. $[\alpha]_D$ −8.0° (c, 0.6 in H_2O).

3-O-(2,4-Di-O-methyl-β-D-xylopyranoside), 24-O-α-L-arabinofuranoside: [129369-39-7]. ***Forbeside J***

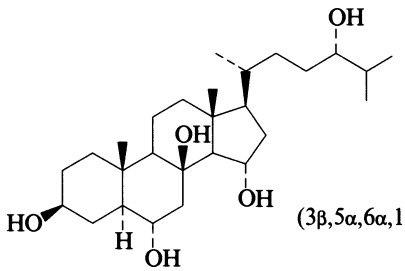
$C_{39}H_{68}O_{14}$ M 760.958

Isol. from *A. forbesi.* Powder. Mp 250° dec. $[\alpha]_D$ −17.4° (c, 1 in H_2O).

Riccio, R. *et al*, *Gazz. Chim. Ital.*, 1985, **115**, 405; 1990, **120**, 155 (*isol*)
Kicha, A.A. *et al*, *Khim. Prir. Soedin.*, 1985, **21**, 801; *Chem. Nat. Compd.* (*Engl. Transl.*), 760 (*Culcitoside C_1*)
Riccio, R. *et al*, *J. Nat. Prod.* (*Lloydia*), 1988, **51**, 989 (*Glacialoside B*)
Findlay, J.A. *et al*, *J. Nat. Prod.* (*Lloydia*), 1991, **54**, 428 (*Forbesides*)

Cholestane-3,6,8,15,24-pentol, 9CI C-10091

Updated Entry replacing C-01150



(3β,5α,6α,15α,24*S*)-*form*

$C_{27}H_{48}O_5$ M 452.673

(3β,5α,6α,15α,24S)-form [117121-29-6]
Occurs in starfish *Asterina pectinifera*. Needles (MeOH aq.). Mp 236-239°. $[\alpha]_D$ +53.0° (c, 1.02 in MeOH).

24-Sulfate:
$C_{27}H_{48}O_8S$ M 532.737
Constit. of *Aphelasterias japonica*. $[\alpha]_D$ +23.5° (c, 0.5 in MeOH).

24-O-β-D-Xylopyranoside, 3-sulfate: ***Aphelasteroside A***
$C_{32}H_{56}O_{12}S$ M 664.853
Constit. of *A. japonica*. $[\alpha]_D$ −6.0° (c, 0.5 in MeOH).

(3β,5α,6α,15β,24S)-form [99481-53-5]
$[\alpha]_D$ +12° (c, 0.3 in MeOH).

24-O-β-Xylopyranoside: [124609-38-7]. ***Pycnopodioside A***
$C_{32}H_{56}O_9$ M 584.789
Isol. from the starfish *Pycnopodia helianthoides*. $[\alpha]_D$ +2°.

24-O-β-D-Xylopyranoside, 3-sulfate: [124596-51-6]. ***Pycnopodioside B***
$C_{32}H_{56}O_{12}S$ M 664.853
Isol. from *P. helianthoides*. $[\alpha]_D$ +1.8°.

3-O-β-D-Xylopyranoside, 24-sulfate: [117585-52-1]. ***Glacialoside A***
$C_{32}H_{56}O_{12}S$ M 664.853
Isol. from the starfish *Marthasterias glacialis* (as Na salt). $[\alpha]_D$ +3° (c, 0.7 in MeOH).

24-O-β-D-Glucopyranoside, 6-sulfate: [124596-52-7]. ***Pycnopodioside C***
$C_{33}H_{58}O_{13}S$ M 694.879
Isol. from *P. helianthoides*. $[\alpha]_D$ +4.2°.

24-O-(5-O-Sulfo-α-L-arabinofuranoside): [131466-95-0]. ***Scoparioside A***
$C_{32}H_{56}O_{12}S$ M 664.853
Constit. of the starfish *Astropecten scoparius*. Isol. as Na salt.

24-O-(5-O-Sulfo-β-D-xylofuranoside): [131466-96-1]. ***Scoparioside B***
$C_{32}H_{56}O_{12}S$ M 664.853
Constit. of *A. scoparius*. Isol. as Na salt.

24-O-(3-O-Methyl-4-O-sulfo-β-D-xylopyranoside): [131501-27-4]. ***Scoparioside C***
$C_{33}H_{58}O_{12}S$ M 678.880
Constit. of *A. scoparius*. Isol. as Na salt.

(3β,5α,6α,15α,24ξ)-form

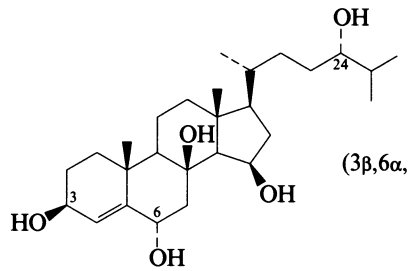
5'-O-Sulfate, 24-(3-O-methyl-α-L-arabinofuranosyl): [80764-19-8]. ***Asterosaponin P_1***
$C_{33}H_{58}O_{12}S$ M 678.880
Constit. of starfish *Patiria pectinifera*. Cryst. Mp 191-192°. $[\alpha]_D$ +3.0° (c, 0.6 in MeOH).

(3β,5α,6β,15α,24S)-form

3-O-β-D-Xylopyranoside, 24-sulfate: [123154-34-7]. ***Pisasteroside B***
$C_{32}H_{56}O_{12}S$ M 664.853
Isol. from the starfish *Pisaster giganteus* (as Na salt). $[\alpha]_D^{25}$ +6° (c, 1 in MeOH).

Kicha, A.A. *et al*, *Tetrahedron Lett.*, 1983, **24**, 3893.
Riccio, R. *et al*, *Gazz. Chim. Ital.*, 1985, **115**, 405 (*synth, ms, pmr, cmr*)
Riccio, R. *et al*, *J. Nat. Prod.* (*Lloydia*), 1988, **51**, 989 (*Glacialoside A*)
Higuchi, R. *et al*, *Justus Liebigs Ann. Chem.*, 1988, 1185 (*isol, ir, ms, cmr*)
Zollo, F. *et al*, *J. Nat. Prod.* (*Lloydia*), 1989, **52**, 693 (*Pisasteroside B*)
Bruno, I. *et al*, *J. Nat. Prod.* (*Lloydia*), 1989, **52**, 1022 (*Pycnopodiosides*)
Iorizzi, M. *et al*, *J. Nat. Prod.* (*Lloydia*), 1990, **53**, 1225 (*Scopariosides*)
Finamore, E. *et al*, *J. Nat. Prod.* (*Lloydia*), 1992, **55**, 767 (*sulfates*)

Cholest-4-ene-3,6,8,15,24-pentol C-10092



(3β,6α,15β,24*S*)-*form*

$C_{27}H_{46}O_5$ M 450.657

(3β,6α,15β,24S)-form

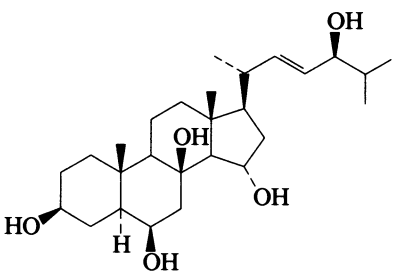
3-O-β-D-Xylopyranoside, 24-sulfate: [131985-13-2]. ***Pisasteroside E***
$C_{32}H_{54}O_{12}S$ M 662.837
Isol. from the starfish *Pisaster giganteus* (as Na salt). $[\alpha]_D$ 0° (MeOH).

(3β,6β,15α,24S)-form

3-O-β-D-Xylopyranoside, 24-sulfate: [131985-42-7]. ***Pisasteroside D***
$C_{32}H_{54}O_{12}S$ M 662.837
Isol. from *P. giganteus* (as Na salt). $[\alpha]_D$ 0° (MeOH).

Zollo, F. *et al*, *J. Nat. Prod.* (*Lloydia*), 1990, **53**, 1000.

Cholest-22-ene-3,6,8,15,24-pentol C-10093



$C_{27}H_{46}O_5$ M 450.657

(3β,5α,6β,15α,22E,24R)-form

24-O-β-D-Xylopyranoside, 15-sulfate: [131466-97-2]. ***Scoparioside D***
$C_{32}H_{54}O_{12}S$ M 662.837

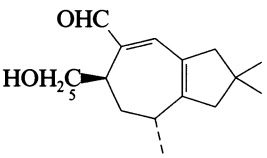
Constit. of the starfish *Astropecten scoparius*. Isol. as Na salt.

Iorizzi, M. *et al*, *J. Nat. Prod.* (*Lloydia*), 1990, **53**, 1225.

Chrysorrheal C-10094

Scrobicalol

[145545-24-0]



$C_{15}H_{22}O_2$ M 234.338

Constit. of *Lactarius chrysorrheus* and *L. scrobiculatus*. Oil. $[\alpha]_D$ +29.6° (c, 0.15 in C_6D_6), $[\alpha]_D^{22}$ +37° (c, 0.1 in $CHCl_3$). Chrysorrheal and Scrobicalol not compared.

5-Aldehyde: ***Chrysorrhedial***

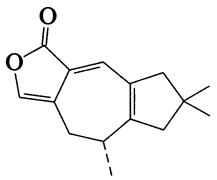
$C_{15}H_{20}O_2$ M 232.322

Constit. of *L. chrysorrheus*. Oil. $[\alpha]_D$ +60.2° (c, 2.4 in CH_2Cl_2).

Pang, Z. *et al*, *Tetrahedron Lett.*, 1992, **31**, 6863 (*isol, pmr, cmr*)
De Bernardi, M. *et al*, *Tetrahedron*, 1993, **49**, 1489 (*isol, pmr, cmr*)

Chrysorrhelactone C-10095

[147396-19-8]



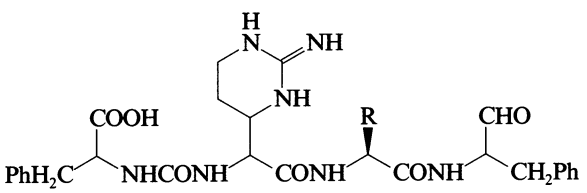
$C_{15}H_{18}O_2$ M 230.306

Constit. of *Lactarius chrysorrheus*. Oil. $[\alpha]_D$ −30.4° (c, 0.7 in CH_2Cl_2).

De Bernardi, M. *et al*, *Tetrahedron*, 1993, **49**, 1489 (*isol, pmr, cmr*)

Chymostatin C-10096

[9076-44-2]



Chymostatin A R = $-CH_2CH(CH_3)_2$

Chymostatin B R = $-CH(CH_3)_2$

Chymostatin C R = $-CH(CH_3)CH_2CH_3$

Peptide antibiotic complex consisting of three components. Isol. from *Streptomyces hygroscopicus*.

Antiinflammatory agent. Inhibits α,β, γ and δ chymotrypsin and papain.

Chymostatin A [51759-76-3]

$C_{31}H_{41}N_7O_6$ M 607.708

Chymostatin B [51759-77-4]

$C_{30}H_{39}N_7O_6$ M 593.681

Chymostatin C [51759-78-5]

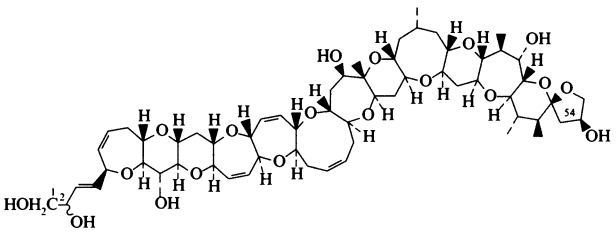
$C_{31}H_{41}N_7O_6$ M 607.708

Umezawa, H. *et al*, *J. Antibiot.*, 1970, **23**, 425 (*isol*)
Tatsuta, K. *et al*, *J. Antibiot.*, 1973, **26**, 625 (*struct*)
Umezawa, H., *Acta Biol. Med. Ger.*, 1977, **36**, 1899 (*rev*)
Kambara, H. *et al*, *Org. Mass Spectrom.*, 1982, **17**, 67 (*ms*)

Ciguatoxin, 9CI C-10097

CTX 1

[11050-21-8]



$C_{60}H_{86}O_{19}$ M 1111.328

Isol. from *Gymnothorax javanicus* and other fish and shellfish. Present in the dinoflagellate *Gambierdiscus toxicus*. Causes ciguatera food poisoning. *G. toxicus* is the primary cause.

54-Deoxy, stereoisomer: [142185-85-1]. *CTX 3*

$C_{60}H_{86}O_{18}$ M 1095.329

Isol. from *Lycodontis javanicus*.

1,2,54-Trisdeoxy, 1,2-didehydro: [123676-76-6]. ***Gambiertoxin 4b.*** *GT 4b*

$C_{60}H_{84}O_{16}$ M 1061.314

Isol. from *G. toxicus*.

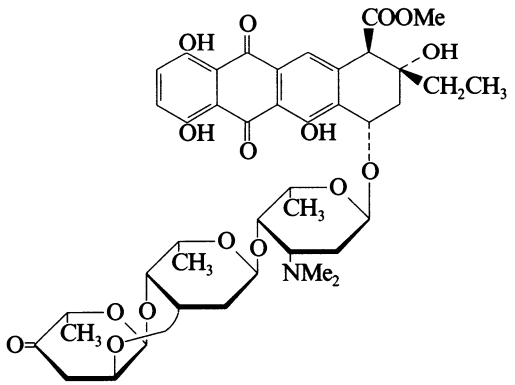
Scheuer, P.J., *Bioact. Mol.*, 1989, **10**, 265 (*occur*)
Murata, M. *et al*, *J. Am. Chem. Soc.*, 1990, **112**, 4380 (*pmr, struct*)
Lewis, R.J. *et al*, *Toxicon*, 1991, **29**, 1115 (*isol, derivs*)
Murata, M. *et al*, *Tetrahedron Lett.*, 1992, **33**, 525 (*cmr, struct*)

Cinerubin B C-10098

Updated Entry replacing C-01327

Ryemycin B_1. 1-Hydroxyaclacinomycin B. MA 144B_2. Antibiotic MA 144B_2. Ciclamycin 1

[35906-51-5]



$C_{42}H_{51}NO_{16}$ M 825.862

Anthracycline antibiotic. Isol. from *Streptomyces antibioticus, S. griseorubiginosus, S. galilaeus* and *S. niveorubes*. Active against gram-positive bacteria, viruses and tumours. Orange-red cryst. Mp 168-178°, Mp 240-243° dec.

▷ QI9277700.

De(methoxycarbonyl): ***Betaclamycin B***

$C_{40}H_{49}NO_{14}$ M 767.825

Biosynth. prod. from *S. galilaeus*. Mp 182-185°.

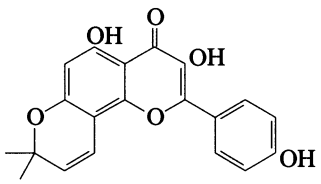
5^c-Epimer: ***Spartanamicin A***

$C_{42}H_{51}NO_{16}$ M 825.862
Prod. by a *Micromonospora* sp. Antifungal agent.
Orange powder. Mp 174-176°.

Ettlinger, L. *et al*, *Chem. Ber.*, 1959, **92**, 1867 (*isol, uv, ir*)
Richle, W. *et al*, *Helv. Chim. Acta*, 1972, **55**, 467 (*cryst struct, pmr*)
David, L. *et al*, *J. Antibiot.*, 1980, **33**, 49 (*isol*)
Oki, T. *et al*, *J. Antibiot.*, 1980, **33**, 49 (*isol*)
David, L. *et al*, *Tetrahedron*, 1982, **38**, 1631 (*ms*)
Yoshimoto, A. *et al*, *J. Antibiot.*, 1992, **45**, 1005 (*Betaclamycin B*)
Nair, M.G. *et al*, *J. Antibiot.*, 1992, **45**, 1738 (*Spartanamicin A*)
Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th Ed., Van Nostrand-Reinhold, 1992, TAH650.

Citrusinol C-10099

Updated Entry replacing C-01415
3,5-Dihydroxy-2-(4-hydroxyphenyl)-8,8-dimethyl-4H,8H-benzo[1,2-b:3,4-b']dipyran-4-one, 9CI
[112516-43-5]

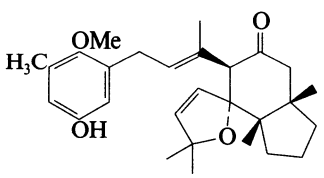


$C_{20}H_{16}O_6$ M 352.343
Isol. from *Citrus nobilis*. Yellow needles + $1H_2O$ (Me_2CO). Mp 252-254°.
Tri-Ac: Plates (Me_2CO). Mp 203-205°.
3-O-α-L-Rhamnopyranoside: [113558-13-7]. ***Ikarisoside E***
$C_{26}H_{26}O_{10}$ M 498.485
Isol. from *Epimedium grandiflorum* and *E. sempervirens*. Yellow powder. $[\alpha]_D^{22}$ −92° (c, 0.18 in MeOH).
4'-Me ether, 3-O-α-L-rhamnopyranoside: [143601-07-4]. ***Acuminatin***†
$C_{27}H_{28}O_{10}$ M 512.512
Constit. of *E. acuminatum*.

Wu, T.S. *et al*, *Phytochemistry*, 1987, **26**, 3094 (*isol*)
Fukai, T. *et al*, *Phytochemistry*, 1988, **27**, 259 (*Ikarisoside E*)
Hu, B.H. *et al*, *Yaoxue Xuebao*, 1992, **27**, 397; *CA*, **117**, 167659 (*Acuminatin*)

Claraenone C-10100

[149864-72-2]

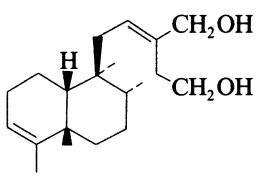


$C_{28}H_{38}O_4$ M 438.606
Constit. of a *Cystoseira* sp. $[\alpha]_D^{25}$ −35.8° (c, 0.52 in $CHCl_3$).

Norte, M. *et al*, *Tetrahedron Lett.*, 1993, **34**, 3485 (*isol, pmr, cmr*)

3,12-Clerodadiene-15,16-diol C-10101

Updated Entry replacing C-01482



(*ent*-5α,13*E*)-*form*

$C_{20}H_{34}O_2$ M 306.487

(ent-5α,12E)-form

Dialdehyde: [55890-21-6]. ***3,12-Clerodadiene-15,16-dial. Linaridial***
Constit. of *Linaria japonica*. Oil. $[\alpha]_D$ +13° ($CHCl_3$).
Dialdehyde, bis-2,4-dinitrophenylhydrazone: Yellow cryst. (EtOAc). Mp 207-209°. $[\alpha]_D^{13}$ −24° (c, 0.75 in Py).
16-Carboxylic acid: ***16-Oxo-3,12-clerodadien-15-oic acid.*** *16-Oxo-3,12-kolavadien-15-oic acid*
$C_{20}H_{30}O_3$ M 318.455
Constit. of *Polyalthia viridis*. Gum. $[\alpha]_D^{20}$ −36.4° (c, 0.63 in $CHCl_3$).

(ent-5β,13E)-form

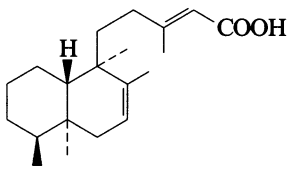
15,16-Di-Ac:
$C_{24}H_{38}O_4$ M 390.562
Constit. of *L. saxatilis*.
Dialdehyde: Isol. from *L. saxatilis*.

(ent-5β,13Z)-form

15,16-Di-Ac:
$C_{24}H_{38}O_4$ M 390.562
Constit. of *L. saxatilis*.
Dialdehyde: Isol. from *L. saxatilis*.

Kitagawa, I. *et al*, *Chem. Pharm. Bull.*, 1976, **24**, 294.
San Feliciano, A. *et al*, *Phytochemistry*, 1993, **33**, 631 (*isol, pmr, cmr*)
Kijjoa, A. *et al*, *Phytochemistry*, 1993, **34**, 457 (*deriv*)

7,13-Clerodadien-15-oic acid C-10102



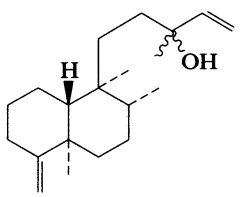
$C_{20}H_{32}O_2$ M 304.472

(13E)-form

Constit. of *Eperua purpurea*. Oil (as Me ester). $[\alpha]_D^{25}$ −18.4° (c, 1 in $CHCl_3$) (Me ester).

Avila, D. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 1586 (*isol, pmr, cmr*)

4(18),14-Clerodadien-13-ol C-10103

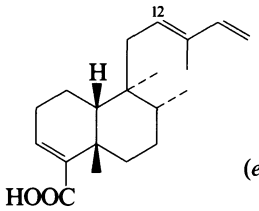


$C_{20}H_{34}O$ M 290.488

(ent-13ξ)-form [145458-08-8] ***Chelodane***
Constit. of *Chelonaplysilla erecta*. Oil.

Rudi, A. *et al*, *J. Nat. Prod.* (*Lloydia*), 1992, **55**, 1408 (*isol, pmr, cmr*)

3,12,14-Clerodatrien-18-oic acid C-10104



(*ent-5α,12E)-form*

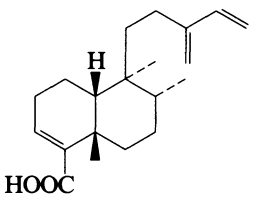
$C_{20}H_{30}O_2$ M 302.456

(ent-5α,12E)-form [143049-05-2]
Constit. of *Schistochila acuminata*. Solid. Mp 86-88°. $[\alpha]_D^{27}$ −21.1° (c, 11.1 in EtOH).

(ent-5α,12Z)-form [143049-07-4]
Constit. of *S. acuminata*.

Chen, J.-A. *et al*, *J. Chin. Chem. Soc.* (*Peking*), 1992, **39**, 263 (*isol, pmr, cmr*)

3,13(16),14-Clerodatrien-18-oic acid C-10105



$C_{20}H_{30}O_2$ M 302.456

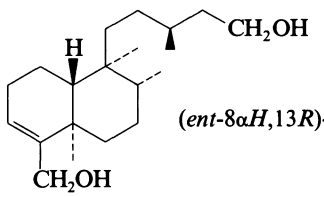
(ent-5α)-form [143049-06-3]
Constit. of *Schistochila acuminata* and *S. aligera*. Solid. Mp 153-155°. $[\alpha]_D^{27}$ −16.0° (c, 3.95 in $CHCl_3$).

Me ester: [143049-08-5].
$C_{21}H_{32}O_2$ M 316.483
Constit. of *S. acuminata*. Oil. $[\alpha]_D^{27}$ −36.5° (c, 0.115 in $CHCl_3$).

Chen, J.-A. *et al*, *J. Chin. Chem. Soc.* (*Peking*), 1992, **39**, 263 (*isol, pmr, cmr*)

3-Clerodene-15,18-diol C-10106

Updated Entry replacing C-01507



(*ent-8αH,13R)-form*

$C_{20}H_{36}O_2$ M 308.503

(ent-8αH,13R)-form

15,18-Dicarboxylic acid: [70492-74-9]. ent-*3-Clerodene-15,18-dioic acid.* ***Haplociliatic acid***
$C_{20}H_{32}O_4$ M 336.470
Isol. from *Haplopappus ciliatus*. Cryst. (EtOH). Mp 198-201°. $[\alpha]_D^{25}$ −86° (c, 2.5 in EtOH).

(ent-5α,8ξH,13ξ)-form [28644-71-5] ***Cistodiol***
Constit. of *Cistus monspeliensis*. Cryst. Mp 86-88°. $[\alpha]_D$ +47.9° ($CHCl_3$).

15,18-Dicarboxylic acid: [28644-72-6]. ***Cistodioic acid***
$C_{20}H_{32}O_4$ M 336.470
Constit. of *C. monspeliensis*. Cryst. Mp 255-256°. $[\alpha]_D$ +63.6° (EtOH).

(ent-5β,8αH,13ξ)-form
Constit. of *Bacharis trinervis*. Oil. $[\alpha]_D$ −25.6° (c, 0.83 in $CHCl_3$).

15-Ac:
$C_{22}H_{38}O_3$ M 350.540
Constit. of *B. trinervis*. Oil.

18-Ac:
$C_{22}H_{38}O_3$ M 350.540
Constit. of *B. trinervis*. Oil. $[\alpha]_D$ −28.1° (c, 0.34 in $CHCl_3$).

15-Carboxylic acid: ent-*18-Hydroxy-3-cleroden-15-oic acid*
$C_{20}H_{34}O_3$ M 322.487
Isol. from *Relhania corymbosa* and *R. genistifolia*.

15-Carboxylic acid, Ac:
$C_{22}H_{36}O_4$ M 364.524
Constit. of *R. genistifolia*.

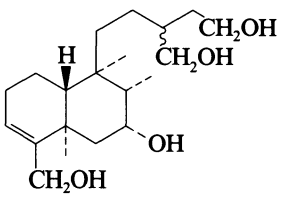
15-Carboxylic acid, 13E,14-didehydro, Ac: ***ent-19-Acetoxy-3,13-clerodadien-15-oic acid***
$C_{22}H_{34}O_4$ M 362.508
Constit. of *R. genistifolia*.

15,18-Dicarboxylic acid, 18-Me ester: ***Schistochilic acid B***
$C_{21}H_{34}O_4$ M 350.497
Constit. of *Schistochila nobilis*. Oil. $[\alpha]_D^{22}$ −86° (c, 1.74 in CCl_4).

18-(Methylmalonyl):
$C_{24}H_{40}O_5$ M 408.577
Constit. of *B. trinervis*. Oil.

Berti, G. *et al*, *Tetrahedron Lett.*, 1970, 1401.
Bittner, M.L. *et al*, *Phytochemistry*, 1978, **17**, 1797 (*Haplociliatic acid*)
Tsichritzis, F. *et al*, *Phytochemistry*, 1990, **29**, 3173.
Tori, M. *et al*, *Phytochemistry*, 1993, **32**, 1229 (*Schistochilic acid B*)
Kuroyanagi, M. *et al*, *Phytochemistry*, 1993, **34**, 1377 (*isol, pmr, cmr*)

3-Clerodene-7,15,16,18-tetrol C-10107



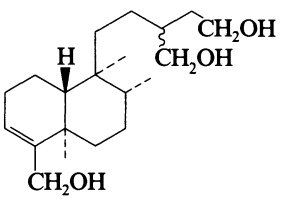
$C_{20}H_{36}O_4$ M 340.502

(ent-7β,13ξ)-form

15,16,18-Tri-Ac:
$C_{26}H_{42}O_7$ M 466.614
Constit. of *Baccharis trinervis*. Oil. $[\alpha]_D$ −49.3° (c, 0.5 in $CHCl_3$).

Kuroyangi, M. *et al*, *Phytochemistry*, 1993, **34**, 1377 (*isol, pmr, cmr*)

3-Clerodene-15,16,18-triol C-10108



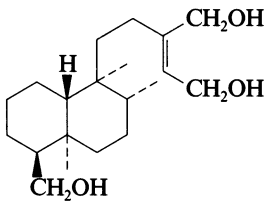
$C_{20}H_{36}O_3$ M 324.503

(ent-13ξ)-form

15,16-Di-Ac:
$C_{24}H_{40}O_5$ M 408.577
Constit. of *Baccharis trinervis*. Oil.

15,18-Di-Ac:
$C_{24}H_{40}O_5$ M 408.577
Constit. of *B. trinervis*. Oil. $[\alpha]_D$ −26.5° (c, 0.34 in $CHCl_3$).
Kuroyangi, M. *et al*, *Phytochemistry*, 1993, **34**, 1377 (*isol, pmr, cmr*)

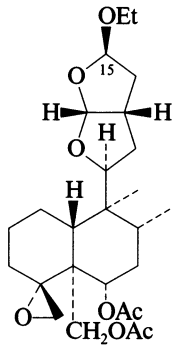
13-Clerodene-15,16,18-triol C-10109



$C_{20}H_{36}O_3$ M 324.503
(ent-4βH,13Z)-form [148302-73-2] ***Crolechinol***
Constit. of *Croton lechleri*.
Cai, Y. *et al*, *Phytochemistry*, 1993, **32**, 755 (*isol, pmr, cmr*)

Clerodinin C C-10110

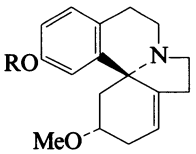
Updated Entry replacing C-01515
[124753-87-3]



$C_{26}H_{40}O_8$ M 480.597
Constit. of *Clerodendrum brachyanthum*. Cryst. Mp 147-149°. $[\alpha]_D^{25}$ +30° (c, 1 in $CHCl_3$).
15-Epimer: [124815-92-5]. ***Clerodinin D***
$C_{26}H_{40}O_8$ M 480.597
Constit. of *C. brachyanthum*. Cryst. Mp 163-165°. $[\alpha]_D^{23}$ −31.5° (c, 1 in $CHCl_3$).
O^{15}*-De-Et*, O^{15}*-Me:* [124854-66-6]. ***Clerodinin A***
$C_{25}H_{38}O_8$ M 466.570
Constit. of *C. brachyanthum*. Cryst. Mp 158-160°. $[\alpha]_D^{25}$ +28.8° (c, 1 in $CHCl_3$).
O^{15}*-De-Et*, O^{15}*-Me, 15-epimer:* [124854-67-7]. ***Clerodinin B***
$C_{25}H_{38}O_8$ M 466.570
Constit. of *C. brachyanthum*. Cryst. Mp 198-200°. $[\alpha]_D^{25}$ −30.5° (c, 1 in $CHCl_3$).
Lin, Y.-L. *et al*, *Chem. Pharm. Bull.*, 1989, **37**, 2191 (*isol, pmr, cmr*)
Lin, Y.-L. *et al*, *Heterocycles*, 1989, **29**, 1489 (*isol, pmr, cmr*)

Cocculine C-10111

Updated Entry replacing C-01584
(3β)-1,6-Didehydro-3-methoxyerythrinan-15-ol, 9CI
[27675-39-4]

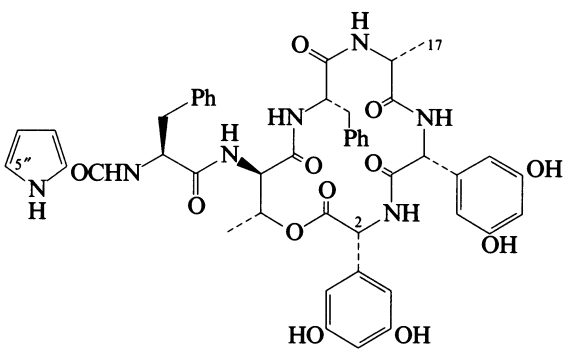


R = H

$C_{17}H_{21}NO_2$ M 271.358
Alkaloid from the leaves of *Cocculus laurifolius*, the fruit of *C. carolinus* and the rhizomes of *C. trilobus* (Menispermaceae). Hypotensive agent which acts *via* ganglionic blocking. Cryst. (Me_2CO). Mp 217-218°. $[\alpha]_D$ +271.1° (MeOH).
B,HCl: Mp 222-223°.
B,HNO_3*:* Mp 196-197°.
Me ether: see *Cocculidine, C-01582*
O-*De-Me:* ***Coclafine***
$C_{16}H_{19}NO_2$ M 257.332
Alkaloid from leaves of *C. laurifolius* (Menispermaceae). Cryst. (Me_2CO). Mp 246-266°. $[\alpha]_D$ +255° (c, 0.15 in MeOH).
Yunusov, S., *Zh. Obshch. Khim.*, 1950, **20**, 368; *CA*, **44**, 6582g (*isol*)
Yunusov, S. *et al*, *Khim. Prir. Soedin.*, 1970, **6**, 74; *Chem. Nat. Compd.* (*Engl. Transl.*), 69 (*pmr, ms, struct*)
Razakov, R. *et al*, *J. Chem. Soc., Chem. Commun.*, 1974, 150 (*cryst struct, abs config*)
Elsohly, M.A. *et al*, *J. Pharm. Sci.*, 1976, **65**, 132 (*isol, uv, ir, pmr, ms*)
McPhail, A.T. *et al*, *Tetrahedron Lett.*, 1976, 485 (*pmr*)
McPhail, A.T. *et al*, *J. Chem. Soc., Perkin Trans. 2*, 1977, 1156 (*cryst struct*)
Bhakuni, D.S. *et al*, *J. Chem. Soc., Perkin Trans. 1*, 1978, 618 (*biosynth*)
Ju-ichi, M. *et al*, *Yakugaku Zasshi*, 1978, **98**, 886; *CA*, **89**, 215622c (*isol*)
Bhakuni, D.S. *et al*, *Tetrahedron*, 1980, **36**, 3107 (*isol*)
Madhusudanan, K.P. *et al*, *Indian J. Chem., Sect. B*, 1983, **22**, 907 (*ms*)
Ziyaev, R. *et al*, *Khim. Prir. Soedin.*, 1991, 84; *Chem. Nat. Compd.* (*Engl. Transl.*), 73 (*Coclafine*)

Cochinmicin I C-10112

RP 59451. Antiobiotic RP 59451
[143728-97-6]



$C_{46}H_{47}N_7O_{12}$ M 889.917
Cyclic depsipeptide antibiotic. Prod. by a *Microbispora* sp. Endothelin antagonist. $[\alpha]_D^{23}$ −10.0° (c, 0.1 in MeOH). Identity with RP 59451 not confirmed.
2-Epimer: [146876-02-0]. ***Cochinmicin V***

$C_{46}H_{47}N_7O_{12}$ M 889.917
Prod. by a *M.* sp. $[\alpha]_D^{23}$ +20.0° (c, 0.1 in MeOH).

5″-Chloro: [143728-99-8]. ***Cochinmicin III***
$C_{46}H_{46}ClN_7O_{12}$ M 924.362
Prod. by a *M.* sp. Endothelin antagonist. $[\alpha]_D^{23}$ −10.0° (c, 0.1 in MeOH).

2-Epimer, 5″-chloro: [114919-77-6]. ***Cochinmicin II. RP 55185. Antibiotic RP 55185***
$C_{46}H_{46}ClN_7O_{12}$ M 924.362
Prod. by a *M.* sp. Endothelin antagonist. $[\alpha]_D^{23}$ +20.0° (c, 0.1 in MeOH). Identity with RP 55185 not confirmed.

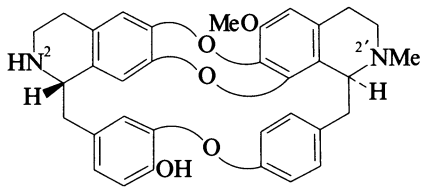
2-Epimer, 17-hydroxy, 5″-chloro: [146874-41-1]. *Cochinmicin IV*
$C_{46}H_{46}ClN_7O_{13}$ M 940.361
Prod. by a *M.* sp. Endothelin antagonist. $[\alpha]_D^{23}$ +30.0° (c, 0.1 in MeOH).

[143728-98-7]

Lam, Y.K.T. *et al, J. Antibiot.*, 1992, **45**, 1709, 1717, 1792 (*isol, pmr, cmr, struct, props*)

Cocsoline C-10113

Updated Entry replacing C-01602



(+)-*form*

$C_{34}H_{32}N_2O_5$ M 548.637

(+)-***form*** [54352-70-4]
Alkaloid from the leaves and stems of *Cocculus pendulus*, the roots of *C. leaebe*, and the stems of *Synclisia scabrida* and *Albertisia papuana* (Menispermaceae). Amorph. powder. Mp 197-199°. $[\alpha]_D$ +204° (c, 1.3 in $CHCl_3$).

$N^{2'}$-*Oxide(β−):* ***Cocsoline 2′-β-N-oxide***
$C_{34}H_{32}N_2O_6$ M 564.637
Alkaloid from roots of *Anisocycla cymosa* (Menispermaceae). Amorph. powder.

N-*Me:* [26279-88-9]. ***Cocsuline. Efirine. Trigilletine***
$C_{35}H_{34}N_2O_5$ M 562.664
Alkaloid from *C. pendulus, C. leaebe, Triclisia gilletii, T. dictyophylla, T. patens, S. scabrida* and *A. papuana* (Menispermaceae). Minute needles (abs. EtOH). Mp 272-274°. $[\alpha]_D^{23}$ +292° (c, 0.76 in $CHCl_3$), $[\alpha]_D^{23}$ +337° (c, 0.86 in Py).

N-*Me, Ac:* Rosettes of prisms (EtOAc/hexane). Mp 166-168° dec.

N-*Me*, N^2-*oxide:* [91106-34-2]. ***Cocsuline* N-*2-oxide***
$C_{35}H_{34}N_2O_6$ M 578.663
Alkaloid from the stems and roots of *C. hirsutus* (Menispermaceae). Amorph. (MeOH). Mp 182-187°. $[\alpha]_D^{25}$ +125° (c, 0.5 in MeOH).

N-*Me, Et ether:* Cryst. ($MeOH/CH_2Cl_2$). Mp 214-216°. $[\alpha]_D$ +230° (c, 1.02 in $CHCl_3$).

N-*De-Me:* ***2′-Norcocsoline***
$C_{33}H_{30}N_2O_5$ M 534.610
Alkaloid from roots of *Anisocycla cymosa* (Menispermaceae). Amorph. powder.

Me ether: [54352-71-5]. **O-*Methylcocsoline***
$C_{35}H_{34}N_2O_5$ M 562.664
Alkaloid from the stems of *Albertisia papuana* (Menispermaceae). Cryst. (EtOAc). Mp 235-237°. $[\alpha]_D$ +236° (c, 1.2 in $CHCl_3$). Phys. constants are for synthetic material.

Me ether, $N^{2'}$-*oxide (β-):* **O-*Methylcocsoline 2′-β-*N-*oxide***
$C_{35}H_{34}N_2O_6$ M 578.663
Alkaloid from roots of *Anisocycla cymosa* (Menispermaceae). Amorph. powder.

N,O-*Di-Me:* see *Isotrilobine, I-00890*

(−)-***form*** [36104-64-0] ***Micranthine***
Alkaloid from the bark of *Daphnandra micrantha* and from the leaves and terminal twigs of an unnamed *D.* sp. (Atherospermataceae). Oedematous agent on injection, vasodilator, respiratory paralytic. Cryst. (MeOH). Mp 190-194° dec. $[\alpha]_D^{16}$ −221° (c, 1.3 in $CHCl_3$).

Me ether: [40225-93-2]. **O-*Methylmicranthine***
$C_{35}H_{34}N_2O_5$ M 562.664
Alkaloid from the bark of *D. micrantha* and *D.* sp. Dt-7, and from the leaves and terminal twigs of an unnamed *D.* sp. (Atherospermataceae). Cryst. + $\frac{1}{2}$ H_2O (C_6H_6). Mp 163-165° dec. $[\alpha]_D^{20}$ −208° ($CHCl_3$).

Me ether, N-*Ac:* Cryst. + 0.67 CCl_4 ($CHCl_3/CCl_4$). Mp 174-179° dec. $[\alpha]_D^{22}$ −203° ($CHCl_3$).

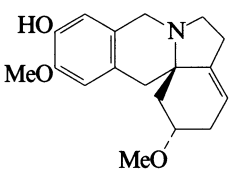
N,O-*Di-Me:* see *Isotrilobine, I-00890*

1,2-Didehydro: [58207-93-5]. ***1,2-Dehydromicranthine***
$C_{34}H_{30}N_2O_5$ M 546.621
Alkaloid from the leaves and terminal twigs of an unnamed *D.* sp. (Atherospermataceae). Mp 188-194° dec. $[\alpha]_D^{20}$ −150° ($CHCl_3$).

Bick, I.R.C. *et al, J. Chem. Soc., Perkin Trans. 1*, 1972, 2884 (*Micranthine, O-Methylmicranthine*)
Tackie, A.N. *et al, Phytochemistry*, 1973, **12**, 2509 (*Cocsuline*)
Joshi, P.P. *et al, Indian J. Chem.*, 1974, **12**, 649 (*ir, uv, pmr, ms, struct*)
Weber, N. *et al, Phytochemistry*, 1974, **13**, 2326 (*Cocsuline*)
Bhakuni, D.S. *et al, Tetrahedron*, 1975, **31**, 2575 (*isol, ir, uv, pmr, ms, Cocsuline*)
Bick, I.R.C. *et al, Tetrahedron Lett.*, 1975, 2219 (*1,2-Dehydromicranthine*)
Bhakuni, D.S. *et al, J. Chem. Soc., Perkin Trans. 1*, 1978, 121 (*biosynth*)
Bick, I.R.C., *Heterocycles*, 1981, **16**, 2105 (*Micranthine*)
Spiff, A.I. *et al, J. Nat. Prod.* (*Lloydia*), 1981, **44**, 160 (*Cocsuline*)
Leboeuf, M. *et al, Plant. Med. Phytother.*, 1982, **16**, 280; *CA*, **100**, 20463q (*O-Methylcocsoline*)
Ikram, M. *et al, Planta Med.*, 1982, **45**, 253 (*Cocsuline*)
Ohiri, F.C. *et al, Planta Med.*, 1983, **47**, 87 (*Cocsoline, Cocsuline*)
El-Shabrawy, A.O. *et al, Heterocycles*, 1984, **22**, 993 (*Cocsuline N-2-oxide*)
Hussain, S.F. *et al, Tetrahedron*, 1984, **40**, 2513 (*isol, ms, cd, Cocsuline*)
Kanyinda, B. *et al, J. Nat. Prod.* (*Lloydia*), 1993, **56**, 957 (*Cocsoline 2′-β-N-oxide, 12-O-Methylcocsoline 2′-β-N-oxide*)

Cohirsitinine C-10114

[142717-67-7]



Relative configuration

$C_{18}H_{23}NO_3$ M 301.385
Alkaloid from whole plants of *Cocculus hirsutus* (Menispermaceae). Gum. $[\alpha]_D^{25}$ +51° ($CDCl_3$).

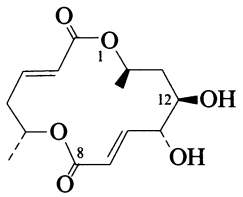
Ahmad, V.U. *et al, J. Nat. Prod.* (*Lloydia*), 1992, **55**, 237 (*isol, uv, ir, pmr, cmr, ms, struct*)

Colletodiol C-10115

Updated Entry replacing C-01655

11,12-Dihydroxy-6,14-dimethyl-1,7-dioxacyclotetradeca-3,9-diene-2,8-dione, 9CI. 11,12-Dihydroxy-3,9-dimethyl-2,8-dioxacyclotetradeca-5,13-diene-1,7-dione

[21142-67-6]



$C_{14}H_{20}O_6$ M 284.308

Constit. of *Colletotrichum capsici* and *Chaetomium funicola*. Cryst. (Me_2CO/pet. ether). Mp 163-164°. $[\alpha]_D$ +36° (c, 1 in $CHCl_3$). Biol. inactive.

Di-Ac: Rods. Mp 130-131°.

Dibenzoyl: Prisms (EtOAc/pet. ether). Mp 103-105°.

11-Ketone: [50376-39-1]. ***Colletoketol.*** *12-Hydroxy-6,14-dimethyl-1,7-dioxacyclotetradeca-3,9-diene-2,8,11-trione, 9CI*

$C_{14}H_{18}O_6$ M 282.293

Metab. of *C. capsici*. Prisms (Me_2CO/pet. ether). Mp 138-139°.

9,10-Dihydro, 11,12-Diketone: see *Grahamimycin A_1, G-00689*

11-Deoxy: [50376-40-4]. ***Colletol***

$C_{14}H_{20}O_5$ M 268.309

From *C. capsici*. Needles (EtOAc/pet ether). Mp 101-104°. $[\alpha]_D$ −38.4° (c, 0.95 in $CHCl_3$).

12-Deoxy: [50376-41-5]. ***Colletallol***

$C_{14}H_{20}O_5$ M 268.309

From *C. capsici*. Oil.

5-Hydroxy, 12-deoxy: ***Clonostachydiol***

$C_{14}H_{20}O_6$ M 284.308

Prod. by *Clonostachys cylindrospora*. Anthelmintic. Cryst. Mp 164°. $[\alpha]_D^{20}$ +103° (c, 1 in MeOH). Gross struct. only is known.

MacMillan, J. *et al, J. Chem. Soc., Perkin Trans. 1*, 1973, 1487 (*isol*)

Amstutz, R. *et al, Helv. Chim. Acta*, 1981, **64**, 1796 (*cryst struct*)

Tsutsui, H. *et al, Tetrahedron Lett.*, 1984, **25**, 2159, 2163 (*synth*)

Schnurrenberger, P. *et al, Tetrahedron Lett.*, 1984, **25**, 2209 (*synth, bibl*)

Simpson, T.J. *et al, J. Chem. Soc., Chem. Commun.*, 1985, 1822 (*biosynth, nmr*)

Hillis, L.R. *et al, J. Org. Chem.*, 1985, **50**, 470 (*synth*)

Wakamatsu, T. *et al, Tetrahedron Lett.*, 1985, **26**, 1989 (*Colletallol*)

Schnurrenberger, P. *et al, Justus Liebigs Ann. Chem.*, 1987, 733 (*synth, bibl*)

Keck, G.E. *et al, J. Org. Chem.*, 1989, **54**, 896; 1991, **56**, 6606 (*synth, Colletol*)

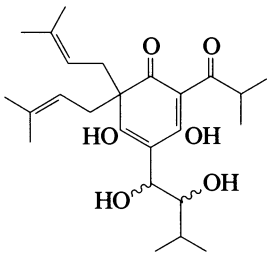
Dommerholt, F.J. *et al, Tetrahedron Lett.*, 1991, **32**, 1495 (*Colletallol*)

Grabley, S. *et al, J. Antibiot.*, 1993, **46**, 343 (*Clonostachydiol*)

Colupdol C-10116

4-(2,3-Dihydroxy-3-methylbutyl)-3,5-dihydroxy-6,6-bis(3-methyl-2-butenyl)-2-(2-methyl-1-oxopropyl)-2,4-cyclohexadien-1-one, 9CI

[52844-27-6]



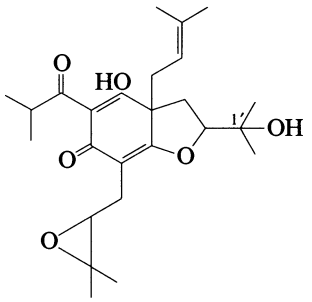
$C_{25}H_{38}O_6$ M 434.572

Enolised tetraketone. Constit. of beer.

Kowaka, M. *et al, Amer. Soc. Brew. Chem. Proc.*, 1973, 66.

Colupdox a C-10117

[35923-67-2]



$C_{25}H_{36}O_6$ M 432.556

Enolised β-diketone. Isol. from hops.

1'-Deoxy: [36136-11-5]. ***Colupox b***

$C_{25}H_{36}O_5$ M 416.556

Isol. from hops.

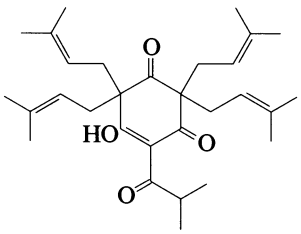
Kokubo, E. *et al, Amer. Soc. Brew. Chem. Proc.*, 1971, 265 (*isol*)

Kokubo, E. *et al, CA*, 1973, **78**, 159926 (*struct*)

Colupone C-10118

5-Hydroxy-2,2,6,6-tetrakis(3-methyl-2-butenyl)-4-(2-methyl-1-oxopropyl)-4-cyclohexene-1,3-dione, 9CI

[16658-23-4]



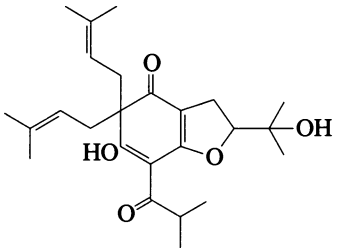
$C_{30}H_{44}O_4$ M 468.675

Congener of Lupulone, L-00877. Found in hops.

Elvidge, J.A. *et al, J. Chem. Soc. C*, 1969, 1839 (*pmr, uv, ir*)

Colupox a C-10119

[18944-21-3]



$C_{25}H_{36}O_5$ M 416.556

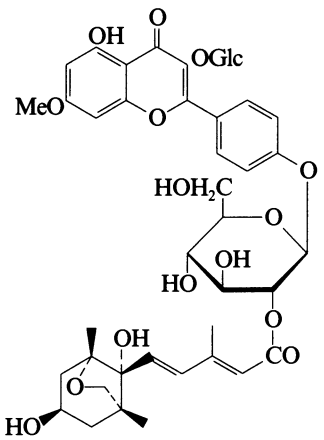
Isol. from hops. V. pale yellow oil. Racemic.

[22592-22-9]

Cahill, D.M. *et al*, *J. Chem. Soc. C*, 1969, 938 (*synth*)
Kokubo, E. *et al*, *Amer. Soc. Brew. Chem. Proc.*, 1971, 265 (*isol*)
Kokubo, E. *et al*, *CA*, 1973, **78**, 159926 (*struct*)

Complanatin C-10120

[138505-45-0]



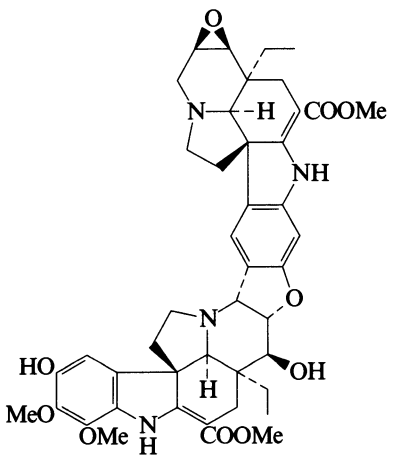
$C_{43}H_{52}O_{20}$ M 888.872

Complex glycoside acylated with dihydrophaseic acid (see Phaseic acid, P-00918). Isol. from *Astragalus complanatus*. Pale yellow needles. Mp 192-194°. $[\alpha]_D$ +0.5° (MeOH).

Cui, B.L. *et al*, *Tetrahedron Lett.*, 1991, **32**, 6135.

Conophylline C-10121

[142741-24-0]

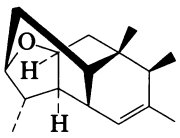


$C_{44}H_{50}N_4O_{10}$ M 794.900

Alkaloid from the leaves of *Tabernaemontana divaricata* (Apocynaceae). Light yellow prisms (EtOAc). Mp *ca.* 200° dec.

Kam, T.-S. *et al*, *Tetrahedron Lett.*, 1992, **33**, 969 (*isol, pmr, cmr, struct*)

Contrunculin A C-10122

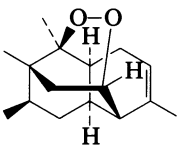


$C_{16}H_{24}O$ M 232.365

Constit. of *Latrunculia conulosa*. Oil. $[\alpha]_D$ +151.3° (c, 3.99 in $CHCl_3$).

Butler, M.S. *et al*, *Aust. J. Chem.*, 1993, **46**, 1363 (*isol, pmr, cmr*)

Contrunculin B C-10123



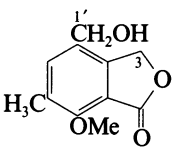
$C_{16}H_{24}O_2$ M 248.364

Constit. of *Latrunculia conulosa*. Unstable oil. $[\alpha]_D$ −35.9° (c, 1.7 in $CHCl_3$).

Butler, M.S. *et al*, *Aust. J. Chem.*, 1993, **46**, 1363 (*isol, pmr, cmr*)

Convolvulol C-10124

[142309-48-6]



$C_{11}H_{12}O_4$ M 208.213

Metab. of *Phomopsis convolvulus*.

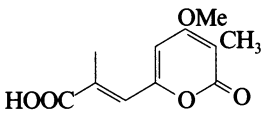
1′-Carboxylic acid: [479-14-1]. ***Convolvulanic acid B***
$C_{11}H_{10}O_5$ M 222.197
Metab. of *P. convolvulus*.

1′-Carboxylic acid, 3ξ-hydroxy: [142309-47-5]. ***Convolvulanic acid A***
$C_{11}H_{10}O_6$ M 238.196
Metab. of *P. convolvulus*.

Tsantrizos, Y.S. *et al*, *Can. J. Chem.*, 1992, **70**, 2276 (*isol, pmr, cmr*)

Convolvulopyrone C-10125

[142309-49-7]



$C_{11}H_{12}O_5$ M 224.213

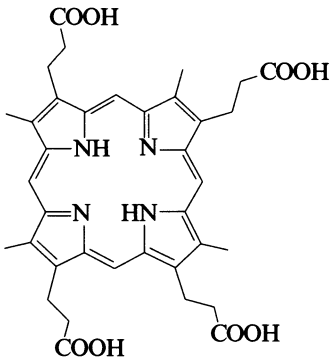
Metab. of *Phomopsis convolvulus*.

Tsantrizos, Y.S. *et al*, *Can. J. Chem.*, 1992, **70**, 2276 (*isol, pmr, cmr*)

Coproporphyrin III C-10126

Updated Entry replacing C-01773

[14643-66-4]



$C_{36}H_{38}N_4O_8$ M 654.718

Excreted in small amounts in urine and faeces, found in blood, yeast, microorganisms etc. By-product of Haem formation *in vivo*, due to oxidation of the porphyrinogen. Violet cryst. Large amounts may be excreted in disorders of Porphyrin metabolism (together with the I isomer). λ_{max} (dication), 400, 548, 590 nm (HCl aq.).

Tetra-Me ester: [5522-63-4].
$C_{40}H_{46}N_4O_8$ M 710.825
Violet cryst. ($CHCl_3$/MeOH). Mp 153-155°, Mp 178-182°. Mp behaviour is complex. λ_{max} 400, 498, 532, 566, 594, 621 nm.

Tetra-Me ester, Cu complex: Purple cryst. ($CHCl_3$/MeOH). Mp 216-219°.

5,10,15,20,22,24-Hexahydro: [2624-63-7].
Coproporphyrinogen III
$C_{36}H_{44}N_4O_8$ M 660.766
Interm. in the biosynth of haems and chlorophylls. Highly unstable.

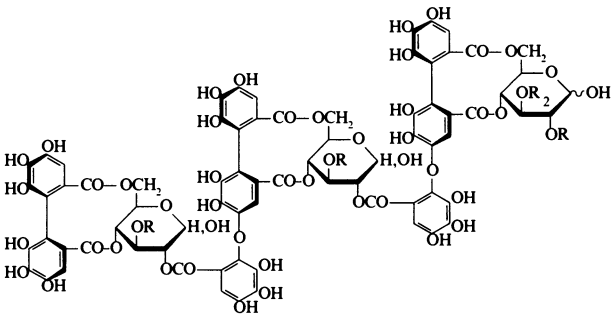
Zn complex: ***Zincphyrin.*** *Zinc coproporphyrin III*
$C_{36}H_{36}N_4O_8Zn$ M 718.092
Prod. by a *Streptomyces* sp. Shows potent photosensitising activity. Dark red powder.

[83903-38-2, 84325-07-5]

Fischer, H. *et al*, *Hoppe Seyler's Z. Physiol. Chem.*, 1929, **182**, 265.
Morsingh, F. *et al*, *J. Am. Chem. Soc.*, 1960, **82**, 4377 (*synth*)
Abraham, R.J. *et al*, *J. Chem. Soc. B*, 1966, 620 (*pmr*)
Jackson, A.H. *et al*, *J. Chem. Soc., Perkin Trans. 1*, 1972, 1475 (*synth*)
Harel, E., *Prog. Phytochem.*, 1978, **5**, 127 (*rev*)
Janson, T.R. *et al*, *The Porphyrins*, (Dolphin, D., Ed.), Academic Press, N.Y., Vol. II, 1979, 1 (*pmr, cmr*)
Burnham, B.F. *et al*, *The Porphyrins*, (Dolphin, D., Ed.), Academic Press, N.Y., Vol. VI, 1979, 234 (*synth*)
Battersby, A.R. *et al*, *J. Chem. Soc., Perkin Trans. 1*, 1981, 2786 (*synth*)
Smith, K.M. *et al*, *Tetrahedron*, 1982, **38**, 2441 (*pmr, cmr*)
Robinson, J.A. *et al*, *J. Chem. Soc., Perkin Trans. 1*, 1985, 1699 (*deriv, synth, uv, pmr, ms*)
Lim, C.K. *et al*, *Methods Enzymol.*, 1986, **123**, 383 (*hplc*)
Toriya, M. *et al*, *J. Antibiot.*, 1993, **46**, 196 (*Zincphyrin*)

Cornusiin C C-10127

[108906-53-2]



R = 3,4,5-Trihydroxybenzoyl

$C_{102}H_{74}O_{66}$ M 2355.667

Exists as an equilibrated mixt. of α- and β-anomers. A tannin compd. isol. from the fruit of *Cornus officinalis* and from *Trapa japonica*. Shows an *in vivo* anti-tumour activity. Off-white amorph. powder + 12 or $14H_2O$. $[\alpha]_D^{20}$ +25° (c, 0.3 in MeOH).

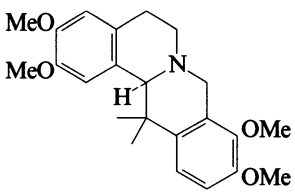
2-O-Degalloyl: [126594-59-0]. ***Cornusiin F***
$C_{95}H_{70}O_{62}$ M 2203.561
Isol. from fruit of *C. officinalis*. Off-white amorph. powder + $12H_2O$. $[\alpha]_D^{20}$ +18° (c, 1.0 in MeOH).

Miyamoto, K. *et al*, *Chem. Pharm. Bull.*, 1987, **35**, 814 (*pharmacol*)
Hatano, T. *et al*, *Chem. Pharm. Bull.*, 1989, **37**, 2083 (*struct, uv, ir, cd, pmr, cmr*)

Corymotine C-10128

Updated Entry replacing C-01892

5,8,13,13a-Tetrahydro-2,3,9,10-tetramethoxy-13,13-dimethyl-6H-dibenzo[a,g]*quinolizine, 9CI*



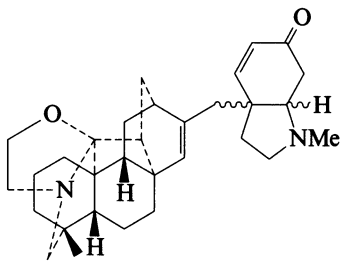
$C_{23}H_{29}NO_4$ M 383.486

(S)-form [115569-75-0]
Corybrachylobine
Alkaloid from the tubers of *Corydalis remota* and *C. solida* ssp. *brachyloba* (Fumariaceae). Prisms (MeOH). Mp 148-149°. $[\alpha]_D^{25}$ −188° (c, 0.087 in $CHCl_3$). The first tetrahydroprotoberberine dimethylated at C-13.

Fu, X. *et al*, *J. Nat. Prod.* (*Lloydia*), 1988, **51**, 262 (*isol, uv, ir, pmr, cmr, ms, struct*)
Sener, B. *et al*, *J. Chem. Soc. Pak.*, 1991, **13**, 63; *CA*, **116**, 3548j.

Coryphine C-10129

[142735-24-8]

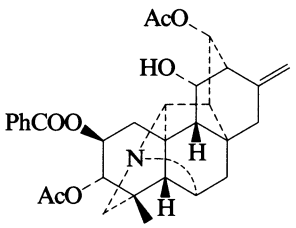


$C_{31}H_{42}N_2O_2$ M 474.685
Alkaloid from epigeal parts of *Aconitum coreanum* (Ranunculaceae). Mp 199-200°. $[\alpha]_D^{20}$ +150° (c, 0.4 in MeOH).

B,HClO$_4$: Cryst. (EtOH aq. or MeOH). Mp 225-226°.

Yusupova, I.M. *et al*, *Khim. Prir. Soedin.*, 1991, 396; *Chem. Nat. Compd. (Engl. Transl.)*, 343 (*isol, pmr, cmr, ms, cryst struct*)

Cossonine C-10130

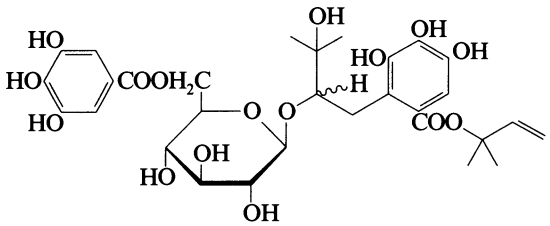


$C_{31}H_{35}NO_7$ M 533.620
Alkaloid from above-ground parts of *Delphinium cossonianum* (Ranunculaceae). Amorph. $[\alpha]_D$ +45° (c, 0.16 in $CHCl_3$).

de la Fuente, G. *et al*, *Phytochemistry*, 1993, **34**, 553 (*isol, ir, pmr, cmr, ms, struct*)

Crenulatin† C-10131

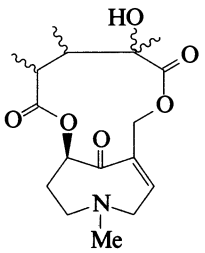
[142937-29-9]



$C_{30}H_{38}O_{16}$ M 654.621
Constit. of the stems of *Rhodiola crenulata.*

Yu, W. *et al*, *Chin. Chem. Lett.*, 1992, **3**, 111 (*isol, pmr, cmr*)

Croaegyptine C-10132

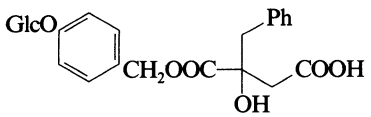


$C_{17}H_{25}NO_6$ M 339.388
Isol. as an insep. mixt. with Crosemperine, C-02024. Alkaloid from *Crotalaria aegyptiaca* (Leguminosae).

Roeder, E. *et al*, *Phytochemistry*, 1993, **34**, 1421.

Cronupapine C-10133

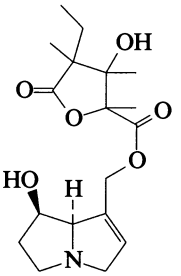
[143572-66-1]



$C_{24}H_{28}O_{11}$ M 492.479
Constit. of *Cronura papirio.* Oil. $[\alpha]_D^{24}$ −55.3° (c, 3.9 in MeOH).

Mochizuki, K. *et al*, *Chem. Lett.*, 1992, 1239 (*isol, pmr, cmr*)

Crotalarine lactone C-10134



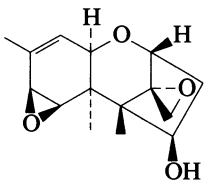
$C_{18}H_{27}NO_6$ M 353.414
Alkaloid from *Crotalaria aegyptiaca* (Leguminosae). Powder. $[\alpha]_D^{18.5}$ −12.25° (c, 0.25 in EtOH).

Roeder, E. *et al*, *Phytochemistry*, 1993, **34**, 1421 (*isol, ir, pmr, cmr, ms, struct*)

Crotocol C-10135

7β,8β:12,13-Diepoxy-4β-trichothecenol. 7β,8β-Epoxy-4β-scirpenol

[21445-21-6]



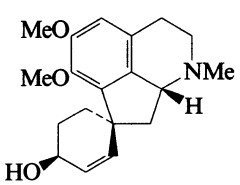
$C_{15}H_{20}O_4$ M 264.321
Inhibitor of protein synth. Cryst. Mp 154°. $[\alpha]_D^{20}$ −6.4° (c, 2 in $CHCl_3$).

O-(*2Z-Butenoyl*): [21284-11-7]. ***Crotocin.*** *Antibiotic T*
$C_{19}H_{24}O_5$ M 332.396
Isol. from *Cephalosporium crotigenum.* Antifungal antibiotic. Cryst. (MeOH). Mp 126°. $[\alpha]_D^{20}$ +13.5° (c, 1 in $CHCl_3$).
▷ YD0117000.

Gláz, E.T. *et al*, *Nature (London)*, 1966, **212**, 617 (*isol*)
Gyimesi, J. *et al*, *Tetrahedron Lett.*, 1967, 1665 (*struct*)
Adams, P.M. *et al*, *J. Chem. Soc., Chem. Commun.*, 1970, 1569 (*biosynth*)
Czugler, M. *et al*, *Acta Crystallogr., Sect. B*, 1975, **31**, 1204 (*cryst struct*)
Ellison, R.A. *et al*, *J. Org. Chem.*, 1976, **41**, 576 (*cmr*)
Avent, A.G. *et al*, *Magn. Reson. Chem.*, 1988, **26**, 475 (*pmr, cmr*)
Cole, R.J. *et al*, *Handbook of Toxic Fungal Metabolites*, Academic Press, N.Y., 1981, 195, 196.
Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th Ed., Van Nostrand-Reinhold, 1992, COB000.

Cryprochine C-10136

[147127-62-6]

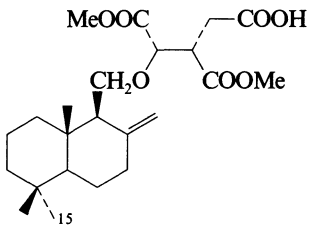


$C_{19}H_{25}NO_3$ M 315.411
Diastereoisomeric with Amuroline, A-01636. Alkaloid from stem bark of *Cryptocarya chinensis* (Lauraceae). Amorph. solid. $[\alpha]_D^{24}$ +40.0° (c, 0.48 in MeOH).

Lee, S.-S. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 227 (*isol, uv, ir, pmr, cmr, ms, struct*)

Cryptoporic acid A C-10137

Updated Entry replacing C-02077
[113592-87-3]



$C_{23}H_{36}O_7$ M 424.533
Metab. of *Cryptoporus volvatus*. Oil. $[\alpha]_D$ +45.3° (c, 0.75 in $CHCl_3$).

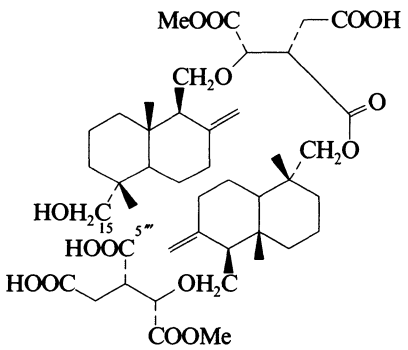
15-Hydroxy: [113592-88-4]. ***Cryptoporic acid B***
$C_{23}H_{36}O_8$ M 440.533
Metab. of *C. volvatus*. Cryst. Mp 208.5-210° dec. $[\alpha]_D$ +45° (c, 0.76 in $CHCl_3$).

Parent acid, 15-hydroxy:
$C_{21}H_{32}O_8$ M 412.479
Constit. of *C. volvatus*. Powder. Mp 75-76°. $[\alpha]_D$ +42.3° (c, 1.64 in MeOH). Has COOH in place of both COOMe's.

Hashimoto, T. *et al*, *Tetrahedron Lett.*, 1987, **28**, 6303 (*isol, pmr*)
Asakawa, Y. *et al*, *Phytochemistry*, 1992, **31**, 579 (*isol, pmr, cmr*)
Takahashi, H. *et al*, *Phytochemistry*, 1993, **33**, 1055 (*isol, pmr, cmr*)

Cryptoporic acid G C-10138

Updated Entry replacing C-02078
[126632-96-0]



$C_{44}H_{66}O_{15}$ M 834.996
Metab. of *Cryptoporus volvatus*. Amorph. powder. Mp 110-114°. $[\alpha]_D$ +40.5° (c, 0.98 in $CHCl_3$).

5'''-Me ester: [120001-10-7]. ***Cryptoporic acid E***
$C_{45}H_{68}O_{15}$ M 849.023
Metab. of *C. volvatus*. Amorph. powder. Mp 85-88°. $[\alpha]_D$ +42.6° (c, 1.01 in $CHCl_3$).

5'''→15 Lactone: [119979-95-2]. ***Cryptoporic acid D***
$C_{44}H_{64}O_{14}$ M 816.981
Metab. of *C. volvatus*. Amorph. powder. Mp 238-241°. $[\alpha]_D$ +39.9° (c, 0.78 in $CHCl_3$).

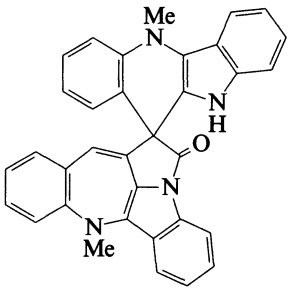
15-Deoxy: [126632-95-9]. ***Cryptoporic acid F***
$C_{44}H_{66}O_{14}$ M 818.997
Metab. of *C. volvatus*. Amorph. powder. Mp 113-115°. $[\alpha]_D$ +64.8° (c, 1.14 in $CHCl_3$).

15-Deoxy, 5'''-Me ester: [119979-94-1]. ***Cryptoporic acid C***
$C_{45}H_{68}O_{14}$ M 833.024
Metab. of *C. volvatus*. Powder. Mp 83-85°. $[\alpha]_D$ +61.2° (c, 0.64 in $CHCl_3$).

5'''→15-Lactone, dicarboxylic acid:
$C_{42}H_{60}O_{14}$ M 788.928
Constit. of *C. volvatus*. Amorph. $[\alpha]_D$ +43.3° (c, 1.71 in MeOH). Has COOH replacing both COOMe's.

Hashimoto, T. *et al*, *J. Chem. Soc., Chem. Commun.*, 1989, 258 (*isol, cryst struct*)
Asakawa, Y. *et al*, *Phytochemistry*, 1992, **31**, 579 (*isol, pmr, cmr, cryst struct*)
Takahashi, H. *et al*, *Phytochemistry*, 1993, **33**, 1055 (*isol, pmr, cmr*)

Cryptospirolepine C-10139

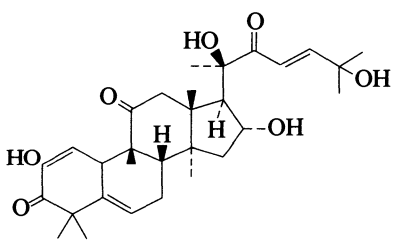


$C_{34}H_{24}N_4O$ M 504.590
Alkaloid from roots of *Cryptolepis sanguinolenta* (Asclepiadaceae). Light brownish-pink cryst. (EtOH).

Tackie, A.N. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 653 (*isol, uv, ir, pmr, cmr, ms, struct*)

Cucurbitacin I C-10140

Updated Entry replacing C-02110
Elatericin B. 2,16α,20R,25-Tetrahydroxycucurbita-1,5,23E-triene-3,11,22-trione
[2222-07-3]



$C_{30}H_{42}O_7$ M 514.658
Constit. of seed of *Iberis amara* and other *I.* spp., *Citrullus colocynthis* and *Ecballium elaterium*. Cryst. Mp 148-149° dec. $[\alpha]_D^{20}$ −58.5° (MeOH).

▷ RC6200000.

25-Ac: [18444-66-1]. ***Cucurbitacin E.*** *α-Elaterin*
$C_{32}H_{44}O_8$ M 556.695
Constit. of *E. elaterium*, *C.* and *Luffa* spp. Mp 234°. $[\alpha]_D^{20}$ −64.3° ($CHCl_3$).

▷ RC6305500.

20-Ac: [38308-89-3]. ***Datiscacin***
$C_{32}H_{44}O_8$ M 556.695
Constit. of *Datisca glomerata*. Mp 208-212°. $[\alpha]_D^{23}$ −18° (c, 0.87 in $CHCl_3$).

2-O-β-D-Glucopyranoside: [29803-94-9]. ***Cucurbitacin I 2-O-β-D-glucopyranoside***

$C_{36}H_{52}O_{12}$ M 676.800
Constit. of *C. lanatus*. Mp 241-243°. $[\alpha]_D^{20}$ −72.6° (EtOH).
▷ RC6191000.

2-O-β-D-Glucopyranoside, 25-Ac: [1398-78-3]. ***Elateriside.*** *Colocynthin. Gratiotoxin*
$C_{38}H_{54}O_{13}$ M 718.837
Constit. of *Citrullus lanatus* and *C. colocynthis*. Mp 148-150°. $[\alpha]_D^{20}$ −63.5° ($CHCl_3$).
▷ RC6192500.

11-Deoxo: ***11-Deoxocucurbitacin I***
$C_{30}H_{44}O_6$ M 500.674
Constit. of *Desfontainia spinosa*. Cryst. (C_6H_6). Mp 212-213°.

23,24-Dihydro: [1110-02-7]. ***Cucurbitacin L***
$C_{30}H_{44}O_7$ M 516.673
Constit. of *Citrullus ecirrhosus* and *C. colocynthis* (also as glycosides), *Gratiola officinalis* and *Bryonia dioica*. Cryst. + $\frac{1}{2}H_2O$ (MeOH aq.). Mp 122-127°. $[\alpha]_D^{28}$ −41° (EtOH).

23,24-Dihydro, 2-O-β-D-glucopyranoside: [61105-51-9]. ***Bryoamaride***
$C_{36}H_{54}O_{12}$ M 678.815
Constit. of *B. dioica* and *C. colocynthis*. Mp 228-235°. $[\alpha]_D^{20}$ −85.7° (c, 0.82 in EtOH).

23,24-Dihydro, 2-O-β-D-glucopyranoside, 25-Ac: [61014-18-4]. ***25-O-Acetylbryoamaride***
$C_{38}H_{56}O_{13}$ M 720.853
Constit. of *B. dioica*. $[\alpha]_D^{20}$ −34.3° (c, 1.04 in $CHCl_3$).

23,24-Dihydro, 2,25-di-O-β-D-glucopyranoside: ***Brydioside A***
$C_{42}H_{64}O_{17}$ M 840.957
Constit. of *Bryonia dioica*. Cryst. Mp 180-181.5°. $[\alpha]_D$ −28.6° (c, 0.8 in MeOH).

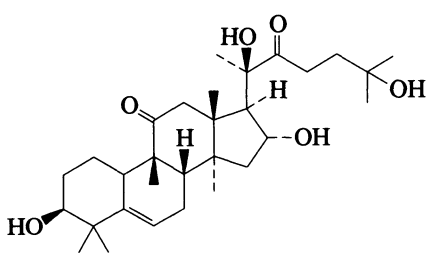
11-Deoxo, 16-O-(2,4-di-O-acetyl-α-L-arabinopyranoside): [119626-74-3]. ***Spinoside A***
$C_{39}H_{56}O_{12}$ M 716.864
Constit. of *Desfontainia spinosa*. Cryst. (Et_2O/hexane). Mp 229-231°. $[\alpha]_D^{25}$ −76° (c, 0.6 in MeOH).

11-Deoxo, 16-O-(2-O-acetyl-α-L-arabinopyranoside): [119626-75-4]. ***Spinoside B***
$C_{37}H_{54}O_{11}$ M 674.827
Constit. of *D. spinosa*. Cryst. (Et_2O/hexane). Mp 194-196°. $[\alpha]_D^{25}$ −77° (c, 0.6 in MeOH).

Kupchan, S.M. *et al, J. Org. Chem.*, 1973, **38**, 1420 (*Datiscacin*)
Ripperger, H., *Tetrahedron*, 1976, **32**, 1567 (*isol*)
Nielsen, J.K. *et al, Phytochemistry*, 1977, **16**, 1519 (*isol*)
Yamada, Y. *et al, Phytochemistry*, 1978, **17**, 1798 (*isol*)
Bull, J.R. *et al, S. Afr. J. Chem.*, 1979, **32**, 27 (*cmr*)
Che, C.-T. *et al, J. Nat. Prod.* (*Lloydia*), 1985, **24**, 429 (*pmr*)
Amonkar, A.A. *et al, Phytochemistry*, 1985, **24**, 1803 (*isol*)
Reddy, K.S. *et al, Phytochemistry*, 1988, **27**, 3781 (*Spinosides*)
Oobayashi, K. *et al, Phytochemistry*, 1992, **31**, 943 (*Brydioside A*)
Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th Ed., Van Nostrand-Reinhold, 1992, COE250.

Cucurbitacin U C-10141

3,16,20,25-Tetrahydroxycucurbit-5-ene-11,23-dione



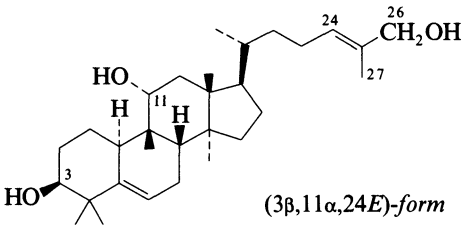
$C_{30}H_{48}O_6$ M 504.706

3-O-β-D-Gentiobioside:
$C_{42}H_{68}O_{16}$ M 828.990
Constit. of *Fevillea cordifolia*. Cryst. ($CHCl_3$/MeOH). Mp 143-144°. $[\alpha]_D^{21}$ +16° (c, 0.5 in MeOH).

Achenbach, H. *et al, J. Nat. Prod.* (*Lloydia*), 1993, **56**, 1506 (*isol, pmr, cmr*)

Cucurbita-5,24-diene-3,11,26-triol C-10142

Updated Entry replacing C-02117



(3β,11α,24*E*)-*form*

$C_{30}H_{50}O_3$ M 458.723

(3β,11α,24E)-form [109985-89-9] ***Carnosiflogenin C***
Powder. $[\alpha]_D^{29}$ +41° (c, 0.39 in MeOH).

26-O-(β-D-Glucopyranosyl-(1→2)-β-D-glucopyranoside), 3-O-β-D-glucopyranoside: [109985-94-6]. ***Carnosifloside V***
$C_{48}H_{80}O_{18}$ M 945.149
Constit. of *Hemsleya carnosiflora*. Sweet taste. Powder. $[\alpha]_D^{26}$ +4.0° (c, 0.77 in MeOH).

26-O-[β-D-Glucopyranosyl-(1→6)-β-D-glucopyranoside], 3-O-β-D-glucopyranoside: [109985-95-7]. ***Carnosifloside VI***
$C_{48}H_{80}O_{18}$ M 945.149
Constit. of *H. carnosiflora*. Sweet taste. Powder. $[\alpha]_D^{26}$ +6.0° (c, 0.6 in MeOH).

11-Ketone: [109985-87-7]. *3β,26-Dihydroxycucurbita-5,24E-dien-11-one.* ***Carnosiflogenin A***
$C_{30}H_{48}O_3$ M 456.707
Needles ($CHCl_3/C_6H_6$). Mp 170.5°. $[\alpha]_D^{16}$ +168.7° (c, 0.43 in MeOH).

11-Ketone, 26-O-[β-D-glucopyranosyl-(1→6)-glucopyranoside]: [109985-90-2]. ***Carnosifloside I***
$C_{42}H_{68}O_{13}$ M 780.991
Constit. of *H. carnosiflora*. Powder. $[\alpha]_D^{22}$ +59.6° (c, 1.42 in MeOH). Tasteless.

11-Ketone, 3-O-β-D-glucopyranoside, 26-O-(β-D-glucopyranosyl-(1→2)-glucopyranoside): [109985-91-3]. ***Carnosifloside II***
$C_{48}H_{78}O_{18}$ M 943.133
Constit. of *H. carnosiflora*. Powder. $[\alpha]_D^{22}$ +55.9° (c, 0.95 in MeOH). Bitter taste.

11-Ketone, 3-O-β-D-glucopyranoside, 26-O-(β-D-glucopyranosyl-(1→6)-glucopyranoside): [109985-92-4]. ***Carnosifloside III***
$C_{48}H_{78}O_{18}$ M 943.133
Constit. of *H. carnosiflora*. Powder. $[\alpha]_D^{14}$ +33.6° (c, 1.01 in MeOH). Bitter taste.

(3β,11α,24Z)-form [114637-68-2]
Scandenogenin C
Plates (C_6H_6/Me_2CO). Mp 120-122°. $[\alpha]_D^{22}$ +50.0° (c, 0.44 in MeOH).

3-O-β-D-Glucopyranoside, 26-O-sophoroside: [114637-79-5]. ***Scandenoside R_6***
$C_{48}H_{80}O_{18}$ M 945.149
Constit. of the rhizomes of *Hemsleya panacis-scandens*. Powder + $1\frac{1}{2}H_2O$. $[\alpha]_D^{22}$ +15.9° (c, 0.76 in MeOH).

3-O-β-D-Glucopyranoside, 26-O-[β-D-glucopyranosyl-(1→6)-glucopyranoside]: [109985-93-5]. ***Carnosifloside IV***
$C_{48}H_{80}O_{18}$ M 945.149
Constit. of *H. carnosiflora*. Powder. $[\alpha]_D^{18}$ +36.2° (c, 0.61 in MeOH). Bitter taste.

11-Ketone: [109985-88-8]. *3β,26-Dihydroxycucurbita-5,24Z-dien-11-one. Carnosiflogenin B*
$C_{30}H_{48}O_3$ M 456.707
Needles (MeOH aq.). Mp 155-156°. $[\alpha]_D^{18}$ +195.3° (c, 0.54 in MeOH).

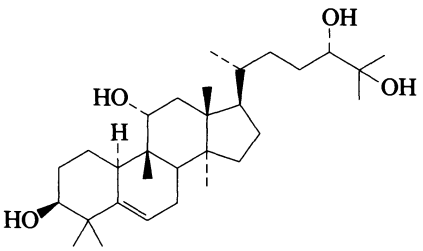
11-Ketone, 3-O-β-D-glucopyranoside, 26-O-sophoroside: [114637-78-4]. ***Scandenoside R₅***
$C_{48}H_{78}O_{18}$ M 943.133
Constit. of the rhizomes of *H. panacis-scandens*. Powder + $2H_2O$. $[\alpha]_D^{23}$ +59.7° (c, 0.39 in MeOH).

(3β,11β,24E)-form [114637-69-3]
11-Epicarnosiflogenin C
Plates (EtOAc/diisopropyl ether). Mp 152-154°. $[\alpha]_D^{22}$ +50.0° (c, 0.38 in MeOH).

3-O-β-D-Glucopyranoside, 26-O-gentiobioside: [109985-97-9]. ***Scandenoside R₇***
$C_{48}H_{80}O_{18}$ M 945.149
Constit. of the rhizomes of *H. panacis-scandens*.

Kasai, R. *et al, Phytochemistry*, 1987, **26**, 1371.
Kasai, R. *et al, Chem. Pharm. Bull.*, 1988, **36**, 234 (*Scandenosides*)

Cucurbit-5-ene-3,11,24,25-tetrol C-10143



$C_{30}H_{52}O_4$ M 476.738

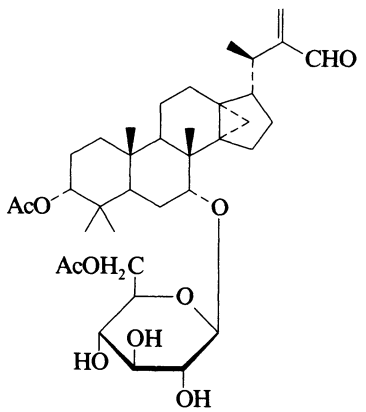
(3β,11α,24R)-form

3-O-β-D-Glucopyranoside, 24-O-[β-D-glucopyranosyl-(1→2)[β-D-glucopyranosyl-(1→6)]-β-D-glucopyranoside]: [126105-12-2]. ***Siamenoside I***
$C_{54}H_{92}O_{24}$ M 1125.306
Constit. of *Siraitia grosvenori* and *S. siamensis*. Powder. $[\alpha]_D^{22}$ +4.9° (c, 1.03 in MeOH).

Kasai, R. *et al, Agric. Biol. Chem.*, 1989, **53**, 3347.
Matsumoto, K. *et al, Chem. Pharm. Bull.*, 1990, **38**, 2030.

Cumindyoside A C-10144

[144608-19-5]

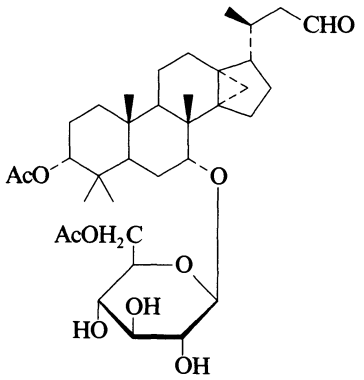


$C_{37}H_{56}O_{10}$ M 660.843
Constit. of *Dysoxylum cumingianum*. Amorph. powder. $[\alpha]_D^{21}$ −64.5° (c, 0.55 in MeOH).

Kashiwada, Y. *et al, J. Org. Chem.*, 1992, **57**, 6946 (*isol, pmr, cmr*)

Cumindyoside B C-10145

[144587-06-4]

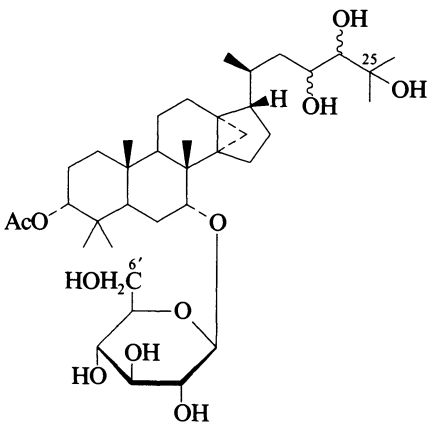


$C_{36}H_{56}O_{10}$ M 648.832
Constit. of *Dysoxylum cumingianum*. Amorph. powder. $[\alpha]_D^{21}$ −57.9° (c, 0.42 in MeOH).

Kashiwada, Y. *et al, J. Org. Chem.*, 1992, **57**, 6946 (*isol, pmr, cmr*)

Cumingianoside B C-10146

[144587-03-1]



$C_{38}H_{64}O_{11}$ M 696.917
Constit. of *Dysoxylum cumingianum*. Amorph. powder. $[\alpha]_D^{22}$ −54.6° (c, 0.9 in MeOH).

6'-Ac: [144608-17-3]. ***Cumingianoside A***
$C_{40}H_{66}O_{12}$ M 738.954
Constit. of *D. cumingianum*. Amorph. powder. $[\alpha]_D$ −47.3° (c, 1.1 in MeOH).

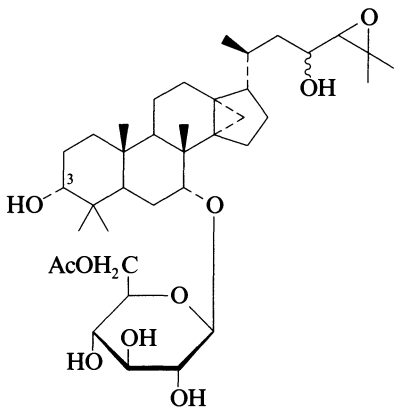
25-Me ether 6'-Ac: [144587-02-0]. ***Cumingianoside C***
$C_{41}H_{68}O_{12}$ M 752.981
Constit. of *D. cumingianum*. Amorph. powder. $[\alpha]_D$ −46.7° (c, 1.1 in MeOH).

25-Deoxy, 25,26-didehydro, 6'-Ac: [144608-18-4]. ***Cumingianoside D***
$C_{40}H_{64}O_{11}$ M 720.939
From *D. cumingianum*. Amorph. powder. $[\alpha]_D^{22}$ −39.2° (c, 1.05 in MeOH).

Kashiwada, Y. *et al, J. Org. Chem.*, 1992, **57**, 6946 (*isol, pmr, cmr*)

Cumingianoside F C-10147

[144587-05-3]



$C_{38}H_{62}O_{10}$ M 678.902
Constit. of *Dysoxylum cumingianum*. Amorph. powder. $[\alpha]_D^{21}$ −35.0° (c, 0.62 in MeOH).

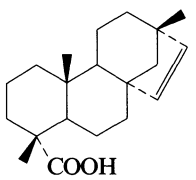
3-Ac: [144587-04-2]. ***Cumingianoside E***
$C_{40}H_{64}O_{11}$ M 720.939
Constit. of *D. cumingianum*. Amorph. powder. $[\alpha]_D^{22}$ −39.6° (c, 1.04 in MeOH).

Kashiwada, Y. *et al*, *J. Org. Chem.*, 1992, **57**, 6946 (*isol, pmr, cmr*)

15-Cupressen-19-oic acid C-10148

20-Cupressenoic acid (incorr.)

[59331-36-1]



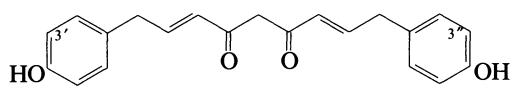
$C_{20}H_{30}O_2$ M 302.456
Constit. of *Dimorphotheca pluvialis*. Cryst. (petrol) (as Me ester). Mp 97° (Me ester).

Bohlmann, F. *et al*, *Chem. Ber.*, 1976, **109**, 1446 (*isol, pmr*)

Curcurmin III C-10149

1,9-Bis(4-hydroxyphenyl)-2,7-nonadiene-4,6-dione, 9CI

[91884-88-7]



$C_{21}H_{20}O_4$ M 336.387
Isol. from the rhizomes of *Curcuma longa*. Chloretic. Yellow pigment.

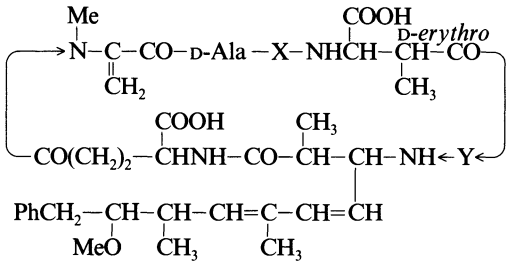
3′-Methoxy: [91884-87-6]. ***Curcumin II***
$C_{22}H_{22}O_5$ M 366.413
Isol. from the rhizomes of *C. longa*. Chloretic. Yellow pigment.

3′,3″-Dimethoxy: [91884-86-5]. *Curcumin*. ***Curcumin I***
$C_{23}H_{24}O_6$ M 396.439
Isol. from the rhizomes of *C. longa*. Chloretic. Yellow pigment.

Gorchakova, N.K. *et al*, *Farmatsiya (Moscow)*, 1984, **33**, 12; *CA*, **101**, 126880 (*isol, props*)
Nagabhusan, M. *et al*, *Mutat. Res.*, 1988, **202**, 163 (*props*)

Cyanoginosin C-10150

Updated Entry replacing C-02194



Cyanoginosin	LA	X = L-Leu, Y = L-Ala
	LR	X = L-Leu, Y = L-Arg
	YR	X = L-Tyr, Y = L-Arg
	YA	X = L-Tyr, Y = L-Ala
	YM	X = L-Tyr, Y = L-Met
	RR	X = Y = L-Arg
	LAba	X = L-Leu, Y = L-MeAla
	FR	X = L-Phe, Y = L-Arg
	AR	X = L-Ala, Y = L-Arg

Peptide toxin complex. Prod. by *Microcystis aeruginosa*. Hepatotoxin; causes death to cattle. Similar to Nodularin, N-00534.

▷ Highly toxic, LD_{50} 0.056 mg/kg (mice).

Cyanoginosin LA [96180-79-9]
Aeruginosin. Microcystin LA. Toxin BE 4
$C_{46}H_{67}N_7O_{12}$ M 910.075
No phys. props. reported.

Cyanoginosin LR [101043-37-2]
Akerstox. Microcystin LR. Toxin BE 2. Toxin T 17. Toxin I(MA)
$C_{49}H_{74}N_{10}O_{12}$ M 995.183
No phys. props. reported.

Cyanoginosin YR [101064-48-6]
Microcystin YR. Toxin BE 3
$C_{52}H_{72}N_{10}O_{13}$ M 1045.200
No phys. props. reported.

Cyanoginosin YA [101043-36-1]
Toxin BE 5. Microcystin YA
$C_{49}H_{65}N_7O_{13}$ M 960.092
No phys. props. reported.

Cyanoginosin YM [101043-35-0]
Microcystin YM
$C_{51}H_{69}N_7O_{13}S$ M 1020.211
No phys. props. reported.

Cyanoginosin RR [111755-37-4]
Cyanoviridin RR. Microcystin RR
$C_{49}H_{75}N_{13}O_{12}$ M 1038.211
Also isol. from *M. viridis*. Toxin. $[\alpha]_D$ −100° (c, 0.52 in MeOH).

Cyanoginosin LAba [111982-69-5]
Microcystin LAba
$C_{47}H_{69}N_7O_{12}$ M 924.102

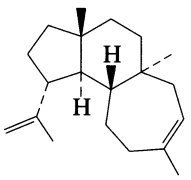
Cyanoginosin FR [111982-70-8]
Microcystin FR
$C_{52}H_{72}N_{10}O_{12}$ M 1029.201
$[\alpha]_D^{26}$ −67.0° (c, 0.026 in MeOH).

Cyanoginosin AR [138258-91-0]
Microcystin AR
$C_{46}H_{68}N_{10}O_{12}$ M 953.103
$[\alpha]_D^{26}$ −80.0° (c, 0.04 in MeOH).

Elleman, T.C. *et al*, *Aust. J. Biol. Sci.*, 1978, **31**, 209 (*isol, props*)
Runnegar, M.T.C. *et al*, *S. Afr. J. Sci.*, 1982, **78**, 363 (*props*)

Botes, D.P. *et al*, *Toxicon*, 1982, **20**, 945, 1037 (*isol*)
Botes, D.P. *et al*, *J. Chem. Soc., Perkin Trans. 1*, 1984, 2311; 1985, 2747 (*struct, nmr, ms*)
Kusumi, T. *et al*, *Tetrahedron Lett.*, 1987, **28**, 4695 (*Cyanoviridin RR*)
Rinehart, K.L. *et al*, *J. Am. Chem. Soc.*, 1988, **110**, 8557.
Painuly, P. *et al*, *Tetrahedron Lett.*, 1988, **29**, 11 (*Cyanoginosin RR*)
Tsukuda, T. *et al*, *Tetrahedron Lett.*, 1989, **30**, 4245 (*config*)
Namikoshi, M. *et al*, *J. Org. Chem.*, 1990, **55**, 6135; 1992, **57**, 866 (*isol, ms, pmr*)

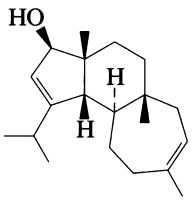
12,18-Cyathadiene C-10151



$C_{20}H_{32}$ M 272.473
Constit. of a *Higginsia* sp. Oil. $[\alpha]_D$ −28° (c, 0.4 in $CHCl_3$).

Cassidy, M.P. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 1190 (*isol, pmr, cmr*)

2,12-Cyathadien-1-ol C-10152

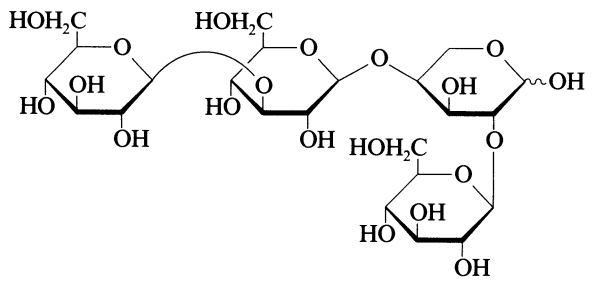


$C_{20}H_{32}O$ M 288.472
1β-form [144967-83-9]
Constit. of *Myrmekioderma styx*. $[\alpha]_D^{22}$ +38.8° (c, 0.05 in CH_2Cl_2).
12α,13α-Epoxide 1-Ac: [144967-85-1]. ***1β-Acetoxy-12α,13α-epoxy-2-cyathene***
$C_{22}H_{34}O_3$ M 346.509
Constit. of *M. styx*. $[\alpha]_D^{22}$ +69.4° (c, 0.018 in CH_2Cl_2).

Sennett, S.H. *et al*, *J. Nat. Prod.* (*Lloydia*), 1992, **55**, 1421 (*isol, pmr, cmr*)

Cyclamotetraose C-10153

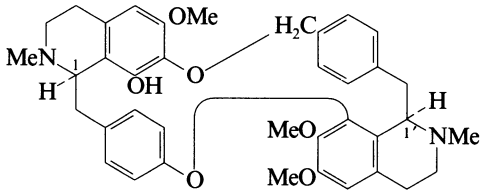
β-D-Glucopyranosyl-(1→3)-β-D-glucopyranosyl-(1→4)-[β-D-glucopyranosyl-(1→2)]-L-arabinose
[23643-62-1]



Pyranose-*form*
$C_{23}H_{40}O_{20}$ M 636.557
Sugar present in Cyclamin (see Cyclamiretin A, C-02212). $[\alpha]_D^{20}$ +12.2° (c, 0.96 in H_2O).

Tschesche, R. *et al*, *Justus Liebigs Ann. Chem.*, 1969, **721**, 194.

Cycleaneonine C-10154

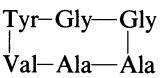


(1*R*,1′*R*)-*form*
$C_{38}H_{42}N_2O_6$ M 622.760
(1R,1′R)-form
Alkaloid from roots of *Cyclea sutchuenensis* (Menispermaceae). Cytotoxic. Amorph. powder. $[\alpha]_D^{26}$ −119° (c, 1.28 in $CHCl_3$).
(1R,1′S)-form
Isocycleaneonine
Alkaloid from roots of *C. sutchuenensis* (Menispermaceae). Cytotoxic. Amorph. powder. $[\alpha]_D^{26}$ +5.1° (c, 0.12 in $CHCl_3$).
(1S,1′S)-form
Alkaloid from stems of *C. racemosa* (Menispermaceae). Cytotoxic. Amorph. powder. $[\alpha]_D^{23}$ +86.8° ($CHCl_3$).

Wang, X.-K. *et al*, *Phytochemistry*, 1993, **33**, 1249 (*isol, uv, ir, pmr, ms, struct*)

Cyclo(alanylalanylvalyltyrosylglycylglycyl) C-10155

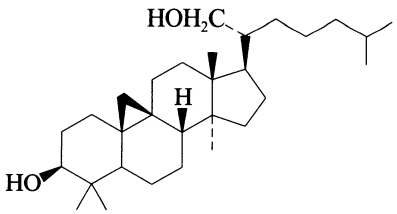
Stellaria *Cyclopeptide*
[137476-73-4]



$C_{24}H_{34}N_6O_7$ M 518.569
Isol. from the roots of *Stellaria dichotoma* var. *lanceolata*.

Wang, Y. *et al*, *CA*, 1992, **116**, 231870p (*isol*)

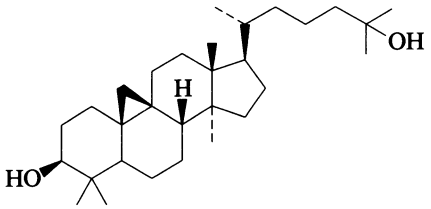
Cycloartane-3,21-diol C-10156



$C_{30}H_{52}O_2$ M 444.740
3β-form [148044-48-8]
Constit. of *Guarea trichilioides*. Cryst. Mp 88-91°. $[\alpha]_D^{25}$ +20.0° (c, 1.06 in $CHCl_3$).

Furlan, N. *et al*, *Phytochemistry*, 1993, **32**, 1519 (*isol, pmr, cmr*)

Cycloartane-3,25-diol C-10157



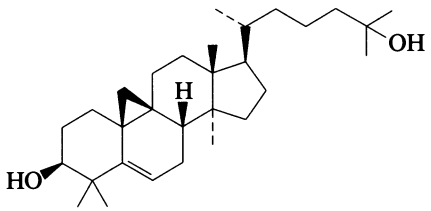
$C_{30}H_{52}O_2$ M 444.740

3β-form

Constit. of mature wheat straw (*Triticum aestivum*).

Gaspar, E.M.M. *et al*, *Phytochemistry*, 1993, **34**, 523.

Cycloart-5-ene-3,25-diol C-10158



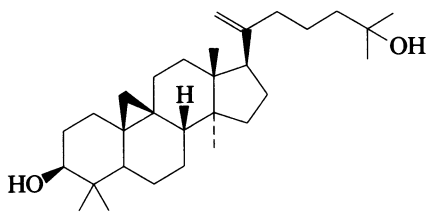
$C_{30}H_{50}O_2$ M 442.724

3β-form

Constit. of mature wheat straw (*Triticum aestivum*).

Gaspar, E.M.M. *et al*, *Phytochemistry*, 1993, **34**, 523 (*isol*)

Cycloart-20-ene-3,25-diol C-10159



$C_{30}H_{50}O_2$ M 442.724

3β-form [146539-98-2]

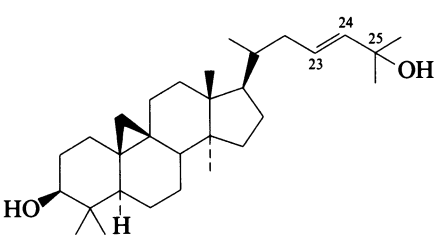
Constit. of *Amberboa ramosa*. Cryst. Mp 169-170°. $[\alpha]_D^{25}$ −18° (c, 0.03 in $CHCl_3$).

Akhtar, N. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 295 (*isol, pmr, cmr, ms*)

Cycloart-23-ene-3,25-diol C-10160

Updated Entry replacing C-02238

9,19-Cyclolanost-23-ene-3,25-diol, 9CI



$C_{30}H_{50}O_2$ M 442.724

(3β,23E)-form [14599-48-5]

Isol. from *Tillandsia usneoides* and *Tricholepsis glaberrima*. Prisms (EtOAc). Mp 200-204°. $[\alpha]_D^{27}$ +38° (c, 0.85 in $CHCl_3$).

3-Ac: [26531-71-5].

$C_{32}H_{52}O_3$ M 484.761

Isol. from roots of *Sapium insigne*. Prisms (hexane). Mp 148-150°. $[\alpha]_D^{22}$ +43° (c, 0.75 in $CHCl_3$).

Di-Ac: Cryst. (Et_2O). Mp 105-108°.

25-Me ether: ***25-Methoxycycloart-23-en-3β-ol***

$C_{31}H_{52}O_2$ M 456.751

Isol. from *Tillandsia usneoides*. Needles (MeOH/Et_2O) (as acetate). Mp 152-154° (acetate). $[\alpha]_D^{28}$ +48° (c, 0.75 in $CHCl_3$) (acetate).

3-Ketone: ***25-Hydroxycycloart-23-en-3-one***

$C_{30}H_{48}O_2$ M 440.708

Constit. of *Guarea trichiloides*. Cryst. Mp 116-118°. $[\alpha]_D^{25}$ +15.3° (c, 1.9 in $CHCl_3$).

Djerassi, C. *et al*, *J. Chem. Soc.*, 1962, 4034 (*isol, ir, pmr, struct*)

Fourrey, J.L. *et al*, *Tetrahedron*, 1970, **26**, 3839 (*synth*)

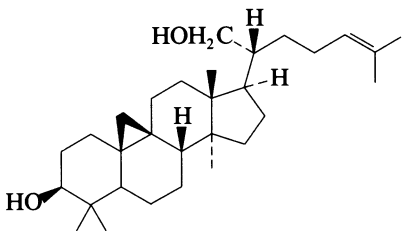
Chawla, A.S. *et al*, *Planta Med.*, 1978, **34**, 109 (*isol*)

Srivastava, S.K. *et al*, *J. Nat. Prod.* (*Lloydia*), 1985, **48**, 496 (*acetate, isol, pmr*)

Furlan, M. *et al*, *Phytochemistry*, 1993, **32**, 1519.

Cycloart-24-ene-3,21-diol C-10161

Updated Entry replacing O-00646



$C_{30}H_{50}O_2$ M 442.724

3β-form [125292-57-1]

Constit. of *Monocyclanthus vignei*. Cryst. ($CHCl_3$). Mp 130°. $[\alpha]_D^{21}$ +41° (c, 0.96 in $CHCl_3$).

21-Aldehyde: [125292-62-8]. ***3-Hydroxycycloart-24-en-21-al***

$C_{30}H_{48}O_2$ M 440.708

Constit. of *M. vignei*. Cryst. (Me_2CO). Mp 79-81°. $[\alpha]_D^{21}$ +47° (c, 0.28 in $CHCl_3$).

21-Carboxylic acid: [125302-31-0]. ***3-Hydroxycycloart-24-en-21-oic acid***

$C_{30}H_{48}O_3$ M 456.707

Constit. of *M. vignei* and *Lansium domesticum*. Skin tumour inhibitor. Cryst. ($CHCl_3$). Mp 185-186° (181°). $[\alpha]_D^{21}$ +23° (c, 0.48 in $CHCl_3$) (+18.7°).

21-Aldehyde, 3-ketone: [125292-61-7]. ***3-Oxocycloart-24-en-21-al***

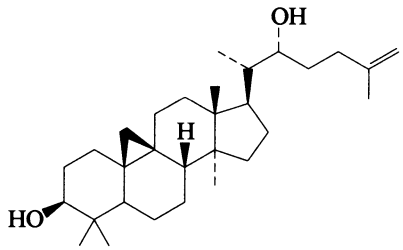
$C_{30}H_{46}O_2$ M 438.692

Constit. of *M. vignei*. Cryst. (Me_2CO). Mp 80-82°. $[\alpha]_D^{21}$ +20° (c, 0.72 in $CHCl_3$).

Nishizawa, M. *et al*, *Tetrahedron Lett.*, 1989, **30**, 5615 (*cryst struct*)

Achenbach, H. *et al*, *Phytochemistry*, 1992, **31**, 4263 (*isol, pmr, cmr*)

Cycloart-25-ene-3,22-diol C-10162



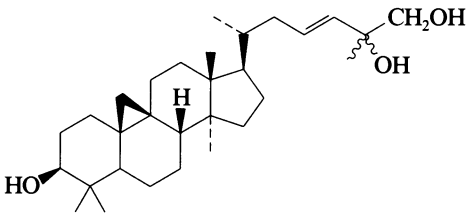
$C_{30}H_{50}O_2$ M 442.724

(3β,22R)-form [146539-97-1]

Constit. of *Amberboa ramosa*. Cryst. Mp 180-181°. $[\alpha]_D^{20}$ +20.6° (c, 0.87 in $CHCl_3$).

Akhtar, N. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 295 (*isol, pmr, cmr, ms*)

Cycloart-23-ene-3,25,26-triol C-10163



$C_{30}H_{50}O_3$ M 458.723

(3β,25ξ)-form

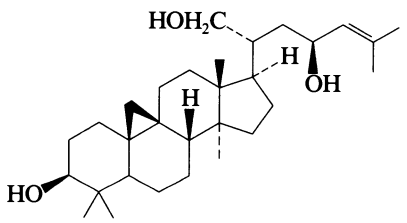
3-Me ether: [142950-85-4]. *3-Methoxycycloart-23-ene-25,26-diol*

$C_{31}H_{52}O_3$ M 472.750

Constit. of *Artemisia argyi*. Cryst. Mp 146-147°. $[\alpha]_D^{20}$ +87° (c, 0.84 in $CHCl_3$).

Tan, R.X. *et al*, *Chin. Chem. Lett.*, 1992, **3**, 117 (*isol, pmr, cmr*)

Cycloart-24-ene-3,21,23-triol C-10164



$C_{30}H_{50}O_3$ M 458.723

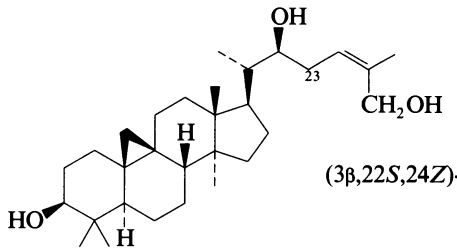
(3β,23R)-form [146257-57-0]

Constit. of *Monocylanthus vignei*. Cryst. (MeOH). Mp 204-205°. $[\alpha]_D^{21}$ +38° (c, 0.6 in $CHCl_3$).

Achenbach, H. *et al*, *Phytochemistry*, 1992, **31**, 4263 (*isol, pmr, cmr*)

Cycloart-24-ene-3,22,26-triol C-10165

Updated Entry replacing D-01656



(3β,22*S*,24*Z*)-*form*

$C_{30}H_{50}O_3$ M 458.723

(3β,22S,24Z)-form [146453-58-9] ***Thalictogenin a***

Sapogenin from *Thalictrum thunbergii*. Needles. Mp 202-204°. $[\alpha]_D^{19}$ +30.2° (c, 0.5 in Py).

3-O-[β-D-Quinovopyranosyl-(1→6)-β-D-glucopyranosyl-(1→4)-β-D-fucopyranoside]: [146445-76-3]. ***Thalictoside A***

$C_{48}H_{80}O_{16}$ M 913.150

Constit. of *T. thunbergii*. Amorph. powder. $[\alpha]_D^{25}$ −1.3° (c, 0.25 in Py).

3-O-[β-D-Glucopyranosyl-(1→6)-[α-L-rhamnopyranosyl-(1→2)]-β-D-glucopyranosyl-(1→4)-β-D-fucopyranoside]: [146469-97-8]. ***Thalictoside C***

$C_{54}H_{90}O_{21}$ M 1075.292

Constit. of *T. thunbergii*. Amorph. powder. $[\alpha]_D^{26}$ −23.5° (c, 0.48 in Py).

(3α,22ξ,24E)-form

26-Carboxylic acid: ***3α,22-Dihydroxycycloart-24-en-26-oic acid***

$C_{30}H_{48}O_4$ M 472.707

Constit. of *Mangifera indica*. Cryst. ($CHCl_3$/MeOH). Mp 218-220°. $[\alpha]_D^{30}$ +27.5° (c, 0.8 in $CHCl_3$).

(3β,22ξ,24E)-form

26-Carboxylic acid: ***3β,22-Dihydroxycycloart-24-en-26-oic acid***

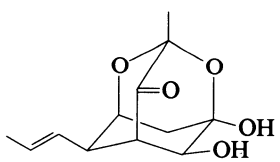
$C_{30}H_{48}O_4$ M 472.707

Constit. of *M. indica*.

Anjaneyulu, V. *et al*, *Phytochemistry*, 1989, **28**, 1471.
Yoshimitsu, H. *et al*, *Chem. Pharm. Bull.*, 1992, **40**, 2465.

Cycloarthropsadiol C C-10166

[144476-63-1]

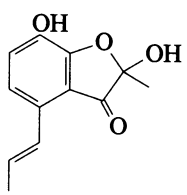


$C_{12}H_{16}O_5$ M 240.255

Metab. of *Arthropsis truncata*. Oil. $[\alpha]_D^{25}$ −38.7° (c, 0.91 in MeOH).

Ayer, W.A. *et al*, *Can. J. Chem.*, 1992, **70**, 1338 (*isol, pmr, cmr*)

Cycloarthropsone C-10167

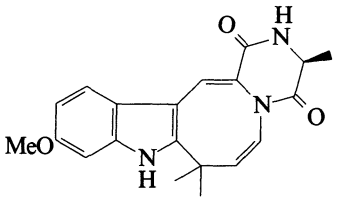


$C_{12}H_{12}O_4$ M 220.224

Metab. of *Arthropsis truncata*. Yellow solid. Mp 168-172°.
Ayer, W.A. *et al*, *Can. J. Chem.*, 1992, **70**, 1338, 1348 (*isol, pmr, cmr, biosynth*)

Cycloechinulin C-10168

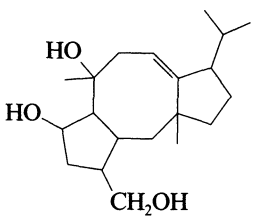
[143086-29-7]



$C_{20}H_{21}N_3O_3$ M 351.404
Metab. from the sclerotia of *Aspergillus ochraceus*. Shows moderate activity against the lepidopteran crop pest *Helicoverpa zea*. Yellow solid. $[\alpha]_D$ −23.3° (c, 0.06 in $CHCl_3$).
De Guzman, F.S. *et al*, *J. Nat. Prod.* (*Lloydia*), 1992, **55**, 931 (*isol, uv, pmr, cmr, ms, struct*)

Cyclooctatin C-10169

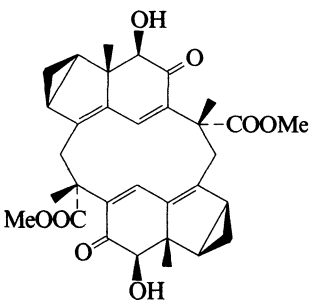
[139552-97-9]



$C_{20}H_{34}O_3$ M 322.487
Prod. by *Streptomyces melanosporofaciens*.
Lysophospholipase inhibitor. Powder. Mp 183-185° dec. $[\alpha]_D^{27}$ +90.6° (c, 0.5 in MeOH).
Aoyagi, T. *et al*, *J. Antibiot.*, 1992, **45**, 1587, 1703 (*isol, struct*)

Cycloshizukaol A C-10170

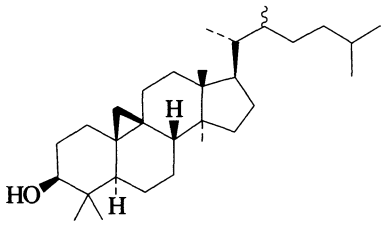
[150033-85-5]



$C_{32}H_{36}O_8$ M 548.632
Constit. of *Chloranthus serratus*. Pale yellow powder. Mp 88-90°. $[\alpha]_D^{23}$ +310° (c, 0.27 in $CHCl_3$).
Kawabata, J. *et al*, *Phytochemistry*, 1993, **32**, 1347 (*isol, pmr, cmr*)

Cycloswietenol C-10171

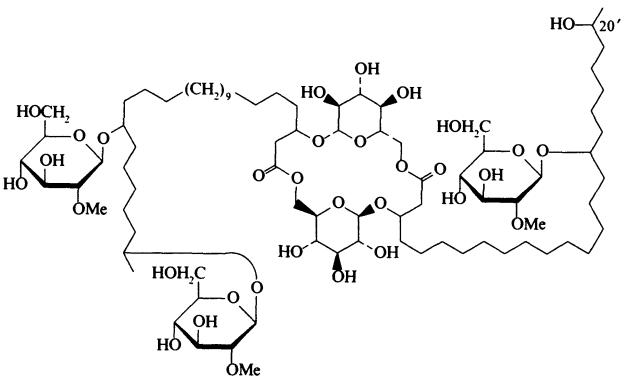
Updated Entry replacing C-02426
22-Methylcycloartan-3β-ol
[62875-16-5]



$C_{31}H_{54}O$ M 442.767
Constit. of *Swietenia mahagoni*. Cryst. (MeOH). Mp 143-145°. $[\alpha]_D$ +55° (c, 1 in $CHCl_3$).
Anjaneyulu, A.S.R. *et al*, *Indian J. Chem., Sect. B*, 1978, **16**, 650 (*isol*)
Lakshminarayana, V. *et al*, *Org. Magn. Reson.*, 1981, **17**, 77 (*cmr*)

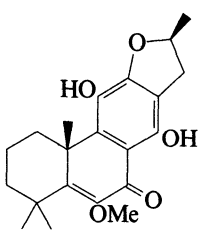
Cycloviracin B_1 C-10172

BU 4224V-B_1. Antibiotic BU 4224V-B_1
[142382-45-4]



$C_{83}H_{152}O_{33}$ M 1678.094
Macrolide-glycolipid antibiotic. Prod by *Kibdelosporangium albatum*. Antiviral agent. Powder + $2H_2O$. Mp 84-85°. $[\alpha]_D^{26}$ −15.6° (c, 0.5 in MeOH).
20'-Ketone: [142382-46-5]. ***Cycloviracin B_2.*** *BU 4224V-B_2. Antibiotic BU 4224V-B_2*
$C_{83}H_{150}O_{33}$ M 1676.078
From *K. albatum*. Antiviral agent. Powder + $2H_2O$. Mp 82-83°. $[\alpha]_D^{26}$ −16.1° (c, 0.5 in MeOH).
Tsunakawa, M. *et al*, *J. Antibiot.*, 1992, **45**, 1467, 1472 (*isol, pmr, cmr, struct, props*)

Cyrtophyllone A C-10173



$C_{21}H_{26}O_5$ M 358.433
Constit. of *Clerodendron cyrtophyllum*. Yellow cryst. ($CHCl_3$). Mp 204-206°.
Tian, X. *et al*, *Chem. Pharm. Bull.*, 1993, **41**, 1415 (*isol, pmr, cmr, cryst struct*)

Cytifolioside C-10174

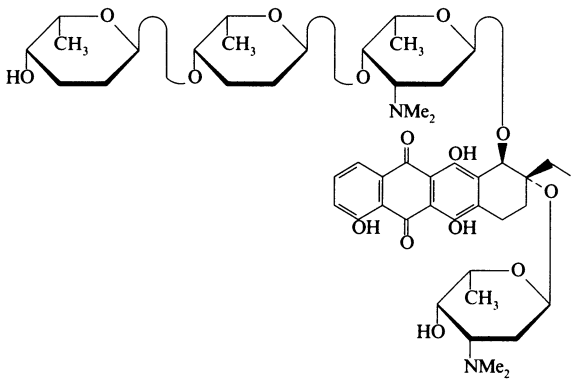
$C_{27}H_{32}O_{13}$ M 564.542

May possess an isoflavonoid struct. Constit. of the leaves and fruit of *Cytisus sessifolius*. Cryst. + $\frac{1}{2}H_2O$. Mp 245°.

Paris, R.R. *et al*, *C. R. Hebd. Seances Acad. Sci.*, 1962, **254**, 3031.

Cytorhadin X C-10175

[133914-58-6]



$C_{48}H_{68}N_2O_{15}$ M 913.070

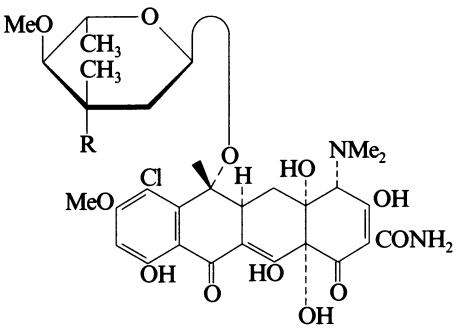
Anthracycline antibiotic. Prod. by *Streptomyces* HPL Y-11472. Cytotoxic. Orange powder.

Hedtmann, U. *et al*, *J. Antibiot.*, 1992, **45**, 1373 (*isol, struct, props*)

D

Dactylocycline A D-10001

[125622-12-0]



R = NHOH

$C_{31}H_{40}ClN_3O_{13}$ M 698.122

Tetracycline antibiotic. Prod. by *Dactylosporangium* sp. Active against gram-positive bacteria.

Tymiak, A.A. *et al, J. Antibiot.*, 1992, **45**, 1892, 1899, 1907 (*isol, pmr, cmr, ms, struct, props*)

Dactylocycline B D-10002

[125622-13-1]

As Dactylocycline A, D-10001 with

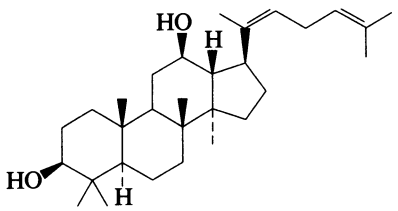
R = NO_2

$C_{31}H_{38}ClN_3O_{14}$ M 712.106

Tetracycline antibiotic. Prod. by *Dactylosporangium* sp. Active against gram-positive bacteria.

Tymiak, A.A. *et al, J. Antibiot.*, 1992, **45**, 1892, 1899, 1907 (*isol, pmr, cmr, ms, struct, props*)

Dammara-20(22),24-diene-3,12-diol D-10003



$C_{30}H_{50}O_2$ M 442.724

(3β,12β,20Z)-form

3-O-β-D-Glucopyranoside: [105558-26-7]. ***Ginsenoside Rh$_3$***

$C_{36}H_{60}O_7$ M 604.866

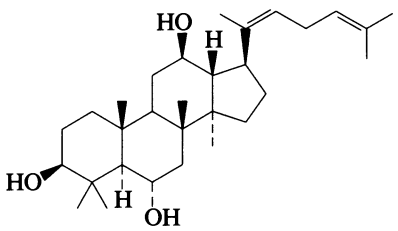
Constit. of *Panax ginseng.*

[89951-13-3, 108266-93-9]

Atopkina, L.N. *et al, Carbohydr. Res.*, 1988, **177**, 101 (*synth, pmr, cmr*)

Zhang, S. *et al, Planta Med.*, 1990, **56**, 298 (*Ginsenoside Rh$_3$*)

Dammara-20(22),24-diene-3,6,12-triol D-10004



$C_{30}H_{50}O_3$ M 458.723

(3β,6α,20Z)-form

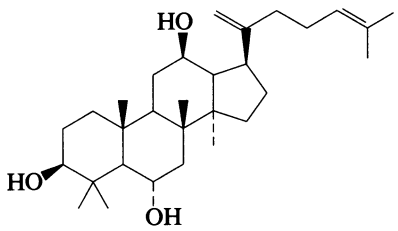
6-O-Neohesperidoside: [126223-28-7]. ***Ginsenoside F$_4$.*** *Ginsenoside Rg$_4$*

$C_{42}H_{70}O_{12}$ M 767.008

Constit. of *Panax ginseng.* Powder. Mp 177-180°. $[\alpha]_D^{20}$ −10.8° (c, 0.5 in MeOH).

Zhang, S. *et al, Planta Med.*, 1990, **56**, 298.

Dammara-20,24-diene-3,6,12-triol D-10005



$C_{30}H_{50}O_3$ M 458.723

(3β,6α,12β)-form

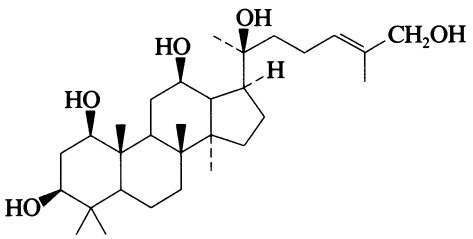
6-O-[α-L-Rhamnopyranosyl-(1→2)-β-D-glucopyranoside]: [147419-93-0].

$C_{42}H_{70}O_{12}$ M 767.008

Constit. of *Panax ginseng.* Amorph.

Zhao, Y.Q. *et al, Chin. Chem. Lett.*, 1992, **3**, 887.

Dammar-24-ene-1,3,12,20,26-pentol D-10006



$C_{30}H_{52}O_5$ M 492.738

(1β,3β,12β,20S,24E)-form

20-O-[β-D-Glucopyranosyl-(1→6)-β-D-glucopyranoside]: [150626-50-9]. ***Gycomoside I***

$C_{42}H_{72}O_{15}$ M 817.022

Constit. of *Gynostemma compressum.* Needles. Mp 196-197°. $[\alpha]_D^{22}$ +0.031° (c, 1.67 in MeOH).

Ding, S.L. *et al, Chin. Chem. Lett.*, 1992, **3**, 813 (*isol, pmr, cmr*)

Ding, S. *et al, Planta Med.*, 1993, **59**, 373.

Dammar-25-ene-3,6,12,20,24-pentol D-10007

$C_{30}H_{52}O_5$ M 492.738

(3β,6α,12β,20S,24ξ)-form

20-O-β-D-Glucopyranoside: [69987-14-0]. ***Ginsenoside M_{7cd}***
$C_{36}H_{62}O_{10}$ M 654.880
Isol. from *Panax ginseng*. Powder + $1\frac{1}{2}H_2O$. $[\alpha]_D^{21}$ +29.0° (c, 0.33 in MeOH).

Yahara, S. *et al, Chem. Pharm. Bull.*, 1979, **27**, 88.

Dammar-23-ene-3,12,20,25-tetrol D-10008

Updated Entry replacing D-00044

$C_{30}H_{52}O_4$ M 476.738

(3α,12β,20S,23E)-form [38736-83-3] ***Betulafolienetetrol B***
Constit. of *Betula platyphylla*. Cryst. ($CHCl_3$). Mp 130-133°. $[\alpha]_D$ −4.9° ($CHCl_3$).

3-Malonyl, 12-Ac:
$C_{35}H_{56}O_8$ M 604.823
Constit. of *B. pendula*. Amorph. powder. $[\alpha]_D^{24}$ −18.0° (c, 0.0074 in $CHCl_3$).

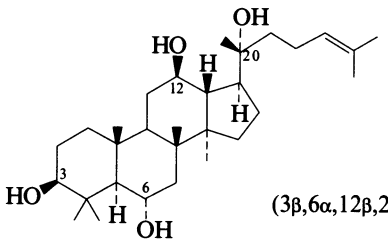
(3β,12β,20S,23ξ)-form

3-O-Sophoroside, 20-O-β-D-glucopyranoside: [93376-72-8]. ***Ginsenoside M_{6a}***
$C_{48}H_{82}O_{19}$ M 963.164
Isol. from *Panax ginseng*.

Ikekawa, N. *et al, Phytochemistry*, 1972, **11**, 3037.
Rickling, B. *et al, Planta Med.*, 1993, **59**, 76 (*isol, pmr, cmr*)

Dammar-24-ene-3,6,12,20-tetrol D-10009

Updated Entry replacing D-00046



(3β,6α,12β,20*R*)-*form*

$C_{30}H_{52}O_4$ M 476.738

(3β,6α,12β,20R)-form [1453-93-6] ***Protopanaxatriol***
Cryst. ($CHCl_3$). Mp 233-235°. $[\alpha]_D^{16}$ −8.2° ($CHCl_3$).

(3β,6α,12β,20S)-form [34080-08-5]
Noncryst. $[\alpha]_D^{21}$ +42.9° ($CHCl_3$).

6,20-Di-O-β-D-glucopyranoside: [22427-39-0]. ***Ginsenoside A_2.*** *Panaxoside A. Sanchinoside C_1*
$C_{42}H_{72}O_{14}$ M 801.022
Constit. of *Panax ginseng*. Powder. Mp 194-196.5°. $[\alpha]_D^{19.5}$ +32° (Py).
▷ LD_{50} (mus, ipr) 405 mg/kg. LY9537200.

6-O-[α-L-Rhamnopyranosyl-(1→2)-β-D-glucopyranoside], 20-O-β-D-glucopyranoside: [52286-59-6]. ***Ginsenoside B_2.*** *Chikusetsusaponin IVe*
$C_{48}H_{82}O_{18}$ M 947.165
Constit. of *P. ginseng*. Cryst. (EtOH aq.). Mp 201-203°. $[\alpha]_D^{30}$ 0° (c, 1 in MeOH).

6-O-[β-D-Glucopyranosyl-(1→2)-β-D-glucopyranoside]: [52286-58-5]. ***Ginsenoside R_f***
$C_{42}H_{72}O_{14}$ M 801.022
Constit. of *P. ginseng*. Powder (Me_2CO). Mp 197-198°. $[\alpha]_D^{30}$ +7° (c, 1 in MeOH).

6-O-[α-L-Rhamnopyranosyl-(1→2)-β-D-glucopyranoside]: ***Ginsenoside C.*** *Chikusetsusaponin I. Ginsenoside R_{g2}*
$C_{42}H_{72}O_{13}$ M 785.023
Constit. of *P. ginseng*. Cryst. (EtOH). Mp 187-189°. $[\alpha]_D^{30}$ +5.5° (c, 1 in MeOH).

3-O-[β-D-Glucopyranosyl-(1→2)-β-D-glucopyranoside], 20-O-[β-D-xylopyranosyl-(1→6)-β-D-glucopyranoside]: [68406-26-8]. ***Ginsenoside R_{b3}***
$C_{53}H_{90}O_{23}$ M 1095.280
Constit. of *P. ginseng*. Powder (propan-2-ol). Mp 193-195°. $[\alpha]_D^{28}$ +19.4° (c, 1 in MeOH).

6-O-[β-D-Xylopyranosyl-(1→2)-β-D-glucopyranoside], 20-O-β-D-glucopyranoside: [80418-24-2]. ***Notoginsenoside R_1***
$C_{47}H_{80}O_{18}$ M 933.138
Constit. of roots of *P. notoginseng*. Needles (H_2O). Mp 215-217°. $[\alpha]_D^{25}$ +15.0° (c, 1.0 in MeOH).

6-O-[β-D-Xylopyranosyl-(1→2)-β-D-glucopyranoside]: [80418-25-3]. ***Notoginsenoside R_2***
$C_{41}H_{70}O_{13}$ M 770.996
Constit. of *P. notoginseng*. Powder. $[\alpha]_D^{15}$ +10.3° (c, 1.0 in MeOH).

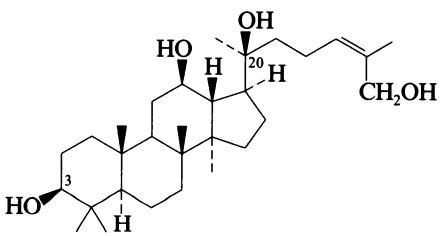
6-O-β-D-Glucopyranoside: [63223-86-9]. ***Ginsenoside Rh_1.*** *Sanchinoside B_2*
$C_{36}H_{62}O_9$ M 638.880
Isol. from *P.* spp. Powder + $1\frac{1}{2}H_2O$. $[\alpha]_D^{22}$ +20° (c, 0.88 in MeOH).

20-O-β-D-Glucopyranoside: [53963-43-2]. ***Ginsenoside F_1***
$C_{36}H_{62}O_9$ M 638.880
Isol. from *P.* spp. Powder + $1H_2O$. $[\alpha]_D^{25}$ +36.6° (c, 1.12 in MeOH).

20-O-Vicianoside: [62025-50-7]. ***Ginsenoside F_3***
$C_{41}H_{70}O_{13}$ M 770.996
Isol. from *P.* spp. Powder + $3H_2O$. $[\alpha]_D^{25}$ +26.5° (c, 0.98 in MeOH).

Nagai, Y. *et al, Tetrahedron*, 1971, **27**, 881 (*isol*)
Sanada, S. *et al, Chem. Pharm. Bull.*, 1974, **22**, 2407; 1978, **26**, 1694 (*isol*)
Lin, T.D. *et al, Chem. Pharm. Bull.*, 1976, **24**, 253 (*isol*)
Yahara, S. *et al, Chem. Pharm. Bull.*, 1976, **24**, 2204; 1979, **27**, 88 (*Ginsenosides*)
Zhou, J. *et al, Chem. Pharm. Bull.*, 1981, **29**, 2844 (*isol*)

Dammar-24-ene-3,12,20,26-tetrol D-10010



$C_{30}H_{52}O_4$ M 476.738

(3β,12β,20S)-form

20-O-Gentiobioside: [80321-71-7]. ***Gynosaponin U***
$C_{42}H_{72}O_{14}$ M 801.022
Constit. of *Gynostemma pentaphylla*. Mp 151-153°. $[\alpha]_D^{22}$ +16.3° (c, 2.0 in MeOH).

3-O-Sophoroside, 20-O-rutinoside: [80321-66-0]. ***Gynosaponin P.*** *Gypenoside XIX*
$C_{54}H_{92}O_{23}$ M 1109.307
Constit. of *G. pentaphylla*. Mp 206-209°. $[\alpha]_D^{22}$ +8.27° (c, 2.5 in MeOH).

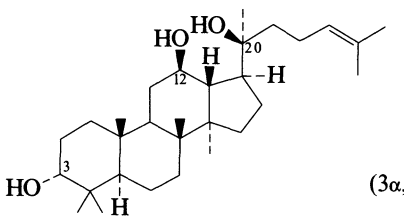
3-O-[β-D-Glucopyranosyl-(1→2)-α-L-rhamnopyranosyl-(1→6)-β-D-glucopyranoside], 20-O-rutinoside: [80321-65-9]. ***Gynosaponin O***
$C_{60}H_{102}O_{27}$ M 1255.450
Constit. of *G. pentaphylla*. Mp 202-205°. $[\alpha]_D^{22}$ −1.3° (c, 2.5 in MeOH).

3-O-[*β*-D-*Glucopyranosyl*-(*1*→*2*)-*α*-L-*rhamnopyranosyl*-(*1*→*6*)-*β*-D-*glucopyranoside*], *20*-O-*gentiobioside:* [80321-70-6]. ***Gynosaponin T***
$C_{60}H_{102}O_{28}$ M 1271.449
Constit. of *G. pentaphylla*. Mp 177-179°. $[\alpha]_D^{22}$ −2.69° (c, 1.3 in MeOH).

Ger. Pat., 3 042 117, (1981); *CA*, **96**, 24789x (*Gynosaponins*)
Takemoto, T. *et al*, *Yakugaku Zasshi*, 1983, **103**, 1015 (*Gypenosides*)

Dammar-24-ene-3,12,20-triol, 9CI D-10011

Updated Entry replacing D-00054



(3α,12β,20*S*)-*form*

$C_{30}H_{52}O_3$ M 460.739
C(20) configs. in this series are variable and difficult to determine.

(3α,12β,20S)-form [7755-01-3] ***Betulafolienetriol***
Produced from *Panax ginseng* roots and from *Betula platyphylla*. Cryst. Mp 236-238° (197-198°). $[\alpha]_D$ +20.5° (c, 1 in $CHCl_3$).

3-O-[*β*-D-*Xylopyranosyl*-(*1*→*6*)-*β*-D-*glucopyranoside*]: [59252-86-7]. ***Chikusetsusaponin Ia***
$C_{41}H_{70}O_{12}$ M 754.997
Constit. of *P. japonicum*. Cryst. ($CHCl_3$/MeOH/EtOAc). Mp 194°. $[\alpha]_D^{16}$ −3.5° (c, 1.4 in $CHCl_3$).

3-Malonyl, 12-Ac: [147199-47-1].
$C_{35}H_{56}O_7$ M 588.823
Constit. of *Betula pendula*. Amorph. powder. $[\alpha]_D^{24}$ −18.2° (c, 0.005 in $CHCl_3$).

3-Ketone: [51116-90-6]. ***12,20-Dihydroxydammar-24-en-3-one***
$C_{30}H_{50}O_3$ M 458.723
Constit. of *B. platyphylla*. Cryst. Mp 202-202°. $[\alpha]_D^{19}$ +56.0° (c, 0.93 in $CHCl_3$).

3-Ketone, 12-Ac: [127750-93-0].
$C_{32}H_{54}O_4$ M 502.776
Constit. of *B. glandulosa*. Oil. $[\alpha]_D^{25}$ +48° (c, 0.15 in CH_2Cl_2).

(3β,12β,20S)-form [6892-79-1] ***Protopanaxadiol***
Sapogenin of Ginsenosides $R_{b\text{-}1}$, $R_{b\text{-}2}$ and R_e from *P. ginseng*. Cryst. Mp 199-200°.

3-O-[*β*-D-*Glucopyranosyl*-(*1*→*2*)-*β*-D-*glucopyranoside*], *20*-O-[*β*-D-*glucopyranosyl*-(*1*→*6*)-*β*-D-*glucopyranoside*]: [41753-43-9]. ***Ginsenoside R_{b1}***. *Sanchinoside* E_1. *Gypenoside III. Gynosaponin C*
$C_{54}H_{92}O_{23}$ M 1109.307
Constit. of *P. ginseng*. Powder. Mp 197-198°. $[\alpha]_D^{22}$ +12.4° (c, 0.9 in $CHCl_3$).
▷ LD_{50} (mus, ipr) 1110 mg/kg.

3-O-[*β*-D-*Glucopyranosyl*-(*1*→*2*)-*β*-D-*glucopyranoside*], *20*-O-[*α*-L-*arabinofuranosyl*-(*1*→*6*)-*β*-D-*glucopyranoside*]: [11021-14-0]. ***Ginsenoside R_c***
$C_{53}H_{90}O_{22}$ M 1079.281
Constit. of *P. ginseng*. Powder. Mp 199-201°. $[\alpha]_D^{22}$ +1.9° (c, 1 in MeOH).
▷ LY9536300.

3-O-[*β*-D-*Glucopyranosyl*-(*1*→*2*)-*β*-D-*glucopyranoside*], *20*-O-*β*-D-*glucopyranoside:* [52705-93-8]. ***Ginsenoside R_d***. *Gypenoside VIII*
$C_{48}H_{82}O_{18}$ M 947.165
Constit. of *P. ginseng*. Powder. Mp 206-209°. $[\alpha]_D^{22}$ +19.4° (c, 1 in MeOH).

3-O-[*β*-D-*Glucopyranosyl*-(*1*→*2*)-*β*-D-*glucopyranoside*], *20*-O-[*α*-L-*arabinopyranosyl*-(*1*→*6*)-*β*-D-*glucopyranoside*]: [11021-13-9]. ***Ginsenoside R_{b2}***
$C_{53}H_{90}O_{22}$ M 1079.281
Constit. of *P. ginseng*. Powder. Mp 200-203°. $[\alpha]_D^{22}$ +3° (c, 1 in MeOH).
▷ LY9536100.

3-O-[*β*-*Xylopyranosyl*-(*1*→*2*)-*β*-*glucopyranosyl*-(*1*→*2*)-*β*-*glucopyranoside*], *20*-O-[*β*-*glucopyranosyl*-(*1*→*6*)-*β*-D-*glucopyranoside*]: [88100-04-3]. ***Notoginsenoside F_a***
$C_{59}H_{100}O_{27}$ M 1241.423
Constit. of leaves of *P. notoginseng*. Needles (MeOH). Mp 235-240°. $[\alpha]_D^{17}$ −2.0° (c, 1.0 in H_2O).

3-O-[*β*-*Xylopyranosyl*-(*1*→*2*)-*β*-*glucopyranosyl*-(*1*→*2*)-*β*-*glucopyranoside*], *20*-O-[*β*-*xylopyranosyl*-(*1*→*6*)-*β*-*glucopyranoside*]: [88122-52-5]. ***Notoginsenoside F_c***
$C_{58}H_{98}O_{26}$ M 1211.397
Constit. of leaves of *P. notoginseng*. Needles (MeOH). Mp 219-223°. $[\alpha]_D^{18}$ −1.4° (c, 0.67 in H_2O).

3-O-*β*-*Glucopyranoside*, *20*-O-[*α*-*arabinofuranosyl*-(*1*→*6*)-*β*-*glucopyranoside*]: [88105-29-7]. ***Notoginsenoside F_e***
$C_{47}H_{80}O_{17}$ M 917.139
Constit. of leaves of *P. notoginseng*. Needles (MeOH). Mp 179-184°. $[\alpha]_D^{27}$ −0.3° (c, 0.8 in MeOH).

3-O-[*β*-D-*Glucopyranosyl*-(*1*→*2*)-*β*-D-*glucopyranoside*], *20*-O-[*β*-D-*xylopyranosyl*-(*1*→*4*)-*α*-L-*arabinopyranosyl*-(*1*→*6*)-*β*-D-*glucopyranoside*]: [83459-41-0]. ***Ginsenoside R_{a1}***
$C_{58}H_{98}O_{26}$ M 1211.397
From root of *P. ginseng*. Powder. $[\alpha]_D^{25}$ +12.8° (c, 1.0 in MeOH).

3-O-[*β*-D-*Glucopyranosyl*-(*1*→*2*)-*β*-D-*glucopyranoside*], *20*-O-[*β*-D-*xylopyranosyl*-(*1*→*2*)-*α*-L-*arabinofuranosyl*-(*1*→*6*)-*β*-D-*glucopyranoside*]: [83459-42-1]. ***Ginsenoside R_{a2}***
$C_{58}H_{98}O_{26}$ M 1211.397
From root of *P. ginseng*. Powder. $[\alpha]_D^{25}$ −2.4° (c, 1.0 in MeOH).

3-O-*β*-D-*Glucopyranoside:* [78214-33-2]. ***Ginsenoside Rh_2***
$C_{36}H_{62}O_8$ M 622.881
Isol. from *P. ginseng*.

3,20-Di-O-*β*-D-*glucopyranoside:* [62025-49-4]. ***Ginsenoside F_2***
$C_{42}H_{72}O_{13}$ M 785.023
Isol. from *P.* spp. Powder + $2\frac{1}{2}H_2O$. $[\alpha]_D^{25}$ +21.1° (c, 1.14 in MeOH).

3-O-*Sophoroside:* [14197-60-5]. ***Ginsenoside Rg_3***
$C_{42}H_{72}O_{13}$ M 785.023
Isol. from *P.* spp.

20-O-[*β*-D-*Xylopyranosyl*-(*1*→*6*)-*β*-D-*glucopyranoside*]: [80325-22-0]. ***Gynosaponin M.*** *Gypenoside XIII*
$C_{41}H_{70}O_{12}$ M 754.997
Constit. of *Gynostemma pentaphylla*.

20-Rutinoside: [80330-77-4]. ***Gynosaponin N.*** *Gypenoside XIV*
$C_{42}H_{72}O_{12}$ M 769.024
Constit. of *G. pentaphylla*.

3-O-*β*-D-*Glycopyranoside*, *20*-O-*gentiobioside:* [80321-69-3]. ***Gynosaponin S.*** *Gypenoside XVII*
$C_{48}H_{82}O_{18}$ M 947.165
Constit. of *G. pentaphylla* and *Panax* spp.

3-O-*β*-D-*Glucopyranoside*, *20*-O-*rutinoside:* [80330-76-3]. ***Gynosaponin J.*** *Gypenoside X*
$C_{48}H_{82}O_{17}$ M 931.166
Constit. of *G. pentaphylla*.

3-O-Rutinoside, 20-O-β-D-glucopyranoside: [80321-64-8]. ***Gynosaponin K.*** *Gypenoside XI*
$C_{48}H_{82}O_{17}$ M 931.166
Constit. of *G. pentaphylla.*

3-O-(6″-O-Acetylsophoroside), 20-O-vicianoside: [87733-67-3]. ***Ginsenoside Rs$_1$***
$C_{55}H_{92}O_{23}$ M 1121.318
Isol. from *P. ginseng.* Powder + $2H_2O$. $[\alpha]_D^{16}$ +19.0° (c, 1 in MeOH).

3,20-Di-O-rutinoside: [80321-62-6]. ***Gynosaponin G.*** *Gypenoside VII*
$C_{54}H_{92}O_{21}$ M 1077.308
Constit. of *G. pentaphylla.*

3-O-β-D-Glucopyranoside, 20-O-[β-D-xylopyranosyl-(1→6)-β-D-glucopyranoside]: [80321-63-7]. ***Gynosaponin I.*** *Gypenoside IX. Notoginsenoside F$_d$*
$C_{47}H_{80}O_{17}$ M 917.139
Constit. of *G. pentaphylla* and *Panax notoginseng.*
Powder. $[\alpha]_D^{27}$ +1.0° (c, 3 in MeOH).

3-O-Sambubioside, 20-O-rutinoside: [80321-68-2]. ***Gynosaponin R***
$C_{53}H_{90}O_{21}$ M 1063.281
Constit. of *G. pentaphylla.*

3-O-Sophoroside, 20-O-rutinoside: [80321-60-4]. ***Gynosaponin E.*** *Gypenoside V*
$C_{54}H_{92}O_{22}$ M 1093.308
Constit. of *G. pentaphylla* and *Gymnema sylvestre.*

3-O-Sambubioside, 20-O-[β-D-xylopyranosyl-(1→6)-β-D-glucopyranoside]: [80321-67-1]. ***Gynosaponin Q***
$C_{52}H_{88}O_{21}$ M 1049.255
Constit. of *Gynostemma pentaphylla.*

3-O-Sophorotrioside, 20-O-gentiobioside: [112722-00-6]. ***Ginsenoside RA$_0$***
$C_{60}H_{102}O_{28}$ M 1271.449
Isol. from *P. quinquefolius.*

3-O-Sophoroside, 20-O-[β-D-xylopyranosyl-(1→3)-β-D-glucopyranosyl-(1→6)-β-D-glucopyranoside]: [90985-77-6]. ***Ginsenoside Ra$_3$***
$C_{59}H_{100}O_{27}$ M 1241.423
Isol. from *P. ginseng.* Powder + $4H_2O$. $[\alpha]_D^{17}$ +9.8° (c, 0.43 in MeOH).

3-O-(6-O-Acetylsophoroside), 20-O-[α-L-arabinofuranosyl-(1→6)-β-D-glucopyranoside]: [87733-66-2]. ***Ginsenoside Rs$_2$***
$C_{55}H_{92}O_{23}$ M 1121.318
Isol. from *P. ginseng.* Powder + $2H_2O$. $[\alpha]_D^{16}$ +2.5° (c, 1 in MeOH).

3-O-[β-D-Glucopyranosyl-(1→2)-α-L-rhamnopyranosyl-(1→6)-β-D-glucopyranoside], 20-O-β-D-glucopyranoside: [80321-61-5]. ***Gynosaponin F***
$C_{54}H_{92}O_{22}$ M 1093.308
Constit. of *G. pentaphylla.*

3-O-[β-D-Glucopyranosyl-(1→2)-α-L-rhamnopyranosyl-(1→6)-β-D-glucopyranoside], 20-O-gentiobioside: [80325-21-9]. ***Gynosaponin A***
$C_{60}H_{102}O_{27}$ M 1255.450
Constit. of *G. pentaphylla.*

3-O-[β-D-Glucopyranosyl-(1→2)-α-L-rhamnopyranosyl-(1→6)-β-D-glucopyranoside], 20-O-rutinoside: [80321-59-1]. ***Gynosaponin B***
$C_{60}H_{102}O_{26}$ M 1239.450
Constit. of *G. pentaphylla.*

3-Malonyl, 12-Ac: ***Pendulic acid***
$C_{35}H_{56}O_7$ M 588.823
Constit. of *Betula pendula.* Amorph.

(3β,12β,20R)-form

3-O-β-D-Glucopyranoside: [112246-15-8]. ***(20R)-Ginsenoside Rh$_2$***
$C_{36}H_{62}O_8$ M 622.881
Isol. from *P. ginseng.* Antineoplastic. Cryst. Mp 278-280°.

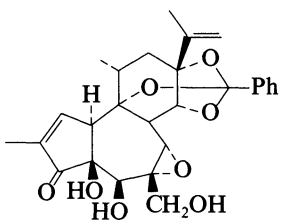
3-O-Sophoroside: [38243-03-7]. ***(20R)-Ginsenoside Rg$_3$***
$C_{42}H_{72}O_{13}$ M 785.023
Isol. from *P. ginseng.*

Nagai, M. *et al, Tetrahedron Lett.*, 1967, 3579 (*isol*)
Tanaka, O. *et al, Chem. Pharm. Bull.*, 1972, **20**, 1204; 1985, **33**, 2323, 3852 (*struct, Gynosaponin S*)
Sanada, S. *et al, Chem. Pharm. Bull.*, 1974, **22**, 421, 2407 (*isol, struct*)
Lin, T.D. *et al, Chem. Pharm. Bull.*, 1976, **24**, 253 (*isol*)
Kasai, R. *et al, Chem. Pharm. Bull.*, 1976, **24**, 400; 1983, **31**, 2120 (*synth, Ginsenoside Rs$_1$, Ginsenoside Rs$_2$*)
Yahara, S. *et al, Chem. Pharm. Bull.*, 1976, **24**, 2204 (*Ginsenoside F$_2$*)
Asakawa, J. *et al, Tetrahedron*, 1977, **33**, 1935 (*cmr*)
Besso, H. *et al, Chem. Pharm. Bull.*, 1982, **30**, 2380 (*isol*)
Koizumi, H. *et al, Chem. Pharm. Bull.*, 1982, **30**, 2393 (*isol*)
Yang, T.R. *et al, Phytochemistry*, 1983, **22**, 1473 (*Notoginsenosides*)
Takemoto, T. *et al, Yakugaku Zasshi*, 1983, **103**, 173, 1015 (*Gypenosides*)
Matsuura, H. *et al, Chem. Pharm. Bull.*, 1984, **32**, 1188 (*Ginsenoside Ra$_3$*)
Xu, S. *et al, Yaoxue Xuebao*, 1987, **22**, 750; *CA*, **108**, 72123 (*Ginsenoside RA$_0$*)
Atopkina, L.N. *et al, Khim. Prir. Soedin.*, 1989, 813 (*synth, Ginsenoside Rh$_2$*)
Martindale, The Extra Pharmacopoeia, 30th edn., Pharmaceutical Press, London, 1993, 1372.
Taipale, H.T. *et al, Phytochemistry*, 1993, **34**, 755 (*Pendulic acid*)
Rickling, B. *et al, Planta Med.*, 1993, **59**, 76 (*isol, pmr, cmr, ms, ir*)
Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th Ed., Van Nostrand-Reinhold, 1992, PAF450.

Daphnetoxin D-10012

Updated Entry replacing D-00070

[28164-88-7]



$C_{27}H_{30}O_8$ M 482.529
Toxic principle from *Daphne* spp. Cryst. Mp 194-196°. $[\alpha]_D$ +63°.

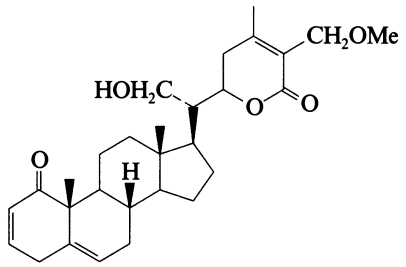
▷ Severe skin irritant. LD_{50} (mus, ipr) 1.1 mg/kg. Exp. reprod. effects.

21-Dephenyl, 21-(1,3-heptadienyl): [101391-09-7]. ***Excoecaria factor O$_2$***
$C_{28}H_{36}O_8$ M 500.588
Constit. of *Excoecaria oppositifolia.*

Stout, G.H. *et al, J. Am. Chem. Soc.*, 1970, **92**, 1070.
Wiriyachitra, P. *et al, Planta Med.*, 1985, 368 (*Excoecaria factor O$_2$*)
Naturally Occurring Phorbol Esters, (ed., Evans, F.J.), CRC Press, 1986, 217 (*rev*)
Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th Ed., Van Nostrand-Reinhold, 1992, DAB850.

Daturametelin C D-10013

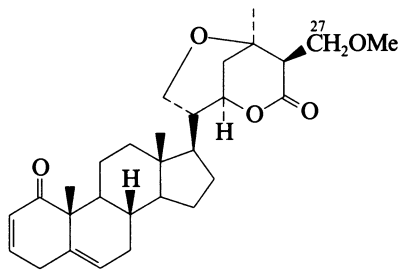
[123297-25-6]



$C_{29}H_{40}O_5$ M 468.632
Constit. of *Datura metel.* Needles. Mp 199-202°. $[\alpha]_D^{25}$ +68.7° (c, 0.49 in $CHCl_3$).

Shingu, K. *et al, Chem. Pharm. Bull.*, 1989, **37**, 2132 (*isol, pmr, cmr*)

Daturametelin D D-10014

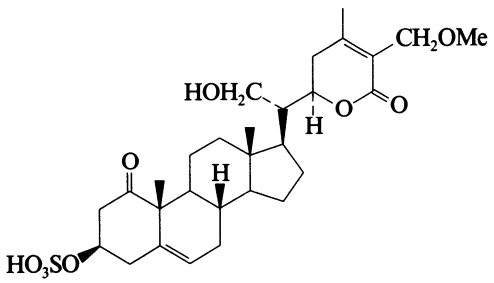


$C_{29}H_{40}O_5$ M 468.632
Constit. of *Datura metel.* Needles ($CHCl_3$/MeOH). Mp 199.5-201.5°. $[\alpha]_D^{26}$ −90.6° (c, 0.68 in $CHCl_3$). CA incorrectly gives Daturametelin D the same reg. no. as Withametelin, W-10004.

O^{27}-*De-Me, 27-O-β-D-glucopyranoside:* ***Daturametelin G***
$C_{34}H_{48}O_{10}$ M 616.747
Constit. of *D. metel.*

Shingu, K. *et al, Chem. Pharm. Bull.*, 1989, **37**, 2132 (*isol, pmr, cmr*)

Daturametelin E D-10015

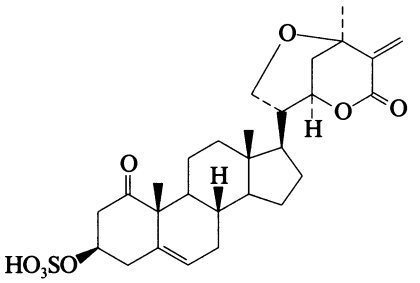


$C_{29}H_{42}O_9S$ M 566.711
Constit. of *Datura metel.* Amorph. powder. $[\alpha]_D^{28}$ +25.8° (c, 0.69 in MeOH).

Shingu, K. *et al, Chem. Pharm. Bull.*, 1989, **37**, 2132 (*isol, pmr, cmr*)

Daturametelin F D-10016

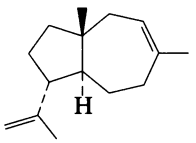
[124853-98-1]



$C_{28}H_{38}O_8S$ M 534.669
Constit. of *Datura metel.* Amorph. powder. $[\alpha]_D^{20}$ +5.0° (c, 0.42 in Py).

Shingu, K. *et al, Chem. Pharm. Bull.*, 1989, **37**, 2132 (*isol, pmr, cmr*)

8,11-Daucadiene D-10017



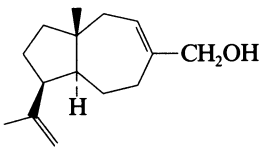
$C_{15}H_{24}$ M 204.355
Constit. of a *Higginsia* sp. Oil. $[\alpha]_D$ −7° (c, 1.1 in $CHCl_3$).

Cassidy, M.P. *et al, J. Nat. Prod.* (*Lloydia*), 1993, **56**, 1190 (*isol, pmr, cmr*)

8,11-Daucadien-14-ol D-10018

Isodaucenol

[147029-02-5]

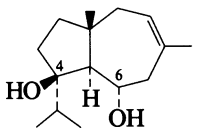


$C_{15}H_{24}O$ M 220.354
Constit. of *Rosa rugosa.* Syrup.

Hashidoko, Y. *et al, Phytochemistry*, 1993, **32**, 387 (*isol, pmr, cmr*)

8-Daucene-4,6-diol D-10019

Updated Entry replacing D-00113



$C_{15}H_{26}O_2$ M 238.369

(***4β,6α)-form*** [41690-67-9] ***Jaeschkeanadiol.*** *Ferutinol. Chimganidol. Tchimganidol. Jeschkeanadiol*
Constit. of *Ferula jaeschkeana.* Cryst. (pet. ether). Mp 91-92°. $[\alpha]_D$ +38.8° ($CHCl_3$).

6-Benzoyl: [60033-08-1]. ***Teferidine***
$C_{22}H_{30}O_3$ M 342.477
Constit. of *F. tenuisecta* and *F. jaeschkeana.* Oil. $[\alpha]_D$ +37.5°.

6-(3,4-Dihydroxybenzoyl): [70284-22-9]. ***Akiferidin***
$C_{22}H_{30}O_5$ M 374.476

Constit. of *F. akitschkensis*. Cryst. (EtOAc/hexane). Mp 52-54°. $[\alpha]_D$ +28.5° (c, 1.4 in $CHCl_3$).

6-(4-Hydroxy-3-methoxybenzoyl): [54526-95-3]. ***Teferin***
$C_{23}H_{32}O_5$ M 388.503
Constit. of *F. tenuisecta*. Cryst. Mp 78-80°. $[\alpha]_D$ +86.5° ($CHCl_3$).

6-(2-Hydroxybenzoyl): ***Jaeschkeanadiol salicylate***
$C_{22}H_{30}O_4$ M 358.477
Constit. of *F. jaeschkeana*. Cryst. Mp 210-213°.

6-Angeloyl: ***Jaeschkeanadiol angelate***
$C_{20}H_{32}O_3$ M 320.471
Constit. of *F. jaeschkeana*. Oil.

6-(4-Hydroxybenzoyl): [41743-44-6]. ***Ferutinin***
$C_{22}H_{30}O_4$ M 358.477
Constit. of *F. jaeschkeana* and other *F.* spp. Mp 121-122°. $[\alpha]_D^{22}$ +66° (c, 1.36 in EtOH).

6-(3,4-Methylenedioxybenzoyl): [126585-80-6]. ***Jaeskeanidin***
$C_{23}H_{30}O_5$ M 386.487
Constit. of *F. jaeschkeana*. Cryst. Mp 123-124°.

6-(3-Hydroxy-4-methoxybenzoyl): [41744-35-8]. ***Ferutin***
$C_{23}H_{32}O_5$ M 388.503
Isol. from *F.* spp. Cryst. (pet. ether). Mp 130-131°. $[\alpha]_D^{25}$ +101.8° (c, 1.08 in MeOH).

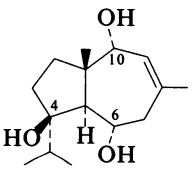
6-(2-Methylbutanoyl):
$C_{20}H_{34}O_3$ M 322.487
Constit. of *F. linkii*.

6-(3-Methylbutanoyl):
$C_{20}H_{34}O_3$ M 322.487
Constit. of *F. linkii*. Oil.

Sriraman, M.C. *et al*, *Tetrahedron*, 1973, **29**, 985 (*Jaeschkeanadiol*)
Saidhhodźhaev, A.I. *et al*, *Khim. Prir. Soedin.*, 1974, **10**, 166; 1976, **12**, 105; *Chem. Nat. Compd.* (*Engl. Transl.*), 166 (*derivs*)
Khasanov, T.Kh. *et al*, *Khim. Prir. Soedin.*, 1974, **10**, 528; *Chem. Nat. Compd.* (*Engl. Transl.*), 542 (*Teferin*)
Kushmuradov, A.Yu. *et al*, *Khim. Prir. Soedin.*, 1978, **14**, 725; *Chem. Nat. Compd.* (*Engl. Transl.*), 617 (*Ferutinol, Akiferidin*)
Razdan, T.K. *et al*, *Phytochemistry*, 1989, **28**, 3389.
González, A.G. *et al*, *Phytochemistry*, 1993, **33**, 863 (*derivs*)

8-Daucene-4,6,10-triol D-10020

Updated Entry replacing D-00118
8-Carotene-4,6,10-triol



$C_{15}H_{26}O_3$ M 254.369

(4β,6α,10α)-form [103654-31-5]
Pallinol. 1-Hydroxyferulinkiol
Oil. $[\alpha]_D^{20}$ +37.3° (c, 0.1 in $CHCl_3$).

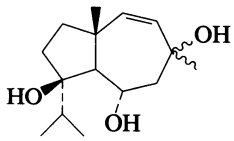
6-(2-Methylbutanoyl):
$C_{20}H_{34}O_4$ M 338.486
Constit. of *Ferula linkii*. Cryst. (EtOAc/hexane). Mp 77-79°.

6,10-Diangeloyl: [90695-04-8]. ***Pallinin***
$C_{25}H_{38}O_5$ M 418.572
Constit. of *F. pallida*. Cryst. (EtOAc/pet. ether). Mp 79-80°. $[\alpha]_D^{20}$ −148.5° (c, 0.1 in $CHCl_3$).

10-Ketone: see *4,6-Dihydroxy-8-daucen-10-one, D-10132*

Kushmuradov, A.Yu. *et al*, *Khim. Prir. Soedin.*, 1986, **22**, 53; *Chem. Nat. Compd.* (*Engl. Transl.*), 48 (*Pallinin*)
González, A.G. *et al*, *Phytochemistry*, 1993, **33**, 863 (*deriv, pmr, cmr*)

9-Daucene-4,6,8-triol D-10021



$C_{15}H_{26}O_3$ M 254.369

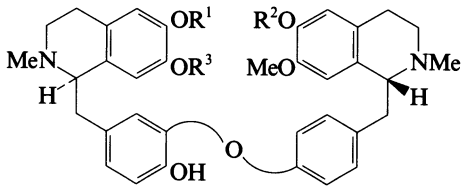
(4β,6α,8ξ)-form [103701-24-2] ***Ferutriol***
Gum.

6-(3-Methylbutanoyl): [103701-22-0].
$C_{20}H_{34}O_4$ M 338.486
Constit. of *Ferula linkii*. Cryst. (pet. ether). Mp 54-56°.

Díaz, J.G. *et al*, *Phytochemistry*, 1986, **25**, 1161 (*isol, pmr, cmr*)

Dauricine D-10022

Updated Entry replacing D-00127
6,6′-Di-O-methyldauricoline
[524-17-4]



$R^1 = R^2 = R^3 = Me$

$C_{38}H_{44}N_2O_6$ M 624.775
Alkaloid from the rhizomes of *Menispermum dauricum*, the subterranean parts of *M. canadense*, and from *Polyalthia nitidissima* (Menispermaceae, Annonaceae). Shows antiinflammatory and anaesthetic props. Weak curarising agent. Mp 115°. $[\alpha]_D$ −139° (MeOH).

▷ Toxic, LD_{50} 6 mg/kg (i.p., mice).

B,2MeI: Needles (MeOH). Mp 201°. $[\alpha]_D^{20}$ −114° (c, 0.348 in H_2O).

Me ether: [2202-17-7]. **O-*Methyldauricine***
$C_{39}H_{46}N_2O_6$ M 638.802
Alkaloid from the bark of *Colubrina asiatica* and *Popowia* cf. *cyanocarpa* (Rhamnaceae, Annonaceae). Shows activity against Walker 256 carcinosarcoma. Brittle foam. $[\alpha]_D$ −128° (c, 0.06 in MeOH).

Me ether, 2-N-Oxide: [107882-03-1]. **O-*Methyldauricine 2-N-oxide***
$C_{39}H_{46}N_2O_7$ M 654.802
Alkaloid from the bark and leaves of *P. pisocarpa* (Annonaceae). Amorph. $[\alpha]_D$ −138° (c, 0.5 in MeOH). Isol. as an inseparable mixt. with the 2′-*N*-oxide (ratio 10:7 or 7:10).

Me ether, 2′-N-Oxide: [107882-02-0]. **O-*Methyldauricine 2′-N-oxide***
$C_{39}H_{46}N_2O_7$ M 654.802
Alkaloid from the bark and leaves of *P. pisocarpa* (Annonaceae). Amorph.

N-De-Me: **N-*Demethyldauricine.* *2-Demethyldauricine***
$C_{37}H_{42}N_2O_6$ M 610.749
Alkaloid from rhizomes of *M. dauricum* (Menispermaceae).

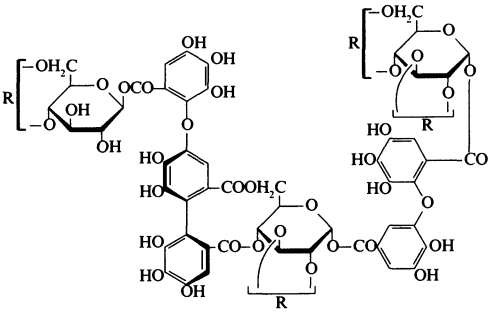
N′-De-Me: [34302-34-6]. **N′-*Demethyldauricine.* *2′-Demethyldauricine***
$C_{37}H_{42}N_2O_6$ M 610.749
Alkaloid from the rhizomes of *M. canadense* (Menispermaceae). Unstable oil. $[\alpha]_D^{27}$ −98° (MeOH).

Manske, R.H.F., *Can. J. Res., Sect. B*, 1943, **21**, 17 (*isol*)

Inubushi, Y. *et al*, *Yakugaku Zasshi*, 1952, **72**, 762; *CA*, **47**, 6430d (*struct*)
Tomita, M. *et al*, *Chem. Pharm. Bull.*, 1955, **3**, 449 (*synth, O-Methyldauricine*)
Manske, R.H.F. *et al*, *Chem. Pharm. Bull.*, 1965, **13**, 1476 (*pmr*)
Johns, S.R. *et al*, *Aust. J. Chem.*, 1970, **23**, 363 (*isol, pmr, ms, config, O-Methyldauricine*)
Tschesche, R. *et al*, *Phytochemistry*, 1970, **9**, 1683 (*isol, uv, ir, pmr, ms, O-Methyldauricine*)
Doskotch, R.W. *et al*, *J. Nat. Prod.* (*Lloydia*), 1971, **34**, 292 (*Demethyldauricine*)
Baldas, J. *et al*, *J. Chem. Soc., Perkin Trans. 1*, 1972, 592 (*ms*)
Jossang, A. *et al*, *Planta Med.*, 1983, **49**, 20 (*isol*)
Jossang, A. *et al*, *J. Nat. Prod.* (*Lloydia*), 1986, **49**, 1018 (*oxides*)
Pan, X.P., *Yaoxue Xuebao*, 1992, **27**, 788; *CA*, **118**, 165183e (*N-Demethyldauricine*)

Davuriciin T_1 D-10023

[137371-86-9]



R = Hexahydroxydiphenoyl, $C_{14}H_8O_8$

$C_{109}H_{74}O_{70}$ M 2503.742

Ellagitannin isol. from the root of *Rosa davurica*. Light brown amorph. powder + $17H_2O$. $[\alpha]_D^{20}$ +68° (c, 1.0 in MeOH).

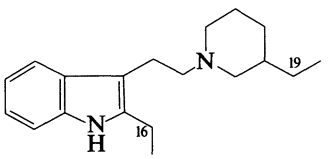
Yoshida, T. *et al*, *Phytochemistry*, 1991, **30**, 2747 (*struct, uv, cd, pmr, cmr*)

Decarbomethoxytetrahydrosecodine D-10024

Updated Entry replacing D-00193

2-Ethyl-3-[2-(3-ethylpiperidino)ethyl]indole, 9CI, 8CI

[20785-62-0]



$C_{19}H_{28}N_2$ M 284.444

Alkaloid from the leaves of *Tabernaemontana cumminsii* and whole plants of *Haplophyton crooksii* (Apocynaceae). Exhibits antiacetylcholinesterase activity. Oil or amorph. powder.

Picrate: Mp 137-138°.

19-Oxo: ***19-Oxodecarbomethoxytetrahydrosecodine***

$C_{19}H_{26}N_2O$ M 298.427

Alkaloid from *Aspidosperma marcgravianum* (Apocynaceae).

16-Oxo: ***Crooksidine***

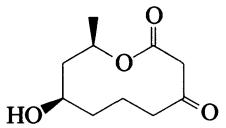
$C_{19}H_{26}N_2O$ M 298.427

Alkaloid from whole plants of *H. crooksii* (Apocynaceae). Exhibits antiacetylcholinesterase activity. Glass. $[\alpha]_D$ +27.6° (c, 0.205 in $CHCl_3$).

Crooks, P.A. *et al*, *J. Chem. Soc., Chem. Commun.*, 1968, 1210 (*isol, uv, ms, synth, struct*)
Robert, G.M.T. *et al*, *J. Nat. Prod.* (*Lloydia*), 1983, **46**, 694 (*deriv*)
Mroue, M.A. *et al*, *Phytochemistry*, 1993, **33**, 217 (*Crooksidine*)

Decarestrictine J D-10025

[144161-44-4]



$C_{10}H_{16}O_4$ M 200.234

From *Penicillium simplicissium*. Cholesterol inhibitor.

Grabley, S. *et al*, *J. Antibiot.*, 1992, **45**, 1176 (*isol, pmr, cmr*)

4-Decenedioic acid D-10026

[67494-01-3]

$HOOC(CH_2)_4CH{=}CHCH_2CH_2COOH$

$C_{10}H_{16}O_4$ M 200.234

Z-form [41221-65-2]

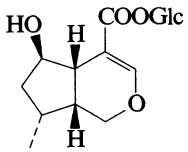
Isol. from urine of patients with Jamaican vomit disease. Solid (hexane/Et_2O). Mp 52-53°.

E-form [128823-57-4]

Solid (hexane/Et_2O). Mp 136-137.5°.

Tanaka, K., *J. Biol. Chem.*, 1972, **247**, 7465 (*isol*)
Kaydos, J.A. *et al*, *J. Org. Chem.*, 1993, **58**, 3463 (*synth, ir, pmr, cmr*)

1-Deglucosylpenstemonosidic acid glucoside D-10027

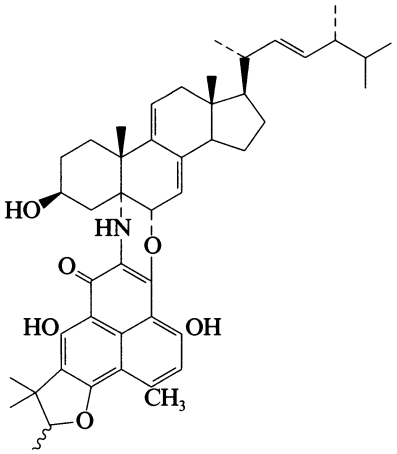


$C_{16}H_{24}O_9$ M 360.360

Constit. of *Penstemon* spp. Cryst. Mp 184-185°. $[\alpha]_D^{25}$ −54° (c, 0.8 in MeOH).

Abdel-Kader, M.S. *et al*, *Phytochemistry*, 1993, **34**, 1367 (*isol, pmr, cmr*)

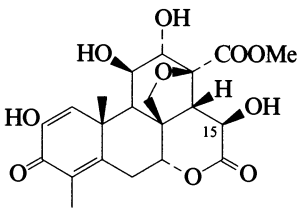
Dehydroazasirosterol D-10028



$C_{47}H_{59}NO_6$ M 733.986
Metab. of a *Sirococcus* sp. Amorph. powder.
Ayer, W.A. *et al*, *Can. J. Chem.*, 1992, **70**, 1905 (*isol, pmr, cmr*)

Dehydrobruceolide D-10029

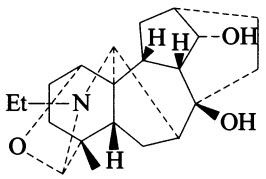
Updated Entry replacing D-00285



$C_{21}H_{24}O_{10}$ M 436.415
15-Ac: [53730-90-8]. ***Dehydrobrucein B***
$C_{23}H_{26}O_{11}$ M 478.452
Constit. of *Brucea antidysenterica* and *B. javanica*. Oil. $[\alpha]_D^{24}$ +40.5° (c, 0.2 in $CHCl_3$).
15-Benzoyl: [53663-00-6]. ***Dehydrobruceantarin***
$C_{28}H_{28}O_{11}$ M 540.523
Constit. *B. antidysenterica*. Oil. $[\alpha]_D^{24}$ +68° (c, 0.15 in Py).
15-O-(3,4-Dimethyl-2E-pentenoyl): [53662-98-9]. ***Dehydrobruceantin***
$C_{28}H_{34}O_{11}$ M 546.570
Constit. of *B. antidysenterica*. Oil. $[\alpha]_D^{25}$ +79° (c, 0.62 in Py).
15-(3-Hydroxy-2-isopropylidenebutanoyl): [53663-02-8]. ***Dehydrobruceantol***
$C_{28}H_{34}O_{12}$ M 562.569
Constit. of *B. antidysenterica*. Oil. $[\alpha]_D^{23}$ +30° (c, 0.11 in $CHCl_3$).
15-(3-Methylbutanoyl): [73435-47-9]. ***Dehydrobrucein A***
$C_{26}H_{32}O_{11}$ M 520.532
Constit. of *B. javanica*.

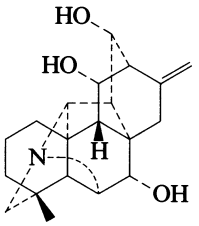
Kupchan, S.M. *et al*, *J. Org. Chem.*, 1975, **40**, 648.
Philipson, J.D. *et al*, *Planta Med.*, 1981, **41**, 209 (*Dehydrobrucein A*)

Dehydrocardiopetaline D-10030



$C_{21}H_{31}NO_3$ M 345.481
Alkaloid from above-ground parts of *Delphinium cossonianum* (Ranunculaceae). Amorph. $[\alpha]_D$ +17.8° (c, 0.80 in $CHCl_3$).
de la Fuente, G. *et al*, *Phytochemistry*, 1993, **34**, 553 (*isol, ir, pmr, cmr, ms, struct*)

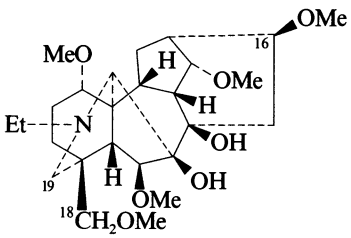
Delfissinol D-10031



$C_{20}H_{27}NO_3$ M 329.438
Alkaloid from aerial parts of *Delphinium fissum* ssp. *anatolicum* (Ranunculaceae). Amorph. $[\alpha]_D^{20}$ −39.1° (c, 0.2 in MeOH).
Ulubelen, A. *et al*, *Phytochemistry*, 1993, **34**, 1165 (*isol, ir, pmr, cmr, ms, struct*)

Delphatine D-10032

Updated Entry replacing D-00368
18-O-Methyllycoctonine. Delsonine
[25488-62-4]



$C_{26}H_{43}NO_7$ M 481.628
Identity of Delsonine (From *D. consolida*) with Delphatine is not conclusively establ. Alkaloid from the roots, seeds and aerial parts of *Delphinium biternatum*, from *D. consolida* and from the seeds of *Consolida ambigua*, (formerly *D. ajacis*)(Ranunculaceae). Amorph. solid. $[\alpha]_D^{29}$ +38.2° (c, 2.95 in $CHCl_3$).
B,HClO₄: Mp 212-214° (205-207°). $[\alpha]_D^{32}$ +23° (c, 0.412 in MeOH).
O¹⁶-De-Me: [66891-14-3]. ***Delbiterine.*** *16-Demethyldelphatine*
$C_{25}H_{41}NO_7$ M 467.601
Alkaloid from the roots of *D. biternatum* (Ranunculaceae). Mp 137-138°.
19-Oxo: [25488-63-5]. ***19-Oxodelphatine***
$C_{26}H_{41}NO_8$ M 495.612
Alkaloid from the stems and leaves of *D. ajacis* (Ranunculaceae). $[\alpha]_D$ +32.8° (c, 0.31 in $CHCl_3$).
O⁶-De-Me: ***6-Demethyldelphatine***
$C_{25}H_{41}NO_7$ M 467.601

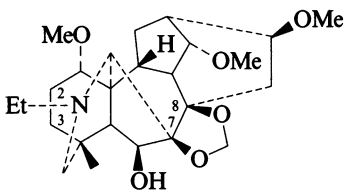
Alkaloid from roots of *Aconitum septentrionale* (Ranunculaceae). Amorph. $[\alpha]_D$ +19.3° (c, 0.295 in $CHCl_3$).

Marion, L. *et al*, *J. Am. Chem. Soc.*, 1947, **69**, 2010 (*Delsonine*)
Abubakirov, N.K. *et al*, *CA*, 1955, **49**, 5495.
Yunusov, M.S. *et al*, *Dokl. Akad. Nauk SSSR*, 1969, **188**, 1077; 1970, **6**, 334; *CA*, **72**, 32091h; **73**, 77443m (*struct*)
Pelletier, S.W. *et al*, *Heterocycles*, 1977, **7**, 327 (*cmr*)
Salimov, B.T. *et al*, *Khim. Prir. Soedin.*, 1978, 106; *Chem. Nat. Compd.* (*Engl. Transl.*), 84 (*Delbiterine*)
Pelletier, S.W. *et al*, *J. Nat. Prod.* (*Lloydia*), 1980, **43**, 395 (*isol*)
Pelletier, S.W. *et al*, *J. Am. Chem. Soc.*, 1981, **103**, 6536 (*config*)
Edwards, O.E. *et al*, *Can. J. Chem.*, 1982, **60**, 2661 (*config*)
Liang, X. *et al*, *J. Nat. Prod.* (*Lloydia*), 1991, **54**, 1283 (*19-Oxodelphatine*)
Sayed, H.M. *et al*, *J. Nat. Prod.* (*Lloydia*), 1992, **55**, 1595 (*6-Demethyldelphatine*)

Delpheline D-10033

Updated Entry replacing D-00369

[509-28-4]



$C_{25}H_{39}NO_6$ M 449.586

Alkaloid from the seeds of *Delphinium elatum* and from the roots and aerial parts of *D. ternatum* (Ranunculaceae) also from *D. occidentale*. Prisms (EtOH aq.). Mp 227° (210-212°, 216-219°). $[\alpha]_D^{15}$ −25.8° (c, 2 in $CHCl_3$).

B,HCl: Prisms + $1H_2O$ (Me_2CO aq.). Mp 219° (frothing). $[\alpha]_D^{20}$ −42.8° (c, 2 in H_2O).

B,HI: Cryst. (MeOH/EtOAc). Mp 213-214° dec.

B,HNO_3: Prisms (Me_2CO aq.). Mp 191-193°. $[\alpha]_D^{22}$ −41.2° (c, 2 in H_2O).

Ac: [42907-15-3]. ***6-Acetyldelpheline***
$C_{27}H_{41}NO_7$ M 491.623
Alkaloid from *D. barbeyi* and aerial parts of *D. occidentale* (Ranunculaceae). Prisms (EtOH aq.). Mp 125° (120-122°). $[\alpha]_D^{20}$ −34.5° (c, 2 in EtOH).

O^{16}-*De-Me:* [123064-69-7]. ***Eladine***
$C_{24}H_{37}NO_6$ M 435.559
Alkaloid from the seeds of *D. elatum* (Ranunculaceae). Amorph. $[\alpha]_D^{23}$ −57.5° (c, 0.89 in $CHCl_3$).

O^6-*Me:* [122384-95-6]. ***Paciline.*** *6-O-Methyldelpheline*
$C_{26}H_{41}NO_6$ M 463.613
Alkaloid from seeds of the *D.* hybrid 'pacific giant' (Ranunculaceae). Amorph. $[\alpha]_D$ −7.2° (c, 1.0 in $CHCl_3$).

6-Ketone: [60223-97-4]. *Pacinine. 6-Dehydrodelpheline*
$C_{25}H_{37}NO_6$ M 447.570
Alkaloid from seeds of the *D.* hybrid 'pacific giant' (Ranunculaceae). Mp 133-135.5°. $[\alpha]_D$ −58° (c, 1.0 in MeOH).

6-Deoxy: [113707-10-1]. ***6-Deoxydelpheline.*** *Occidentaline*
$C_{25}H_{39}NO_5$ M 433.587
Alkaloid from *D. barbeyi* and *D. occidentale* (Ranunculaceae). Mp 119.5-120.5° (112-115°).

2,3-Didehydro: [86695-19-4]. *Deacetyltatsiensine*
Plates (EtOH). Mp 236-238°. $[\alpha]_D^{25}$ +28.8° (c, 0.34 in EtOH).

2,3-Didehydro, Ac: [86695-18-3]. ***Tatsiensine***
$C_{27}H_{39}NO_7$ M 489.608
Alkaloid from the roots of *D. kamaonense* and *D. tatsienense* (Ranunculaceae). Amorph. $[\alpha]_D^{25}$ +17.4° (c, 0.3 in EtOH).

O^{14}-*De-Me:* [119371-58-3]. ***Delelatine***
$C_{24}H_{37}NO_6$ M 435.559
Alkaloid from seeds of *D. elatum* and from *D. tatsienense* (Ranunculaceae). Cryst. (Et_2O). Mp 84.5-86.5°.

O^{14}-*De-Me, di-Ac:* $[\alpha]_D^{23}$ −62.4° (c, 0.62 in $CHCl_3$).

O^{14}-*De-Me, 6-ketone:* [90718-33-5]. ***Yunnadelphinine***
$C_{24}H_{35}NO_6$ M 433.544
Alkaloid from *D. yunnanense* (Ranunculaceae).

O^{14}-*De-Me, 6-ketone,* O^{14}-*Ac:* [123519-72-2]. ***Barbinidine***
$C_{26}H_{37}NO_7$ M 475.581
Alkaloid from aerial parts of *D. barbeyi* (Ranunculaceae). Cryst. (Me_2CO/hexane). Mp 215-216°.

O^{14}-*De-Me,* O^6-*Me:* [123064-67-5]. ***Isodelpheline***
$C_{25}H_{39}NO_6$ M 449.586
Alkaloid from the seeds of *D. elatum* (Ranunculaceae). $[\alpha]_D^{26}$ −1.2° (c, 1 in $CHCl_3$).

O^{14}-*De-Me,* O^6-*Me, Ac:* Cryst. (pet. ether). Mp 116-118°. $[\alpha]_D^{26}$ +13.5° (c, 0.17 in $CHCl_3$).

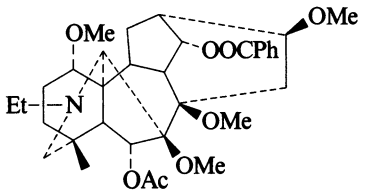
O^1,O^{14}-*Di-de-Me:* ***Delmenzine***
$C_{23}H_{35}NO_6$ M 421.533
Alkaloid from *D. menziesii* (Ranunculaceae). Amorph.

O^1-*De-Me:* ***Pacidine***
$C_{24}H_{37}NO_6$ M 435.559
Alkaloid from seeds of *D. elatum* cv. 'Pacific Giant' (Ranunculaceae). Amorph. solid. $[\alpha]_D^{20}$ −14.3° (c, 0.49 in $CHCl_3$).

Goodson, J.A., *J. Chem. Soc.*, 1943, 139; 1944, 665 (*isol, struct*)
Cookson, R.C. *et al*, *J. Chem. Soc.*, 1956, 2689, 3121 (*isol, uv, struct*)
Edwards, O.E. *et al*, *Can. J. Chem.*, 1958, **36**, 1097 (*struct*)
Carmack, M. *et al*, *J. Am. Chem. Soc.*, 1958, **80**, 497 (*struct*)
Pelletier, S.W. *et al*, *J. Am. Chem. Soc.*, 1981, **103**, 6536 (*config*)
Pelletier, S.W. *et al*, *Heterocycles*, 1983, **20**, 1347 (*synth, pmr, cmr, deriv*)
Matveev, V.M. *et al*, *Khim. Prir. Soedin.*, 1983, **19**, 657; *Chem. Nat. Compd.* (*Engl. Transl.*), 627 (*isol*)
Luo, S. *et al*, *CA*, 1984, **101**, 35860m (*Yunnaldelphinine*)
Jiang, Q.P. *et al*, *Heterocycles*, 1984, **22**, 2429 (*cmr*)
Kulanthaivel, P. *et al*, *Heterocycles*, 1988, **27**, 339 (*Occidentaline*)
Ross, S.A. *et al*, *Phytochemistry*, 1988, **27**, 3719 (*isol, ir, pmr, cmr, ms, struct*)
Joshi, B.S. *et al*, *Tetrahedron Lett.*, 1988, **29**, 2397 (*Occidentaline, 6-Deoxydelpheline*)
Bando, H. *et al*, *Heterocycles*, 1989, **29**, 1293 (*Paciline, Pacinine*)
Pelletier, S.W. *et al*, *Phytochemistry*, 1989, **28**, 1521 (*Barbinidine*)
Pelletier, S.W. *et al*, *Tetrahedron*, 1989, **45**, 1887 (*isol, ir, pmr, cmr, ms, struct, Isodelpheline, Eladine*)
Sun, F. *et al*, *Heterocycles*, 1991, **32**, 1963 (*Delmenzine*)
Wada, K. *et al*, *Phytochemistry*, 1992, **31**, 2135 (*Pacidine*)

Delphiperegrine D-10034

[142609-22-1]



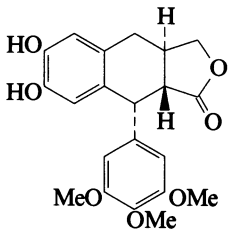
$C_{34}H_{47}NO_8$ M 597.747

Alkaloid from aerial parts of *Delphinium peregrinum* (Ranunculaceae). $[\alpha]_D^{22}$ +5.6° (c, 0.2 in MeOH).

Ulubelen, A. *et al*, *Phytochemistry*, 1992, **31**, 1019 (*isol, ir, pmr, cmr, ms, struct*)

4,5-Demethylene-7-deoxypodophyllotoxin D-10035

[1173-42-8]



$C_{21}H_{22}O_7$ M 386.401

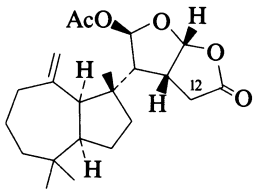
Isol. from seeds of *Hernandia ovigera*. Needles (EtOH). Mp 238-241°. $[\alpha]_D$ −113° (c, 0.086 in $CHCl_3$).

Ito, C. *et al*, *Chem. Pharm. Bull.*, 1992, **40**, 1319.

Dendrillolide A D-10036

Updated Entry replacing D-00424

[91158-68-8]



$C_{22}H_{32}O_5$ M 376.492

Constit. of a *Dendrilla* sp. and *Chelonaphysilla violacea*. Oil. $[\alpha]_D^{20}$ +83.51° (c, 3.8 in $CHCl_3$). Formerly this struct. was assigned to Dendrillolide B. The struct. of Dendrillolide B has not been reassigned.

12β-Acetoxy: [104311-71-9]. ***Macfarlandin E.*** *Aplyviolacene*

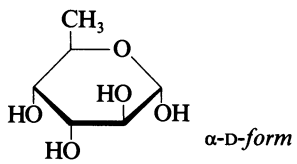
$C_{24}H_{34}O_7$ M 434.528

Constit. of *Chromodoris macfarlandi*, *C. norrisi*, *Chelonaplysilla violacea* and *Dysidea* sp. Glass. $[\alpha]_D$ −34° (c, 0.05 in $CHCl_3$).

Sullivan, B. *et al*, *J. Org. Chem.*, 1984, **49**, 3204 (*isol*)
Molinski, T.F. *et al*, *J. Org. Chem.*, 1986, **51**, 4564 (*struct*)
Hambley, T.W. *et al*, *Tetrahedron Lett.*, 1986, **27**, 3281 (*isol*)
Carmely, S. *et al*, *J. Org. Chem.*, 1988, **53**, 4801 (*isol*, *pmr*, *cmr*)
Bobzin, S.C. *et al*, *J. Org. Chem.*, 1989, **54**, 5727 (*struct*)
Bergquist, P.R. *et al*, *Aust. J. Chem.*, 1993, **46**, 623 (*isol*, *pmr*, *cmr*)

6-Deoxyaltrose D-10037

Altromethylose



α-D-*form*

$C_6H_{12}O_5$ M 164.158

Found in polysialoglycoprotein of *Salvelinus leucomaemis* eggs. Only 6-deoxyhexose other than fucose found in glycoproteins.

D-form [18546-02-6]

Syrup. $[\alpha]_D$ +16.2° (H_2O).

p-*Bromophenylosazone:* Mp 177-178°. $[\alpha]_D$ +8° ($CHCl_3$).

L-form [32738-74-2]

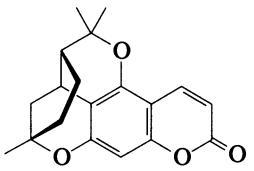
Syrup. $[\alpha]_D$ −17.3°.

p-*Bromophenylosazone:* Mp 132°. $[\alpha]_D$ −1° ($CHCl_3$).

Freudenberg, K. *et al*, *Ber.*, 1929, **62**, 373.
Iwasaki, M. *et al*, *Eur. J. Biochem.*, 1987, **168**, 185 (*isol*)

Deoxybruceol D-10038

[31750-71-7]



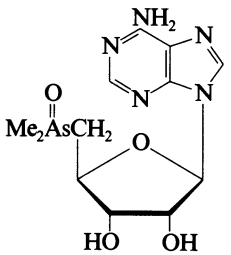
$C_{19}H_{20}O_4$ M 312.365

Not the deoxy deriv. of Bruceol, B-00969. Constit. of *Eriostemon brucei*. Mp 117-123°.

Begley, M.J. *et al*, *J. Chem. Soc., Chem. Commun.*, 1976, 140 (*synth*)
Ghisalberti, E.L. *et al*, *J. Chem. Soc., Perkin Trans. 2*, 1981, 583 (*config*)
Gray, A.I. *et al*, *J. Nat. Prod.* (*Lloydia*), 1992, **55**, 681 (*pmr*, *cmr*)

5′-Deoxy-5′-(dimethylarsinyl)adenosine, 9CI D-10039

[137138-03-5]



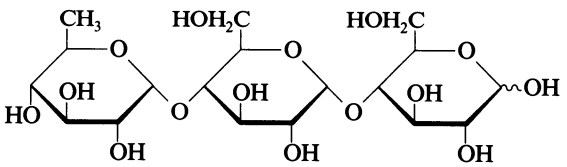
$C_{12}H_{18}AsN_5O_4$ M 371.227

Isol. from the kidney of the giant clam, *Tridacna maxima*. $[\alpha]_D$ +54.2° (c, 3 in MeOH).

Francesconi, K.A. *et al*, *J. Chem. Soc., Chem. Commun.*, 1991, 928 (*isol*)

6-Deoxy-α-D-glucopyranosyl-(1→4)-α-D-glucopyranosyl-(1→4)-D-glucose D-10040

[61637-54-5]



Pyranose-*form*

$C_{18}H_{32}O_{15}$ M 488.442

Prod. formed by the action of bacterial amylase on deoxyamylose. $[\alpha]_D^{25}$ +143° (c, 0.9 in H_2O).

Takeo, K. *et al*, *Carbohydr. Res.*, 1976, **51**, 73.
Weill, C.E. *et al*, *Carbohydr. Res.*, 1979, **73**, 337.

Deoxyribonucleic acid, 9CI, 8CI D-10041

DNA. Thymus nucleic acid

A polynucleotide constructed from chains of 2-deoxy-D-ribose purine and pyrimidine units linked by phosphate diester bonds between the 3′- and 5′-hydroxyls of

adjacent sugars. DNA from viruses have molecular weights ca. 1-130 × 10^6 whereas bacterial and animal DNA has much higher molecular weights with chains easily severed during isoln. The adenine and thymine contents are equal and the guanine and cytosine contents also equal, regardless of source. In the secondary structure two polymer chains form right-handed helices about a common axis, with the sequence of atoms running in opposite directions in each strand. The bases are inside the helix and the adenine of one chain is hydrogen bonded to the thymine of the other and similarly with the guanine and cytosine. Present in all life forms except some viruses. An essential component of chromosomes in cell nuclei which carries genetic information by containing a chemical code in its structure, which is exactly reproducible. The linear sequence of bases in one strand determines the sequence in the other. Thus each strand can serve as a template for replication of the original DNA molecule. DNA also serves as a template for the formation of ribonucleic acids.

Watson, J.D. *et al*, *Nature* (*London*), 1953, **171**, 737, 964 (*struct*)
Chargaff, E. *et al*, *The Nucleic Acids*, Academic Press, Vol. 1, 1955 (*rev*)
Brown, D.M. *et al*, *Compr. Biochem.*, (Florkin, M. etal, Ed.), 1963, **8**, 157 (*rev*)
Crick, F., *Nature* (*London*), 1970, **227**, 561.
Davidson, J.N., *The Biochemistry of Nucleic Acids*, Academic Press, 7th Ed., 1972.
Narang, S.A., *Tetrahedron*, 1983, **39**, 3 (*rev*)
Jankowski, K. *et al*, *Adv. Heterocycl. Chem.*, 1986, **39**, 79 (*rev, ms*)
Taillandier, E. *et al*, *J. Mol. Struct.*, 1989, **214**, 185 (*rev, ir, raman*)
Wemmer, D.E., *Biol. Magn. Reson.*, 1992, **10**, 195 (*rev, nmr*)

Dethymicin D-10042

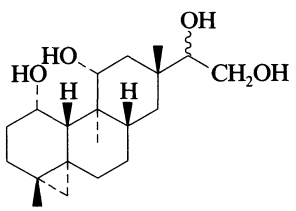
[146259-43-0]

$C_{71}H_{126}N_2O_{21}$ M 1343.777

Struct. unknown. Prod. by *Amycolatopsis mediterranei*. Immunosuppressant. Powder + $4H_2O$. Mp 137-139°. $[\alpha]_D^{26}$ −33.3° (c, 0.733 in MeOH).

Ueno, M. *et al*, *J. Antibiot.*, 1992, **45**, 1819 (*isol, props*)

1,11,15,16-Devadaranetetrol D-10043



$C_{20}H_{34}O_4$ M 338.486

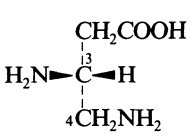
(ent-1β,11β,15ξ)-form [150036-24-1]

1β,11β-Dihydroxyerythroxydiol X

Constit. of *Erythroxylum australe*. $[\alpha]_D$ −20° (CH_2Cl_2) (as di-Ac).

Ansell, S.M. *et al*, *Phytochemistry*, 1993, **32**, 937 (*isol, cmr*)

3,4-Diaminobutanoic acid D-10044



(R)-form

$C_4H_{10}N_2O_2$ M 118.135

(R)-form

B,2HCl: Cryst. (EtOH aq.). Mp 222-223°. $[\alpha]_D$ +7.9° (c, 1 in H_2O).

N^4-*Tri-Me:* [98063-21-9]. *2-Amino-3-carboxy*-N,N,N-*trimethyl-1-propanaminium, 9CI.* ***Emeriamine***

$C_7H_{16}N_2O_2$ M 160.216

Isol. from *Emericella quadrilineata*. Antidiabetic. Zwitterionic.

N^4-*Tri-Me, B,2HCl:* [96201-14-8].

Mp 219-220° dec. $[\alpha]_D$ +7.6° (c, 1 in H_2O).

N^4-*Tri-Me, Me ester:* Yellow needles (MeOH) (as dipicrate). Mp 139-140° (as dipicrate). $[\alpha]_D$ −0.7° (c, 1 in DMF).

N^3-*Ac*, N^4-*tri-Me:* [96186-68-4]. *2-(Acetylamino)-3-carboxy*-N,N,N-*trimethyl-1-propanaminium hydroxide inner salt, 9CI.* ***Emericedin A.*** *FA 5859. Antibiotic FA 5859*

$C_9H_{18}N_2O_3$ M 202.253

Isol. from *E. quadrilineata* and *Aspergillus* sp. 3704. Inhibitor of fatty acid degradn. Diuretic. Prisms (EtOH/Et_2O). Mp 174-175°. $[\alpha]_D$ −16.3° (c, 1 in H_2O).

N^3-*Propanoyl*, N^4-*tri-Me:* [101396-05-8]. ***Emericedin B***

$C_{10}H_{20}N_2O_3$ M 216.280

Isol. from *E. quadrilineata*. Yellow needles (as monopicrate). Mp 191-193° (as monopicrate). $[\alpha]_D$ −6.4° (c, 0.39 in MeOH).

N^3-*Butanoyl*, N^4-*tri-Me:* [96186-43-5]. ***Emericedin C***

$C_{11}H_{22}N_2O_3$ M 230.306

Isol. from *E. quadrilineata*. Yellow needles (as monopicrate). Mp 176-177° (as monopicrate). $[\alpha]_D$ −5.1° (c, 0.39 in MeOH).

(S)-form

B,2HCl: [141318-80-1].

Cryst. (EtOH aq.). Mp 221-222°. $[\alpha]_D$ −7.2° (c, 1 in H_2O).

N^4-*Tri-Me:* [125377-87-9].

Cryst. (MeOH/Et_2O) (as dihydrochloride). Mp 214-216° dec. (as dihydrochloride). $[\alpha]_D$ −8.2° (c, 0.58 in H_2O).

N^3-*Ac*, N^4-*tri-Me:* Cryst. (MeOH/Et_2O) (as dihydrochloride). Mp 218-220° dec. (as dihydrochloride). $[\alpha]_D$ +20.5° (c, 0.92 in H_2O).

(±)-form [131530-16-0]

B,2HCl: [109754-82-7].

Cryst.

Pat. Coop. Treaty (*WIPO*), 83 01 952, (1983); *CA*, **99**, 120691.
Shinagawa, S. *et al*, *J. Med. Chem.*, 1987, **30**, 1458 (*Emeriamine, Emericedins*)
Cardillo, G. *et al*, *Synlett*, 1990, 543 (*synth*)
Misiti, D. *et al*, *Synth. Commun.*, 1992, **22**, 883 (*synth*)

4,4′-Diaminodibutylamine, 8CI D-10045

Updated Entry replacing D-00626

N-(*4-Aminobutyl*)-*1,4-butanediamine, 9CI.* sym-*Homospermidine. 1,9-Diamino-5-azanonane*

[4427-76-3]

$H_2NCH_2(CH_2)_3NH(CH_2)_3CH_2NH_2$

$C_8H_{21}N_3$ M 159.274

Constit. of *Santalum album* (sandalwood) and present in legume root nodules. Also isol. from organs of the Japanese newt and from roots of water hyacinth *Eichhornia crassipes*.

B,2HCl: Mp 283-285° dec.

N^1-(*3-Aminopropyl*): [86812-44-4]. N^1-(*3-Aminopropyl*) *homospermidine*

$C_{11}H_{28}N_4$ M 216.369

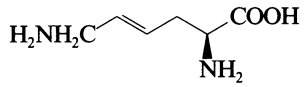
Constit. of the seeds of *Vicia sativa*. Also prod. by various bacteria incl. *Acidothermus* sp. and *Agrobacterium* sp. Residue present in Glysperin A, G-00606.

[138656-54-9]

Kuttan, R. *et al*, *Biochemistry*, 1971, **10**, 361 (*isol, synth*)
Yamamoto, S. *et al*, *Chem. Pharm. Bull.*, 1983, **31**, 3315 (*isol*)
Samejima, K. *et al*, *Chem. Pharm. Bull.*, 1984, **32**, 3428 (*Aminopropylhomospermidine*)
Hamana, K. *et al*, *Can. J. Microbiol.*, 1990, **36**, 567; 1991, **37**, 350 (*Aminopropyl homospermidine*)
Ramaswamy, S. *et al*, *CA*, 1992, **116**, 55605v (*cryst struct*)

2,6-Diamino-4-hexenoic acid, 9CI D-10046

4,5-Didehydrolysine



(*S,E*)-*form*

$C_6H_{12}N_2O_2$ M 144.173

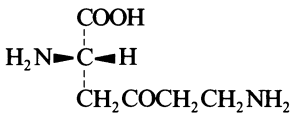
(***S*)-(*E*)-*form*** [13004-62-1]
Prod. by *Nocardiopsis* sp.

(±)-(***E*)-*form*** [39871-25-5]
B,HCl: Mp 238-239°.
B,2HCl: Cryst. (EtOH). Mp 201-205°.

Davis, A.L. *et al*, *J. Am. Chem. Soc.*, 1973, **95**, 6800 (*synth, struct*)
Japan. Pat., 92 88 993, (1992); *CA*, **117**, 149454 (*isol*)

2,6-Diamino-4-oxohexanoic acid D-10047

4-Oxolysine

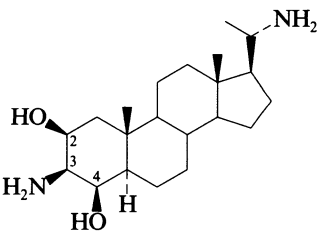


$C_6H_{12}N_2O_3$ M 160.172

(***S*)-*form*** [118021-34-4]
L-form
Prod. by *Streptomyces* sp.
B,2HCl: [37637-24-4].
Hygroscopic solid. Mp 160-180°.

John, D.I. *et al*, *J. Chem. Soc., Perkin Trans. 1*, 1972, 1825 (*synth*)
Japan. Pat., 92 288 992, (1992); *CA*, **117**, 149453 (*isol*)

3,20-Diaminopregnane-2,4-diol D-10048



$C_{21}H_{38}N_2O_2$ M 350.543
CA gives incorrect names for Axillarines C-F.

(2β,3β,4β,20S)-form

N^{20},N^{20}-*Di-Me*, N^3-*benzoyl:* [128255-09-4]. ***Axillarine E***
$C_{30}H_{46}N_2O_3$ M 482.705
Alkaloid from *Pachysandra axillaris* (Buxaceae). Cryst. Mp 285-290°.

N^{20},N^{20}-*Di-Me*, N^3-*benzoyl, 4-Ac:* [128255-10-7]. ***Axillarine C***
$C_{32}H_{48}N_2O_4$ M 524.742
Alkaloid from *P. axillaris* (Buxaceae). Cryst. Mp 272-274°. $[\alpha]_D^{22}$ +22.4° (c, 0.981 in $CHCl_3$).

N^{20},N^{20}-*Di-Me*, N^3-*benzoyl, 2,4-di-Ac:* [128255-11-8]. ***Axillarine D***
$C_{34}H_{50}N_2O_5$ M 566.779
Alkaloid from *P. axillaris* (Buxaceae). Cryst. Mp 223-225°. $[\alpha]_D^{22}$ +11.6° (c, 0.433 in $CHCl_3$).

N^{20},N^{20}-*Di-Me*, N^3-*tigloyl, 4-Ac:* [128255-12-9]. ***Axillarine F***
$C_{30}H_{50}N_2O_4$ M 502.736
Alkaloid from *P. axillaris* (Buxaceae). Cryst. Mp 241-244°. $[\alpha]_D^{22}$ +29.5° (c, 0.398 in $CHCl_3$).

Chiu, M. *et al*, *J. Nat. Prod.* (*Lloydia*), 1992, **55**, 25 (*isol, ir, pmr, cmr, ms, struct*)

Diapause hormone D-10049

[137534-96-4]

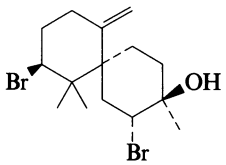
H-Thr-Asp-Met-Lys-Asp-Glu-Ser-Asp-Arg-Gly-Ala-His-Ser-Glu-Arg-Gly-Ala-Leu-Cys-Phe-Gly-Pro-Arg-Leu-NH_2

Secreted from the suboesophageal ganglion of the silkworm *Bombyx mori*. Neuropeptide hormone which induces the embryonic diapause.

Imai, K. *et al*, *Proc. Jpn. Acad., Ser. B*, 1991, **67**, 98 (*isol, synth*)

2,11-Dibromo-7(14)-chamigren-3-ol D-10050

2,8-Dibromo-5(14)-chamigren-9-ol



$C_{15}H_{24}Br_2O$ M 380.162
Constit. of *Laurencia flexilis*. Oil.

de Nys, R. *et al*, *Phytochemistry*, 1993, **34**, 725 (*isol, pmr, cmr*)

1,1-Dibromo-1-chloro-2-propanone, 9CI D-10051

1,1-Dibromo-1-chloroacetone

$H_3CCOCClBr_2$

$C_3H_3Br_2ClO$ M 250.317
Minor component of the essential oil of the edible Hawaiin red alga, *Asparagopsis taxiformis*.

Burreson, B.J. *et al*, *J. Agric. Food Chem.*, 1976, **24**, 856 (*synth, pmr, ms, gc-ms*)

1,1-Dibromo-3-chloro-2-propanone, 9CI D-10052

1,1-Dibromo-3-chloroacetone

[1578-18-3]

$Br_2CHCOCH_2Cl$

$C_3H_3Br_2ClO$ M 250.317
Minor component of the red algae, *Asparagopsis taxiformis* and *Falkenbergia rufolanosa*.

Rappe, C. *et al*, *Ark. Kemi*, 1965, **24**, 105 (*synth*)
Fenical, W., *Tetrahedron Lett.*, 1974, 4463 (*isol, gc-ms, synth*)
Codomier, L. *et al*, *C. R. Hebd. Seances Acad. Sci. Ser. D*, 1977, **284**, 1163 (*isol, glc*)

1,3-Dibromo-1-chloro-2-propanone, 9CI D-10053

1,3-Dibromo-1-chloroacetone

[55716-00-2]

$BrCH_2COCHBrCl$

$C_3H_3Br_2ClO$ M 250.317

(±)-*form*
Component of the red algae, *Asparagopsis taxiformis*, *A. armata* and tetrasporophyte *Falkenbergia rufolanosa*. Bp_{10} 95-97°. n_D^{25} 1.5632.

Rappe, C. *et al*, *Ark. Kemi*, 1965, **24**, 105 (*synth*)
Codomier, L. *et al*, *C. R. Hebd. Seances Acad. Sci. Ser. D*, 1977, **284**, 1163 (*isol*)
Bruneau, Y. *et al*, *C. R. Hebd. Seances Acad. Sci. Ser. D*, 1978, **286**, 603 (*isol*)
Combaut, G. *et al*, *Phytochemistry*, 1978, **17**, 1661 (*isol, glc*)

1,1-Dibromo-3,3-dichloro-2-propanone, 9CI D-10054

1,1-Dibromo-3,3-dichloroacetone
[62874-83-3]

$Br_2CHCOCHCl_2$

$C_3H_2Br_2Cl_2O$ M 284.762
Component of the red alga, *Asparagopsis armata* and tetrasporophyte, *Falkenbergia rufolanosa*.

McConnell, O. *et al*, *Phytochemistry*, 1977, **16**, 367 (*isol, gc-ms*)
Bruneau, Y. *et al*, *C. R. Hebd. Seances Acad. Sci. Ser. D*, 1978, **286**, 603 (*isol, glc*)
Combaut, G. *et al*, *Phytochemistry*, 1978, **17**, 1661 (*isol, glc*)

1,3-Dibromo-1,3-dichloro-2-propanone, 9CI D-10055

1,3-Dibromo-1,3-dichloroacetone
[62874-84-4]

BrCHClCOCHBrCl

$C_3H_2Br_2Cl_2O$ M 284.762
Component of the red alga, *Asparagopsis armata* and tetrasporophyte, *Falkenbergia rufolanosa*.

McConnell, O. *et al*, *Phytochemistry*, 1977, **16**, 367 (*isol, glc*)
Bruneau, Y. *et al*, *C. R. Hebd. Seances Acad. Sci. Ser. D*, 1978, **286**, 603 (*isol, glc*)
Combaut, G. *et al*, *Phytochemistry*, 1978, **17**, 1661 (*isol, glc*)

1,1-Dibromo-3-iodo-2-propanone, 9CI D-10056

1,1-Dibromo-3-iodoacetone
[59227-99-5]

$Br_2CHCOCH_2I$

$C_3H_3Br_2IO$ M 341.769
Minor component of the essential oil of the edible Hawaiin red alga, *Asparagopsis taxiformis*, and *A. armata*.

Burreson, B.J. *et al*, *J. Agric. Food Chem.*, 1976, **24**, 856 (*isol, gc-ms*)
McConnell, O. *et al*, *Phytochemistry*, 1977, **16**, 367 (*isol, gc-ms*)

1,1-Dibromo-2-propanone, 9CI D-10057

1,1-Dibromoacetone
[867-54-9]

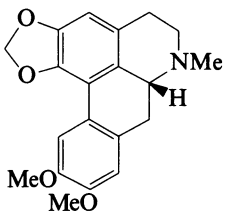
$H_3CCOCHBr_2$

$C_3H_4Br_2O$ M 215.872
Minor component of the essential oil of the edible Hawaiin red alga *Asparagopsis taxiformis*, and of *Falkenbergia rufolanosa*. Liq. Bp_{13} 55-57°. pK_a 11.9 (H_2O, 25°). n_D^{25} 1.5237.

Hughes, E.D. *et al*, *J. Chem. Soc.*, 1931, 3318 (*synth*)
Rappe, C., *Ark. Kemi*, 1964, **21**, 503 (*synth, pmr, ir*)
Takahashi, K., *Bull. Chem. Soc. Jpn.*, 1964, **37**, 963 (*pmr*)
Burreson, B.J. *et al*, *J. Agric. Food Chem.*, 1976, **24**, 856 (*isol, glc*)
Combaut, G. *et al*, *Phytochemistry*, 1978, **17**, 1661 (*isol, glc*)
Geigert, J. *et al*, *J. Biol. Chem.*, 1983, **258**, 2273 (*gc-ms*)
Guthrie, J.P. *et al*, *J. Am. Chem. Soc.*, 1984, **106**, 1351 (*pKa*)
Bostroem, G.O. *et al*, *J. Mol. Struct.*, 1987, **158**, 23 (*conformn*)

Dicentrine D-10058

Updated Entry replacing D-00796
9,10-Dimethoxy-1,2-methylenedioxyaporphine. N,O-*Dimethylactinodaphnine*. *Eximine*†



(*R*)-*form*

$C_{20}H_{21}NO_4$ M 339.390

(*R*)-*form* [28832-07-7]
Alkaloid from a Brazilian *Duguetia* sp.(Annonaceae). Mp 169°. $[\alpha]_D$ −53° (c, 1 in $CHCl_3$).

N-*De-Me:* (−)-***Nordicentrine***
$C_{19}H_{19}NO_4$ M 325.363
Alkaloid from tubers of *Stephania pierrei* (Menispermaceae). Mp 248° dec. $[\alpha]_D^{20}$ −34° (c, 0.2 in MeOH).

(*S*)-*form* [517-66-8]
Alkaloid from a variety of genera in the Lauraceae (*Cassytha*, *Laurus*, *Lindera*, *Ocotea*, *Litsea*), Menispermaceae (*Cocculus*, *Cissampelos*, *Stephania*), Fumariaceae (*Dicentra*) and Papaveraceae (*Glaucium*). Mp 168-169°. $[\alpha]_D$ +57° (c, 1 in EtOH).

B,HCl: Mp 169°.
B,MeI: Mp 224°.

N-*De-Me:* [25394-59-6]. (+)-***Nordicentrine***. *9,10-Dimethoxy-1,2-methylenedioxynoraporphine*
$C_{19}H_{19}NO_4$ M 325.363
Alkaloid from the trunk and leaves of *Lindera oldhamii*, the leaves of *Litsea salicifolia*, and the stem bark of *Guatteria scandens* (Lauraceae, Annonaceae). Mp 254-255° dec. $[\alpha]_D^{31}$ +31° (c, 0.65 in MeOH).

4S-*Hydroxy:* [72170-12-8]. ***4-Hydroxydicentrine***
$C_{20}H_{21}NO_5$ M 355.390
Alkaloid from leaves of *Ocotea minarum* (Lauraceae). Mp 210°. $[\alpha]_D$ +60° (c, 0.5 in $CHCl_3$).

6a,7-*Didehydro:* see *Dehydrodicentrine*, *D-00295*

(±)-*form* [26110-43-0]
Has bactericidal activity. Mp 178-179°.

B,HCl: Mp 263-265° dec.
B,MeI: Mp 228-229°.

Asahina, Y. *et al*, *Arch. Pharm.* (*Weinheim, Ger.*), 1909, **247**, 201 (*isol*)
Haworth, R.D. *et al*, *J. Chem. Soc.*, 1925, **127**, 2018; 1926, **128**, 29 (*synth*)
Craig, J.C. *et al*, *Tetrahedron*, 1965, **21**, 395 (*ord, uv*)
Casagrande, C. *et al*, *Farmaco, Ed. Sci.*, 1970, **25**, 442 (*isol*)
Lu, S.T. *et al*, *Yakugaku Zasshi*, 1972, **92**, 910 (*isol, pmr, ir*)
Cava, M.P. *et al*, *Tetrahedron*, 1973, **29**, 2245 (*synth*)
Chen, I.S., *J. Chin. Chem. Soc.* (*Taipei*), 1977, **24**, 41; *CA*, **87**, 35908a ((+)-*Nordicentrine*)
O'Brien, J.P. *et al*, *Heterocycles*, 1978, **11**, 347 (*synth*)
Vecchietti, V. *et al*, *Farmaco, Ed. Sci.*, 1979, **34**, 829 (*4-Hydroxydicentrine*)
Ricca, G.S. *et al*, *Gazz. Chim. Ital.*, 1979, **109**, 1 (*cmr*)
Marsaioli, A.J. *et al*, *Phytochemistry*, 1979, **18**, 165 (*cmr*)
Rastogi, R.C. *et al*, *Phytochemistry*, 1980, **19**, 998 ((+)-*Nordicentrine*)
Ringdahl, B. *et al*, *J. Nat. Prod.* (*Lloydia*), 1981, **44**, 80 (*cd*)
Hocquemiller, R. *et al*, *J. Nat. Prod.* (*Lloydia*), 1983, **46**, 335 ((+)-*Nordicentrine*)

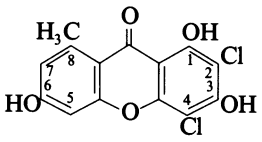
Hara, H. *et al*, *Chem. Pharm. Bull.*, 1986, **34**, 1946 (*synth, pmr*)
Likhitwitayawuid, K. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 1468 ((-)-*Nordicentrine*)

2,4-Dichloro-1,3,6-trihydroxy-8-methylxanthone D-10059

Updated Entry replacing D-00821

2,4-Dichloro-1,3,6-trihydroxy-8-methyl-9H-xanthen-9-one. ***2,4-Dichlorononorlichexanthone***

[22105-31-3]



$C_{14}H_8Cl_2O_5$ M 327.120
Isol. from lichen *Lecanora straminea*. Prisms (EtOAc). Mp 285-287°.

6-Me ether: [22105-96-0]. *2,4-Dichloro-1,3-dihydroxy-6-methoxy-8-methylxanthone.* ***Thiophaninic acid***
Isol. from lichens incl. *L.* and *Pertusaria* spp. Yellow needles (DMSO aq.). Mp 278-279° (276°).

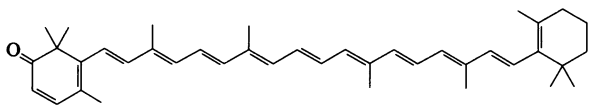
3,6-Di-Me ether: [22105-97-1]. *2,4-Dichloro-1-hydroxy-3,6-dimethoxy-8-methylxanthone.* ***2,4-Dichloro-3,6-di-O-methylnorlichexanthone***
$C_{16}H_{12}Cl_2O_5$ M 355.173
Isol. from *P.* spp. Yellow needles (DMSO aq.). Yellow needles (EtOH). Mp 278-279° (276°), Mp 184-186°.

Tri-Me ether: [22105-98-2]. *2,4-Dichloro-1,3,6-trimethoxy-8-methylxanthone*
$C_{17}H_{14}Cl_2O_5$ M 369.200
Needles ($CHCl_3$/MeOH). Mp 193-194°.

Santesson, J., *Ark. Kemi*, 1969, **30**, 427, 461 (*isol*)
Huneck, S. *et al*, *Z. Naturforsch., B*, 1969, **24**, 750 (*isol*)
Elix, J.A. *et al*, *Aust. J. Chem.*, 1978, **31**, 145 (*isol*)
Huneck, S. *et al*, *Tetrahedron*, 1978, **34**, 2491 (*isol, synth, cmr*)

3,4-Didehydro-β,β-caroten-2-one D-10060

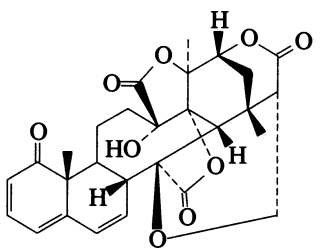
[130177-40-1]



$C_{40}H_{52}O$ M 548.850
Constit. of the eggs of the stick insect *Anisomorpha buprestoides* and *Neophirasea japonica*.

Matsuno, T. *et al*, *Comp. Biochem. Physiol., B: Comp. Biochem.*, 1990, **95**, 583 (*isol*)
Davidson, B.S. *et al*, *Tetrahedron Lett.*, 1991, **32**, 5651 (*isol, pmr*)

4,7-Didehydroneophysalin B D-10061

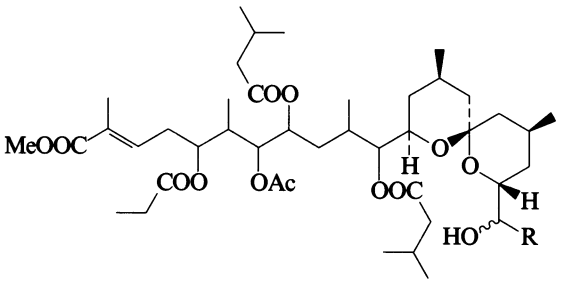


$C_{28}H_{28}O_9$ M 508.524
Constit. of *Physalis alkekengi*. Amorph. solid. $[\alpha]_D$ +21° (c, 0.26 in MeOH).

Sunayama, R. *et al*, *Phytochemistry*, 1993, **34**, 529 (*isol, pmr, cmr*)

Didemnaketal A D-10062

[135257-49-7]



R = —$COCH_3$

$C_{44}H_{72}O_{14}$ M 825.044
Isol. from the ascidian *Didemnum* sp. HIV-1 protease inhibitor. Oil. $[\alpha]_D$ −11.0° (c, 0.8 in $CHCl_3$).

Potts, B.C.M. *et al*, *J. Am. Chem. Soc.*, 1991, **113**, 6321 (*isol, struct*)

Didemnaketal B D-10063

[135257-48-6]

As Didemnaketal A, D-10062 with

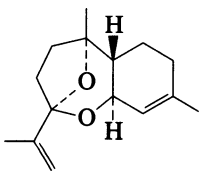
R = —$C(CH_3)$=$CHCH_2CH_2CH(CH_3)CH_2COOMe$

$C_{52}H_{86}O_{15}$ M 951.242
Isol. from the ascidian *Didemnum* sp. HIV-1 protease inhibitor. Oil.

Potts, B.C.M. *et al*, *J. Am. Chem. Soc.*, 1991, **113**, 6321 (*isol, struct*)

1,10:7,10-Diepoxy-2,11-bisaboladiene D-10064

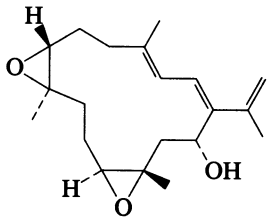
[149067-97-0]



$C_{15}H_{22}O_2$ M 234.338
Constit. of *Artemisia sieberi*. Oil.

Weyerstahl, P. *et al*, *Justus Liebigs Ann. Chem.*, 1993, 111 (*isol, pmr, cmr*)

7,8:11,12-Diepoxy-1,3,15-cembratrien-14-ol D-10065



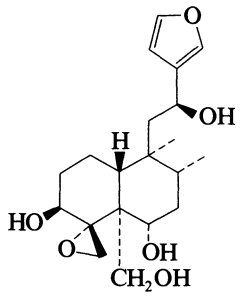
$C_{20}H_{30}O_3$ M 318.455
(1E,3E,7R*,8R*,11S*,12S*,14R*)-form

Ac: [149182-65-0].
$C_{22}H_{32}O_4$ M 360.492
Constit. of *Sarcophyton tortuosum*. Oil. $[\alpha]_D$ +110° (c, 1 in CCl_4).

Leone, P.A. *et al, J. Nat. Prod.* (*Lloydia*), 1993, **56**, 521 (*isol, pmr, cmr*)

4,18:15,16-Diepoxy-13(16),14-clerodadiene-3,6,12,19-tetrol D-10066

Updated Entry replacing D-00944



$C_{20}H_{30}O_6$ M 366.453
(ent-3α,4β,6β,12R)-form

6-Ac: [103827-25-4]. ***Teupyrin B***
$C_{22}H_{32}O_7$ M 408.491
Constit. of *Teucrium pyrenaicum*. Cryst. (EtOAc/hexane). Mp 213-215°. $[\alpha]_D^{26}$ +7.1° (c, 0.126 in MeOH).

12,19-Di-Ac: ***Teugracilin C***
$C_{24}H_{34}O_8$ M 450.528
Constit. of *T. gracile*. Amorph. solid. Mp 55-65°. $[\alpha]_D^{19}$ +1.7° (c, 0.241 in $CHCl_3$).

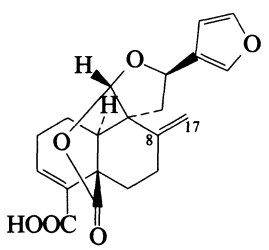
(ent-3β,4β,6β,12ξ)-form

3,19-Di-Ac: ***Teucrolin B***
$C_{24}H_{34}O_8$ M 450.528
Constit. of *T. olivarianum*. Needles (EtOAc/hexane). Mp 173-174°. $[\alpha]_D$ −48.5° (c, 0.07 in C_6H_6).

12-Ketone, 3,6,19-tri-Ac: ***Teucrolin C***
$C_{26}H_{34}O_9$ M 490.549
Constit. of *T. olivarianum*. Plates (EtOAc/hexane). Mp 152-153°. $[\alpha]_D$ −72.8° (c, 0.11 in C_6H_6).

Fernández, P. *et al, Phytochemistry*, 1986, **25**, 1405.
Bruno, M. *et al, Phytochemistry*, 1991, **30**, 3693 (*Teugracilin C*)
Al-Yahya, M.A. *et al, J. Nat. Prod.* (*Lloydia*), 1993, **56**, 830 (*Teucrolins*)
Iiménez-Barbero, J., *Tetrahedron*, 1993, **49**, 6921 (*struct*)

12,20:15,16-Diepoxy-3,8(17),13(16),14-clerodatetraen-19,20-olid-18-oic acid D-10067



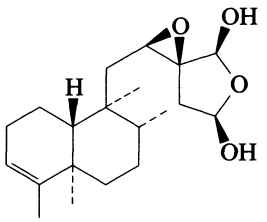
$C_{20}H_{20}O_6$ M 356.374
(ent-12S,20R)-form

Me ester: [76475-17-7]. ***Croverin***
$C_{21}H_{22}O_6$ M 370.401
Isol. from *Croton verreauxii*. Mp 151-153°. $[\alpha]_D^{25}$ −26° ($CHCl_3$).

8,17-Dihydro, Me ester: [76475-18-8]. ***Dihydrocroverin***
$C_{21}H_{24}O_6$ M 372.417
Isol. from *C. verreauxii*. Mp 205-206°. $[\alpha]_D^{25}$ −66° ($CHCl_3$).

Fujita, E. *et al, J. Chem. Soc., Chem. Commun.*, 1980, 920 (*isol, struct*)

12,13:15,16-Diepoxy-3-clerodene-15,16-diol D-10068

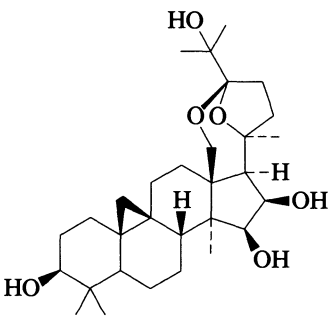


$C_{20}H_{32}O_4$ M 336.470
(ent-12S,13R,15S,16R)-form

Di-Ac: [150065-53-5].
$C_{24}H_{36}O_6$ M 420.545
Constit. of *Linaria saxatilis*. Oil. $[\alpha]_D^{23}$ −27.8° (c, 0.9 in $CHCl_3$).

San Feliciano, A. *et al, Phytochemistry*, 1993, **33**, 631 (*isol, pmr, cmr*)

18,24:20,24-Diepoxycycloartane-3,15,16,25-tetrol D-10069

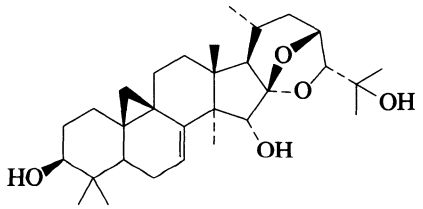


$C_{30}H_{48}O_6$ M 504.706
(3β,15β,16β,20S,24R)-form
Cryst. ($CHCl_3$). Mp 159-160°.

3-O-β-D-Xylopyranoside, 15,16-di-Ac: ***Beesioside I***
$C_{39}H_{60}O_{12}$ M 720.896
Constit. of *Beesia calthaefolia*. Cryst. ($CHCl_3$/MeOH). Mp 264-266°. $[\alpha]_D$ −10.7° (c, 0.52 in $CHCl_3$/MeOH).

Sakurai, N. *et al, Chem. Pharm. Bull.*, 1993, **41**, 272 (*isol, pmr, cmr*)

16,23:16,24-Diepoxycycloart-7-ene-3,15,25-triol D-10070



$C_{30}H_{46}O_5$ M 486.690

(3β,15α,23R,24R)-form [150972-71-7]
Constit. of *Cimicifuga heracleifolia*. Needles. Mp 222-223°. $[\alpha]_D$ +6.36° (c, 0.47 in $CHCl_3$).

3-O-β-D-Xylopyranoside: [150972-77-3].
$C_{35}H_{54}O_9$ M 618.806
Constit. of *C. heracleifolia*. Powder. $[\alpha]_D$ −9.6° (c, 0.35 in $CHCl_3$/MeOH).

3-O-(3-Acetyl-β-D-xylopyranoside): [150972-76-2].
$C_{37}H_{56}O_{10}$ M 660.843
Constit. of *C. heracleifolia*. Powder. $[\alpha]_D$ −13.2° (c, 0.53 in $CHCl_3$/MeOH).

3-O-(2,4-Diacetyl-β-D-xylopyranoside): [150972-75-1].
$C_{39}H_{58}O_{11}$ M 702.881
Constit. of *C. heracleifolia*. Powder. $[\alpha]_D$ −15.5° (c, 0.53 in $CHCl_3$).

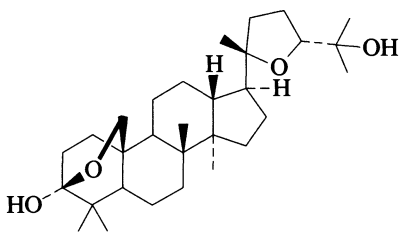
3-Ketone: [150972-74-0]. *16,23:16,24-Diepoxy-15,25-dihydroxycycloart-7-en-3-one*
$C_{30}H_{44}O_5$ M 484.675
Constit. of *C. heracleifolia*. Cryst. Mp 225-226°. $[\alpha]_D$ −12.4° (c, 0.37 in $CHCl_3$).

(3β,15α,23R,24S)-form [150972-72-8] ***7,8-Didehydrocimigenol***
Constit. of *C. heracleifolia*. Powder.

25-Ac: [150972-73-9].
$C_{32}H_{48}O_6$ M 528.728
Constit. of *C. heracleifolia*. Powder.

Li, J.X. *et al*, *Chem. Pharm. Bull.*, 1993, **41**, 832 (*isol, pmr, cmr, cryst struct*)

3,19:20,24-Diepoxydammarane-3,25-diol D-10071

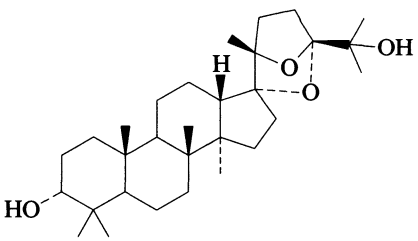


$C_{30}H_{50}O_4$ M 456.707

(3αOH,20S,24R)-form
Constit. of *Cleome africana*. Cryst. (EtOH). Mp 100°.

Tsichritzis, F. *et al*, *Phytochemistry*, 1993, **33**, 423 (*isol, pmr, cmr*)

17,24:20,24-Diepoxydammarane-3,25-diol D-10072

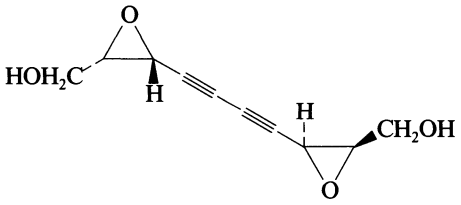


$C_{30}H_{50}O_4$ M 474.723

(3α,17α,20S,24S)-form
Constit. of *Cleome africana*. Cryst. (EtOH). Mp 251°.

Tsichritzis, F. *et al*, *Phytochemistry*, 1993, **33**, 423 (*isol, pmr, cmr*)

2,3:8,9-Diepoxy-4,6-decadiyne-1,10-diol D-10073



$C_{10}H_{10}O_4$ M 194.187

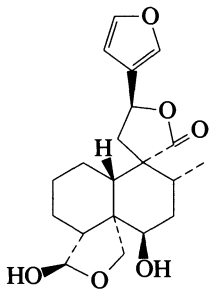
(2R,3R,8R,9R)-form [147921-90-2] ***Repandiol***
Constit. of the mushrooms *Hydnum repandum* and *H. repandum* var. *album*. Cytotoxic. Leaflets (MeOH). Mp 168-169°. $[\alpha]_D^{19}$ +40.0° (c, 0.12 in MeOH).

Di-Ac: Amorph. powder. $[\alpha]_D^{26}$ +63.4° (c, 0.12 in $CHCl_3$).

Takahashi, A. *et al*, *Chem. Pharm. Bull.*, 1992, **40**, 3181 (*isol, pmr, cmr, synth, struct*)

15,16:18,19-Diepoxy-6,18-dihydroxy-13(16),14-clerodadien-20,12-olide D-10074

Updated Entry replacing D-00961



$C_{20}H_{26}O_6$ M 362.422

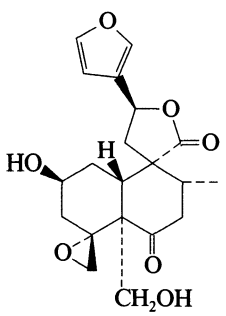
(ent-4αH,6α,12βH,18α)-form [125137-21-5] ***Teukotschyn***
Constit. of *Teucrium kotschyanum*. Amorph. solid. Mp 95-105°. $[\alpha]_D^{22}$ −5.7° (c, 0.317 in $CHCl_3$).

6-Ketone: [87376-65-6]. ent-*15,16:18,19-Diepoxy-18-hydroxy-6-oxo-13(16),14-clerodadien-20,12-olide*.
Teuscorodin
Isol. from *T. scorodonia*. Cryst. (Me_2CO/hexane). Mp 152-153°. $[\alpha]_D^{22}$ +2.9° (c, 0.24 in $CHCl_3$).

18-O-β-D-Glucopyranoside, 16-Ac: ***Teulamioside***
$C_{28}H_{38}O_{12}$ M 566.601
Constit. of *T. lamiifolium*. Amorph. solid. Mp 125-135°. $[\alpha]_D^{18}$ −92.8° (c, 0.626 in $CHCl_3$).

Marco, J.L. *et al*, *Phytochemistry*, 1983, **22**, 727 (*Teuscorodin*)
Simoes, F. *et al*, *Phytochemistry*, 1989, **28**, 2763 (*Teukotschyn*)
Malakov, P.Y. *et al*, *Phytochemistry*, 1993, **34**, 1095 (*Teulamioside*)

4,18:15,16-Diepoxy-2,19-dihydroxy-6-oxo-13(16),14-clerodadien-20,12-olide D-10075



$C_{20}H_{24}O_7$ M 376.405

(ent-2α,4β,12βH)-form

19-Ac: [146428-63-9]. ***Teumassin***

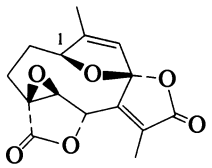
$C_{22}H_{26}O_8$ M 418.443

Constit. of *Teucrium massiliense*. Amorph. solid. $[\alpha]_D^{20}$ +42.5° (c, 0.047 in $CHCl_3$).

Bruno, M. *et al*, *Phytochemistry*, 1992, **31**, 4366 (*isol, pmr*)

1,8:4,5-Diepoxy-7(11),9-germacradiene-12,8:14,6-diolide D-10076

Updated Entry replacing D-00988



(1*S*,4β,5β,6α,8α)-*form*

$C_{15}H_{14}O_6$ M 290.272

(1S,4β,5β,6α,8α)-form [88653-68-3] ***Neoliacine***

Constit. of *Neolitsea aciculata*. Cryst. Mp 283° dec. $[\alpha]_D$ +7.3° (c, 5.4 in Py).

(1R,4β,5β,6α,8β)-form

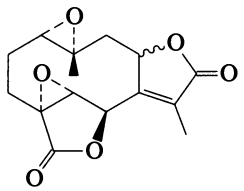
Pseudoneolicine

Constit. of *N. villosa*. Cryst. ($CHCl_3$). Mp 272-274°. $[\alpha]_D$ −6.9° (c, 0.3 in Me_2CO).

Nozaki, H. *et al*, *J. Chem. Soc., Chem. Commun.*, 1983, 1107 (*isol, cryst struct*)

Li, W.-S. *et al*, *Phytochemistry*, 1993, **32**, 1503 (*isol, pmr, cmr*)

1,10:4,5-Diepoxy-7(11)-germacrene-12,8:15,6-diolide D-10077



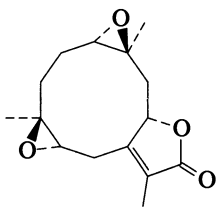
$C_{15}H_{16}O_6$ M 292.288

(1α,4α,5α,6β,8ξ,10α)-form [145940-31-4] ***Acutotrine***

Constit. of *Neolitsea acutotrinervia*. Plates (Me_2CO/hexane). Mp 240-242°.

Li, W.-S., *J. Nat. Prod.* (*Lloydia*), 1992, **55**, 1614 (*isol, pmr, cmr*)

1,10:4,5-Diepoxy-7(11)-germacren-12,8-olide D-10078



$C_{15}H_{20}O_4$ M 264.321

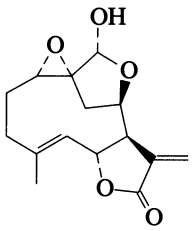
(1α,4β,5α,8α,10β)-form

Litseacassifolide

Constit. of *Litsea cassiaefolia*. Cryst. (Et_2O). Mp 203-205°. $[\alpha]_D$ −137° (c, 0.3 in $CHCl_3$).

Hakim, E.H. *et al*, *Aust. J. Chem.*, 1993, **46**, 1355 (*isol, pmr, cmr, cryst struct*)

1,10:8,14-Diepoxy-14-hydroxy-4,11(13)-germacradien-12,6-olide D-10079



$C_{15}H_{18}O_5$ M 278.304

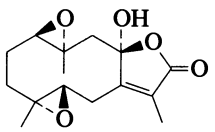
(1α,4E,6α,8β,10α,14α)-form [146564-55-8]

Constit. of *Blainvillea gayana*. Gum.

Kijjoa, A. *et al*, *Phytochemistry*, 1993, **32**, 383 (*isol, pmr, cmr*)

1,10:4,5-Diepoxy-8-hydroxy-7(11)-germacren-12,8-olide D-10080

Updated Entry replacing D-01008



(1β,4α,5β,8α*OH*,10β)-*form*

$C_{15}H_{20}O_5$ M 280.320

(1β,4α,5β,8αOH,10α)-form

8-(2-Methylpropyl): ***1β,10α:4α,5β-Diepoxy-8α-isobutoxyglechomanolide***

$C_{19}H_{28}O_5$ M 336.427

Constit. of *Smyrnium perfoliatum*. Amorph.

(1β,4α,5β,8βOH,10α)-form

8-(2-Methylpropyl): ***1β,10α:4α,5β-Diepoxy-8β-isobutoxyglechomanolide***

$C_{19}H_{28}O_5$ M 336.427

From *S. perfoliatum*. Cryst. Mp 155°.

(1α,4α,5α,6β,8ξ,10α)-form

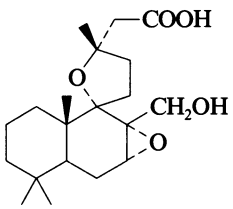
Villosine

Constit. of *Neolitsea villosa*. Needles ($CHCl_3$). Mp 224-226°.

Gören, N. *et al*, *Phytochemistry*, 1987, **26**, 2585.

Li, W.-S. *et al*, *Phytochemistry*, 1993, **32**, 1503 (*Villosine*)

7,8:9,13-Diepoxy-17-hydroxy-15-labdanoic acid D-10081



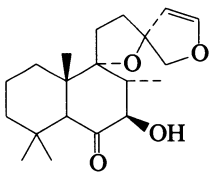
$C_{20}H_{32}O_5$ M 352.470

(7α,8α,9α,13S)-form

Constit. of *Chrysoma pauciflosculosa*. Gum.

Menelaou, M.A. *et al*, *Phytochemistry*, 1993, **34**, 97 (*isol, pmr, cmr*)

9,13:15,16-Diepoxy-7-hydroxy-14-labden-6-one D-10082



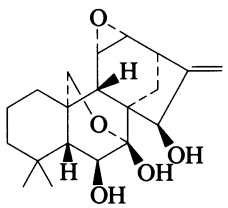
$C_{20}H_{30}O_4$ M 334.455

(7β,8βH,9α,13R)-form [151178-05-1] ***Preleoheterin***

Constit. of *Leonurus heterophyllus*. Syrup. $[\alpha]_D^{25}$ −15.99° (c, 0.5 in EtOH).

Hon, P.M. *et al*, *Phytochemistry*, 1993, **33**, 639 (*isol*, *pmr*, *cmr*)

7,20:11,12-Diepoxy-16-kaurene-6,7,15-triol D-10083



$C_{20}H_{28}O_5$ M 348.438

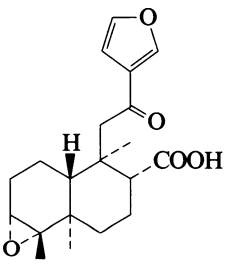
(ent-6α,11β,12β,15α)-form

Wikstroemioidin A

Constit. of *Isodon wikstroemioides*. Needles (MeOH). Mp 196-197°. $[\alpha]_D^{25}$ −204.3° (c, 0.23 in Py).

Shun-Hua, W. *et al*, *Phytochemistry*, 1993, **34**, 1099 (*isol*, *pmr*, *cmr*)

3,4:15,16-Diepoxy-12-oxo-13(16),14-clerodadien-17-oic acid D-10084



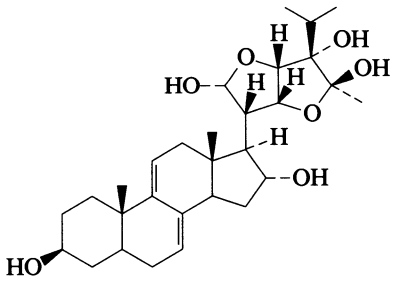
$C_{20}H_{26}O_5$ M 346.422

(ent-3β,4β)-form [143183-67-9] ***Epoxychiromodine***

Constit. of *Croton megalocarpus*. Cryst. Mp 166-168°. $[\alpha]_D^{21}$ −31° (c, 0.8 in $CHCl_3$). Epoxychiromodine is strictly speaking a misnomer.

Addae-Mensah, I. *et al*, *Phytochemistry*, 1992, **31**, 2055 (*isol*, *pmr*, *cmr*)

21,23:22,28-Diepoxystigmasta-7,9(11)-diene-3,16,21,24,28-pentol D-10085



$C_{29}H_{44}O_7$ M 504.662

(3β,16α,21R,22R,23R,24R,28S)-form

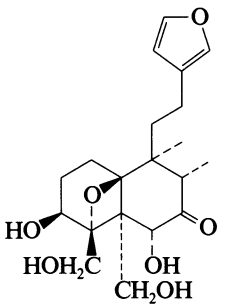
28-Me ether, 3-O-β-D-glucopyranoside: ***Vernonioside B₂***

$C_{36}H_{56}O_{12}$ M 680.831

Constit. of *Vernonia amygdalina*. Cryst. (MeOH). Mp 260-261°. $[\alpha]_D^{24}$ +65.3° (c, 0.453 in MeOH).

Jisaka, M. *et al*, *Phytochemistry*, 1993, **34**, 409 (*isol*, *pmr*, *cmr*)

4,10:15,16-Diepoxy-3,6,18,19-tetrahydroxy-13(16),14-clerodadien-7-one D-10086



$C_{20}H_{28}O_7$ M 380.437

(ent-3α,4β,6β,10α)-form

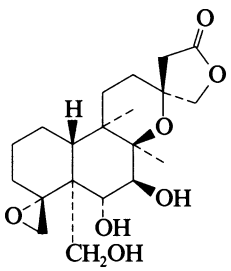
19-Ac: ***Teucrolin E***

$C_{22}H_{30}O_8$ M 422.474

Constit. of *Teucrium olivarianum*. Plates. Mp 78-79°. $[\alpha]_D$ −35.4° (c, 0.05 in C_6H_6).

Al-Yahya, M.A. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 830 (*isol*, *pmr*, *cmr*)

4,18:8,13-Diepoxy-6,7,19-trihydroxy-15,16-clerodanolide D-10087



$C_{20}H_{30}O_7$ M 382.453

(ent-4β,6β,7α,8α,13R)-form

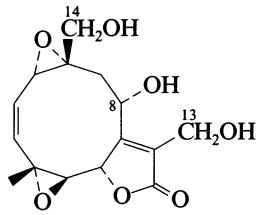
6-(2S-Methylbutanoyl), 7,19-di-Ac: ***Scutalpin A***

$C_{29}H_{42}O_{10}$ M 550.645

Constit. of *Scutellaria alpina*. Cryst. (MeOH). Mp 218-220°. $[\alpha]_D^{24}$ −24.7° (c, 0.382 in $CHCl_3$).

Bozov, P.I. *et al*, *Phytochemistry*, 1993, **34**, 453 (*isol, pmr, cmr, cryst struct*)

1,10:4,5-Diepoxy-8,13,14-trihydroxy-2,7(11)-germacradien-12,6-olide D-10088



$C_{15}H_{18}O_7$ M 310.303

(1α,2E,4α,5β,6α,8α,10α)-form

8-(2-Methylpropanoyl), 13-Ac:
$C_{21}H_{26}O_9$ M 422.431
Constit. of *V. galamensis.*

8-(2-Methylpropanoyl), 13,14-di-Ac:
$C_{23}H_{28}O_{10}$ M 464.468
Constit. of *V. galamensis.*

8-(2-Methylpropenyl), 13-Ac: [94450-25-6].
$C_{21}H_{24}O_9$ M 420.415
Constit. of *Vernonia adoensis.* Oil.

8-(2-Methylbutanoyl), 13-Ac: [94450-29-0].
$C_{22}H_{28}O_9$ M 436.458
Constit. of *V. adoensis.* Oil.

8-(3-Methyl-2-butenoyl), 13-Ac: ***Prevernocistifolide-8-O-senecioate***
$C_{22}H_{26}O_9$ M 434.442
Constit. of *V. galamensis.*

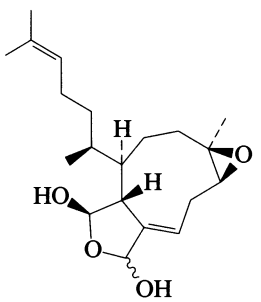
8-(3-Methyl-2-butenoyl), 13,14-di-Ac:
$C_{24}H_{28}O_{10}$ M 476.479
Constit. of *V. galamensis.*

2α,3α-Epoxide, 8-(3-methyl-2-butenoyl), 13-Ac:
$C_{22}H_{26}O_{10}$ M 450.441
Constit. of *V. galamensis.*

2,3-Dihydro, 8-(2,3-epoxy-2-methylpropanoyl), 13-Ac, 14-deoxy: ***17,18-Epoxyvernonatolide***
$C_{21}H_{26}O_9$ M 422.431
Constit. of *V. adoensis.* Oil.

Bohlmann, F. *et al*, *Phytochemistry*, 1984, **23**, 1795 (*isol, pmr*)
Perdue, R.E. *et al*, *Phytochemistry*, 1993, **34**, 1075 (*isol, pmr, cmr*)

6,7:18,19-Diepoxy-1(9),13-xenicadiene-18,19-diol D-10089

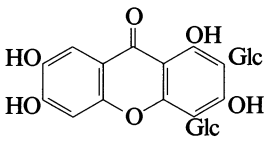


$C_{20}H_{32}O_4$ M 336.470

Di-Me ether: ***Dictyoepoxide***
$C_{22}H_{36}O_4$ M 364.524
Constit. of a *Dictyota* sp. Oil.

Patil, A.D. *et al*, *Phytochemistry*, 1993, **33**, 1061 (*isol, pmr, cmr*)

2,4-Diglucosyl-1,3,6,7-tetrahydroxyxanthone D-10090



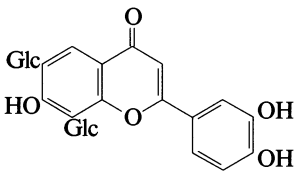
$C_{25}H_{28}O_{16}$ M 584.487

3,6,7-Tri-Me ether: [140388-69-8]. *2,4-Diglucosyl-1-hydroxy-3,6,7-trimethoxyxanthone*
$C_{28}H_{34}O_{16}$ M 626.567
Constit. of the aerial parts of *Asplenium adiatum-nigrum.*

Imperato, F., *Phytochemistry*, 1991, **30**, 3839.

6,8-Diglucosyl-3′,4′,7-trihydroxyflavone D-10091

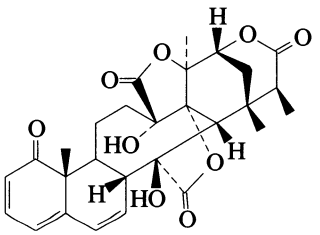
2-(3,4-Dihydroxyphenyl)-6,8-di-β-D-glucopyranosyl-7-hydroxy-4H-1-benzopyran-4-one



$C_{27}H_{30}O_{15}$ M 594.525
Constit. of the leaves of *Sophora prostata.* Tentative identification.

Markham, K.R. *et al*, *Phytochemistry*, 1973, **12**, 1091.

25,27-Dihydro-4,7-didehydro-7-deoxyphysalin A D-10092

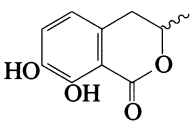


$C_{28}H_{30}O_9$ M 510.540
Constit. of *Physalis alkekengi.* Amorph. solid. $[\alpha]_D$ −67° (c, 0.24 in MeOH).

Sunayama, R. *et al*, *Phytochemistry*, 1993, **34**, 529 (*isol, pmr, cmr*)

3,4-Dihydro-7,8-dihydroxy-3-methyl-1*H*-2-benzopyran-1-one, 9CI D-10093

3,4-Dihydro-7,8-dihydroxy-3-methylisocoumarin
[118853-80-8]



$C_{10}H_{10}O_4$ M 194.187
Constit. of *Azadirachta indica.* Cryst (Et_2O/hexane). Mp 212°.

Di-Me ether: [118918-23-3]. *3,4-Dihydro-7,8-dimethoxy-3-methylisocoumarin.* ***Margocetin***
$C_{12}H_{14}O_4$ M 222.240

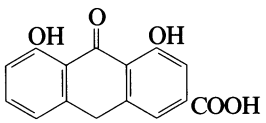
Constit. of *A.indica*. Plates (CH_2Cl_2) or cryst. (Et_2O/hexane). Mp 85°, Mp 250-251°. Large discrepancy in reported Mp's.

Siddiqui, S. *et al*, *Planta Med.*, 1988, **54**, 457 (*isol*)
Bhide, B.H. *et al*, *Indian J. Chem., Sect. B*, 1992, **31**, 116 (*synth*)

9,10-Dihydro-4,5-dihydroxy-10-oxo-2-anthracenecarboxylic acid D-10094

9,10-Dihydro-4,5-dihydroxy-10-oxo-2-anthroic acid, 8CI. ***Rheinanthrone***

[480-09-1]



$C_{15}H_{10}O_5$ M 270.241

Prod. from *Cassia* spp. and *Rheum* spp. Purgative agent. Mp 250-280° dec.

O-*Glucoside:* [54003-18-8].
$C_{21}H_{20}O_{10}$ M 432.383
Constit. of *C. angustifolia.*

O-*Diglucoside:* [57077-57-3].
$C_{27}H_{30}O_{15}$ M 594.525
Constit. of *C. angustifolia.*

[30201-14-0, 57077-55-1, 117639-10-8]

Lemli, J. *et al*, *Phytochemistry*, 1975, **14**, 1397 (*glucoside*)
Evans, F.J. *et al*, *Biomed. Mass Spectrom.*, 1979, **6**, 374 (*ms*)
De Witte, P. *et al*, *Pharmacology*, suppl. 1, 1988, **36**, 152 (*metab*)

2,5-Dihydrofuran, 9CI D-10095

[1708-29-8]

C_4H_6O M 70.091

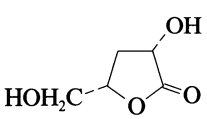
Constit. of the leaves of *Ledum palustre*. Liq. with sharp disagreeable odour. Bp 66.5-67.5°. Forms azeotrope, Bp 64-5° containing 6.1% H_2O.

Brace, N.O. *et al*, *J. Am. Chem. Soc.*, 1955, **77**, 4157 (*synth*)
Reppe, W. *et al*, *Justus Liebigs Ann. Chem.*, 1955, **596**, 80 (*synth*)
Lozoc'h, R. *et al*, *J. Magn. Reson.*, 1973, **12**, 244 (*pmr*)
Fortunato, B. *et al*, *Gazz. Chim. Ital.*, 1976, **106**, 799 (*ir*)
Terlouw, J.K. *et al*, *Org. Mass Spectrom.*, 1979, **14**, 387 (*ms*)
Kintzinger, J.P. *et al*, *Tetrahedron*, 1980, **36**, 3431 (*nmr*)
Ylipahkala, T.M. *et al*, *Chromatographia*, 1992, **34**, 159 (*isol*)

4,5-Dihydro-3-hydroxy-5-(hydroxymethyl)-2(3*H*)-furanone D-10096

Updated Entry replacing D-01251

3-Deoxypentonic acid γ-lactone, 9CI. 2-Hydroxy-4-hydroxymethyl-4-butanolide



$C_5H_8O_4$ M 132.116

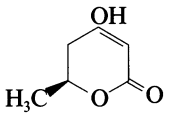
(***3S,5S*)-*form*** [19473-20-2]
D-threo-*form*
Isol. from human and rat blood serum. Shows appetite-stimulant props. Oil. $[\alpha]_D^{20}$ +23.2° (c, 3.61 in MeOH). Other stereoisomers also prepd.

[19473-19-9]

Uchikawa, O. *et al*, *Bull. Chem. Soc. Jpn.*, 1988, **61**, 2025 (*synth, ir, pmr, cmr, bibl*)
Matsumoto, K. *et al*, *Heterocycles*, 1992, **34**, 363 (*synth*)

5,6-Dihydro-4-hydroxy-6-methyl-2*H*-pyran-2-one, 9CI D-10097

[33177-29-6]



$C_6H_8O_3$ M 128.127

(***S*)-*form***
*Me ether: 5,6-Dihydro-4-methoxy-6-methyl-2*H*-pyran-2-one*
$C_7H_{10}O_3$ M 142.154
Mp 59-60°. $[\alpha]_D^{17}$ +256° (c, 0.5 in MeOH).

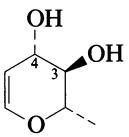
O-*β*-D-*Glucopyranoside:* [125445-59-2]. ***Gerberin***
$C_{12}H_{18}O_8$ M 290.269
Constit. of *Gerbera jamesonii hybrida*. Amorph. powder. $[\alpha]_D^{19}$ −11.2° (c, 1.2 in MeOH).

(±)-***form*** [74259-30-6]
Cryst. Mp 123-125° (121-122°).

Izawa, T. *et al*, *Chem. Lett.*, 1975, 161 (*synth*)
Svendsen, A. *et al*, *J. Org. Chem.*, 1975, **40**, 1927 (*synth*)
Nedjar, B. *et al*, *J. Heterocycl. Chem.*, 1978, **15**, 1153 (*synth*)
Haeusler, J., *Monatsh. Chem.*, 1982, **113**, 1213 (*synth*)
Nagumo, S. *et al*, *Chem. Pharm. Bull.*, 1989, **37**, 2621 (*Gerberin*)

3,4-Dihydro-2-methyl-2*H*-pyran-3,4-diol D-10098

*3,4-Dihydro-3,4-dihydroxy-2-methyl-2*H*-pyran*



(2*S*,3*R*,4*S*)-*form*

$C_6H_{10}O_3$ M 130.143

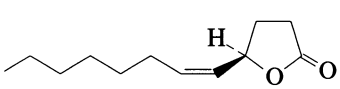
(***2S,3R,4S*)-*form***
4-O-*β*-D-*Glucopyranoside, 3-Ac:* [81793-76-2]. ***Sapopyroside***
$C_{14}H_{22}O_9$ M 334.322
Isol. from *Saponaria officinalis* and *Dianthus superbus*. Prisms or needles (EtOH/EtOAc). Mp 179°. $[\alpha]_D$ −64° (c, 1.0 in H_2O).

(***2S,3S,4S*)-*form***
4-O-*β*-D-*Glucopyranoside, 3-Ac:* [94323-77-0]. ***Barbapyroside***
$C_{14}H_{22}O_9$ M 334.322
Isol. from *D. barbatus* and *D. deltoides*. Prisms or needles. Mp 215°. $[\alpha]_D$ −24° (c, 1.0 in H_2O).

Shimizu, M. *et al*, *Phytochemistry*, 1982, **21**, 245.
Plouvier, G. *et al*, *Phytochemistry*, 1986, **25**, 546.

Dihydro-5-(1-octenyl)-2(3*H*)-furanone D-10099

5-Dodecen-4-olide



$C_{12}H_{20}O_2$ M 196.289

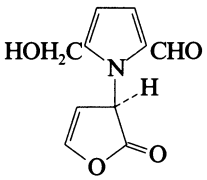
(***R,Z*)-*form*** [139477-52-4]
Isol. from the beetle *Anomala cuprea*. Sex pheromone. $Bp_{0.2}$ 115°. $[\alpha]_D^{24}$ −80.9° (c, 0.99 in $CHCl_3$), $[\alpha]_D^{24}$ −61.8° (c, 1 in hexane).

[139477-53-5]

Leal, W.S., *Naturwissenschaften*, 1991, **78**, 521 (*isol, struct*)
Fukusaki, E. *et al*, *Biosci., Biotechnol., Biochem.*, 1992, **56**, 1160 (*synth*)

1-(2,3-Dihydro-2-oxo-3-furanyl)-5-(hydroxymethyl)-1*H*-pyrrole-2-carboxaldehyde, 9CI D-10100

[112663-86-2]



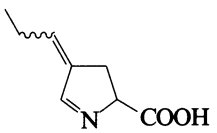
$C_{10}H_9NO_4$ M 207.185
Constit. of the roots of *Pisum satum* seedlings. Cell cycle regulator.

Lynn, D.G. *et al*, *J. Am. Chem. Soc.*, 1987, **109**, 5858 (*isol, props*)
Evans, L.S. *et al*, *Phytochemistry*, 1987, **26**, 2891 (*isol, props*)

3,4-Dihydro-4-propylidene-2*H*-pyrrole-2-carboxylic acid, 9CI D-10101

3-Propylidene-Δ^1-pyrroline-5-carboxylic acid. LBI

[146790-55-8]



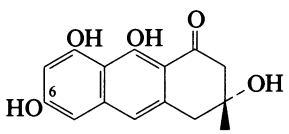
$C_8H_{11}NO_2$ M 153.180
Prod. by *Streptomyces lincolnensis*. Biosynth. precursor of Lincomycin, L-00590.

Kuo, M.S. *et al*, *J. Antibiot.*, 1992, **45**, 1773.

3,4-Dihydro-3,6,8,9-tetrahydroxy-3-methyl-1(2*H*)-anthracenone D-10102

Updated Entry replacing D-01420
Atrochrysone

[124903-85-1]



(*R*)-*form*

$C_{15}H_{14}O_5$ M 274.273
Constit. of *Cortinarius atrovirens* and *C. odoratus*. Green-yellow needles (MeOH). Mp 234-238°.

(R)-form

Constit. of *Araliorhamnus vaginata*. Yellow pigment. Mp 182-183°.

(S)-form

6-Me ether: [61419-07-6]. *3,4-Dihydro-3,8,9-trihydroxy-6-methoxy-3-methyl-1(2H)-anthracenone.* ***Torosachrysone***
$C_{16}H_{16}O_5$ M 288.299
Isol. from seeds of *Cassia torosa* and *C. singueana*. Citrine needles (MeOH). Mp 191-194°. $[\alpha]_D^{34}$ +7.2° (c, 1.7 in dioxan).

6-Me ether, 8-O-β-D-gentiobioside: [94356-13-5].
$C_{28}H_{36}O_{15}$ M 612.583
Constit. of seeds of *C. torosa*. Yellow powder (MeOH). Mp 166-168°. $[\alpha]_D^{22}$ −43.6° (c, 0.25 in MeOH).

6-O-(3,7-Dimethyl-2,6-octadienyl): [87605-72-9]. ***Vismione D***
$C_{25}H_{30}O_5$ M 410.509
Prod. by *Psorospermum febrifugum*. Red-brown cryst. (MeOH). Mp 142-145° dec.

6-O-(3,7-Dimethyl-2,6-octadienyl), 3-Ac: ***Acetylvismione D***
$C_{27}H_{32}O_6$ M 452.546
From *P. febrifugum*. Cryst. (hexane). Mp 65-66°. $[\alpha]_D^{22}$ +6° (c, 0.3 in $CHCl_3$).

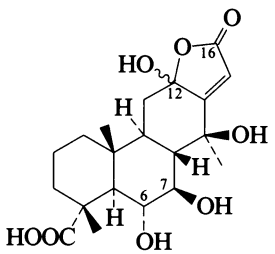
(ξ)-form

6-O-(3-Methyl-2-butenyl), 3-Ac: [103451-03-2]. ***Vismione H***
$C_{22}H_{24}O_6$ M 384.428
Isol. from *Vismia guineensis*. Red solid (Et_2O/hexane). Mp 110-114° dec.

[93798-36-8]

Takahashi, S. *et al*, *Phytochemistry*, 1976, **15**, 1295 (*Torosachrysone*)
Takido, M. *et al*, *J. Nat. Prod.* (*Lloydia*), 1977, **40**, 191 (*Torosachrysone*)
Botta, B. *et al*, *Phytochemistry*, 1983, **22**, 539; 1986, **25**, 766, 1217 (*Vismiones*)
Kitanaka, S. *et al*, *Chem. Pharm. Bull.*, 1984, **32**, 3436 (*Torosachrysone gentiobioside*)
Gill, M. *et al*, *Phytochemistry*, 1989, **28**, 2647 (*isol, biosynth, pmr, cmr*)
Gill, M. *et al*, *Tetrahedron: Asymmetry*, 1990, **1**, 621.
Gill, M. *et al*, *J. Nat. Prod.* (*Lloydia*), 1992, **55**, 372 (*biosynth*)
Mammo, W. *et al*, *Phytochemistry*, 1992, **31**, 3577 (*isol*)

12,16-Dihydro-6,7,12,14-tetrahydroxy-16-oxovinhaticoic acid D-10103



$C_{20}H_{28}O_8$ M 396.436

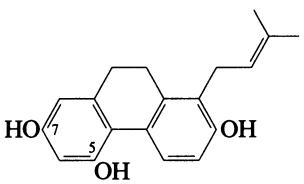
(6α,7β,12ξ,14β)-form

6,7-Di-Ac, Me ester: [41370-37-0].
$C_{25}H_{34}O_{10}$ M 494.538
Isol. from the fruit of *Pterodon pubescens*. Cryst. (1-propanol). Mp 184-186°.

Fascio, M. *et al*, *Phytochemistry*, 1976, **15**, 201 (*isol*)

9,10-Dihydro-2,5,7-trihydroxy-1-prenylphenanthrene D-10104

9,10-Dihydro-1-(3-methyl-2-butenyl)-2,5,7-phenanthrenetriol



$C_{19}H_{20}O_3$ M 296.365

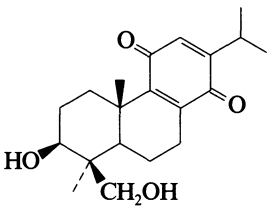
7-Me ether: [126192-35-6]. *9,10-Dihydro-2,5-dihydroxy-7-methoxy-1-prenylphenanthrene.* ***Spiranthol A***
$C_{20}H_{22}O_3$ M 310.392
Constit. of *Spiranthes sinensis* var. *amoena*. Sl. coloured amorph. powder.

5,7-Di-Me ether: [126192-36-7]. *9,10-Dihydro-2-hydroxy-5,7-dimethoxy-1-prenylphenanthrene.* ***Spiranthol B***

$C_{21}H_{24}O_3$ M 324.419
Constit. of *S. sinensis* var. *amoena*. Sl. coloured amorph. solid.

Tezuka, Y. *et al*, *Chem. Pharm. Bull.*, 1989, **37**, 3195.

3,19-Dihydroxy-8,12-abietadiene-11,14-dione D-10105



$C_{20}H_{28}O_4$ M 332.439

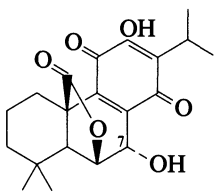
3β-form [142937-49-3] ***Triptoquinondiol***
Constit. of *Tripterygium regelii*. Golden needles. Mp 183-184°. $[\alpha]_D^{15}$ −49.3° (c, 0.31 in $CHCl_3$).

3-Ketone: [142937-50-6]. *19-Hydroxy-8,12-abietadiene-3,11,14-trione*. ***Triptoquinone B.*** *3-Oxotriptoquinonol*
$C_{20}H_{26}O_4$ M 330.423
Constit. of *T. regelii* and *T. wilfordii*. Golden needles. Mp 135-136°. $[\alpha]_D^{15}$ +158.8° (c, 0.86 in $CHCl_3$), $[\alpha]_D$ +336° (c, 0.21 in $CHCl_3$). Triptoquinone B and 3-Oxotriptoquinonol not compared.

Shen, J.H. *et al*, *Chin. Chem. Lett.*, 1992, **3**, 113 (*isol, pmr, cmr*)
Takaishi, Y. *et al*, *Tetrahedron Lett.*, 1992, **33**, 7177 (*Triptoquinone B*)

7,12-Dihydroxy-8,12-abietadiene-12,6-olide D-10106

Updated Entry replacing C-00213



$C_{20}H_{24}O_6$ M 360.406

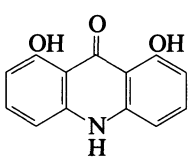
(6β,7α)-form
Atuntzensin A
Constit. of *Isodon grandifolia* var. *atuntzensis*. Yellow needles (Me_2CO/petrol). Mp 219-220°. $[\alpha]_D^{26}$ +48.9° (c, 0.27 in Py).

7-Et ether: [121927-69-3]. *7-Ethoxy-12-hydroxy-8,12-abietadiene-20,6-olide*. ***Canariquinone***
$C_{22}H_{28}O_6$ M 388.460
Constit. of *Salvia canariensis*. Amorph. yellow solid.

Gonzalez, A.G. *et al*, *Can. J. Chem.*, 1989, **67**, 208 (*Canariquinone*)
Shun-Hua, W. *et al*, *Phytochemistry*, 1993, **34**, 1176 (*Atuntzensin A*)

1,8-Dihydroxyacridone D-10107

1,8-Dihydroxy-9(10H)-acridinone, 9CI
[151077-55-3]



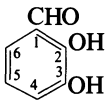
$C_{13}H_9NO_3$ M 227.219
Alkaloid from aerial parts of *Boronia lanceolata* (Rutaceae). Yellow needles ($CHCl_3$/MeOH). Mp 250°.

N-*Me:* [130897-51-7]. *1,8-Dihydroxy-10-methylacridone*
$C_{14}H_{11}NO_3$ M 241.246
Alkaloid from aerial parts of *B. lanceolata* (Rutaceae). Yellow needles ($CHCl_3$/MeOH). Mp 235-237°.

Ahsan, M. *et al*, *Phytochemistry*, 1993, **33**, 1507 (*isol, uv, ir, pmr, cmr, ms, struct*)

2,3-Dihydroxybenzaldehyde, 9CI, 8CI D-10108

[24677-78-9]



$C_7H_6O_3$ M 138.123
Yellow needles. Mp 108°. Bp_{16} 119-120°. pK_{a1} 7.73; pK_{a2} 10.91 (20°, 0.15*M* $NaClO_4$, 4% EtOH).

Phenylhydrazone: Yellow needles (EtOH). Mp 167°.

2-Me ether: 3-Hydroxy-2-methoxybenzaldehyde
$C_8H_8O_3$ M 152.149
Needles (C_6H_6/hexane). Mp 113-115° (108-110°).

3-Me ether: [148-53-8]. *2-Hydroxy-3-methoxybenzaldehyde*. o-*Vanillin*. *3-Formylguaiacol*
$C_8H_8O_3$ M 152.149
Yellow needles (H_2O). Mp 44-45°. Bp_{10} 128°. pK_{a1} 7.91 (25°).
▷ CU6530000.

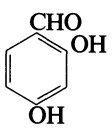
Di-Me ether: 2,3-Dimethoxybenzaldehyde. o-*Veratraldehyde*
Isol. from trunkwood of *Machaerium kuhlmannii*. Needles (EtOH, Et_2O or pet. ether). Mp 54°. Bp_{745} 256°, Bp_{12} 137°.

Di-Me ether, oxime: [5470-95-1].
$C_9H_{11}NO_3$ M 181.191
Needles (EtOH aq.). Mp 98-99°.

Pauly, H. *et al*, *Justus Liebigs Ann. Chem.*, 1911, **383**, 312 (*synth*)
U.S. Pat., 1 345 649, (1920); *CA*, **14**, 2644 (*synth*)
Kratzl, K. *et al*, *Monatsh. Chem.*, 1960, **91**, 219.
Santavy, F. *et al*, *Collect. Czech. Chem. Commun.*, 1972, **37**, 1825 (*uv, derivs*)
Neville, G.A., *Org. Magn. Reson.*, 1972, **4**, 633 (*pmr, derivs*)
Huneck, S., *Tetrahedron*, 1976, **32**, 109 (*synth, deriv*)
Ollis, W.D. *et al*, *Phytochemistry*, 1978, **17**, 1383 (*isol, 2,3-dimethoxybenzaldehyde*)
Smidrkal, J., *Collect. Czech. Chem. Commun.*, 1982, **47**, 2140 (*synth*)
Akashi, T. *et al*, *Chem. Pharm. Bull.*, 1986, **34**, 2024 (*deriv*)
Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th Ed., Van Nostrand-Reinhold, 1992, VFP000.

2,4-Dihydroxybenzaldehyde, 9CI D-10109

β-Resorcylaldehyde, 8CI
[95-01-2]



$C_7H_6O_3$ M 138.123
Used for photometric detn. of Fe(*III*). Needles (Et_2O/ligroin). Sol. H_2O, EtOH, $CHCl_3$, Et_2O. Mp 135-136°, Mp 201-202°. Bp_{22} 220-228°. pK_{a1} 7.10; pK_{a2} 9.42 (20°, 0.15*M* $NaClO_4$, 4% EtOH).

Di-Ac: [41777-08-6].
$C_{11}H_{10}O_5$ M 222.197

Mp 69°.

Oxime: [5399-68-8]. *Resorcylaldoxime*
$C_7H_7NO_3$ M 153.137
Used as 0.2-1% EtOH soln. as a metallochromic indicator for titrimetric detn. of Fe(*III*) (purple colour). Cryst. (H_2O). Sol. EtOH, Et_2O, H_2O. Mp 192°, Mp 198-199°.

Semicarbazone: [3030-93-1].
$C_8H_9N_3O_3$ M 195.177
Used as 0.1% DMF or EtOH soln. for fluorimetric detn. of Sc (λ_{max} 455 nm, pH 6) and Ga (λ_{max} 425 nm, pH 2.4-2.5), Zr. Cryst. (EtOH). Sol. DMF, EtOH.

Thiosemicarbazone:
$C_8H_9N_3O_2S$ M 211.244
Used as a 1m*M* EtOH soln. for photometric detn. of Cu (λ_{max} 374 nm, ε 12400). Cryst. Sol. MeOH, EtOH.

Formylhydrazone:
$C_8H_8N_2O_3$ M 180.163
Used as EtOH soln. for fluorimetric detn. of Sc and Ga. Pale yellow cryst. Sol. EtOH, AcOH; sl. sol. H_2O. Mp 200-240° dec. pK_{a1} 8.8; pK_{a2} 10.4 (20°, 50% EtOH).

2-Me ether: [18278-34-7]. *4-Hydroxy-2-methoxybenzaldehyde*
$C_8H_8O_3$ M 152.149
Leaflets (C_6H_6). Mp 153°.

4-Me ether: [673-22-3]. *2-Hydroxy-4-methoxybenzaldehyde. 2-Hydroxyanisaldehyde. 4-Methoxysalicylaldehyde*
$C_8H_8O_3$ M 152.149
Mp 40-42°. pK_{a1} 8.89 (25°).

4-Me ether, 2-O-[β-D-xylopyranosyl-(1→6)-β-D-glucopyranoside]: [140484-68-0].
$C_{19}H_{26}O_{12}$ M 446.407
Constit. of *Mondia whytei*. Incorrect MF in CA.

Di-Me ether: [613-45-6]. *2,4-Dimethoxybenzaldehyde. 2-Methoxyanisaldehyde*
$C_9H_{10}O_3$ M 166.176
Needles (pet. ether). Mp 71°. Bp_{10} 165°.

Di-Me ether, oxime: [31874-34-7].
$C_9H_{11}NO_3$ M 181.191
Needles (H_2O). Mp 106°.

Shoesmith, J.B. *et al*, *J. Chem. Soc.*, 1923, 2704 (*synth*)
Hinkel, L.E. *et al*, *J. Chem. Soc.*, 1932, 2793; 1936, 184 (*synth*)
Welcher, F.J., *Organic Analytical Reagents*, Van Nostrand, N.Y., 1947, **3**, 258 (*synth, use, oxime*)
Raju, N., *Nature (London)*, 1955, **175**, 167 (*use*)
Holzbecher, Z. *et al*, *Collect. Czech. Chem. Commun.*, 1961, **20**, 1204 (*use*)
Gross, H. *et al*, *Chem. Ber.*, 1963, **96**, 308 (*synth*)
Holzbecher, Z., *Microchem. J.*, 1965, **9**, 288 (*use*)
de Ropp, R.S. *et al*, *Arch. Int. Pharmacodyn. Ther.*, 1969, **181**, 127 (*pharmacol*)
Stankoviansky, S. *et al*, *Chem. Zvesti*, 1971, **25**, 123 (*thiosemicarbazone, use*)
Santavy, F. *et al*, *Collect. Czech. Chem. Commun.*, 1972, **37**, 1825 (*uv*)
Desai, M. *et al*, *Fresenius' Z. Anal. Chem.*, 1972, **259**, 367 (*detn, Fe*)
Desai, M. *et al*, *Indian J. Appl. Chem.*, 1972, **35**, 142 (*use*)
Steinegger, E. *et al*, *Pharm. Acta Helv.*, 1972, **47**, 133 (*tlc*)
de Kowalewski, D.G. *et al*, *J. Mol. Struct.*, 1973, **16**, 451 (*nmr*)
Morishige, K., *Anal. Chim. Acta*, 1974, **73**, 245 (*synth, detn, Sc*)
Kiyotoshi, M. *et al*, *Bunseki Kagaku (Jpn. Anal.)*, 1975, **24**, 321 (*detn, Sc*)
Deguchi, M. *et al*, *Bunseki Kagaku (Jpn. Anal.)*, 1983, **32**, 507; *CA*, **99**, 186547p (*synth, detn, Ga*)
Karl, J. *et al*, *J. Med. Chem.*, 1988, **31**, 72 (*Di-Me ether*)

3,5-Dihydroxybenzoic acid, 9CI D-10110

α-*Resorcylic acid, 8CI. Resorcinol-5-carboxylic acid*

[99-10-5]

$C_7H_6O_4$ M 154.122

Constit. of *Arachis hypogaea* and *Cicer arietinum* seeds. Also present in *Pterocarpus santilinus*. Used as 1% soln. in EtOH as metallochromic indicator in titrimetric detn. of Fe(*III*). Cryst. + $1\frac{1}{2}$ H_2O (H_2O). Sol. H_2O. Mp 232-233° (anhyd.). pK_a 4.04.

▷ VH3708000.

Me ester: [2150-44-9].
$C_8H_8O_4$ M 168.149
Leaflets. Mp 168-170° (163-165°). pK_{a1} 8.71; pK_{a2} 10.66 (20°).

Et ester: [4142-98-7].
$C_9H_{10}O_4$ M 182.176
Cryst. (EtOH aq.). Mp 128-129°.

Ph ester: [133551-50-5].
$C_{13}H_{10}O_4$ M 230.220
Cryst. (MeOH aq.). Mp 174-176°.

Amide: [3147-62-4].
$C_7H_7NO_3$ M 153.137
Tan solid (EtOH). Mp 285-287° dec.

Di-Ac: [35354-29-1].
$C_{11}H_{10}O_6$ M 238.196
Mp 161-162°.

Mono-Me ether: [19520-75-3]. *3-Hydroxy-5-methoxybenzoic acid*
$C_8H_8O_4$ M 168.149
Cryst. ($CHCl_3$/pet. ether). Mp 202°.

Mono-Me ether, Me ester: [19520-74-2].
$C_9H_{10}O_4$ M 182.176
Needles ($CHCl_3$/MeOH). Mp 99°.

Dibenzyl ether: [28917-43-3]. *3,5-Dibenzyloxybenzoic acid*
$C_{21}H_{18}O_4$ M 334.371
Cryst. (EtOH or EtOAc). Mp 214-216° (210-211°).

Dibenzyl ether, Me ester: [58605-10-0].
$C_{22}H_{20}O_4$ M 348.398
Mp 65-66°.

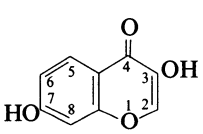
[3147-62-4, 41696-97-3]

Suter, C.M. *et al*, *J. Am. Chem. Soc.*, 1939, **61**, 232 (*synth*)
Birkenshaw, J.H. *et al*, *J. Chem. Soc.*, 1942, 368 (*synth*)
Curtis, R.F. *et al*, *J. Chem. Soc. C*, 1968, 1807 (*deriv*)
Coward, R.F. *et al*, *J. Chromatogr.*, 1969, **45**, 311 (*glc*)
Scott, K.N., *J. Magn. Reson.*, 1970, **2**, 361 (*pmr*)
Desai, M.N. *et al*, *Mikrochim. Acta*, 1970, 190 (*detn, Fe*)
Scott, K.N., *J. Am. Chem. Soc.*, 1972, **92**, 8564 (*cmr*)
Belg. Pat., 833 181, (1975); *CA*, **86**, 72210 (*manuf*)
Kamath, B.V. *et al*, *J. Appl. Chem. Biotechnol.*, 1975, **25**, 743 (*uv*)
Reddy, S.B. *et al*, *Curr. Sci.*, 1977, **46**, 236 (*occur*)
Kumar, N.R. *et al*, *Indian J. Exp. Biol.*, 1979, **17**, 114; *CA*, **90**, 118113a.
Settine, R.L. *et al*, *Org. Prep. Proced. Int.*, 1979, **11**, 87 (*amide*)
Aldrich Library of FT-IR Spectra, 1st edn., 1985, **2**, 227A (*ir*)
de Koster, C.G. *et al*, *Fresenius' Z. Anal. Chem.*, 1986, **323**, 321 (*ms*)
Hawker, C.J. *et al*, *J. Am. Chem. Soc.*, 1991, **113**, 4583 (*Ph ester, dibenzyl ether, synth, ir, pmr, cmr, ms*)
Chakraborty, T.K. *et al*, *J. Org. Chem.*, 1992, **57**, 5462 (*Me esters*)

3,7-Dihydroxy-4*H*-1-benzopyran-4-one, 9CI D-10111

3,7-Dihydroxychromone

[75885-75-5]



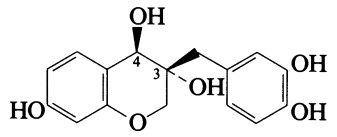
$C_9H_6O_4$ M 178.144
Oxidn. prod. of Brazilin, B-00783. Pale-brown leaflets (MeOH aq.), needles (EtOH). Mp 271°.

Di-Ac:
$C_{13}H_{10}O_6$ M 262.218
Needles (AcOH aq.). Mp 148-149°.
Di-O-β-D-glucopyranoside: [121707-70-8].
$C_{21}H_{26}O_{14}$ M 502.428
Constit. of the flowers of *Anthemis tinctoria.*
7-Me ether: 3-Hydroxy-7-methoxy-4H-1-benzopyran-4-one
$C_{10}H_8O_4$ M 192.171
Microneedles (MeOH aq.). Mp 171-172°.
Di-Me ether: [67029-83-8]. *3,7-Dimethoxy-4H-1-benzopyran-4-one*
$C_{11}H_{10}O_4$ M 206.198
Leaflets (MeOH). Mp 169-170°.

Pfeiffer, P. *et al, Ber.*, 1924, **57**, 208; 1925, **58**, 1953 (*synth*)
Nagy, M. *et al, Česk. Farm.*, 1989, **38**, 308 (*isol, deriv*)

3-(3,4-Dihydroxybenzyl)-3,4,7-chromantriol D-10112

3-[(3,4-Dihydroxyphenyl)methyl]-3,4-dihydro-2H-1-benzopyran-3,4,7-triol, 9CI



(3*R*,4*R*)-*form*

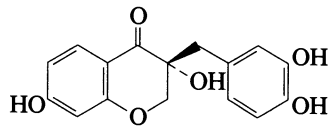
$C_{16}H_{16}O_6$ M 304.299
(***3R,4R*)-*form*** [111254-18-3]
(−)-trans-*form.* ***Episappanol***
Isol. from *Caesalpinia japonica* and *C. sappan.* Obt. as a 1:1 mixt. with its C-4 epimer.
3'-Me ether: [111254-22-9]. ***3'-O-Methylepisappanol***
$C_{17}H_{18}O_6$ M 318.326
Constit. of *C. sappan.* Obt. as a mixt. with its C-4 epimer.
4-Me ether: [112529-37-0]. ***4-O-Methylepisappanol***
$C_{17}H_{18}O_6$ M 318.326
Constit. of *C. japonica* and *C. sappan.* $[\alpha]_D^{25}$ −36.2° (c, 0.58 in MeOH). Obt. as a mixt. with its C-4 epimer.
(***3R,4S*)-*form*** [111254-19-4]
(+)-cis-*form.* ***Sappanol***
Isol. from *C. japonica* and *C. sappan.* Needles. Mp 157-160°. $[\alpha]_D^{29}$ +3.7° (c, 0.50 in MeOH). Obt. as a 1:1 mixt. with its C-4 epimer.
3'-Me ether: [111254-21-8]. ***3'-O-Methylsappanol***
$C_{17}H_{18}O_6$ M 318.326
Constit. of *C. sappan.* Obt. as a mixt. with its C-4 epimer.
4-Me ether: [104778-16-7]. ***4-O-Methylsappanol.*** *3-(3,4-Dihydroxybenzyl)-4-methoxy-3,7-chromandiol*
$C_{17}H_{18}O_6$ M 318.326
Isol. from *C. japonica* and *C. sappan.* Powder. $[\alpha]_D^{25}$ +54.4° (c, 0.62 in MeOH).

[104778-15-6, 111321-29-0, 111321-30-3, 111321-31-4, 111321-32-5]

Saitoh, T. *et al, Chem. Pharm. Bull.*, 1986, **34**, 2506 (*derivs*)
Namikoshi, M. *et al, Chem. Pharm. Bull.*, 1987, **35**, 2761, 3548, 3579 (*isol, pmr, cmr, abs config*)

3-(3,4-Dihydroxybenzyl)-3,7-dihydroxy-4-chromanone D-10113

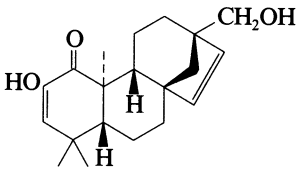
3-[(3,4-Dihydroxyphenyl)methyl]-2,3-dihydro-3,7-dihydroxy-4H-1-benzopyran-4-one, 9CI. ***Sappanone B***
[102067-85-6]



$C_{16}H_{14}O_6$ M 302.283
(***R*)-*form*** [104778-15-6]
Constit. of *Caesalpinia japonica* and *C. sappan.* Needles. Mp 157-160°. $[\alpha]_D^{29}$ +53.7° (c, 0.41 in MeOH).

Saitoh, T. *et al, Chem. Pharm. Bull.*, 1986, **34**, 2506 (*isol*)
Namikoshi, M. *et al, Chem. Pharm. Bull.*, 1987, **35**, 3568, 3597 (*isol, pmr, cmr, abs config*)

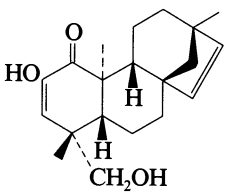
2,17-Dihydroxy-2,15-beyeradien-1-one D-10114



$C_{20}H_{28}O_3$ M 316.439
***ent*-form** [150036-78-5]
Constit. of *Erythroxylum australe.* Gum. $[\alpha]_D$ −3° (CH_2Cl_2).

Ansell, S.M. *et al, Phytochemistry*, 1993, **32**, 937 (*isol, pmr, cmr*)

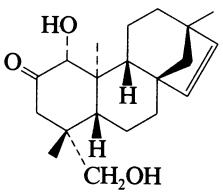
2,19-Dihydroxy-2,15-beyeradien-1-one D-10115



$C_{20}H_{28}O_3$ M 316.439
***ent*-form** [150036-81-0]
Constit. of *Erythroxylum australe.* Cryst. (hexane). Mp 145-150°. $[\alpha]_D$ −46° (CH_2Cl_2).

Ansell, S.M. *et al, Phytochemistry*, 1993, **32**, 937 (*isol, pmr, cmr*)

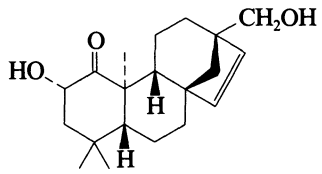
1,19-Dihydroxy-15-beyeren-2-one D-10116



$C_{20}H_{30}O_3$ M 318.455
(***ent-1β*)-*form*** [150036-15-0]
Constit. of *Erythroxylum australe.* Needles (hexane). Mp 165-169°. $[\alpha]_D$ +16° (CH_2Cl_2).

Ansell, S.M. *et al, Phytochemistry*, 1993, **32**, 937 (*isol, pmr, cmr*)

2,17-Dihydroxy-15-beyeren-1-one D-10117



$C_{20}H_{30}O_3$ M 318.455

(ent-2β)-form [150036-12-7]

Constit. of *Erythroxylum australe*. Gum.

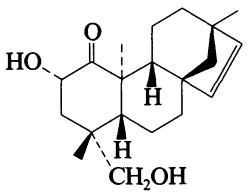
2-Ketone, 1α-alcohol: [150036-13-8]. ***1,17-Dihydroxy-15-beyeren-2-one***

$C_{20}H_{30}O_3$ M 318.455

Constit. of *E. australe*. Cryst. (hexane). Mp 138-141°. $[\alpha]_D$ +43° (CH_2Cl_2).

Ansell, S.M. *et al*, *Phytochemistry*, 1993, **32**, 937 (*isol, pmr, cmr*)

2,19-Dihydroxy-15-beyeren-1-one D-10118



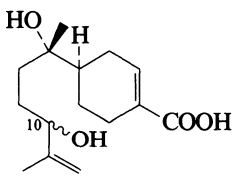
$C_{20}H_{30}O_3$ M 318.455

(ent-2β)-form [150036-79-6]

Constit. of *Erythroxylum australe*. Needles (hexane). Mp 133-135°. $[\alpha]_D$ +143° (EtOH).

Ansell, S.M. *et al*, *Phytochemistry*, 1993, **32**, 937 (*isol, pmr, cmr*)

7,10-Dihydroxy-2,11-bisaboladien-15-oic acid D-10119



$C_{15}H_{24}O_4$ M 268.352

Me ester: [147029-04-7]. ***Bisaborosaol E***

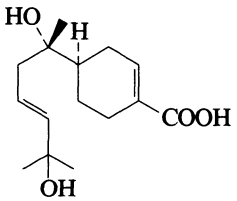
$C_{16}H_{26}O_4$ M 282.379

Constit. of *Rosa rugosa*. Syrup. Isol. as a mixt. of 10-epimers (E1 and E2).

[147126-86-1]

Hashidoko, Y. *et al*, *Phytochemistry*, 1993, **32**, 387 (*isol, pmr*)

7,11-Dihydroxy-2,9-bisaboladien-15-oic acid D-10120



$C_{15}H_{24}O_4$ M 268.352

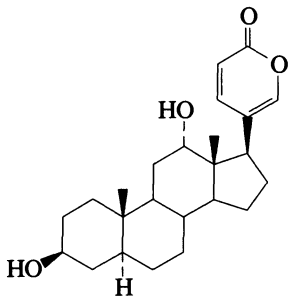
Me ester: [147029-03-6]. ***Bisaborosaol F***

$C_{16}H_{26}O_4$ M 282.379

Constit. of *Rosa rugosa*. Syrup.

Hashidoko, Y. *et al*, *Phytochemistry*, 1993, **32**, 387 (*isol, pmr, cmr*)

3,12-Dihydroxy-20,22-bufadienolide D-10121



$C_{24}H_{34}O_4$ M 386.530

(3β,5α,12α)-form

3-O-[β-D-Xylopranosyl-(1→4)-α-L-rhamnopyranoside], 12-Ac: [122074-68-4]. ***Physodin C***

$C_{37}H_{54}O_{13}$ M 706.826

Isol. from *Urginea physodes*.

3-O-[β-D-Glucopyranosyl-(1→3)-4-O-acetyl-α-L-rhamnopyranoside], 12-Ac: [122051-36-9]. ***Physodin D***

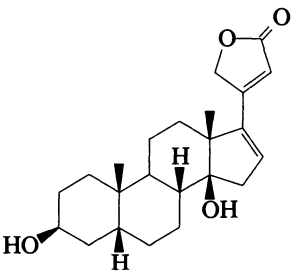
$C_{40}H_{58}O_{15}$ M 778.889

Isol. from *U. physodes*.

Van Heerden, F.R. *et al*, *S. Afr. J. Chem.*, 1988, **41**, 145.

3,14-Dihydroxycarda-16,20(22)-dienolide D-10122

Updated Entry replacing D-01595



$C_{23}H_{32}O_4$ M 372.503

(3β,5β,14β)-form [2763-20-4] ***16-Anhydrogitoxigenin***

Present in *Nerium oleander, Cryptostegia grandiflora* and *C. madagascariensis*. Platelets (MeOH/Et_2O). Mp 227°. $[\alpha]_D$ +92.7° (MeOH).

3-Ac: Mp 207°. $[\alpha]_D$ +83° ($CHCl_3$).

3-O-D-Digitaloside: ***16-Anhydrostrospeside***

$C_{30}H_{44}O_8$ M 532.673

Isol. from seeds of *Strophanthus boivinii, Nerium oleander* and *Digitalis* spp. Plates (MeOH aq.). Mp 242-246°. $[\alpha]_D^{18}$ +69.4° (MeOH).

3-O-L-Acofrioside: [20819-47-0]. ***16-Desacetyl-16-anhydroacoschimperoside P***

$C_{30}H_{44}O_8$ M 532.673

Isol. from seeds of *Vallaris solanacea*. Mp 251-254°. $[\alpha]_D$ +35° (c, 1.02 in MeOH).

3-O-[β-D-Glucopyranosyl(1→4)-β-D-digitaloside]: ***16-Anhydrodigitalin.*** *16-Anhydrodigitalinum verum*

$C_{36}H_{54}O_{13}$ M 694.815

Isol. from *Adenium honghel*, also present in *D. purpurea* and *Nerium* spp. Needles. Mp 280-283°. $[\alpha]_D^{20}$ −8.7° (Py). Readily obt. by dehydration of Digitalin (see 3,14,16-Trihydroxycard-20(22)-enolide, T-01996), possible artifact.

3-O-L-Oleandroside: ***16-Desacetyl-16-anhydrooleandrin***
$C_{30}H_{44}O_7$ M 516.673
Isol. from leaves of *Urechites lutea* and *N. oleander*. Prisms (MeOH aq.). Mp 224-230°. $[\alpha]_D^{21}$ +20° (MeOH).

3-O-D-Sarmentoside: ***16-Desacetyl-16-anhydrocryptograndoside A***
$C_{30}H_{44}O_7$ M 516.673
Isol. from leaves of *Cryptostegia grandiflora* and seeds of *N. oleander*. Granules (Me_2CO/Et_2O). Mp 230-232°. $[\alpha]_D^{21}$ +53° (MeOH).

3-O-[β-D-Glucopyranosyl(1→4)-β-D-sarmentoside]: ***16-Desacetyl-16-anhydrocryptograndoside B***
$C_{36}H_{54}O_{12}$ M 678.815
Minor constit. of leaves of *Cryptostegia grandiflora*. Shows v. little cardiac action. Cryst. ($MeOH/Et_2O$). Mp 198°. $[\alpha]_D$ +28° (MeOH). Readily obt. by loss of AcOH from Cryptograndoside B (see Oleandrigenin, O-00319).

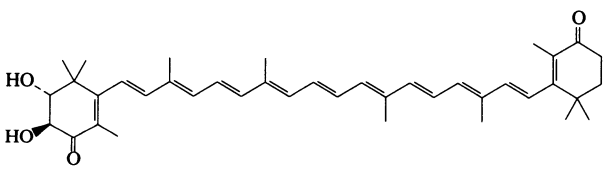
3-O-β-D-Cymaroside: ***16-Desacetyl-16-anhydrohongheloside A***
$C_{30}H_{44}O_7$ M 516.673
Isol. from leaves of *Adenium multiflorum*. Needles (MeOH aq.). Mp 206-210°. $[\alpha]_D^{16}$ +74.8° (MeOH). Prob. artifact.

3-O-D-Diginoside: ***16-Anhydrodesacetylnerigoside***
$C_{30}H_{44}O_7$ M 516.673
Isol. from seeds of *Nerium oleander*. Prisms $+H_2O$ (Me_2CO/Et_2O). Mp 182-186°. $[\alpha]_D^{25}$ +55.6° (MeOH).

3-O-(6-Deoxy-3-O-methyl-β-D-glucopyranoside): [128574-84-5]. ***Obeside D***
$C_{30}H_{44}O_8$ M 694.815
Constit. of *Adenium obesum*. Prisms (MeOH). Mp 227-230°. $[\alpha]_D^{25}$ −2.9° (c, 0.96 in MeOH).

Reichstein, T. *et al*, *Helv. Chim. Acta*, 1950, **33**, 76, 1013, 1993; 1952, **35**, 434, 673, 898; 1953, **36**, 434; 1959, **42**, 977 (*isol, struct, derivs*)
Russel, J.H. *et al*, *Helv. Chim. Acta*, 1960, **43**, 167 (*synth*)
Kaufmann, H. *et al*, *Helv. Chim. Acta*, 1965, **48**, 65 (*16-Desacetyl-16-anhydroacoschimperoside P*)
Doskotch, R.W. *et al*, *J. Pharm. Sci.*, 1972, **61**, 570 (*isol*)
Sanduja, R. *et al*, *J. Nat. Prod.* (*Lloydia*), 1984, **47**, 285 (*isol*)
Yamauchi, T. *et al*, *Chem. Pharm. Bull.*, 1990, **38**, 669 (*Obeside D*)

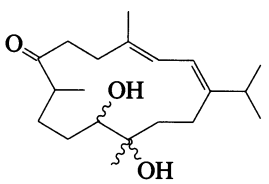
2,3-Dihydroxy-β,β-carotene-4,4′-dione D-10123



$C_{40}H_{52}O_4$ M 596.848
(2R,3S)-form [72826-79-0]
Isol. from a mutant of *Rhizobium lupini*. λ_{max} 477nm (EtOH).
Beyer, P. *et al*, *Helv. Chim. Acta*, 1979, **62**, 2551.

11,12-Dihydroxy-1,3-cembradien-7-one D-10124

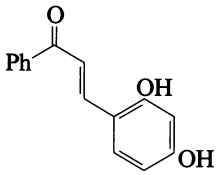
[147217-22-9]



$C_{20}H_{34}O_3$ M 322.487
Constit. of a *Eunicea* sponge. Cryst. (MeOH). Mp 156-157°. $[\alpha]_D$ +11.3° (c, 0.7 in $CHCl_3$).
Shin, J. *et al*, *Tetrahedron*, 1993, **49**, 515 (*isol, pmr, cmr*)

2,4-Dihydroxychalcone D-10125

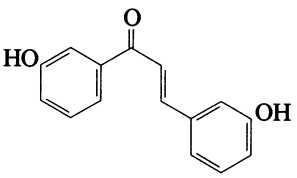
3-(2,4-Dihydroxyphenyl)-1-phenyl-2-propen-1-one
[92496-59-8]



$C_{15}H_{12}O_3$ M 240.258
Constit. of the fruit of *Litchi chinensis*.
Jaiswal, B.P. *et al*, *Indian J. Exp. Biol.*, 1987, **25**, 66 (*occur*)

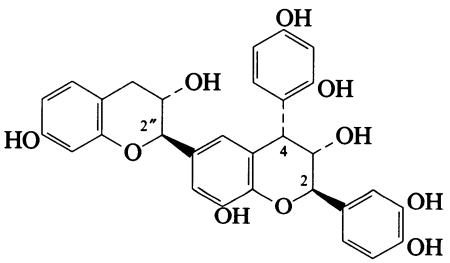
3,3′-Dihydroxychalcone D-10126

1,3-Bis(3-hydroxyphenyl)-2-propen-1-one, 9CI



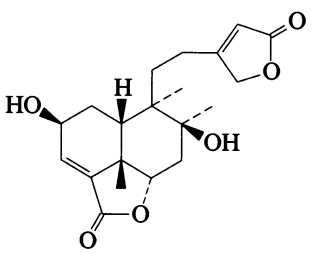
$C_{15}H_{12}O_3$ M 240.258
(E)-form [142784-23-4]
Constit. of *Primula macrophylla*. Yellow cryst. (MeOH). Mp 155-156° dec.
Ahmad, V.U. *et al*, *J. Nat. Prod.* (*Lloydia*), 1992, **55**, 956 (*isol*)

6-(3,7-Dihydroxychroman-2-yl)-4-(2,4-dihydroxyphenyl)-3,3′,4′,8-tetrahydroxyflavan D-10127



$C_{30}H_{26}O_{10}$ M 546.529
(2R,2″R,3S,3″S,4S)-form [127612-91-3]
Constit. of the heartwood of *Colophospermum mopane*.
Malan, J.C.S. *et al*, *J. Chem. Soc., Perkin Trans. 1*, 1990, 209 (*isol*)

2,8-Dihydroxy-3,13-clerodadiene-6,18:15,16-diolide D-10128



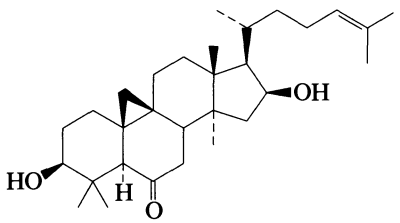
$C_{20}H_{26}O_6$ M 362.422

(ent-2α,5α,6β,8α)-form

2-Ac: ***Ventricosenediolide***
$C_{22}H_{28}O_7$ M 404.459
Constit. of *Lophozia ventricosa*. Cryst. Mp 172-175°. $[\alpha]_D^{20}$ +24.6° (c, 0.27 in $CHCl_3$).

Tori, M. *et al*, *Phytochemistry*, 1993, **34**, 181 (*isol, pmr, cmr, cryst struct*)

3,16-Dihydroxy-24-cycloarten-6-one D-10129



$C_{30}H_{48}O_3$ M 456.707

(3β, 16β)-form

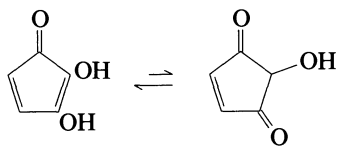
Di-O-β-D-glucopyranoside: [99481-43-3].
$C_{42}H_{68}O_{13}$ M 780.991
Constit. of the aerial parts of *Astragalus trigonus*. Needles (EtOH aq.). Mp 214-215° dec. $[\alpha]_D$ +25° (c, 0.0013 in MeOH).

[99481-44-4]

El-Sebakhy, N. *et al*, *Planta Med.*, 1985, 350.

2,3-Dihydroxy-2,4-cyclopentadien-1-one, 9CI D-10130

[124902-00-7]



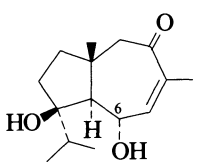
$C_5H_4O_3$ M 112.085
Constit. of the seeds of *Trifolium repens*. Powder. Mp 208° dec.

Di-Me ether: 2,3-Dimethoxy-2,4-cyclopentadien-1-one
$C_7H_8O_3$ M 140.138
Mp 123-125°.

Nakatani, M. *et al*, *Phytochemistry*, 1989, **28**, 2499 (*isol*)

4,6-Dihydroxy-7-daucen-9-one D-10131

Updated Entry replacing D-01672



$C_{15}H_{24}O_3$ M 252.353

(4β,6α)-form [96853-60-0] ***Lancerodiol.*** *Lancerotol*
Constit. of *Ferula lancerottensis*.

6-(4-Hydroxybenzoyl): [96853-62-2].
$C_{22}H_{28}O_5$ M 372.460
From *F. lancerottensis*. Cryst. Mp 227-228°.

6-(4-Methoxybenzoyl): [96853-59-7].
$C_{23}H_{30}O_5$ M 386.487
From *F. lancerottensis*. Gum.

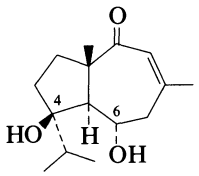
6-(4-Hydroxy-3-methoxybenzoyl): Lancerodiol vanillate
$C_{23}H_{30}O_6$ M 402.486
From *F. orientalis*.

6-(3,4-Dimethoxybenzoyl): Lancerotol veratrate
$C_{24}H_{32}O_6$ M 416.513
Constit. of *F. linkii*.

Fraga, B.M. *et al*, *Phytochemistry*, 1985, **24**, 501 (*isol*)
Díaz, J.G. *et al*, *Phytochemistry*, 1986, **25**, 1161 (*isol, pmr, cmr*)
Miski, M. *et al*, *J. Nat. Prod.* (*Lloydia*), 1987, **50**, 829 (*isol*)

4,6-Dihydroxy-8-daucen-10-one D-10132

Updated Entry replacing D-01674



$C_{15}H_{24}O_3$ M 252.353
Several numbering systems are in use for daucanes.

(4β,6α)-form [79863-23-3] ***Lapidol***
Isol. from *Ferula sinaica*. Yellow oil. $[\alpha]_D^{20}$ +123° (c, 1.2 in $CHCl_3$).

6-Angeloyl: [79863-24-4]. ***Lapidin***
$C_{20}H_{30}O_4$ M 334.455
Constit. of *Ferula lapidosa*. Cryst. (hexane). Mp 80-81°. $[\alpha]_D^{20}$ +166° (c, 1.5 in $CHCl_3$).

6-(4-Hydroxybenzoyl):
$C_{22}H_{28}O_5$ M 372.460
Constit. of *F. sinaica*. $[\alpha]_D^{24}$ +12.9° (c, 1.12 in $CHCl_3$).

6-(3,4,5-Trimethoxybenzoyl): [80535-89-3]. ***Palliferin***
$C_{25}H_{34}O_7$ M 446.539
From *F. pallida*.

6-(3,4-Methylenedioxy-5-methoxybenzoyl): [80535-88-2]. ***Palliferinin***
$C_{24}H_{30}O_7$ M 430.497
From *F. pallida*.

6-(4-Methoxybenzoyl): [53947-82-3]. ***Ferutidin***
$C_{23}H_{30}O_5$ M 386.487
Constit. of *F. communis*, *F. sinacia* and *F. linkii*. Cryst. (hexane). Mp 161°. $[\alpha]_D^{25}$ +91° (c, 0.88 in CH_2Cl_2).

6-(2-Methylbutanoyl):
$C_{20}H_{32}O_4$ M 336.470
Constit. of *F. linkii*. Cryst. (EtOAc/hexane). Mp 79-81°.

6-(2-Methylpropanoyl):
$C_{19}H_{30}O_4$ M 322.444
Constit. of *F. linkii*. Cryst. (EtOAc/hexane). Mp 101-103°.

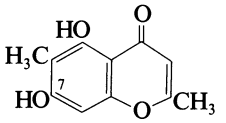
Golovina, L.A. *et al*, *Khim. Prir. Soedin.*, 1981, **17**, 318; *Chem. Nat. Compd.* (*Engl. Transl.*), 244 (*isol, struct*)
Kushmuradov, A.Y. *et al*, *Khim. Prir. Soedin.*, 1981, **17**, 523 (*isol*)
Moiseeva, G.P. *et al*, *Khim. Prir. Soedin.*, 1984, **20**, 45; *Chem. Nat. Compd.* (*Engl. Transl.*), 42 (*cd*)
Appendino, G. *et al*, *Phytochemistry*, 1984, **23**, 2545; 1990, **29**, 1481 (*Ferutidin*)
Ahmed, A.A., *Phytochemistry*, 1991, **30**, 1207 (*isol, pmr*)
González, A.G. *et al*, *Phytochemistry*, 1993, **33**, 863 (*derivs, pmr, cmr*)

5,7-Dihydroxy-2,6-dimethyl-4*H*-1-benzopyran-4-one, 9CI D-10133

Updated Entry replacing D-01717

5,7-Dihydroxy-2,6-dimethylchromone. ***Eugenitol***

[491-48-5]



$C_{11}H_{10}O_4$ M 206.198

Constit. of the flowers of *Eugenia caryophyllata*. Prisms (EtOH or Me_2CO). Mp 290-292°.

7-O-(2-O-Acetyl-β-D-glucopyranoside): [39387-36-5]. ***Mollin***

$C_{19}H_{22}O_{10}$ M 410.377

Isol. from the lichen *Roccellaria mollis*.

7-O-(2,6-Di-O-acetyl-β-D-glucopyranoside): [41666-57-3]. ***Roccellin***

$C_{21}H_{24}O_{11}$ M 452.414

Isol. from the lichen *R. mollis*. Needles. Mp 206-207°.

7-Me ether: [480-12-6]. *5-Hydroxy-7-methoxy-2,6-dimethyl-4H-1-benzopyran-4-one.* ***Eugenitin***

$C_{12}H_{12}O_4$ M 220.224

From *E. caryophyllata*, *Lecanora rupicola*, *Chaetomium thielavioideum*, and *Cylindrocarpon* spp. Used as a 0.02*M* MeOH soln. for extraction-photometric detn. of Ti (λ_{max} 515 nm). Prisms (EtOH or Me_2CO). Sol. MeOH. Mp 162°.

7-Me ether, 5-Ac:

$C_{14}H_{14}O_5$ M 262.262

Cryst. (EtOH). Mp 176-177°.

Schmid, H., *Helv. Chim. Acta*, 1949, **32**, 813; 1950, **33**, 917 (*isol, synth*)
Schönberg, A. *et al*, *J. Am. Chem. Soc.*, 1953, **75**, 4992 (*synth*)
Mukerjee, S.K. *et al*, *Proc. - Indian Acad. Sci., Sect. A*, 1953, **38**, 207 (*synth*)
Mukerjee, S.K. *et al*, *Chem. Ind. (London)*, 1955, 1009.
Murata, A. *et al*, *Bunseki Kagaku (Jpn. Anal.)*, 1970, **119**, 1346 (*synth*)
Coombe, R.G. *et al*, *Aust. J. Chem.*, 1972, **25**, 875 (*isol*)
Ito, T. *et al*, *Anal. Chim. Acta*, 1980, **113**, 343 (*detn, Ti*)
Sekita, K. *et al*, *Chem. Pharm. Bull.*, 1980, **28**, 2428 (*deriv*)
Huneck, S. *et al*, *Z. Naturforsch., B*, 1992, **47**, 449 (*Roccellin, Mollin*)

5,7-Dihydroxy-2,8-dimethyl-4*H*-1-benzopyran-4-one, 9CI D-10134

Updated Entry replacing D-01718

5,7-Dihydroxy-2,8-dimethylchromone. ***Isoeugenitol***

[479-06-1]

$C_{11}H_{10}O_4$ M 206.198

Present in *Eugenia caryophyllata*. Mp 229-230°.

7-(2,3,6-Triacetyl-β-D-glucopyranoside): [50816-68-7]. ***Lobodirin***

$C_{23}H_{26}O_{12}$ M 494.451

Constit. of *Lobodirina cerebriformis*. Mp 247-249°. $[\alpha]_D^{24}$ −63° (c, 0.74 in EtOH/Py). Struct. revised in 1992.

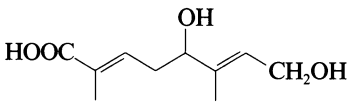
7-Me ether: [519-18-6]. *5-Hydroxy-7-methoxy-2,8-dimethyl-4H-1-benzopyran-4-one.* ***Isoeugenitin***

$C_{12}H_{12}O_4$ M 220.224

Constit. of *E. caryophyllata*. Golden needles. Mp 147.5-148°.

Schmid, H. *et al*, *Helv. Chim. Acta*, 1949, **32**, 1358; 1950, **33**, 917, 1770.
Huneck, S., *Phytochemistry*, 1973, **12**, 2497 (*Lobodirin*)
Huneck, S. *et al*, *Z. Naturforsch., B*, 1992, **47**, 449 (*Lobodirin*)

5,8-Dihydroxy-2,6-dimethyl-2,6-octadienoic acid D-10135



$C_{10}H_{16}O_4$ M 200.234

(2E,5ξ,6E)-form

β-D-Glucopyranosyl ester:

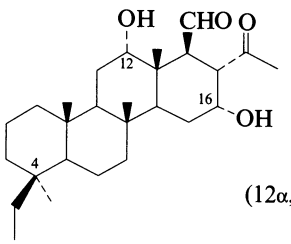
$C_{16}H_{26}O_9$ M 362.376

Constit. of *Penstemon* spp.

Abdel-Kader, M.S. *et al*, *Phytochemistry*, 1993, **34**, 1367 (*isol, pmr, cmr*)

12,16-Dihydroxy-20,24-dimethyl-24-oxo-25-scalaranal D-10136

Updated Entry replacing D-01735



(12α,16α)-*form*

$C_{27}H_{44}O_4$ M 432.642

C-14 config. not indicated for Scalarherbacin B, prob. the same as for the other compds. in this entry.

(12α,16α)-form

16-Ac: [73723-40-7]. ***Scalarherbacin B***

$C_{29}H_{46}O_5$ M 474.679

Isol. from sponge *Dysidea herbacea*.

Di-Ac: ***Scalarherbacin B acetate***

$C_{31}H_{48}O_6$ M 516.717

Isol. from *D. herbacea*.

(12α,16β)-form

12-Ac: [99617-38-6]. ***12α-Acetoxy-16β-hydroxy-20,24-dimethyl-24-oxo-25-scalaranal***

$C_{29}H_{46}O_5$ M 474.679

Constit. of sponge *Carteriospongia foliascens*. Oil.

12,16-Di-Ac:

$C_{31}H_{48}O_6$ M 516.717

Constit. of *Strepsichordaia lendenfeldi*. Oil. $[\alpha]_D$ +88.1° (c, 0.24 in $CHCl_3$).

16-Propanoyl, 12-Ac:

$C_{32}H_{50}O_6$ M 530.743

Constit. of *S. lendenfeldi*. Oil. $[\alpha]_D$ +96.0° (c, 0.33 in $CHCl_3$).

16-(3R-Hydroxybutanoyl), 12-Ac:

$C_{33}H_{52}O_7$ M 560.770

Constit. of *S. lendenfeldi*. Oil. $[\alpha]_D$ +61.3° (c, 1.08 in $CHCl_3$).

16-(3-Hydroxypentanoyl), 12-Ac:

$C_{34}H_{54}O_7$ M 574.796

Constit. of *S. lendenfeldi*. Oil. $[\alpha]_D$ +60.3° (c, 0.46 in $CHCl_3$).

(12β,16α)-form

16-O-(3-Hydroxypentanoyl): [78570-09-9]. ***Foliaspongin***

$C_{32}H_{52}O_6$ M 532.759

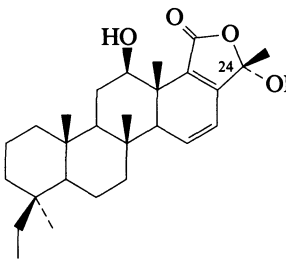
Isol. from *Phyllospongia foliascens*. Shows antiinflammatory props. Cryst. (MeOH). Mp 186-189°. $[\alpha]_D$ +44° ($CHCl_3$).

12-Ketone, 16-O-(3-hydroxypentanoyl): [125990-21-8].
Dehydrofoliaspongin
$C_{32}H_{50}O_6$ M 530.743
Constit. of *P. foliascens*. Glass. $[\alpha]_D$ +39° (c, 3.7 in $CHCl_3$).

12-Ketone, 16-O-(3S-hydroxy-4-methylpentanoyl): [125990-20-7]. ***Phyllofoliaspongin***
$C_{33}H_{52}O_6$ M 544.770
Constit. of *P. foliascens*. Glass. $[\alpha]_D^{20}$ +40° (c, 0.9 in $CHCl_3$).

Kashman, Y. *et al, Tetrahedron Lett.*, 1979, 3879.
Kikuchi, H. *et al, Chem. Pharm. Bull.*, 1983, **31**, 552 (*isol*)
Braekman, J.C. *et al, Tetrahedron*, 1985, **41**, 4603 (*struct*)
Kitagawa, I. *et al, Chem. Pharm. Bull.*, 1989, **37**, 2078 (*Phyllofoliaspongin, Dihydrofoliaspongin*)
Bowden, B.F. *et al, J. Nat. Prod.* (*Lloydia*), 1992, **55**, 1234 (*isol, pmr, cmr*)

12,24-Dihydroxy-20,24-dimethyl-15,17-scalaradien-25,24-olide D-10137



(12β,24α)-*form*

$C_{27}H_{40}O_4$ M 428.611

(12β,24α)-form

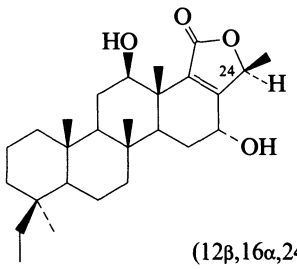
12-(3-Hydroxypentanoyl): [145680-53-1]. ***Phyllactone E***
$C_{32}H_{48}O_6$ M 528.728
Constit. of *Phyllospongia foliascens*.

(12β,24β)-form

12-(3-Hydroxypentanoyl): [145613-56-5]. ***Phyllactone D***
$C_{32}H_{48}O_6$ M 528.728
Constit. of *P. foliascens*.

Fu, X. *et al, J. Nat. Prod.* (*Lloydia*), 1992, **55**, 1607 (*isol, pmr, cmr*)

12,16-Dihydroxy-20,24-dimethyl-17-scalaren-25,24-olide D-10138



(12β,16α,24α*H*)-*form*

$C_{27}H_{42}O_4$ M 430.626

(12β,16α,24αH)-form

12-(3-Hydroxypentanoyl): [145680-52-0]. ***Phyllactone B***
$C_{32}H_{50}O_6$ M 530.743
Constit. of *Phyllospongia foliascens*. Needles (Me_2CO). Mp 179-180°. $[\alpha]_D$ +27° (c, 0.98 in $CHCl_3$).

12-(3-Acetoxypentanoyl), 16-Ac: [145613-55-4]. ***Phyllactone C***
$C_{36}H_{54}O_8$ M 614.818
Constit. of *P. foliascens*. Gum. $[\alpha]_D$ +29° (c, 0.22 in $CHCl_3$).

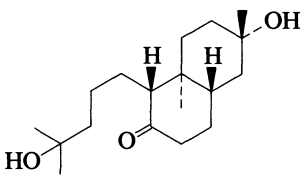
(12β,16α,24βH)-form

12-(3-Hydroxypentanoyl): [145613-54-3].
$C_{32}H_{50}O_6$ M 530.743
Constit. of *P. foliascens*. Needles (Me_2CO). Mp 193-194°. $[\alpha]_D$ +11° (c, 1.13 in $CHCl_3$).

Fu, X. *et al, J. Nat. Prod.* (*Lloydia*), 1992, **55**, 1607 (*isol, pmr, cmr*)

4,13-Dihydroxy-15,16-dinor-4,5-seco-5-rosanone D-10139

4,13-Dihydroxy-15,16-dinor-5-pictanone

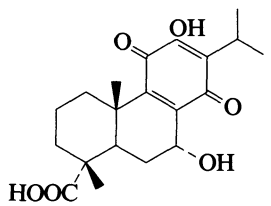


$C_{18}H_{32}O_3$ M 296.449

(ent-13β)-form [150036-61-6]
Constit. of *Erythroxylon pictum*. Oil.

Ansell, S.M. *et al, Phytochemistry*, 1993, **32**, 945 (*isol, pmr*)

7,12-Dihydroxy-11,14-dioxo-8,12-abietadien-18-oic acid D-10140



$C_{20}H_{26}O_6$ M 362.422

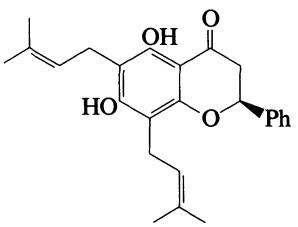
7α-form [145700-89-6] ***Horminone-18-oic acid***
Constit. of *Salvia divaricata*. Light yellow amorph. solid.

Ulubelen, A. *et al, J. Nat. Prod.* (*Lloydia*), 1992, **55**, 1518 (*isol, pmr, cmr*)

5,7-Dihydroxy-6,8-diprenylflavanone D-10141

Updated Entry replacing D-01758

2,3-Dihydro-5,7-dihydroxy-6,8-bis(3-methyl-2-butenyl)-4H-1-benzopyran-4-one. ***Spinoflavanone B***



$C_{25}H_{28}O_4$ M 392.494

(S)-form [96386-71-9]
Isol. from *Helichrysum rugulosum* and *Tephrosia spinosa*. Yellow oil. $[\alpha]_D^{25}$ −72.2°.

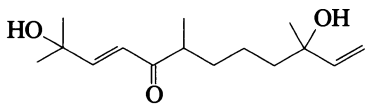
(±)-form [129314-38-1]
Isol. from the roots of *Glycyrrhiza pallidiflora*. Cryst. (C_6H_6/hexane). Mp 101-102°.

Bohlmann, F. *et al, Planta Med.*, 1984, **50**, 271 (*isol*)
Fukai, T. *et al, Heterocycles*, 1990, **31**, 643 (*isol*)
Venkata, R.E. *et al, Phytochemistry*, 1993, **32**, 183 (*isol, pmr*)

2,10-Dihydroxy-3,11-dodecadien-5-one D-10142

Salvinin†

[145701-28-6]

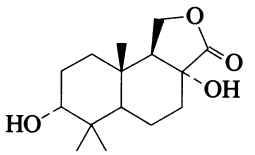


$C_{15}H_{26}O_3$ M 254.369

Constit. of *Salvia divaricata*. Amorph.

Ulubelen, A. *et al*, *J. Nat. Prod.* (*Lloydia*), 1992, **55**, 1518 (*isol, pmr, cmr*)

3,8-Dihydroxy-12,11-drimanolide D-10143



$C_{15}H_{24}O_4$ M 268.352

(3α,8α)-form [145512-52-3] ***3α-Hydroxypeniopholide***

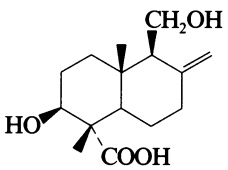
Constit. of *Peniophora polygonia*. Cryst. Mp 178-179.5°. $[\alpha]_D^{21}$ −34.8° (c, 0.21 in MeOH).

(3β,8α)-form [145400-87-9] ***3β-Hydroxypeniopholide***

Constit. of *P. polygonia*. Cryst. Mp 178-179.5°. $[\alpha]_D^{21}$ −34.8° (c, 0.21 in MeOH).

Ayer, W.A. *et al*, *J. Nat. Prod.* (*Lloydia*), 1992, **55**, 1454 (*isol, pmr, cmr*)

3,11-Dihydroxy-8(12)-drimen-13-oic acid D-10144



$C_{15}H_{24}O_4$ M 268.352

3β-form [151029-04-8]

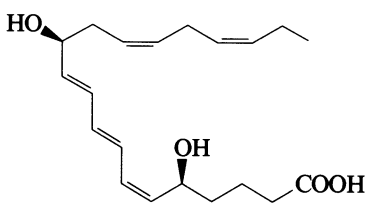
Constit. of *Cryptoporus volvatus*. Powder. Mp 180-182°. $[\alpha]_D$ −6.5° (c, 1.38 in $CHCl_3$).

Takahashi, H. *et al*, *Phytochemistry*, 1993, **33**, 1055 (*isol, pmr, cmr*)

5,12-Dihydroxy-6,8,10,14,17-eicosapentaenoic acid D-10145

Leukotriene B_5. LTB_5

[80445-66-5]



$C_{20}H_{30}O_4$ M 334.455

Prod. *in vivo* from eicosapentaenoic acid. No phys. props. reported.

Murphy, R.A. *et al*, *Prostaglandins*, 1981, **22**, 613 (*isol*)

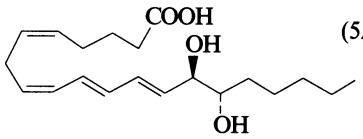
Corey, E.J. *et al*, *Proc. Natl. Acad. Sci. U.S.A.*, 1983, **80**, 3581 (*biosynth*)

Corey, E.J. *et al*, *Tetrahedron Lett.*, 1983, **24**, 4883 (*synth, pmr, uv, ms*)

14,15-Dihydroxy-5,8,10,12-eicosatetraenoic acid D-10146

14,15-DiHETE

[77667-09-5]



(5Z,8Z,10E,12E,14R,15S)-form

$C_{20}H_{32}O_4$ M 336.470

(5Z,8Z,10E,12E,14R,15S)-form [82263-61-4]

Formed by human blood platelets and swine leukocytes. No phys. props. given.

(5Z,8Z,10E,12E,14S,15S)-form [82263-60-3]

Formed by arachidonate lipoxygenase of leukocytes. No phys. props. given.

[89410-77-5, 89410-78-6]

Maas, R.L. *et al*, *Proc. Natl. Acad. Sci. U.S.A.*, 1983, **80**, 2884 (*biosynth*)

Falck, J.R. *et al*, *Tetrahedron Lett.*, 1983, **24**, 5719 (*synth, pmr, bibl*)

Radmark, O. *et al*, *J. Biol. Chem.*, 1984, **259**, 13011 (*synth, biochem*)

Corey, E.J. *et al*, *Tetrahedron Lett.*, 1985, **26**, 1919 (*synth*)

Brash, A.R. *et al*, *Arch. Biochem. Biophys.*, 1989, **273**, 414.

5,6-Dihydroxy-8,11,14-eicosatrienoic acid D-10147

[81920-20-9]

$H_3CCH_2(CH_2)_3(CH{=}CHCH_2)_3CH(OH)CH(OH)CH_2CH_2CH_2COOH$

$C_{20}H_{34}O_4$ M 338.486

Metab. of arachidonic acid. 5*R*,6*R*-form synth. No phys. props. reported.

δ-Lactone: [98050-32-9]. *Tetrahydro-6-(1-hydroxy-3,6,9-pentadecatrienyl)-2H-pyran-2-one*

No phys. props. reported.

[98050-31-8]

Corey, E.J. *et al*, *Tetrahedron Lett.*, 1983, **24**, 265 (*synth*)

Moustakis, C.A. *et al*, *J. Am. Chem. Soc.*, 1985, **107**, 5283 (*synth*)

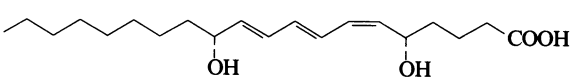
Nishimura, M. *et al*, *Prostaglandins*, 1989, **38**, 413 (*biosynth*)

Balazy, M., *J. Biol. Chem.*, 1991, **266**, 23561 (*biosynth*)

5,12-Dihydroxy-6,8,10-eicosatrienoic acid, 9CI D-10148

Leukotriene B_3

[88099-35-8]



$C_{20}H_{34}O_4$ M 338.486

Metab. of arachidonic acid. Cryst. (CH_2Cl_2/Et_2O). Mp 101-103°. $[\alpha]_D^{21}$ +7.8° (c, 0.23 in $CDCl_3$).

Cotterill, I. *et al*, *J. Chem. Soc., Chem. Commun.*, 1990, 1661 (*synth*)

Kobayashi, Y. *et al*, *J. Org. Chem.*, 1990, **55**, 5324 (*synth, uv, pmr, cmr*)

Babudri, F. *et al*, *J. Org. Chem.*, 1991, **56**, 6245 (*synth, pmr*)

8,9-Dihydroxy-5,11,14-eicosatrienoic acid D-10149

[81943-03-5]

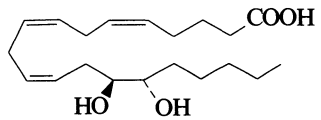
$H_3C(CH_2)_4CH{=}CHCH_2CH{=}CHCH_2CH(OH)CH(OH)$
$CH_2CH{=}CHCH_2CH_2CH_2COOH$

$C_{20}H_{34}O_4$ M 338.486
Arachidonic acid metab.

Oliw, E.H. *et al*, *Biochim. Biophys. Acta*, 1982, **721**, 135 (*biosynth*)
Oliw, E.H. *et al*, *J. Biol. Chem.*, 1982, **257**, 3771 (*biosynth*)
Nishimura, M. *et al*, *Prostaglandins*, 1989, **38**, 413 (*biosynth*)

14,15-Dihydroxy-5,8,11-eicosatrienoic acid D-10150

[79551-81-8]



(14*S*,15*S*)-*form*

$C_{20}H_{34}O_4$ M 338.486

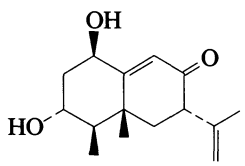
(5Z,8Z,11Z,14R,15S)-form [89410-73-1]
Prod. of arachidonic acid metab.

(5Z,8Z,11Z,14S,15S)-form [89410-74-2]
Prod. of arachidonic acid metab.

[98050-20-5]

Oliw, E.H. *et al*, *J. Biol. Chem.*, 1981, **256**, 9924 (*biosynth*)
Manna, S. *et al*, *Tetrahedron Lett.*, 1983, **24**, 33 (*synth*)
Falck, J.R. *et al*, *Tetrahedron Lett.*, 1983, **24**, 5715 (*synth, bibl*)
Moustakis, C.A. *et al*, *J. Am. Chem. Soc.*, 1985, **107**, 5283 (*synth*)
Nishimura, M. *et al*, *Prostaglandins*, 1989, **38**, 413 (*biosynth*)

1,3-Dihydroxy-9,11-eremophiladien-8-one D-10151

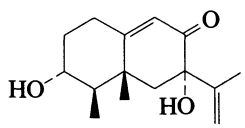


$C_{15}H_{22}O_3$ M 250.337

(1β,3α,7βH)-form [129602-06-8]
Metab. of *Drechslera gigantea*. $[\alpha]_D$ +33.8° (c, 0.07 in MeOH).

Sugawara, F. *et al*, *Biosci., Biotechnol., Biochem.*, 1993, **57**, 236 (*isol, pmr, cmr*)

3,7-Dihydroxy-9,11-eremophiladien-8-one D-10152

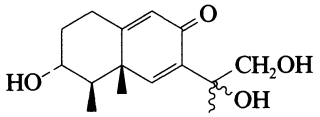


$C_{15}H_{22}O_3$ M 250.337

(3α,7α)-form [129602-11-5]
Metab. of *Drechslera gigantea*. $[\alpha]_D$ −47° (c, 0.1 in $CHCl_3$).

Sugawara, F. *et al*, *Biosci., Biotechnol., Biochem.*, 1993, **57**, 236 (*isol, pmr*)

3,11-Dihydroxy-7,9-eremophiladien-8-one D-10153

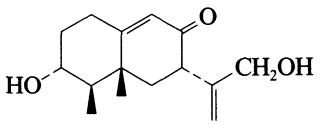


$C_{15}H_{22}O_4$ M 266.336

(3α,11ξ)-form [129602-09-1]
Metab. of *Drechslera gigantea*.

Sugawara, F. *et al*, *Biosci., Biotechnol., Biochem.*, 1993, **57**, 236 (*isol, pmr*)

3,12-Dihydroxy-9,11(13)-eremophiladien-8-one D-10154

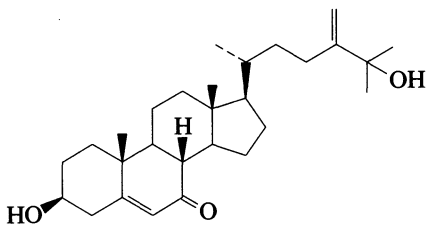


$C_{15}H_{22}O_3$ M 250.337

(3α,7βH)-form [129602-04-6]
Metab. of *Drechslera gigantea*. $[\alpha]_D$ +93° (c, 1 in $CHCl_3$).

Sugawara, F. *et al*, *Biosci., Biotechnol., Biochem.*, 1993, **57**, 236 (*isol, pmr, cmr*)

3,25-Dihydroxyergosta-5,24(28)-dien-7-one D-10155

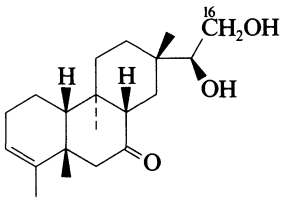


$C_{28}H_{44}O_3$ M 428.654

3β-form [147641-74-5]
Constit. of *Stelodoryx chlorophylla*. $[\alpha]_D$ −31.9° (c, 0.3 in $CHCl_3$).

De Riccardis, F. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 282 (*isol, pmr, cmr, ms*)

15,16-Dihydroxy-3-erythroxylen-7-one D-10156



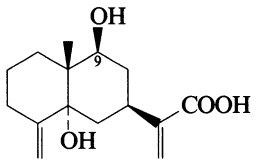
$C_{20}H_{32}O_3$ M 320.471

(ent-5α,13R)-form [150527-28-9] ***Fagonone***
Constit. of *Fagonia bruguieri*. Needles ($CHCl_3$/Et_2O). Mp 133-135°. $[\alpha]_D^{25}$ +23° (c, 0.086 in $CHCl_3$).

16-Ac: [149981-93-1].
$C_{22}H_{34}O_4$ M 362.508
Constit. of *F. bruguieri*. Needles ($CHCl_3$/MeOH). Mp 120-122°. $[\alpha]_D^{25}$ +26° (c, 0.066 in $CHCl_3$).

Abdel-Kader, M.S. *et al*, *Phytochemistry*, 1993, **33**, 718 (*isol, pmr, cmr, cryst struct*)

5,9-Dihydroxy-4(15),11(13)-eudesmadien-12-oic acid D-10157



$C_{15}H_{22}O_4$ M 266.336

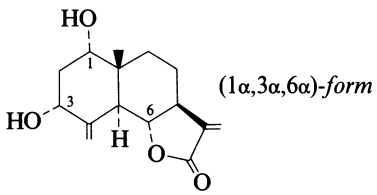
(5α,9β)-form

9-Ac: [126255-44-5]. *9-Acetoxy-5-hydroxy-4(15),11(13)-eudesmadien-12-oic acid*
$C_{17}H_{24}O_5$ M 308.374
Constit. of *Artemisia tournefortiana*. Oil (as Me ester). $[\alpha]_D^{24}$ +7° (c, 0.55 in $CHCl_3$) (Me ester).

Sanz, J.F. *et al*, *Justus Liebigs Ann. Chem.*, 1990, 541 (*isol, pmr, cmr*)

1,3-Dihydroxy-4(15),11(13)-eudesmadien-12,6-olide D-10158

Updated Entry replacing D-01820



(1α,3α,6α)-*form*

$C_{15}H_{20}O_4$ M 264.321

(1α,3α,6α)-form [27740-14-3] ***Ludovicin B***
Constit. of *Artemisia ludoviciana*. Cryst. (CH_2Cl_2/EtOAc). Mp 152°. $[\alpha]_D^{25}$ +138°.

11β,13-Dihydro: [25645-08-3]. *1α,3α-Dihydroxy-4(15)-eudesmen-12,6α-olide*. ***Erivanin***
$C_{15}H_{22}O_4$ M 266.336
Constit. of *A. fragrans* and *A. spicigera*. Cryst. (also descr. as oil). Mp 203-205°. $[\alpha]_D^{20}$ +112° (c, 3.9 in EtOH).

11β,13-Dihydro, 1-Ac: ***1-Acetylerivanin***
$C_{17}H_{24}O_5$ M 308.374
Constit. of *Senecio chrysanthemoides*. Cryst. Mp 187-189°.

(1α,3β,6α)-form

11β,13-Dihydro: ***3-Epierivanin***
$C_{15}H_{22}O_4$ M 266.336
Constit. of *A. herba-alba*. Gum. $[\alpha]_D^{24}$ +124° (c, 0.7 in $CHCl_3$).

(1β,3α,6α)-form
3α-Hydroxyreynosin
Constit. of *A. ludoviciana*. Cryst. (EtOAc/diisopropyl ether). Mp 236-237°. $[\alpha]_D$ +73° (c, 0.23 in Me_2CO).

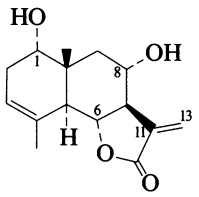
11β,13-Dihydro: [32203-46-6]. *1β,3α-Dihydroxy-4(15)-eudesmen-12,6α-olide*. ***1-Epierivanin***
$C_{15}H_{22}O_4$ M 266.336
Constit. of *Picris aculeata*. Gum.

(1β,3β,6α)-form [41653-78-5] ***Ridentin B***
Constit. of *A. tripartita*. Cryst. (EtOAc). Mp 188-190°.

Lee, K.H. *et al*, *Phytochemistry*, 1970, **9**, 403 (*Ludovicin B*)
Irwin, M.A. *et al*, *Phytochemistry*, 1973, **12**, 871 (*Ridentin B*)
Samek, Z. *et al*, *Collect. Czech. Chem. Commun.*, 1975, **40**, 2676 (*Erivanin*)
Arias, J.M. *et al*, *J. Chem. Soc., Perkin Trans. 1*, 1987, 471 (*synth*)
Harapanhalli, R.S. *et al*, *J. Chem. Soc., Perkin Trans. 1*, 1988, 2633 (*synth*)
Bruno, M. *et al*, *Phytochemistry*, 1988, **27**, 1201 (*1-Epierivanin*)
Sanz, J.F. *et al*, *J. Nat. Prod.* (*Lloydia*), 1990, **53**, 940 (*3-Epierivanin*)
Mengi, N. *et al*, *Phytochemistry*, 1991, **30**, 2329 (*1-Acetylerivanin*)
Marco, J.A. *et al*, *Phytochemistry*, 1993, **32**, 460 (*Erivanin*)
Ruiz-Cancino, A. *et al*, *Phytochemistry*, 1993, **33**, 1333 (*3α-Hydroxyreynosin*)
Banerjee, A.K. *et al*, *Tetrahedron*, 1993, **49**, 4761 (*synth, rev*)

1,8-Dihydroxy-3,11(13)-eudesmadien-12,6-olide D-10159

Updated Entry replacing D-01830



$C_{15}H_{20}O_4$ M 264.321

(1α,6α,8α)-form [36204-28-1] ***Dimerostemmabrasiolide***

1-Ac: [36437-92-0]. ***Isoludalbin***
$C_{17}H_{22}O_5$ M 306.358
Constit. of *Artemisia ludoviciana*. Cryst. (EtOAc/pet. ether). Mp 174-175°.

8-Ac: [36437-90-8]. ***Ludalbin***
$C_{17}H_{22}O_5$ M 306.358
Constit. of *A. ludoviciana* and *A. mexicana*. Cryst. (Et_2O/pet. ether). Mp 169-171°. $[\alpha]_D^{27}$ +227.6° (c, 1 in $CHCl_3$).

1-O-(2-Hydroxymethylpropenoyl):
$C_{19}H_{24}O_6$ M 348.395
Constit. of *Dimerostemma brasilianum*. Gum.

6α,7α-Epoxide, 8-Ac: ***α-Epoxyludalbin***
$C_{17}H_{20}O_6$ M 320.341
Constit. of *A. mexicana*. Cryst. Mp 185°.

(1β,6α,8α)-form [84305-05-5] ***8α-Hydroxybalchanin***
Constit. of *Leucanthemella serotina*. Cryst. ($CHCl_3$/Et_2O). Mp 80-82°. $[\alpha]_D^{20}$ +150.6° (c, 0.29 in $CHCl_3$).

11β,13-Dihydro: ***8α-Hydroxy-11β,13-dihydrobalchanin***
$C_{15}H_{22}O_4$ M 266.336
Isol. from *L. serotina*. Oil.

8-(Phenylacetyl): ***8-Phenylacetoxyludalbin***
$C_{23}H_{26}O_5$ M 382.455
Constit. of *Anthanasia calva*. Cryst. Mp 177°. $[\alpha]_D^{24}$ +165° (c, 0.52 in $CHCl_3$).

8-(3-Hydroxy-3-methylbutanoyl): [81575-41-9]. ***Beogradolide A***
$C_{20}H_{28}O_6$ M 364.438
Constit. of *Tanacetum serotinum*.

8-Tigloyl: [81575-40-8]. ***Beogradolide B***
$C_{20}H_{26}O_5$ M 346.422
Constit. of *T. serotinum*.

(1β,6α,8β)-form
8β-Hydroxybalchanin

8-Ac: [56064-70-1]. ***α-Liriodenolide***
$C_{17}H_{22}O_5$ M 306.358
Constit. of *Liriodendron tulipifera*. Cryst. (Et_2O/diisopropyl ether). Mp 72-73°.

8-Angeloyl:
$C_{20}H_{26}O_5$ M 346.422
Constit. of *Tithonia rotundifolia*. Gum. $[\alpha]_D^{24}$ +58° (c, 0.05 in $CHCl_3$).

8-(3-Hydroxy-2-methylenebutanoyl): [92356-87-1]. ***Tirotundifolin C***
$C_{20}H_{26}O_6$ M 362.422

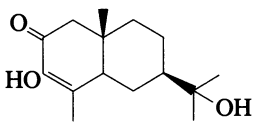
Constit. of *Tithonia rotundifolia*. Cryst. (Me_2CO/hexane). Mp 168-170°. $[\alpha]_D$ +30.8° (c, 0.2 in MeOH).

8-(2-Hydroxymethyl-2-butenoyl)(Z-): [92356-86-0]. ***Tirotundifolin D***
$C_{20}H_{26}O_6$ M 362.422
Constit. of *T. rotundifolia*. Cryst. (Me_2CO/hexane). Mp 163-165°.

8-(2,3-Epoxy-2-methylbutanoyl):
$C_{20}H_{26}O_6$ M 362.422
Constit. of *T. rotundifolia*. Gum.

Bohlmann, F. *et al*, *Phytochemistry*, 1981, **20**, 267; 1982, **21**, 1343 (*isol*)
Holub, M. *et al*, *Collect. Czech. Chem. Commun.*, 1982, **47**, 2927 (*8-Hydroxybalchanin*)
Doskotch, R.W. *et al*, *J. Nat. Prod.* (*Lloydia*), 1983, **46**, 923 (α-*Liriodenolide*)
Pérez, A.L. *et al*, *Phytochemistry*, 1984, **23**, 823 (*Tirotundifolins*)
Mata, R. *et al*, *Phytochemistry*, 1984, **23**, 1665 (*Epoxyludalbin*)
Fernandez, J. *et al*, *Tetrahedron*, 1987, **43**, 805 (*synth, 8-Hydroxy-11,13-dihydrobalchanin*)
Stefanovic, M. *et al*, *CA*, 1990, **112**, 52162e (*Beogradolides*)
Zdero, C. *et al*, *Phytochemistry*, 1991, **30**, 1161 (*8-Phenylacetylludalbin*)

3,11-Dihydroxy-3-eudesmen-2-one D-10160

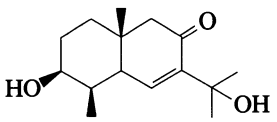


$C_{15}H_{24}O_3$ M 252.353

3,11-Di-O-β-D-glucopyranoside: [126054-85-1]. ***Atractyloside I***
$C_{27}H_{44}O_{13}$ M 576.637
Constit. of *Atractylodes lancea*. Needles. Mp 156-158°. $[\alpha]_D^{27}$ +19.7° (c, 1 in MeOH).

Yahara, S. *et al*, *Chem. Pharm. Bull.*, 1989, **37**, 2995 (*isol, pmr, cmr*)

3,11-Dihydroxy-6-eudesmen-8-one D-10161

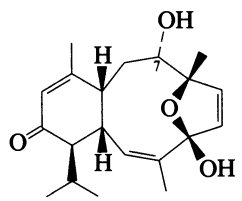


$C_{15}H_{24}O_3$ M 252.353

(3β,4β)-form [71539-79-2] ***Pluchein***
Constit. of *Pluchea chingoyo*. Cryst. Mp 77-79°.

Chiang, M.T. *et al*, *Rev. Latinoam. Quim.*, 1979, **10**, 95 (*isol, pmr*)

7,11-Dihydroxy-3,9,12-eunicellatrien-2-one D-10162



$C_{20}H_{28}O_4$ M 332.439

(7α,8β,11β)-form

7-(3-Methyl-2-butenoyl): ***Valdivone A***
$C_{25}H_{34}O_5$ M 414.541
Constit. of *Alcyonium valdivae*. Needles. Mp 89-91°. $[\alpha]_D$ +94.4° (c, 0.34 in $CHCl_3$).

7-(3-Methylbutanoyl): ***Dihydrovaldivone A***
$C_{25}H_{36}O_5$ M 416.556
Constit. of *A. valdivae*. Oil.

7-(Phenylacetyl): ***Valdivone B***
$C_{28}H_{34}O_5$ M 450.574
Constit. of *A. valdivae*. Needles. Mp 171-173°. $[\alpha]_D$ +79.4° (c, 0.57 in $CHCl_3$).

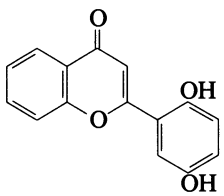
11-Me ether, 7-(3-methyl-2-butenoyl): ***4-O-Methylvaldivone A***
$C_{26}H_{36}O_5$ M 428.567
Constit. of *A. valdivae*. Oil.

11-Me ether, 7-(phenylacetyl): ***4-O-Methylvaldivone B***
$C_{29}H_{36}O_5$ M 464.600
Constit. of *A. valdivae*. Oil.

Lin, Y. *et al*, *Tetrahedron*, 1993, **49**, 7977 (*isol, pmr, cmr*)

2′,5′-Dihydroxyflavone D-10163

2-(2,5-Dihydroxyphenyl)-4H-1-benzopyran-4-one
[92439-19-5]



$C_{15}H_{10}O_4$ M 254.242
Large discrepancy in Mp between synthetic and natural samples. Isol. from the farinose exudate of *Primula pulverulenta* and *P. japonica*. Pale yellow needles (EtOAc/hexane). Yellow needles (EtOH). Mp 173-175° (natural), Mp 284-285° (synthetic).

5′-Ac: [115219-85-7]. *5′-Acetoxy-2′-hydroxyflavone*
$C_{17}H_{12}O_5$ M 296.279
Isol. from the farinose exudate of *P. pulverulenta*. Needles (EtOAc). Mp 221-222°.

Di-Ac: Needles (EtOH), powder (MeOH). Mp 92-94° (natural), Mp 148° (synthetic).

Di-Me ether: [74670-10-3]. *2′,5′-Dimethoxyflavone*
$C_{17}H_{14}O_4$ M 282.295
Cryst. (EtOH). Mp 120°.

Gallagher, K.M. *et al*, *J. Chem. Soc.*, 1953, 3770 (*synth*)
Wollenweber, E. *et al*, *Z. Naturforsch., C*, 1988, **43**, 305 (*isol, uv, ms, pmr,*)

2′,7-Dihydroxyflavone D-10164

7-Hydroxy-2-(2-hydroxyphenyl)-4H-1-benzopyran-4-one, 9CI
[77298-66-9]

$C_{15}H_{10}O_4$ M 254.242
Needles (EtOH). Mp 320°.

Di-Ac:
$C_{19}H_{14}O_6$ M 338.316
Cryst. (EtOH aq.). Mp 105°.

7-O-β-D-Glucopyranoside: [140187-26-4]. ***Macrophylloside***†
$C_{21}H_{20}O_9$ M 416.384
Isol. from *Primula macrophylla*. Cryst. Mp 66-67°.

7-Me ether: [32272-22-3]. *2′-Hydroxy-7-methoxyflavone*
$C_{16}H_{12}O_4$ M 268.268
Cryst. (EtOH). Mp 253-254°, Mp 290-293°.

Di-Me ether: [62536-78-1]. *2′,7-Dimethoxyflavone*
$C_{17}H_{14}O_4$ M 282.295
Cryst. (EtOH). Mp 176-177°.

Gallagher, K.M. *et al*, *J. Chem. Soc.*, 1953, 3770 (*synth*)
Ahmad, V.U. *et al*, *Phytochemistry*, 1991, **30**, 4206 (*Macrophylloside*)

7,8-Dihydroxyflavone D-10165

7,8-Dihydroxy-2-phenyl-4H-1-benzopyran-4-one, 9CI

[38183-03-8]

$C_{15}H_{10}O_4$ M 254.242
Yellow needles (EtOH aq.). Mp 246° (239°).

Di-Ac:
$C_{19}H_{14}O_6$ M 338.316
Needles (EtOH). Mp 201°.

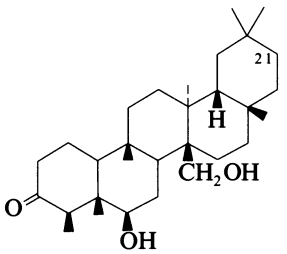
7-Me ether: 8-Hydroxy-7-methoxyflavone
$C_{16}H_{12}O_4$ M 268.268
Yellow prisms (EtOH). Mp 227°.

Di-Me ether: [65548-54-1]. *7,8-Dimethoxyflavone*
$C_{17}H_{14}O_4$ M 282.295
Constit. of the leaves of *Godmania aesculifolia*. Needles (EtOH). Mp 151-152°.

Venkataraman, K., *J. Chem. Soc.*, 1929, 2219 (*synth*)
Baker, W., *J. Chem. Soc.*, 1939, 956 (*synth*)
Aronoff, S., *J. Org. Chem.*, 1940, **5**, 561 (*uv*)
Téoule, R. *et al*, *Bull. Soc. Chim. Fr.*, 1961, **3**, 546 (*synth, uv*)
Prasunamba, K.L. *et al*, *Indian J. Chem., Sect. B*, 1977, **15**, 929 (*synth*)
Cushman, M. *et al*, *Tetrahedron Lett.*, 1990, **31**, 6497 (*synth*)
Stermitz, F.R. *et al*, *Biochem. Syst. Ecol.*, 1992, **20**, 481 (*isol, deriv*)

6,26-Dihydroxy-3-friedelanone D-10166

Updated Entry replacing D-01909



$C_{30}H_{50}O_3$ M 458.723
Struct. revised in 1993 (formerly assigned as 6,27-dihydroxy).

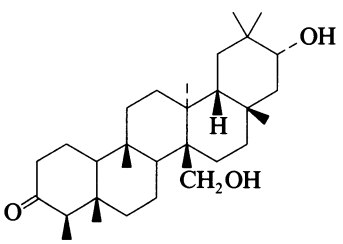
6β-form [78835-10-6] ***Kokzeylanol***
Constit. of *Kokoona zeylanica*. Cryst. Mp 282-284°. $[\alpha]_D$ −0.8°.

21-Oxo: [78835-09-3]. *6,26-Dihydroxy-3,21-friedelanedione.* ***Kokzeylanonol***
$C_{30}H_{48}O_4$ M 472.707
Constit. of *K. zeylanica*. Cryst. Mp 314-316°. $[\alpha]_D$ +86.8°. Struct. revised in 1993.

Gunatilaka, A.A.L. *et al*, *Tetrahedron*, 1984, **40**, 805; 1993, **49**, 10397.

21,26-Dihydroxy-3-friedelanone D-10167

Updated Entry replacing D-01910



$C_{30}H_{50}O_3$ M 458.723
Structs. revised in 1993.

21α-form [72183-91-6] ***Kokoondiol***
Constit. of *Salacia reticulata* var. *diandra* and *Kokoona zeylanica*. Cryst. (pet. ether). Mp 271-273°. $[\alpha]_D^{27}$ −29° ($CHCl_3$), $[\alpha]_D$ +18.0° ($CHCl_3$). Gunatilaka *et al* (1983) give both positive and negative opt. rotns. for Kokoondiol.

21-Ketone: [72183-90-5]. *26-Hydroxy-3,21-friedelanedione.* ***Kokoononol***
$C_{30}H_{48}O_3$ M 456.707
Isol. from *K. zeylanica*. Mp >325°. $[\alpha]_D$ +100.0° ($CHCl_3$).

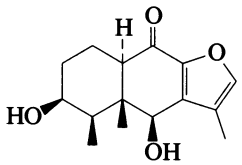
21-Deoxy: [72183-92-7]. *26-Hydroxy-3-friedelanone.* ***Kokoonol***
$C_{30}H_{50}O_2$ M 442.724
Isol. from *K. zeylanica*. Mp 272°. $[\alpha]_D$ −28.5° ($CHCl_3$).

21-Deoxy, 27-aldehyde: 3-Oxo-27-friedelanal. ***Kokoonal***
$C_{30}H_{48}O_2$ M 440.708
Constit. of *Caloncoba glauca*. Amorph. Mp 252-253°. $[\alpha]_D$ −2° (c, 0.1 in $CHCl_3$).

21β-form
Epikokoondiol
Constit. of *Salacia reticulata*. Cryst. Mp 269-270°. $[\alpha]_D^{25}$ −28° (c, 1.1 in $CHCl_3$).

Gunatilaka, A.A.L. *et al*, *J. Chem. Soc., Perkin Trans. 1*, 1983, 2459 (*isol*)
Kumar, V. *et al*, *Phytochemistry*, 1985, **24**, 2067 (*isol*)
Giner, R.M. *et al*, *Phytochemistry*, 1993, **33**, 237 (*Kokoonal*)
Gunatilaka, A.A.L. *et al*, *Tetrahedron*, 1993, **49**, 10397 (*struct*)

3,6-Dihydroxyfuranoeremophilan-9-one D-10168



$C_{15}H_{20}O_4$ M 264.321

(3β,6β,10α)-form

3,6-Bis(2-methyl-2-propenoyl): [68773-75-1].
$C_{23}H_{28}O_6$ M 400.471
Constit. of *Euryops* spp.

3-(2-Methyl-2-propenoyl), 6-angeloyl: [68773-77-3].
$C_{24}H_{30}O_6$ M 414.497
Constit. of *E.* spp.

3-(2-Methyl-2-propenoyl), 6-tigloyl: [68773-76-2].
$C_{24}H_{30}O_6$ M 414.497
Constit. of *E.* spp.

6-(2,3-Epoxy-2-methylbutanoyl), 3-Ac:
$C_{22}H_{28}O_7$ M 404.459
Constit. of *E.* spp. Oil. $[\alpha]_D^{24}$ −10.2° (c, 1.27 in $CHCl_3$).

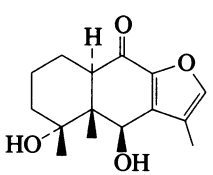
[59806-48-3]

Bohlmann, F. *et al*, *Phytochemistry*, 1978, **17**, 1135 (*isol, pmr, cmr*)

4,6-Dihydroxyfuranoeremophilan-9-one D-10169

Updated Entry replacing D-01917

4,6-Dihydroxy-9-oxofuranoeremophilane



$C_{15}H_{20}O_4$ M 264.321

(4α,6β,10αH)-form

6-(Methylpropanoyl): [53820-31-8].
$C_{19}H_{26}O_5$ M 334.411
Constit. of *Euryops hebecarpus*. Cryst. (Et_2O/pet. ether). Mp 208°.

6-Tigloyl: [53820-42-1].
$C_{20}H_{26}O_5$ M 346.422
Constit. of *E. virgineus*. Cryst. Mp 242°.

6-Angeloyl: [53820-27-2].
$C_{20}H_{26}O_5$ M 346.422
Constit. of *E. hebecarpus*. Cryst. (Et_2O/pet. ether). Mp 214°. $[\alpha]_D^{24}$ −9.8° (c, 0.1 in $CHCl_3$).

6-(2-Methylbutanoyl):
$C_{20}H_{28}O_5$ M 348.438
Constit. of *E.* spp. Cryst. (Et_2O/pet. ether). Mp 153°.

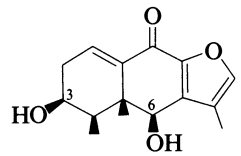
6-(2,3-Epoxy-2-methylbutanoyl):
$C_{20}H_{26}O_6$ M 362.422
Constit. of *E.* spp. Cryst. (Et_2O/pet. ether). Mp 193°. $[\alpha]_D^{24}$ −58.1° (c, 0.52 in $CHCl_3$).

Bohlmann, F. *et al*, *Chem. Ber.*, 1974, **107**, 2730.
Bohlmann, F. *et al*, *Phytochemistry*, 1978, **17**, 1135 (*isol, pmr*)

3,6-Dihydroxyfuranoeremophil-1(10)-en-9-one D-10170

Updated Entry replacing D-01919

3,6-Dihydroxy-9-oxoeuryopsin



$C_{15}H_{18}O_4$ M 262.305

(3β,6β)-form

6-(Methylpropenoyl): [53987-94-3].
$C_{19}H_{22}O_5$ M 330.380
From *Euryops spathaceus*. Cryst. (Et_2O/pet. ether). Mp 145.5°.

6-Angeloyl: [53820-51-2].
$C_{20}H_{24}O_5$ M 344.407
Constit. of *E. spathaceus*. Cryst. (Et_2O/pet. ether). Mp 151°.

3,6-Bis(methylpropenoyl): [53820-70-5].
$C_{23}H_{26}O_6$ M 398.455
Constit. of *E. spathaceus*. Oil.

3,6-Diangeloyl:
$C_{25}H_{30}O_6$ M 426.508
Constit. of *E. spathaceus*. Oil.

3-Angeloyl, 6-(methylpropenoyl):
$C_{24}H_{28}O_5$ M 396.482
Constit. of *E. spathaceus*. Oil.

6-Angeloyl, 3-(methylpropenoyl):
$C_{24}H_{28}O_5$ M 396.482
Constit. of *E. spathaceus*. Oil.

6-(2,3-Epoxy-2-methylbutanoyl):
$C_{20}H_{24}O_6$ M 360.406
Constit. of *E.* spp. Cryst. (Et_2O/pet. ether). Mp 151.5°. $[\alpha]_D^{24}$ +8.7° (c, 0.39 in $CHCl_3$).

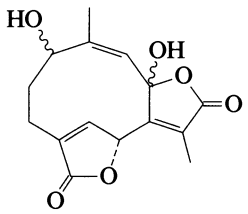
3-Angeloyl, 6-(2-methylpropanoyl):
$C_{24}H_{30}O_6$ M 414.497
Constit. of *E.* spp. Oil.

3-Angeloyl, 6-propanoyl:
$C_{23}H_{28}O_6$ M 400.471
Constit. of *E.* spp. Oil.

3,6-Dipropanoyl:
$C_{21}H_{26}O_6$ M 374.433
Constit. of *E.* spp. Oil.

Bohlmann, F. *et al*, *Chem. Ber.*, 1972, **105**, 3523; 1974, **107**, 2730 (*isol, struct*)
Bohlmann, F. *et al*, *Phytochemistry*, 1978, **17**, 1135 (*isol, pmr*)

1,8-Dihydroxy-4,7(11),9-germacratriene-12,8:15,6-diolide D-10171



$C_{15}H_{16}O_6$ M 292.288

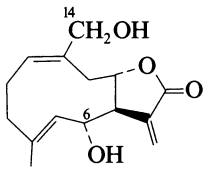
(1ξ,6α,8ξ,9Z)-form

1-Ac: [145940-30-3]. ***Acutotrinol***
$C_{17}H_{18}O_7$ M 334.325
Constit. of *Neolitsea acutotrinerva*. Plates (Me_2CO/hexane). Mp 232-234°.

Li, W.-S. *et al*, *J. Nat. Prod.* (*Lloydia*), 1992, **55**, 1614 (*isol, pmr, cmr*)

6,14-Dihydroxy-1(10),4,11(13)-germacratrien-12,8-olide D-10172

Updated Entry replacing D-01962



(1(10)*E*,4*E*,6α,8α)-*form*

$C_{15}H_{20}O_4$ M 264.321

(1(10)E,4E,6α,8α)-form

6-Ac: [88861-90-9]. ***Soulangianolide B***
$C_{17}H_{22}O_5$ M 306.358
Isol. from a *Magnolia* sp. Oil. $[\alpha]_D$ −63° (c, 0.53 in MeOH).

11β,13-Dihydro: [127054-49-3]. ***6α,14-Dihydroxy-1(10)E,4E-germacradien-12,8α-olide***
Isol. from *Schkuhria pinnata*. Oil.

11β,13-Dihydro, 14-aldehyde: [127072-56-4]. ***6α-Hydroxy-14-oxo-1(10)E,4E-germacradien-12,8α-olide***
$C_{15}H_{20}O_4$ M 264.321
From *S. pinnata*. Oil.

(1(10)E,4E,6α,8β)-form

14-(2-Methylpropanoyl): [87441-79-0]. ***Schkuhrioidin***
$C_{19}H_{26}O_5$ M 334.411
Constit. of *Schkuhria schkuhrioides*. Pale-yellow oil. $[\alpha]_D^{20}$ +86.5° (MeOH).

14-Aldehyde: [73675-60-2]. *6-Hydroxy-14-oxo-1(10),4,11(13)-germacratrien-12,8-olide*. ***Schkuhriolide***
$C_{15}H_{18}O_4$ M 262.305
Constit. of *Schkuhria schkuhrioides*. Mp 155-157°. $[\alpha]_D^{20}$ +84.6° (c, 0.52 in MeOH).

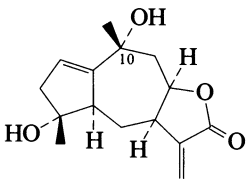
(1(10)Z,4E,6α,8α)-form

14-(2-Hydroxymethylpropenoyl): [114927-44-5]. ***Gochnatolide***
$C_{19}H_{24}O_6$ M 348.395
Constit. of *Gochnatia hypoleuca*. Cryst. (Me_2CO/hexane). Mp 107-109°. $[\alpha]_D^{25}$ +8.89° (c, 0.169 in $CHCl_3$).

[85081-10-3, 114915-87-6, 114927-45-6]

Samek, Z. *et al*, *Z. Chem.*, 1979, **19**, 449 (*Schkuhriolide*)
Rychlewska, U., *J. Chem. Soc., Perkin Trans. 2*, 1982, 1641 (*cryst struct, Schkuhriolide*)
Romo de Vivar, A. *et al*, *Phytochemistry*, 1982, **21**, 2905 (*Schkuhrioidin*)
El-Feraly, F.S., *Phytochemistry*, 1983, **22**, 2239 (*Soulangianolide B*)
Maldonado, E. *et al*, *Phytochemistry*, 1988, **27**, 861 (*Gochnatolide*)
Ganzer, U. *et al*, *Phytochemistry*, 1990, **29**, 535 (*isol, pmr, derivs*)

4,10-Dihydroxy-1,11(13)-guaiadien-12,8-olide D-10173



(4α*OH*,5α,8β,10α*OH*)-*form*

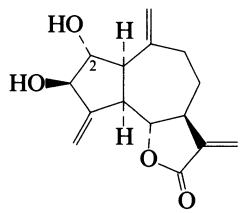
$C_{15}H_{20}O_4$ M 264.321

(4αOH,5α,8β,10αOH)-form
Constit. of *Jasonia candicans*. $[\alpha]_D^{20}$ −280.6° (c, 1.8 in $CHCl_3$).

(4αOH,5α,8β,10βOH)-form
Constit. of *J. candicans*. $[\alpha]_D^{20}$ +266.7° (c, 0.03 in $CDCl_3$).

Ahmed, A.A. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 1276 (*isol, pmr, cmr, cryst struct*)

2,3-Dihydroxy-4(15),10(14),11(13)-guaiatrien-12,6-olide D-10174



$C_{15}H_{18}O_4$ M 262.305

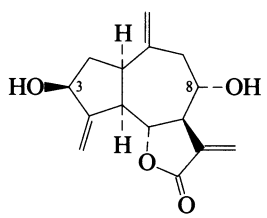
(1α,2α,3β,5α,6α)-form

2-(2-Methylpropanoyl): [146959-86-6]. ***Cebellin O***
$C_{19}H_{24}O_5$ M 332.396
Constit. of *Centaurea bella*. Oil. $[\alpha]_D^{25}$ +24.3° (c, 0.17 in $CHCl_3$).

Daniewski, W.M. *et al*, *Phytochemistry*, 1993, **32**, 204.

3,8-Dihydroxy-4(15),10(14),11(13)-guaiatrien-12,6-olide D-10175

Updated Entry replacing D-02004



(1α,3β,5α,6α,8α)-*form*

$C_{15}H_{18}O_4$ M 262.305

(1α,3β,5α,6α,8α)-form [31565-50-1] ***8-Hydroxyzaluzanin C. Eleganin***†
Constit. of *Amberboa muricata*. Cryst. Mp 150-151.5°. $[\alpha]_D^{20}$ +119.7°. The name Eleganin is unchecked and may refer to Integrifolin below; its description in CA is defective.

8-(3-Methyl-2-butenoyl):
$C_{20}H_{24}O_5$ M 344.407
Constit. of *Pseudostiffia kingii*. Gum. $[\alpha]_D^{24}$ +32° (c, 0.2 in $CHCl_3$).

8-(4-Hydroxy-3-methyl-2-butenoyl):
$C_{20}H_{24}O_6$ M 360.406
Constit. of *P. kingii*. Gum. $[\alpha]_D^{24}$ +22° (c, 0.25 in $CHCl_3$).

8-(2-Hydroxymethylpropenoyl): [35730-78-0]. ***Cynaropicrin***
$C_{19}H_{22}O_6$ M 346.379
Constit. of *Cynara scolymus*. Noncryst. $[\alpha]_D^{20}$ +108.6°.

8-(3-Chloro-2-hydroxy-2-methylpropanoyl): [66761-09-9]. ***Linichlorin B***
$C_{19}H_{23}ClO_6$ M 382.840
Constit. of *Centaurea linifolia*. Cryst. (EtOAc/pet. ether). Mp 144-146°. $[\alpha]_D$ +95° (c, 0.5 in $CHCl_3$).

Di-Ac: [71305-80-1]. ***8α-Acetoxyzaluzanin D***
$C_{19}H_{22}O_6$ M 346.379
Constit. of *C. conicum*. Oil. $[\alpha]_D$ +174° (c, 2.3 in $CHCl_3$).

3-O-β-D-Glucopyranoside: [100228-50-0]. ***Crepiside E***
$C_{21}H_{28}O_9$ M 424.447
Constit. of *Crepis japonica*. Amorph. powder. $[\alpha]_D$ +12.9° (c, 0.62 in MeOH).

8-O-(4-Hydroxyphenylacetyl), 3-O-β-D-glucopyranoside: [100187-60-8]. ***Crepiside G***
$C_{29}H_{34}O_{11}$ M 558.581
Constit. of *C. japonica*. Amorph. powder. $[\alpha]_D^{20}$ +41.3° (c, 0.40 in MeOH).

3-O-(6-O-p-Hydroxyphenylacetyl-β-D-glucopyranoside): [100228-49-7]. ***Crepiside H***
$C_{29}H_{34}O_{11}$ M 558.581
Constit. of *C. japonica*. Amorph. powder. $[\alpha]_D$ +22.9° (c, 0.83 in MeOH).

8-Ac: [71305-81-2]. ***8α-Acetoxyzaluzanin C***
$C_{17}H_{20}O_5$ M 304.342
Constit. of *Conocephalum conicum*. Oil.

8-(2-Methylpropanoyl): [68370-46-7]. ***Aguerin A***
$C_{19}H_{24}O_5$ M 332.396
Constit. of *Centaurea canariensis* and *C. linifolia*. Oil. $[\alpha]_D$ +89° (c, 0.14 in $CHCl_3$).

8-(2-Methylpropenoyl): [68370-45-6]. ***Aguerin B***
$C_{19}H_{22}O_5$ M 330.380
Constit. of *Centaurea* spp. Oil. $[\alpha]_D$ +96° (c, 0.17 in $CHCl_3$).

3-Ketone: 8-Hydroxy-3-oxo-4(15),10(14),11(13)-guaiatrien-12,6-olide. ***8α-Hydroxydehydrozaluzanin C***
$C_{15}H_{16}O_4$ M 260.289
Constit. of *P. kingii, Vernonia arkansana* and *V. profuga*. Cryst. (MeOH). Mp 191°. $[\alpha]_D^{24}$ +118° (c, 0.3 in $CHCl_3$).

3-Ketone, 11β,13-dihydro: 8-Hydroxy-3-oxo-4(15),10(14)-guaiadien-12,6-olide
$C_{15}H_{18}O_4$ M 262.305
Constit. of *P. kingii* and *V. noveboracensis*. Cryst. (Et_2O/pet. ether). Mp 168°. $[\alpha]_D^{24}$ +169.5° (c, 0.57 in $CHCl_3$).

3-Ketone, 8-O-(2-hydroxymethylpropenoyl): [35821-02-4]. ***Dehydrocyanaropicrin***
$C_{19}H_{20}O_6$ M 344.363
Constit. of *Cynara scolymus*. Cryst. Mp 126°. $[\alpha]_D^{20}$ +60°.

4β,11β,13,15-Tetrahydro: see *3,8-Dihydroxy-10(14)-guaien-12,6-olide, D-02017*

3-(2-Hydroxymethylpropenoyl):
$C_{19}H_{22}O_6$ M 346.379
Constit. of *Brachylaena perrieri.* $[\alpha]_D^{24}$ +135° (c, 0.37 in $CHCl_3$).

3,8-Bis-(2-hydroxymethylpropenoyl):
$C_{23}H_{26}O_8$ M 430.454
Constit. of *B. perrieri.* $[\alpha]_D^{24}$ +128° (c, 1.73 in $CHCl_3$).

8-(3-Hydroxy-2-methylpropanoyl):
$C_{19}H_{24}O_6$ M 348.395
Constit. of *Centaurea pabotii.* Cryst. (Et_2O/MeOH). Mp 98-99°. $[\alpha]_D$ +105° (c, 9.3 in $CHCl_3$).

8-(2,3-Epoxy-2-methylpropanoyl): ***Salograviolide C***
$C_{19}H_{22}O_6$ M 346.379
Constit. of *Centaurea salonitana.* Cryst. Mp 140-141°. $[\alpha]_D^{20}$ +89° (c, 0.54 in $CHCl_3$).

(1α,3β,5α,6α,8β)-form [89647-87-0] ***Integrifolin***
Constit. of *Andryala integrifolia.* Cryst. (EtOAc/pet. ether). Mp 206-208°. $[\alpha]_D$ −17.5° (c, 0.2 in $CHCl_3$).

3-Ac: [92484-33-8]. ***Kandavanolide***
$C_{17}H_{20}O_5$ M 304.342
Constit. of *Centaurea kandavanensis.* Cryst. Mp 142.5°. $[\alpha]_D^{24}$ +33.7° (c, 0.49 in $CHCl_3$).

3-O-(6-O-p-Hydroxyphenylacetyl-β-D-glucopyranoside): [100187-59-5]. ***Crepiside I***
$C_{29}H_{34}O_{11}$ M 558.581
Constit. of *Crepis japonica.* Amorph. powder. $[\alpha]_D^{29}$ −22.6° (c, 0.31 in MeOH).

8-O-[2-Hydroxy-3-(p-hydroxyphenyl)propanoyl], 3-O-β-D-glucopyranoside: [124960-89-0]. ***Tectoroside***
$C_{30}H_{36}O_{12}$ M 588.607
Constit. of *Crepis tectorum.* Oil.

3-O-β-D-Glucopyranoside, 8-(4-hydroxyphenylacetyl): [132341-19-6]. ***Ixerisoside A***
$C_{29}H_{34}O_{11}$ M 558.581
Constit. of *Ixeris debilis.* Amorph. powder. $[\alpha]_D^{21}$ −40.6° (c, 0.16 in MeOH).

4β,15-Dihydro, 3-O-β-D-glucopyranoside, 8-[2-hydroxy-3-(4-hydroxyphenyl)propanoyl]: [132282-40-7]. ***Ixerisoside B***
$C_{30}H_{38}O_{12}$ M 590.623
Constit. of *I. repens.* Amorph. powder. $[\alpha]_D^{25}$ −26.9° (c, 0.46 in MeOH).

(1ξ,3ξ,5ξ,6ξ,8ξ)-form

8-O-(2-Hydroxymethylpropenoyl): [35932-39-9]. ***Saupirin***
$C_{19}H_{22}O_6$ M 346.379
Constit. of the flowers of *Saussurea neopulchella.* Mp 75-84°. $[\alpha]_D^{17}$ +112° (c, 1.7 in MeOH).

Chugunov, P.V. *et al, Khim. Prir. Soedin.*, 1971, **7**, 727; *Chem. Nat. Compd.* (*Engl. Transl.*), 706 (*Saupirin*)
Corbella, A. *et al, J. Chem. Soc., Chem. Commun.*, 1972, 386 (*Cynaropicrin*)
González, A.G. *et al, An. Quim.*, 1973, **69**, 1333.
González, A.G. *et al, Can. J. Chem.*, 1978, **56**, 491 (*Linichlorin B*)
Bohlmann, F. *et al, Phytochemistry*, 1978, **17**, 475; 1981, **21**, 2379; 1982, **21**, 1171.
González, A.G. *et al, Phytochemistry*, 1978, **17**, 955 (*Aguerins*)
Asakawa, Y. *et al, Phytochemistry*, 1979, **18**, 285 (*Acetoxyzaluzanins*)
Massanet, G.M. *et al, Phytochemistry*, 1984, **23**, 912 (*Integrifolin*)
Rustaiyan, A. *et al, Planta Med.*, 1984, **50**, 363 (*Kandavanolide*)
Miyase, T. *et al, Chem. Pharm. Bull.*, 1985, **33**, 4451 (*Crepisides*)
Kisiel, W. *et al, Phytochemistry*, 1989, **28**, 2403 (*Tectoroside*)
Warashina, T. *et al, Phytochemistry*, 1990, **29**, 3217 (*Ixerisosides*)
Zdero, C. *et al, Phytochemistry*, 1991, **30**, 3810 (*isol, pmr, cmr*)
Marco, J.A. *et al, Phytochemistry*, 1992, **31**, 3527 (*8-(3-Hydroxy-2-methylpropanoyl)*)
Daniewski, W.M. *et al, Phytochemistry*, 1993, **34**, 445 (*Salograviolide C*)

3,12-Dihydroxyhexadecanoic acid D-10176

Updated Entry replacing D-02031

3,12-Dihydroxypalmitic acid. Operculinolic acid. Turpetholic acid D

[66675-73-8]

$H_3C(CH_2)_3CH(OH)(CH_2)_8CH(OH)CH_2COOH$

$C_{16}H_{32}O_4$ M 288.426
Mp 83.4°.

Me ester: [53781-47-8].
$C_{17}H_{34}O_4$ M 302.453
Mp 81-82°. $[\alpha]_D$ +0.9°.

Et ester:
$C_{18}H_{36}O_4$ M 316.480
Mp 72-73°.

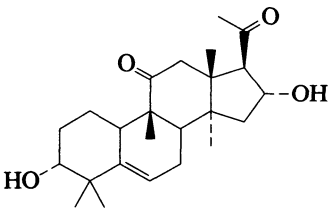
12-O-[β-D-Glucopyranosyl-(1→3)-α-L-rhamnopyranosyl(1→3)-β-D-glucopyranosyl(1→3)-β-D-glucopyranoside]: [66895-64-5]. ***Turpethinic acid D***
$C_{40}H_{72}O_{23}$ M 920.995
Isol. from *Ipomoea turpethum.*

12-O-[α-L-Rhamnopyranosyl-(1→6)-[α-D-glucopyranosyl-(1→4)]-α-D-glucopyranosyl-(1→4)-L-rhamnopyranosyl-(1→2)[β-D-glucopyranosyl-(1→3)]-β-D-glucopyranoside]: [34437-89-3]. ***Operculinic acid.*** *Operculic acid. Rhamnoconvolvulinolic acid*
$C_{52}H_{92}O_{32}$ M 1229.280
Constit. of *Ipomoea operculata.* Mp 182-185°. $[\alpha]_D^{24}$ −48.6° (c, 1.2 in Py).

[66965-42-2]

Shellard, E.J., *Planta Med.*, 1961, **9**, 141 (*isol*)
Ciraf, E. *et al, Arch. Pharm.* (*Weinheim, Ger.*), 1974, **307**, 628 (*synth*)
Wagner, H. *et al, Phytochemistry*, 1977, **16**, 711 (*struct, Operculinic acid*)
Wagner, H. *et al, Planta Med.*, 1978, **33**, 144 (*Turpethinic acid D*)
Piatak, D.M. *et al, Lipids*, 1985, **20**, 903 (*synth*)

3,16-Dihydroxy-22,23,24,25,26,27-hexanorcurcurbit-5-ene-11,20-dione D-10177



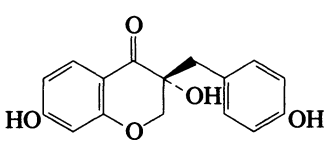
$C_{24}H_{36}O_4$ M 388.546

(3α,16α)-form [149725-31-5] ***Kinoin C***
Constit. of *Ibervillea sonorae.* Cryst. ($CHCl_3$/MeOH aq.). Mp 185-187°. $[\alpha]_D^{21}$ +178° (c, 0.1 in $CHCl_3$).

Achenbach, H. *et al, Phytochemistry*, 1993, **33**, 437 (*isol, pmr, cmr*)
Weckert, E. *et al, Phytochemistry*, 1993, **33**, 447 (*cryst struct, abs config*)

3,7-Dihydroxy-3-(4-hydroxybenzyl)-4-chromanone D-10178

2,3-Dihydro-3,7-dihydroxy-3-[(4-hydroxyphenyl)methyl]-4H-1-benzopyran-4-one, 9CI. 3'-Deoxysappanone B

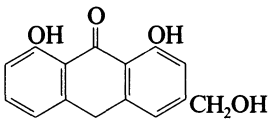


$C_{16}H_{14}O_5$ M 286.284

(R)-form [110064-51-2]
Constit. of the heartwood of *Caesalpina sappan*. $[\alpha]_D^{25}$ +11.9° (c, 0.21 in MeOH).
Namikoshi, M. *et al*, *Chem. Pharm. Bull.*, 1987, **35**, 3597 (*abs config*)
Namikoshi, M. *et al*, *Phytochemistry*, 1987, **26**, 1831 (*isol*)

1,8-Dihydroxy-3-(hydroxymethyl)-9(10*H*)-anthracenone D-10179

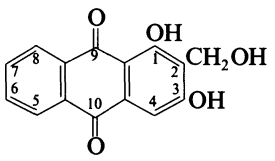
1,8-Dihydroxy-3-(hydroxymethyl)anthrone, 8CI. Aloeemodin anthrone. 10-Deglucosylbarbaloin
[6247-99-0]



$C_{15}H_{12}O_4$ M 256.257
Hydrol. prod. from *Cassia* spp. Yellow needles (AcOH). Mp 199°.
O-*Glucoside:* [54003-19-9].
$C_{21}H_{22}O_9$ M 418.399
Constit. of *Cassia angustifolia*.
O-*Diglucoside:* [57077-59-5].
$C_{27}H_{32}O_{14}$ M 580.541
Constit. of *C. angustifolia*.
[57077-54-0]
Murty, V.K. *et al*, *Tetrahedron*, 1967, **23**, 515 (*synth*)
Lemli, J. *et al*, *Phytochemistry*, 1975, **14**, 1397 (*glucosides*)

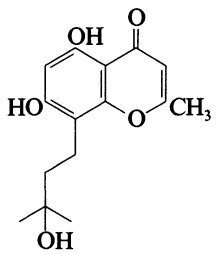
1,3-Dihydroxy-2-hydroxymethylanthraquinone D-10180

Updated Entry replacing D-02053
1,3-Dihydroxy-2-(hydroxymethyl)-9,10-anthracenedione, 9CI. ***Lucidin***†
[478-08-0]



$C_{15}H_{10}O_5$ M 270.241
Obt. from *Coprosma*, *Morinda* and *Rubia* spp. Yellow cryst. (dioxan). Mp >330°. pK_a 8.11 (H_2O, 20°). Prob. artifact.
▷ CB6712000.
Tri-Ac:
$C_{21}H_{16}O_8$ M 396.353
Cryst. (EtOH). Mp 175-178°.
1-Me ether: [477-83-8]. *3-Hydroxy-2-hydroxymethyl-1-methoxyanthraquinone.* ***Damnacanthol***
$C_{16}H_{12}O_5$ M 284.268
Obt. from roots of *M. citrifolia*, *Damnacanthus* spp. and bark of *Coprosma rotundifolia*. Yellow needles (EtOH). Mp 295° (288-290°).
1,1'-Di-Me ether: 3-Hydroxy-1-methoxy-2-(methoxymethyl) anthraquinone
$C_{17}H_{14}O_5$ M 298.295
Isol. from *M. lucida*. Prob. artifact.
1-Me, O$^{1'}$*-Et:* [63965-57-1]. *2-Ethoxymethyl-3-hydroxy-1-methoxyanthraquinone.* ***Subspinosin***
$C_{18}H_{16}O_5$ M 312.321
Isol. from *Plocama pendula* and (as Subspinosin) from *Damnacanthus subspinosus*. Prob. artifact. Struct. of Subspinosin revised in 1990.
Tri-Me ether:
$C_{18}H_{16}O_5$ M 312.321
Cryst. (EtOH). Mp 173°.
O$^{1'}$*-Et:* [17526-17-9]. *1,3-Dihydroxy-2-(ethoxymethyl) anthraquinone.* ***Ibericin***
$C_{17}H_{14}O_5$ M 298.295
Isol. from roots of *Rubia iberica*. Citron-yellow cryst. (C_6H_6). Mp 182-183° dec.
▷ CB6705000.
O$^{1'}$*-Et, Di-Ac:* Mp 163-164°.
1'-O-[3-(Hydroxymethyl)-7-methyloctanoyl]: [75076-73-2]. ***Tinctomorone***
$C_{25}H_{28}O_7$ M 440.492
Isol. from the heartwood of *Morinda tinctoria*. Mp 195°.
[80565-16-8]
Agyangar, N.R. *et al*, *J. Sci. Ind. Res., Sect. B*, 1956, **15**, 359 (*synth*)
Bloom, H. *et al*, *J. Chem. Soc.*, 1959, 178 (*ir*)
Stikhin, V.A. *et al*, *Khim. Prir. Soedin.*, 1966, **2**, 12; 1967, **3**, 276; *Chem. Nat. Compd.* (*Engl. Transl.*), 9; 230 (*Ibericin*)
Hirose, Y. *et al*, *Chem. Pharm. Bull.*, 1973, **21**, 2790 (*synth*)
Leistner, E., *Planta Med.*, (Suppl.), 1975, 214 (*biosynth*)
Briggs, L.H. *et al*, *J. Chem. Soc., Perkin Trans. 1*, 1976, 1789 (*isol, pmr*)
González, A.G. *et al*, *An. Quim.*, 1977, **73**, 869 (*isol, deriv*)
Castonguay, A. *et al*, *Can. J. Chem.*, 1977, **55**, 1324 (*deriv*)
Roberts, J.L. *et al*, *J. Chem. Soc., Perkin Trans. 1*, 1977, **30**, 1553 (*synth*)
Eswaran, V. *et al*, *Indian J. Chem., Sect. B*, 1979, **17**, 650 (*Tinctomorone*)
Demagos, G.P. *et al*, *Z. Naturforsch., B*, 1981, **36**, 1180 (*isol, deriv*)
Yu, J.R. *et al*, *Yaoxue Xuebao*, 1990, **25**, 173; *CA*, **113**, 231067 (*Subspinosin*)
Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th Ed., Van Nostrand-Reinhold, 1992, DMT200.

5,7-Dihydroxy-8-(3-hydroxy-3-methylbutyl)-2-methyl-4*H*-1-benzopyran-4-one D-10181

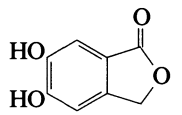


$C_{15}H_{18}O_5$ M 278.304
Di-Me ether: [86408-20-0]. *8-(3-Hydroxy-3-methylbutyl)-5,7-dimethoxy-2-methyl-4*H*-1-benzopyran-4-one, 9CI.* ***Perforatin B***
$C_{17}H_{22}O_5$ M 306.358
Constit. of the roots of *Harrisonia perforata*.
Wang, M. *et al*, *Yaoxue Xuebao*, 1983, **18**, 113; *CA*, **99**, 67494.

5,6-Dihydroxy-1(3*H*)-isobenzofuranone, 9CI D-10182

5,6-Dihydroxyphthalide, 8CI

[53766-43-1]



$C_8H_6O_4$ M 166.133

Isol. from heartwood of *Acacia crombei.*

5-Me ether: 6-Hydroxy-5-methoxyphthalide

$C_9H_8O_4$ M 180.160

Needles (EtOH or H_2O). Mp 208.4-209°.

6-Me ether: 5-Hydroxy-6-methoxyphthalide

$C_9H_8O_4$ M 180.160

Cryst. (C_6H_6). Mp 177-177.6°.

Di-Me ether: [531-88-4]. *5,6-Dimethoxyphthalide. Metameconine*

$C_{10}H_{10}O_4$ M 194.187

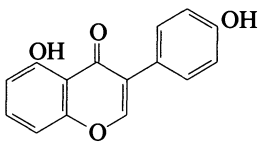
Cryst. (butanol). Mp 156.5-157°.

Allen, M. *et al, J. Org. Chem.*, 1961, **26**, 2906.

Brandt, E.V. *et al, J. Chem. Soc., Perkin Trans. 1*, 1981, 1879.

4′,5-Dihydroxyisoflavone D-10183

*5-Hydroxy-3-(4-hydroxyphenyl)-4*H*-1-benzopyran-4-one, 9CI*



$C_{15}H_{10}O_4$ M 254.242

4′-Me ether: [133086-79-0]. *5-Hydroxy-4′-methoxyisoflavone.* ***Pallidiflorin***

$C_{16}H_{12}O_4$ M 268.268

Isol. from the rhizome of *Glycyrrhiza pallidiflora.*

Di-Me ether: 4′,5-Dimethoxyisoflavone

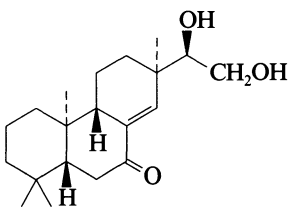
$C_{17}H_{14}O_4$ M 282.295

Mp 161°.

Inoue, N., *Nippon Kagaku Zasshi*, 1958, **79**, 1537.

Liu, J.H. *et al, Yaoxue Xuebao*, 1990, **25**, 689; *CA*, **114**, 160672 (*Pallidiflorin*)

15,16-Dihydroxy-8(14)-isopimaren-7-one D-10184



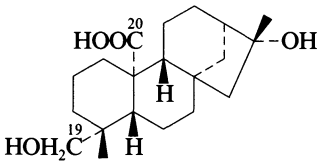
$C_{20}H_{32}O_3$ M 320.471

(ent-15S)-form [145701-02-6]

Constit. of *Calibrachoa parviflora.* Cryst. (EtOAc/heptane). Mp 164-165°. $[\alpha]_D$ +16° (c, 1 in $CHCl_3$).

Elliger, C.A. *et al, J. Nat. Prod.* (*Lloydia*), 1992, **55**, 1477 (*isol, pmr, cmr, cryst struct*)

16,19-Dihydroxy-20-kauranoic acid D-10185



$C_{20}H_{32}O_4$ M 336.470

(ent-16β)-form

20→19-Lactone: [149249-32-1]. *Hypodiolide A.* ent-*16β-Hydroxy-20,19-kauranolide*

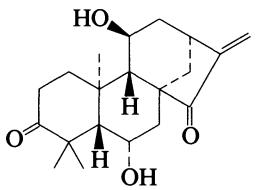
$C_{20}H_{30}O_3$ M 318.455

Constit. of *Tripterygium hypoglaucum* and *Ryparosa acuminata.* Needles (EtOAc/hexane). Mp 200-202° (205-206°). $[\alpha]_D$ −32° (c, 0.09 in $CHCl_3$).

Zhang, L. *et al, Acta Pharm. Sin.*, 1993, **28**, 32 (*isol, pmr, cmr, cryst struct*)

Shaari, K. *et al, Aust. J. Chem.*, 1993, **46**, 739 (*isol, pmr, cmr*)

6,11-Dihydroxy-16-kaurene-3,15-dione D-10186



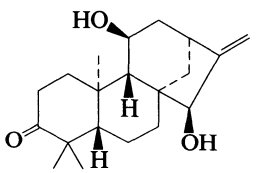
$C_{20}H_{28}O_4$ M 332.439

(ent-6β,11α)-form [148225-29-0] ***Inflexarabdonin I***

Constit. of *Rabdosia inflexa.* Needles. Mp 232-234°. $[\alpha]_D^{23.5}$ −106.4° (c, 0.87 in MeOH).

Takeda, Y. *et al, Phytochemistry*, 1993, **32**, 145 (*isol, pmr, cmr*)

11,15-Dihydroxy-16-kauren-3-one D-10187



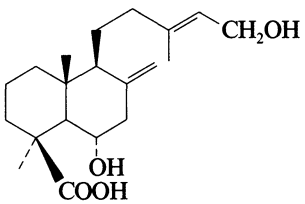
$C_{20}H_{30}O_3$ M 318.455

(ent-11α,15α)-form [148225-30-3] ***Inflexarabdonin J***

Constit. of *Rabdosia inflexa.* Amorph. powder. $[\alpha]_D^{27}$ −63.4° (c, 0.56 in MeOH).

Takeda, Y. *et al, Phytochemistry*, 1993, **32**, 145 (*isol, pmr, cmr*)

6,15-Dihydroxy-8(17),13-labdadien-19-oic acid D-10188



$C_{20}H_{32}O_4$ M 336.470

(6α,13E)-form

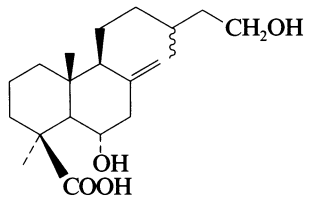
*19→6 Lactone, 15-*O*-β-D-glucopyranoside:* [149182-81-0]. ***Gomojoside P***

$C_{26}H_{40}O_8$ M 480.597

Constit. of *Viburnum suspensum*. Amorph. powder. $[\alpha]_D$ −190° (c, 0.15 in MeOH).

Iwagawa, T. *et al*, *Phytochemistry*, 1993, **32**, 1515 (*isol, pmr, cmr*)

6,15-Dihydroxy-8(17)-labden-19-oic acid D-10189



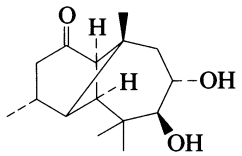
$C_{20}H_{34}O_4$ M 338.486

(6α,13ξ)-form

19→6-Lactone, 15-O-β-D-glucopyranoside: [149182-82-1].
Gomojoside Q
$C_{26}H_{42}O_8$ M 482.613
Constit. of *Viburnum suspensum*. Amorph. powder. $[\alpha]_D$ +9.0° (c, 0.17 in MeOH).

Iwagawa, T. *et al*, *Phytochemistry*, 1993, **32**, 1515 (*isol, pmr, cmr*)

9,10-Dihydroxy-5-longipinanone D-10190



$C_{15}H_{24}O_3$ M 252.353

(3α,9α,10β)-form

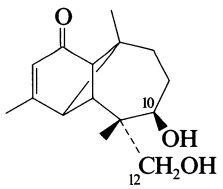
Diangeloyl: [150259-04-4].
$C_{25}H_{36}O_5$ M 416.556
Constit. of *Stevia serrata*. Oil. $[\alpha]_D$ +1° (c, 0.84 in $CHCl_3$).

Román, L.U. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 1148 (*isol, pmr, cmr*)

10,12-Dihydroxy-3-longipinen-5-one D-10191

Updated Entry replacing D-02202

7,13-Dihydroxy-2-longipinen-1-one



$C_{15}H_{22}O_3$ M 250.337

10β-form [100045-39-4]
Constit. of *Stevia achalensis*. Oil. $[\alpha]_D^{24}$ +64° (c, 0.65 in $CHCl_3$).

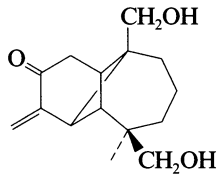
12-Angeloyl, 10-Ac: [151310-25-7].
$C_{22}H_{30}O_5$ M 374.476
Constit. of *S. origanoides*. Oil. $[\alpha]_D$ +9° (c, 0.2 in $CHCl_3$).

Bohlmann, F. *et al*, *Justus Liebigs Ann. Chem.*, 1985, 1764; 1986, 799 (*isol*)

Cerda-Garćia-Rojas, C.M. *et al*, *Phytochemistry*, 1993, **32**, 1219 (*isol, pmr, cmr*)

12,14-Dihydroxy-3(15)-longipinen-4-one D-10192

11,14-Dihydroxymarsupellone



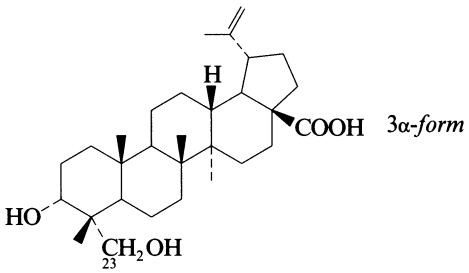
$C_{15}H_{22}O_3$ M 250.337

Di-Ac:
$C_{19}H_{26}O_5$ M 334.411
Constit. of *Marsupella emarginata*. Oil. $[\alpha]_D$ −37.9° (c, 0.62 in $CHCl_3$).

Nagashima, F. *et al*, *Phytochemistry*, 1993, **33**, 1445 (*isol, pmr, cmr*)

3,23-Dihydroxy-20(29)-lupen-28-oic acid D-10193

Updated Entry replacing D-02216



$C_{30}H_{48}O_4$ M 472.707

3α-form

23-Carboxylic acid: [83725-39-7]. ***3α-Hydroxy-20(29)-lupene-23,28-dioic acid***
$C_{30}H_{46}O_5$ M 486.690
Isol. from *Schefflera octophylla*. Cryst. (Me_2CO/hexane). Mp 260-262°. $[\alpha]_D^{25}$ −10.9° (c, 0.43 in MeOH).

3β-form [85999-40-2] ***Anemosapogenin.*** *23-Hydroxybetulinic acid*
Constit. of *Paeonia japonica, Anemone chinensis* and *Pulsatilla chinensis*. Cryst. (MeOH/$CHCl_3$). Mp 263-267°. $[\alpha]_D^{21}$ +88° (c, 0.075 in Py).

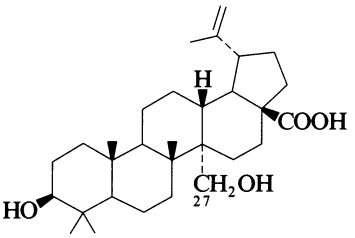
3-O-α-L-Arabinopyranoside:
$C_{35}H_{56}O_8$ M 604.823
Constit. of *P. chinensis*. Cryst. Mp 160-165°.

3-Ketone: 23-Hydroxy-3-oxo-20(29)-lupen-28-oic acid. ***Pulsatillic acid***
$C_{30}H_{46}O_4$ M 470.691
Constit. of *P. chinensis*. Cryst. Mp 214-217°.

Adam, G. *et al*, *Phytochemistry*, 1982, **21**, 1385 (*deriv*)
Liu, S. *et al*, *CA*, 1985, **103**, 113718 (*cryst struct*)
Preiss, A. *et al*, *Magn. Reson. Chem.*, 1986, **24**, 915 (*cmr*)
Ikuta, A. *et al*, *Phytochemistry*, 1988, **27**, 2813 (*isol*)
Ye, W.C. *et al*, *Chin. Chem. Lett.*, 1991, **2**, 375 (*isol, pmr, cmr*)

3,27-Dihydroxy-20(29)-lupen-28-oic acid D-10194

Updated Entry replacing D-02217



$C_{30}H_{48}O_4$ M 472.707

3β-form [102636-98-6] ***Cyclicodiscic acid***
Isol. from *Cyclicodiscus gabunensis*. Cryst. powder. Mp 286° dec.

Me ester: Cryst. (Et_2O/hexane). Mp 190°.

Di-Ac: Cryst. (EtOAc/hexane). Mp 281-282°.

3-O-[α-L-Arabinopyranosyl-(1→3)-β-D-glucopyranoside]: [137553-09-4].
$C_{41}H_{66}O_{13}$ M 766.965
Constit. of the bark of *C. gabunensis*. Cryst. powder (EtOAc/MeOH). $[\alpha]_D^{20}$ +17° (c, 1.2 in EtOH).

3-O-[α-L-Arabinopyranosyl-(1→3)-α-L-arabinopyranosyl-(1→3)-β-D-glucopyranoside]: [130263-13-7].
Cyclicodiscoside
$C_{46}H_{74}O_{17}$ M 899.080
Constit. of the stem bark of *C. gabunensis*. Amorph. solid.

27-Carboxylic acid: [2572-03-4]. *3-Hydroxy-20(29)-lupene-27,28-dioic acid.* ***Melaleucic acid***
$C_{30}H_{46}O_5$ M 486.690
Constit. of *Melaleuca* spp. Cryst. (MeOH aq.). Mp 363-364°. $[\alpha]_D$ +19° (c, 1 in Py).

3-Ketone, 27-carboxylic acid: 3-Oxo-20(29)-lupene-27,28-dioic acid. ***Gouanic acid***
$C_{30}H_{44}O_5$ M 484.675
Constit. of *Gouania microcarpa*. Cryst. (EtOAc). Mp 305-308°.

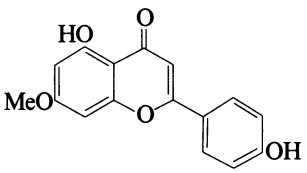
Hall, S.R. *et al*, *Acta Crystallogr.*, 1965, **18**, 265 (*cryst struct, Melaleucic acid*)
Chopra, C.S. *et al*, *Tetrahedron*, 1965, **21**, 1529 (*isol*)
Chopra, C.S., *CA*, 1972, **77**, 62175 (*pmr, Melaleucic acid*)
Wenkert, E. *et al*, *Org. Magn. Reson.*, 1978, **11**, 337 (*cmr, Melaleucic acid*)
Tchivounda, H.P. *et al*, *Phytochemistry*, 1990, **29**, 2723, 3255; 1991, **30**, 2711 (*isol, pmr, cmr*)
Nair, S.P. *et al*, *Phytochemistry*, 1993, **33**, 711 (*Gouanic acid*)

4′,5-Dihydroxy-7-methoxyflavone D-10195

Updated Entry replacing D-02256

5-Hydroxy-2-(4-hydroxyphenyl)-7-methoxy-4H-1-benzopyran-4-one. ***Genkwanin.*** *Apigenin 7-methyl ether. Puddumetin*

[437-64-9]



$C_{16}H_{12}O_5$ M 284.268

Widespread flavonoid isol. from the Asteraceae, Cistaceae, Eupomataceae, Lamiaceae, Pteridaceae and Saxifragaceae. Used as EtOH soln. for analytical reactions with some metals. Yellow needles (MeOH). Mp 286°.

5-O-β-D-Glucopyranoside: [552-52-3]. ***Glucogenkwanin***
$C_{22}H_{22}O_{10}$ M 446.410
Occurs in *Prunus verecunda* and *P. speciosa*. Yellow needles + $2H_2O$ (EtOH). Mp 273-274°.

4′-O-β-D-Glucopyranoside: [20486-36-6]. ***Phegopolin***
$C_{22}H_{22}O_{10}$ M 446.410
Constit. of leaves of *Phegopteris polypodiodes*. Yellow needles. Mp 235-236° (203-204°). $[\alpha]_D^{21}$ −35.8° (c, 0.5 in Py).

4′-O-Neohesperidoside: ***Fasciculatin*** †
$C_{28}H_{32}O_{14}$ M 592.552
Constit. of *Vernonia fasciculata*. Yellow solid. Mp >300° dec.

5-O-[α-D-Xylopyranosyl(1→6)-β-D-glucopyranoside]: [50675-78-0].
$C_{27}H_{30}O_{14}$ M 578.526
Isol. from leaves of *Ovidia pillo-pillo* and *Thymelea tartonraira*. Mp 173-175°.

5-O-(α-D-Glucosyl-α-D-glucoside): ***Wikstroemin***
$C_{28}H_{32}O_{15}$ M 608.552
Isol. from *Wikstroemia viridiflora*. Light-yellow needles. Mp 200-202°, Mp 270-272° dec. (double Mp).

4′-O-β-D-Galactopyranoside: [61490-80-0].
$C_{22}H_{22}O_{10}$ M 446.410
Isol. from *Cheilanthes longissima*.

4′-O-Glucosylrhamnoside: [131405-88-4].
$C_{28}H_{32}O_{14}$ M 592.552
Isol. from *Asplenium normale* and *A. oligophlebium*. Pale yellow needles (MeOH aq.).

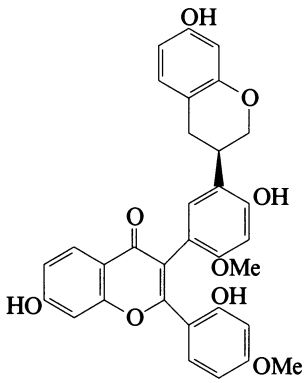
5-O-(6-O-Malonyl-β-D-glucopyranoside): [130733-29-8].
$C_{25}H_{24}O_{13}$ M 532.457
Isol. from *Equisetum arvense*.

4′-O-[β-D-Glucopyranosyl-(1→3)-β-D-xylopyranoside]: [61470-51-7].
$C_{27}H_{30}O_{14}$ M 578.526
Isol. from *C. longissima* and *Lasiosiphon eriocephalus*.

5-O-[β-D-Xylopyranosyl-(1→6)-β-D-glucopyranoside]: [77099-20-8]. ***Yuankanin***
$C_{27}H_{30}O_{14}$ M 578.526
Constit. of *Daphne genkwa* and *D. gnidium*.

Mahal, H.S. *et al*, *J. Chem. Soc.*, 1936, 569.
Narasimhachari, N. *et al*, *Proc. - Indian Acad. Sci., Sect. A*, 1950, **32**, 17 (*synth*)
Hasegawa, M. *et al*, *J. Am. Chem. Soc.*, 1954, **76**, 5559 (*Glucogenkwanin*)
Tseng, K.F. *et al*, *CA*, 1963, **59**, 15373 (*Wikstroemin*)
Dawson, R.M. *et al*, *Aust. J. Chem.*, 1965, **18**, 1871 (*isol*)
Kawano, N. *et al*, *Chem. Pharm. Bull.*, 1966, **14**, 299 (*synth*)
Farkas, L. *et al*, *Chem. Ber.*, 1968, **101**, 1630 (*Phegopolin*)
Korkuć, A., *Wiad. Chem.*, 1969, **23**, 345; *CA*, **71**, 56224j (*use*)
Nunez-Alarcon, J. *et al*, *Phytochemistry*, 1973, **12**, 1451 (*5-O-Xylosylglucoside*)
Sunder, R. *et al*, *Indian J. Chem., Sect. B*, 1976, **14**, 599 (*4′-galactoside, 4′-glucosylxyloside*)
Wagner, H. *et al*, *Tetrahedron Lett.*, 1976, 1799 (*nmr*)
Narain, N.K., *J. Chem. Soc., Perkin Trans. 1*, 1977, 1018 (*Fasciculatin*)
Markham, K.R. *et al*, *Tetrahedron*, 1978, **34**, 1389 (*cmr*)
Hauteville, M. *et al*, *Tetrahedron*, 1981, **37**, 377 (*synth*)
Ragot, J. *et al*, *Fitoterapia*, 1988, **59**, 336 (*Yuankanin*)
Veit, M. *et al*, *Phytochemistry*, 1990, **29**, 2555 (*5-(6-malonylglucoside)*)
Iwashina, T. *et al*, *Phytochemistry*, 1990, **29**, 3543 (*4′-glucosylrhamnoside*)

2′,7-Dihydroxy-4′-methoxyflavone(3→5′)-2′,7-dihydroxy-4′-methoxyisoflavan D-10196



$C_{32}H_{26}O_9$ M 554.552

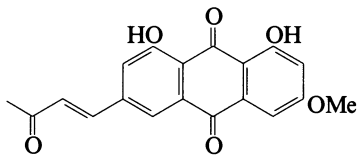
(R)-form [132586-75-5]

Constit. of the heartwood of *Dalbergia odorifera*. Amorph. powder.

Ogata, T. *et al*, *Chem. Pharm. Bull.*, 1990, **38**, 2750 (*isol*)

1,8-Dihydroxy-3-methoxy-6-(3-oxo-1-butenyl)anthraquinone D-10197

[20194-62-1]



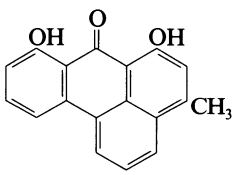
$C_{19}H_{14}O_6$ M 338.316

Constit. of *Xanthoria aureola* and *X. parietina*.

Piattelli, M. *et al*, *Phytochemistry*, 1968, **7**, 1183 (*isol*)
Krivoshchekova, O.E. *et al*, *Khim. Prir. Soedin.*, 1981, 96 (*isol*)

6,8-Dihydroxy-4-methyl-7*H*-benz[*de*]anthracen-7-one, 9CI D-10198

[69911-64-4]



$C_{18}H_{12}O_3$ M 276.291

Isol. from the heartwood of *Cassia garrettiana*. Orange-yellow powder ($CHCl_3$). Mp 188-192°.

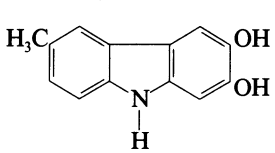
Di-Ac: [69940-11-0].

Yellow needles (EtOAc). Mp 224-225°.

Hata, K. *et al*, *Chem. Pharm. Bull.*, 1978, **26**, 3792 (*isol*)

2,3-Dihydroxy-6-methyl-9*H*-carbazole D-10199

6-Methyl-9H-carbazole-2,3-diol



$C_{13}H_{11}NO_2$ M 213.235

Methylene ether: 6-Methyl-2,3-methylenedioxycarbazole.

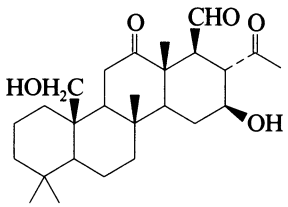
Clausenalene

$C_{14}H_{11}NO_2$ M 225.246

Alkaloid from the stem bark of *Clausena heptaphylla* (Rutaceae). Needles (C_6H_6/pet. ether). Mp 224-225° dec.

Bhattacharyya, P. *et al*, *Phytochemistry*, 1993, **33**, 248 (*isol, uv, ir, pmr, cmr, synth, struct*)

16,22-Dihydroxy-24-methyl-12,24-dioxo-25-scalaranal D-10200



$C_{26}H_{40}O_5$ M 432.599

16β-form

Di-Ac: [75605-87-7].

$C_{30}H_{44}O_7$ M 516.673

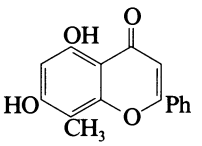
Constit. of a *Phyllospongia* sp. Needles (Et_2O). Mp 107.2-108.6°. $[\alpha]_D^{21}$ +132.2° (c, 1.15 in $CHCl_3$).

Kazlauskas, R. *et al*, *Aust. J. Chem.*, 1980, **33**, 1783 (*isol, pmr*)

5,7-Dihydroxy-8-methylflavone D-10201

5,7-Dihydroxy-8-methyl-2-phenyl-4H-1-benzopyran-4-one, 9CI. ***Cryptochrysin.*** *8-Methylchrysin*

[55969-56-7]



$C_{16}H_{12}O_4$ M 268.268

Isol. from the heartwood of *Pinus morrisonicola*. Yellow cryst. (MeOH or EtOAc). Mp 255-256°.

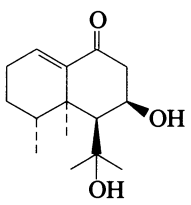
Di-Me ether: [14004-47-8]. *5,7-Dimethoxy-8-methylflavone*

$C_{18}H_{16}O_4$ M 296.322

Cryst. (EtOH). Mp 230-231°.

Aknin, J. *et al*, *Bull. Soc. Chim. Fr.*, 1963, 604 (*synth*)
Beirne, J.J. *et al*, *Tetrahedron*, 1975, **31**, 265 (*synth*)
Fang, J.M. *et al*, *Phytochemistry*, 1987, **26**, 2559 (*isol*)

7,11-Dihydroxy-1(10)-nardosinen-9-one D-10202



$C_{15}H_{24}O_3$ M 252.353

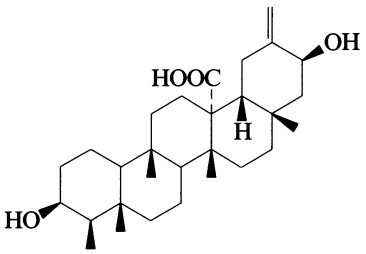
7β-form [20489-11-6] ***Nardosinonediol***

Constit. of *Nardostachys chinensis*. Cryst. (MeOH aq.). Mp 141-143°. $[\alpha]_D^{20}$ +15.8° (c, 2.06 in EtOH), $[\alpha]_D$ −1.7° (c, 0.95 in MeOH). No explanation given for discrepancy in optical rotations.

Rücker, G. *et al*, *Chem. Ber.*, 1969, **102**, 2691, 2707 (*synth, pmr*)
Dyck, E. *et al*, *Phytochemistry*, 1974, **13**, 1907 (*isol*)

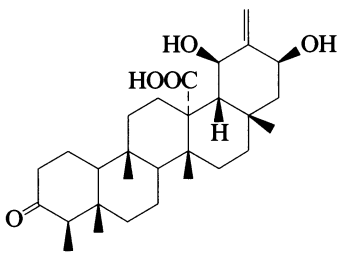
Hikino, H. *et al*, *Phytochemistry*, 1988, **27**, 3667 (*isol, cmr*)
Itokawa, H. *et al*, *Chem. Pharm. Bull.*, 1993, **41**, 1183 (*isol, pmr, cmr*)

3,21-Dihydroxy-30-nor-27-friedelanoic acid D-10203



$C_{29}H_{46}O_4$ M 458.680
(3β,21β)-form [148963-42-2]
Constit. of *Caloncoba glauca*. Amorph. Mp 218-219°. $[\alpha]_D$ +17° (c, 0.1 in $CHCl_3$).
Giner, R.M. *et al*, *Phytochemistry*, 1993, **32**, 237 (*isol, pmr, cmr*)

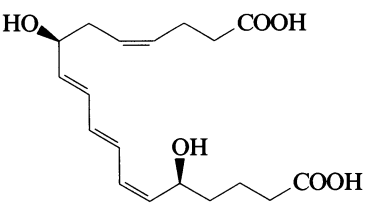
19,21-Dihydroxy-30-nor-3-oxo-20(29)-friedelen-27-oic acid D-10204



$C_{29}H_{44}O_5$ M 472.664
(19β,21β)-form
Me ester:
$C_{30}H_{46}O_5$ M 486.690
Constit. of *Phyllobotryon spathulatum*. Gum. $[\alpha]_D$ +15° (c, 0.1 in MeOH).
Gibbons, S. *et al*, *Phytochemistry*, 1993, **34**, 273 (*isol, pmr, cmr*)

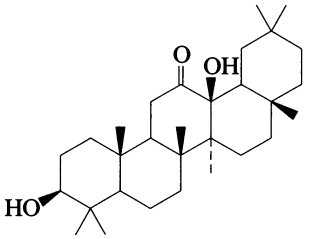
7,14-Dihydroxy-4,8,10,12-octadecatetraenedioic acid D-10205

18-Carboxy-19,20-dinor LTB$_4$. *18-Carboxyleukotriene B*$_4$
[102674-12-4]



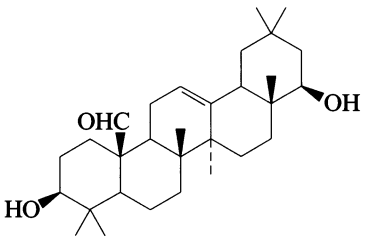
$C_{18}H_{26}O_6$ M 338.400
Formed in hepatocyte metab. of LTB_4 (see 5,12-Dihydroxy-6,8,10,14-eicosatetraenoic acid, D-01783).
Harper, T.W. *et al*, *J. Biol. Chem.*, 1986, **261**, 5414 (*biosynth*)
Jedlitschky, G. *et al*, *J. Biol. Chem.*, 1991, **266**, 24763 (*biosynth*)

3,13-Dihydroxy-12-oleananone D-10206



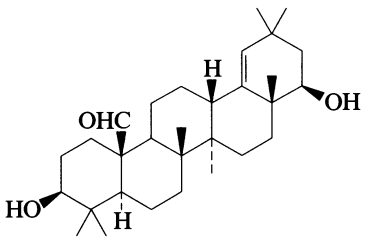
$C_{30}H_{50}O_3$ M 458.723
(3β,13β)-form
3-Ac: [125263-66-3]. ***Rubiprasin B***
$C_{32}H_{52}O_4$ M 500.760
Constit. of *Rubia cordifolia* var. *pratensis*. Needles ($CHCl_3$). Mp 277-280°.
Itokawa, H. *et al*, *Chem. Pharm. Bull.*, 1989, **37**, 1670 (*isol, pmr, cmr*)

3,22-Dihydroxy-12-oleanen-25-al D-10207



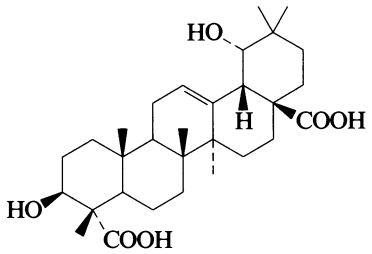
$C_{30}H_{48}O_3$ M 456.707
(3β,22β)-form
3-O-[α-L-Rhamnopyranosyl-(1→2)-β-D-xylopyranosyl-(1→2)-β-D-glucuronopyranoside]: [135545-89-0]. ***Periandradulcin B***
$C_{47}H_{74}O_{17}$ M 911.091
Constit. of the roots of *Periandra dulcis*. Phosphodiesterase inhibitor. Powder. Mp 225-227° dec. $[\alpha]_D^{25}$ +12.0° (c, 1 in MeOH).
Ikeda, Y. *et al*, *Chem. Pharm. Bull.*, 1991, **39**, 566.

3,22-Dihydroxy-18-oleanen-25-al D-10208



$C_{30}H_{48}O_3$ M 456.707
(3β,22β)-form
3-O-[α-L-Rhamnopyranosyl-(1→2)-β-D-glucopyranosyl-(1→2)-β-D-glucuronopyranoside]: [135545-90-3]. ***Periandradulcin C***
$C_{48}H_{76}O_{18}$ M 941.118
Constit. of the roots of *Periandra dulcis*. Phosphodiesterase inhibitor. Pale brown powder + $1H_2O$. Mp 205-210° dec. $[\alpha]_D^{25}$ −17.4° (c, 0.5 in Py).
Ikeda, Y. *et al*, *Chem. Pharm. Bull.*, 1991, **39**, 566 (*isol*)

3,19-Dihydroxy-12-oleanene-18,23-dioic acid D-10209



$C_{30}H_{46}O_6$ M 502.690

(3β,19α)-form

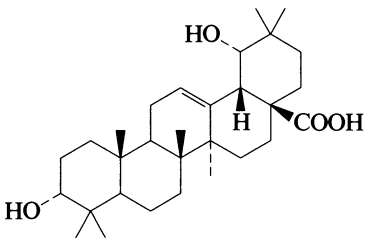
Ilexolic acid B

Constit. of *Ilex rotunda*. Needles (EtOH). Mp >340°. $[\alpha]_D$ +155° (c, 3 in MeOH).

Amimoto, K. *et al*, *Phytochemistry*, 1993, **33**, 1475 (*isol, pmr, cmr*)

3,19-Dihydroxy-12-oleanen-28-oic acid D-10210

Updated Entry replacing D-02451



(3α,19α)-*form*

$C_{30}H_{48}O_4$ M 472.707

(3α,19α)-form [56586-60-8] ***3-Episiaresinolic acid***

Constit. of *Gardenia latifolia*.

3-Ac: Mp 266-268°. $[\alpha]_D$ +13.6° ($CHCl_3$).

(3β,19α)-form [511-77-3] ***Siaresinolic acid.*** *Siaresinol*

Isol. from Siam benzoin (siamese gum) and from *Osteospermum corymbosum* and *G. latifolia*. Cryst. (MeOH/Et_2O). Mp 274-275°. $[\alpha]_D^{24}$ +98.5° (EtOH).

Me ester: Cryst. Mp 198-200°.

3-O-β-D-Xylopyranoside: [108529-23-3]. ***Ilexoside A***

$C_{35}H_{56}O_8$ M 604.823

Constit. of leaves of *Ilex chinensis*. Cryst. (MeOH). Mp 264-267°. $[\alpha]_D$ +7.8° (c, 0.20 in MeOH).

3-Ac: [125263-67-4]. ***Rubiprasin C***

$C_{32}H_{50}O_5$ M 514.744

Constit. of *Rubia cordifolia* var. *pratensis*. Needles ($CHCl_3$). Mp 171-173°.

3-Ketone: ***19-Hydroxy-3-oxo-12-oleanen-28-oic acid***

$C_{30}H_{46}O_4$ M 470.691

Constit. of *O. corymbosum*. Mp 187-190° (as Me ester).

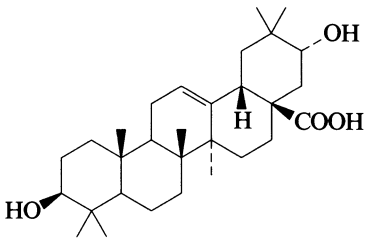
(3β,19β)-form [32205-23-5] ***Spinosic acid A***

Constit. of *Randia spinosa*, *Couepia paraensis* and *G. latifolia*. Cryst. ($CHCl_3$/MeOH). Mp 270-272°. $[\alpha]_D$ +12.5° (c, 0.42 in $CHCl_3$).

Barton, D.H.R. *et al*, *J. Chem. Soc.*, 1952, 78 (*struct*)
Tursch, B. *et al*, *Bull. Soc. Chim. Belg.*, 1966, **75**, 107 (*pmr*)
Aplin, R.T. *et al*, *J. Chem. Soc. C*, 1971, 1067 (*Spinosic acid A*)
Doddrell, D.M. *et al*, *Tetrahedron Lett.*, 1974, 2381 (*cmr*)
Reddy, G.C.S. *et al*, *Indian J. Chem.*, 1975, **13**, 749 (*isol*)
Inada, A. *et al*, *Chem. Pharm. Bull.*, 1987, **35**, 841 (*Ilexoside A*)
Jakupovic, J. *et al*, *Phytochemistry*, 1988, **27**, 2881 (*isol*)
Itokawa, H. *et al*, *Chem. Pharm. Bull.*, 1989, **37**, 1670 (*Rubiprasin C*)

3,21-Dihydroxy-12-oleanen-28-oic acid D-10211

Updated Entry replacing D-02452



(3β,21α)-*form*

$C_{30}H_{48}O_4$ M 472.707

(3β,21α)-form [53492-07-2]

Isol. from *Amaracus dictamnus* and *Olax dissitiflora*.

(3β,21β)-form [25763-71-7] ***Machaerinic acid.*** *Proceric acid*

Constit. of *Machaerocereus gummosus* and of *Albizzia* spp., *Enterolobium contortisiliquum* and others.

Me ester: [6089-94-7].

Cryst. (MeOH). Mp 234-236°. $[\alpha]_D^{31}$ +76° ($CHCl_3$).

Et ester: [15486-27-8].

$C_{32}H_{52}O_4$ M 500.760

Mp 245-247°.

3-O-[α-L-Arabinopyranosyl-(1→2)-β-D-glucuronopyranoside], 28-O-β-D-glucopyranosyl ester: [117804-15-6].

Cynarasaponin J

$C_{47}H_{74}O_{19}$ M 943.090

Constit. of *Cynara cardunculus*. Powder + $2H_2O$ (as Me ester). $[\alpha]_D^{25}$ +15.6° (c, 0.95 in MeOH)(Me ester).

Glycoside: [12789-49-0]. ***Proceranin A***

Isol. from seeds of *Albizzia procera*. Hygroscopic powder. Mp 180-182°. $[\alpha]_D$ −19.1°. Gives Glc, Gal, Ara, Xyl, Fuc, Rha 4:1:1:1:1:2 on hydrol.

21-Cinnamoyl: [94444-40-3].

$C_{39}H_{54}O_5$ M 602.853

Isol. from *E. contortisiliquum*. Cryst. (Me_2CO). Mp 270°.

21-Cinnamoyl, 3-O-β-D-glucopyranoside: [107686-60-2].

$C_{45}H_{64}O_{10}$ M 764.995

Isol. from *E. contortisiliquum*.

28→21 lactone: [6987-78-6]. *3β-Hydroxy-12-oleanen-28,21β-olide.* ***3β-Hydroxycoriaceolide***

$C_{30}H_{46}O_3$ M 454.692

Saponin of *Stryphnodendron coriaceum*, *Albizzia* spp., *E.* spp. and *Acacia concinna*. Cryst. Mp 240-243°. $[\alpha]_D$ −16° (c, 1 in $CHCl_3$).

21-Ketone: [511-81-9]. *3β-Hydroxy-21-oxo-12-oleanen-28-oic acid.* ***Machaeric acid***

$C_{30}H_{46}O_4$ M 470.691

Constit. of *M. gummosus*, *Olax obtusifolia* and *Tetrapanax papyriferum*. Cryst. (Et_2O). Mp 309-312°. $[\alpha]_D$ +23° ($CHCl_3$).

3α-form

21-Ketone: [76425-50-8]. *3α-Hydroxy-21-oxo-12-oleanen-28-oic acid.* ***Papyriogenin F***

$C_{30}H_{46}O_4$ M 470.691

Isol. from *T. papyriferum*. Prisms (MeOH). Mp 275-277°. $[\alpha]_D$ +73° (c, 0.05 in $CHCl_3$). Artifact.

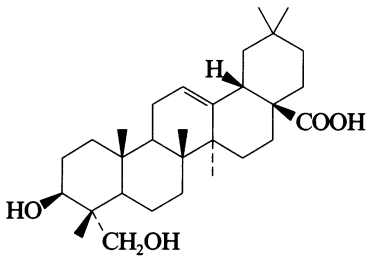
[117804-24-7]

Djerassi, C. *et al*, *J. Am. Chem. Soc.*, 1955, **77**, 1825 (*isol*)
Budzikiewicz, H. *et al*, *J. Am. Chem. Soc.*, 1963, **85**, 3688 (*ms*)
Tursch, B. *et al*, *Bull. Soc. Chim. Belg.*, 1966, **75**, 191 (*pmr*)
Varshney, I.P. *et al*, *Planta Med.*, 1972, **22**, 47; 1975, **27**, 272 (*struct*)
Varshney, I.P. *et al*, *Indian J. Chem.*, 1973, **11**, 1189 (*isol, derivs*)
Asada, M. *et al*, *J. Chem. Soc., Perkin Trans. 1*, 1980, 325 (*Papyriogenin F*)

Woo, W.S. *et al*, *J. Nat. Prod.* (*Lloydia*), 1984, **47**, 547 (*Tetrahydrofuranpropenoate*)
Delgado, M.C.C. *et al*, *Phytochemistry*, 1984, **23**, 2289 (*derivs*)
Delgado, M.C.C. *et al*, *Quim. Nova*, 1986, **9**, 119.
Shimizu, S. *et al*, *Chem. Pharm. Bull.*, 1988, **36**, 2466 (*Cynarasaponin J*)

3,23-Dihydroxy-12-oleanen-28-oic acid D-10212

Updated Entry replacing D-02456



$C_{30}H_{48}O_4$ M 472.707

3β-form [465-99-6] ***Hederagenin.*** *Caulosapogenin. Hederidin. Kalosapogenin. Melanthigenin. Astrantiagenin E*
Sapogenin from *Clematis*, *Holboellia*, *Hedera* spp. and other plants. Epicarcinogen inhibitor. Cryst. (EtOH). Mp 334° dec. $[\alpha]_D$ +82° (Py).

3-O-β-D-Glucopyranoside: ***Caulosaponin.*** *Leontin*†
$C_{36}H_{58}O_9$ M 634.849
Isol. from roots of *Calophyllum thalictroides*. Needles (EtOH). Mp 250-255° dec.

3-O-α-L-Rhamnopyranoside: [29618-15-3]. ***Pastuchoside C.*** *Polypetaloside A*
$C_{36}H_{58}O_8$ M 618.849
Constit. of *H. pastuchovii*. Cryst. (MeOH). Mp 254-257°. $[\alpha]_D^{20}$ +43° (c, 1.2 in MeOH).

3-O-[β-D-Glucopyranosyl(1→3)-β-D-glucuronopyranoside]: [25406-62-6]. ***Spinasaponin B***
$C_{42}H_{66}O_{15}$ M 810.974
Saponin from roots of spinach (*Spinacea* spp.).

3-Glucosylarabinoside: [26339-89-9]. ***Hederacoside A***
$C_{41}H_{66}O_{13}$ M 766.965
Obt. from *H. helix*. Cryst. Mp 257-260°.

3-O-α-L-Arabinopyranoside: [17184-21-3]. ***Cauloside A.*** *Kizutasaponin K_3. Leontoside A. β_2-Fatsin. Fatsiaside B_1. Prosapogenin CP_1. Akeboside St_b. Nepalin 1. Scabioside A. Polypetaloside B. Hederoside A_2. Tauroside B*
$C_{35}H_{56}O_8$ M 604.823
Constit. of *Patrinia*, *Phytolacca*, *Schefflera*, *Caulophyllum*, *Fatsia*, *Hedera* spp. and others. Needles (MeOH). Mp 228-231°. $[\alpha]_D^{25}$ +67.2° (c, 0.64 in MeOH).

3-O-(2-O-Acetyl-α-L-arabinopyranoside): [87562-05-8].
$C_{37}H_{58}O_9$ M 646.860
From *Patrinia scabiosaefolia*. Prisms (MeOH). Mp 226-229°. $[\alpha]_D^{20}$ +68° (c, 0.05 in MeOH).

3-O-[α-L-Rhamnopyranosyl(1→2)-α-L-arabinopyranoside]: [27013-91-8]. ***Sapindoside A.*** *Kalopanaxsaponin A. Kizutasaponin K_6. Prosapogenin CP_{3b}. α-Hederin. Akebiasaponin P_D. Nepalin 2. Tauroside E. Hederoside B*
$C_{41}H_{66}O_{12}$ M 750.965
Isol. from *Sapindus*, *H.*, *Astrantia* spp. and others. Mp 214-216°, Mp 256-259° dec. $[\alpha]_D^{20}$ +16.5° (c, 4.85 in MeOH).
▷ LD_{50} (mus, orl) >4000 mg/kg. LD_{50} (mus, ipr) 1800 mg/kg. RK0177800.

3-O-[β-D-Xylopyranosyl(1→3)-α-L-rhamnopyranosyl(1→2)-α-L-arabinopyranoside]: [30994-75-3]. ***Sapindoside B.*** *Prosapogenin CP_5. Akebiasaponin P_G*
$C_{46}H_{74}O_{16}$ M 883.081
Isol. from *S.* spp., *Lecaniodiscus cupanoides* and others. Mp 276-278°. $[\alpha]_D^{20}$ +17.5° (c, 2.85 in MeOH).

3-O-[β-D-Glucopyranosyl(1→4)-β-D-xylopyranosyl(1→3)α-L-rhamnopyranosyl(1→2)-α-L-arabinopyranoside]: [29781-27-9]. ***Sapindoside C.*** *Prosapogenin CP_{8a}*
$C_{52}H_{84}O_{21}$ M 1045.223
Isol. from *S. mukorossi*. Mp 235°. $[\alpha]_D$ −5.5° (c, 7.2 in MeOH).

3-O-[α-L-Rhamnopyranosyl(1→6)-[α-D-glucopyanosyl(1→2)]-β-D-glucopyranosyl(1→4)-β-D-xylopyranosyl(1→3)-α-L-rhamnopyranosyl(1→2)-α-L-arabinopyranoside]: [31204-40-7]. ***Sapindoside D***
$C_{64}H_{104}O_{30}$ M 1353.508
Isol. from *S. mukorossi*. Mp 100-102°. $[\alpha]_D^{20}$ +44° (c, 1.3 in MeOH).

3-O-[β-D-Xyl(1→3)-α-L-Rha(1→2)α-L-arabinopyranoside], [α-L-Rhamnopyranosyl(1→6)-[α-D-Glu(1→2)]-β-D-Glu-(1→4)-β-D-Xyl(1→3)-α-L-Rha(1→2)-α-L-arabinopyranosyl] ester: [32619-52-6]. ***Sapindoside E***
$C_{80}H_{130}O_{42}$ M 1763.882
Isol. from *S. mukorossi*. Mp 164-166°. $[\alpha]_D^{20}$ −45.4° (c, 1.76 in MeOH).

23-Aldehyde: see *3-Hydroxy-23-oxo-12-oleanen-28-oic acid, H-02739*

Di-Ac, Me ester: [6028-03-1].
Isol. from *Hedyotis lawsonii*. Cryst. (MeOH). Mp 193°. $[\alpha]_D$ +78° (c, 1.15 in $CHCl_3$).

3-O-[β-D-Xylopyranosyl(1→3)-α-L-rhamnopyranosyl(1→2)-α-L-arabinopyranoside], [β-D-glucopyranosyl(1→2)-β-D-glucopyranosyl] ester: [87733-76-4]. ***Mukurozisaponin Y_1***
$C_{58}H_{94}O_{26}$ M 1207.365
Isol. from *S. mukorossi*. Powder +$3H_2O$. $[\alpha]_D^{21}$ −10.1° (c, 1 in MeOH).

[α-L-Rhamnopyranosyl(1→4)-β-D-glucopyranosyl(1→6)-β-D-glucopyranosyl] ester: [57539-70-5]. ***Cussonoside A.*** *HN saponin H*
$C_{48}H_{78}O_{18}$ M 943.133
Isol. from *Cussonia barteri* and *Hedera nepalensis*. Powder (MeOH/EtOAc). Mp 198-202° dec. $[\alpha]_D$ −3.3° (c, 3 in MeOH).

23-Aldehyde, 3-(6-acetyl-β-D-glucopyranoside), β-D-glucopyranosyl ester: [100156-32-9]. ***Lucyoside M***
$C_{44}H_{68}O_{15}$ M 837.012
Isol. from *Luffa cylindrica*.

3-O-[3-Acetyl-β-D-xylopyranosyl(1→3)-α-L-rhamnopyranosyl(1→2)-α-L-arabinopyranoside]: [104494-27-1].
$C_{48}H_{76}O_{17}$ M 925.118
Isol. from *S. delavayi*. Powder + $1H_2O$. $[\alpha]_D^{26}$ −2.9° (c, 1.01 in MeOH).

3-O-[α-L-Arabinopyranosyl(1→3)-α-L-rhamnopyranosyl(1→2)-α-L-arabinopyranoside]: [80666-65-5].
$C_{46}H_{74}O_{16}$ M 883.081
Isol. from *S.* spp., *Lecaniodiscus cupanoides* and *Anemone rivularis*. Powder + $4H_2O$. $[\alpha]_D^{15}$ +12.1° (c, 1 in MeOH).

3-O-[α-L-Arabinopyranosyl(1→3)-α-L-rhamnopyranosyl(1→2)-α-L-arabinopyranoside], [β-D-Glucopyranosyl(1→2)-β-D-glucopyranosyl] ester: [87781-65-5]. ***Mukurozisaponin Y_2***
$C_{58}H_{94}O_{26}$ M 1207.365
Isol. from *S. mukorossi*. Powder + $4H_2O$. $[\alpha]_D^{21}$ −4.8° (c, 1 in MeOH).

3-O-[4-Acetyl-β-D-xylopyranosyl(1→3)-α-L-rhamnopyranosyl(1→2)-α-L-arabinopyranoside]: [87733-78-6]. ***Mukurozisaponin E_1***
$C_{48}H_{76}O_{17}$ M 925.118
Isol. from *S. delavayi* and *S. mukorossi*. Powder. $[\alpha]_D^{23}$ −6.2° (c, 1 in MeOH).

3-O-[α-L-*Arabinofuranosyl*(*1*→*3*)-α-L-*rhamnopyranosyl*(*1*→*2*)-α-L-*arabinopyranoside*]: [84607-60-3].
$C_{46}H_{74}O_{16}$ M 883.081
Isol. from *S. delavayi*, *S. mukorossi* and *A.* spp. $[\alpha]_D^{23}$ −10.2° (c, 1 in MeOH).

3-O-[α-L-*Arabinopyranosyl*(*1*→*2*)-β-D-*glucopyranosyl*(*1*→*2*)-α-L-*arabinopyranoside*]: [102349-43-9]. ***Medicoside C***
$C_{46}H_{74}O_{17}$ M 899.080
Isol. from alfalfa (*Medicago sativa*). Mp 227-229°. $[\alpha]_D^{21}$ +34.0° (c, 0.41 in EtOH).

3-O-[α-L-*Arabinopyranosyl*-(*1*→*2*)-β-D-*glucopyranosyl*-(*1*→*2*)-α-L-*arabinopyranoside*] β-D-*glucopyranosyl ester:* [107241-23-6]. ***Medicoside I***
$C_{52}H_{84}O_{22}$ M 1061.222
Isol. from *M. sativa*. $[\alpha]_D$ +31° (c, 1.05 in $CHCl_3$).

3-O-[β-D-*Ribopyranosyl*(*1*→*3*)-α-L-*rhamnopyranosyl*(*1*→*2*)-α-L-*arabinopyranoside*], [α-L-*rhamnopyranosyl*(*1*→*4*)-β-D-*glucopyranosyl*(*1*→*6*)-β-D-*glucopyranosyl*] *ester:* [96315-53-6]. ***Huzhangoside D***
$C_{64}H_{104}O_{30}$ M 1353.508
Isol. from *A. rivularis*. Powder. $[\alpha]_D$ −29.6° (c, 2.73 in MeOH).

3-O-[α-L-*Ribopyranosyl*(*1*→*3*)-α-L-*rhamnopyranosyl*(*1*→*3*)-α-L-*rhamnopyranosyl*(*1*→*2*)-α-L-*arabinopyranoside*], [β-D-*glucopyranosyl*(*1*→*3*)-β-D-*glucopyranosyl*(*1*→*3*)-α-L-*rhamnopyranosyl*(*1*→*4*)-β-D-*glucopyranosyl*] *ester:* [58344-18-6]. ***Songaroside B***
$C_{76}H_{124}O_{39}$ M 1661.792
Present in the Dipsacaeae and from *Clematis songarica*. Mp 246-248°. $[\alpha]_D^{18}$ +33° (c, 0.83 in MeOH).

3-Ketone: [466-01-3]. *23-Hydroxy-3-oxo-12-oleanen-28-oic acid.* ***Hederagonic acid.*** *Hederagenic acid*
$C_{30}H_{46}O_4$ M 470.691
Isol. from *Caltha palustris* and *Viburnum erubescens*. Mp 222-225°. $[\alpha]_D$ +75.4°.

3-O-[β-D-*Ribopyranosyl*(*1*→*3*)-α-L-*rhamnopyranosyl*(*1*→*2*)-α-L-*arabinopyranoside*]: [72629-76-6]. ***Prosapogenin CP$_6$.*** *Clematoside S*
$C_{46}H_{74}O_{16}$ M 883.081
Isol. from *A. rivularis*, *Biomphalaria glabrata* and *Clematis chinensis*. Powder (MeOH aq.). Mp 242-246° dec. $[\alpha]_D$ −11.2° (c, 0.92 in MeOH).

3-O-α-L-*Arabinopyranoside*, β-D-*glucopyranosyl ester:* [39524-13-5]. ***HN saponin F***
$C_{41}H_{66}O_{13}$ M 766.965
Isol. from *Hedera nepalensis*. Needles (MeOH aq.). Mp 202-205° dec. $[\alpha]_D$ +36.0° (c, 0.5 in MeOH).

3-O-α-L-*Arabinopyranoside*, [β-D-*glucopyranosyl*(*1*→*6*)-β-D-*glucopyranosyl*] *ester:* [39524-08-8].
$C_{47}H_{76}O_{18}$ M 929.107
Present in *Akebia quinata*, *Lonicera nigra*, *Patrinia* and *Phytolacca* spp. Powder (MeOH/EtOAc). Mp 218-220° (207-210°) dec. $[\alpha]_D^{18}$ +15.3° (c, 2 in MeOH).

23-O-α-L-*Arabinopyranoside:* [83864-75-9]. ***Prosapogenin CP$_0$***
$C_{35}H_{56}O_8$ M 604.823
Isol. from *Clematis chinensis*. Needles + $1H_2O$ (MeOH). Mp 192-195° dec. $[\alpha]_D$ +48.9° (c, 0.43 in MeOH).

3-O-[β-D-*Ribopyranosyl*(*1*→*2*)-α-L-*arabinopyranoside*], [α-L-*rhamnopyranosyl*(*1*→*4*)-β-D-*glucopyranosyl*(*1*→*6*)-β-D-*glucopyranosyl*] *ester:* [38358-51-9]. ***Vitalboside F***
$C_{58}H_{94}O_{26}$ M 1207.365
Isol. from *C. vitalba* and *C. orientalis*. Mp 208-210°. $[\alpha]_D^{20}$ −19.4° (c, 1.27 in MeOH).

3-O-[α-L-*Ribopyranosyl*(*1*→*3*)-α-L-*rhamnopyranosyl*(*1*→*3*)-α-L-*rhamnopyranosyl*(*1*→*2*)-α-L-*arabinopyranoside*]: [58989-67-6]. ***Songaroside B'***
$C_{52}H_{84}O_{20}$ M 1029.224
Isol. from *C. songarica*.

3-O-[β-D-*Xylopyranosyl*(*1*→*2*)-α-L-*arabinopyranoside*]: [38631-44-6]. ***Akebiasaponin B***
$C_{40}H_{64}O_{12}$ M 736.938
Isol. from seeds of *A. quinata*. Needles ($CHCl_3$/MeOH aq.). Mp 249.5-250.5° dec. $[\alpha]_D$ +37° (c, 1.05 in MeOH).

3-O-[β-D-*Xylopyranosyl*(*1*→*2*)-α-L-*arabinopyranoside*], [β-D-*glucopyranosyl*(*1*→*6*)-β-D-*glucopyranosyl*] *ester:* [39524-14-6]. ***Akebiasaponin E***
$C_{52}H_{84}O_{22}$ M 1061.222
Isol. from *A. quinata*. Powder + $4H_2O$ (MeOH/pet. ether). Mp 210-214° dec. $[\alpha]_D$ +6° (c, 1.8 in MeOH).

3-O-[β-D-*Xylopyranosyl*(*1*→*3*)-α-L-*arabinopyranoside*]: [60213-68-5].
$C_{40}H_{64}O_{12}$ M 736.938
Isol. from *A. quinata*. Needles + $1H_2O$. Mp 236-240° dec. $[\alpha]_D$ +45° (c, 2.42 in MeOH).

3-O-α-L-*Arabinopyranoside*, [α-L-*rhamnopyranosyl*(*1*→*4*)-β-D-*glucopyranosyl*(*1*→*4*)-β-D-*glucopyranosyl*] *ester:* [75621-05-5]. ***Fatsiaside D***
$C_{53}H_{86}O_{22}$ M 1075.249
Isol. from *Fatsia japonica*. Cryst. (MeOH aq.). Mp 184-187° dec. $[\alpha]_D^{25}$ +5.3° (MeOH aq.).

3-O-α-L-*Arabinopyranoside*, [α-L-*rhamnopyranosyl*(*1*→*4*)-β-D-*glucopyranosyl*(*1*→*6*)-β-D-*glucopyranosyl*] *ester:* [12672-45-6]. ***Cauloside D.*** *Kizutasaponin K_{10}. Hederoside G*
$C_{53}H_{86}O_{22}$ M 1075.249
Isol. from *Caulophyllum*, *H.* spp. and a few others. Powder (EtOAc/MeOH). Mp 211-213° dec. $[\alpha]_D$ +10.2° (Py).

3-O-[β-D-*Glucopyranosyl*(*1*→*2*)-α-L-*arabinopyranoside*]: [20853-58-1]. ***Calthoside D.*** *Cauloside C. Fatsiaside D_1. α-Fatsin. Akebiasaponin C. Hederoside D_2*
$C_{41}H_{66}O_{13}$ M 766.965
Isol. from *Fatsia japonica*, *Lonicera nigra*, *A.* spp., *C. robustum* and others. Shows antifungal and cytotoxic and contraceptive activities. Cryst. (MeOH). Mp 252-255° dec. $[\alpha]_D^{20}$ +39.2°. α-Fatsin originally assigned incorrect struct.

3-O-(*2*-O-*Acetyl*-α-L-*arabinopyranoside*), [β-D-*glucopyranosyl*(*1*→*6*)-β-D-*glucopyranosyl*] *ester:* [103976-31-4].
$C_{49}H_{78}O_{19}$ M 971.144
Isol. from *P. scabiosaefolia*. Plates (MeOH). Mp 224-226°. $[\alpha]_D^{25}$ +17.2° (c, 0.5 in MeOH).

Glycoside: [11060-82-5]. ***Hederacaucoside D.*** *Pastuchoside A*
$C_{59}H_{96}O_{22}$ M 1157.394
Constit. of *H. caucaugenia* and *H. pastuchovii*. Cryst. Mp 205-215°. Struct. not established. Conts. 5 sugar residues.

3-O-[β-D-*Glucopyranosyl*-(*1*→*3*)-*arabinopyranoside*]: ***Collinsonidin***
$C_{41}H_{66}O_{13}$ M 766.965
Constit. of *Collinsonia canadensis*. Cryst. (EtOH). Mp 250-252°. $[\alpha]_D$ +55.6°.

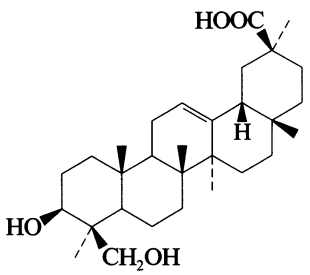
3-O-[α-L-*Arabinopyranosyl*-(*1*→*3*)-α-L-*rhamnopyranosyl*-(*1*→*2*)-α-L-*arabinopyranoside*]: ***Clemontanoside C***
$C_{46}H_{74}O_{16}$ M 883.081
Constit. of *Clematis montana*. Cryst. (MeOH). Mp 229-230°.

[30883-34-2]

Power, F.B. *et al*, *J. Chem. Soc.*, 1913, **103**, 191 (*Caulosaponin*)
Tschesche, R. *et al*, *Justus Liebigs Ann. Chem.*, 1969, **726**, 125 (*isol*)
Cheung, H.T. *et al*, *Tetrahedron*, 1969, **25**, 119 (*pmr*)
Schloesser, E. *et al*, *Z. Naturforsch., B*, 1969, **24**, 1284 (*Hederacoside*)

Chirva, V.Ya. *et al*, *Khim. Prir. Soedin.*, 1970, **6**, 218, 316, 374, 431; 1972, **8**, 472; *Chem. Nat. Compd.* (*Engl. Transl.*), 213, 316, 380, 440, 468 (*Sapindosides, Vitalboside F*)
Iskenderov, G.B. *et al*, *Khim. Prir. Soedin.*, 1970, **6**, 376; *Chem. Nat. Compd.* (*Engl. Transl.*), 384 (*Pastuchoside C*)
Higuchi, R. *et al*, *Chem. Pharm. Bull.*, 1972, **20**, 1935, 2143; 1976, **24**, 1021 (*deriv, isol, struct*)
Karrer, W. *et al*, *Konstitution und Vorkommen der Organischen Pflanzenstoffe*, 2nd Ed., Birkhäuser Verlag, Basel, 1972-1985, no. 1996 (*occur*)
Agarwal, S.K. *et al*, *Phytochemistry*, 1974, **13**, 666 (*Hederagonic acid*)
Tori, K. *et al*, *Tetrahedron Lett.*, 1974, 4227 (*cmr*)
Krokhmalyuk, V.V. *et al*, *Khim. Prir. Soedin.*, 1975, **11**, 600; *Chem. Nat. Compd.* (*Engl. Transl.*), 629 (*Songarosides*)
Strigina, L.I. *et al*, *Phytochemistry*, 1975, **14**, 1583 (*Cauloside D*)
Aoki, T. *et al*, *Phytochemistry*, 1976, **15**, 781; 1981, **20**, 1681 (*isol, Fatsiasides*)
Iskenderov, G.B., *CA*, 1977, **86**, 40174s (*Hederacaucoside D*)
Roques, R. *et al*, *Acta Crystallogr., Sect. B*, 1978, **34**, 1634 (*cryst struct*)
Shiraizu, M. *et al*, *Chem. Pharm. Bull.*, 1978, **26**, 655 (*Cauloside D*)
Kizu, H. *et al*, *Chem. Pharm. Bull.*, 1979, **27**, 2388; 1982, **30**, 3340; 1985, **33**, 3324, 3473 (*Prosaprogenins, Cussonoside A*)
Chetyrina, N.S. *et al*, *Khim. Prir. Soedin.*, 1979, **15**, 174; *Chem. Nat. Compd.* (*Engl. Transl.*), 146 (*Calthoside D*)
Bulgakov, V.P. *et al*, *CA*, 1981, **95**, 93797q (*Pastuchoside A*)
Encarnacion, R. *et al*, *Phytochemistry*, 1981, **20**, 1939 (*deriv*)
Kemoklidze, Z.S. *et al*, *Khim. Prir. Soedin.*, 1982, **18**, 788; *Chem. Nat. Compd.* (*Engl. Transl.*), 757 (*Calthoside D*)
Kimata, H. *et al*, *Chem. Pharm. Bull.*, 1983, **31**, 1998 (*Mukurozisaponins*)
Woo, W.S. *et al*, *Phytochemistry*, 1983, **22**, 1045 (*isol*)
Mizutani, K. *et al*, *Planta Med.*, 1984, **50**, 327 (*Huzhangosides*)
Timbekova, A.E. *et al*, *Khim. Prir. Soedin.*, 1985, **21**, 805; *Chem. Nat. Compd.* (*Engl. Transl.*), 763 (*Mediocoside C*)
Takemoto, T. *et al*, *Yakugaku Zasshi*, 1985, **105**, 834 (*Lucyoside M*)
Nakayama, K. *et al*, *Chem. Pharm. Bull.*, 1986, **34**, 2209 (*deriv*)
Dubois, M.A. *et al*, *Planta Med.*, 1986, 80 (*Cussonoside A*)
Choi, J.S. *et al*, *Planta Med.*, 1987, **53**, 62.
Massio, G. *et al*, *J. Chem. Soc., Perkin Trans. 1*, 1988, 3071 (*Medicosides, pmr, ms*)
Joshi, B.S. *et al*, *J. Nat. Prod.* (*Lloydia*), 1992, **55**, 1468 (*Collinsonidin*)
Thapliyal, R.P. *et al*, *Phytochemistry*, 1993, **33**, 671 (*Clemontanoside C*)

3,24-Dihydroxy-12-oleanen-30-oic acid D-10213



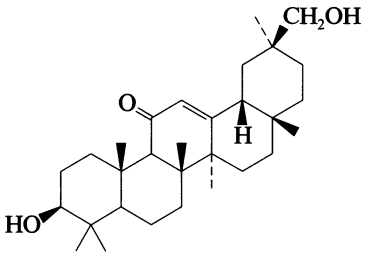
$C_{30}H_{48}O_4$ M 472.707

3β-form

3-O-[β-D-Glucuronopyranosyl-(1→2)-β-D-glucuronopyranoside]: [134250-13-8]. ***Licoricesaponin J2***
$C_{42}H_{64}O_{16}$ M 824.958
Constit. of *Glycyrrhiza uralensis*. Mp 263-265°. $[\alpha]_D^{25}$ +21° (MeOH).

Kitagawa, I. *et al*, *Chem. Pharm. Bull.*, 1991, **39**, 244.

3,30-Dihydroxy-12-oleanen-11-one D-10214



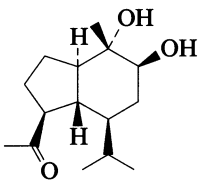
$C_{30}H_{48}O_3$ M 456.707

3β-form [14226-18-7] ***Glycyrrhetol***
Constit. of *Glycyrrhiza glabra*. Cryst. (MeOH aq.). Mp 252-254°. $[\alpha]_D^{20}$ +87° (c, 1.9 in $CHCl_3$).

30-Carboxylic acid: see *Glycyrrhetic acid, G-00597*

Canonica, L. *et al*, *Gazz. Chim. Ital.*, 1967, **97**, 1347 (*isol*)
Ricca, G.S. *et al*, *Gazz. Chim. Ital.*, 1968, **98**, 602 (*pmr*)

9,10-Dihydroxy-4-oplopanone D-10215

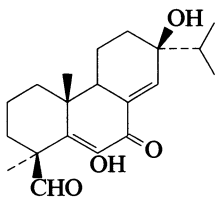


$C_{15}H_{26}O_3$ M 254.369

(9β,10α)-form
Constit. of *Artemisia sieberi*. Oil. $[\alpha]_D$ −5° (c, 0.8 in $CHCl_3$).

Marco, J.A. *et al*, *Phytochemistry*, 1993, **34**, 1061 (*isol, pmr, cmr*)

6,13-Dihydroxy-7-oxo-5,8(14)-abietadien-19-al D-10216

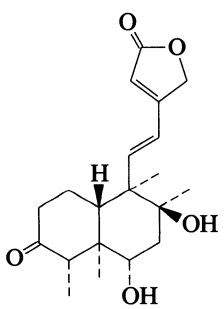


$C_{20}H_{28}O_4$ M 332.439

13β-form [151484-87-6] ***Juniperal***
Constit. of *Juniperus chinensis*. Yellow oil. $[\alpha]_D^{25}$ +3.2° (c, 1.6 in MeOH).

Fang, J.-M. *et al*, *Phytochemistry*, 1993, **33**, 1169 (*isol, pmr, cmr*)

6,8-Dihydroxy-3-oxo-11,13-clerodadien-15,16-olide D-10217



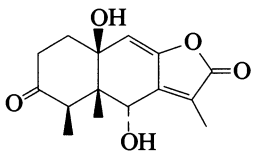
$C_{20}H_{28}O_5$ M 348.438

(ent-6β,8α,11E)-form

6-Benzoyl: [114436-05-4]. ***Scutellone E***
$C_{27}H_{32}O_6$ M 452.546
Constit. of *Scutellaria rivularis*. Needles (Me_2CO). Mp 230-232°. $[\alpha]_D^{24}$ +72.7° (c, 1 in $CHCl_3$).

Lin, Y.-L. *et al*, *Chem. Pharm. Bull.*, 1988, **36**, 2642.

6,10-Dihydroxy-3-oxo-7(11),8-eremophiladien-12,8-olide D-10218

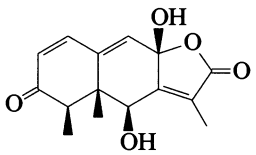


$C_{15}H_{18}O_5$ M 278.304

(6α,10β)-form [149301-57-5]
Constit. of *Ligularia veitchiana*. Needles (Me_2CO). Mp 148-149°. $[\alpha]_D^{25}$ +42.6° (c, 0.5 in Me_2CO).

Jia, Z. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 494 (*isol, pmr, cmr*)

6,8-Dihydroxy-3-oxo-1,7(11),9-eremophilatrien-12,8-olide D-10219



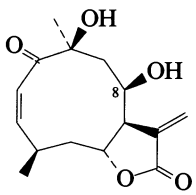
$C_{15}H_{16}O_5$ M 276.288

(6β,8βOH)-form [149301-68-8]
Constit. of *Ligularia veitchiana*. Cryst. (MeOH). Mp 193-194°. $[\alpha]_D^{25}$ +12.0° (c, 0.5 in $CHCl_3$).

Jia, Z. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 494 (*isol, pmr, cmr*)

8,10-Dihydroxy-1-oxo-2,11(13)-germacradien-12,6-olide D-10220

Updated Entry replacing D-02502



(2*Z*,4α*H*,6α,8β,10β)-*form*

$C_{15}H_{20}O_5$ M 280.320

(2Z,4αH,6α,8β,10β)-form

8-(2-Methylpropenoyl): [110300-73-7]. ***Calein E***
$C_{19}H_{24}O_6$ M 348.395
Constit. of *Calea zacatechichi*. Cryst. (Me_2CO/diisopropyl ether). Mp 150-151°. $[\alpha]_D$ +47.4° ($CHCl_3$).

8-Tigloyl: [110300-74-8]. ***Calein F***
$C_{20}H_{26}O_6$ M 362.422
From *C. zacatechichi*. Cryst. Mp 141-143°.

(2Z,4αH,6α,8α,10β)-form

8-(2-Methylpropenoyl), 10-Ac:
$C_{21}H_{26}O_7$ M 390.432
Constit. of *Lychnophora blanchetii*. Gum.

8-Angeloyl, 10-Ac: [80398-75-0]. ***Ereglomerulide.*** *2,3-cis-Ereglomerulide*
$C_{22}H_{28}O_7$ M 404.459
Constit. of *Eremanthus glomerulatus*. Cryst. (Et_2O/pet. ether). Mp 189°. $[\alpha]_D^{24}$ −29° (c, 0.3 in $CHCl_3$).

(2E,4αH,6α,8α,10β)-form

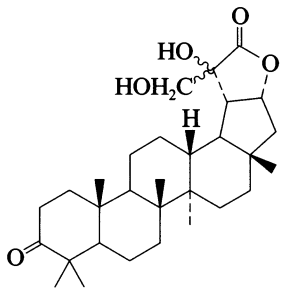
8-Angeloyl, 10-Ac: [80377-59-9]. ***2,3-trans-Ereglomerulide***
$C_{22}H_{28}O_7$ M 404.459
Constit. of *E. glomerulatus*. Gum. $[\alpha]_D^{24}$ −7° (c, 0.1 in $CHCl_3$).

(2Z,4αH,6α,8β,10α)-form

8-(3-Methylbutanoyl): [67506-31-4]. ***Neurolenin A***
$C_{20}H_{28}O_6$ M 364.438
Constit. of *Neurolaena lobata*. Cryst. (EtOAc/hexane). Mp 127-128°. $[\alpha]_D^{25}$ −257.7° (c, 1.0 in $CHCl_3$).

Manchand, P.S. *et al*, *J. Org. Chem.*, 1978, **43**, 4352 (*Nurolaenin A*)
Bohlmann, F. *et al*, *Phytochemistry*, 1981, **20**, 1609; 1982, **21**, 1087.
Barros, D.A.D. *et al*, *Planta Med.*, 1985, 38 (*Erglomerulide*)
Martinez, M. *et al*, *Phytochemistry*, 1987, **26**, 2104 (*Caleins*)

20,29-Dihydroxy-3-oxo-30,21-lupanolide D-10221



$C_{30}H_{46}O_5$ M 486.690

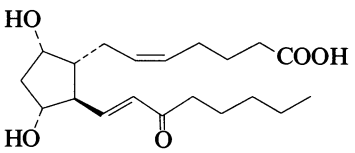
(21α,20ξ)-form
Ochraceolide D
Constit. of *Kokoona ochracea*. Cryst. ($CHCl_3$/MeOH). Mp 253-256°. $[\alpha]_D^{25}$ +10° (c, 0.1 in MeOH).

Ngassapa, O. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 1676 (*isol, pmr, cmr*)

9,11-Dihydroxy-15-oxo-5,13-prostadienoic acid, 9CI D-10222

7-[3,5-Dihydroxy-2-(3-oxo-1-octenyl)cyclopentyl]-5-heptenoic acid, 8CI

[35850-13-6]



(5Z,9*S*,11*R*,13*E*)-*form*

$C_{20}H_{32}O_5$ M 352.470

(5Z,9S,11R,13E)-form

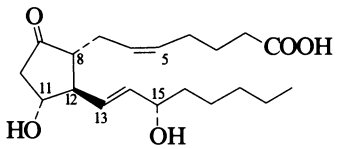
15-Oxo-PGF$_{2\alpha}$
Metab. of PGF$_{2\alpha}$ (see 9,11,15-Trihydroxyprosta-5,13-dienoic acid, T-02631).

13,14-Dihydro: see *9,11-Dihydroxy-15-oxo-5-prostenoic acid, D-02562*

Bundy, G.L. *et al*, *Adv. Biosci.* (*Oxford*), 1972, **9**, 125 (*synth*)
Pace-Asciak, C. *et al*, *Prostaglandins*, 1972, **1**, 469 (*biosynth*)
Hansen, H.S., *Prostaglandins*, 1976, **12**, 647 (*rev*)

Schneider, W.P. *et al*, *J. Am. Chem. Soc.*, 1977, **99**, 1222 (*synth*)
Speziale, E. *et al*, *Biochem. Biophys. Res. Commun.*, 1984, **124**, 69 (*biochem*)

11,15-Dihydroxy-9-oxo-5,13-prostadienoic acid, 9CI D-10223



$C_{20}H_{32}O_5$ M 352.470

(5Z,8R,11R,12R,13E,15R)-form [38873-82-4]
15(R)-*Prostaglandin* E_2
Isol. from *Plexaura homomalla*.

Me ester: [31687-35-1].
Oil.

(5Z,8R,11R,12R,13E,15S)-form [363-24-6]
Prostaglandin E_2. *PGE*$_2$. ***Dinoprostone, BAN, INN, JAN, USAN. Dinopron EM. Enzaprost E. Medullin. Minprostin*** E_2. *Prostarmon E. Prostenon. Prostin* E_2. *U 12062*
Most common and biologically active of mammalian prostaglandins. Oxytocic, abortifacient and vasodilator. Cryst. Mp 66-68°. $[\alpha]_D^{26}$ −61° (c, 1 in THF).
▷ UK8000000.

(5E,8R,11R,12R,13E,15S)-form [36150-00-2]
(5E)-*PGE*$_2$
Plates (Et_2O/hexane). Mp 76-77°. $[\alpha]_D$ −66° (c, 0.983 in EtOH), −95° (c, 0.903 in $CHCl_3$).
▷ Exp. teratogen.

(5Z,8R,11S,12R,13E,15S)-form [38310-90-6]
11-epi-*PGE*$_2$
Oil. $[\alpha]_D^{25}$ −26° (c, 0.0076 in EtOH).

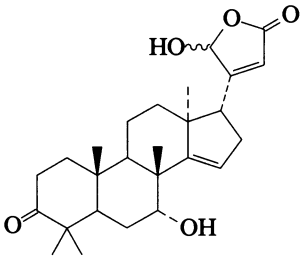
(5Z,8SR,11RS,12RS,13E,15SR)-form [31660-17-0]
(±)-*8*-iso-*PGE*$_2$
Cryst. (EtOAc/heptane). Mp 90-92°.

(5Z,8RS,11RS,12RS,13E,15RS)-form [31660-13-6]
(±)-*15*-epi-*PGE*$_2$

[38873-84-6]

Bergström, S. *et al*, *Biochim. Biophys. Acta*, 1964, **90**, 207 (*biosynth*)
Corey, E.J. *et al*, *J. Am. Chem. Soc.*, 1969, **91**, 5675; *Tetrahedron Lett.*, 1970, 307 (*synth*)
Light, R.J. *et al*, *Eur. J. Biochem.*, 1972, **28**, 232 (*isol*)
Bundy, G.L. *et al*, *J. Am. Chem. Soc.*, 1972, **94**, 2124 (*synth*)
Horton, E.W., *Proc. R. Soc. London, B*, 1972, **182**, 411 (*rev*)
Floyd, D.M. *et al*, *Tetrahedron Lett.*, 1972, 3269 (*synth*)
Von Euler, U.S., *Arch. Int. Pharmacodyn. Ther.*, 1973, **202**, 295 (*rev, pharmacol*)
Heather, J.B. *et al*, *Tetrahedron Lett.*, 1973, 2313 (*synth*)
Sih, C.J. *et al*, *J. Am. Chem. Soc.*, 1975, **97**, 865 (*synth*)
Uekama, K. *et al*, *Chem. Lett.*, 1977, 1389 (*cd*)
Schneider, W.P. *et al*, *J. Am. Chem. Soc.*, 1977, **99**, 1222 (*synth, ms*)
Andersen, N.H. *et al*, *Prostaglandins*, 1977, **14**, 61 (*synth*)
Van Dyk, J.M., *Drugs of Today (Barcelona)*, 1978, **14**, 74 (*rev*)
Chen, S.-M.L. *et al*, *J. Org. Chem.*, 1978, **43**, 3450 (*synth, ir, pmr, cmr, ms*)
Nakamura, N. *et al*, *Tetrahedron Lett.*, 1978, 1549 (*synth, pmr*)
Newton, R.F. *et al*, *J. Chem. Soc., Perkin Trans. 1*, 1979, 2789 (*synth*)
de Titta, G.T. *et al*, *Acta Crystallogr., Sect. B*, 1980, **36**, 638 (*cryst struct, conformn*)
Howard, C. *et al*, *J. Chem. Soc., Perkin Trans. 1*, 1981, 2049 (*Me ester, synth, ir, pmr*)
Stehle, R.G., *Methods Enzymol.*, 1982, **86**, 436 (*rev*)
Martindale, The Extra Pharmacopoeia, 28th/29th Ed., Pharmaceutical Press, London, 1982/1989, 8082.
Donaldson, R.E. *et al*, *J. Org. Chem.*, 1983, **48**, 2167 (*synth*)
Tanaka, T. *et al*, *Tetrahedron Lett.*, 1985, **26**, 5575 (*synth*)
Suzuki, M. *et al*, *J. Am. Chem. Soc.*, 1988, **110**, 4718 (*synth*)
Johnson, C.R. *et al*, *J. Am. Chem. Soc.*, 1988, **110**, 4726 (*synth, pmr, cmr*)
Murray, C.K. *et al*, *J. Am. Chem. Soc.*, 1990, **112**, 5660 (*synth*)
Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th Ed., Van Nostrand-Reinhold, 1992, DVJ200.

7,21-Dihydroxy-3-oxo-24,25,26,27-tetranorapotirucalla-14,20(22)-dien-23,21-olide D-10224



$C_{26}H_{36}O_5$ M 428.567

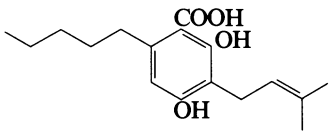
(6α,21ξ)-form
Constit. of *Picrolemma granatensis*. Amorph. solid. Mp 168-172°. $[\alpha]_D$ +24° (c, 0.093 in $CHCl_3$).

1,2-Didehydro: 7,21-Dihydroxy-3-oxo-24,25,26,27-tetranorapotirucalla-1,14,20(22)-trien-23,21-olide
$C_{26}H_{34}O_5$ M 426.552
Constit. of *P. granatensis*.

Rodrigues Fo, E. *et al*, *Phytochemistry*, 1993, **34**, 501 (*isol, pmr, cmr*)

2,4-Dihydroxy-6-pentyl-3-prenylbenzoic acid D-10225

2,4-Dihydroxy-3-(3-methyl-2-butenyl)-6-pentylbenzoic acid



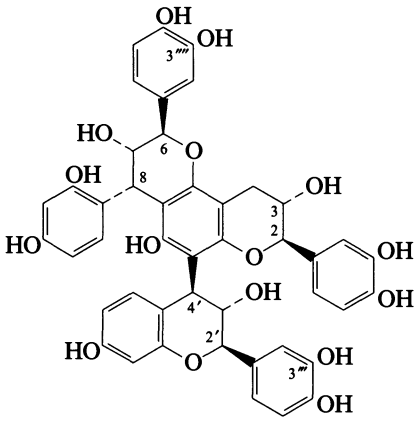
$C_{17}H_{24}O_4$ M 292.374

4-Me ether: [80489-91-4]. *2-Hydroxy-4-methoxy-6-pentyl-3-prenylbenzoic acid*
$C_{18}H_{26}O_4$ M 306.401
Isol. from the aerial parts of *Glycyrrhiza acanthocarpa*.
Needles (pentane). Mp 102-103°.

Ghisalberti, E.L. *et al*, *Phytochemistry*, 1981, **20**, 1959.

4-(2,4-Dihydroxyphenyl)-2,8-bis(3,4-dihydroxyphenyl)-6-[2-(3,4-dihydroxyphenyl)-3,4-dihydro-3,7-dihydroxy-2*H*-1-benzopyran-4-yl]-3,4,9,10-tetrahydro-2*H*,8*H*-benzo[1,2-*b*:3,4-*b*']dipyran-3,5,9-triol, 9CI D-10226

[127612-67-3]



$C_{45}H_{38}O_{16}$ M 834.786

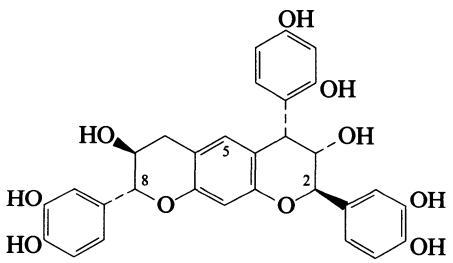
Constit. of the heartwood of *Colophospermum mopane*.

3'''-Deoxy: [127612-72-0].
$C_{45}H_{38}O_{15}$ M 818.786
Constit. of *C. mopane*.

3''''-Deoxy: [127612-71-9].
$C_{45}H_{38}O_{15}$ M 818.786
Constit. of *C. mopane*.

Steynberg, J.P. *et al*, *J. Chem. Soc., Perkin Trans. 2*, 1990, 235.

4-(2,4-Dihydroxyphenyl)-2,8-bis(3,4-dihydroxyphenyl)-3,4,7,8-tetrahydro-2*H*,6*H*-benzo[1,2-*b*:5,4-*b*']dipyran-3,7-diol, 9CI D-10227



(2*R*,3*S*,4*R*,7*S*,8*R*)-*form*

$C_{30}H_{26}O_{10}$ M 546.529

(2R,3S,4R,7S,8R)-form [127644-47-7]
Constit. of the heartwood of *Colophospermum mopane*.

(2R,3S,4R,7S,8S)-form [127644-49-9]
Constit. of *C. mopane*.

(2R,3S,4S,7S,8R)-form [105805-44-5]
Constit. of *C. mopane*.

5-Hydroxy: [118964-31-1].
$C_{30}H_{26}O_{11}$ M 562.529
Constit. of the heartwood of *Baikiaea plurijuga* and *Guibourtia coleosperma*.

(2R,3S,4S,7S,8S)-form [127644-45-5]
Constit. of *C. mopane*.

5-Hydroxy: [130932-37-5].
Constit. of *B. plurijuga*.

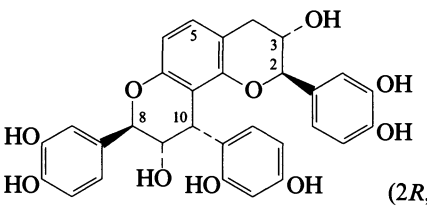
(2S,3S,4R,7R,8R)-form

5-Hydroxy: [130932-35-3].
Constit. of *B. plurijuga*.

[127644-51-3, 127644-53-5, 127644-55-7, 127644-57-9]

Steynberg, J.P. *et al*, *J. Chem. Soc., Perkin Trans. 1*, 1988, 3323; 1989, 1709 (*isol, derivs*)
Malan, J.C. *et al*, *J. Chem. Soc., Perkin Trans. 1*, 1990, 227 (*isol*)
Steynberg, J.P. *et al*, *Phytochemistry*, 1990, **29**, 2979 (*isol, derivs*)

10-(2,4-Dihydroxyphenyl)-2,8-bis(3,4-dihydroxyphenyl)-3,4,9,10-tetrahydro-2*H*,8*H*-benzo[1,2-*b*:3,4-*b*']dipyran-3,9-diol, 9CI D-10228



(2*R*,3*S*,8*R*,9*S*,10*R*)-*form*

$C_{30}H_{26}O_{10}$ M 546.529

(2R,3S,8R,9S,10R)-form [102258-23-1]
Constit. of the heartwood of *Colophospermum mopane*.

(2R,3S,8R,9S,10S)-form [127644-75-1]
Constit. of *C. mopane*.

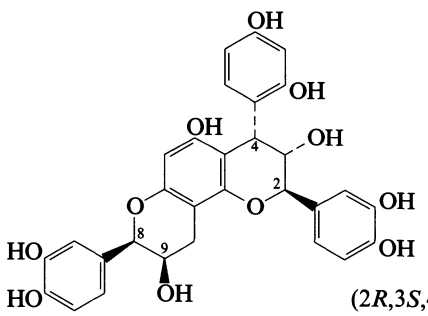
(2R,3S,8S,9S,10S)-form [127644-77-3]
Constit. of *C. mopane*.

(2S,3S,8R,9S,10S)-form [105880-85-1]
Constit. of *C. mopane*.

(2S,3S,8S,9S,10R)-form [127644-79-5]
Constit. of *C. mopane*.

Malan, J.C.S. *et al*, *J. Chem. Soc., Perkin Trans. 1*, 1990, 209 (*isol*)

4-(2,4-Dihydroxyphenyl)-2,8-bis(3,4-dihydroxyphenyl)-3,4,9,10-tetrahydro-2*H*,8*H*-benzo[1,2-*b*:3,4-*b*']dipyran-3,5,9-triol, 9CI D-10229



(2*R*,3*S*,4*R*,8*R*,5*R*)-*form*

$C_{30}H_{26}O_{11}$ M 562.529

(2R,3S,4R,8R,9R)-form [130932-39-7]
Constit. of *Baikiaea plurijuga* and *Guibourtia coleosperma*.

(2R,3S,4R,8R,9S)-form [119065-94-0]
Constit. of *B. plurijuga* and *G. coleosperma*.

(2R,3S,4S,8R,9R)-form [130932-41-1]
Constit. of *B. plurijuga*.

(2S,3R,4S,8S,9R)-form [130932-51-3]
Constit. of *B. plurijuga*.

(2S,3S,4R,8R,9R)-form [130932-43-3]
Constit. of *B. plurijuga* and *G. coleosperma*.

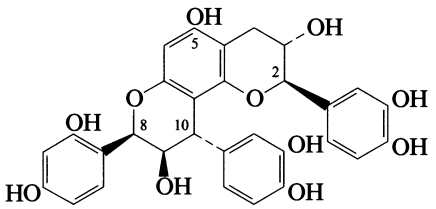
(*2S,3S,4R,8R,9S*)-*form* [119065-88-2]
Constit. of *B. plurijuga* and *G. coleosperma.*

(*2S,3S,4R,8S,9R*)-*form* [130932-45-5]
Constit. of *B. plurijuga.*

[105805-43-4]

Steynberg, J.P. *et al, J. Chem. Soc., Perkin Trans. 1*, 1988, 3323, 3331; 1989, 1709 (*isol*)
Steynberg, J.P. *et al, Phytochemistry*, 1990, **29**, 2979 (*isol*)

8-(2,4-Dihydroxyphenyl)-2,10-bis(3,4-dihydroxyphenyl)-3,4,9,10-tetrahydro-2*H*,8*H*-benzo[1,2-*b*:3,4-*b*']dipyran-3,5,9-triol, 9CI D-10230



(2*R*,3*S*,8*R*,9*R*,10*S*)-*form*

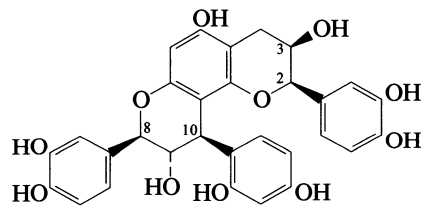
$C_{30}H_{26}O_{11}$ M 562.529

(*2R,3S,8R,9R,10S*)-*form* [118964-22-0]
Constit. of the heartwood of *Baikiaea plurijuga.*

(*2R,3S,8S,9R,10S*)-*form* [119065-84-8]
Constit. of *B. plurijuga.*

Steynberg, J.P. *et al, J. Chem. Soc., Perkin Trans. 1*, 1988, 3331; 1989, 1709.

10-(2,4-Dihydroxyphenyl)-2,8-bis(3,4-dihydroxyphenyl)-3,4,9,10-tetrahydro-2*H*,8*H*-benzo[1,2-*b*:3,4-*b*']dipyran-3,5,9-triol, 9CI D-10231



(2*R*,3*R*,8*R*,9*S*,10*R*)-*form*

$C_{30}H_{26}O_{11}$ M 562.529

(*2R,3R,8R,9S,10R*)-*form* [130932-29-5]
Constit. of the heartwood of *Baikiaea plurijuga* and *Guibourtia coleosperma.*

(*2R,3R,8R,9S,10S*)-*form* [130932-27-3]
Constit. of *B. plurijuga, G. coleosperma* and *Colophospermum mopane.*

(*2R,3S,8R,9S,10R*)-*form* [119067-90-2]
Constit. of *G. coleosperma.*

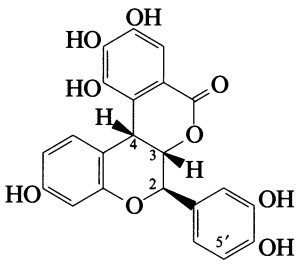
(*2R,3S,8R,9S,10S*)-*form* [102258-25-3]
Constit. of *B. plurijuga* and *G. coleosperma.*

(*2S,3R,8S,9R,10R*)-*form* [130932-31-9]
Constit. of *B. plurijuga.*

(*2S,3S,8R,9S,10S*)-*form* [119065-92-8]
Constit. of *B. plurijuga.*

Steynberg, J.P. *et al, J. Chem. Soc., Perkin Trans. 1*, 1988, 3323, 3331; 1989, 1709 (*isol, struct*)
Steynberg, J.P. *et al, Phytochemistry*, 1990, **29**, 2979 (*isol, struct*)

6-(3,4-Dihydroxyphenyl)-6*a*,12*b*-dihydro-3,10,11,12-tetrahydroxy[2]benzopyrano[3,4-*c*][1]benzopyran-8(6*H*)-one, 9CI D-10232



$C_{22}H_{16}O_9$ M 424.363
Flavonoid numbering shown.

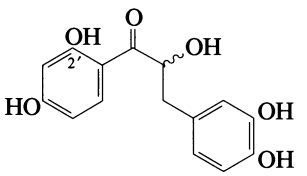
(*2R,3S,4S*)-*form* [126655-06-9]
Constit. of the heartwood of *Burkea africana* and *Peltophorum africana.*

5'-Hydroxy: [126655-08-1]. *6a,12b-Dihydro-3,10,11,12-tetrahydroxy-6-(3,4,5-trihydroxyphenyl)[2]benzopyrano[3,4-c][1]benzopyran-8[6H]one, 9CI*
$C_{22}H_{16}O_{10}$ M 440.362
Constit. of the heartwood of *B. africana.*

Bam, M. *et al, Phytochemistry*, 1990, **29**, 283 (*isol*)

1-(2,4-Dihydroxyphenyl)-3-(3,4-dihydroxyphenyl)-2-hydroxy-1-propanone, 9CI D-10233

α,2',3,4,4'-Pentahydroxydihydrochalcone



$C_{15}H_{14}O_6$ M 290.272

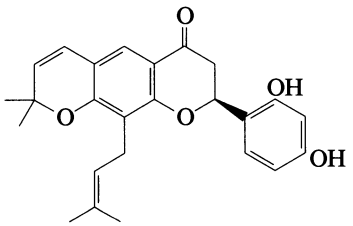
(±)-*form*

2'-Me ether: [117614-80-9]. *α,3,4,4'-Tetrahydroxy-2'-methoxydihydrochalcone*
$C_{16}H_{16}O_6$ M 304.299
Isol. from the heartwood of *Xanthocercis zambesiaca.*

Bezuidenhout, S.C. *et al, Phytochemistry*, 1988, **27**, 2329.

2-(2,4-Dihydroxyphenyl)-8,8-dimethyl-10-(3-methyl-2-butenyl)-8*H*-pyrano[2,3-*d*]chroman-4-one, 8CI D-10234

2',4'-Dihydroxy-7,6-(2,2-dimethylpyrano)-8-prenylflavanone
[52100-63-7]



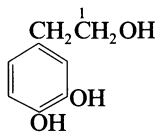
$C_{25}H_{26}O_5$ M 406.477
Isol. from the roots of *Euchresta japonica.* Shows ulcerogenic props. Config. not determined.

(*S*)-*form* [50773-30-3]
Isol. from the roots of *Sophora subprostrata*. Needles (C_6H_6). Mp 173°. $[\alpha]_D^{25}$ −2.5° (c, 5 in EtOH).

Kyogoku, K. *et al*, *Chem. Pharm. Bull.*, 1973, **21**, 1192 (*isol*)
Japan. Pat., 73 99313, (1973); *CA*, **80**, 124752 (*isol*)

2-(3,4-Dihydroxyphenyl)ethanol D-10235

Updated Entry replacing D-02633
4-(2-Hydroxyethyl)-1,2-benzenediol, 9CI. 3,4-Dihydroxyphenethyl alcohol, 8CI. 3,4-Dihydroxybenzeneethanol
[10597-60-1]



$C_8H_{10}O_3$ M 154.165
Occurs as various complex glycosides e.g. Echinacoside, E-00019. Oil. $Bp_{0.02}$ 170-175° part. dec. Previously incorrectly descr. as cryst., Mp 81-3°.

1-O-[α-L-Rhamnopyranosyl(1→6)-β-D-glucopyranoside]: [93675-88-8]. ***Forsythoside E***
$C_{20}H_{30}O_{12}$ M 462.450
Isol. from fruits of *Forsythia suspensa*. Pale yellow amorph. solid. $[\alpha]_D$ −35.3° (c, 0.41 in MeOH).

1-O-[α-L-Rhamnopyranosyl(1→3)-β-D-glucopyranoside]: [61548-34-3]. ***Verbasoside***
$C_{20}H_{30}O_{12}$ M 462.450
Isol. from *Cistanche salsa*, *Stachys sieboldii*, *Pedicularis striata* and other plants. The crude drug Cistanche Herba, from *C. salsa*, is used as a tonic in oriental medicine. Powder. $[\alpha]_D^{24}$ −49.3° (c, 0.34 in MeOH).

1-O-[α-L-Rhamnopyranosyl(1→3)-2-O-acetyl-β-D-glucopyranoside]: [104806-92-0]. ***Cistanoside H***
$C_{22}H_{32}O_{13}$ M 504.487
Isol. from *Cistanche salsa*. Monohydrate. $[\alpha]_D^{18}$ −58.9° (c, 1.6 in MeOH).

3-Me ether: [2380-78-1]. *4-Hydroxy-3-methoxybenzeneethanol. (4-Hydroxy-3-methoxyphenyl) ethanol*
$C_9H_{12}O_3$ M 168.192
Isol. from various plant spp. Constit. of mandibular secretion of honeybees.

3'-Me ether, 1-O-[α-L-rhamnopyranosyl(1→3)-β-D-glucopyranoside]: [97400-08-3]. ***Cistanoside E***
$C_{21}H_{32}O_{12}$ M 476.477
Isol. from *C. salsa*. Amorph.

4-O-(6-O-Galloyl-β-D-glucopyranoside): [115397-25-6].
$C_{21}H_{24}O_{12}$ M 468.413
Tannin from leaves of *Castanopsis cuspidata* var. *sieboldii*. Amorph. powder + H_2O. $[\alpha]_D^{20}$ −44.1° (c, 1.05 in H_2O).

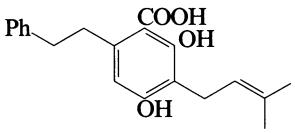
1-O-[α-L-Rhamnopyranosyl-(1→3)-4-O-isoferuloyl-β-D-glucopyranoside]: [113953-02-9]. ***Phtheirospermoside***
$C_{30}H_{38}O_{15}$ M 638.621
Isol. from *Phtheirospermum japonicum*. Amorph. powder. $[\alpha]_D^{23}$ −93.1° (c, 0.2 in MeOH).

1-O-[β-D-Apio-D-furanosyl-(1→3)[α-L-rhamnopyranosyl-(1→6)]-4-O-caffeoyl-β-D-glucopyranoside]: [135010-61-6]. ***Pedicularioside A***
$C_{34}H_{44}O_{19}$ M 756.710
Isol. from *Pedicularis striata*. Amorph. powder. $[\alpha]_D^{22}$ −58.4° (c, 1.2 in MeOH).

Baraldi, P.G. *et al*, *Justus Liebigs Ann. Chem.*, 1983, 684 (*synth, ir, pmr, bibl*)
Endo, K. *et al*, *Can. J. Chem.*, 1984, **62**, 2011 (*Forsythoside E*)
Kobayashi, H. *et al*, *Chem. Pharm. Bull.*, 1985, **33**, 1452 (*Cistanoside E*)
Karasawa, H. *et al*, *Yakugaku Zasshi*, 1986, **106**, 562, 721 (*Verbasoside, Cistanoside H*)
Ageta, M. *et al*, *Chem. Pharm. Bull.*, 1988, **36**, 870 (*4-galloylglucoside*)
Takeda, Y., *J. Nat. Prod.* (*Lloydia*), 1988, **51**, 180 (*Phtheirospermoside*)
Bianco, A. *et al*, *Synth. Commun.*, 1988, **15**, 1765 (*synth*)
Nishimura, H. *et al*, *Phytochemistry*, 1990, **29**, 3303; 1991, **30**, 965 (*Verbasoside*)
Liu, Z. *et al*, *Phytochemistry*, 1991, **30**, 1341 (*Pedicularioside A*)

2,4-Dihydroxy-6-(2-phenylethyl)-3-prenylbenzoic acid D-10236

2,4-Dihydroxy-3-(3-methyl-2-butenyl)-6-(2-phenylethyl) benzoic acid. 2-Carboxy-3,5-dihydroxy-4-prenylbibenzyl



$C_{20}H_{22}O_4$ M 326.391
Cryst. (EtOH). Mp 144-145°.

4-Me ether: [80489-90-3]. *2-Hydroxy-4-methoxy-6-(2-phenylethyl)-3-prenylbenzoic acid. 2-Carboxy-3-hydroxy-5-methoxy-4-prenylbibenzyl*
$C_{21}H_{24}O_4$ M 340.418
Isol. from the aerial parts of *Glycyrrhiza acanthocarpa*. Needles (toluene/pet. ether). Mp 134°.

Ghisalberti, E.L. *et al*, *Phytochemistry*, 1981, **20**, 1959.

3-(3,4-Dihydroxyphenyl)-8-hydroxy-2*H*-1-benzopyran-2-one, 9CI D-10237

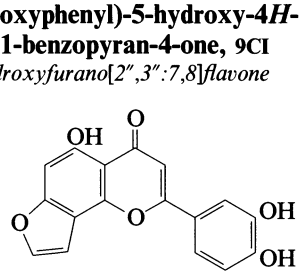
3-(3,4-Dihydroxyphenyl)-8-hydroxycoumarin
$C_{15}H_{10}O_5$ M 270.241

4'-Me ether: [68165-54-8]. *8-Hydroxy-3-(3-hydroxy-4-methoxyphenyl)coumarin.* ***Phyllozutin***
$C_{16}H_{12}O_5$ M 284.268
Isol. from cell culture of *Hydrangea macrophylla seringe* var. *thungergii*. Cryst.

Japan. Pat., 78 59 094, (1978); *CA*, **89**, 194146 (*isol*)

2-(3,4-Dihydroxyphenyl)-5-hydroxy-4*H*-furo[2,3-*h*]-1-benzopyran-4-one, 9CI D-10238

3',4',5-Trihydroxyfurano[2",3":7,8]flavone



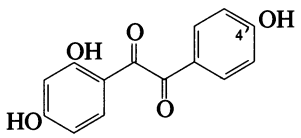
$C_{17}H_{10}O_6$ M 310.262

5-Me, 3',4'-methylene ether: [69722-45-8]. *5-Methoxy-3',4'-methylenedioxyfurano[2",3":7,8]flavone*
$C_{19}H_{12}O_6$ M 336.300
Isol. from the stem bark of *Pongamia glabra*. Needles ($CHCl_3$/pet. ether). Mp 268-269° (263-264°).

Garg, G.P. *et al*, *Indian J. Chem., Sect. B*, 1978, **16**, 658 (*isol*)
Pathak, V.P. *et al*, *Acta Chim. Acad. Sci. Hung.*, 1982, **110**, 123 (*synth*)
Talapatra, S.K. *et al*, *Phytochemistry*, 1982, **21**, 761 (*isol*)

1-(2,4-Dihydroxyphenyl)-2-(4-hydroxyphenyl)ethanedione D-10239

2,4,4'-Trihydroxybenzil



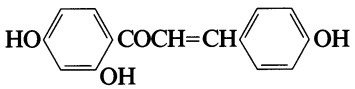
$C_{14}H_{10}O_5$ M 258.230

4'-Me ether: 2,4-Dihydroxy-4'-methoxybenzil
$C_{15}H_{12}O_5$ M 272.257
Isol. from *Trifolium subterraneum*. Yellow needles (CH_2Cl_2/pet. ether). Mp 172°. Prob. artifact.

Beck, A.B. *et al*, *Aust. J. Chem.*, 1966, **19**, 1755.

1-(2,4-Dihydroxyphenyl)-3-(4-hydroxyphenyl)-2-propen-1-one, 9CI D-10240

2',4,4'-Trihydroxychalcone, 8CI

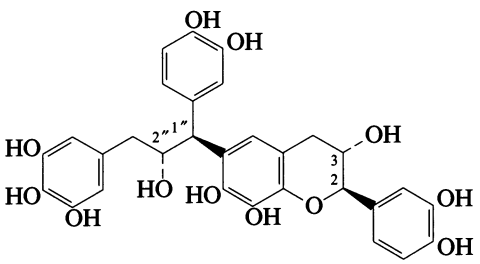


$C_{15}H_{12}O_4$ M 256.257
Isol. from heartwood of *Pterocarpus marsupium*.

Tri-Me ether: [18493-30-6]. *1-(2,4-Dimethoxyphenyl)-3-(4-hydroxyphenyl)-2-propen-1-one, 9CI. 2',4,4'-Trimethoxychalcone, 8CI.* ***Metochalcone,*** **INN.** *Lesidrin. Versidril. CB1314. Acrobil. Cholesteril. Trimepaton. Numerous proprietary names*
$C_{18}H_{18}O_4$ M 298.338
Choleretic, diuretic. Mp 97°.

Freudenberg, K. *et al*, *Chem. Ber.*, 1957, **90**, 957 (*synth*)
Guilleman, P., *Gaz. Hop. Civ. Mil.*, 1958, **130**, 215 (*pharmacol, tox*)
Kovalev, I.P. *et al*, *Zh. Obshch. Khim.*, 1963, **33**, 1670 (*ir*)
Batterham, T.J. *et al*, *Aust. J. Chem.*, 1964, **17**, 428 (*nmr*)
Lavrushin, V.F. *et al*, *Zh. Obshch. Khim.*, 1964, **34**, 13 (*polarog*)
Mathew, J. *et al*, *J. Indian Chem. Soc.*, 1984, **61**, 728 (*isol*)

6-[1-(3,4-Dihydroxyphenyl)-2-hydroxy-3-(3,4,5-trihydroxyphenyl)propyl]-3',4',7,8-tetrahydroxyflavan D-10241



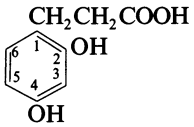
$C_{30}H_{28}O_{12}$ M 580.544

(1''S,2R,2''R,3S)-form [109671-59-2]
Constit. of the heartwood of *Prosopis glandulosa*.

Young, E. *et al*, *J. Chem. Soc., Perkin Trans. 1*, 1986, 1737 (*isol*)

3-(2,4-Dihydroxyphenyl)propanoic acid D-10242

2,4-Dihydroxybenzenepropanoic acid, 9CI. 2,4-Dihydroxyhydrocinnamic acid, 8CI. Hydroumbellic acid
[5631-68-5]



$C_9H_{10}O_4$ M 182.176
Cryst. (C_6H_6 or H_2O). Mp 165°.

Di-Me ether: [22174-29-4].
$C_{11}H_{14}O_4$ M 210.229
Cryst. (EtOH). Mp 105°.

4-Me ether: [21144-17-2].
$C_{10}H_{12}O_4$ M 196.202
Needles (Et_2O/hexane). Mp 91-92°.

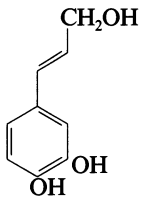
4-Me ether, Me ester: [69471-28-9].
$C_{11}H_{14}O_4$ M 210.229
Isol. from *Machaerium kuhlmannii*.

Hurd, C.D. *et al*, *J. Am. Chem. Soc.*, 1939, **61**, 249 (*synth*)
Amakasa, T. *et al*, *J. Org. Chem.*, 1966, **31**, 1433 (*ir*)
Kametani, T. *et al*, *J. Chem. Soc. C*, 1969, 4 (*synth, deriv*)
Ollis, W.D. *et al*, *Phytochemistry*, 1978, **17**, 1383 (*isol, deriv*)

3-(3,4-Dihydroxyphenyl)-2-propen-1-ol D-10243

Updated Entry replacing D-02672

4-(3-Hydroxy-1-propenyl)-1,2-benzenediol, 9CI. Caffeyl alcohol
[3598-26-3]



$C_9H_{10}O_3$ M 166.176
(*E*)-config. assumed for derivs. except where (*Z*)-config. is certain.

(E)-form
Mp 144-145°.

3'-Me ether: [458-35-5]. *3-(4-Hydroxy-3-methoxyphenyl)-2-propen-1-ol. 4-(3-Hydroxy-1-propenyl)-2-methoxyphenol, 9CI.* ***Coniferyl alcohol.*** *Lubanol*
$C_{10}H_{12}O_3$ M 180.203
Lignin degradn. substance found in sulfite liquor and in Siam benzoin gum. Prisms. Spar. sol. hot H_2O. Mp 74-75°. Bp_3 163-165°. pK_{a1} 9.54 (25°). Resinified by acids.

3'-Me ether, 1-O-β-D-glucopyranoside: [65995-51-9].
Citrusin D. *Isoconiferin*
$C_{16}H_{22}O_8$ M 342.345
Isol. from *Citrus limon, C. unshiu, Fortunella japonica* and *Pinus sylvestris*. Shows antihypertensive props. $[\alpha]_D^{20}$ −16.9° (c, 4.1 in MeOH). λ_{max} 275 nm (ε 5000) (MeOH).

3'-Me ether, 4'-O-β-D-glucopyranoside:
[531-29-3]. *Abietin*†. ***Coniferin.*** *Coniferoside. Laricin*†
$C_{16}H_{22}O_8$ M 342.345
Chief glycoside of the Coniferae. Isol. for example from *Larix europaea, Fraxinus quadrangulata* and *Scorzonera hispanica*. Needles + $2H_2O$. Mp 185°. $[\alpha]_D^{20}$ −66.9° (Py aq.).

3'-Me ether, 1-O-benzoyl: Lubanol benzoate
$C_{17}H_{16}O_4$ M 284.311

Isol. from Siam benzoin. Cryst. (Et_2O/pet. ether). Mp 72°.

4'-Me ether, 1,3'-diangeloyl: [21930-88-1].
$C_{20}H_{24}O_5$ M 344.407
Constit. of *Blumea lacera*. $Bp_{0.1}$ 130°. λ_{max} 256, 295 nm.

3'-Me ether, 4'-O-(3,7-dimethyl-2,6-octadienyl): [129350-09-0]. O-*Geranylconiferyl alcohol*
$C_{20}H_{28}O_3$ M 316.439
Constit. of *Fagara rhetza* and *Pteronia* spp. Oil.

(Z)-form

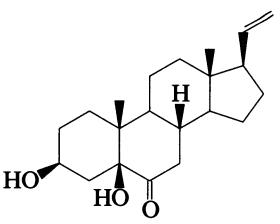
3'-Me ether, 1-O-β-D-glucopyranoside: [66791-74-0]. ***Faguside***
$C_{16}H_{22}O_8$ M 342.345
Isol. from bark of *Fagus silvatica* and *F. grandifolia*. Antifeedant against insect pests. $[\alpha]_D^{33.5}$ −27.6° (c, 0.13 in MeOH).

3'-Me ether, 4-O-(6-O-galloyl-β-D-glucopyranoside): [109194-58-3]. cis-*Coniferyl alcohol 4-O-(6-galloylglucopyranoside)*
$C_{23}H_{26}O_{12}$ M 494.451
Isol. from acorns of *Quercus mongolica*. Needles + $1H_2O$. Mp 195-196°. $[\alpha]_D^{24}$ −38.3° (c, 0.7 in MeOH).

[18604-50-7, 113349-27-2]

Tiemann, F. *et al*, *Ber.*, 1874, **7**, 608; 1875, **8**, 1127; 1878, **11**, 659; 1885, **18**, 3481 (*synth*)
Zincke, A. *et al*, *Monatsh. Chem.*, 1921, **41**, 423; 1922, **42**, 447.
Allen, C.F.H. *et al*, *J. Am. Chem. Soc.*, 1949, **71**, 2683 (*synth*)
Freudenberg, K. *et al*, *Chem. Ber.*, 1950, **83**, 600; 1955, **88**, 10 (*isol*)
Hermann, K., *Pharmazie*, 1953, **8**, 303; *CA*, **48**, 9361.
Plouvier, V., *C. R. Hebd. Seances Acad. Sci.*, 1954, **238**, 1835 (*isol, Coniferin*)
Bohlmann, F. *et al*, *Tetrahedron Lett.*, 1969, 69 (*Me ether diangeloyl*)
Brunow, G., *Acta Chem. Scand.*, 1972, **26**, 1123.
Harmatha, J. *et al*, *Collect. Czech. Chem. Commun.*, 1978, **43**, 774 (*Faguside*)
Ishimaru, K. *et al*, *Phytochemistry*, 1987, **26**, 1147 (*cis-Coniferyl alcohol galloylglucoside*)
Sawabe, A. *et al*, *Nippon Kagaku Kaishi*, 1988, **62**, 1067 (*Citrusin D*)
Lewis, N.-G. *et al*, *Phytochemistry*, 1988, **27**, 2119 (*Faguside*)
Shibuya, H. *et al*, *Chem. Pharm. Bull.*, 1992, **40**, 2325 (*O-Geranylconiferyl alcohol*)
Quideau, S. *et al*, *J. Agric. Food Chem.*, 1992, **40**, 1108 (*synth, Coniferyl alcohol*)

3,5-Dihydroxypregn-20-en-6-one D-10244



$C_{21}H_{32}O_3$ M 332.482

(3β,5β)-form [150999-03-4] ***Villosterol***
Constit. of *Turraea villosa*. Cryst. (Me_2CO/pet. ether). Mp 192-193°. $[\alpha]_D$ −35.29° (c, 0.17 in $CHCl_3$).

Chiplunkar, Y.G. *et al*, *Phytochemistry*, 1993, **33**, 901 (*isol, pmr, cmr, cryst struct*)

3,6-Dihydroxypregn-9(11)-en-20-one, 9CI D-10245

Updated Entry replacing D-02719

$C_{21}H_{32}O_3$ M 332.482

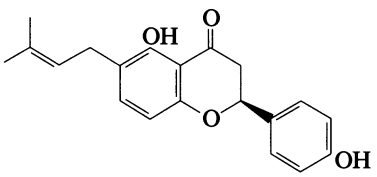
(3β,5α,6α)-form [37717-02-5] ***Asterosapogenin I.*** *Asterone*
Isol. from *Asterias amurensis* and *Acanthaster planci*. Mp 162-163°, Mp 193-196°. $[\alpha]_D^{23}$ +65.2° ($CHCl_3$).

6-O-(6-Deoxy-β-D-glucopyranoside), 3-O-sulfate: [129602-19-3]. ***Forbeside E3***
$C_{27}H_{42}O_{10}S$ M 558.689
Isol. from the starfish *Asterias forbesi*. Powder (as Na salt). Mp 206° (Na salt). $[\alpha]_D^{28}$ −3.5° (c, 0.004 in H_2O).

Sheikh, Y.M. *et al*, *J. Am. Chem. Soc.*, 1972, **94**, 3278 (*isol*)
Ikegami, S. *et al*, *Tetrahedron Lett.*, 1972, 1601 (*isol*)
ApSimon, J.W. *et al*, *Can. J. Chem.*, 1973, **51**, 850; 1974, **52**, 4113 (*isol, synth*)
Smith, D.S.H. *et al*, *J. Chem. Soc., Perkin Trans. 1*, 1975, 1751 (*synth*)
Findlay, J.A. *et al*, *J. Nat. Prod.* (*Lloydia*), 1990, **53**, 710 (*Forbeside E3*)

4',5-Dihydroxy-6-prenylflavanone D-10246

2,3-Dihydro-5-hydroxy-2-(4-hydroxyphenyl)-6-(3-methyl-2-butenyl)-4H-1-benzopyran-4-one, 9CI. ***Crotaramosmin***



$C_{20}H_{20}O_4$ M 324.376
Isol. from *Crotalaria ramosissima*.

(S)-form [139682-14-7]
Isol. from *C. ramosissima*. Cryst. Mp 116°.

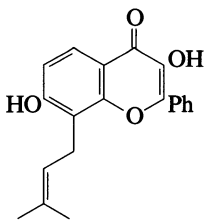
Di-Ac: Cryst. (EtOAc/pet. ether). Mp 136°.

Khalilullah, M. *et al*, *J. Nat. Prod.* (*Lloydia*), 1992, **55**, 229 (*isol, pmr, cmr*)

3,7-Dihydroxy-8-prenylflavone D-10247

3,7-Dihydroxy-8-(3-methyl-2-butenyl)-2-phenyl-4H-1-benzopyran-4-one, 9CI. 7-Hydroxy-8-prenylflavonol. ***Maackiaflavanol***

[140848-75-5]



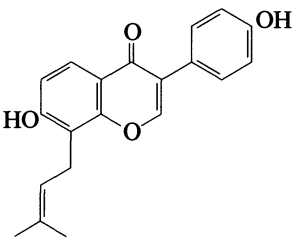
$C_{20}H_{18}O_4$ M 322.360
Constit. of the roots of *Maackia tenuifolia*.

Shen, J. *et al*, *Chin. Chem. Lett.*, 1991, **2**, 629 (*isol, synth, struct*)

4′,7-Dihydroxy-8-prenylisoflavone D-10248

7-Hydroxy-3-(4-hydroxyphenyl)-8-(3-methyl-2-butenyl)-4H-1-benzopyran-4-one, 9CI. 8-Prenyldaidzein

[135384-00-8]



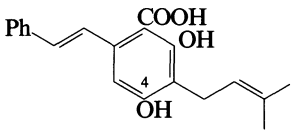
$C_{20}H_{18}O_4$ M 322.360

Constit. of *Erythrina* x *bidwilli* and *Pueraria lobata*. Pale yellow amorph. powder.

Hakamatsuka, T. *et al*, *Phytochemistry*, 1991, **30**, 1481 (*isol*)
Iinuma, M. *et al*, *Chem. Pharm. Bull.*, 1992, **40**, 2749 (*isol*)

2,4-Dihydroxy-3-prenyl-6-styrylbenzoic acid D-10249

2,4-Dihydroxy-3-(3-methyl-2-butenyl)-6-(2-phenylethenyl) benzoic acid. 1-Carboxy-2,4-dihydroxy-3-prenylstilbene



$C_{20}H_{20}O_4$ M 324.376

(E)-form

4-Me ether: [87402-84-4]. *2-Hydroxy-4-methoxy-3-(3-methyl-2-butenyl)-6-(2-phenylethenyl)benzoic acid. 2-Hydroxy-4-methoxy-3-prenyl-6-styrylbenzoic acid*

$C_{21}H_{22}O_4$ M 338.402

Constit. of *Cajanus cajan*. Phytoalexin. Pale yellow needles (MeOH aq.). Mp 150-165°.

[86660-10-8]

Cooksey, C.J. *et al*, *Phytochemistry*, 1982, **21**, 2935.

4,6-Dihydroxy-3-prenyl-2-styrylbenzoic acid D-10250

4,6-Dihydroxy-3-(3-methyl-2-butenyl)-2-(2-phenylethenyl) benzoic acid. 1-Carboxy-2,4-dihydroxy-5-prenylstilbene

$C_{20}H_{20}O_4$ M 324.376

(E)-form

4-Me ether: [87402-83-3]. *6-Hydroxy-4-methoxy-3-(3-methyl-2-butenyl)-2-(2-phenylethenyl)benzoic acid. 6-Hydroxy-4-methoxy-3-prenyl-2-styrylbenzoic acid*

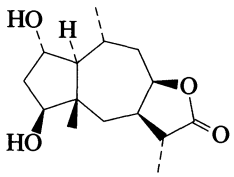
$C_{21}H_{22}O_4$ M 338.402

Constit. of *Cajanus cajan*. Phytoalexin. Pale yellow needles (MeOH aq.). Mp 144-146°.

[86660-09-5]

Cooksey, C.J. *et al*, *Phytochemistry*, 1982, **21**, 2935.

2,4-Dihydroxy-12,8-pseudoguaianolide D-10251



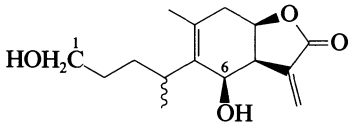
$C_{15}H_{24}O_4$ M 268.352

(1α,2α,4β,5β,8β,10α,11βH)-form [124961-64-4]

Constit. of *Gaillardia grandiflora*. Oil. $[\alpha]_D^{27}$ +78.4° (c, 0.102 in $CHCl_3$).

Harimaya, K. *et al*, *Chem. Pharm. Bull.*, 1989, **37**, 2525 (*isol, pmr, cmr*)

1,6-Dihydroxy-1,10-seco-5(10),11(13)-eudesmadien-12,8-olide D-10252



$C_{15}H_{22}O_4$ M 266.336

(4ξ,6β,8β)-form

Britannilactone

Constit. of *Inula britannica*. Cryst. ($CHCl_3$/Me_2CO). Mp 175-177°. $[\alpha]_D$ +91.3° (c, 0.092 in MeOH).

1-Ac:

$C_{17}H_{24}O_5$ M 308.374

Constit. of *I. britannica*. Needles. Mp 124-126°. $[\alpha]_D$ +101.6° (c, 0.264 in $CHCl_3$).

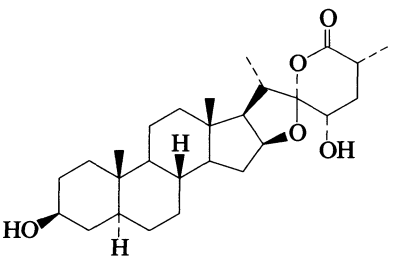
Di-Ac:

$C_{19}H_{26}O_6$ M 350.411

Constit. of *I. britannica*. Needles. Mp 84-85°. $[\alpha]_D$ +37.5° (c, 0.171 in $CHCl_3$).

Zhou, B.-N. *et al*, *Phytochemistry*, 1993, **34**, 249 (*isol, pmr, cmr*)

3,23-Dihydroxyspirostan-26-one, 9CI D-10253



$C_{27}H_{42}O_5$ M 446.626

(3β,5α,23S,25R)-form

3-O-[α-L-Rhamnopyranosyl-(1→2)][α-L-rhamnopyranosyl-(1→4)]-β-D-glucopyranoside]: [137038-72-3]. ***Soladulcoside B***

$C_{45}H_{72}O_{18}$ M 901.053

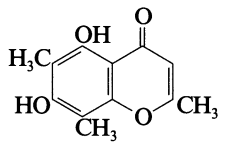
Constit. of the aerial parts of *Solanum dulcamara*. Powder. $[\alpha]_D$ −79.2°.

Yamashita, T. *et al*, *Chem. Pharm. Bull.*, 1991, **39**, 1626.

5,7-Dihydroxy-2,6,8-trimethyl-4*H*-1-benzopyran-4-one, 9CI D-10254

5,7-Dihydroxy-2,6,8-trimethylchromone. ***8-Methyleugenitol***

[41682-21-7]



$C_{12}H_{12}O_4$ M 220.224

Constit. of *Dianella ensifolia* and *Marsdenia tinctoria* var. *tomentosa*. Cryst. (MeOH). Mp 282°.

7-O-(6-O-Acetyl-β-D-glucopyranoside): [41666-58-4].

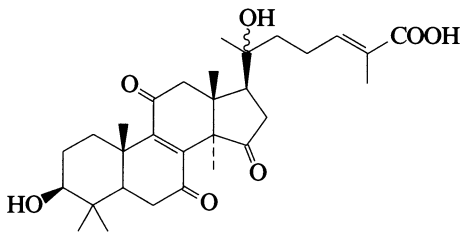
Galapagin

$C_{20}H_{24}O_{10}$ M 424.404

Isol. from the lichen *Roccella galapagoensis*. Pale yellow needles (MeOH). Mp 163-165°. Wrong MF given in CA.

Huneck, S. *et al*, *J. Prakt. Chem.*, 1972, **314**, 488 (*synth*)
Ito, K. *et al*, *Yakugaku Zasshi*, 1978, **98**, 1285 (*isol*)
Lojanapiwatna, V. *et al*, *CA*, 1982, **97**, 178728 (*isol*)
Huneck, S. *et al*, *Z. Naturforsch., B*, 1992, **47**, 449 (*Galapagin*)

3,20-Dihydroxy-7,11,15-trioxolanosta-8,24-dien-26-oic acid D-10255



$C_{30}H_{42}O_7$ M 514.658

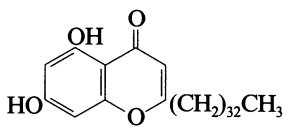
(3β,20ξ,24E)-form [150033-91-3] ***Ganoderic acid V_1***

Metab. of *Ganoderma lucidum*. Cryst. Mp 234-234.5°. $[\alpha]_D^{21}$ +100° (c, 0.12 in $CHCl_3$).

Hirotani, M. *et al*, *Phytochemistry*, 1993, **33**, 379 (*isol, pmr, cmr*)

5,7-Dihydroxy-2-tritriacontyl-4*H*-1-benzopyran-4-one D-10256

5,7-Dihydroxy-2-tritriacontylchromone



$C_{42}H_{72}O_4$ M 641.028

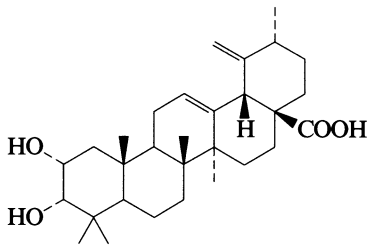
7-Me ether: [144049-68-3]. *5-Hydroxy-7-methoxy-2-tritriacontyl-4H-1-benzopyran-4-one, 9CI. 5-Hydroxy-7-methoxy-2-tritriacontylchromone*

$C_{43}H_{74}O_4$ M 655.055

Constit. of *Agave americana*. Exhibitis antibacterial activity. Needles ($CHCl_3$/pet. ether). Mp 83°.

Parmer, V.S. *et al*, *Tetrahedron*, 1992, **48**, 1281.

2,3-Dihydroxy-12,19(29)-ursadien-28-oic acid D-10257



(2α,3α)-*form*

$C_{30}H_{46}O_4$ M 470.691

(2α,3α)-form

β-D-Glucopyranosyl ester: [146787-96-4]. ***Alpinoside***

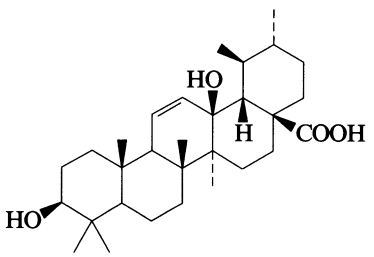
$C_{36}H_{56}O_9$ M 632.833

Constit. of *Sanguisorba alpina*. Amorph. powder. Mp 247-249.5°. $[\alpha]_D^{15}$ +7.5° (c, 0.2 in MeOH).

Jia, Z.-J. *et al*, *Phytochemistry*, 1993, **32**, 155.

3,13-Dihydroxy-11-ursen-28-oic acid D-10258

Updated Entry replacing D-02889



$C_{30}H_{48}O_4$ M 472.707

(3β,13β)-form

20→13 Lactone: [35959-05-8]. *3β-Hydroxy-11-ursen-28,13-olide.* ***11,12-Dehydroursolic acid lactone***

$C_{30}H_{46}O_3$ M 454.692

Isol. from *Eucalyptus robusta* and *E. tereticornis*. Cryst. Mp 278° (262-265°) dec. $[\alpha]_D^{10}$ +44°.

20→13 Lactone, 3-Ac: [35959-08-1].

$C_{32}H_{48}O_4$ M 496.729

Constit. of the waxes of *E.* spp., *Euclea natalensis* and from *Pieris japonica*. Cryst. (EtOAc). Mp 252°. $[\alpha]_D^{20}$ +46° ($CHCl_3$).

20→13-Lactone, 3-O-(p-hydroxycinnamoyl): ***Tereticornate B***

$C_{39}H_{52}O_5$ M 600.837

Constit. of *Eucalyptus tereticornis*. Cryst. (MeOH). Mp 270-274°. $[\alpha]_D$ +37.3° (c, 1 in $CHCl_3$).

20→13 Lactone, 3-O-(4-hydroxy-3-methoxycinnamoyl): ***Tereticornate A***

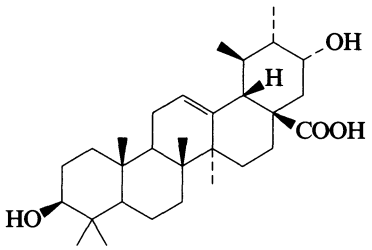
$C_{40}H_{54}O_6$ M 630.863

Constit. of *E. tereticornis*. Cryst. (MeOH). Mp 267-270°. $[\alpha]_D$ +27° (c, 1 in $CHCl_3$).

Horn, D.H.S. *et al*, *Aust. J. Chem.*, 1964, **17**, 477 (*isol*)
Mezzetti, T. *et al*, *Planta Med.*, 1970, **18**, 326; 1971, **20**, 244 (*isol, synth*)
Schiaffella, F. *et al*, *Phytochemistry*, 1975, **14**, 584 (*isol*)
Katai, M. *et al*, *Chem. Pharm. Bull.*, 1983, **31**, 1567 (*isol*)
Wang, H. *et al*, *Phytochemistry*, 1993, **33**, 151 (*Tereticornates*)

3,21-Dihydroxy-12-ursen-28-oic acid D-10259

Updated Entry replacing D-02892



$C_{30}H_{48}O_4$ M 472.707

(3β,21α)-form [101512-28-1] ***21α-Hydroxyursolic acid***
Constit. of *Amaracus dictamnus*. Cryst. ($CHCl_3$) (as Me ester). Mp 214° (Me ester). $[\alpha]_D^{21}$ +24° ($CHCl_3$) (Me ester).

(3β,21β)-form
21β-Hydroxyursolic acid
Constit. of *Satureia acinos*. Cryst. (EtOAc/hexane). Mp 292-295°. $[\alpha]_D^{20}$ +37.3° (c, 0.1 in MeOH).

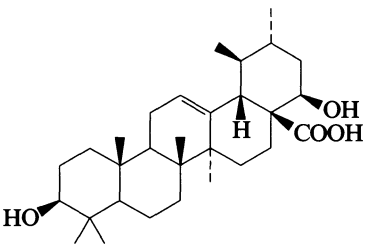
3-O-[α-L-Arabinopyranosyl-(1→2)-β-D-glucuronopyranoside]: [117804-12-3]. ***Cynarasaponin F***
$C_{41}H_{64}O_{14}$ M 780.948
Constit. of *Cynara cardunculus*. Powder + $1\frac{1}{2}H_2O$ (as di-Me ester). $[\alpha]_D^{25}$ +23.4° (c, 0.47 in MeOH)(di-Me ester).

3-O-[α-L-Arabinopyranosyl-(1→2)-β-D-glucuronopyranoside], β-D-glucopyranosyl ester: [117804-13-4]. ***Cynarasaponin G***
$C_{47}H_{74}O_{19}$ M 943.090
Constit. of *C. cardunculus*. Powder + $2H_2O$ (as Me ester). $[\alpha]_D^{25}$ +11.1° (c, 0.85 in MeOH)(Me ester).

[117804-19-0, 117804-21-4]

Escudero, J. *et al*, *J. Nat. Prod.* (*Lloydia*), 1985, **48**, 128.
Piozzi, F. *et al*, *Phytochemistry*, 1986, **24**, 539.
Shimizu, S. *et al*, *Chem. Pharm. Bull.*, 1988, **36**, 2466 (*Cynarasaponins*)

3,22-Dihydroxy-12-ursen-28-oic acid D-10260



$C_{30}H_{48}O_4$ M 472.707

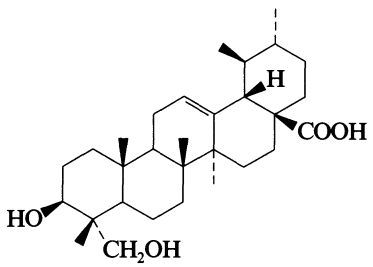
(3β,22β)-form

3-(3-Methylbutanoyl): ***Lantaiursolic acid***
$C_{35}H_{56}O_5$ M 556.824
Constit. of *Lantana camara*. Cryst. Mp 218-220°. $[\alpha]_D$ +37.5° (c, 0.96 in $CHCl_3$).

Pan, W.D. *et al*, *Acta Pharm. Sin.*, 1993, **28**, 40.

3,23-Dihydroxy-12-ursen-28-oic acid D-10261

Updated Entry replacing D-02894



$C_{30}H_{48}O_4$ M 472.707

3β-form
Constit. of *Guettarda angelica*, *Hedyotis lawsoniae* and *Cigarrilla mexicana*. Mp 180-181.5°, Mp 266-268°.

Di-Ac, Me ester: [94492-28-1].
Needles (EtOH). Mp 180-181.5°. $[\alpha]_D^{21}$ +64.1° (c, 0.22 in $CHCl_3$).

3-Ketone: ***23-Hydroxy-3-oxo-12-ursen-28-oic acid***
$C_{30}H_{46}O_4$ M 470.691
Isol. from *Cussonia natalensis*. Cryst. (EtOAc). Mp 170°.

23-Carboxylic acid: ***3β-Hydroxy-12-ursene-23,28-dioic acid***
$C_{30}H_{46}O_5$ M 486.690
Isol. from *Schefflera octophylla*. Powder. Mp 160-162°. $[\alpha]_D^{20}$ +37° (c, 0.12 in MeOH).

23-Carboxylic acid, 28-O-[α-L-rhamnopyranosyl(1→4)-β-D-glucopyranosyl(1→6)-β-D-glucopyranoside]:
$C_{48}H_{76}O_{19}$ M 957.117
Constit. of *S. octophylla*. Powder. Mp 232-234°. $[\alpha]_D^{20}$ −10° (c, 0.39 in MeOH).

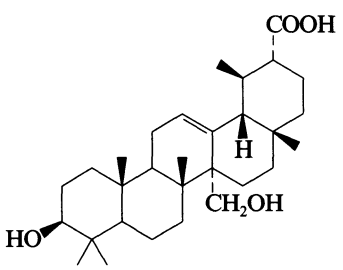
3-O-β-D-Glucuronopyranoside, 28-O-β-D-glucopyranosyl ester: [117804-11-2]. ***Cynarasaponin E***
$C_{42}H_{66}O_{15}$ M 810.974
Constit. of *Cynara cardunculus*. Powder + $2H_2O$ (as Me ester). $[\alpha]_D^{25}$ +3.7° (c, 0.95 in MeOH) (Me ester).

3-O-[α-L-Arabinopyranosyl-(1→2)-β-D-glucuronopyranoside], 28-O-β-D-glucopyranosyl ester: [117804-10-1]. ***Cynarasaponin D***
$C_{47}H_{74}O_{19}$ M 943.090
Constit. of *Cynara cardunculus*. Powder + $2H_2O$ (as Me ester). $[\alpha]_D^{25}$ +7.6° (c, 1.16 in MeOH), (Me ester).

[117827-84-6, 117849-92-0]

Kikuchi, T. *et al*, *Chem. Pharm. Bull.*, 1984, **32**, 3906 (*isol*)
Sousa, M.P. *et al*, *Phytochemistry*, 1984, **23**, 2589 (*isol*)
Shimizu, S. *et al*, *Chem. Pharm. Bull.*, 1988, **36**, 2466 (*Cynarasaponins*)
Mata, R. *et al*, *Phytochemistry*, 1988, **27**, 1887.
Fourie, G. *et al*, *Phytochemistry*, 1989, **28**, 2851 (*isol, pmr, cmr*)
Sung, T.V. *et al*, *Phytochemistry*, 1992, **31**, 227 (*23,28-dioic acid*)

3,27-Dihydroxy-12-ursen-30-oic acid D-10262



$C_{30}H_{48}O_4$ M 472.707

3β-form

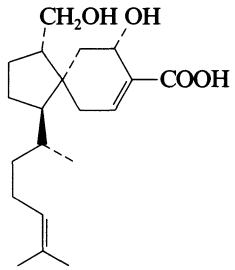
27-(3-(4-Hydroxyphenyl)-2-propenoyl): [147044-48-2]. ***Obtusilic acid***

$C_{39}H_{54}O_6$ M 618.852
Constit. of *Plumeria obtusa*. Needles ($CHCl_3$/MeOH). Mp 290-291°.

Siddiqui, S. *et al*, *Phytochemistry*, 1992, **31**, 4279 (*isol, pmr, cmr, ms*)

5,19-Dihydroxy-3,14-viscidadien-20-oic acid D-10263

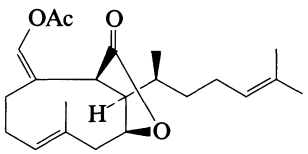
[110623-74-0]



$C_{20}H_{32}O_4$ M 336.470
Constit. of *Eremophila exotrachys*. Oil (as Me ester). $Bp_{0.1}$ 190° (bath) (Me ester). $[\alpha]_D$ +101.7° (c, 1 in $CHCl_3$) (Me ester).

Forster, P.G. *et al*, *Aust. J. Chem.*, 1986, **39**, 2111 (*isol, pmr*)

Dilopholide D-10264



$C_{22}H_{32}O_4$ M 360.492
Constit. of *Dilophus ligulatus*. Oil. $[\alpha]_D$ −113.7° (c, 0.86 in $CHCl_3$).

Bouaicha, N. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 1747 (*isol, pmr, cmr*)

2,4-Dimethoxybenzoic acid D-10265

β-Resorcylic acid dimethyl ether

[91-52-1]

$C_9H_{10}O_4$ M 182.176
Constit. of stems and leaves of *Anthyllis sericea*. Cryst. (H_2O or hexane). Mp 108-109°. pK_{a1} 4.36 (25°).

Me ester: [2150-41-6].
$C_{10}H_{12}O_4$ M 196.202
Bp 294-296°, Bp_{13} 160-162°.

Anhydride:
$C_{18}H_{18}O_7$ M 346.336
Cryst. (EtOAc/pet. ether). Mp 81-82°.

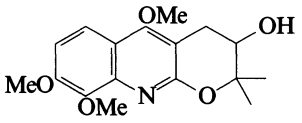
Nitrile: [4107-65-7]. *1-Cyano-2,4-dimethoxybenzene*
$C_9H_9NO_2$ M 163.176
Mp 91°.

[1521-95-5, 39828-35-8]

Theresa, Y.M. *et al*, *Aust. J. Chem.*, 1968, **21**, 1633 (*synth*)
Org. Synth., 1970, **50**, 52 (*deriv*)
Marco, J.A. *et al*, *Phytochemistry*, 1978, **17**, 1438 (*occur*)

8,9-Dimethoxygeibalansine D-10266

[142741-29-5]



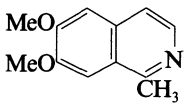
$C_{17}H_{21}NO_5$ M 319.357
Alkaloid from stem bark of *Dutaillyea baudounii* (Rutaceae).

Muyard, F. *et al*, *Phytochemistry*, 1992, **31**, 1087 (*isol, uv, ir, pmr, ms, struct*)

6,7-Dimethoxy-1-methylisoquinoline, 9CI D-10267

Updated Entry replacing D-02981
Isosalsolidine. *Nigellimine*

[4594-02-9]



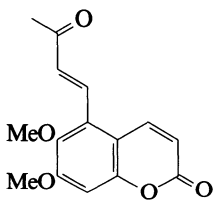
$C_{12}H_{13}NO_2$ M 203.240
Alkaloid detected in *Pachycereus weberi* by tandem mass spectrom. (Cactaceae). Trace constit. in seeds of *Nigella sativa* (Ranunculaceae). Cryst. (Et_2O/EtOAc). Mp 118-119°.

N-*Oxide:* ***Nigellimine* N-*oxide***
$C_{12}H_{13}NO_3$ M 219.240
Minor alkaloid from the seeds of *Nigella sativa* (Ranunculaceae). Amorph.

Roush, R.A. *et al*, *Anal. Chem.*, 1985, **57**, 109 (*occur*)
Atta-ur-Rahman, *et al*, *Heterocycles*, 1985, **23**, 953 (*oxide*)
Atta-ur-Rahman, *et al*, *J. Nat. Prod.* (*Lloydia*), 1992, **55**, 676 (*isol*)

6,7-Dimethoxy-5-(3-oxo-1-butenyl)-2*H*-1-benzopyran-2-one D-10268

[146607-48-9]



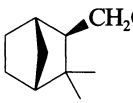
$C_{15}H_{14}O_5$ M 274.273
Probable struct. Struct. revised in 1992. Constit. of *Toddalia asiatica*. Fine pale yellow needles (Me_2CO). Mp 186.5-188.5° (176-180°).

Ishii, H. *et al*, *Chem. Pharm. Bull.*, 1992, **40**, 2614 (*synth, struct, bibl*)

3,3-Dimethylbicyclo[2.2.1]heptane-2-methanol, 9CI D-10269

3,3-Dimethyl-2-norbornanemethanol, 8CI. Camphanol

[27899-45-2]



(1*R*,2*R*,4*S*)-*form*

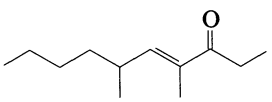
$C_{10}H_{18}O$ M 154.252
Constit. of oil of armoise (*Artemisia* sp.).

(*1R,2R,4S*)-*form* [81601-70-9]
exo-*form*
3,5-Dinitrobenzoyl: [114977-14-9].
Leaflets (EtOH). Mp 77-78°.
(*1R,2S,4S*)-*form* [81601-68-5]
endo-*form*
Mp 88-88.5°. $[\alpha]_D$ +9.2° (c, 3.5 in $CHCl_3$).
3,5-Dinitrobenzoyl: [114927-01-4].
Leaflets (EtOH). Mp 86-88°.
4-Methylbenzenesulfonyl: [81601-69-6].
Mp 48-48.5° (39-41°).
O-[*D-Apio-β-D-furanosyl-(1→6)-β-D-glucopyranoside*]: [114892-58-9]. ***Shionoside A***
$C_{21}H_{36}O_{10}$ M 448.509
Constit. of the roots of *Aster tataricus*. Needles (EtOAc/MeOH). Mp 163-164°. $[\alpha]_D^{22}$ −79.3° (c, 1.05 in MeOH).
O-*Rutinoside:* [114892-59-0]. ***Shionoside B***
$C_{22}H_{38}O_{10}$ M 462.536
Constit. of the roots of *A. tataricus*. Needles (EtOAc/MeOH). Mp 109-111°. $[\alpha]_D^{22}$ −50.5° (c, 0.6 in MeOH).

[18310-55-9, 18410-94-1, 63373-82-0, 67560-14-9, 72188-57-9, 105453-57-4]

Biellmann, J.F. *et al*, *J. Org. Chem.*, 1982, **47**, 2882 (*synth*)
Buchbauer, G. *et al*, *Monatsh. Chem.*, 1982, **113**, 1433; 1983, **114**, 113 (*synth, pmr*)
Falorni, M. *et al*, *J. Org. Chem.*, 1986, **51**, 5291 (*synth*)
Nagao, T. *et al*, *Chem. Pharm. Bull.*, 1988, **36**, 571 (*synth, Shionosides*)

4,6-Dimethyl-4-decen-3-one D-10270

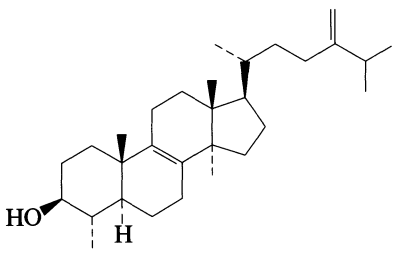


$C_{12}H_{22}O$ M 182.305
Constit. of the essential oil of *Evernia prunastri*.
(*E*)-*form* [111187-59-8] ***Bishomomanicone***
Constit. of the mandibular gland secretion of the ant *Manica rubida*.

Corbier, B. *et al*, *Recherches*, 1974, **19**, 289 (*isol*)
Bestmann, H.J. *et al*, *Justus Liebigs Ann. Chem.*, 1988, 55 (*isol, pmr*)

4,14-Dimethylergosta-8,24(28)-dien-3-ol D-10271

4,14,24-Trimethylcholesta-8,24(28)-dien-3-ol



$C_{30}H_{50}O$ M 426.724
(*3β,4α,5α*)-*form* [16910-32-0] ***Obtusifoliol***
Constit. of numerous plant spp. Mp 144°.

[89955-50-0, 121250-35-9]

Barrera, J.B. *et al*, *CA*, 1967, **67**, 108792g (*struct*)
Itoh, T. *et al*, *Phytochemistry*, 1978, **17**, 971 (*isol*)
Xu, S. *et al*, *J. Chromatogr.*, 1988, **452**, 377 (*chromatog*)

4,14-Dimethylergosta-9(11),24(28)-dien-3-ol D-10272

4,14-Dimethyl-24-methylenecholest-9(11)-en-3-ol
$C_{30}H_{50}O$ M 426.724
(*3β,4α,5α*)-*form* [77704-66-6]
Isol. from seeds of *Phaseolus vulgaris*. Mp 105-107° (as acetate).

[105097-80-1, 108944-19-0]

Akihisa, T. *et al*, *Phytochemistry*, 1989, **28**, 1219 (*isol*)

Dimethylformamide, 9CI D-10273

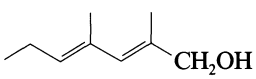
Formyldimethylamine
[68-12-2]

$HCONMe_2$

C_3H_7NO M 73.094
Constit. of *Astragalus cibarius*. Manuf. by carbonylation of dimethylamine or by reaction between methyl formate and dimethylamine. Widely used aprotic solv. and reagent in org. synth. and chemical analysis. Liq. Misc. H_2O, EtOH, Et_2O, C_6H_6, $CHCl_3$. $d_4^{22.4}$ 0.945. Mp −61°. Bp 153°, Bp_{39} 76°. $n_D^{22.4}$ 1.4294.
▷ Reacts violently with many materials. Possible human carcinogen. May increase skin absorption of other carcinogens. Skin and eye irritant. Symptoms of occup. exposure include anorexia, abdominal pain, nausea, headache, dizziness. Hepatotoxic. LD_{50} (rat, orl) 2800 mg/kg. Exp. reprod. and teratogenic effects. LQ2100000.

Benneville, P.L. *et al*, *J. Org. Chem.*, 1956, **21**, 772 (*synth*)
Stermitz, F.R. *et al*, *Phytochemistry*, 1972, **11**, 1117 (*occur*)
McClelland, R.A. *et al*, *J. Chem. Soc., Chem. Commun.*, 1974, 824 (*pmr*)
Pizey, J.S., *Synth. Reagents*, Ellis Horwood, 1974, **1**, 1 (*rev, bibl*)
Large, R. *et al*, *Org. Mass Spectrom.*, 1976, **11**, 582 (*ms*)
Kudo, K. *et al*, *Chem. Lett.*, 1977, 1495 (*synth*)
Fritz, H. *et al*, *Org. Magn. Reson.*, 1977, **9**, 108 (*cmr*)
Sandell, E.B. *et al*, *Photometric Determination of Traces of Metals*, Wiley, New York, 1978 (*use*)
Kirk-Othmer Encycl. Chem. Technol., 3rd Ed., Wiley, N.Y., 1978-1984, **11**, 263 (*rev*)
Fieser and Fieser's Reagents for Organic Synthesis, Wiley, 1980, **8**, 189.
Shono, T. *et al*, *Acta Chem. Scand., Ser. B*, 1983, **37**, 491 (*synth*)
Aldrich Library of FT-IR Spectra, 1st edn., 1985, **1**, 758D (*ir*)
Gescher, A., *Chem. Br.*, 1990, 435 (*tox*)
Hargittai, I. *et al*, *J. Phys. Chem.*, 1993, **97**, 4966 (*ed, struct*)
Martindale, The Extra Pharmacopoeia, 30th edn., Pharmaceutical Press, London, 1993, 1102.
Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th Ed., Van Nostrand-Reinhold, 1992, DSB000.
Ethel Browning's Toxicity and Metabolism of Industrial Solvents, 2nd edn., (Snyder, R., ed.), Elsevier, Volume 2, 1990, 149 (*tox*)
Bretherick, L., *Handbook of Reactive Chemical Hazards*, 4th edn., Butterworth, London and Boston, 1990, 1184.
Luxon, S.G., *Hazards in the Chemical Laboratory*, 5th edn., Royal Society of Chemistry, Cambridge, 1992, 508.

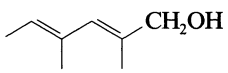
2,4-Dimethyl-2,4-heptadien-1-ol D-10274



$C_9H_{16}O$ M 140.225

(*E,E*)-*form* [62332-67-6]
Constit. of the defense secretions of *Leiobunum leiopenis*. Liq. Bp_8 96-99°.
Jones, T.H. *et al*, *Proc. Natl. Acad. Sci. U.S.A.*, 1977, **74**, 419 (*isol*)

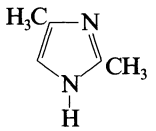
2,4-Dimethyl-2,4-hexadien-1-ol D-10275



$C_8H_{14}O$ M 126.198
(*E,E*)-*form* [62332-66-5]
Constit. of the defence secretions of some *Leiobunum* spp. Liq. Bp_8 83-85°, $Bp_{0.05}$ 48-50°.
Aldehyde: [62332-65-4]. *2,4-Dimethyl-2,4-hexadienal*
$C_8H_{12}O$ M 124.182
Constit. of the defense secretion of some *L.* spp. Oil. Bp_{39} 110-120°.
Aldehyde, 2,4-dinitrophenylhydrazone: [136464-82-9].
Cryst. + $\frac{1}{2}H_2O$ (EtOH). Mp 174-176°.
Jones, T.H. *et al*, *Proc. Natl. Acad. Sci. U.S.A.*, 1977, **74**, 419 (*isol*)
Bartelt, R.J. *et al*, *J. Agric. Food Chem.*, 1990, **38**, 2192 (*synth*)
Patel, P. *et al*, *J. Chem. Soc., Perkin Trans. 1*, 1991, 1941 (*synth*)

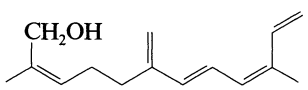
2,4-Dimethyl-1*H*-imidazole D-10276

[930-62-1]



$C_5H_8N_2$ M 96.132
Probable artifact from the flowers of *Sophora flavescens*. Constit. of tobacco smoke. Cryst. Mp 92° (*in vacuo*). $Bp_{0.02}$ 118-120°. pK_a 8.36 (25°).
B,HCl: [70807-88-4].
Hygroscopic needles (EtOH/Et_2O). Mp 205°.
[1689-36-7, 126311-05-5]
Weidenhagen, R. *et al*, *Ber.*, 1935, **68**, 1960 (*synth*)
Scheinbaum, M.L. *et al*, *Tetrahedron Lett.*, 1971, 2205 (*synth*)
Casey, M. *et al*, *J. Chem. Soc., Chem. Commun.*, 1982, 714 (*synth*)
Murakoshi, I. *et al*, *Phytochemistry*, 1982, **21**, 2379 (*isol*)
Garcia, M.L.S. *et al*, *J. Chem. Soc., Perkin Trans. 2*, 1983, 1391 (*nqr*)
Watanabe, T. *et al*, *J. Heterocycl. Chem.*, 1983, **20**, 1277 (*synth*)
Lipshutz, B.H. *et al*, *J. Org. Chem.*, 1983, **48**, 3745 (*synth*)

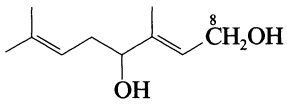
2,10-Dimethyl-6-methylene-2,7,9,11-dodecatetraen-1-ol D-10277



$C_{15}H_{22}O$ M 218.338
(*7E,9Z*)-*form*
Porninsol
Isolated as a mixture of fatty acid esters from *Lactarius porninsis*. Released when the fruiting bodies are injured.
1-Aldehyde: 2,10-Dimethyl-6-methylene-2,7,9,11-dodecatetraen-1-al. ***Porninsal***
$C_{15}H_{20}O$ M 216.322
Released when *L. porninsis* fruiting bodies are injured.
Gamba-Invernizzi, A. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 1948 (*isol, pmr, cmr*)

3,7-Dimethyl-2,6-octadiene-1,4-diol D-10278

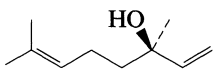
Updated Entry replacing D-03191
Rosiridol
[101391-01-9]



$C_{10}H_{18}O_2$ M 170.251
Struct. of Rosiridol questioned (1993). Constit. of *Rhodiola rosea*. Oil. $[\alpha]_D^{20}$ −7.7° (c, 1.3 in Me_2CO).
8-O-β-D-Glucopyranoside: [100462-37-1]. ***Rosiridin***
$C_{16}H_{28}O_7$ M 332.393
From *R. rosea*. Oil. $[\alpha]_D^{20}$ −32.7° (c, 1.1 in Me_2CO).
Enantiomer: Isorosiridol
$C_{10}H_{18}O_2$ M 170.251
Oil. $[\alpha]_D^{20}$ +25°.
Enantiomer, di-Ac:
$C_{14}H_{22}O_4$ M 254.325
Constit. of *Cunila spicata*. Oil. $[\alpha]_D^{20}$ −27° (c, 1.4 in Me_2CO).
Kurkin, V.A. *et al*, *Khim. Prir. Soedin.*, 1985, **21**, 593.
Manns, D., *Planta Med.*, 1993, **59**, 171 (*isol, pmr, cmr*)

3,7-Dimethyl-1,6-octadien-3-ol D-10279

Updated Entry replacing D-03196
Linalool. *Linalol. Linalyl alcohol. Licareol. Coriandrol*
[78-70-6]



(*R*)-*form*

$C_{10}H_{18}O$ M 154.252
Prod. synthetically by several routes. Used extensively in perfumery industry. Important intermed. in manuf. of α-Tocopherol, T-01508.
▷ Mod. toxic. RG5775000.
(*R*)-*form* [126-91-0]
Constit. of many essential oils including *Melissa officinalis* (lemon balm), rose, neroli and lavender. Major component of oil of *Mentha arvensis*. Shows sedative and antibacterial props.; active ingredient of herbal medicines containing lemon balm extracts. Oil. Bp_{756} 197-200°. $[\alpha]_D^{20}$ −17°.
3-O-[α-L-Rhamnopyranosyl-(1→2)-glucopyranoside]: ***Anatolioside***
$C_{22}H_{38}O_{10}$ M 462.536
Constit. of *Viburnum orientale*. Amorph. powder. $[\alpha]_D^{20}$ −31.4° (c, 0.29 in MeOH).
3-O-[(6-Hydroxy-2,6-dimethyl-2,7-octadienoyl)-(1→4)-α-L-rhamnopyranosyl-(1→2)-β-D-glucopyranoside]: ***Anatolioside A***
$C_{32}H_{52}O_{12}$ M 628.756
Constit. of *V. orientale*. Amorph. powder. $[\alpha]_D^{20}$ −40.1° (c, 0.39 in MeOH).
(*S*)-*form* [126-90-9]
Constit. of coriander and other essential oils. Major component of oil of *Cryptocarya moschata* and *C. aschersoniana*. Oil. Bp 198-200°, Bp_{20} 85-90°.
3-O-β-D-Glucopyranoside: [82928-12-9].
$C_{16}H_{28}O_6$ M 316.394

Constit. of fronds of *Arachniodes maximowiczii*. Oil. $[\alpha]_D^{22}$ −160° (c, 4.0 in MeOH).

3-O-[β-L-Fucopyranosyl-(1→6)-β-D-glucopyranoside]:
$C_{22}H_{38}O_{10}$ M 462.536
Constit of fronds of *A. maximowiczii*. Syrup. $[\alpha]_D^{22}$ −27° (c, 2.0 in MeOH).

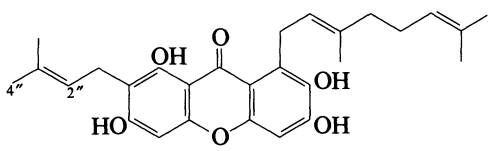
(ξ)-form

Ac: [115-95-7]. *Linalool acetate*
$C_{12}H_{20}O_2$ M 196.289
Isol. from numerous plants.

(±)-form [22564-99-4]
Bp 198°. n_D^{20} 1.4616.

Ohloff, G. *et al*, *Tetrahedron*, 1962, **18**, 37 (*abs config*)
Naves, Y.R. *et al*, *Helv. Chim. Acta*, 1963, **46**, 1056, 2551 (*isol, uv*)
Wilhalm, B. *et al*, *Acta Chem. Scand.*, 1964, **18**, 1573 (*ms*)
Nair, G.V. *et al*, *Tetrahedron Lett.*, 1966, 5097 (*synth*)
Suga, T. *et al*, *Bull. Chem. Soc. Jpn.*, 1972, **45**, 1480 (*biosynth*)
Karrer, W. *et al*, *Konstitution und Vorkommen der Organischen Pflanzenstoffe*, 2nd Ed., Birkhäuser Verlag, Basel, 1972-1985, no. 120 (*occur*)
Bohlmann, F. *et al*, *Org. Magn. Reson.*, 1975, **7**, 426 (*cmr*)
Takabe, K. *et al*, *Tetrahedron Lett.*, 1975, 3005 (*synth*)
Julia, M. *et al*, *Bull. Soc. Chim. Fr.*, 1976, 513 (*synth*)
Scarborough, R.M. *et al*, *J. Org. Chem.*, 1979, **44**, 1742 (*synth*)
Tange, K. *et al*, *Bull. Chem. Soc. Jpn.*, 1981, **54**, 2763 (*biosynth*)
Tanaka, N. *et al*, *Chem. Pharm. Bull.*, 1986, **34**, 1015 (*derivs*)
Ohwa, M. *et al*, *J. Org. Chem.*, 1986, **51**, 2599 (*synth*)
Howell, A.R. *et al*, *J. Chem. Soc., Perkin Trans. 1*, 1990, 2715 (*synth*)
Çaliş, I. *et al*, *Helv. Chim. Acta*, 1993, **76**, 416 (*Anatoliosides*)
Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th Ed., Van Nostrand-Reinhold, 1992, LFX000, LFY000.

1-(3,7-Dimethyl-2,6-octadienyl)-2,3,6,8-tetrahydroxy-7-(3-methyl-2-butenyl) xanthone D-10280



$C_{28}H_{32}O_6$ M 464.557

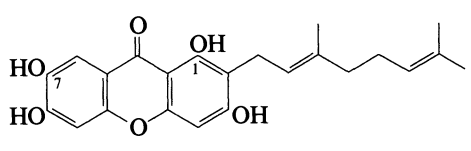
(E)-form

2-Me ether: [21044-85-9]. *1-Geranyl-3,6,8-trihydroxy-2-methoxy-7-prenylxanthone.* ***Cowanin***
$C_{29}H_{34}O_6$ M 478.584
Isol. from *Garcinia cowa*.

2-Me ether, 4″-hydroxy: [21044-79-1]. ***Cowanol***
$C_{29}H_{34}O_7$ M 494.583
Isol. from *G. cowa*.
▷ C-2″ config. not determined.

Krahn, M.M., *Diss. Abstr. Int., B*, 1968, **29**, 941.

2-(3,7-Dimethyl-2,6-octadienyl)-1,3,6,7-tetrahydroxyxanthone D-10281



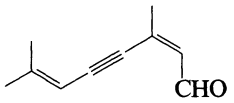
$C_{23}H_{24}O_6$ M 396.439

(E)-form

7-Me ether: [21044-78-0]. *2-Geranyl-1,3,6-trihydroxy-7-methoxyxanthone.* ***Cowaxanthone***
$C_{24}H_{26}O_6$ M 410.466
Isol. from *Garcinia cowa*.

Krahn, M.M., *Diss. Abstr. Int., B*, 1968, **29**, 941.

3,7-Dimethyl-2,6-octadien-4-ynal D-10282



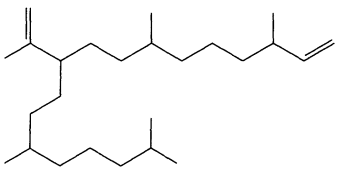
$C_{10}H_{12}O$ M 148.204

(Z)-form [142474-79-1] ***Taxifolial D***
Constit. of *Caulerpa taxifolia*. Oil.

Guerriero, A. *et al*, *Helv. Chim. Acta*, 1992, **75**, 689 (*isol, pmr, cmr*)

3-(3,7-Dimethyloctyl)-2,6,10-trimethyl-1,11-dodecadiene D-10283

10-Isopropenyl-3,7,13,17-tetramethyl-1-octadecane
[149402-60-8]

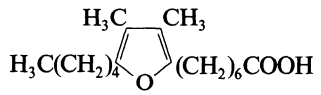


$C_{25}H_{48}$ M 348.654
Constit. of diatomaceous microbial communities. Oil. $[\alpha]_D$ +1.8° (c, 0.18 in $CHCl_3$).

Summons, R.E. *et al*, *Aust. J. Chem.*, 1993, **46**, 907 (*isol, ms, pmr, cmr*)

3,4-Dimethyl-5-pentyl-2-furanheptanoic acid, 9CI D-10284

8,11-Epoxy-9,10-dimethyl-8,10-hexadienoic acid. F_0 acid
[92745-17-0]

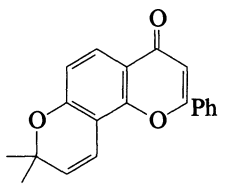


$C_{18}H_{30}O_3$ M 294.433
Component of F acid fraction present in human and beef blood serum.

Okajima, H. *et al*, *Chem. Pharm. Bull.*, 1984, **32**, 3281 (*isol*)
Puchta, V. *et al*, *Justus Liebigs Ann. Chem.*, 1988, 25 (*occur*)
Hannemann, K. *et al*, *Lipids*, 1989, **24**, 296 (*occur*)

8,8-Dimethyl-2-phenyl-4*H*,8*H*-benzo[1,2-*b*:3,4-*b*']dipyran-4-one, 9CI D-10285

6″,6″-Dimethylpyrano[2″,3″:7,8]flavone
[64125-32-2]



$C_{20}H_{16}O_3$ M 304.345
Constit. of the roots of *Dahlstedtia pentaphylla*. Needles (C_6H_6/pet. ether). Mp 131°.

Jain, A.C. *et al*, *Tetrahedron*, 1979, **35**, 413 (*synth*)
Islam, A. *et al*, *Indian J. Chem., Sect. B*, 1981, **20**, 21 (*synth*)
Garcez, F.R. *et al*, *Phytochemistry*, 1988, **27**, 1079 (*isol*)

Dimethyl sulfoxide, BAN, USAN, INN D-10286

Sulfinylbismethane, 9CI. Methyl sulfoxide. DMSO. Dermavet. Iduridine. NSC 763. Numerous proprietary names

[67-68-5]

MeSOMe

C_2H_6OS M 78.135

Constit. of *Phaseolus vulgaris, Medicago sativa.* Manuf. by oxidation of Dimethyl sulfide, D-03295. Widely used solvent and reagent in org. synth. Dissolves some inorganic salts, facilitates many reactions. Oxidising agent. Pharmaceutical aid for vet. applications. Topical antiinflammatory agent. Liq. Misc. H_2O, org. solvs. d_4^{20} 1.100. Mp 18.5°. Bp 189°, $Bp_{0.37}$ 20°. n_D^{25} 1.4790, n_D^{25} 1.4775. Dielectric constant ε = 46.45. Viscosity 1.991 cP.

▷ Can decompose exothermically at 150°. Can cause redness, itching and scaling of skin and damage to eyes. Low oral toxicity, but readily absorbed by skin with adverse systemic effects reported. Can act as a carrier for skin absorption of other chemicals. Fl.p. 95° (oc), autoignition temp. 215/270°. PV6210000.

U.S. Pat., 2 581 050, (1952); *CA*, **46**, 8669 (*synth*)
Martin, D. *et al*, *Angew. Chem., Int. Ed. Engl.*, 1967, **6**, 318 (*rev*)
Jacob, S.W. *et al*, *Arzneim.-Forsch.*, 1967, **17**, 1553 (*pharmacol, tox*)
Allan, G.G. *et al*, *Chem. Ind. (London)*, 1967, 1706 (*haz*)
Dimethyl Sulfoxide, (eds. Jacob, S.W. *et al*) M. Dekker, New York, 1971 (*book, tox, pharmacol*)
Jacob, S.W. *et al*, *Ann. N.Y. Acad. Sci.*, Eds., 1975, **243** (*book*)
Large, R. *et al*, *Org. Mass Spectrom.*, 1976, **11**, 582 (*ms*)
Frolov, Y.L. *et al*, *Izv. Akad. Nauk SSSR, Ser. Khim.*, 1978, 1042; *Bull. Acad. Sci. USSR, Div. Chem. Sci. (Engl. Transl.)*, 901 (*uv*)
Fieser and Fieser's Reagents for Organic Synthesis, Wiley, 1980, **8**, 198.
Pearson, T.W. *et al*, *J. Agric. Food Chem.*, 1981, **29**, 1089 (*occur*)
Mancuso, J. *et al*, *Synthesis*, 1981, 165 (*rev, bibl*)
Kharasch, N. *et al*, *Ann. N.Y. Acad. Sci.*, 1983, **411**, 391 (*rev, struct, props*)
Swanson, B.N. *et al*, *Rev. Clin. Basic Pharmacol.*, 1985, **5**, 1 (*rev, pharmacol*)
Cataliotti, R.S. *et al*, *Spectrochim. Acta, Part A*, 1986, **42**, 855 (*ir, raman*)
Negwer, M., *Organic-Chemical Drugs and their Synonyms*, 6th Ed., Akademie-Verlag, Berlin, 1987, 64.
Martin, G.F. *et al*, *Synth. Commun.*, 1987, **17**, 1667 (*purifn*)
Itoh, S. *et al*, *Z. Naturforsch., A*, 1987, **42**, 858 (*struct*)
Casida, J.E. *et al*, *J. Agric. Food Chem.*, 1992, **40**, 1425 (*cmr, pmr*)
Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th Ed., Van Nostrand-Reinhold, 1992, DUD800.
Bretherick, L., *Handbook of Reactive Chemical Hazards*, 4th edn., Butterworth, London and Boston, 1990, 0867.
Luxon, S.G., *Hazards in the Chemical Laboratory*, 5th edn., Royal Society of Chemistry, Cambridge, 1992, 524.
Patty's Ind. Hyg. Toxicol. (4th edn.), Wiley, 1993, **2**, 2087.

2,4-Dimethylthiophene D-10287

[638-00-6]

C_6H_8S M 112.195

Constit. of *Allium* spp. and *Azadirachta indica.* Also found in various cooked foods. Odorant used in food flavouring. Insol. H_2O; sol. Et_2O, EtOH, C_6H_6. Bp 140.7°.

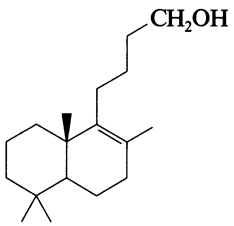
▷ Mod. toxic.

Zelinsky, N., *Ber.*, 1887, **20**, 2018.
Nishimura, H. *et al*, *J. Org. Chem.*, 1975, **40**, 1567 (*synth, ir, ms, pmr*)
Mubarak, A.M. *et al*, *Phytochemistry*, 1990, **29**, 3351 (*isol*)
Takeshita, M. *et al*, *J. Org. Chem.*, 1991, **56**, 2837 (*synth*)
Sax, N.I., *Dangerous Properties of Industrial Materials*, 5th Ed., Van Nostrand-Reinhold, 1979, 1030.

15,16-Dinor-8-labden-14-ol D-10288

Luffarin Y

[145398-75-0]

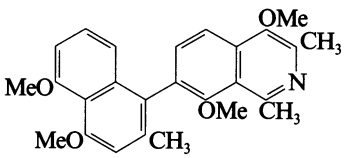


$C_{18}H_{32}O$ M 264.450

Constit. of *Luffariella geometrica.* Oil. $[\alpha]_D^{20}$ +72.3° (c, 1.6 in $CHCl_3$).

Butler, M.-S. *et al*, *Aust. J. Chem.*, 1992, **45**, 1705 (*isol, pmr, cmr*)

Dioncophyllacine A D-10289



$C_{26}H_{27}NO_4$ M 417.504

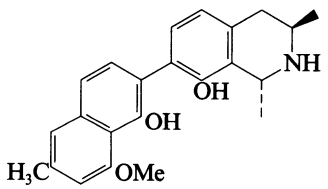
(±)-***form*** [146471-70-7]

Alkaloid from leaves of *Triphyopyllum peltatum* (Dioncophyllaceae). Needles (MeOH). Mp 177-179°.

Bringmann, G. *et al*, *Phytochemistry*, 1992, **31**, 4015 (*isol, ir, pmr, ms, cryst struct*)

Dioncophylline B D-10290

[140367-82-4]



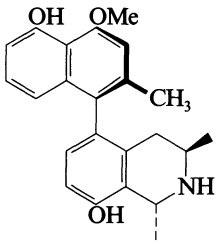
$C_{23}H_{25}NO_3$ M 363.455

Alkaloid from the root bark of *Triphyophyllum peltatum* (Dioncophyllaceae). Needles + ½MeOH. $[\alpha]_D^{20}$ −37.6° (c, 0.37 in $CHCl_3$).

Bringmann, G. *et al*, *Phytochemistry*, 1991, **30**, 3845 (*isol, ir, pmr, cmr, struct*)

Dioncophylline C D-10291

[146471-75-2]



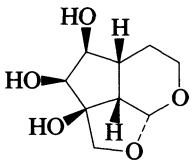
$C_{23}H_{25}NO_3$ M 363.455

Alkaloid from root bark of *Triphyophyllum peltatum* (Dionchophyllaceae). Mp 246° dec. $[\alpha]_D^{20}$ +19.2° (c, 0.52 in $CHCl_3$).

Bringmann, G. *et al*, *Phytochemistry*, 1992, **31**, 4019 (*isol, ir, pmr, cd, ms, struct*)

2,10-Dioxatricyclo[6.2.1.0^{5,11}]undecane-6,7,8-triol D-10292

[103744-68-9]



$C_9H_{14}O_5$ M 202.207

Constit. of *Picrorhiza kurrooa*. Cryst. (EtOH) (as tri-Ac). Mp 167-168° (tri-Ac). $[\alpha]_D$ +33.2° (c, 1 in Me_2CO) (tri-Ac).

Weinges, K. *et al*, *Justus Liebigs Ann. Chem.*, 1989, 1113 (*isol, cryst struct*)

4,5-Dioxo-2-hexadecenoic acid D-10293

$H_3C(CH_2)_{10}COCOCH{=}CHCOOH$

$C_{16}H_{26}O_4$ M 282.379

(E)-form [135863-69-3] ***Podoscyphic acid***

Isol. from the basidiomycete *Podoscypha* sp. Enzyme inhibitor. Pale yellow solid. Mp 105°.

Et ester: [135863-70-6].

$C_{18}H_{30}O_4$ M 310.433

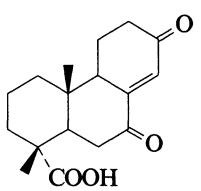
Pale yellow oil.

Bis(2,4-dinitrophenylhydrazone): Orange-red cryst. Mp 210°.

Erkel, G. *et al*, *Z. Naturforsch., C*, 1991, **46**, 442 (*isol, props*)

7,13-Dioxo-8(14)-podocarpen-18-oic acid D-10294

[151480-68-1]



$C_{17}H_{22}O_4$ M 290.358

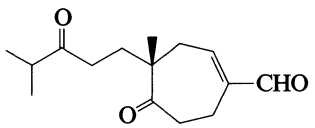
Constit. of *Pinus massoniana*.

Cheung, H.T.A. *et al*, *Tetrahedron*, 1993, **49**, 7903 (*isol, pmr, cmr*)

4,5-Dioxo-4,5-seco-8-daucen-14-al D-10295

Secocarotanal

[147029-01-4]



$C_{15}H_{22}O_3$ M 250.337

Constit. of *Rosa rugosa*. Syrup.

Hashidoko, Y. *et al*, *Phytochemistry*, 1993, **32**, 387 (*isol, pmr, cmr*)

1,5-Diphenyl-1,4-pentadiene D-10296

Updated Entry replacing D-03412

1,1'-(1,4-Pentadiene-1,5-diyl)bisbenzene, 9CI

[52267-15-9]

$PhCH{=}CHCH_2CH{=}CHPh$

$C_{17}H_{16}$ M 220.313

(E,E)-form [26057-48-7]

Oil. $Bp_{0.5}$ 170°.

(E,Z)-form [26057-49-8]

Isol. from *Caulerpa racemosa*. Oil.

(Z,Z)-form [26057-47-6]

Obt. chromatographically, no phys. props. reported.

Brenner, S. *et al*, *Isr. J. Chem.*, 1969, **7**, 735 (*synth, pmr*)
Boyle, P.H. *et al*, *J. Org. Chem.*, 1973, **38**, 826 (*synth*)
Shoppee, C.W. *et al*, *J. Chem. Soc., Perkin Trans. 1*, 1975, 765 (*synth*)
Komatsu, K. *et al*, *Bull. Chem. Soc. Jpn.*, 1982, **55**, 2470 (*synth*)
Tolbert, L.M. *et al*, *J. Am. Chem. Soc.*, 1990, **112**, 9519 (*synth, pmr, cmr*)
Anjaneyulu, A.S.R. *et al*, *J. Nat. Prod.* (*Lloydia*), 1992, **55**, 497 (*isol, pmr, cmr*)

Diphosphine, 9CI, 8CI D-10297

Biphosphine. Phosphinophosphine. Diphosphane

[13445-50-6]

H_2PPH_2

H_4P_2 M 65.979

Monomeric. Gauche conformation preferred. Interatomic distances: P—H 145.1, P—P 221.8 pm; angles: PPH 95.2°, HPH 91.3°. By-product in synth. of PH_3. Obt. by incubation of human faeces with a mixed bacterial culture under anaerobic conditions. Liq. which polym. when heated. Dec. at −30°. Light sensitive. Poly cryst. solid at low temps. Mp −99°. Bp 66.7° (51.7°). When heated, yields higher phosphines.

▷ Highly toxic. Spont. flammable.

Evers, E.C. *et al*, *J. Am. Chem. Soc.*, 1956, **78**, 5726 (*synth*)
Gmelin Handbook Inorg. Chem., Syst. No. 16, 1965, **C**, 51 (*rev, bibl*)
Frankiss, S.G., *Inorg. Chem.*, 1968, **7**, 1931 (*ir, raman, props*)
Fieser and Fieser's Reagents for Organic Synthesis, Wiley, 1969, **2**, 329 (*use*)
Mellor Compr. Treat. Inorg. Theor. Chem., Longman, London, 1971, **8/III**, 272, 1141 (*rev*)
Beagley, B. *et al*, *J. Mol. Struct.*, 1972, **11**, 371 (*ed*)
Durig, J.R. *et al*, *J. Am. Chem. Soc.*, 1974, **96**, 2688 (*synth, microwave, struct*)
Albrand, J.P. *et al*, *Inorg. Chem.*, 1975, **14**, 570 (*synth*)
Odom, J.D. *et al*, *Inorg. Chem.*, 1975, **14**, 2849 (*ir, raman*)
Brauer, G., *Handbuch Präp. Anorg. Chem.*, 3rd Ed., Ferdinand Enke Verlag, 1975-1981, **1**, 514 (*synth*)
Elbel, S. *et al*, *Inorg. Chem.*, 1976, **15**, 1235 (*synth, pe, struct*)
Baudler, M. *et al*, *Z. Anorg. Allg. Chem.*, 1977, **437**, 78 (*ir, raman*)

Galasso, V., *J. Magn. Reson.*, 1979, **36**, 181 (*nmr*)
Gassmann, G. *et al*, *Angew. Chem., Int. Ed. Engl.*, 1993, **32**, 761 (*synth*)
Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th Ed., Van Nostrand-Reinhold, 1992, DWP229.

1,3-Dithiane, 9CI D-10298

m-*Dithiane, 8CI*

[505-23-7]

$C_4H_8S_2$ M 120.239

Constit. of garlic and other *Allium* spp. Used in synth. as a formyl anion equivalent. Cryst. (MeOH). Mp 54°. Sublimes.

1-Oxide: [16452-25-8].
$C_4H_8OS_2$ M 136.239
Mp 87-88°.

1,1-Dioxide: [55337-75-2].
$C_4H_8O_2S_2$ M 152.238
Cryst. ($CHCl_3$/Et_2O). Mp 139-140°.

cis-*1,3-Dioxide:* [55337-76-3].
$C_4H_8O_2S_2$ M 152.238
Cryst. (MeOH). Mp 239-240° (215-216°).

trans-*1,3-Dioxide:* [132141-02-7].
$C_4H_8O_2S_2$ M 152.238
Cryst. (EtOH). Mp 182-183°. Known also in opt. active form (*R,R*-enantiomer, $[\alpha]_D$ +243°, 99.8% e.e.).

1,1,3,3-Tetraoxide: [26413-18-3].
$C_4H_8O_4S_2$ M 184.237
Mp 330°.

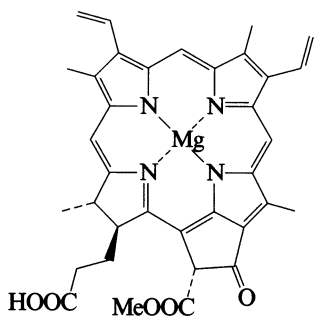
[16487-10-8]

Carlson, R.M. *et al*, *J. Org. Chem.*, 1968, **33**, 2596 (*monoxides*)
Org. Synth., 1970, **50**, 72 (*synth*)
Khan, S.A. *et al*, *J. Am. Chem. Soc.*, 1975, **97**, 1468 (*dioxides*)
Adams, W.J. *et al*, *J. Mol. Struct.*, 1977, **37**, 261 (*cryst struct*)
Fieser and Fieser's Reagents for Organic Synthesis, Wiley, 1980, **8**, 217, 246; 1981, **9**, 48, 235; 1982, **10**, 231; 1984, **11**, 285; 1986, **12**, 573; 1992, **16**, 161 (*use*)
Labiad, B. *et al*, *Synth. Commun.*, 1989, **19**, 31 (*synth*)
Bien, S. *et al*, *J. Chem. Soc., Perkin Trans. 2*, 1990, 1987 (*dioxides*)
Aggarwal, V.K. *et al*, *J. Org. Chem.*, 1992, **57**, 6390 (*R,R-dioxide*)

Divinylchlorophyllide a D-10299

Updated Entry replacing D-03501

[74735-51-6]



$C_{35}H_{32}MgN_4O_5$ M 612.967

Photoreduction prod. of protochlorophyllide. Intermed. in Chlorophyll a, C-10084 biosynth.

Wu, S.M. *et al*, *Tetrahedron*, 1984, **40**, 659 (*pmr, ms*)

13,16,19-Docosatrienoic acid D-10300

[59708-86-0]

$H_3CCH_2(CH{=}CHCH_2)_3(CH_2)_9CH_2COOH$

$C_{22}H_{38}O_2$ M 334.541

All-(Z)-form [28845-86-5]

Isol. from rape seed oil. Widespread among marine organisms. Found in lipids of egg yolk, embryo of dogfish and in lipids and phospholipids of pancreatic islets.

[108698-01-7]

Haeffner, E., *Lipids*, 1970, **5**, 430 (*isol, struct*)
Moreno, V.J. *et al*, *Lipids*, 1979, **14**, 15, 313 (*biosynth*)
Diaz, G.B. *et al*, *Lipids*, 1988, **23**, 1125; 1990, **25**, 724 (*occur*)
Berger, A. *et al*, *Lipids*, 1990, **25**, 473 (*biosynth*)

2,8-Dodecadienoic acid D-10301

Updated Entry replacing D-03542

$H_3C(CH_2)_2CH{=}CH(CH_2)_4CH{=}CHCOOH$

$C_{12}H_{20}O_2$ M 196.289

(2E,8E)-form

Large plates. Mp 34-35°. $Bp_{0.8}$ 140°.

S-*Benzylthiouronium salt:* Plates (EtOAc). Mp 159°.
2-Methylpropylamide: Needles (pet. ether). Mp 53°.

(2Z,8E)-form

Bp_1 127-129°.

S-*Benzylthiouronium salt:* Plates (EtOAc). Mp 148°.
2-Methylpropylamide: $Bp_{0.6}$ 154°, $Bp_{0.03}$ 142°.

(2ξ,8ξ)-form

2-Methylpropylamide: N-*Isobutyl-2,8-dodecadienamide.*
Herculin
$C_{16}H_{29}NO$ M 251.411
Isol. from *Zanthoxylum clava-herculis*. Insecticide. Pungent needles (hexane). Mp 59-60°. Struct. doubtful.

Jacobson, M., *J. Am. Chem. Soc.*, 1948, **70**, 4234 (*isol, struct*)
Raphael, R.A. *et al*, *J. Chem. Soc.*, 1950, 115; 1951, 2693 (*synth*)
Crombie, L., *J. Chem. Soc.*, 1952, 2997 (*synth, struct*)

1,12-Dodecanediol D-10302

Updated Entry replacing D-03551

Dodecamethylenediol

[5675-51-4]

$HOCH_2(CH_2)_{10}CH_2OH$

$C_{12}H_{26}O_2$ M 202.336

Constit. of the leaf wax of *Chamaecyparis obtusa* and of *Pinus thunbergii*. Cryst. (EtOH aq. or C_6H_6). Mp 80-81°. Bp_{12} 189°.

Di-Me ether:
$C_{14}H_{30}O_2$ M 230.390
Mp 11.5°. Bp_{15} 155-156°.

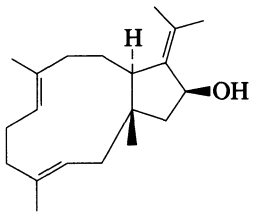
Di-Ac:
$C_{16}H_{30}O_4$ M 286.411
Mp 36.5-37.5°.

Di-Ph ether: [61575-03-9]. *1,1'-[1,12-Dodecanediylbis(oxy)] bisbenzene, 9CI. 1,2-Diphenoxydodecane*
$C_{24}H_{34}O_2$ M 354.531
Isol. from the leaves of *Arachis hypogaea* infected with *Puccinia arachidis*. Phytoalexin.

Chuit, P., *Helv. Chim. Acta*, 1926, **9**, 264 (*synth*)
Guyer, A. *et al*, *Helv. Chim. Acta*, 1955, **38**, 976.
Colonge, J. *et al*, *Bull. Soc. Chim. Fr.*, 1959, 1248 (*synth*)
White, R.W. *et al*, *Tetrahedron Lett.*, 1971, 3587 (*synth*)
Drewes, S.E. *et al*, *J. Chem. Soc., Perkin Trans. 1*, 1974, 2578.

Rosen, M.J. *et al*, *J. Am. Oil Chem. Soc.*, 1976, **53**, 742 (*di-Ph ether*)
Rao, P.V.S. *et al*, *Oleagineux*, 1991, **46**, 501; *CA*, **116**, 252152 (*di-Ph ether*)

3,7,12(18)-Dolabellatrien-13-ol D-10303



$C_{20}H_{32}O$ M 288.472

(3E,7E,13β)-form

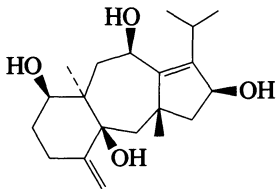
Isopalominol

Constit. of *Eunicea laciniata*. Cryst. Mp 117.3-119°.

Rodríguez, A.D. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 1843 (*isol, pmr, cmr*)

1(15),8-Dolastadiene-4,7,10,14-tetrol D-10304

Updated Entry replacing D-03617



$C_{20}H_{32}O_4$ M 336.470

(4β,7β,10β,14β)-form

7,10-Di-Ac: [75744-69-3]. ***Amijidictyol***
$C_{24}H_{36}O_6$ M 420.545
Constit. of *Dictyota linearis*. Cryst. Mp 187-189°. $[\alpha]_D$ −40° ($CHCl_3$).

7-Ac: [140475-71-4]. ***Deacetylamijidictyol***
$C_{22}H_{34}O_5$ M 378.508
Constit. of *Dictyota divaricata*. Amorph. powder. $[\alpha]_D^{27}$ −90° (c, 0.05 in MeOH).

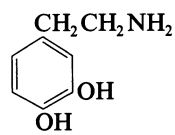
Ochi, M. *et al*, *Chem. Lett.*, 1980, 1233.
Li, L.N. *et al*, *Chin. Chem. Lett.*, 1991, **2**, 621 (*isol, pmr, cmr, deriv*)

Dopamine, BAN, INN D-10305

Updated Entry replacing D-03651

4-(2-Aminoethyl)-1,2-benzenediol, 9CI. 2-(3,4-Dihydroxyphenyl)ethylamine. 3,4-Dihydroxyphenethylamine. Hydroxytyramine. Oxytyramine. Cardiosteril. Dopastat. Intropin. NSC 169105. ASL 279

[51-61-6]



$C_8H_{11}NO_2$ M 153.180

Occurs in animals, esp. in the brain and nervous system, and in several higher plants, such as broom (*Cytisus scoparius*) and banana (*Musa sapientium*), and in the alga *Monostroma fuscum* (Leguminosae, Musaceae). Adrenergic, sympathomimetic, vasopressor. Autoxidises very readily as free base.

▷ LD_{50} (rat, ipr) 163 mg/kg. Exp. reprod. and teratogenic effects. UX1088000.

B,HCl: [62-31-7]. *Dopamine hydrochloride, USAN, JAN*
Mp 240-241° dec. (>220° dec.).
▷ Adverse effects (incl. ocular effect) reported when used therapeutically. LD_{50} (rat, ipr) 597 mg/kg. Exp. reprod. and teratogenic effects. UX1092000.

O^3-*β-D-Glucoside:* [50908-96-8]. ***Dopamine 3-O-glucoside***
$C_{14}H_{21}NO_7$ M 315.322
Alkaloid from seeds of *Entada pursaetha* (Leguminosae). Semicryst. brown solid. $[\alpha]_D^{20}$ −62.0° (c, 2 in H_2O).

O^3-*β-D-Glucoside, per-Ac:* $[\alpha]_D$ −16° (c, 3.6 in EtOH), $[\alpha]_D^{20}$ +0.7° (c, 5 in $CHCl_3$).

N-*Me:* see *Epinine, E-00341*

N-*Tri-Me:* see *Coryneine, C-01901*

O^3-*Me:* see *4-Hydroxy-3-methoxyphenethylamine, H-02273*

O^4-*Me:* [3213-30-7]. ***3-Hydroxy-4-methoxyphenethylamine.*** *5-(2-Aminoethyl)-2-methoxyphenol, 9CI, 8CI*
Alkaloid from *Pachycereus pecten-aboriginum* (Cactaceae). Identified chromatographically.

Di-Me ether: see *3,4-Dimethoxyphenethylamine, D-02990*

O^4-*Me*, N-(*4-Hydroxy-3-methoxycinnamoyl*) (E-)*:* **N-trans-*Feruloyl*-4-O-*methyldopamine***
$C_{19}H_{21}NO_5$ M 343.379
Alkaloid from roots of *Chenopodium album* (Chenopodiaceae). Oil.

Org. Synth., Coll. Vol., 3, 1955, 720 (*synth*)
Waalkes, T.P. *et al*, *Science* (*Washington, D.C.*), 1958, **127**, 648 (*isol*)
Keppe, T. *et al*, *J. Med. Chem.*, 1965, **8**, 368 (*uv*)
Lundström, J., *Acta Chem. Scand.*, 1971, **25**, 3489 (*biosynth*)
Agurell, S. *et al*, *J. Nat. Prod.* (*Lloydia*), 1971, **34**, 183 (*3-Hydroxy-4-methoxyphenethylamine*)
Milne, G.W. *et al*, *Anal. Chem.*, 1973, **45**, 1952 (*ms*)
Larsen, P.O. *et al*, *Phytochemistry*, 1973, **12**, 2243 (*glucoside*)
Lambert, F. *et al*, *Org. Magn. Reson.*, 1975, **72**, 66 (*pmr*)
Smith, T.A., *Phytochemistry*, 1977, **16**, 9 (*occur, bibl*)
Scratchley, G.A. *et al*, *J. Chromatogr.*, 1979, **169**, 313 (*hplc*)
Carter, J.E. *et al*, *Anal. Profiles Drug Subst.*, 1982, **11**, 257 (*rev, uv, ir, pmr, cmr, ms, anal*)
Carey, R.M. *et al*, *Recent Prog. Horm. Res.*, 1986, **42**, 251 (*rev*)
Negwer, M., *Organic-Chemical Drugs and their Synonyms*, 6th Ed., Akademie-Verlag, Berlin, 1987, 946 (*synonyms*)
Martindale, The Extra Pharmacopoeia, 30th edn., Pharmaceutical Press, London, 1993, 1243.
Horio, T. *et al*, *Phytochemistry*, 1993, **33**, 807 (*N-trans-Feruloyl-4-O-Methyldopamine*)
Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th Ed., Van Nostrand-Reinhold, 1992, DYC400, DYC600.

Dotriacontane, 9CI D-10306

Dicetyl. Lacceran. Bicetyl

[544-85-4]

$H_3C(CH_2)_{30}CH_3$

$C_{32}H_{66}$ M 450.873

Constit. of higher plants, eg. *Bacopa monnieri, Mentha aquatica, Agave sisalana*. Plates (Et_2O). Mp 74-75°. $Bp_{1.5}$ 245°.

▷ JT2360000.

Levene, P.A. *et al*, *J. Biol. Chem.*, 1915, **20**, 530 (*synth*)
Brown, I. *et al*, *J. Chem. Soc.*, 1960, 2783 (*isol*)
Razafindrazaka, J. *et al*, *Bull. Soc. Chim. Fr.*, 1963, 1633 (*isol*)

2-Dotriacontanone, 9CI D-10307

[77327-15-2]

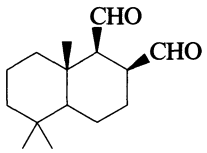
$H_3C(CH_2)_{29}COCH_3$

$C_{32}H_{64}O$ M 464.857

Isol. from the snakes *Boiga irregularis* and *Thamnophis sirtalis parietalis*. Sex attractant pheromone.

Mason, R.T. *et al*, *J. Chem. Ecol.*, 1990, **16**, 2353 (*isol, ms*)
Murata, Y. *et al*, *J. Nat. Prod.* (*Lloydia*), 1991, **54**, 233 (*isol*)

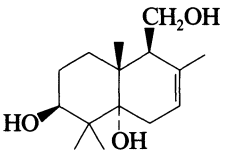
11,12-Drimanedial D-10308



$C_{15}H_{24}O_2$ M 236.353
Constit. of a *Dysidea* sp. Oil. $[\alpha]_D$ +8.5° (c, 0.55 in $CHCl_3$).

Butler, M.S. *et al*, *Aust. J. Chem.*, 1993, **46**, 1255 (*isol, pmr, cmr*)

7-Drimene-3,5,11-triol D-10309

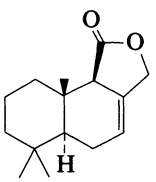


$C_{15}H_{26}O_3$ M 254.369
(*3β,5α*)-*form* [82526-29-2] ***Uvidin F***
Constit. of *Lactarius uvidus*.

De Bernardi, M. *et al*, *CA*, 1982, **97**, 69267n.

7-Drimen-11,12-olide D-10310

Updated Entry replacing D-03695
Drimenin
[2326-89-8]

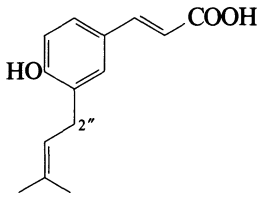


$C_{15}H_{22}O_2$ M 234.338
Constit. of *Drimys winteri*. Cryst. (MeOH). Mp 133°. $[\alpha]_D$ −42° (c, 0.76 in C_6H_6).
11α-Alcohol: [72581-69-2]. *11,12-Epoxy-7-drimen-11α-ol.* ***Isodrimeninol***
$C_{15}H_{24}O_2$ M 236.353
Constit. of *Polygonum hydropiper*. Oil. $[\alpha]_D$ −37° (c, 1.5 in $CHCl_3$).
11β-Alcohol: [67594-76-7]. ***Drimeninol***
$C_{15}H_{24}O_2$ M 236.353
Constit. of *Porella* spp. Oil. $[\alpha]_D$ −26°.

Appel, H.H. *et al*, *J. Chem. Soc.*, 1960, 4685 (*isol*)
Kitahara, Y. *et al*, *J. Chem. Soc., Chem. Commun.*, 1969, 342 (*synth*)
Yanagawa, H. *et al*, *Synthesis*, 1970, 257 (*synth*)
Asakawa, Y. *et al*, *Phytochemistry*, 1978, **17**, 457 (*Drimeninol*)
Asakawa, Y. *et al*, *Experientia*, 1979, **35**, 1420 (*Isodrimeninol*)
Jalali-Naini, M. *et al*, *Tetrahedron*, 1983, **39**, 749 (*synth*)
Liapis, M. *et al*, *J. Chem. Soc., Perkin Trans. 1*, 1985, 815 (*synth*)
Ragoussis, V. *et al*, *J. Chem. Soc., Perkin Trans. 1*, 1987, 987 (*synth*)
Harrigan, G.G. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 921 (*cmr*)

Drupanin D-10311

Updated Entry replacing D-03709
3-[4-Hydroxy-3-(3-methyl-2-butenyl)phenyl]-2-propenoic acid, 9CI. 4-Hydroxy-3-prenylcinnamic acid
[53755-58-1]

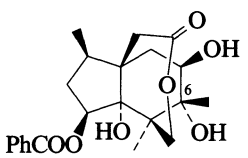


$C_{14}H_{16}O_3$ M 232.279
Constit. of the fruits of *Psoralea drupacea*. Acicular cryst. Mp 147-148°.
Me ester: [72704-01-9]. ***Plicatin B***
$C_{15}H_{18}O_3$ M 246.305
Isol. from leaves and stem of *P. juncea* and from *P. plicata*. Cryst. (Et_2O/hexane). Mp 86-87° (72°).
2″R-Hydroxy, Me ester: [131889-82-2]. ***Plicatin A***
$C_{15}H_{18}O_4$ M 262.305
Constit. of *Psoralea plicata*. Cryst. (Me_2CO). Mp 182°. $[\alpha]_D$ −59.7° (c, 0.067 in $CHCl_3$).
2″R-Hydroxy, Me ester, Me ether: Cryst. (EtOH). Mp 167°. $[\alpha]_D$ −57.6° (c, 0.07 in $CHCl_3$).

Golovina, L.A. *et al*, *Khim. Prir. Soedin.*, 1973, **9**, 700; *Chem. Nat. Compd.* (*Engl. Transl.*), 672 (*isol, uv, pmr, struct*)
Rasool, N. *et al*, *Phytochemistry*, 1990, **29**, 3979 (*isol, pmr, cmr, ms*)
Mitscher, L.A. *et al*, *Phytochemistry*, 1991, **30**, 3569 (*isol, pmr, cmr, uv, ir*)

Dunnianin D-10312

Updated Entry replacing D-03734
[116085-00-8]

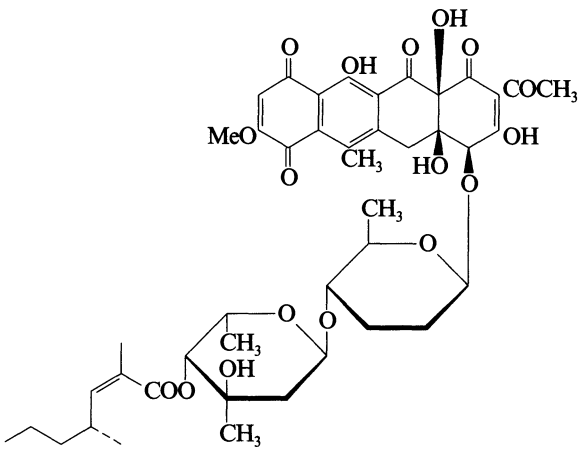


$C_{22}H_{28}O_7$ M 404.459
Constit. of the bark of *Illicium dunnianum*. Needles ($CHCl_3$). Mp 245-246°. $[\alpha]_D^{24}$ +61° (c, 0.1 in dioxan).
6-Deoxy: [116085-01-9]. ***6-Deoxydunnianin***
$C_{22}H_{28}O_6$ M 388.460
Constit. of the bark of *I. dunnianum*. Needles ($CHCl_3$/hexane). Mp 222-223°.
3-Deacyl, 3-Ac, 7-benzoyl: ***Isodunnianin***
$C_{24}H_{30}O_8$ M 446.496
Constit. of *I. tashiroi*. Cryst. (Et_2O/CH_2Cl_2). Mp 153-154°. $[\alpha]_D$ +1.32° (c, 0.3 in EtOH).

Kouno, I. *et al*, *J. Chem. Soc., Perkin Trans. 1*, 1988, 1537 (*isol, pmr, cmr*)
Fukuyama, Y. *et al*, *Planta Med.*, 1993, **59**, 181 (*Isodunnianin*)

Dutomycin D-10313

[146663-67-4]



$C_{44}H_{54}O_{17}$ M 854.900

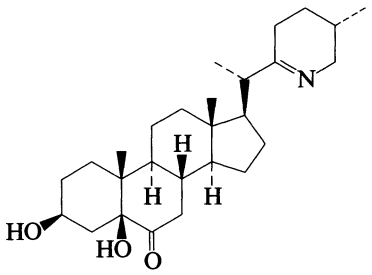
Anthracycline antibiotic. Prod. by a *Streptomyces* sp. Antitumour agent. Orange powdery cryst. Mp 237-238°. $[\alpha]_D^{24}$ −85° (c, 0.1 in DMSO).

Xuan, L.-J. *et al*, *J. Antibiot.*, 1992, **45**, 1974 (*isol*, *pmr*, *cmr*, *struct*)

E

Ebeietinone E-10001

[143114-79-8]



$C_{27}H_{43}NO_3$ M 429.642

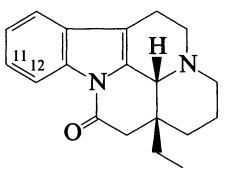
Alkaloid from bulbs of *Fritillaria ebeiensis* var. *purpurea* (Liliaceae). Needles (Me_2CO). Mp 199-203°. $[\alpha]_D$ −53.5° (c, 0.24 in $CHCl_3$).

Li, P. *et al*, *Phytochemistry*, 1992, **31**, 2190 (*isol, ir, pmr, cmr, ms, struct*)

Eburnamonine E-10002

Updated Entry replacing E-00011

Eburnamenin-14(15H)-one, 9CI. Huntericine



(+)-*form*

$C_{19}H_{22}N_2O$ M 294.396

(+)-*form* [474-00-0]

Alkaloid from *Hunteria eburnea, Amsonia tabernaemontana* and several other genera in the family Apocynaceae. Mp 183°. $[\alpha]_D^{26}$ +89° ($CHCl_3$).

N^4-*Oxide:* ***Eburnamonine N^4-oxide***

$C_{19}H_{22}N_2O_2$ M 310.395

Alkaloid from leaves of *Kopsia larutensis* (Apocynaceae). Mp 119-121°. $[\alpha]_D$ +56° (c, 0.35 in $CHCl_3$).

11,12-Dimethoxy: [19775-49-6]. ***Dimethoxyeburnamonine***

$C_{21}H_{26}N_2O_3$ M 354.448

Alkaloid from *Vinca minor* (Apocynaceae). Mp 220°.

(−)-*form* [4880-88-0]

Vincamone. ***Vinburnine,*** *INN. Cervoxan. Eburnal. Eburnoxine. Ebornoxin. Eubron. Luvenil. Monil. Scleramin. Tensiplex. CH 846*

Alkaloid from *V. minor* (Apocynaceae). Drug for stimulation of muscle activity. Cerebrotonic. Mp 173-174°. $[\alpha]_D$ −102° ($CHCl_3$).

11-Methoxy: [4800-93-5]. ***11-Methoxyeburnamonine***

$C_{20}H_{24}N_2O_2$ M 324.422

Alkaloid from *V. minor* (Apocynaceae). Needles (Me_2CO). Mp 169-170°. $[\alpha]_D^{22}$ −107° (c, 0.15 in $CHCl_3$).

(±)-*form* [2580-88-3]

Vincanorine

Alkaloid from *V. minor* (Apocynaceae). Cryst. (MeOH). Mp 203-204°.

B,HClO₄: Cryst. (dioxan). Mp 243-245°.

Mokrý, J. *et al*, *Experientia*, 1961, **17**, 354 (*uv, ir*)
Plat, M. *et al*, *Bull. Soc. Chim. Fr.*, 1962, 1082 (*ms*)
Bartlett, M.F. *et al*, *J. Org. Chem.*, 1963, **28**, 2197 (*cd, uv, ir*)
Trojánek, J. *et al*, *Collect. Czech. Chem. Commun.*, 1964, **29**, 433 (*uv, ir, synth*)
Trojánek, J. *et al*, *Chem. Ind. (London)*, 1965, 1261.
Döpke, W. *et al*, *Pharmazie*, 1968, **23**, 99 (*Dimethoxyeburnamonine*)
Döpke, W. *et al*, *Tetrahedron Lett.*, 1968, 1805 (*11-Methoxyeburnamonine*)
Chiesi, V.A. *et al*, *Cryst. Struct. Commun.*, 1973, **2**, 599 (*cryst struct*)
Cartier, D. *et al*, *Bull. Soc. Chim. Fr.*, 1976, 1961 (*synth*)
Hermann, J.L. *et al*, *Tetrahedron Lett.*, 1976, 801 (*synth*)
De Angelis, L., *Drugs of Today (Barcelona)*, 1978, **14**, 160 (*rev*)
Wenkert, E. *et al*, *Tetrahedron*, 1981, **37**, 4017 (*synth*)
Martindale, The Extra Pharmacopoeia, 28th/29th Ed., Pharmaceutical Press, London, 1982/1989, 14014.
Imanishi, T. *et al*, *Chem. Pharm. Bull.*, 1983, **31**, 1191 (*synth*)
Szabó, L. *et al*, *Tetrahedron*, 1983, **29**, 3737 (*synth, ir*)
Takano, S. *et al*, *J. Chem. Soc., Perkin Trans. 1*, 1985, 305 (*synth, ir, pmr, ms*)
Kalaus, G. *et al*, *J. Org. Chem.*, 1985, **50**, 3760 (*synth, ir, pmr, cmr, ms*)
Magnus, P. *et al*, *Tetrahedron*, 1986, **42**, 3215 (*synth*)
Node, M. *et al*, *J. Am. Chem. Soc.*, 1987, **109**, 7901 (*synth*)
Lewin, G. *et al*, *Tetrahedron*, 1987, **43**, 493 (*synth*)
Wenkert, G. *et al*, *J. Org. Chem.*, 1988, **53**, 1953 (*synth*)
Wasserman, H.H. *et al*, *Tetrahedron Lett.*, 1989, **30**, 873 (*synth*)
Kam, T.-S. *et al*, *Phytochemistry*, 1992, **31**, 2936 (*oxide*)

Echinozolinone E-10003

Updated Entry replacing E-00031

$C_{10}H_{10}N_2O_2$ M 190.201

Struct. unknown. Originally considered as 3-(2-Hydroxyethyl)-4(3*H*)-quinazolinone but props. of authentic synthetic material differ from those reported for natural Echinozolinone. The isomeric struct., 1-(2-Hydroxyethyl)-4(1*H*)-quinazolinone has also been excluded by synthesis. Alkaloid from aerial parts of *Echinops echinatus* (Compositae). Pale-yellow needles ($CHCl_3$/MeOH). Mp 150°.

7-Hydroxy: ***7-Hydroxyechinozolinone***

$C_{10}H_{10}N_2O_3$ M 206.201

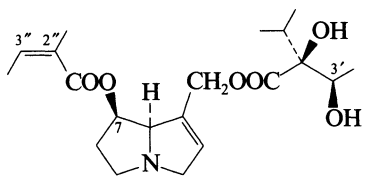
Minor alkaloid from flowers of *E. echinatus* (Compositae). Amorph. solid. Doubtful structural assignment (see statement under Echinozolinone above).

Chaudhuri, P.K., *Phytochemistry*, 1987, **26**, 587.
Reisch, J. *et al*, *J. Nat. Prod. (Lloydia)*, 1989, **52**, 404.
Chaudhuri, P.K., *J. Nat. Prod. (Lloydia)*, 1992, **55**, 249 (*deriv*)

Echiumine E-10004

Updated Entry replacing E-00037

[633-16-9]



$C_{20}H_{31}NO_6$ M 381.468

Diester of Retronecine with angelic and (+)- trachelanthic acids. Alkaloid from *Echium plantagineum, Amsinckia intermedia, Cryptantha leiocarpa* and *C. clevelandii* (Boraginaceae). Cryst. (pet. ether) (also descr. as a brown gum). Mp 99-100°. $[\alpha]_D$ +14.4° (c, 2.02 in EtOH).

Picrate: Cryst. (EtOH aq.). Mp 131-132°.

3'-Epimer: [74410-74-5]. ***Symlandine***
$C_{20}H_{31}NO_6$ M 381.468
Alkaloid from leaves of *Symphytum* x *uplandicum* (hybrid of *S. officinale* and *S. asperum*) (Boraginaceae). Diester of Retronecine with angelic and (−)-Viridifloric acids.

7-Epimer: ***7-Angelylheliotridine trachelanthate***
$C_{20}H_{31}NO_6$ M 381.468
Minor alkaloid from *Heliotropium supinum* (Boraginaceae). Diester of Heliosupine with angelic and trachelanthic acids. Obt. only as a mixt. with 7-Angelylheliotridine viridiflorate.

3',7-Diepimer: ***7-Angelylheliotridine viridiflorate.*** *7-Angelyl-9-viridiflorylheliotridine*
$C_{20}H_{31}NO_6$ M 381.468
Minor alkaloid from *H. supinum* (Boraginaceae). Diester of Heliosupine with angelic and viridifloric acids. Obt. only as a mixt. with 7-Angelylheliotridine trachelanthate.

2"R,3"S*-dihydroxy:* **threo-2",3"-Dihydroxyechiumine**
$C_{20}H_{33}NO_8$ M 415.483
Alkaloid from *C. leiocarpa* and *C. clevelandii* (Boraginaceae). Brown gum.

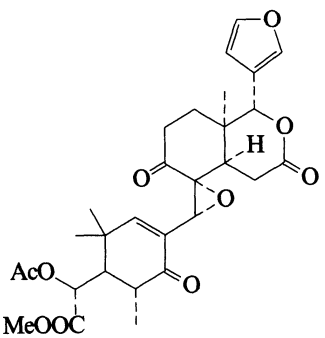
2"R-Hydroxy, 3"S*-chloro:* **erythro-3"-Chloro-2"-hydroxyechiumine**
$C_{20}H_{32}ClNO_7$ M 433.928
Alkaloid from *C. leiocarpa* and *C. clevelandii* (Boraginaceae). Brown gum.

2",3"-Epoxide: ***2",3"-Epoxyechiumine***
$C_{20}H_{31}NO_7$ M 397.467
Alkaloid from *C. leiocarpa* and *C. clevelandii* (Boraginaceae). Brown gum.

Culvenor, C.C.J. *et al, Aust. J. Chem.*, 1956, **9**, 512; 1959, **12**, 694; 1966, **19**, 1955; 1980, **33**, 1105 (*struct, pmr, Symlandine*)
Šimánek, V. *et al, Collect. Czech. Chem. Commun.*, 1969, **34**, 1832 (*uv*)
Glinski, J.A. *et al, Tetrahedron Lett.*, 1985, **26**, 2857 (*synth*)
Stermitz, F.R. *et al, Phytochemistry*, 1993, **33**, 383 (*epoxide, 2",3"-Dihydroxyechiumine, 3"-Chloro-2"-hydroxyechiumine*)

Ecuadorin E-10005

[144597-20-6]

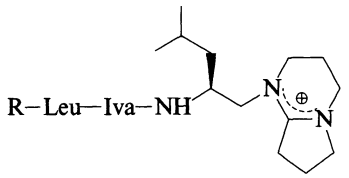


$C_{29}H_{34}O_{10}$ M 542.582
Constit. of *Guarea kunthiana.* Needles (MeOH). Mp 237-238°. $[\alpha]_D$ +4.2° (c, 0.7 in $CHCl_3$).

Mootoo, B.S. *et al, Can. J. Chem.*, 1992, **70**, 1260 (*isol, pmr, cmr*)

Efrapeptin A E-10006

[138145-52-5]



R = -Gly-Aib-Ac

$C_{32}H_{58}N_7O_5$ M 620.854
Member of Efrapeptin antibiotic complex. See Efrapeptin, E-00059. Prod. by *Tolypocladium niveum.* Possesses insect toxicity.

Gupta, S. *et al, J. Org. Chem.*, 1992, **57**, 2306 (*isol, props*)

Efrapeptin B E-10007

[138145-53-6]

As Efrapeptin A, E-10006 with

R = Ac

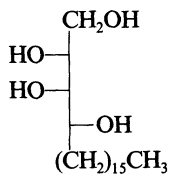
$C_{26}H_{48}N_5O_3$ M 478.697
Member of Efrapeptin antibiotic complex. See Efrapeptin, E-00059. Prod. by *Tolypocladium niveum.*

Gupta, S. *et al, J. Org. Chem.*, 1992, **57**, 2306 (*isol, props*)

1,2,3,4-Eicosanetetrol, 9CI E-10008

1,2,3,4-Icosanetetrol

[42415-56-5]



(*2R,3S,4R*)-*form*

$C_{20}H_{42}O_4$ M 346.549

(***2R,3S,4R*)-*form*** [105368-57-8]
D-lyxo-*form*
$[\alpha]_D$ +2.5° (c, 0.28 in Py).

Tetra-Ac: [105368-58-9].
Needles (hexane). Mp 84-86°. $[\alpha]_D^{20}$ +20.3° (c, 1 in $CHCl_3$).

(***2S,3R,4R*)-*form*** [105368-50-1]
D-ribo-*form*
Cryst. (MeOH). $[\alpha]_D^{20}$ +6.8° (c, 0.6 in Py).

Tetra-Ac: [105265-44-9].
Oil. $[\alpha]_D^{20}$ +3.3° (c, 1.2 in $CHCl_3$).

(***2S,3R,4S*)-*form*** [105368-53-4]
L-lyxo-*form*
$[\alpha]_D$ −2.1° (c, 0.3 in Py).

(***2S,3S,4R*)-*form*** [105368-60-3]
D-xylo-*form.* ***Guggultetrol 20***
Isol. from the saponified resin of *Commiphora mukul.*
Cryst. (EtOH). $[\alpha]_D^{20}$ +9.2° (c, 0.28 in EtOH).

Tetra-Ac: [105368-61-4].
Cryst. (hexane). Mp 54-56°. $[\alpha]_D^{20}$ +2.3° (c, 1 in $CHCl_3$).

Kjaer, A. *et al, Tetrahedron*, 1986, **42**, 1439 (*synth*)
Kumar, V. *et al, Tetrahedron*, 1987, **43**, 5933 (*synth, abs config*)

5,8,11,14-Eicosatetraenoic acid E-10009

Updated Entry replacing E-00086

5,8,11,14-Icosatetraenoic acid

[7771-44-0]

$H_3C(CH_2)_4CH{=}CHCH_2CH{=}CHCH_2CH{=}CHCH_2CH{=}CH(CH_2)_3COOH$

$C_{20}H_{32}O_2$ M 304.472

▷ JX3850000.

(all-Z)-form [506-32-1]

Arachidonic acid

Constit. of many animal phospholipids, also of some ferns and mosses. Essential fatty acid. Precursor of prostaglandin G_2 series. Mp −49.5°. Bp_1 163°.

▷ Potentially explosive. LD_{50} (mus, ivn) 33 mg/kg. CE6675000.

Me ester: [2566-89-4].

$C_{21}H_{34}O_2$ M 318.498

$Bp_{0.7}$ 194-196°.

(2-Hydroxyethyl)amide: [94421-68-8].

Arachnidonylethanolamide. ***Anandamide***

$C_{22}H_{37}NO_2$ M 347.540

Isol. from porcine brain. Cannabinoid receptor ligand.

20, 20, 20-Trifluoro: [115178-89-7]. *20-Trifluoroarachidonic acid*

$C_{20}H_{29}F_3O_2$ M 358.443

Used in studying physiological conditions of leukotriene B_4 synth (see 5,12-Dihydroxy-6,8,10,14-eicosatetraenoic acid, D-01783).

[77297-91-7]

Osbond, J.M. *et al*, *J. Chem. Soc.*, 1961, 2779 (*synth*)
Schlenk, H. *et al*, *J. Am. Oil Chem. Soc.*, 1965, **42**, 481 (*occur*)
Wagner, H. *et al*, *Naturwissenschaften*, 1965, **52**, 305 (*occur*)
Frost, D.J. *et al*, *Chem. Phys. Lipids*, 1975, **15**, 53 (*pmr*)
Fryer, R.I. *et al*, *J. Org. Chem.*, 1975, **40**, 348 (*synth*)
Gunstone, F.D. *et al*, *Chem. Phys. Lipids*, 1976, **17**, 1 (*cmr*)
Corey, E.J. *et al*, *Tetrahedron Lett.*, 1984, **25**, 2729 (*purifn*)
Tanaka, Y. *et al*, *Arch. Biochem. Biophys.*, 1988, **263**, 178 (*synth*)
Devane, W.A. *et al*, *Science (Washington, D.C.)*, 1992, **258**, 1946 (*Anandamide*)
Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th Ed., Van Nostrand-Reinhold, 1992, AQS750.

2,4,16-Eicosatrienoic acid E-10010

2,4,16-Icosatrienoic acid

$H_3CCH_2CH_2CH{=}CH(CH_2)_{10}CH{=}CHCH{=}CHCOOH$

$C_{20}H_{34}O_2$ M 306.487

(2E,4E,16Z)-form

Piperidide: [145237-20-3]. ***Pipereicosalidine***

$C_{25}H_{43}NO$ M 373.621

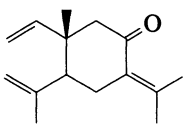
Alkaloid fom fruits of *Piper retrofractum* (Piperaceae). Oil.

Ahn, J.W. *et al*, *Phytochemistry*, 1992, **31**, 3609.

1,3,7(11)-Elematrien-8-one E-10011

β-Elemenone

[20303-60-0]



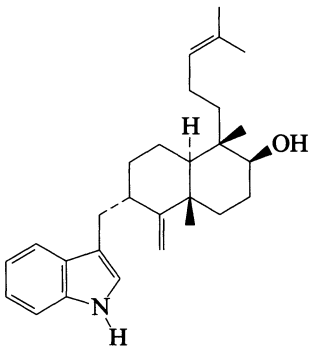
$C_{15}H_{22}O$ M 218.338

Constit. of *Myrica gale* and *Ledum palustre*. Oil. $[\alpha]_D$ +46° (c, 0.8 in $CHCl_3$).

Naya, Y. *et al*, *Heterocycles*, 1978, **10**, 29 (*isol*)
Fujisawa, T. *et al*, *Chem. Lett.*, 1983, 1533 (*synth*)
Yoshikoshi, A. *et al*, *Chem. Lett.*, 1990, 151 (*synth*)
Kato, M. *et al*, *J. Org. Chem.*, 1991, **56**, 7071 (*synth, pmr*)

Emeniveol E-10012

[146001-22-1]



$C_{28}H_{39}NO$ M 405.622

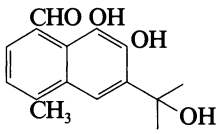
Alkaloid from *Emericella nivea*. Needles (MeOH). Mp 179°. $[\alpha]_D^{20}$ −91° (c, 1 in MeOH).

Kimura, Y. *et al*, *Tetrahedron Lett.*, 1992, **33**, 6987 (*isol, pmr, cmr, cryst struct*)

Emmotin I E-10013

7,8-Dihydroxy-6-(1-hydroxy-1-methylethyl)-4-methyl-1-naphthalenecarboxaldehyde

[91147-04-5]



$C_{15}H_{16}O_4$ M 260.289

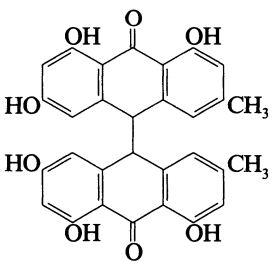
Constit. of *Emmotum nitens*.

Goulart, M.O.F. *et al*, *Mikrochim. Acta*, 1986, **4**, 23.

Emodin bianthrone E-10014

2,2',4,4',5,5'-Hexahydroxy-7,7'-dimethyl[9,9'-bianthracene]-10,10'(9H,9'H)-dione, 9CI. Rheumemodin bianthrone

[2506-11-8]



$C_{30}H_{22}O_8$ M 510.499

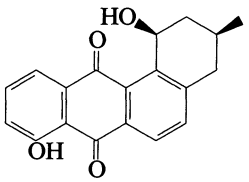
Constit. of *Cassia* sp. and *Rhamnus* spp. Pale green leaflets (MeOH aq.). Mp >245° dec.

Friedrich, H. *et al*, *Phytochemistry*, 1973, **12**, 1459 (*isol*)
Cameron, D.W. *et al*, *Aust. J. Chem.*, 1976, **29**, 1509, 1535 (*synth*)

Emycin A E-10015

1,2,3,4-Tetrahydro-1,8-dihydroxy-3-methylbenz[a] *anthracene-7,12-dione*

[127414-87-3]



$C_{19}H_{16}O_4$ M 308.333

Angucycline antibiotic. Prod. by *Streptomyces sp.*.

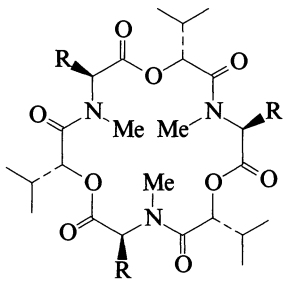
Dobreff, S., *Ph.D. Thesis*, Univ. of Gottingen, Germany, 1989 (*isol*)

Enniatin A E-10016

Updated Entry replacing E-00260

Lateritiin I

[2503-13-1]



R = $CH(CH_3)CH_2CH_3$

$C_{36}H_{63}N_3O_9$ M 681.908

Cyclic depsipeptide related to the Sporidesmins and Beauvericin. Isol. from *Fusarium orthoceras* and *F. sciroi*. Ionophoric antibiotic. Needles (EtOH aq.). Mp 121-122°. $[\alpha]_D^{18}$ −90° (c, 1.0 in $CHCl_3$).

[11113-62-5, 19248-58-9]

Plattner, Pl.A. *et al*, *Helv. Chim. Acta*, 1948, **31**, 594 (*isol*)
Tomita, Y. *et al*, *CA*, 1971, **75**, 71514e (*cryst struct*)
Andhya, T.K. *et al*, *J. Chem. Soc., Perkin Trans. 1*, 1974, 743 (*struct, synth*)
Deol, B.S. *et al*, *Aust. J. Chem.*, 1978, **31**, 1397 (*isol*)
Das, B.C. *et al*, *J. Antibiot.*, 1979, **32**, 569 (*ms*)
Madry, N. *et al*, *Appl. Microbiol. Biotechnol.*, 1984, **20**, 83 (*synth*)
Steinrauf, L.K., *Met. Ions Biol. Syst.*, 1985, **19**, 139 (*rev*)
Tomoda, H. *et al*, *J. Antibiot.*, 1992, **45**, 1207 (*isol, struct*)

Enniatin A_1 E-10017

2-(N-Methyl-L-valine)enniatin A, 9CI

[4530-21-6]

As Enniatin A, E-10016 with

R^1 = $-CH(CH_3)_2$, R^2 = R^3 = $-CH(CH_3)CH_2CH_3$

$C_{35}H_{61}N_3O_9$ M 667.882

Cyclic depsipeptide antibiotic. Isol. from *Fusarium* spp. Ionophore.

Deol, B.S. *et al*, *Aust. J. Chem.*, 1978, **31**, 1397 (*isol, bibl*)
Madry, N. *et al*, *Appl. Microbiol. Biotechnol.*, 1984, **20**, 83 (*synth*)
Tomoda, H. *et al*, *J. Antibiot.*, 1992, **45**, 1207 (*isol, struct*)

Enniatin B_1 E-10018

2-(N-Methyl-L-isoleucine)enniatin B, 9CI

[19914-20-6]

As Enniatin A, E-10016 with

R^1 = R^2 = $-CH(CH_3)_2$, R^3 = $-CH(CH_3)CH_2CH_3$

$C_{34}H_{59}N_3O_9$ M 653.855

Cyclic depsipeptide antibiotic. Isol. from *Fusarium* spp. Ionophore.

Deol, B.S. *et al*, *Aust. J. Chem.*, 1978, **31**, 1397 (*isol, bibl*)
Madry, N. *et al*, *Appl. Microbiol. Biotechnol.*, 1984, **20**, 83 (*synth*)
Tomoda, H. *et al*, *J. Antibiot.*, 1992, **45**, 1207 (*isol, struct*)

Enniatin D E-10019

[19893-21-1]

As Enniatin A, E-10016 with

R^1 = R^2 $-CH(CH_3)_2$, R^3 = $-CH_2CH(CH_3)_2$

$C_{34}H_{59}N_3O_9$ M 653.855

Cyclic depsipeptide antibiotic. Isol. from *Fusarium* spp. $[\alpha]_D^{18}$ −63° (c, 0.2 in $CHCl_3$).

Tomoda, H. *et al*, *J. Antibiot.*, 1992, **45**, 1207 (*isol, struct*)

Enniatin E E-10020

[144470-22-4]

As Enniatin A, E-10016 with

R^1 = —$CH(CH_3)_2$, R^2 = —$CH_2CH(CH_3)_2$, R^3 = —$CH(CH_3)CH_2CH_3$
R^1 = —$CH(CH_3)_2$, R^2 = —$CH(CH_3)CH_2CH_3$, R^3 = —$CH_2CH(CH_3)_2$

$C_{35}H_{61}N_3O_9$ M 667.882

Cyclic depsipeptide antibiotic. Isol. from *Fusarium* spp. Ionophore. $[\alpha]_D^{18}$ −77° (c, 1 in $CHCl_3$). Consists of a mixture of two isomers.

Tomoda, H. *et al*, *J. Antibiot.*, 1992, **45**, 1207 (*isol, struct*)

Enniatin F E-10021

[144446-20-8]

As Enniatin A, E-10016 with

R^1 = $-CH_2CH(CH_3)_2$, R^2 = R^3 = $-CH(CH_3)CH_2CH_3$

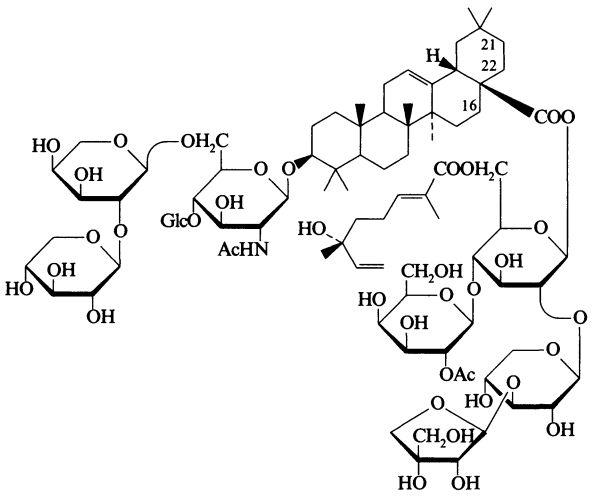
$C_{36}H_{63}N_3O_9$ M 681.908

Cyclic depsipeptide antibiotic. Isol. from *Fusarium* spp. Ionophore. $[\alpha]_D^{18}$ −70.0° (c, 1 in $CHCl_3$).

Tomoda, H. *et al*, *J. Antibiot.*, 1992, **45**, 1207 (*isol, struct*)

Entadasaponin II E-10022

[102191-02-6]



$C_{88}H_{139}NO_{42}$ M 1883.048

Complex glycoside of oleanolic acid (see 3-Hydroxy-12-oleanen-28-oic acid, H-02589). Constit. of the bark of *Entada phaseoloides*. Shows antitumour activity. Powder + $5H_2O$. Mp 214-216° dec. $[\alpha]_D^{25}$ −15.2° (c, 0.66 in MeOH).

16α-Hydroxy: [102191-03-7]. ***Entadasaponin III***

$C_{88}H_{139}NO_{43}$ M 1899.047

Main saponin of *E. phaseoloides* bark. Mp 211-214° dec. $[\alpha]_D^{25}$ −27.0° (c, 0.33 in MeOH). Complex glycoside of Echinocystic acid (see 3,16-Dihydroxy-12-oleanen-28-oic acid, D-02449).

21α,22α-Dihydroxy: ***Entadasaponin IV***

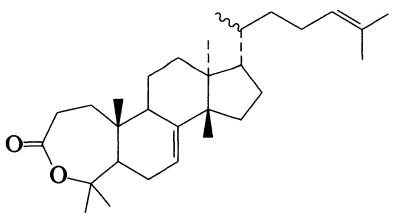
$C_{88}H_{139}NO_{44}$ M 1915.046

Saponin from *E. phaseoloides* bark. Powder + $6H_2O$. Mp 222-225° dec. $[\alpha]_D^{25}$ −22.7° (c, 7.0 in MeOH).

Okada, Y. *et al*, *Phytochemistry*, 1987, **26**, 2789.
Okada, Y. *et al*, *Chem. Pharm. Bull.*, 1988, **36**, 1264.

Entandrolide E-10023

[65402-13-3]



$C_{30}H_{48}O_2$ M 440.708

Struct. incorrect in ref. Constit. of *Entandrophyragma* sp. Cryst. ($MeOH/CH_2Cl_2$). Mp 125-128°. $[\alpha]_D$ −94°.

Okorie, D.A. *et al*, *Phytochemistry*, 1977, **16**, 2029 (*isol, pmr, cmr*)

Entanin E-10024

[72980-57-5]

Triterpenoid glycoside of unknown struct. Constit. of the seed kernels of *Entada scandens*.

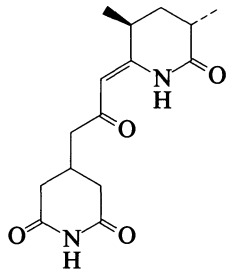
Indian Pat., 140 384, (1976); *CA*, **92**, 107612 (*isol*)

Epiderstatin E-10025

Updated Entry replacing E-00301

4-[3-(3,5-Dimethyl-6-oxo-2-piperidinylidene)-2-oxopropyl]-2,6-piperidinedione, 9CI

[126602-16-2]



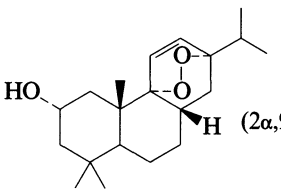
$C_{15}H_{20}N_2O_4$ M 292.334

Glutarimide antibiotic. Prod. by *Streptomyces pulveraceus* ssp. *epiderstagenes*. Inhibitor of mitogenic activity induced by epidermal growth factor. Powder. Mp 185-187°. $[\alpha]_D^{21}$ +5.3° (c, 0.22 in MeOH).

Osada, H. *et al*, *J. Antibiot.*, 1989, **42**, 1599, 1607 (*isol, struct, props*)
Sonoda, T. *et al*, *J. Antibiot.*, 1992, **45**, 1963 (*abs config*)

9,13-Epidioxy-11-abieten-2-ol E-10026

9,13-Endoperoxy-11-abieten-2-ol



(2α,9α,13α)-*form*

$C_{20}H_{32}O_3$ M 320.471

Errors in diagrams in reference.

(2α,9α,13α)-form

Cryst. (MeOH). Mp 142-144°. $[\alpha]_D^{25}$ −97.4° (c, 1.4 in $CHCl_3$).

Malonyl ester:

$C_{23}H_{34}O_6$ M 406.518

Constit. of *Calceolaria purpurea*. Oil (as Me ester). $[\alpha]_D^{20}$ −64.2° (c, 1 in $CHCl_3$) (Me ester).

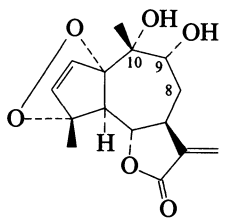
(2α,9β,13β)-form

Malonyl ester: Constit. of *C. purpurea*. Oil (as Me ester). $[\alpha]_D^{25}$ −10.6° (c, 1 in $CHCl_3$) (Me ester).

Chamy, M.C. *et al*, *Phytochemistry*, 1993, **34**, 1103 (*isol, pmr, cmr, cryst struct*)

1,4-Epidioxy-9,10-dihydroxy-2,11(13)-guaiadien-12,6-olide E-10027

Updated Entry replacing E-00306



(1α,4α,5α,6α,9α,10α)-*form*

$C_{15}H_{18}O_6$ M 294.304

(1α,4α,5α,6α,9α,10α)-form

9-Ac: [79858-81-4]. ***Apressin***

$C_{17}H_{20}O_7$ M 336.341
Constit. of *Achillea depressa*. Cryst. (EtOAc/pet. ether). Mp 182-184°. $[\alpha]_D$ −46.6° (c, 0.3 in EtOH).

10-Ac: [116384-08-8]. ***Isoapressin***
$C_{17}H_{20}O_7$ M 336.341
Constit. of *A. ligustica*.

9-Deoxy: [85799-10-6]. *1,4-Epidioxy-10-hydroxy-2,11(13)-guaiadien-12,6-olide*. ***Tanaparthin α-peroxide***
$C_{15}H_{18}O_5$ M 278.304
Constit. of *Tanacetum parthenium*. Cryst. Mp 95-96°. $[\alpha]_D^{20}$ −32.1° (c, 0.11 in $CHCl_3$).

9-Angeloyl: [143062-44-6].
$C_{20}H_{24}O_7$ M 376.405
Isol. from *Ursinia dentata*.

9-(2-Methylpropanoyl): [143015-86-5].
$C_{19}H_{24}O_7$ M 364.394
Constit. of *U. dentata*.

9-(3-Methylbutanoyl): [131574-98-6].
$C_{20}H_{26}O_7$ M 378.421
Constit. of *U. dentata*.

9-(2-Methylbutanoyl): [131574-99-7].
$C_{20}H_{26}O_7$ M 378.421
Constit. of *U. dentata*.

10-Tigloyl: ***α-Peroxyachifolide***
$C_{20}H_{24}O_7$ M 376.405
Constit. of *A. millefolium*. Needles (EtOH). Mp 154°.

(1β,4β,5α,6α,9α,10α)-form

9-Angeloyl: [72635-10-0]. ***Athanadregeolide***
$C_{20}H_{24}O_7$ M 376.405
Constit. of *Athanasia dregeana*. Oil. $[\alpha]_D^{24}$ −20° (c, 2 in $CHCl_3$).

9-Deoxy: [85758-28-7]. ***Tanaparthin β-peroxide***
$C_{15}H_{18}O_5$ M 278.304
Constit. of *T. parthenium*. Gum.

8α-Hydroxy, 9-angeloyl: ***8α-Hydroxyanthadregeolide***
$C_{20}H_{24}O_8$ M 392.405
From *A. dregeana*. Cryst. (Et_2O/pet. ether). Mp 172-173°.

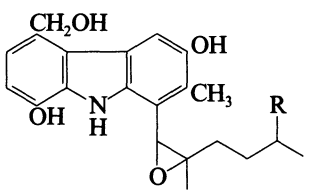
10-Tigloyl: ***β-Peroxyachifolide***
$C_{20}H_{24}O_7$ M 376.405
Constit. of *A. millefolium*. Needles (EtOH).

(1β,4β,5α,6α,9α,10β)-form

9-Angeloyl: [72690-44-9]. ***10-Epiathanadregeolide***
$C_{20}H_{24}O_7$ M 376.405
Constit. of *A. dregeana*. Oil.

Bohlmann, F. *et al*, *Phytochemistry*, 1979, **18**, 995; 1982, **21**, 2543 (*Athanadregeolide, Tanaparthin peroxides*)
Tsankova, E. *et al*, *Phytochemistry*, 1981, **20**, 1436 (*Apressin*)
Bruno, M. *et al*, *Phytochemistry*, 1988, **27**, 1871 (*Isoapressin*)
Begley, M.J. *et al*, *Phytochemistry*, 1989, **28**, 940 (*Tanaparthin peroxides*)
Rücker, G. *et al*, *Arch. Pharm.* (*Weinheim, Ger.*), 1991, **324**, 979 (*Peroxyachifolides*)
Jakupovic, J. *et al*, *Phytochemistry*, 1992, **31**, 863 (*isol, pmr*)

Epocarbazolin A E-10028



R = CH_3

$C_{22}H_{27}NO_4$ M 355.433

Prod. by *Streptomyces anulatus*. 5-Lipoxygenase inhibitor. Active against gram-positive bacteria. Pale yellow powder. Mp >100°. $[\alpha]_D^{26}$ +75° (c, 0.5 in MeOH). Unstable to light.

Nihei, Y. *et al*, *J. Antibiot.*, 1993, **46**, 25 (*isol, pmr, cmr, struct, props*)

Epocarbazolin B E-10029

As Epocarbazolin A, E-10028 with

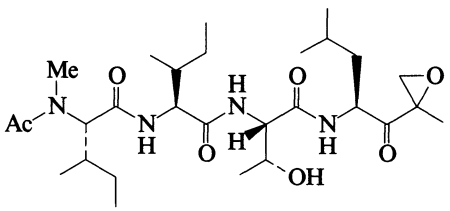
R = $-CH_2CH_3$

$C_{23}H_{29}NO_4$ M 369.460
Prod. by *Streptomyces anulatus*. 5-Lipoxygenase inhibitor. Active against gram-positive bacteria. Pale yellow powder. Mp >100°. $[\alpha]_D^{26}$ +78° (c, 0.5 in MeOH). Unstable to light.

Nihei, Y. *et al*, *J. Antibiot.*, 1993, **46**, 25 (*isol, pmr, cmr, struct, props*)

Epoxomicin E-10030

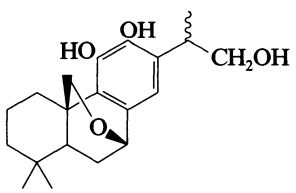
BU 4061T. Antibiotic BU 4061T
[134381-21-8]



$C_{28}H_{50}N_4O_7$ M 554.726
Tripeptide antibiotic. Prod. by an actinomycete strain No. Q996-17. Antitumour agent. Powder. Mp 107-109°. $[\alpha]_D^{24.5}$ −66.1° (c, 0.5 in MeOH).

Hanada, M. *et al*, *J. Antibiot.*, 1992, **45**, 1746 (*isol, pmr, cmr, struct*)

7,20-Epoxy-8,11,13-abietatriene-11,12,16-triol E-10031

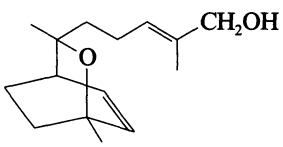


$C_{20}H_{28}O_4$ M 332.439
(7β,15ξ)-form [150065-60-4] ***16-Hydroxy-20-deoxocarnosol***
Constit. of *Salvia mellifera*. Amorph. solid.

Luis, J.G. *et al*, *Phytochemistry*, 1993, **33**, 635 (*isol, pmr, cmr*)

3,7-Epoxy-1,10-bisaboladien-12-ol E-10032

1,8-Dehydrosesquicineol-12-ol



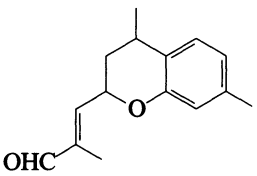
$C_{15}H_{24}O_2$ M 236.353
Ac: [149067-91-4].
$C_{17}H_{26}O_3$ M 278.391
Constit. of *Artemisia sieberi*.

Propanoyl: [149067-92-5].
$C_{18}H_{28}O_3$ M 292.417
Constit. of *A. sieberi.*
Methylpropanoyl: [149067-93-6].
$C_{19}H_{30}O_3$ M 306.444
Constit. of *A. sieberi.*
Butanoyl: [149067-94-7].
$C_{19}H_{30}O_3$ M 306.444
Constit. of *A. sieberi.*
3-Methylbutanoyl:
$C_{20}H_{32}O_3$ M 320.471
Constit. of *A. sieberi.*
Pentanoyl:
$C_{20}H_{32}O_3$ M 320.471
Constit. of *A. sieberi.*

Weyerstahl, P. *et al, Justus Liebigs Ann. Chem.*, 1993, 111 (*isol, pmr, cmr*)

1,9-Epoxy-1,3,5,10-bisabolatetraen-12-al E-10033

3-(3,4-Dihydro-4,7-dimethyl-2H-1-benzopyran-2-yl)-2-methyl-2-propenal, 9CI. 2,9-Epoxycurcumen-12-al
[134151-40-9]

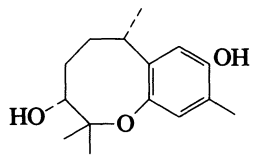


$C_{15}H_{18}O_2$ M 230.306
Isol. from *Polyachyrus fuscus.* Oil.

Pritschow, P. *et al, Phytochemistry*, 1991, **30**, 893.

6,11-Epoxy-1,3,5-bisabolatriene-3,10-diol E-10034

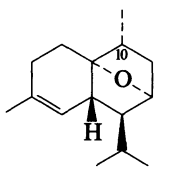
Heliannuol A
[148054-17-5]



$C_{15}H_{22}O_3$ M 250.337
Constit. of *Helianthus annuus.* Cryst. ($CHCl_3$). Mp 80-81°. $[\alpha]_D$ −55.4° (c, 0.3 in MeOH).

Macías, F.A. *et al, Tetrahedron Lett.*, 1993, **34**, 1999 (*isol, pmr, cmr, cryst struct*)

1,8-Epoxy-4-cadinene E-10035



10α-*form*

$C_{15}H_{24}O$ M 220.354

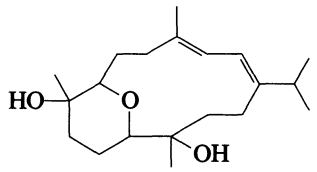
10α-form
Constit. of *Pulicaria gnaphaloides.* Oil. $[\alpha]_D^{20}$ +43.5° (c, 0.6 in $CHCl_3$).

10β-form
Constit. of *P. gnaphaloides.* Oil.

Weyerstahl, P. *et al, Justus Liebigs Ann. Chem.*, 1993, 1117 (*isol, pmr, cmr*)

7,11-Epoxy-1,3-cembradiene-8,12-diol E-10036

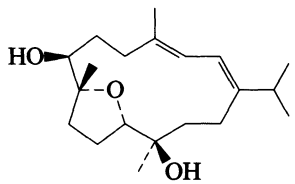
[147217-21-8]



$C_{20}H_{34}O_3$ M 322.487
Constit. of a *Eunicea* sponge. Oil. $[\alpha]_D$ −85.8° (c, 0.9 in MeOH).

Shin, J. *et al, Tetrahedron*, 1993, **49**, 515 (*isol, pmr, cmr*)

8,11-Epoxy-1,3-cembradiene-7,12-diol E-10037

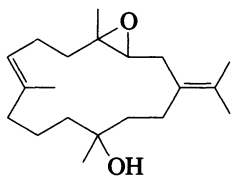


$C_{20}H_{34}O_3$ M 322.487
(1E,3E,7β,8α,11α,12β)-form [147217-19-4]
Constit. of a *Eunicea* sponge. Cryst. (Me_2CO). Mp 131-132°. $[\alpha]_D$ −85.8° (c, 0.8 in MeOH).
7-Ac: [147217-20-7].
$C_{22}H_{36}O_4$ M 364.524
Constit. of a *E.* sponge. Cryst. (Me_2CO/hexane). Mp 96-98°. $[\alpha]_D$ −35.3° (c, 0.5 in MeOH).

Shin, J. *et al, Tetrahedron*, 1993, **49**, 515 (*isol, pmr, cmr, cryst struct*)

3,4-Epoxy-1(15),7-cembradien-12-ol E-10038

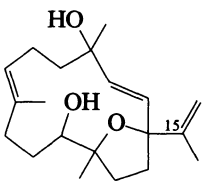
Setiformenol
[146621-73-0]



$C_{20}H_{34}O_2$ M 306.487
Constit. of the liverwort *Tetralophozia setiformis.* Oil. $[\alpha]_D^{22}$ +19.3° (c, 1.22 in $CHCl_3$).

Tori, M. *et al, Phytochemistry*, 1993, **34**, 181 (*isol, pmr, cmr*)
Tori, M. *et al, Tetrahedron Lett.*, 1993, **34**, 643 (*isol, pmr, cmr*)

1,12-Epoxy-2,7,15-cembratriene-4,11-diol E-10039



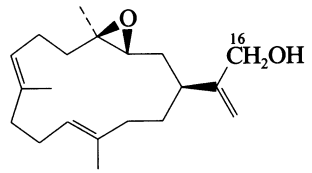
$C_{20}H_{32}O_3$ M 320.471
Constit. of *Sinularia ovispiculata.* Cryst. Mp 156-158°. $[\alpha]_D^{25}$ +81.0° (c, 0.59 in MeOH).

15,16-Dihydro: ***1,12-Epoxy-2,7-cembradiene-4,11-diol***
$C_{20}H_{34}O_3$ M 322.487

Isol. from *S. ovispiculata*. Cryst. Mp 143-145°. $[\alpha]_D^{25}$ +113.5° (c, 0.1 in $CHCl_3$).

Rao, C.B. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 2003 (*isol, pmr, cmr*)

3,4-Epoxy-7,11,15(17)-cembratrien-16-ol E-10040



$C_{20}H_{32}O_2$ M 304.472

(3R,4R,7E,11E)-form [148149-83-1] ***Pseudoplexaurol***

Constit. of *Pseudoplexaura porosa*. Oil. $[\alpha]_D^{26}$ −21.5° (c, 3.4 in $CHCl_3$).

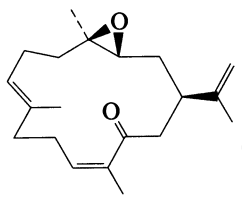
16-Carboxylic acid: 3,4-Epoxy-7,11,15(17)-cembratrien-16-oic acid. ***Pseudoplexauric acid***

$C_{20}H_{30}O_3$ M 318.455

Constit. of *Eunicea mammosa*. $[\alpha]_D^{25}$ −15.18° (c, 2.7 in $CHCl_3$) (as Me ester).

Rodríguez, A.D. *et al*, *Experientia*, 1993, **49**, 179 (*isol, pmr, cmr*)
Rodríguez, A.D. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 1101 (*isol, pmr, cmr*)

3,4-Epoxy-7,11,15-cembratrien-13-one E-10041



(1*R*,3*R*,4*R*,7*E*,11*Z*)-*form*

$C_{20}H_{30}O_2$ M 302.456

(1R,3R,4R,7E,11Z)-form

Constit. of *Eunicea mammosa*. Oil. $[\alpha]_D^{25}$ −5.38° (c, 2.6 in $CHCl_3$).

(1S,3S,4S,7E,11E)-form [65634-83-5]

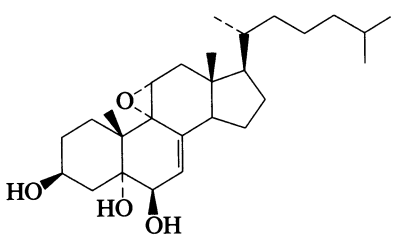
Constit. of an unidentified soft coral. Oil. $[\alpha]_D^{20}$ +12.78° (c, 1.65 in $CHCl_3$).

(1S,3S,4S,7E,11Z)-form

Constit. of an unidentified soft coral. Oil. $[\alpha]_D^{20}$ +8.8° (c, 1.6 in $CHCl_3$).

Ravi, B.N. *et al*, *J. Org. Chem.*, 1978, **43**, 2127 (*isol, pmr, cmr*)
Rodríguez, A.D. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 1101 (*isol, pmr, cmr*)

9,11-Epoxycholest-7-ene-3,5,6-triol E-10042



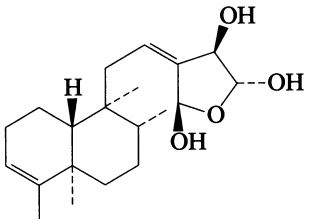
$C_{27}H_{44}O_4$ M 432.642

(3β,5α,6β,9α,11α)-form [120152-00-3]

Isol. from marine gastropod *Planaxis sulcatus*. Cryst. (Me_2CO). Mp 237-239°. $[\alpha]_D^{20}$ −29.1° (c, 0.3 in $CHCl_3$).

Alam, M. *et al*, *Steroids*, 1988, **52**, 45 (*isol*)
Migliuolo, A. *et al*, *Steroids*, 1991, **56**, 154 (*synth, pmr, cmr*)

15,16-Epoxy-3,12-clerodadiene-14,15,16-triol E-10043



$C_{20}H_{32}O_4$ M 266.336

(ent-12Z,14S,15S,16S)-form

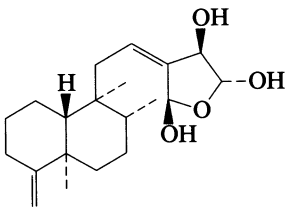
Tri-Ac:

$C_{26}H_{38}O_7$ M 392.448

Constit. of *Linaria saxatilis*. Cryst. (hexane). Mp 161-162°. $[\alpha]_D^{23}$ −101.6° (c, 0.99 in $CHCl_3$).

San Feliciano, A. *et al*, *Phytochemistry*, 1993, **33**, 631 (*isol, pmr, cmr*)

15,16-Epoxy-4(18),12-clerodadiene-14,15,16-triol E-10044



$C_{20}H_{32}O_4$ M 336.470

(ent-12Z,14S,15S,16S)-form

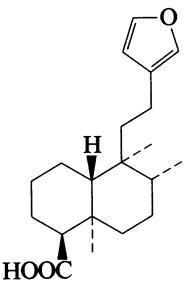
Tri-Ac:

$C_{26}H_{38}O_7$ M 462.582

Constit. of *Linaria saxatilis* var. *glutinosa*. Cryst. (hexane). Mp 141-143°.

San Feliciano, A. *et al*, *Tetrahedron*, 1993, **49**, 9067 (*isol, pmr, cmr, cryst struct*)

15,16-Epoxy-13(16),14-clerodadien-18-oic acid E-10045



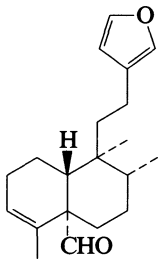
$C_{20}H_{30}O_3$ M 318.455

(ent-4βH)-form [148302-74-3] ***Crolechinic acid***

Constit. of *Croton lechleri*.

Cai, Y. *et al*, *Phytochemistry*, 1993, **32**, 755 (*isol, pmr, cmr*)

15,16-Epoxy-3,13(16),14-clerodatrien-19-al E-10046

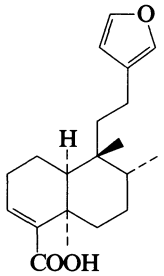


$C_{20}H_{28}O_2$ M 300.440

ent-form [38611-52-8] ***Hoffmanniaaldehyde***
Constit. of *Croton cortesianus*.

Siems, K. *et al*, *Phytochemistry*, 1992, **31**, 4363 (*isol, pmr, cmr*)

15,16-Epoxy-3,13(16),14-clerodatrien-18-oic acid E-10047

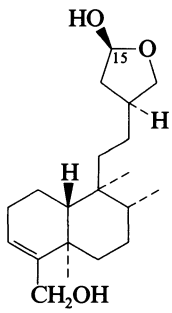


$C_{20}H_{28}O_3$ M 316.439

(5α,8βH)-form [148810-31-5] ***Tinotufolin B***
Constit. of *Tinospora tuberculata*. Oil. $[\alpha]_D^{27}$ −71.0° (c, 1.95 in MeOH).

Fukuda, N. *et al*, *Justus Liebigs Ann. Chem.*, 1993, 325 (*isol, pmr, cmr*)

15,16-Epoxy-3-clerodene-15,18-diol E-10048



(*ent*-13*R*,15*R*)-*form*

$C_{20}H_{34}O_3$ M 322.487

(ent-13R,15R)-form

15-Me ether: 15,16-Epoxy-15-methoxy-3-cleroden-18-ol
$C_{21}H_{36}O_3$ M 336.514
Constit. of *Baccharis trinervis*. Oil. $[\alpha]_D$ +17.6° (c, 3.4 in $CHCl_3$).

15-Et ether: 15,16-Epoxy-15-ethoxy-3-cleroden-18-ol
$C_{22}H_{38}O_3$ M 350.540
Constit. of *B. trinervis*. Oil. $[\alpha]_D$ +22.6° (c, 0.64 in $CHCl_3$).

15-Me ether, 18-(methylmalonoyl):
$C_{25}H_{40}O_6$ M 436.587
Constit. of *B. trinervis*. Oil.

(ent-13R,15R)-form

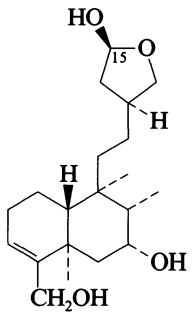
15-Me ether: Constit. of *B. trinervis*. Oil. $[\alpha]_D$ −90.9° (c, 1.2 in $CHCl_3$).

15-Et ether: Constit. of *B. trinervis*. Oil. $[\alpha]_D$ −91.9° (c, 0.24 in $CHCl_3$).

15-Me ether, 18-(methylmalonoyl): Constit. of *B. trinervis*. Oil. $[\alpha]_D$ −81.2° (c, 1.5 in $CHCl_3$).

Kuroyanagi, M. *et al*, *Phytochemistry*, 1993, **34**, 1377 (*isol, pmr, cmr*)

15,16-Epoxy-3-clerodene-7,15,18-triol E-10049



(*ent*-7β,13*R*,15*R*)-*form*

$C_{20}H_{34}O_4$ M 338.486

(ent-7β,13R,15R)-form

15-Me ether, 18-Ac:
$C_{23}H_{38}O_5$ M 394.550
Constit. of *Baccharis trinervis*. Oil.

15-Me ether, 18-(methylmalonoyl):
$C_{25}H_{40}O_7$ M 452.587
Constit. of *B. trinervis*. Oil. $[\alpha]_D$ −35.6° (c, 0.24 in $CHCl_3$).

(ent-7β,13R,15S)-form

15-Me ether, 18-Ac: Constit. of *B. trinervis*. Oil.

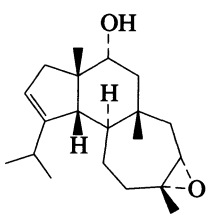
15-Me ether, 18-(methylmalonoyl): Constit. of *B. trinervis*. Oil.

(ent-7β,13ξ,15ξ)-form

15-Me ether: ent-*15,16-Epoxy-15-methoxy-3-clerodene-7,18-diol*
$C_{21}H_{36}O_4$ M 352.513
Constit. of *B. articulata*. Oil. $[\alpha]_D^{25}$ −47.5° (c, 0.4 in $CHCl_3$).

Dai, J. *et al*, *Phytochemistry*, 1993, **34**, 1087 (*isol, pmr, cmr*)
Kuroyanagi, M. *et al*, *Phytochemistry*, 1993, **34**, 1377 (*isol, pmr, cmr*)

12,13-Epoxy-2-cyathen-8-ol E-10050



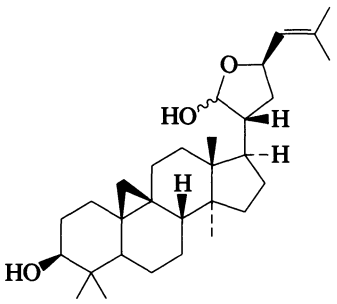
$C_{20}H_{32}O_2$ M 304.472

(8α,12α,13α)-form

Ac: [144967-84-0]. *8α-Acetoxy-12α,13α-epoxy-2-cyathene*
$C_{22}H_{34}O_3$ M 346.509
Constit. of *Myrmekioderma styx*. $[\alpha]_D^{22}$ −87.7° (c, 0.018 in CH_2Cl_2).

Sennett, S.H. *et al*, *J. Nat. Prod.* (*Lloydia*), 1992, **55**, 1421 (*isol, pmr, cmr*)

21,23-Epoxycycloart-24-ene-3,21-diol E-10051



$C_{30}H_{48}O_3$ M 456.707

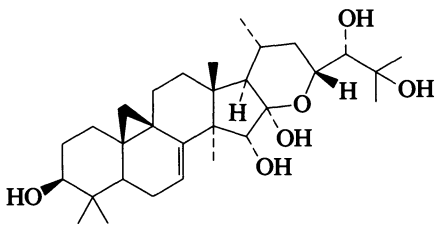
(3β,21ξ,23R)-form [146257-70-7]

Constit. of *Monocyclanthus vignei*. Amorph.

[146257-69-4]

Achenbach, H. *et al*, *Phytochemistry*, 1992, **31**, 4263 (*isol, pmr, cmr*)

16,23-Epoxycycloart-7-ene-3,15,16,24,25-pentol E-10052



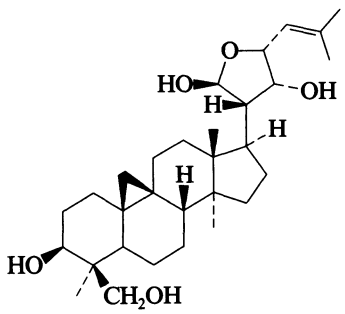
$C_{30}H_{48}O_6$ M 504.706

(3β,15α,16αOH,23R,24S)-form

3-O-β-D-Xylopyranoside, 24-Ac: [150972-78-4].
$C_{37}H_{58}O_{11}$ M 678.859
Constit. of *Cimicifuga heracleifolia*. Powder. $[\alpha]_D$ −27.4° (c, 0.62 in $CHCl_3$/MeOH).

Li, J.X. *et al*, *Chem. Pharm. Bull.*, 1993, **41**, 832 (*isol, pmr, cmr*)

21,23-Epoxycycloart-24-ene-3,21,22,30-tetrol E-10053



$C_{30}H_{48}O_5$ M 488.706

(3β,20S,21R,22R,23R)-form

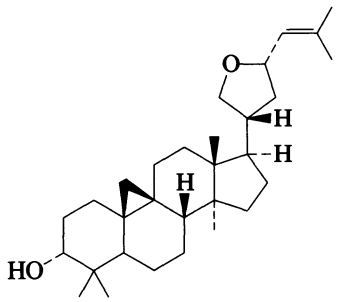
21 Me ether, 3-O-[α-L-Rhamnopyranosyl-(1→2)-β-D-glucopyranoside]: [150968-30-2]. ***Thalictoside I***
$C_{43}H_{70}O_{14}$ M 810.991
Constit. of *Thalictri herba*. Powder. $[\alpha]_D$ +10.3° (MeOH).

(3β,20S,21S,22R,23R)-form

21 Me ether, 3-O-(α-L-Rhamnopyranosyl-(1→2)-β-D-glucopyranoside): [150968-29-9]. ***Thalictoside II***
$C_{43}H_{70}O_{14}$ M 810.991
Constit. of *T. herba*. Powder. $[\alpha]_D$ −32.2° (MeOH).

Yoshimitsu, H. *et al*, *Chem. Pharm. Bull.*, 1993, **41**, 786 (*isol, pmr, cmr*)

21,23-Epoxycycloart-24-en-3-ol E-10054



(3α,23*S*)-*form*

$C_{30}H_{48}O_2$ M 440.708

(3α,23S)-form [146257-58-1]

Constit. of *Monocyclanthus vignei*. Cryst. (MeOH). Mp 166-168°. $[\alpha]_D^{21}$ +5° (c, 0.8 in $CHCl_3$).

3-Ketone: [146257-75-2]. ***21,23-Epoxycycloart-24-en-3-one***
$C_{30}H_{46}O_2$ M 438.692
Constit. of *M. vignei*.

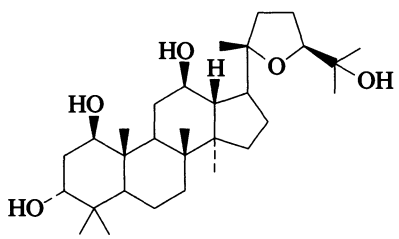
(3β,23R)-form [146257-76-3]
Constit. of *M. vignei*.

3-Ketone: [146257-74-1].
$C_{30}H_{46}O_2$ M 438.692
Constit. of *M. vignei*.

(3β,23S)-form [146257-77-4]
Constit. of *M. vignei*.

Achenbach, H. *et al*, *Phytochemistry*, 1992, **31**, 4263 (*isol, pmr, cmr*)

20,24-Epoxy-1,3,12,25-dammaranetetrol E-10055



$C_{30}H_{52}O_5$ M 492.738

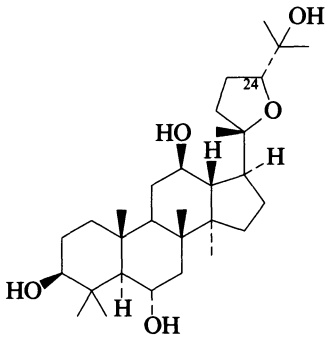
(1β,3α,12β,20S,24S)-form [145700-90-9]

Constit. of *Polansia dodecandra*. Prisms. Mp 234-238°. $[\alpha]_D$ −86.5° (c, 0.89 in $CHCl_3$).

[145700-91-0]

Shi, Q. *et al*, *J. Nat. Prod.* (*Lloydia*), 1992, **55**, 1488 (*isol, pmr, cmr, cryst struct*)

20,24-Epoxy-3,6,12,25-dammaranetetrol E-10056



$C_{30}H_{52}O_5$ M 492.738

(3β,6α,12β,24R)-form

6-O-Neohesperidoside: [69884-00-0]. ***Ginsenoside A_1.*** *Pseudoginsenoside F_{11}*

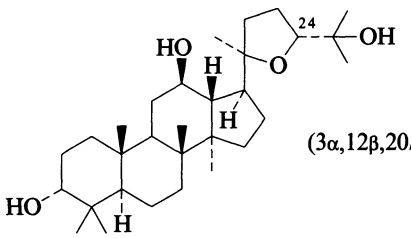
$C_{42}H_{72}O_{14}$ M 801.022

Isol. from *Panax* spp. Powder + $3H_2O$. $[\alpha]_D^{24}$ −12.0° (c, 0.43 in MeOH).

Tanaka, O. *et al*, *Phytochemistry*, 1978, **17**, 1353.

20,24-Epoxydammarane-3,12,25-triol E-10057

Updated Entry replacing E-00467



(3α,12β,20*S*,24*R*)-*form*

$C_{30}H_{52}O_4$ M 476.738

20 and 24 configs. not fully clear and appear to be incorrect in CA.

(3α,12β,20S,24R)-form [19942-05-3] ***Betulafolienetriol oxide I***

Constit. of *Betula platyphylla*. Cryst. (Me_2CO). Mp 237-240°. $[\alpha]_D^{22}$ +2.6° (c, 1.2 in $CHCl_3$).

3-Malonyl: ***Deacetylpapyriferic acid***

$C_{33}H_{54}O_7$ M 562.785

Constit. of *B. glandulosa*. Oil. $[\alpha]_D$ −25° (c, 0.05 in CH_2Cl_2).

3-Malonyl, 12-Ac: [78782-15-7]. ***Papyriferic acid***

$C_{35}H_{56}O_8$ M 604.823

Constit. of *B. papyrifera*, *B. resinifera* and *B. glandulosa*. Cryst. (Me_2CO/cyclohexane). Mp 203-204° dec. $[\alpha]_D$ −18° (c, 0.056 in $CHCl_3$).

(3β,12β,20R,24R)-form [25330-18-1] ***Pyxinol***

Constit. of *Pyxine endochrysina*. Cryst. (MeOH aq.). Mp 225-226°. $[\alpha]_D$ +62.8° ($CHCl_3$).

3-Ac: [38001-86-4].

$C_{32}H_{54}O_5$ M 518.776

Constit. of *P. endochrysina*. Cryst. (MeOH aq.). Mp 196-197°. $[\alpha]_D$ +28.2° (c, 1.06 in $CHCl_3$).

12-Ac:

$C_{32}H_{54}O_5$ M 518.776

Constit. of *Notholaena rigida*. Cryst. Mp 177-179°.

3,12-Di-Ac:

$C_{34}H_{56}O_6$ M 560.813

Constit. of *N. rigida*.

3,25-Di-Ac: [25279-14-5].

$C_{34}H_{56}O_6$ M 560.813

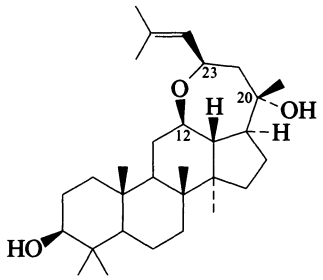
Constit. of *P. endochrysina*. Cryst. (EtOAc). Mp 240-241°. $[\alpha]_D$ +10° (c, 1.0 in $CHCl_3$).

(3β,12β,20S,24S)-form

Constit. of *N. greggii*. Cryst. (Et_2O/hexane). Mp 147°. $[\alpha]_D^{25}$ −24.5° (c, 0.8 in $CHCl_3$).

Yamauchi, H. *et al*, *Tetrahedron Lett.*, 1969, 4245 (*cryst struct*)
Yosioka, I. *et al*, *Chem. Pharm. Bull.*, 1972, **20**, 502 (*isol, struct*)
Nagai, M. *et al*, *Chem. Pharm. Bull.*, 1973, **21**, 2061 (*isol*)
Reichardt, P.B. *et al*, *J. Org. Chem.*, 1981, **46**, 4576 (*Papyriferic acid*)
Arriaga-Giner, F.J. *et al*, *Z. Naturforsch., C*, 1991, **46**, 507; 1992, **47**, 508 (*isol, pmr, cmr*)
Appendino, G. *et al*, *Phytochemistry*, 1992, **31**, 923 (*isol, pmr, cmr, cryst struct*)
Williams, D.E. *et al*, *Phytochemistry*, 1992, **31**, 2321 (*Deacetylpapyriferic acid*)

12,23-Epoxydammar-24-ene-3,20-diol E-10058



$C_{30}H_{50}O_3$ M 458.723

(3β,12β,20S,23R)-form

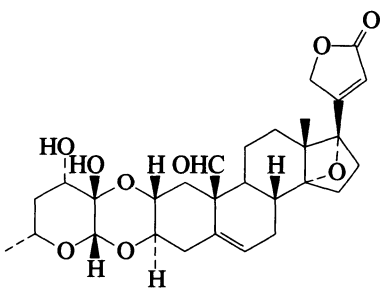
3,20-Di-O-β-D-glucopyranoside: [123617-34-5]. ***Ginsenoside La***

$C_{42}H_{70}O_{13}$ M 783.007

Constit. of *Panax ginseng*. Needles (MeOH). Mp 179-180°. $[\alpha]_D$ −18.4° (Py).

Zhang, S. *et al*, *Chem. Pharm. Bull.*, 1989, **37**, 1966.

14,17-Epoxy-5,6-dehydrocalotropin E-10059

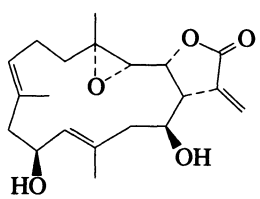


$C_{29}H_{36}O_9$ M 528.598

Isol. from *Gomphocarpus sinaicus*. Cryst. Mp 172-175°.

El-Askary, H. *et al*, *Phytochemistry*, 1993, **34**, 1399.

3,4-Epoxy-10,14-dihydroxy-7,11,15(17)-cembratrien-16,2-olide E-10060



$C_{20}H_{28}O_5$ M 348.438

(1S,2S,3R,4S,10S,14S)-form

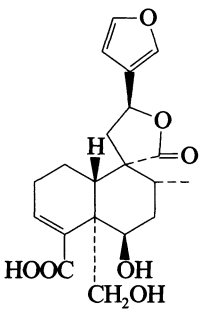
Di-Ac: [145038-59-1]. ***Lobomichaolide***

$C_{24}H_{32}O_7$ M 432.513

Constit. of *Lobophytum michaelae*. Prisms. Mp 180-181°. $[\alpha]_D^{25}$ +54.9° (c, 0.16 in $CHCl_3$).

Wang, S.-K. *et al*, *J. Nat. Prod.* (*Lloydia*), 1992, **55**, 1430 (*isol, pmr, cmr, cryst struct*)

15,16-Epoxy-6,19-dihydroxy-3,13(16),14-clerodatrien-20,12-olid-18-oic acid E-10061



$C_{20}H_{24}O_7$ M 376.405

(ent-6α,12βH)-form

Me ester: ***Teupernin D***†

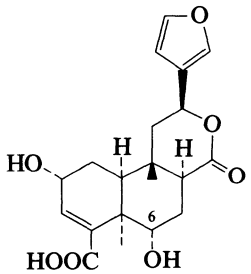
$C_{21}H_{26}O_7$ M 390.432

Constit. of *Teucrium pernyi*. Cryst. (MeOH). Mp 186-188°.

Di-An, S. *et al*, *Phytochemistry*, 1993, **33**, 716 (*isol, pmr, cmr*)

15,16-Epoxy-2,6-dihydroxy-3,13(16),14-clerodatrien-17,12-olid-18-oic acid E-10062

Updated Entry replacing E-00512



$C_{20}H_{24}O_7$ M 376.405

(2α,5α,6α,12αH)-form

Me ester: [104901-06-6]. ***Borapetol B***

$C_{21}H_{26}O_7$ M 390.432

Constit. of stems of *Tinospora tuberculata*. Granules (Me_2CO aq.). Mp 117-118°. $[\alpha]_D$ −14.1° (c, 1.165 in MeOH).

6-O-β-D-Glucopyranoside, Me ester: [104901-05-5]. ***Borapetoside B***

$C_{27}H_{36}O_{12}$ M 552.574

Constit. of stems of *T. tuberculata*. Needles. Mp 153-154°. $[\alpha]_D$ −15.7°.

6-O-β-D-Glucopyranoside, Me ester, 2-ketone: ***Borapetoside G***

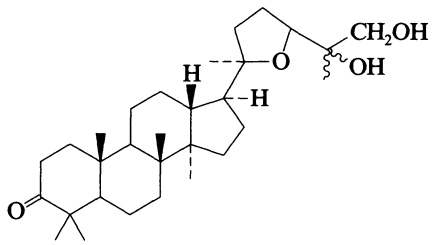
$C_{27}H_{34}O_{12}$ M 550.558

Constit. of *T. tuberculata*.

Fukuda, N. *et al*, *Chem. Pharm. Bull.*, 1986, **34**, 2868.

Fukuda, N. *et al*, *Justus Liebigs Ann. Chem.*, 1993, 491 (*Borapetoside G*)

20,24-Epoxy-25,26-dihydroxydammaran-3-one E-10063



$C_{30}H_{50}O_4$ M 474.723

(20S,24R,25ξ)-form [146830-04-8]

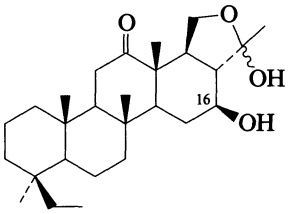
$C_{30}H_{50}O_4$ M 474.723

Constit. of *Mangifera indica*. Cryst. ($CHCl_3$/MeOH). Mp 143-144°. $[\alpha]_D^{30}$ +34° (c, 0.5 in $CHCl_3$).

Anjaneyulu, V. *et al*, *Phytochemistry*, 1993, **32**, 469 (*isol, pmr, cmr*)

24,25-Epoxy-16,24-dihydroxy-20,24-dimethyl-12-scalaranone E-10064

Updated Entry replacing E-00521



$C_{27}H_{44}O_4$ M 432.642

(16β,24ξ)-form

16-Ac: [73731-34-7]. ***Scalardysin B***

$C_{29}H_{46}O_5$ M 474.679

Constit. of *Dysidea herbacea*.

24-Me ether, 16-Ac: [125990-23-0]. ***Phylloketal***

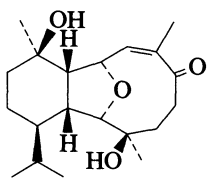
$C_{30}H_{48}O_5$ M 488.706

Constit. of *Phyllospongia foliascens*. Needles (Me_2CO). Mp 201-202°.

Kashman, Y. *et al*, *Tetrahedron Lett.*, 1979, 3879 (*isol*)

Fu, X. *et al*, *Chin. Chem. Lett.*, 1991, **2**, 543 (*Phylloketal*)

6,13-Epoxy-4,12-dihydroxy-7-eunicellen-9-one E-10065



$C_{20}H_{32}O_4$ M 336.470

(4β,6α,12β,13α)-form

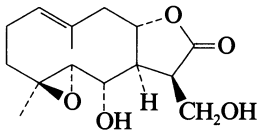
Di-Ac: [151515-28-5]. ***Palmonine E***

$C_{24}H_{36}O_6$ M 420.545

Constit. of *Eunicella verrucosa*. Cryst. Mp 152-153°. $[\alpha]_D$ −17.25° (c, 0.4 in $CHCl_3$).

Ortega, M.J. *et al*, *Tetrahedron*, 1993, **49**, 7823 (*isol, pmr, cmr*)

4,5-Epoxy-6,13-dihydroxy-1(10)-germacren-12,8-olide E-10066



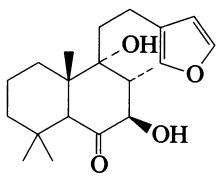
$C_{15}H_{22}O_5$ M 282.336

(1(10)E,4β,5α,6α,8α,11αH)-form

13-Me ether: 4,5-Epoxy-6-hydroxy-13-methoxy-1(10)-germacren-12,8-olide. ***Heimerlein***
$C_{16}H_{24}O_5$ M 296.363
Constit. of *Tanacetum chiliophyllum.*

Gören, N. *et al*, *Phytochemistry*, 1993, **34**, 1071 (*isol, pmr*)

15,16-Epoxy-7,9-dihydroxy-13(16),14-labdadien-6-one E-10067

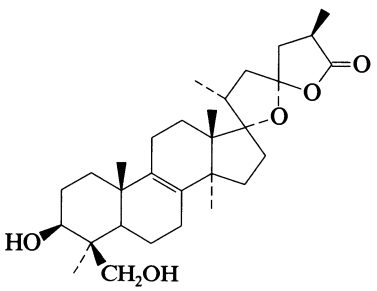


$C_{20}H_{30}O_4$ M 334.455

(7β,8βH,9α)-form [139644-20-5] ***Leoheterin***
Constit. of *Leonurus heterophyllus.* Powder (EtOAc/hexane). Mp 99-101°. $[\alpha]_D^{25}$ +47.7° (c, 0.65 in EtOH).

Hon, P.M. *et al*, *Phytochemistry*, 1993, **33**, 639 (*isol, pmr, cmr*)

17,23-Epoxy-3,29-dihydroxylanost-9-en-26,23-olide E-10068



$C_{30}H_{46}O_5$ M 486.690

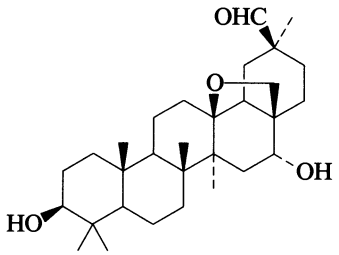
(3β,23S)-form
Aglycone from *Chionodoxa luciliae.*

3-O-[α-L-Rhamnopyranosyl-(1→2)-β-D-glucopyranosyl-(1→2)-α-L-arabinopyranosyl-(1→6)-β-D-glucopyranoside]:
$C_{53}H_{84}O_{23}$ M 1089.233
Constit. of *C. luciliae.*

3-O-[α-L-Rhamnopyranosyl-(1→2)-[β-D-galactopyranosyl-(1→3)]-β-D-glucopyranosyl-(1→2)-α-L-arabinopyranosyl-(1→6)-β-D-glucopranoside]:
$C_{59}H_{94}O_{28}$ M 1251.375
Constit. of *C. luciliae.*

Adinolfi, M. *et al*, *Phytochemistry*, 1993, **34**, 773 (*isol, pmr, cmr*)

13,28-Epoxy-3,16-dihydroxy-30-oleananal E-10069



$C_{30}H_{48}O_4$ M 472.707

(3β,13β,16α)-form

3-O-[α-L-Rhamnopyranosyl-(1→2)-β-D-glucopyranosyl-(1→2)[β-D-glucopyranosyl-(1→3)]β-D-glucopyranoside]: [112468-35-6]. ***Paridiformoside***
$C_{54}H_{88}O_{23}$ M 1105.275
Constit. of *Lysimachia paridiformis.*

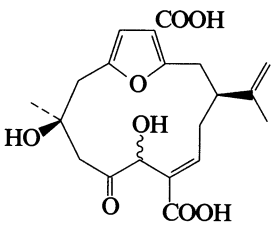
30-Di-Me acetal, 3-O-[α-L-Rhamnopyranosyl-(1→4)-β-D-glucopyranosyl-(1→2)-[β-D-glucopyranosyl-(1→4)]-α-L-arabinopyranoside]:
$C_{55}H_{92}O_{23}$ M 1121.318
Constit. of *Ardisia japonica.* $[\alpha]_D^{25}$ −10.5° (c, 1 in MeOH).

29-Carboxylic acid, 3-O-[α-L-rhamnopyranosyl-(1→4)-β-D-glucopyranosyl-(1→2)-[β-D-glucopyranosyl-(1→4)]-α-L-arabinopyranoside]:
$C_{53}H_{86}O_{23}$ M 1091.249
Constit. of *A. japonica.* $[\alpha]_D$ −2.4° (c, 1 in MeOH).

Han, D. *et al*, *Yaoxue Xuebao*, 1987, **22**, 746; *CA*, **108**, 62305 (*Paridiformoside*)

De Tommasi, N. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 1669 (*isol, pmr, cmr*)

3,6-Epoxy-8,11-dihydroxy-10-oxo-3,5,12-cembratriene-18,20-dioic acid E-10070



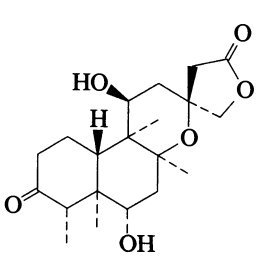
$C_{20}H_{24}O_8$ M 392.405

(8S,11ξ,12E)-form

Di-Me ester:
$C_{22}H_{28}O_8$ M 420.458
Constit. of *Sinularia dissecta.* Needles (MeOH). Mp 170-172°. $[\alpha]_D^{25}$ −8.7° (c, 0.12 in CH_2Cl_2).

Reddy, M.V.R. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 970 (*isol, pmr, cmr*)

8,13-Epoxy-6,11-dihydroxy-3-oxo-15,16-clerodanolide E-10071



$C_{20}H_{30}O_6$ M 366.453

(ent-6β,8α,11α,13R)-form

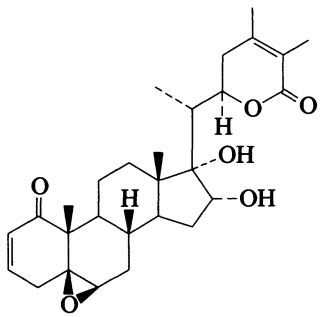
6-Benzoyl, 11-Ac: [121960-93-8]. ***Scutellone G***

$C_{29}H_{36}O_8$ M 512.599

Constit. of *Scutellaria rivularis*. Needles (Me_2CO). Mp 262-263°. $[\alpha]_D^{24}$ +15.0° (c, 1 in $CHCl_3$).

Lin, Y.-L. *et al*, *Chem. Pharm. Bull.*, 1989, **37**, 582 (*isol, pmr, cmr*)

5,6-Epoxy-16,17-dihydroxy-1-oxowitha-2,24-dienolide E-10072



$C_{28}H_{38}O_6$ M 470.605

(5β,6β,16α,17α,22R)-form

Constit. of *Discopodium penninervium*. Powder. $[\alpha]_D$ +48° (c, 0.1 in $CHCl_3$).

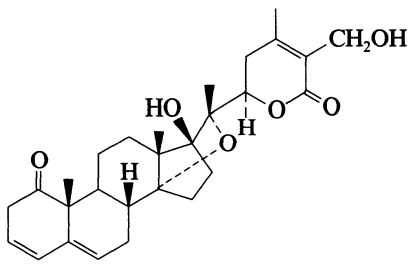
16-Ac:

$C_{30}H_{40}O_7$ M 512.642

Constit. of *D. penninervium*. Powder. $[\alpha]_D^9$ +22° (c, 0.1 in $CHCl_3$).

Harbtemariam, S. *et al*, *Phytochemistry*, 1993, **34**, 807 (*isol, pmr, cmr*)

14,20-Epoxy-17,27-dihydroxy-1-oxowitha-3,5,24-trienolide E-10073



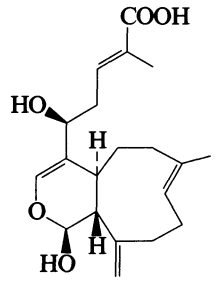
$C_{28}H_{36}O_6$ M 468.589

(14α,17β,20S,22R)-form [150431-65-5] ***Coagulin***

Constit. of *Withania coagulance*. Cryst. $[\alpha]_D^{27}$ −11° (c, 0.0062 in $CHCl_3$/MeOH).

Atta-ur-Rahman, *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 1000 (*isol, pmr, cmr*)

17,18-Epoxy-11,18-dihydroxy-1(19),6,10(17),13-xenicatetraen-15-oic acid E-10074



$C_{20}H_{28}O_5$ M 348.438

Di-Ac, Me ester: [147318-39-6]. ***Acalycigorgin A***

$C_{25}H_{34}O_7$ M 446.539

Constit. of an *Acalycigorgia* sp. Oil. $[\alpha]_D^{20}$ +82.3° (c, 0.4 in $CHCl_3$).

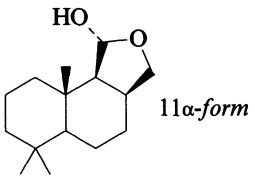
6α,7α-Epoxide, di-Ac, Me ester: [147318-40-9]. ***Acalycigorgin B***

$C_{25}H_{34}O_8$ M 462.539

Constit. of an *A.* sp. Oil. $[\alpha]_D^{21}$ +70.8° (c, 0.13 in $CHCl_3$).

Ochi, M. *et al*, *Heterocycles*, 1993, **36**, 41 (*isol, pmr, cmr*)

11,12-Epoxy-11-drimanol E-10075



11α-form

$C_{15}H_{26}O_2$ M 238.369

11α-form

Ac:

$C_{17}H_{28}O_3$ M 280.406

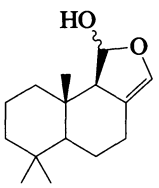
Constit. of *Dysidea* sp. Oil. $[\alpha]_D$ −37.8° (c, 0.2 in $CHCl_3$).

11β-form

Constit. of *D.* sp. Oil. $[\alpha]_D$ −46.8° (c, 0.43 in $CHCl_3$).

Butler, M.S. *et al*, *Aust. J. Chem.*, 1993, **46**, 1255 (*isol, pmr, cmr*)

11,12-Epoxy-8(12)-drimen-11-ol E-10076



$C_{15}H_{24}O_2$ M 236.353

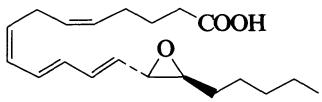
11ξ-form

Constit. of a *Dysidea* sp. Oil.

Butler, M.-S. *et al*, *Aust. J. Chem.*, 1993, **46**, 1255 (*isol, pmr, cmr*)

14,15-Epoxy-5,8,10,12-eicosatetraenoic acid E-10077

13-(3-Pentyloxiranyl)-5,8,10,12-tridecatetraenoic acid. 14,15-EPETE



$C_{20}H_{30}O_3$ M 318.455

(5Z,8Z,10E,12E,14S,15S)-form [81918-96-9]

14,15-Leukotriene A_4. 14,15-LTA_4

Intermed. in 15-lipoxygenase-initiated leukotriene biosynth.

Me ester: [75290-58-3].

$C_{21}H_{32}O_3$ M 332.482

$[\alpha]_D^{22}$ −5.0° (c, 0.3 in cyclohexane).

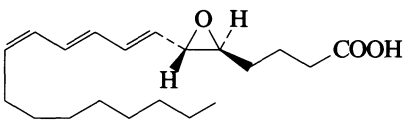
[82263-59-0, 88852-50-0]

Corey, E.J. *et al, J. Am. Chem. Soc.*, 1980, **102**, 6607 (*synth*)
Attrache, V. *et al, Tetrahedron Lett.*, 1981, **22**, 3443 (*synth*)
Zamboni, R. *et al, Tetrahedron Lett.*, 1983, **24**, 4899 (*synth*)
Corey, E.J. *et al, Tetrahedron Lett.*, 1983, **24**, 4917 (*synth*)

5,6-Epoxy-7,9,11-eicosatrienoic acid E-10078

3-(1,3,5-Tetradecatrienyl)oxiranebutanoic acid. ***Leukotriene A_3***

[87791-73-9]



$C_{20}H_{32}O_3$ M 320.471

Derived from 5,8,11-Eicosatrienoic acid, E-00091 by the 5-lipoxygenase leukotriene pathway. Potent inhibitor of rat and human neutrophil LTA_4 hydrolase.

Me ester: [83851-38-1].

$C_{21}H_{34}O_3$ M 334.498

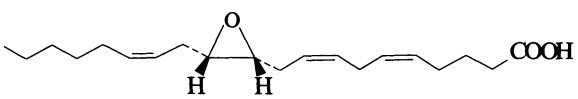
Ir (film) 1740, 1425 cm^{-1}; uv 271, 280 (ε 50000), 290 nm (EtOH).

Okuyama, S. *et al, Chem. Pharm. Bull.*, 1982, **30**, 2453 (*Me ester, synth, ir, uv, pmr*)
Spur, B. *et al, Arch. Pharm. (Weinheim, Ger.)*, 1983, **316**, 789 (*synth, cmr*)
Jakschik, B.A. *et al, J. Biol. Chem.*, 1983, **258**, 12797 (*biosynth*)
Evans, J.F. *et al, J. Biol. Chem.*, 1985, **260**, 10966 (*biochem*)

11,12-Epoxy-5,8,14-eicosatrienoic acid E-10079

10-[3-(2-Octenyl)oxiranyl]-5,8-decadienoic acid, 9CI. 11,12-EET

[81276-02-0]



$C_{20}H_{32}O_3$ M 320.471

(5Z,8Z,11R,12S,14Z)-form [123931-38-4]

Arachidonic acid metab.

Me ester: [110901-54-7].

No phys. props. reported.

(5Z,8Z,11S,12R,14Z)-form [123931-40-8]

Arachidonic acid metab.

Me ester: [90080-08-3].

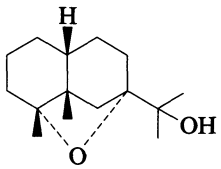
$[\alpha]_D^{24}$ −2.34° (c, 0.66 in $CHCl_3$). No phys. props. reported.

(5Z,8Z,11RS,12SR,14Z)-form

Oil.

Corey, E.J. *et al, J. Am. Chem. Soc.*, 1980, **102**, 1433 (*synth*)
Falck, J.R. *et al, J. Am. Chem. Soc.*, 1984, **106**, 3334 (*biosynth*)
Falck, J.R. *et al, Tetrahedron Lett.*, 1984, **25**, 2443 (*synth*)
Mosset, P. *et al, Tetrahedron Lett.*, 1986, **27**, 6035 (*synth*)
Karara, A. *et al, J. Biol. Chem.*, 1989, **264**, 19822; 1991, **266**, 7561 (*biosynth*)
Capdevila, J.H. *et al, J. Biol. Chem.*, 1990, **265**, 10865 (*biosynth*)

4,7-Epoxy-11-eremophilanol E-10080



$C_{15}H_{26}O_2$ M 238.369

(4α,7α,10β)-form

Undecanoyl: [149301-58-6].

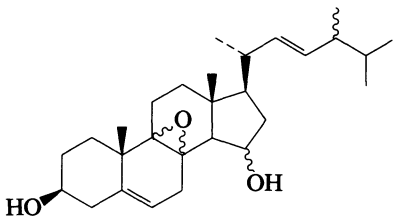
$C_{26}H_{46}O_3$ M 406.648

Constit. of *Ligularia veitchiana*. Powder ($CHCl_3$). Mp 84°. $[\alpha]_D^{25}$ −23.0° (c, 0.5 in $CHCl_3$).

Jia, Z. *et al, J. Nat. Prod.* (*Lloydia*), 1993, **56**, 494 (*isol, pmr, cmr*)

8,9-Epoxyergosta-5,22-diene-3,15-diol E-10081

8,9-Epoxy-24-methylcholesta-5,22-diene-3,15-diol



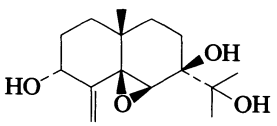
$C_{28}H_{44}O_3$ M 428.654

(3β,8ξ,9ξ,15ξ,24ξ)-form [133587-90-3]

Constit. of *Ganoderma lucidum*. Powder. Mp 228-230°.

Chiang, H.-C. *et al, J. Chin. Chem. Soc.* (*Peking*), 1991, **38**, 71 (*isol, pmr, cmr*)

5,6-Epoxy-4(15)-eudesmene-3,7,11-triol E-10082



$C_{15}H_{24}O_4$ M 268.352

(3α,5β,6β,7β)-form

11-O-(3-Acetyl-2,4-diangeloyl-β-D-fucopyranoside):

$C_{33}H_{48}O_{11}$ M 620.736

Constit. of *Calendula arvensis*.

11-O-[2,4-Diangeloyl-3-(2-methylbutanoyl)-β-D-fucopyranoside]:

$C_{36}H_{54}O_{11}$ M 662.816

Constit. of *C. arvensis*.

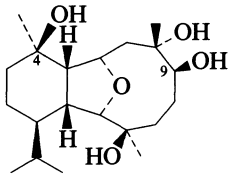
11-O-[2,4-Diangeloyl-3-(2-methylpropanoyl)-β-D-fucopyranoside]:

$C_{35}H_{52}O_{11}$ M 648.789

Constit. of *C. arvensis*.

Ahmed, A.A. *et al, J. Nat. Prod.* (*Lloydia*), 1993, **56**, 1821 (*isol, pmr, cmr*)

6,13-Epoxy-4,8,9,12-eunicellanetetrol E-10083



$C_{20}H_{36}O_5$ M 356.501

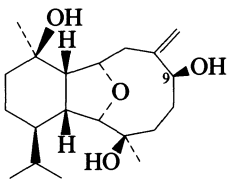
(4β,6α,8α,9β,12β,13α)-form

9-Me ether, 12-Ac: [151484-82-1]. ***Palmonine C***
$C_{23}H_{40}O_6$ M 412.565
Constit. of *Eunicella verrucosa*. Oil.

9-Me ether, 4,12-di-Ac: [151484-80-9]. ***Palmonine A***
$C_{25}H_{42}O_7$ M 454.603
Constit. of *E. verrucosa*. Oil. $[\alpha]_D$ +43.4° (c, 1.04 in $CHCl_3$).

Ortega, M.J. *et al*, *Tetrahedron*, 1993, **49**, 7823 (*isol, pmr, cmr*)

6,13-Epoxy-8(19)-eunicellene-4,9,12-triol E-10084



$C_{20}H_{34}O_4$ M 338.486

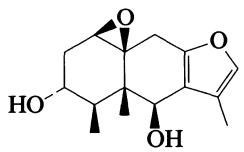
(4β,6α,9β,12β,13α)-form

Tri-Ac: [151484-81-0]. ***Palmonine B***
$C_{26}H_{40}O_7$ M 464.598
Constit. of *Eunicella verrucosa*. Oil. $[\alpha]_D$ −35.8° (c, 1 in $CHCl_3$).

9-Ketone, di-Ac: [151484-83-2]. ***Palmonine D***
$C_{24}H_{36}O_6$ M 420.545
Constit. of *E. verrucosa*. Oil. $[\alpha]_D$ +7.3° (c, 0.7 in $CHCl_3$).

Ortega, M.J. *et al*, *Tetrahedron*, 1993, **49**, 7823 (*isol, pmr, cmr*)

1,10-Epoxyfuranoeremophilane-3,6-diol E-10085



$C_{15}H_{20}O_4$ M 264.321

(1β,3α,6β,10β)-form

3-Angeloyl: [63366-05-2].
$C_{20}H_{26}O_5$ M 346.422
Constit. of *Ligularia vorobierii*. Oil.

3-Angeloyl, 6-Ac: [63366-03-0].
$C_{22}H_{28}O_6$ M 388.460
Constit. of *L. vorobierii*. Oil. $[\alpha]_D^{24}$ −19° (c, 1 in $CHCl_3$).

6-Angeloyl: [64234-09-9].
$C_{20}H_{26}O_5$ M 346.422
Constit. of *Euryops* spp. Oil.

6-(3-Methylpentanoyl): [68773-70-6].
$C_{21}H_{30}O_5$ M 362.465
Constit. of *E.* spp. Oil.

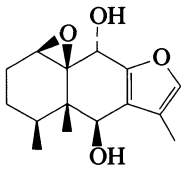
3-(2-Methyl-2-propenoyl): [63366-04-1].
$C_{19}H_{24}O_5$ M 332.396
Constit. of *L. vorobierii*. Oil. $[\alpha]_D^{24}$ −4° (c, 0.02 in $CHCl_3$).

3-(2-Methyl-2-propenoyl), 6-Ac: [63366-02-9].
$C_{21}H_{26}O_6$ M 374.433
Constiot. of *L. vorobierii*. Oil.

Bohlmann, F. *et al*, *Chem. Ber.*, 1977, **110**, 1759 (*isol, pmr*)
Bohlmann, F. *et al*, *Phytochemistry*, 1978, **17**, 1135 (*isol, pmr*)

1,10-Epoxyfuranoeremophilane-6,9-diol E-10086

Updated Entry replacing E-00685



(1β,6β,9α,10β)-*form*

$C_{15}H_{20}O_4$ M 264.321

(1β,6β,9α,10β)-form

6-Angeloyl:
$C_{20}H_{26}O_5$ M 346.422
Constit. of *Euryops* spp. Oil.

6-(3-Methyl-2-butenoyl):
$C_{20}H_{26}O_5$ M 346.422
Constit. of *E.* spp. Oil.

6-Tigloyl:
$C_{20}H_{26}O_5$ M 346.422
Constit. of *E.* spp. Oil.

6-(3-Methyl-2-pentenoyl):
$C_{21}H_{28}O_5$ M 360.449
Constit. of *E.* spp. Oil.

6-(2-Methylpropenoyl):
$C_{19}H_{24}O_5$ M 332.396
Constit. of *E.* spp. Oil.

6-(3-Methylbutanoyl):
$C_{20}H_{28}O_5$ M 348.438
Constit. of *E.* spp. Oil.

6-(2-Methylbutanoyl):
$C_{20}H_{28}O_5$ M 348.438
Constit. of *E.* spp. Oil.

(1β,6β,9β,10β)-form

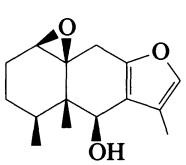
9-(2-Methylpropanoyl): [135417-17-3].
$C_{19}H_{26}O_5$ M 334.411
Constit. of *Senecio behnii*. Gum.

Diketone: ***1,10-Epoxyfuranoeremophilane-6,9-dione***
$C_{15}H_{16}O_4$ M 260.289
Constit. of *S. smithii*. Cryst. (Et_2O/pet. ether). Mp 104°. $[\alpha]_D^{24}$ −26.7° (c, 0.12 in $CHCl_3$).

Bohlmann, F. *et al*, *Chem. Ber.*, 1978, **17**, 1135 (*isol, pmr*)
Bohlmann, F. *et al*, *Phytochemistry*, 1981, **20**, 2389 (*isol, deriv*)
Yamakawa, K. *et al*, *Chem. Pharm. Bull.*, 1984, **32**, 3396 (*synth*)
Dupré, S. *et al*, *Phytochemistry*, 1991, **30**, 1211 (*isol, pmr*)

1,10-Epoxyfuranoeremophilan-6-ol E-10087

Updated Entry replacing E-00687



$C_{15}H_{20}O_3$ M 248.321

(1β,6β,10β)-form [41702-76-5]
Constit. of *Ligularia* spp. Oil. $[\alpha]_D$ −45° (c, 0.11 in EtOH).

O-(*2-Methylpropenoyl*): [55050-49-2]. *1β,10β-Epoxy-6β-(2-methylacryloyloxy)furanoeremophilane*
$C_{19}H_{24}O_4$ M 316.396
Constit. of *Senecio rigidus*. Oil.

O-(*3-Methyl-2-butenoyl*): [55050-50-5]. *1β,10β-Epoxy-6β-senecionyloxyfuranoeremophilane*
$C_{20}H_{26}O_4$ M 330.423
Constit. of *S. rigidus*. Oil.

O-(*4-Hydroxy-2-methyl-2-butenoyl*): [63366-01-8]. *1,10β-Epoxy-6β-(γ-hydroxyangeloyloxy)furanoelemophilane*
Constit. of *Ligularia vorobierii*.

O-(*2-Methylbutanoyl*): *1,10-Epoxy-6-(2-methylbutanoyloxy) furanoeremophilane*
$C_{20}H_{28}O_4$ M 332.439
Constit. of *S. doria*.

6-Angeloyl: [41929-09-3]. ***Senemorin***
$C_{20}H_{26}O_4$ M 330.423
Constit. of *S.* spp. Oil. $[\alpha]_D^{25}$ −70.2° (c, 0.2 in $CHCl_3$).

6-Tigloyl:
$C_{20}H_{26}O_4$ M 330.423
Constit. of *E.* spp. Oil.

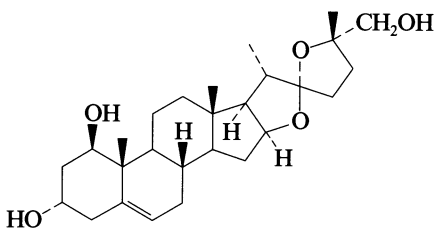
(1α,6β,10α)-form

6-Ac: [40072-65-9].
$C_{17}H_{22}O_4$ M 290.358
Constit. of *E.* spp. Oil.

6-Angeloyl: [40072-64-8].
$C_{20}H_{26}O_4$ M 330.423
Constit. of *E.* spp. Oil. $[\alpha]_D^{24}$ −17.5° (c, 3.4 in $CHCl_3$).

Sato, T. *et al*, *Chem. Lett.*, 1972, 637 (*isol*)
Novotny, L. *et al*, *Collect. Czech. Chem. Commun.*, 1973, **38**, 739 (*isol, struct*)
Bohlmann, F. *et al*, *Chem. Ber.*, 1974, **107**, 2912; 1976, **109**, 819; 1977, **110**, 1759; 1978, **17**, 1135 (*isol*)
Sato, T. *et al*, *Bull. Chem. Soc. Jpn.*, 1975, **48**, 112 (*isol, nmr*)
Bohlmann, F. *et al*, *Phytochemistry*, 1978, **17**, 1135 (*isol*)
Urones, J.G. *et al*, *An. Quim., Ser. C*, 1987, **83**, 358 (*deriv*)

22,25-Epoxyfurost-5-ene-1,3,26-triol E-10088



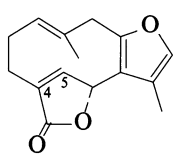
$C_{27}H_{42}O_5$ M 446.626

(1β,3α,22S,25S)-form [91652-21-0] ***Tupisgenin***
Constit. of *Tupistra aurarnstiaca*.

Yang, R. *et al*, *CA*, 1984, **101**, 107361z.

8,12-Epoxy-1(10),4,7,11-germacratetraen-15,6-olide E-10089

Updated Entry replacing E-00708



(1(10)*E*,6α)-*form*

$C_{15}H_{16}O_3$ M 244.290

(1(10)E,6α)-form [728-61-0] ***Linderalactone***
Constit. of *Lindera strychnifolia*. Cryst. (MeOH). Mp 140°. $[\alpha]_D^{26}$ +102° (c, 1 in dioxan).

4β,5β-Epoxide: [13476-25-0]. *4,5;8,12-Diepoxy-1(10),7,11-germacratrien-15,6-olide*. ***Linderane***
$C_{15}H_{16}O_4$ M 260.289
Constit. of *L. strychnifolia* and *Cryptocarya densiflora*. Cryst. (Me_2CO). Mp 190-191° dec. $[\alpha]_D^{24}$ +180.3° (c, 1 in dioxan).

1α,10α:4β,5β-Diepoxide: 1,10:4,5:8,12-Triepoxy-7,11-germacradien-15,6-olide. ***Pseudolinderadine***
Constit. of *C. densiflora*.

1β,10β:4β,5β-Diepoxide: [20082-46-6]. ***Linderadine***
$C_{15}H_{16}O_5$ M 276.288
Constit. of *Neolitsea aciculata*. Cryst. Mp 130-132°. $[\alpha]_D^{25}$ −68.7° (c, 0.3 in dioxan).

(1(10)Z,6α)-form [26379-18-0] ***Neolinderalactone***
Constit. of *L. strychnifolia*. Prisms (MeOH). Mp 116-118°. $[\alpha]_D^{25}$ +100° (c, 1.09 in EtOH).

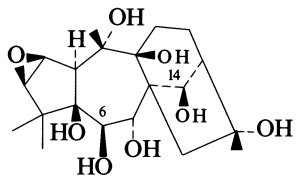
(1(10)E,6β)-form

1α,10α:4α,5α-Diepoxide: (+)-***Linderadine***
$C_{15}H_{16}O_5$ M 276.288
Constit. of *N. villosa*. Cryst. (EtOAc). Mp 176-178°. $[\alpha]_D$ +68.3° (c, 0.38 in $CHCl_3$).

Joshi, B.S. *et al*, *Tetrahedron*, 1967, **23**, 261 (*struct*)
Takeda, K. *et al*, *J. Chem. Soc. C*, 1969, 1491, 2786 (*isol, struct, abs config*)
Takeda, K. *et al*, *J. Chem. Soc. C*, 1970, 973 ((−)-*Linderadine*)
Tori, K. *et al*, *Tetrahedron Lett.*, 1975, 4583 (*cmr*)
Gopalan, A. *et al*, *J. Org. Chem.*, 1984, **49**, 2317 (*synth*)
Achmad, S.A. *et al*, *Aust. J. Chem.*, 1992, 445 (*isol, cryst struct*)
Okada, K. *et al*, *Acta Crystallogr., Sect. C*, 1993, **49**, 341 (*cryst struct*)
Li, W.-S. *et al*, *Phytochemistry*, 1993, **32**, 1503 ((+)-*Linderadine, cryst struct*)

2,3-Epoxy-5,6,7,9,10,14,16-grayanotoxaneheptol E-10090

Updated Entry replacing E-00719



$C_{20}H_{32}O_8$ M 400.468

(1α,2β,3β,5β,6β,7α,9β,10α,14β,16α)-form [34206-60-5] ***Pieristoxin G***
Constit. of *Pieris japonica*. Cryst. (MeOH/EtOAc).
▷ PB9189700.

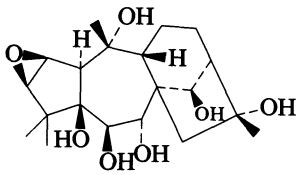
6-Ac: [34183-49-8]. ***Pieristoxin J***
$C_{22}H_{32}O_8$ M 424.490
Constit. of *P. japonica*. Cryst. Mp 258-260°.

14-Propanoyl, 6-Ac: [34183-45-4]. ***Asebotoxin VII***
$C_{25}H_{38}O_{10}$ M 498.569
Isol. from flowers of *P. japonica*.

6-(7)-Propanoyl, 7(6)-Ac: [76024-13-0]. ***Pieristoxin K***
$C_{25}H_{38}O_{10}$ M 498.569
Constit. of *P. japonica*. Cryst. Mp 278-281°.

Fukuyama, K. *et al*, *Chem. Pharm. Bull.*, 1971, **19**, 1980; 1976, **24**, 2775.
Katai, M. *et al*, *Chem. Pharm. Bull.*, 1980, **28**, 3124 (*Pieristoxins J and K*)

2,3-Epoxy-5,6,7,10,14,16-grayanotoxanehexol E-10091



$C_{20}H_{32}O_7$ M 384.469

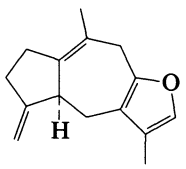
(1α,2β,3β,5β,6β,7α,10α,14β,16α)-form [75899-53-5]

Pieristoxin H

Constit. of *Pieris japonica*. Cryst. Mp 242-245°.

Katai, M. *et al*, *Chem. Pharm. Bull.*, 1980, **28**, 3124 (*isol, ir, pmr, ms*)

8,12-Epoxy-1(10),4(15),7,11-guaiatetraene E-10092



$C_{15}H_{18}O$ M 214.307

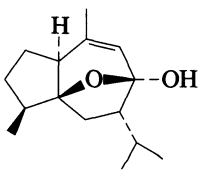
5α-form

Echinofuran†

Constit. of *Echinogorgia praelonga*. Oil. $[\alpha]_D^{20}$ −91° (c, 0.138 in $CHCl_3$). Not registered in CA (confused with the other Echinofuran see Echinofuran, E-00026).

Tanaka, J.-I. *et al*, *J. Nat. Prod.* (*Lloydia*), 1992, **55**, 1522 (*isol, pmr, cmr*)

5,8-Epoxy-9-guaien-8-ol E-10093



$C_{15}H_{24}O_2$ M 236.353

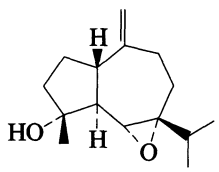
(1α,4β,5β,7βH,8αOH)-form

Isocurcumol

Constit. of *Litsea cassiaefolia*. Cryst. (hexane). Mp 106-107°. $[\alpha]_D$ −86° (c, 0.5 in $CHCl_3$).

Hakim, E.H. *et al*, *Aust. J. Chem.*, 1993, **46**, 1355 (*isol, pmr, cmr, cryst struct*)

6,7-Epoxy-10(14)-guaien-4-ol E-10094



$C_{15}H_{24}O_2$ M 236.353

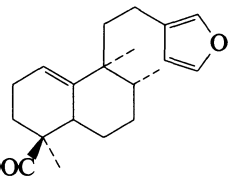
(1β,4α,5α,6α,7α)-form [147511-74-8] ***Orientalol C***

Constit. of *Alisma orientale*. Oil. $[\alpha]_D^{20}$ +2.5° (c, 0.56 in MeOH).

[147511-75-9]

Yoshikawa, M. *et al*, *Chem. Pharm. Bull.*, 1992, **40**, 2582 (*isol, pmr, cmr*)

15,16-Epoxy-1(10),13(16),14-halimatrien-19-oic acid E-10095



$C_{20}H_{28}O_3$ M 316.439

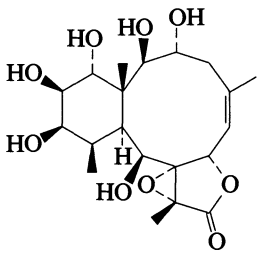
ent-form

Isol. (as Me ester) from seed-pod resin of *Hymenaea courbaril*.

[52591-99-8]

Khoo, S.F. *et al*, *Tetrahedron*, 1973, **29**, 3379 (*isol*)

8,17-Epoxy-2,3,9,12,13,14-hexahydroxy-11-briaren-18,7-olide E-10096



$C_{20}H_{30}O_9$ M 414.452

(2β,3α,5Z,7α,8α,9β,12β,13β,15α,17α)-form

2,3,9,14-Tetra-Ac: ***Stecholide N***

$C_{28}H_{38}O_{13}$ M 582.600

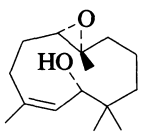
Constit. of *Solenopodium excavatum*. Glass. $[\alpha]_D^{20}$ −53.0° (c, 0.2 in $CHCl_3$).

Schmitz, F.J. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 1339 (*isol, pmr, cmr*)

6,7-Epoxy-2-humulen-1-ol E-10097

Updated Entry replacing E-00752

4,7,7,11-Tetramethyl-12-oxabicyclo[9.1.0]dodec-4-en-6-ol, 9CI



Absolute configuration

$C_{15}H_{26}O_2$ M 238.369

(1S,2Z,6S,7S)-form [87989-23-9]

Constit. of fruit of *Torilis scabra*. Cryst. Mp 125-130°. $[\alpha]_D$ +30.9° (c, 0.22 in $CHCl_3$).

Ac: [87989-22-8]. *15-Acetoxy-6S,7S-epoxy-2Z-humulene*

$C_{17}H_{28}O_3$ M 280.406

Constit. of *T. scabra*. Cryst. Mp 125-130°. $[\alpha]_D$ +21.4° (c, 0.36 in $CHCl_3$).

(1S,2Z,6R,7R)-form

Ac: From *T. scabra*. Oil. $[\alpha]_D$ −175.5° (c, 0.33 in $CHCl_3$).

(1S,2E,6R,7R)-form

(4-Methoxybenzoyl):

$C_{23}H_{32}O_4$ M 372.503

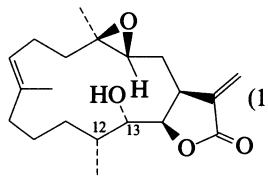
Constit. of *Ferula linkii*. Oil.

Itokawa, H. *et al*, *Chem. Lett.*, 1983, 1581 (*cryst struct*)

Itokawa, H. *et al*, *Chem. Pharm. Bull.*, 1985, **33**, 2204 (*cryst struct, abs config*)
González, A.G. *et al*, *Phytochemistry*, 1993, **33**, 863 (*deriv, pmr, cmr*)

3,4-Epoxy-13-hydroxy-7,15(17)-cembradien-16,14-olide E-10098

Updated Entry replacing E-00767



(1*S*,3*R*,4*R*,7*E*,12*R*,13*S*,14*R*)-*form*

$C_{20}H_{30}O_4$ M 334.455

(1S,3R,4R,7E,12R,13S,14R)-form

12,13-Bisepieupalmerin

Constit. of *Eunicea succinea*. Cryst. (C_6H_6). Mp 144-145°. $[\alpha]_D$ −158.8° (c, 1.57 in $CHCl_3$).

Ac: ***12,13-Bisepieupalmerin acetate***

$C_{22}H_{32}O_5$ M 376.492

Constit. of *E. succinea*. Oil. $[\alpha]_D^{27}$ −170° (c, 0.4 in $CHCl_3$).

(1S,3R,4R,7E,12S,13R,14R)-form [52239-68-6] ***Eupalmerin***

Metab. of *E. mammosa*. Cryst. Mp 148-149°.

Ac: [37299-08-4]. ***Eupalmerin acetate***

$C_{22}H_{32}O_5$ M 376.492

Constit. of *E. palmari*.

13-Ketone: 3,4-Epoxy-13-oxo-7,15(17)-cembradien-16,4-olide. ***Succinolide***

$C_{20}H_{28}O_4$ M 332.439

Constit. of *E. succinea*. Oil. $[\alpha]_D^{25}$ −7.5° (c, 0.8 in $CHCl_3$).

(1S,3R,4R,7E,12R,13R,14R)-form

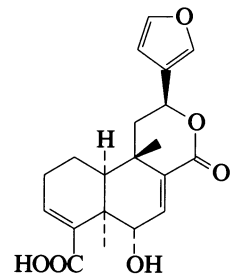
Ac: ***12-Epieupalmerin acetate***

$C_{22}H_{32}O_5$ M 376.492

Constit. of *E. succinea*. Oil. $[\alpha]_D^{25}$ +17.8° (c, 0.9 in $CHCl_3$).

Ealick, S.E. *et al*, *Acta Crystallogr., Sect. B*, 1975, **31**, 1618 (*struct*)
Gopichand, Y. *et al*, *J. Nat. Prod. (Lloydia)*, 1984, **47**, 607 (*isol*)
Fontán, L.A. *et al*, *J. Org. Chem.*, 1990, **55**, 4956 (*pmr, cmr*)
Fontán, L.A. *et al*, *J. Nat. Prod. (Lloydia)*, 1991, **54**, 298 (*isol*)
Rodríquez, A.D. *et al*, *J. Nat. Prod. (Lloydia)*, 1993, **56**, 564 (*isol, pmr, cmr*)

15,16-Epoxy-6-hydroxy-3,7-13(16),14-clerodatetraen-17,12-olid-18-oic acid E-10099



$C_{20}H_{22}O_6$ M 358.390

(5α,6α,12αH)-form

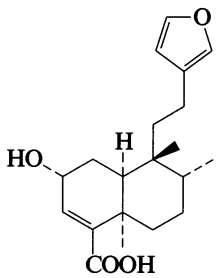
6-O-β-D-Glucopyranoside, Me ester: [151200-50-9]. ***Borapetoside F***

$C_{27}H_{34}O_{11}$ M 534.559

Constit. of *Tinospora tuberculata*. Powder. $[\alpha]_D^{24}$ +61.7° (c, 0.94 in MeOH).

Fukuda, N. *et al*, *Justus Liebigs Ann. Chem.*, 1993, 491 (*isol, pmr, cmr*)

15,16-Epoxy-2-hydroxy-3,13(16),14-clerodatrien-18-oic acid E-10100



$C_{20}H_{28}O_4$ M 332.439

(2α,5α,8βH)-form

Me ester: [148717-64-0]. ***Tinotufolin A***

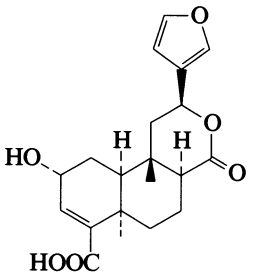
$C_{21}H_{30}O_4$ M 346.466

Constit. of *Tinospora tuberculata*. Oil. $[\alpha]_D^{18}$ +1.2° (c, 0.86 in $CHCl_3$).

Fukuda, N. *et al*, *Justus Liebigs Ann. Chem.*, 1993, 325 (*isol, pmr, cmr*)

15,16-Epoxy-2-hydroxy-3,13(16),14-clerodatrien-17,12-olid-18-oic acid E-10101

Updated Entry replacing E-00802



$C_{20}H_{24}O_6$ M 360.406

(2α,5α,12αH)-form

Me ester: [96552-83-9]. ***Tinophyllol***

$C_{21}H_{26}O_6$ M 374.433

Constit. of *Arcangelisia flava*. Prisms (MeOH). Mp 229-231°. $[\alpha]_D^{20}$ −19.3° (c, 0.5 in Py).

O-β-D-Glucoside, Me ester: [102907-33-5]. ***Tinophylloloside***

$C_{27}H_{36}O_{11}$ M 536.575

Constit. of *Fibraurea tinctoria*. Powder (H_2O). Mp 155-158°. $[\alpha]_D^{21}$ −19.2° (c, 0.25 in MeOH).

2-Ketone, Me ester: [2571-62-2]. ***Tinophyllone***

$C_{21}H_{24}O_6$ M 372.417

Isol. from root and bark of *Tinomiscium philippinense*. Cryst. Mp 175°. $[\alpha]_D^{29}$ −98° ($CHCl_3$).

(2β,5α,12αH)-form

2-O-β-D-Glucopyranoside, Me ester: ***Epitinophylloloside***

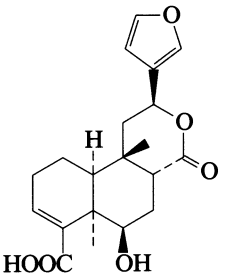
$C_{27}H_{36}O_{11}$ M 536.575

Cryst. Mp 142°. $[\alpha]_D$ −93° (c, 1.9 in MeOH).

Gambolvej, S.K. *et al*, *J. Philipp. Pharm. Assoc.*, 1958, **45**, 303 (*isol*)
Aguilar-Santos, G., *Chem. Ind. (London)*, 1965, 1074 (*uv, ir, pmr, ms*)
Brehm, L. *et al*, *J. Chem. Soc. C*, 1971, 2529 (*cryst struct*)
Kunii, T. *et al*, *Chem. Pharm. Bull.*, 1985, **33**, 479 (*isol, struct*)

Itokawa, H. *et al*, *Phytochemistry*, 1986, **25**, 905 (*Tinophylloloside*)
Song, C.Q. *et al*, *Chin. Chem. Lett.*, 1992, **3**, 185 (*Epitinophylloloside*)

15,16-Epoxy-6-hydroxy-3,13(16),14-clerodatrien-17,12-olid-18-oic acid E-10102



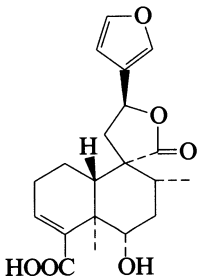
$C_{20}H_{24}O_6$ M 360.406

(5α,6β,8βH,12αH)-form

6-O-β-D-Glucopyranoside, Me ester: [145459-46-7].
Borapetoside C. *Tinocrisposide*
$C_{27}H_{36}O_{11}$ M 536.575
Constit. of *Tinospora tuberculata* and *T. crispa*. Needles (MeOH aq.). Mp 121-122°, Mp 208°. $[\alpha]_D^{24}$ −21.8° (c, 2.09 in MeOH). Borapetoside C and Tinocrisposide not compared. The higher Mp refers to Tinocrisposide.

Pachaly, P. *et al*, *Arch. Pharm. (Weinheim, Ger.)*, 1992, **325**, 705.
Fukuda, N. *et al*, *Justus Liebigs Ann. Chem.*, 1993, 491 (*isol, pmr, cmr*)

15,16-Epoxy-6-hydroxy-3,13(16),14-clerodatrien-20,12-olid-18-oic acid E-10103



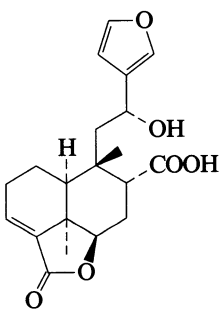
$C_{20}H_{24}O_6$ M 360.406

(ent-6β,12βH)-form

6-Ac, Me ester: ***Koberin B***
$C_{23}H_{28}O_7$ M 416.470
Constit. of *Croton lechleri*.

Cai, Y. *et al*, *Phytochemistry*, 1993, **34**, 265 (*isol, pmr, cmr*)

15,16-Epoxy-12-hydroxy-3,13(16),14-clerodatrien-18,6-olid-17-oic acid E-10104



$C_{20}H_{24}O_6$ M 360.406

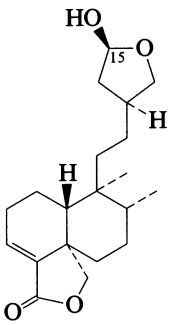
(5α,6β,8βH,12R)-form

12-O-β-D-Glucopyranoside, Me ester: [151200-49-6].
Borapetoside E
$C_{27}H_{36}O_{11}$ M 536.575
Constit. of *Tinospora tuberculata*. Powder. $[\alpha]_D^{25}$ −80.4° (c, 1.12 in MeOH).

12-O-[β-D-Glucopyranosyl-(1→6)-β-D-glucopyranoside], Me ester: [151200-48-5]. ***Borapetoside D***
$C_{33}H_{46}O_{16}$ M 698.717
Constit. of *T. tuberculata*. Powder. $[\alpha]_D^{25}$ −54.7° (c, 1.06 in MeOH).

Fukuda, N. *et al*, *Justus Liebigs Ann. Chem.*, 1993, 491 (*isol, pmr, cmr*)

15,16-Epoxy-15-hydroxy-3-cleroden-18,19-olide E-10105



(ent-13R,15R)-form

$C_{20}H_{30}O_4$ M 334.455

(ent-13R,15R)-form

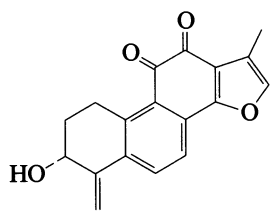
Me ether: 15,16-Epoxy-15-methoxy-3-cleroden-18,19-olide
$C_{21}H_{32}O_4$ M 348.481
Constit. of *Baccharis trinervis*. Oil. $[\alpha]_D$ −48.9° (c, 0.56 in $CHCl_3$).

(ent-13R,15S)-form

Me ether: Constit. of *B. trinervis*. Oil.

Kuroyanagi, M. *et al*, *Phytochemistry*, 1993, **34**, 1377 (*isol, pmr, cmr*)

14,16-Epoxy-3-hydroxy-19,20-dinor-4(18),5,7,9,13,15-abietahexaene-11,12-dione E-10106

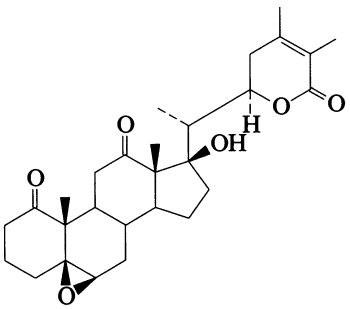


$C_{18}H_{14}O_4$ M 294.306

3α-form [83145-47-5]
3-Hydroxymethylenetanshinquinone
Constit. of *Salvia miltiorrhiza*. Red needles. Mp 192-194°.

Okamura, N. *et al*, *Planta Med.*, 1992, **58**, 571 (*isol, pmr, cmr*)

5,6-Epoxy-17-hydroxy-1,12-dioxowith-24-enolide E-10107



$C_{28}H_{38}O_6$ M 470.605

(5β,6β,17α,22R)-form

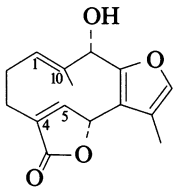
Jaboromagellonine

Constit. of *Jaborosa magellanica*. Cryst. (MeOH). Mp 216°. $[\alpha]_D$ −21.2° (c, 4.1 in MeOH).

Cárcamo, C. *et al*, *Heterocycles*, 1993, **36**, 1771 (*isol, pmr, cmr*)

8,12-Epoxy-9-hydroxy-1(10),4,7,11-germacratetraen-15,6-olide E-10108

Updated Entry replacing E-00842



$C_{15}H_{16}O_4$ M 260.289

(1(10)E,6α,9α)-form

Ac: [20149-38-6]. ***Litsealactone***

$C_{17}H_{18}O_5$ M 302.326

Constit. of *Neolitsea aciculata*. Cryst. (CH_2Cl_2/Et_2O). Mp 157-159°. $[\alpha]_D^{20}$ +57.5° (c, 0.8 in dioxan).

4β,5β-Epoxide, Ac: [20149-39-7]. ***Litseaculane***

$C_{17}H_{18}O_6$ M 318.326

Constit. of *N. aciculata*. Cryst. Mp 145-146°. $[\alpha]_D^{24}$ +76.1° (c, 0.4 in dioxan).

(1(10)E,6α,9β)-form

1β,10α-Epoxide, Ac: [13761-05-2]. ***Zeylanicine***

$C_{17}H_{18}O_6$ M 318.326

Isol. from roots of *N. zeylanica*. Cryst. (CH_2Cl_2/Et_2O). $[\alpha]_D^{26}$ −153° (c, 3.13 in dioxan).

1β,4β:5β,10α-Diepoxide: ***Deacetylzeylanidine***

$C_{15}H_{16}O_6$ M 292.288

Constit. of *N. zeylanica*. Cryst. Mp 207-209°. $[\alpha]_D$ +62° (c, 0.36 in $CHCl_3$).

1β,4β:5β,10α-Diepoxide, Ac: [13761-06-3]. ***Zeylanidine***

$C_{17}H_{18}O_7$ M 334.325

Constit. of *N. zeylanica*. Cryst. (CH_2Cl_2/Et_2O). Mp 220°. $[\alpha]_D^{26}$ −174° (c, 3.2 in dioxan).

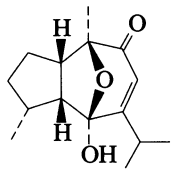
Joshi, B.J. *et al*, *Tetrahedron*, 1967, **23**, 261, 273 (*Zeylanicine, Zeylanidine*)

Takeda, K. *et al*, *J. Chem. Soc. C*, 1970, 973 (*Litsealactone, Litseaculane*)

Das, K.G. *et al*, *Org. Mass Spectrom.*, 1971, **5**, 187 (*ms*)

Li, W.-S. *et al*, *J. Nat. Prod.* (*Lloydia*), 1990, **53**, 1581 (*isol, pmr, cmr, struct*)

6,10-Epoxy-6-hydroxy-7-guaien-9-one E-10109



$C_{15}H_{22}O_3$ M 250.337

(1β,4α,5β,6β,10β)-form [103425-23-6] ***Alpinenone***

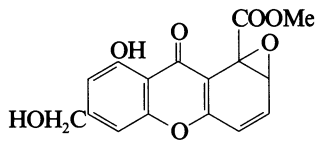
Constit. of *Alpinia japonica* and *A. intermedia*. Needles. Mp 140-142°. $[\alpha]_D$ +322.7° (c, 0.3 in $CHCl_3$).

Itokawa, H. *et al*, *Chem. Pharm. Bull.*, 1987, **35**, 2849, 2860 (*isol, pmr, cmr, cryst struct*)

1,2-Epoxy-8-hydroxy-6-(hydroxymethyl)-1-methoxycarbonylxanthone E-10110

MS 347. Vasodilator 347

[144678-18-2]

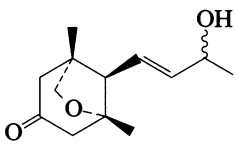


$C_{16}H_{12}O_7$ M 316.267

Prod. by *Aspergillus* SPC-16640. Vasodilator. Mp 253-256°.

Japan. Pat., 92 197 191, (1992); *CA*, **117**, 249971 (*isol, props*)

5,11-Epoxy-9-hydroxy-7-megastigmen-3-one E-10111

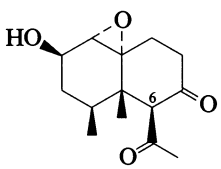


$C_{13}H_{20}O_3$ M 224.299

Constit. of *Centaurea salmantica*. Gum.

Fernández, I. *et al*, *Phytochemistry*, 1993, **34**, 733 (*isol, pmr, cmr*)

1,10-Epoxy-2-hydroxy-13-nor-7,11-nardosinanedione E-10112



(1α,2β,6α*H*,10α)-*form*

$C_{14}H_{20}O_4$ M 252.310

(1α,2β,6αH,10α)-form [148410-01-9]

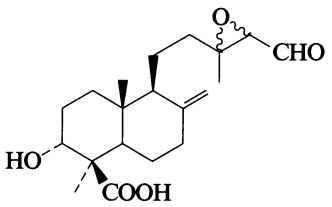
Constit. of *Lemnalia africana*. Yellow oil. $[\alpha]_D$ −78° (c, 0.3 in $CHCl_3$).

(1α,2β,6βH,10α)-form [148410-02-0]

Constit. of *L. africana*. Yellow oil. $[\alpha]_D$ −307° (c, 1 in $CHCl_3$).

Jurek, Y. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 508 (*isol, pmr, cmr*)

13,14-Epoxy-3-hydroxy-15-oxo-8(17)-labden-19-oic acid E-10113



$C_{20}H_{30}O_5$ M 350.454

(3α,13ξ,14ξ)-form

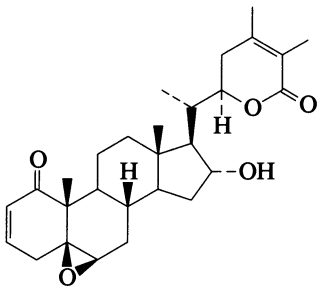
Ac:

$C_{22}H_{32}O_6$ M 392.491

Constit. of *Juniperus thurifera.*

San Feliciano, A. *et al*, *Phytochemistry*, 1993, **33**, 1165 (*isol, pmr, cmr*)

5,6-Epoxy-16-hydroxy-1-oxowitha-2,24-dienolide E-10114



$C_{28}H_{38}O_5$ M 454.605

(5β,6β,16α,22R)-form

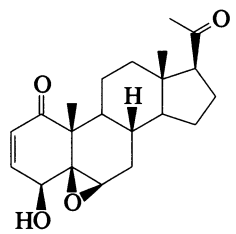
Ac:

$C_{30}H_{40}O_6$ M 496.642

Constit. of *Discopodium penninervium.* Powder. $[\alpha]_D$ +30° (c, 0.1 in $CHCl_3$).

Harbtemariam, S. *et al*, *Phytochemistry*, 1993, **34**, 807 (*isol, pmr, cmr*)

5,6-Epoxy-4-hydroxypregn-2-ene-1,20-dione E-10115



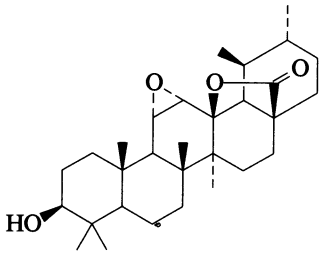
$C_{21}H_{28}O_4$ M 344.450

(4β,5β,6β)-form

Constit. of *Physalis viscosa.* Cryst. (EtOAc/hexane). Mp 204-205°.

Silva, G.L. *et al*, *Phytochemistry*, 1993, **34**, 871 (*isol, pmr, cmr*)

11,12-Epoxy-3-hydroxy-28,13-ursanolide E-10116



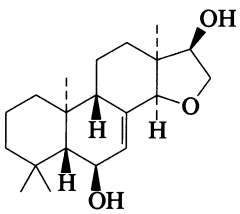
$C_{30}H_{46}O_4$ M 470.691

(3β,11α,12α,13β)-form [74048-34-3]

Constit. of *Thevetia neriifolia.* Plates (MeOH). Mp 283-284°. $[\alpha]_D$ +49.4° ($CHCl_3$).

Begum, S. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 613 (*isol, pmr, cmr, ms*)

14,16-Epoxy-7-isopimarene-6,15-diol E-10117



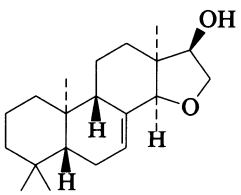
$C_{20}H_{32}O_3$ M 320.471

(ent-6α,14α,15α)-form [145701-03-7]

Constit. of *Calibrachoa parviflora.* Cryst. (MeCN aq.). Mp 207-210°. $[\alpha]_D$ −16° (c, 1 in EtOH).

Elliger, C.A. *et al*, *J. Nat. Prod.* (*Lloydia*), 1992, **55**, 1477 (*isol, pmr, cmr, cryst struct*)

14,16-Epoxy-7-isopimaren-15-ol E-10118



$C_{20}H_{32}O_2$ M 304.472

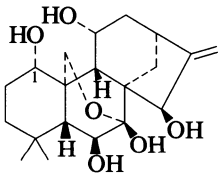
(ent-14α,15α)-form [145774-69-2]

Constit. of *Calibrachoa parviflora.* Cryst. (EtOAc/heptane). Mp 147-150°. $[\alpha]_D$ +21° (c, 1 in $CHCl_3$).

Elliger, C.A. *et al*, *J. Nat. Prod.* (*Lloydia*), 1992, **55**, 1477 (*isol, pmr, cmr, cryst struct*)

7,20-Epoxy-16-kaurene-1,6,7,11,15-pentol E-10119

Updated Entry replacing E-00967



(*ent*-1β,6α,11β,15α)-*form*

$C_{20}H_{30}O_6$ M 366.453

(ent-1β,6α,11β,15α)-form [40768-50-1]

Cryst. Mp 259-261°.

1-O-β-D-Glucopyranoside: [79849-98-2]. ***Shikokiaside A***
$C_{26}H_{40}O_{11}$ M 528.595
Constit. of *Rabdosia shikokiana*. Cryst. Mp 235-240°. $[\alpha]_D^{25}$ +0.5° (c, 0.8 in Py).

1,11-Di-Ac: [80138-56-3]. ent-*1β,11β-Diacetoxy-7,20-epoxy-16-kaurene-6α,7,15α-triol.* ***Rabdosichuanin D***
$C_{24}H_{34}O_8$ M 450.528
Isol. from *R. setschwanensis*. Cryst. Mp 246-248°. $[\alpha]_D^{25}$ −32.79° (c, 0.427 in MeOH).

1,11,15-Tri-Ac: [80138-69-8]. ent-*1β,11β,15α-Triacetoxy-7,20-epoxy-16-kaurene-6α,7-diol.* ***Rabdosianin A***
$C_{26}H_{36}O_9$ M 492.565
Constit. of *R. shikokiana*. Cryst. (Et_2O). Mp 150-153°. $[\alpha]_D^{20}$ −50° (c, 0.21 in $CHCl_3$).

1,6,11,15-Tetra-Ac: [80138-68-7]. ent-*1β,6α,11β,15α-Tetraacetoxy-7,20-epoxy-16-kauren-7-ol.* ***Rabdosianin B***
$C_{28}H_{38}O_{10}$ M 534.602
Constit. of *R. shikokiana*. Cryst. (Et_2O). Mp 215° dec. $[\alpha]_D^{20}$ −70° (c, 0.39 in $CHCl_3$).

15-Ketone: [76470-15-0]. ent-*7,20-Epoxy-1β,6α,7,11β-tetrahydroxy-16-kauren-15-one.* ***Effusanin E***
$C_{20}H_{28}O_6$ M 364.438
Isol. from *R. effusa*, *R. ternifolia* and *R. nervosa*. Shows antibacterial activity. Cryst. Mp 250-252°. $[\alpha]_D^{21}$ −81.3° (c, 0.28 in Py).

15-Ketone, 1,11-di-Ac: [24267-69-4]. ent-*1β,11β-Diacetoxy-7,20-epoxy-6α,7α-dihydroxy-16-kauren-15-one.* ***Shikokianin***
$C_{24}H_{32}O_8$ M 448.512
Isol. from *Isodon shikokianus*. Shows antibacterial and cytotoxic activity. Cryst. Mp 286-288° dec. $[\alpha]_D^{22}$ −38.6° (Py).

11-Ketone, 1,6,15-tri-Ac: [41410-57-5]. ent-*1β,6α,15α-Triacetoxy-7,20-epoxy-7α-hydroxy-16-kauren-11-one.* ***Shikokianidin***
$C_{26}H_{34}O_9$ M 490.549
Constit. of *I. shikokianus*. Cryst. (EtOH). Mp 218-219°. $[\alpha]_D$ −109° (Py).

(ent-1β,6α,11α,15α)-form

11-Ac: [27548-84-1]. ent-*11α-Acetoxy-7,20-epoxy-16-kaurene-1β,6α,7,15α-tetrol.* ***Sodoponin***
$C_{22}H_{32}O_7$ M 408.491
Isol. from *I. japonicus* and *R.* spp. Cryst. Mp 229-231.5°. $[\alpha]_D^{28}$ +45.7° (c, 1 in Py).

6,11-Di-Ac: [90730-85-1]. ent-*6α,11α-Diacetoxy-7,20-epoxy-16-kaurene-1β,7,15α-triol.* ***Ternifolin***
$C_{24}H_{34}O_8$ M 450.528
Isol. from *R. ternifolia*. Drawing error in CA.

15-Ketone: [38602-52-7]. ent-*7,20-Epoxy-1β,6α,7,11α-tetrahydroxy-16-kauren-15-one.* ***Lasiodonin***
$C_{20}H_{28}O_6$ M 364.438
Isol. from *I. lasiocarpus*. Cryst. (MeOH). Mp 252-254° dec. $[\alpha]_D^{17}$ −100° (c, 1 in Py).

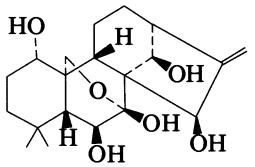
11-O-β-D-Glucopyranoside: [136832-03-6]. ***Parvifoliside***
$C_{26}H_{40}O_{11}$ M 528.595
Constit. of *I. parvifolia*. Cryst. Mp 279-281°. $[\alpha]_D^{20}$ +0.5° (c, 0.4 in MeOH).

1,11-Acetonide: ***Wikstroemioidin B***
$C_{23}H_{34}O_6$ M 406.518
Constit. of *I. wikstroemioides*. Needles (MeOH). Mp 110-112°. $[\alpha]_D^{25}$ −17.6° (c, 0.23 in Py).

Kubota, T. *et al*, *Bull. Chem. Soc. Jpn.*, 1969, **42**, 1778 (*Shikokianin*)
Fujita, E. *et al*, *Chem. Pharm. Bull.*, 1972, **20**, 1752; 1973, **21**, 1357 (*Lasiodonin, Sodoponin*)
Isobe, T. *et al*, *Bull. Chem. Soc. Jpn.*, 1973, **46**, 583 (*Shikokianidin*)
Kubo, I. *et al*, *Agric. Biol. Chem.*, 1974, **38**, 1261.
Kubo, I. *et al*, *J. Am. Chem. Soc.*, 1978, **100**, 628.
Fujita, T. *et al*, *Chem. Lett.*, 1980, 1635 (*Effusanin E*)
Ochi, M. *et al*, *Bull. Chem. Soc. Jpn.*, 1981, **54**, 2786 (*Rabdosianins*)
Isobe, T. *et al*, *Chem. Lett.*, 1981, 1225 (*Shikokiaside A*)
Wang, X. *et al*, *CA*, 1986, **104**, 31723h (*Ternifolin*)
Hao, H. *et al*, *Phytochemistry*, 1990, **29**, 2591 (*isol, pmr, cmr*)
Guo, Y. *et al*, *Chin. Chem. Lett.*, 1991, **2**, 377; *CA*, **115**, 203294q (*Parvifoliside*)
Shun-Hua, W. *et al*, *Phytochemistry*, 1993, **34**, 1099 (*Wikstroemioidin B*)

7,20-Epoxy-16-kaurene-1,6,7,14,15-pentol E-10120

Updated Entry replacing E-00968



$C_{20}H_{30}O_6$ M 366.453

(ent-1β,6α,14α,15α)-form [28957-06-4] ***Enmenol***
Constit. of leaves of *Isodon trichocarpus* and from *Rabdosia* spp. Cryst. (EtOAc). Mp 240-242°. $[\alpha]_D^{30.5}$ −29° (c, 0.14 in EtOH).

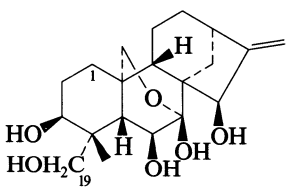
1-Ac: [52718-05-5]. ent-*1β-Acetoxy-7,20-epoxy-16-kaurene-6α,7,14α,15α-tetrol.* ***Lasiokaurinol***
$C_{22}H_{32}O_7$ M 408.491
Constit. of *I. lasiocarpus*. Cryst. (MeOH). Mp 143-147°, Mp 218-221° dec. (double Mp). $[\alpha]_D^{27}$ −12° (c, 0.085 in MeOH).

1,6-Di-Ac: [150148-80-4]. ***Rabdokaurin C***
$C_{24}H_{34}O_8$ M 450.528
Constit. of *R. longituba*. Needles (MeOH). Mp 232-234°. $[\alpha]_D$ −17.5° (c, 1.16 in Py).

Mori, S. *et al*, *Chem. Pharm. Bull.*, 1970, **18**, 871 (*Enmenol*)
Fujita, E. *et al*, *Chem. Pharm. Bull.*, 1974, **22**, 280 (*Lasiokaurinol*)
Takeda, Y. *et al*, *Chem. Pharm. Bull.*, 1993, **41**, 685 (*Rabdokaurin C*)

7,20-Epoxy-16-kaurene-3,6,7,15,19-pentol E-10121

Updated Entry replacing E-00969



$C_{20}H_{30}O_6$ M 366.453

(ent-3α,6α,15α)-form
Maoecrystal K
Constit. of *Rabdosia eriocalyx*. Cryst. Mp 191.5-193°. $[\alpha]_D^{26.5}$ −1.3° (c, 1 in MeOH).

19-O-β-D-Glucopyranoside: ***Rabdoside 1***
$C_{26}H_{40}O_{11}$ M 528.595
Constit. of *R. eriocalyx*. Cryst. Mp 179-180°. $[\alpha]_D^{26.5}$ −4.6° (c, 1 in MeOH).

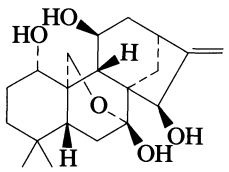
15-Ketone, 3,19-di-Ac: ent-*3α,19-Diacetoxy-7,20-epoxy-6α,7-dihydroxy-16-kauren-15-one.* ***Maoecrystal J***
$C_{24}H_{32}O_8$ M 448.512
Constit. of *R. eriocalyx*. Cryst. (Me_2CO/hexane). Mp 249-250°. $[\alpha]_D$ −49.7° (c, 1 in MeOH).

15-Ketone, 19-Ac: ent-*19-Acetoxy-7,20-epoxy-3α,6α,7-trihydroxy-16-kauren-15-one*
$C_{22}H_{30}O_7$ M 406.475

Constit. of *R. longituba*. Cryst. Mp 210-212°. $[\alpha]_D^{29}$ −88.9° (c, 0.9 in MeOH).

Shen, X. *et al*, *Phytochemistry*, 1989, **28**, 855.
Isogai, A. *et al*, *Phytochemistry*, 1989, **28**, 2427 (*isol, pmr, cmr*)
Takeda, Y. *et al*, *Planta Med.*, 1992, **58**, 470 (*isol, pmr, cmr*)

7,20-Epoxy-16-kaurene-1,7,11,15-tetrol E-10122



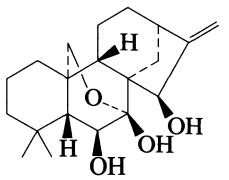
$C_{20}H_{30}O_5$ M 350.454

(ent-1β,7α,11α,15α)-form

1,11-O-Isopropylidene: ***Rabdocoetsin C***
$C_{23}H_{34}O_5$ M 390.519
Constit. of *Rabdosia coetsa*. Needles. Mp 248-249°.

Xu, Y. *et al*, *Phytochemistry*, 1993, **34**, 576 (*isol, pmr, cmr*)

7,20-Epoxy-16-kaurene-6,7,15-triol E-10123



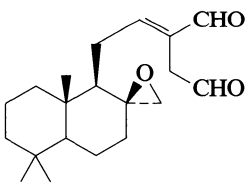
$C_{20}H_{30}O_4$ M 334.455

(ent-6α,15α)-form

6-Ac: [133269-18-8]. ent-*6β-Acetoxy-7,20-epoxy-16-kaurene-7,15-diol.* ***Maoecrystal G***
$C_{22}H_{32}O_5$ M 376.492
Constit. of *Rabdosia eriocalyx*. Cryst. Mp 205-207°.

Shen, X. *et al*, *Acta Bot. Sin.* (*Engl. Transl.*), 1990, **32**, 711 (*isol, pmr, cmr*)

8,17-Epoxy-12-labdene-15,16-dial E-10124



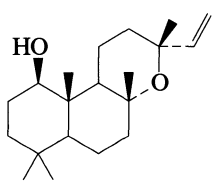
$C_{20}H_{30}O_3$ M 318.455

(8β,12E)-form

ZT
Constit. of *Zingiber officinale*.

Tanabe, M. *et al*, *Chem. Pharm. Bull.*, 1993, **41**, 710.

8,13-Epoxy-14-labden-1-ol E-10125



$C_{20}H_{34}O_2$ M 306.487

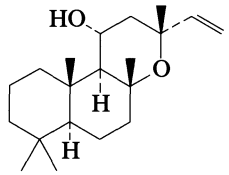
(1β,8α,13R)-form

1β-Hydroxymanoyl oxide
Constit. of *Kyllinga erecta*. Cryst. Mp 100°. $[\alpha]_D$ +3.3° (c, 0.27 in $CHCl_3$).

Mahmout, Y. *et al*, *Phytochemistry*, 1993, **34**, 865 (*isol, pmr, cmr*)

8,13-Epoxy-14-labden-11-ol E-10126

Updated Entry replacing E-01037



$C_{20}H_{34}O_2$ M 306.487

(8α,11α,13R)-form

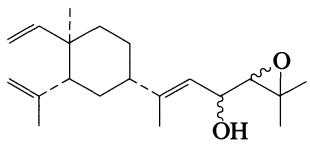
11α-Hydroxymanoyl oxide
Constit. of *Kyllinga erecta*. Cryst. Mp 85°. $[\alpha]_D$ −17.6° (c, 0.225 in $CHCl_3$).

11-Ketone: [61242-47-5]. ***8,13-Epoxy-14-labden-11-one***
$C_{20}H_{32}O_2$ M 304.472
Constit. of *Coleus forskohlii*. Cryst. (2-propanol). Mp 96-97°. $[\alpha]_D^{20}$ −103.2° (c, 0.2 in $CHCl_3$).

Gabetta, B. *et al*, *Phytochemistry*, 1989, **28**, 859 (*ketone*)
Mahmout, Y. *et al*, *Phytochemistry*, 1993, **34**, 865 (*isol, pmr, cmr*)

17,18-Epoxy-8,10,13(15)-lobatrien-16-ol E-10127

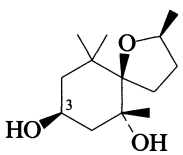
[150312-94-0]



$C_{20}H_{32}O_2$ M 304.472
Constit. of a *Lobophytum* sp. Oil. $[\alpha]_D$ +10.7° (c, 1.4 in $CHCl_3$).

Raju, B.L. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 961 (*isol, pmr, cmr*)

6,9-Epoxy-3,5-megastigmanediol E-10128



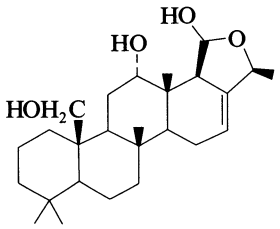
$C_{13}H_{24}O_3$ M 228.331

3-O-β-D-Glucopyranoside: [151516-48-2]. ***Scorospiroside***
$C_{19}H_{34}O_8$ M 390.473
Constit. of *Scorodocarpus borneensis*. Glassy oil. $[\alpha]_D^{24}$ −25.8° (c, 0.06 in MeOH).

Abe, F. *et al*, *Phytochemistry*, 1993, **33**, 1499 (*isol, pmr, cmr*)

24,25-Epoxy-24-methyl-16-scalarene-12,22,25-triol E-10129

Updated Entry replacing E-01082



$C_{26}H_{42}O_4$ M 418.615

(12α,25ξ)-form [85354-71-8]

Ac: ***22-Hydroxy-20-methyldeoxoscalarin***

$C_{28}H_{44}O_5$ M 460.653

Constit. of *Chromodoris sedna*. Oil.

12-Ac, 25-Me ether:

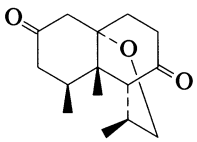
$C_{29}H_{46}O_5$ M 474.679

Constit. of *Phyllospongia dendyi*. Needles ($CHCl_3$/pet. ether). Mp 200-201°. $[\alpha]_D^{25}$ +14.5° (c, 0.15 in $CHCl_3$).

Hochlowski, J.E. *et al*, *J. Org. Chem.*, 1983, **48**, 1738.

Rao, C.B. *et al*, *Indian J. Chem., Sect. B*, 1993, **32**, 288 (*isol, pmr, cmr*)

10,12-Epoxy-2,7-nardosinanedione E-10130



$C_{15}H_{22}O_3$ M 250.337

(10α)-form

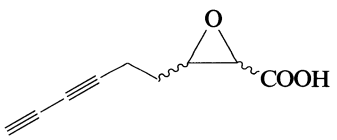
2,7-Nardosinoxanedione

Constit. of *Lemnalia africana*. Semicrystalline. $[\alpha]_D$ +87° (c, 0.3 in $CHCl_3$).

Jurek, J. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 508 (*isol, pmr, cmr*)

2,3-Epoxy-6,8-nonadiynoic acid E-10131

3-(3,5-Hexadiynyl)oxiranecarboxylic acid



$C_9H_8O_3$ M 164.160

2-Phenylethylamide: [96917-25-8]. *3-(3,5-Hexadiynyl)-N-(2-phenylethyl)oxiranecarboxamide. 2,3-Epoxy-6,8-nonadiynoic acid 2-phenylethylamide*

$C_{17}H_{17}NO_2$ M 267.327

Isol. from *Acmella ciliata* and *Salmea scandens*. Oil.

(Z)-*2-Phenylethenylamide:* [75872-78-5]. *3-(3,5-Hexadiynyl)-N-(2-phenylethenyl)oxiranecarboxamide, 9CI. 1,2-Epoxy-6,8-nonadiynoic acid styrylamide*

$C_{17}H_{15}NO_2$ M 265.311

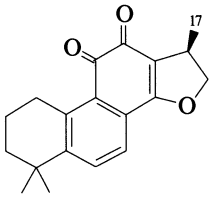
Isol. from *Spilanthes alba*. Oil.

Bohlmann, F. *et al*, *Phytochemistry*, 1980, **19**, 1535; 1985, **24**, 595 (*isol, struct, pmr, ir, ms*)

Martin, R. *et al*, *Phytochemistry*, 1985, **24**, 2295 (*isol, struct, pmr, ms*)

14,16-Epoxy-20-nor-5(10),6,8,13-abietatetraene-11,12-dione E-10132

Updated Entry replacing E-01090



Absolute configuration

$C_{19}H_{20}O_3$ M 296.365

(R)-form [35825-57-1] ***Cryptotanshinone***

Isol. from root of *Salvia miltiorrhiza* and from *Rosmarinus officinalis*. Red cryst. Mp 182°. $[\alpha]_D^{21}$ −91.4° ($CHCl_3$).

17-Hydroxy: ***17-Hydroxycryptotanshinone***

$C_{19}H_{20}O_4$ M 312.365

Isol. from *S. munzii*. Reddish solid.

(±)-form

Orange-brown needles. Mp 174-175°.

[4783-35-1]

Takiura, K. *et al*, *Chem. Pharm. Bull.*, 1962, **10**, 112 (*isol*)

Baillie, A.C. *et al*, *J. Chem. Soc. C*, 1968, 48 (*synth*)

Inouye, Y. *et al*, *Bull. Chem. Soc. Jpn.*, 1969, **42**, 3318 (*synth*)

Tateishi, M. *et al*, *Tetrahedron*, 1971, **27**, 237 (*synth*)

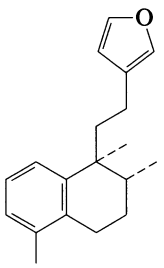
Brieskorn, C.H. *et al*, *Planta Med.*, 1973, **24**, 190 (*isol*)

Romanova, A.S. *et al*, *Khim. Prir. Soedin.*, 1977, 414 (*isol*)

Tomita, Y. *et al*, *J. Chem. Soc., Chem. Commun.*, 1987, 1311 (*biosynth, abs config*)

Luis, J.G. *et al*, *Tetrahedron*, 1993, **49**, 6277 (*17-Hydroxycryptotanshinone*)

15,16-Epoxy-19-nor-1,3,5(10),13(16),14-clerodapentaene E-10133



$C_{19}H_{24}O$ M 268.398

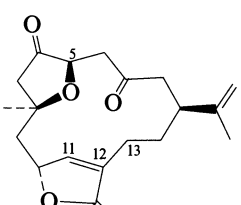
ent-form

Constit. of *Croton cortesianus*.

Siems, K. *et al*, *Phytochemistry*, 1992, **31**, 4363 (*isol, pmr*)

5,8-Epoxy-18-nor-3,6-dioxo-11,15-cembradien-20,10-olide E-10134

Updated Entry replacing E-01096



(1*S*,5*R*,8*S*,10*R*)-*form*

$C_{19}H_{24}O_5$ M 332.396

(1S,5R,8S,10R)-form

Constit. of soft coral *Sinularia numerosa*. Cryst. $[\alpha]_D$ −47° (c, 0.01 in $CHCl_3$).

11β,12β-Epoxide: 5,8:11,12-Diepoxy-18-nor-3,6-dioxo-11,15-cembradien-20,10-olide

$C_{19}H_{24}O_6$ M 348.395

Constit. of *S. inelegans*. Cryst. Mp 176-177°. $[\alpha]_D$ −36° (c, 0.009 in $CHCl_3$).

$\Delta^{12,13}$-*Isomer, 11α-hydroxy:* ***5,8-Epoxy-11α-hydroxy-18-nor-3,6-dioxo-12,15-cembradien-20,10-olide***

$C_{19}H_{24}O_6$ M 348.395

Constit. of *S. inelegans*. Cryst. Mp 196-197°. $[\alpha]_D$ +3.8° (c, 0.004 in $CHCl_3$).

$\Delta^{12,13}$-*Isomer, 11β-hydroxy:* ***5,8-Epoxy-11β-hydroxy-18-nor-3,6-dioxo-12,15-cembradien-20,10-olide***

$C_{19}H_{24}O_6$ M 348.395

Constit. of *S. numerosa*, *S. querciformis* and *S. leptoclades*.

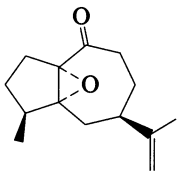
(1S,5S,8S,10R)-form

$\Delta^{12,13}$-*Isomer, 11β-hydroxy:* ***Sinuleptolide***

Constit. of a *S.* sp. Prisms (MeOH). Mp 206-208°. $[\alpha]_D^{25}$ +57.5° (c, 0.27 in MeOH).

Bowden, B.F. *et al*, *Aust. J. Chem.*, 1978, **31**, 2049 (*cryst struct, deriv*)
Sato, A. *et al*, *Tetrahedron*, 1985, **41**, 4303 (*cryst struct*)
Shoji, N. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 1651 (*Sinuleptolide*)

1,5-Epoxy-14-nor-11-guaien-10-one E-10135



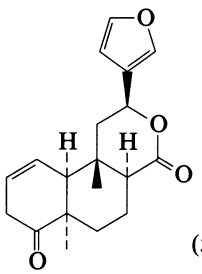
$C_{14}H_{20}O_2$ M 220.311

(1α,4β,5α)-form [150034-01-8]

Constit. of *Aquilaria agallocha* (agarwood). Cryst. Mp 91.5°. $[\alpha]_D^{30}$ +51.6° (c, 0.2 in $CHCl_3$).

Ishihara, M. *et al*, *Phytochemistry*, 1993, **33**, 1147 (*isol, pmr, cmr*)

15,16-Epoxy-18-nor-4-oxo-1,13(16),14-clerodatrien-17,12-olide E-10136



(5α,8α*H*,12α*H*)-*form*

$C_{19}H_{22}O_4$ M 314.380

(5α,8αH,12αH)-form

Tinocallone B

Constit. of *Timospora capillipes*. Cryst. Mp 225°. $[\alpha]_D$ −101.3° (c, 0.5 in $CHCl_3$).

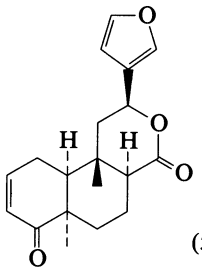
(5α,8βH,12αH)-form

Tinocallone A

Constit. of *T. capillipes*. Cryst. Mp 125°. $[\alpha]_D$ −38.19° (c, 0.54 in $CHCl_3$).

Song, C.Q. *et al*, *Chin. Chem. Lett.*, 1992, **3**, 185 (*isol, pmr, cmr*)

15,16-Epoxy-18-nor-4-oxo-2,13(16),14-clerodatrien-17,12-olide E-10137



(5α,8α*H*,12α*H*)-*form*

$C_{19}H_{22}O_4$ M 314.380

(5α,8αH,12αH)-form

Tinocallone D

Constit. of *Tinospora capillipes*. Cryst. Mp 188-189°. $[\alpha]_D$ +1.85° (c, 0.81 in $CHCl_3$).

(5α,8βH,12αH)-form

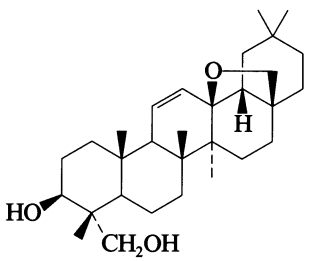
Tinocallone C

Constit. of *T. capillipes*. Cryst. Mp 194-195°. $[\alpha]_D$ −2.8° (c, 0.64 in $CHCl_3$).

Song, C.Q. *et al*, *Chin. Chem. Lett.*, 1992, **3**, 185 (*isol, pmr, cmr*)

13,28-Epoxy-11-oleanene-3,23-diol E-10138

Updated Entry replacing O-00354



$C_{30}H_{48}O_3$ M 456.707

Struct. revised in 1993 formerly thought to be 12-Oleanene-3,13,23,28-tetrol.

(3β,13β)-form

Verbascogenin

Not isol. Hydrol. of Verbascosaponin led to dehydration.

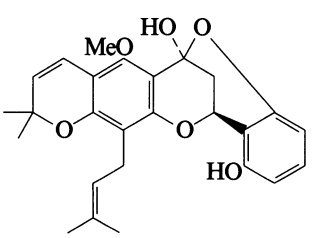
3-O-[α-L-Rhamnopyranosyl-(1→4)-β-D-glucopyranosyl-(1→3)-[β-D-glucopyranosyl-(1→2)]-β-D-fucopyranoside]: [74163-66-9]. ***Verbascosaponin***

$C_{54}H_{88}O_{21}$ M 1073.277

Saponin from *Verbascum phlomoides*. Mp 263-268°.

Tschesche, R. *et al*, *Chem. Ber.*, 1980, **113**, 1754 (*isol, cmr, struct*)
Schröder, H. *et al*, *Justus Liebigs Ann. Chem.*, 1993, 413 (*isol, pmr, cmr*)

4,6′-Epoxyoritiniflavanol E-10139

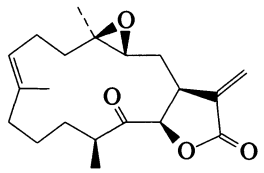


$C_{26}H_{28}O_6$ M 436.504

Tentative identification. Constit. of *Lonchocarpus orotinus*. Not obt. pure.

Waterman, P.G. *et al*, *Phytochemistry*, 1987, **26**, 1189.

3,4-Epoxy-13-oxo-7,15(17)-cembradien-15,14-olide E-10140



$C_{20}H_{28}O_4$ M 332.439

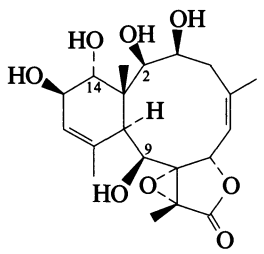
(3R,4R,7E,12S,14R)-form

Eupalmerone

Constit. of *Eunicea mammosa*. Cryst. Mp 159-160°.

Rodríguez, A.D. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 1101 (*isol, pmr, cmr*)

8,17-Epoxy-2,3,9,13,14-pentahydroxy-5,11-briaradien-18,7-olide E-10141



$C_{20}H_{28}O_8$ M 396.436

(2β,3β,5Z,7α,8α,9β,13β,14α,17α)-form

2,3,9,14-Tetra-Ac: ***Stecholide J***

$C_{28}H_{36}O_{12}$ M 564.585

Constit. of *Solenopodium excavatum*. Cryst. Mp 204°. $[\alpha]_D^{20}$ −39.2° (c, 0.5 in $CHCl_3$).

3-Butanoyl, 2,9,14-tri-Ac: ***Stecholide I***

$C_{30}H_{40}O_{12}$ M 592.639

Constit. of *S. excavatum*. Cryst. (MeOH). Mp 116-118°. $[\alpha]_D^{20}$ −40.8° (c, 2.55 in $CHCl_3$).

11β,12β-Epoxide, 3-butanoyl, 2,9,14-tri-Ac: ***Stecholide M***

$C_{30}H_{40}O_{13}$ M 608.638

Constit. of *S. excavatum*. Cryst. Mp 108°. $[\alpha]_D^{20}$ −62.6° (c, 0.26 in $CHCl_3$).

11β,12β-Epoxide, 2,3,9,14-tetra-Ac: ***Stecholide L***

$C_{28}H_{36}O_{13}$ M 580.585

Constit. of *S. excavatum*. Cryst. Mp 148-150°. $[\alpha]_D^{20}$ −53.3° (c, 2.28 in $CHCl_3$).

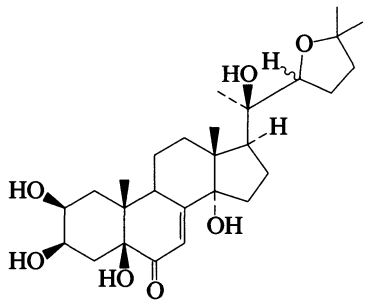
11β,12β-Epoxide, 2,3,9,13,14-penta-Ac: ***Stecholide K***

$C_{30}H_{38}O_{14}$ M 622.622

Constit. of *S. excavatum*. Glass. $[\alpha]_D^{20}$ −58.5° (c, 0.39 in $CHCl_3$).

Schmitz, F.J. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 1339 (*isol, pmr, cmr, cryst struct*)

22,25-Epoxy-2,3,5,14,20-pentahydroxycholest-7-en-6-one E-10142



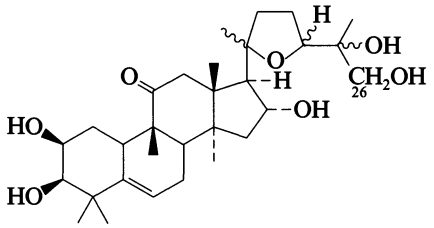
$C_{27}H_{42}O_7$ M 478.625

(2β,3β,5β,14α,20R,22ξ)-form [80651-74-7] ***Ajugasterone D***

Constit. of *Ajuga nipponensis*.

Li, W. *et al*, *Huaxue Xuebao*, 1981, **39**, 735; *CA*, **97**, 145120b.

20,24-Epoxy-2,3,16,25,26-pentahydroxycucurbit-5-en-11-one E-10143



$C_{30}H_{48}O_7$ M 520.705

(2β,3β,16α,20ξ,24ξ,25ξ)-form

2-O-β-D-Glucopyranoside: [151162-87-7].

$C_{36}H_{58}O_{12}$ M 682.847

Constit. of *Picrorhiza kurroa*. Amorph. powder. Mp 160-163°.

3-Ketone, 2-O-β-D-Glucopyranoside: [151162-86-6]. *20,24-Epoxy-2-glucosyloxy-16,25,26-trihydroxycucurbit-5-ene-3,11-dione*

$C_{36}H_{56}O_{12}$ M 680.831

Constit. of *P. kurroa*. Amorph. powder. Mp 175-178°.

26-Deoxy, 2-O-β-D-glucopyranoside: [151162-85-5]. *20,24-Epoxy-2-glucosyloxy-3,16,25-trihydroxycucurbit-5-en-11-one*

$C_{36}H_{58}O_{11}$ M 666.848

Constit. of *Picrorhiza kurroa*. Amorph. powder. Mp 126-130°.

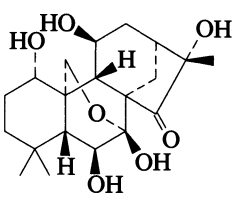
26-Deoxy, 3-ketone, 2-O-β-D-glucopyranoside: [151162-82-2]. *20,24-Epoxy-2-glucosyloxy-16,25-dihydroxycucurbit-5-ene-3,11-dione*

$C_{36}H_{56}O_{11}$ M 664.832

Constit. of *P. kurroa*. Amorph. powder. Mp 132-135°.

Stuppner, H. *et al*, *Phytochemistry*, 1993, **33**, 1139 (*isol, pmr, cmr*)

7,20-Epoxy-1,6,7,11,16-pentahydroxy-15-kauranone E-10144

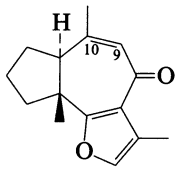


$C_{20}H_{30}O_7$ M 382.453

(ent-1β,6α,11α,16βOH)-form
Parvifolin
Constit. of *Isodon parvifolia*. Amorph. powder. $[\alpha]_D$ −117° (MeOH).

Guo, Y.W. *et al*, *Chin. Chem. Lett.*, 1992, **3**, 633 (*isol, pmr, cmr*)

6,12-Epoxy-6,9,11-pseudoguaiatrien-8-one E-10145



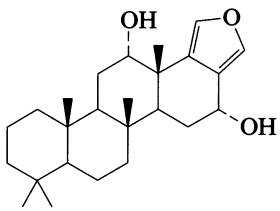
$C_{15}H_{18}O_2$ M 230.306

(1α,5β)-form [140245-63-2] ***9-Furanomexicen-8-one***
Constit. of *Ligularia vigaurea*. Wax. $[\alpha]_D^{23}$ +95.0° (c, 0.72 in $CHCl_3$).

9β,10β-Epoxide: [140245-64-3]. *6,12:9,10-Diepoxy-6,11-pseudoguaiadien-8-one.* ***9,10-Epoxy-8-furanomexicanone***
$C_{15}H_{18}O_3$ M 246.305
Constit. of *L. vigaurea*. Wax. $[\alpha]_D^{23}$ −65.0° (c, 0.78 in $CHCl_3$).

Chen, H.M. *et al*, *Chin. Chem. Lett.*, 1991, **2**, 847 (*isol, pmr, cmr*)

24,25-Epoxy-17(25),18(24)-scalaradiene-12,6-diol E-10146



$C_{25}H_{38}O_3$ M 386.573

(12α,16α)-form

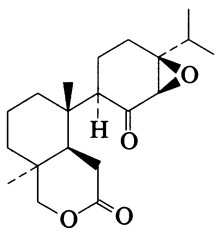
12-Ac: ***Isoscalarafuran B***
$C_{27}H_{40}O_4$ M 428.611
Constit. of *Spongia hispida*. Oil.

(12α,16β)-form

12-Ac: ***Isoscalarafuran A***
$C_{27}H_{40}O_4$ M 428.611
Constit. of *S. hispida*. Oil.

Davis, R. *et al*, *Aust. J. Chem.*, 1993, **46**, 1295 (*isol, pmr, cmr*)

13,14-Epoxy-7,8-seco-7,19-abietanolide E-10147



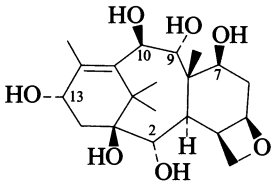
$C_{20}H_{30}O_4$ M 334.455

(13β,14β)-form [151484-89-8] ***Secojuniperolide***
Constit. of *Juniperus chinensis*. Cryst. Mp 96-98°. $[\alpha]_D^{25}$ +20.6° (c, 0.16 in MeOH).

Fang, J.-M. *et al*, *Phytochemistry*, 1993, **33**, 1169 (*isol, pmr, cmr, cryst struct*)

5,20-Epoxy-11-taxene-1,2,7,9,10,13-hexol E-10148

Updated Entry replacing E-01178



$C_{20}H_{32}O_7$ M 384.469

(1β,2α,5β,7β,9α,10β,13α)-form

2-Benzoyl, 7,9,10-tri-Ac: ***13-Deacetylbaccatin VI***
$C_{33}H_{42}O_{11}$ M 614.688
Constit. of *Taxus wallichiana*. Needles (MeOAc/hexane). Mp 225-226°. $[\alpha]_D^{20}$ −38° (c, 1.01 in MeOH).

2-Benzoyl, 7,9,10,13-tetra-Ac: [57672-79-4]. *7β,9α,10β,13α-Tetraacetoxy-2α-benzoyloxy-5β,20-epoxy-11-taxen-1β-ol.* ***Baccatin VI***
$C_{35}H_{44}O_{12}$ M 656.725
Constit. of *T. baccata*. Cryst. Mp 244-245° dec. $[\alpha]_D$ −5°.

2-Hexanoyl, 7,9,10,13-tetra-Ac: [57672-80-7]. ***Baccatin VII***
$C_{34}H_{50}O_{12}$ M 650.762
Isol. from *T. baccata*. Cryst. Mp 270° dec. $[\alpha]_D$ +9°.

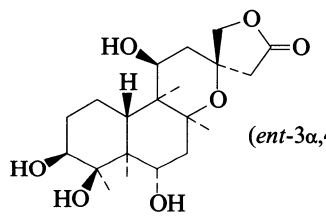
Castellano, E.E. *et al*, *Acta Crystallogr., Sect. B*, 1973, **29**, 2566 (*cryst struct*)

de Marcano, D.P.D.C. *et al*, *J. Chem. Soc., Chem. Commun.*, 1975, 365.

Barboni, L. *et al*, *Phytochemistry*, 1993, **33**, 145 (*13-Deacetylbaccatin VI*)

8,13-Epoxy-3,4,6,11-tetrahydroxy-15,16-clerodanolide E-10149

Updated Entry replacing E-01191



(*ent*-3α,4α,6β,8α,11α,13*S*)-*form*

$C_{20}H_{32}O_7$ M 368.469

(ent-3α,4α,6β,8α,11α,13S)-form

6-Benzoyl, 11-Ac: [114489-74-6]. ***Scutellone C***
$C_{29}H_{38}O_9$ M 530.614
Constit. of *Scutellaria rivularis*. Needles (Me_2CO). Mp 228-230°. $[\alpha]_D^{20}$ −20.0° (c, 1 in $CHCl_3$).

(ent-3β,4α,6β,8α,11α,13R)-form

6-Benzoyl, 11-Ac: [112609-10-6]. ***Scuterivulactone C₂***
$C_{29}H_{38}O_9$ M 530.614
Constit. of *S. rivularis*. Amorph. (as acetate). $[\alpha]_D$ −31° ($CHCl_3$) (acetate).

(ent-3β,4α,6β,8α,11α,13S)-form

6-Benzoyl, 11-Ac: [114489-73-5]. ***Scutellone A.*** *Scuterivulactone C₁*
$C_{29}H_{38}O_9$ M 530.614
Isol. from *S. rivularis*. Prisms (Me_2CO); cryst. (EtOAc). Mp 290-292° (268-272°). $[\alpha]_D$ −7.0° (AcOH), $[\alpha]_D$ +1.26° (c, 1.0 in MeOH).

3-Ketone, 6-benzoyl, 11-Ac: [119614-69-6]. ***Scutellone B***
$C_{29}H_{36}O_9$ M 528.598

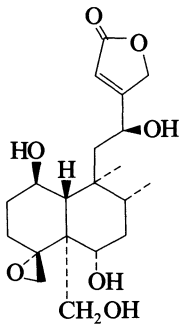
Constit. of *S. rivularis*. Needles (Me_2CO). Mp 196-198°. $[\alpha]_D$ +54.9° (c, 1 in $CHCl_3$).

[112709-53-2]

Kikuchi, T. *et al*, *Chem. Lett.*, 1987, 987.
Lin, Y.-L. *et al*, *J. Chem. Res., Synop.*, 1987, 320 (*cryst struct*)
Lin, Y.-L. *et al*, *Heterocycles*, 1988, **27**, 779.
Lin, Y.-L. *et al*, *Chem. Pharm. Bull.*, 1989, **37**, 582 (*Scutellene B*)

4,18-Epoxy-1,6,12,19-tetrahydroxy-13-cleroden-15,16-olide E-10150

Updated Entry replacing E-01195



$C_{20}H_{30}O_7$ M 382.453

(ent-1α,4β,6β,12R)-form

6,19-Di-Ac, 1-tigloyl: [78798-40-0]. ***Ajugamarin A1.*** *Ajugamarin*
$C_{29}H_{40}O_{10}$ M 548.629
Constit. of leaves of *Ajuga nipponensis*. Needles (CCl_4). Mp 93-95°. $[\alpha]_D^{25}$ −20° (c, 0.4 in CCl_4).

1-(2S-Methylbutanoyl), 6,19-di-Ac: [85447-28-5]. ***Ajugamarin B1.*** *Dihydroajugamarin*
$C_{29}H_{42}O_{10}$ M 550.645
Constit. of *A. nipponensis*. Amorph. solid.

1-Tigloyl, tri-Ac: [122587-82-0]. ***Ajugamarin A2***
$C_{31}H_{42}O_{11}$ M 590.666
Constit. of *A. decumbens*. Amorph. solid. $[\alpha]_D^{25}$ −38° (c, 2.8 in $CHCl_3$).

1-(2S-Methylbutanoyl), tri-Ac: [121449-65-8]. ***Ajugamarin B2***
$C_{31}H_{44}O_{11}$ M 592.682
Constit. of *A. nipponensis*. Cryst. (EtOH). Mp 154-155°. $[\alpha]_D^{30}$ −25° (c, 0.8 in $CHCl_3$).

1-Tigloyl, 12-(2S-methylbutanoyl), di-Ac: [122587-83-1]. ***Ajugamarin G1***
$C_{34}H_{48}O_{11}$ M 632.747
Constit. of *A. decumbens*. Cryst. (EtOH). Mp 165-167°. $[\alpha]_D^{25}$ −37° (c, 1.1 in $CHCl_3$).

12-Tigloyl, 1-(2S-methylbutanoyl), di-Ac: [122616-88-0]. ***Ajugamarin H1***
$C_{34}H_{48}O_{11}$ M 632.747
Constit. of *A. decumbens*. Needles (Me_2CO/hexane). Mp 75-79°. $[\alpha]_D^{25}$ −11° (c, 1.2 in $CHCl_3$).

12-(2S-Methylbutanoyl), 6,12-di-Ac: [123297-96-1]. ***Ajugamarin E3***
$C_{29}H_{42}O_{10}$ M 550.645
Constit. of *A. ciliata* var. *villosior*. Amorph. solid. $[\alpha]_D^{22}$ −37° (c, 1.4 in $CHCl_3$).

12-(2S-Methylbutanoyl), 6-Ac: [123297-94-9]. ***Ajugamarin E1***
$C_{27}H_{40}O_9$ M 508.608
Constit. of *A. ciliata* var. *villosior*. Amorph. solid. $[\alpha]_D^{22}$ −26.9° (c, 2.23 in $CHCl_3$).

12-(2S-Methylbutanoyl), 19-Ac: [123297-95-0]. ***Ajugamarin E2***
$C_{27}H_{40}O_9$ M 508.608
Constit. of *A. ciliata* var. *villosior*. Amorph. solid. $[\alpha]_D^{22}$ −19° (c, 2 in $CHCl_3$).

1-(2S-Methylbutanoyl), 6-Ac: [123313-58-6]. ***Ajugamarin B4***
$C_{27}H_{40}O_9$ M 508.608
Constit. of *A. ciliata* var. *villosior*. Amorph. solid. $[\alpha]_D^{22}$ +20.2° (c, 2.04 in $CHCl_3$).

1-(2S-Methylbutanoyl), 6,12-di-Ac: [123297-93-8]. ***Ajugamarin B5***
$C_{29}H_{42}O_{10}$ M 550.645
Constit. of *A. ciliata* var. *villosior*. Amorph. solid. $[\alpha]_D^{22}$ −7.3° (c, 2.33 in $CHCl_3$).

1-(2S-Methylbutanoyl), 19-Ac: [121449-66-9]. ***Ajugamarin B3***
$C_{27}H_{40}O_9$ M 508.608
Constit. of *A. nipponensis*. Amorph. solid. $[\alpha]_D^{22}$ +22° (c, 0.9 in $CHCl_3$).

12-(2-Methylpropanoyl), 1,6,19-tri-Ac: ***Ajugamacrin A***
$C_{30}H_{42}O_{11}$ M 578.655
Constit. of *A. macrosperma*.

12-(2-Methylbutanoyl), 1,6,19-tri-Ac: ***Ajugamacrin B***
$C_{31}H_{44}O_{11}$ M 592.682
Constit. of *A. macrosperma*.

1,12-Bis-(2-methylpropanoyl), 6,19-di-Ac: ***Ajugamacrin C***
$C_{32}H_{46}O_{11}$ M 606.709
Constit. of *A. macrosperma*. Needles (Me_2CO). Mp 206-207°.

12-(2-Methylbutanoyl), 1-(2-methylpropanoyl), 6,19-di-Ac: ***Ajugamacrin D***
$C_{34}H_{48}O_{11}$ M 632.747
Constit. of *A. macrosperma*. Needles (Me_2CO). Mp 273-274°.

1-(2-Methylbutanoyl), 12-(2-methylpropanoyl), 6,19-di-Ac: ***Ajugamacrin E***
$C_{34}H_{48}O_{11}$ M 632.747
Constit. of *A. macrosperma*. Needles (Me_2CO).

1,6,12,19-Tetra-Ac: ***Ajugapantin A***
$C_{28}H_{38}O_{11}$ M 550.602
Constit. of *A. pantantha*. Needles (Me_2CO). Mp 204-205°.

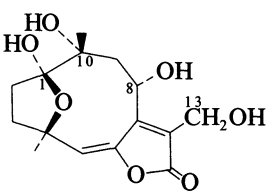
12-(2-Methylbutanoyl),1,6,19-tri-Ac: ***Ajugamacrin B***
$C_{31}H_{44}O_{11}$ M 592.682
Constit. of *A. macrosperma*. Needles (Me_2CO). Mp 200.5-201.5°. $[\alpha]_D^{20.5}$ −16.5° (c, 0.54 in $CHCl_3$).

12-(2-Methylpropanoyl), 1,6,19-tri-Ac: ***Ajugamacrin A***
$C_{30}H_{42}O_{11}$ M 578.655
Constit. of *A. macrosperma*. Prisms (Me_2CO). Mp 190.5-191.5°. $[\alpha]_D^{20.5}$ −17.9° (c, 0.55 in $CHCl_3$).

Shimomura, H. *et al*, *Chem. Pharm. Bull.*, 1983, **31**, 2192; 1989, **37**, 354, 988, 996 (*isol, pmr, cmr, cryst struct*)
Shen, X. *et al*, *Phytochemistry*, 1993, **33**, 887 (*Ajugamacrins*)
Shen, X. *et al*, *Phytochemistry*, 1993, **34**, 1091 (*Ajugamacrins, Ajugapantin A*)

1,4-Epoxy-1,8,10,13-tetrahydroxy-5,7(11)-germacradien-12,6-olide E-10151

Updated Entry replacing E-01198



(1α,4β,8α,10α)-*form*

$C_{15}H_{20}O_7$ M 312.319

The stereochem. of all derivs. in this entry was misassigned in the earlier papers.

(1α,4β,8α,10α)-form [119089-44-0] ***Piptocarphol***
Constit. of *Chrysolaena verbascifolia*. Gum.

8-Ac:
$C_{17}H_{22}O_8$ M 354.356
Constit. of *C. verbascifolia*. Gum.

13-Ac: [76215-51-5]. ***Piptocarphin D***
$C_{17}H_{22}O_8$ M 354.356
Constit. of *Piptocarpha chontalensis*. Oil.

8,13-Di-Ac: [72712-41-5]. ***Hirsutolide.*** *8β-Acetoxy-10β-hydroxyhirsutinolide 13-O-acetate*
$C_{19}H_{24}O_9$ M 396.393
Constit. of *Vernonia saltensis* and *Chromolaena propinqua*. Oil. $[\alpha]_D^{24}$ +36.3° (c, 4.1 in $CHCl_3$). Identity of the various samples not certain. Hirsutinolide is unknown.

10,13-Di-Ac:
$C_{19}H_{24}O_9$ M 396.393
Constit. of *C. verbascifolia*. Gum.

1,8,13-Tri-Ac: [72712-42-6]. ***8β-Acetoxy-10β-hydroxyhirsutinolide 1,13-O-diacetate***
$C_{21}H_{26}O_{10}$ M 438.430
Constit. of *V. saltensis*. Oil. $[\alpha]_D$ −3° (c, 0.6 in $CHCl_3$).

8,10,13-Tri-Ac: [72748-29-9]. ***8β,10β-Diacetoxyhirsutinolide 13-O-acetate***
$C_{21}H_{26}O_{10}$ M 438.430
Constit. of *Stokesia laevis*. Oil. Occurs with the 1-epimer.

8-Ac, 1-formyl:
$C_{18}H_{22}O_9$ M 382.366
Constit. of *C. propinqua*. Gum.

8-(Methylpropenoyl): [76215-50-4]. ***Piptocarphin C***
$C_{19}H_{24}O_8$ M 380.394
Constit. of *P. chontalensis*. Oil.

13-Tigloyl: ***Piptocarphin G***
$C_{20}H_{26}O_8$ M 394.421
Constit. of *P. opaca*. Oil.

13-(2-Methylpropenoyl): ***Piptocarphin H***
$C_{19}H_{24}O_8$ M 380.394
Isol. from *P. opaca*. Oil.

8-Propanoyl, 13-Ac: [71305-86-7]. ***8β-Propionyloxy-10β-hydroxyhirsutinolide 13-O-acetate***
$C_{20}H_{26}O_9$ M 410.420
Constit. of *V. scorpioides*. Oil. $[\alpha]_D^{24}$ +63.5° (c, 0.5 in $CHCl_3$).

8-Propanoyl, 1,13-di-Ac: [79081-71-3]. ***8β-Propionyloxy-10β-hydroxyhirsutinolide 1,13-di-O-acetate***
$C_{22}H_{28}O_{10}$ M 452.457
Constit. of *V. scorpioides*. Oil.

8-(Methylpropenoyl), 13-Ac: [76248-63-0]. ***Piptocarphin A***
$C_{21}H_{26}O_9$ M 422.431
Constit. of *P. chontalensis*. Oil.

8-Tigloyl, 13-Ac: [76215-49-1]. ***Piptocarphin B***
$C_{22}H_{28}O_9$ M 436.458
Constit. of *P. chontalensis*. Oil.

13-Me ether, 8-Ac:
$C_{18}H_{24}O_8$ M 368.383
Constit. of *C. verbascifolia*. Gum.

1-Me ether, 10,13-di-Ac:
$C_{20}H_{26}O_9$ M 410.420
Constit. of *C. verbascifolia*.

1-Me ether, 8,13-di-Ac:
$C_{20}H_{26}O_9$ M 410.420
Constit. of *C. verbascifolia*. Gum.

1,13-Di-Me ether, 8-Ac:
$C_{19}H_{26}O_8$ M 382.410
Constit. of *C. verbascifolia*. Gum.

O^1*-Me, 8-propanoyl, 13-Ac:* [71305-76-5]. ***8-Propionoyloxy-10β-hydroxy-1-O-methylhirsutinolide 13-O-acetate***
$C_{21}H_{28}O_9$ M 424.447
Constit. of *V. scorpioides*. Oil. C8-config. uncertain.

1-Et ether, 8-(methylpropenoyl), 13-Ac: [76215-52-6]. ***Piptocarphin E***
$C_{23}H_{30}O_9$ M 450.485
Constit. of *P. chontalensis*. Oil.

13-Et ether, 8-(methylpropenoyl): [76215-53-7]. ***Piptocarphin F***
$C_{21}H_{28}O_8$ M 408.447
Constit. of *P. chontalensis*. Oil.

O^1*-Me, 8,10,13-tri-Ac:* [72778-10-0]. ***8β,10β-Diacetoxy-1-O-methylhirsutinolide 13-O-acetate***
$C_{22}H_{28}O_{10}$ M 452.457
Constit. of *S. laevis*. Oil. Occurs with the 1-epimer.

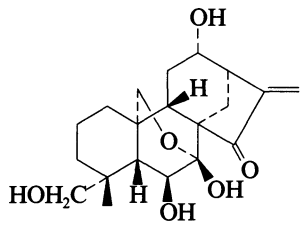
1,13-Di-Me ether, 10-Ac:
$C_{19}H_{26}O_8$ M 382.410
Constit. of *C. verbascifolia*.

1-Me ether, 13-O-(3-formylphenyl), 8-Ac:
$C_{25}H_{28}O_9$ M 472.491
Constit. of *C. verbascifolia*. Gum.

1-Et ether, 8,13-di-Ac:
$C_{21}H_{28}O_9$ M 424.447
Constit. of *C. verbascifolia*. Gum.

Bohlmann, F. *et al*, *Phytochemistry*, 1978, **17**, 475; 1979, **18**, 289, 987 (*isol, pmr*)
Rustaiyan, A.N. *et al*, *Fitoterapia*, 1979, **50**, 243 (*Hirsutolide*)
Cowall, P.L. *et al*, *J. Org. Chem.*, 1981, **46**, 1108 (*isol*)
Herz, W. *et al*, *Phytochemistry*, 1983, **22**, 1286 (*isol*)
Bardón, A. *et al*, *Phytochemistry*, 1992, **31**, 609; 1993, **34**, 253 (*isol, pmr, stereochem*)

7,20-Epoxy-6,7,12,19-tetrahydroxy-16-kauren-15-one E-10152

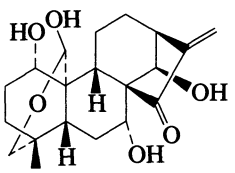


$C_{20}H_{28}O_6$ M 364.438
(ent-6α,7αOH,12β)-form

19-Ac: ***Wikstroemioidin C***
$C_{22}H_{30}O_7$ M 406.475
Constit. of *Isodon wikstroemioides*. Amorph. powder. $[\alpha]_D^{25}$ −71.4° (c, 0.17 in Py).

Shun-Hua, W. *et al*, *Phytochemistry*, 1993, **34**, 1099 (*isol, pmr, cmr*)

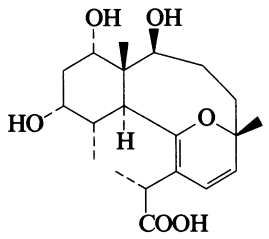
19,20-Epoxy-1,7,14,20-tetrahydroxy-16-kauren-15-one E-10153



$C_{20}H_{28}O_6$ M 364.438
(ent-1β,7β,14α,20S)-form [125445-43-4] ***Rabdoinflexin A***
Constit. of *Rabdosia inflexa*. Prisms. Mp 214-216°. $[\alpha]_D^{24}$ −115.7° (c, 1 in MeOH).

Wang, Z.-Q. *et al*, *Chem. Pharm. Bull.*, 1989, **37**, 2683 (*isol, pmr, cmr*)

5,9-Epoxy-2,12,14-trihydroxy-6,8-briaradien-18-oic acid E-10154



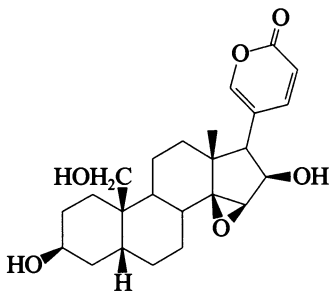
$C_{20}H_{30}O_6$ M 366.453

2,12-Dibutanoyl, 14-Ac, Me ester: [146467-22-3]. ***Methyl briareolate***
$C_{31}H_{46}O_9$ M 562.699
Constit. of *Briareum asbestinum*. Cryst. Mp 165-167°. $[\alpha]_D$ +130.9° (c, 0.11 in $CHCl_3$).

Maharaj, D. *et al*, *Tetrahedron Lett.*, 1992, **33**, 7761 (*isol, pmr, cmr, cryst struct*)

14,15-Epoxy-3,16,19-trihydroxybufa-20,22-dienolide E-10155

Updated Entry replacing E-01229



$C_{24}H_{32}O_6$ M 416.513

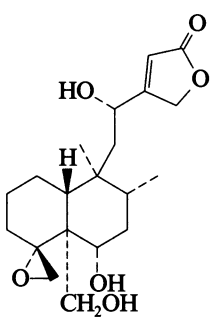
(3β,5β,14β,15β,16β)-form [39844-95-6]
16-Desacetylcinobufaginol
Constit. of the venom of *Bufo formosus vulgaris*. Amorph.

16-Ac: [6691-83-4]. ***Cinobufaginol***
$C_{26}H_{34}O_7$ M 458.550
Constit. of Ch'an Su toad secretion. Cryst. Mp 239-242°. $[\alpha]_D$ −2° (MeOH).

Tri-Ac: Cryst. (Et_2O/Me_2CO). Mp 202-206°.

Linde, H. *et al*, *Helv. Chim. Acta*, 1966, **49**, 1243 (*Cinobufaginol*)
Gsell, L. *et al*, *Helv. Chim. Acta*, 1969, **52**, 551 (*pmr*)
Höriger, N. *et al*, *Helv. Chim. Acta*, 1972, **55**, 2549.

4,18-Epoxy-6,12,19-trihydroxy-13-cleroden-15,16-olide E-10156



$C_{20}H_{30}O_6$ M 366.453

(ent-4β,6β,12R)-form

12-(2S-Methylbutanoyl): [122587-85-3]. ***Ajugamarin F1***
$C_{25}H_{38}O_7$ M 450.571
Constit. of *Ajuga ciliata* var. *villosior*. Cryst. (EtOAc/hexane). Mp 161-163°. $[\alpha]_D^{22}$ −17.9° (c, 2.24 in $CHCl_3$).

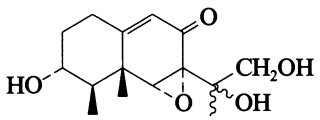
12-(2S-Methylbutanoyl), 6-Ac: [123297-97-2]. ***Ajugamarin F2***
$C_{27}H_{40}O_8$ M 492.608
Constit. of *A. ciliata* var. *villosior*. Cryst. (EtOAc). Mp 161-163°. $[\alpha]_D^{22}$ −14.4° (c, 2.63 in $CHCl_3$).

12-(2S-Methylbutanoyl), 19-Ac: [123297-98-3]. ***Ajugamarin F3***
$C_{27}H_{40}O_8$ M 492.608
Constit. of *A. ciliata* var. *villosior*. Amorph. solid. $[\alpha]_D^{22}$ −1.4° (c, 2.1 in $CHCl_3$).

12-(2S-Methylbutanoyl), di-Ac: [122587-84-2]. ***Ajugamarin F4***
$C_{29}H_{42}O_9$ M 534.645
Constit. of *A. decumbens*. Cryst. (Me_2CO/hexane). Mp 160-163°. $[\alpha]_D^{25}$ −32° (c, 0.9 in $CHCl_3$).

Shimomura, H. *et al*, *Chem. Pharm. Bull.*, 1989, **37**, 988, 996 (*isol, pmr, cmr*)

6,7-Epoxy-3,11,12-trihydroxy-9-eremophilen-8-one E-10157

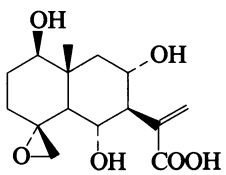


$C_{15}H_{22}O_5$ M 282.336

(3α,6α,7α,11ξ)-form [129602-07-9]
Metab. of *Drechslera gigantea*.

Sugawara, F. *et al*, *Biosci., Biotechnol., Biochem.*, 1993, **57**, 236 (*isol, pmr*)

4,15-Epoxy-1,6,8-trihydroxy-11(13)-eudesmen-12-oic acid E-10158



$C_{15}H_{22}O_6$ M 298.335

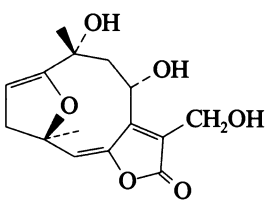
(1β,4α,6α,8α)-form

8-(2-Hydroxymethylpropenoyl), Me ester:
$C_{20}H_{28}O_8$ M 396.436
Constit. of *Onopordon acaulon*. Viscous gum.

Cardona, L. *et al*, *Phytochemistry*, 1993, **33**, 1457 (*isol, pmr, cmr*)

1,4-Epoxy-8,10,13-trihydroxy-1,5,7(11)-germacratrien-12,6-olide E-10159

Updated Entry replacing E-01261



$C_{15}H_{18}O_6$ M 294.304

(4β,5E,8α,10α)-form

8,13-Di-Ac:
$C_{19}H_{22}O_8$ M 378.378
Constit. of *Vernonia venosissima* and *Chrysolaena verbascifolia.*

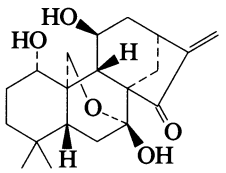
8-Tigloyl, 13-Ac: [142035-43-6].
$C_{22}H_{26}O_8$ M 418.443
Constit. of *V. nudiflora, V. noveboracensis* and *V. polyanthes.* Gum.

8-(2-Methylpropenoyl), 13-Ac:
$C_{21}H_{24}O_8$ M 404.416
Constit. of *V. nudiflora.* Gum.

13-(3-Formylphenyl ether), 8-Ac:
$C_{24}H_{24}O_8$ M 440.449
Constit. of *C. verbascifolia.* Gum.

Bardón, A. *et al, Phytochemistry*, 1992, **31**, 609; 1993, **34**, 253 (*isol, pmr*)

7,20-Epoxy-1,7,11-trihydroxy-16-kauren-15-one E-10160



$C_{20}H_{28}O_5$ M 348.438

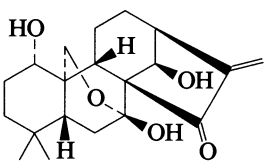
(ent-1β,11α)-form

Rabdocoetsin A
Constit. of *Rabdosia coetsa.* Needles. Mp 250-252°. $[\alpha]_D$ −100° (c, 0.4 in MeOH).

11-Ac: [132185-68-3]. ent-*11α-Acetoxy-7,20-epoxy-1,11-dihydroxy-16-kauren-15-one.* ***Rabdocoetsin D***
$C_{22}H_{30}O_6$ M 390.475
Constit. of *R. coetsa.* Cryst. Mp 243.5-245°. $[\alpha]_D^{23}$ −97° (c, 1 in EtOAc).

Chen, Y. *et al, Acta Bot. Sin.* (*Engl. Transl.*), 1990, **32**, 292 (*isol, pmr, cmr*)
Xu, Y. *et al, Phytochemistry*, 1993, **34**, 576 (*isol, pmr, cmr*)

7,20-Epoxy-1,7,14-trihydroxy-16-kauren-15-one E-10161



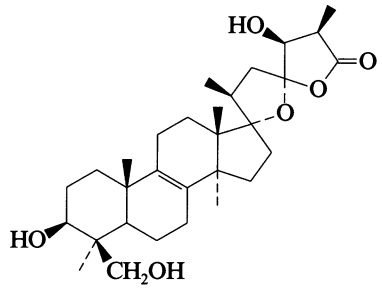
$C_{20}H_{28}O_5$ M 348.438

(ent-1β,7α,14α)-form

1-Ac: [132185-69-4]. ent-*1β-Acetoxy-7,20-epoxy-7,14-dihydroxy-16-kauren-15-one.* ***Rabdocoetsin B***
$C_{22}H_{30}O_6$ M 390.475
Constit. of *Rabdosia coetsa.* Cryst. Mp 236-238°, Mp 342-344°. $[\alpha]_D$ −75° (c, 0.4 in MeOH).

Chen, Y. *et al, Acta Bot. Sin.* (*Engl. Transl.*), 1990, **32**, 292 (*isol, pmr, cmr*)
Xu, Y. *et al, Phytochemistry*, 1993, **34**, 576 (*isol, pmr, cmr*)

17,23-Epoxy-3,24,29-trihydroxylanost-9-en-26,23-olide E-10162



$C_{30}H_{46}O_6$ M 502.690

(3β,23S,24S)-form

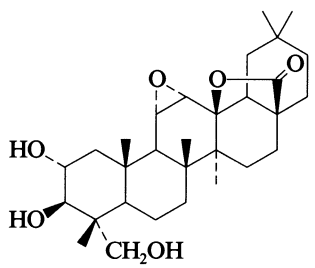
Aglycone from *Chionodoxa luciliae.*

3-O-[α-L-Rhamnopyranosyl-(1→2)-β-D-glucopyranosyl-(1→2)-α-L-arabinopyranosyl-(1→6)-β-D-glucopyranoside]:
$C_{53}H_{84}O_{24}$ M 1105.232
Constit. of *C. lucilae.*

3-O-[β-D-Glucopyranosyl-(1→2)-β-D-galactopyranosyl-(1→3)-[α-L-rhamnopyranosyl-(1→2)]-β-D-glucopyranosyl-(1→2)-α-L-arabinopyranosyl-(1→6)-β-D-glucopyranoside]:
$C_{65}H_{104}O_{34}$ M 1429.516
Constit. of *C. lucilae.*

Adinolfi, M. *et al, Phytochemistry*, 1993, **34**, 773 (*isol, pmr*)

11,12-Epoxy-2,3,23-trihydroxy-28,13-oleananolide E-10163



$C_{30}H_{46}O_6$ M 502.690

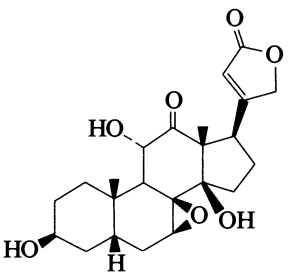
(2α,3β,11α,12α,13β)-form

Constit. of *Anamirta cocculus.* Needles. Mp 284-286°. $[\alpha]_D^{22}$ +37.1° (c, 0.35 in $CHCl_3$).

Jayasinghe, L. *et al, Phytochemistry*, 1993, **34**, 1111 (*isol, pmr, cmr*)

7,8-Epoxy-3,11,14-trihydroxy-12-oxocard-20(22)-enolide E-10164

Updated Entry replacing E-01296



$C_{23}H_{30}O_7$ M 418.486

(3β,5β,7α,8α,11β,14β)-form
Constit. of *Cryptolepis buchanani*. Cryst. (Me_2CO). Mp 220°. Struct. diagrams in this paper are confusing.

3-O-(2-Deoxy-β-D-glucopyranoside): [111420-57-6]. ***Cryptosin***
$C_{29}H_{40}O_{11}$ M 564.628

(3β,5β,7β,11α)-form [22146-03-8] ***Sarverogenin***
Constit. of seeds of *Strophanthus sarmentosus*. Cryst. (MeOH). Mp 232-234°. $[\alpha]_D$ +48.5° (c, 0.16 in MeOH). Cryst. from MeOH aq. gives a lower-melting form Mp 120-188°.

▷ FH5077000.

3-Diginoside: ***Intermedioside***
$C_{30}H_{42}O_{10}$ M 562.656
From *S.* spp. Cryst. (Me_2CO). Mp 125°, Mp 196°. $[\alpha]_D$ +19° ($CHCl_3$).

3-O-D-Sarmentoside: ***Sarveroside***
$C_{30}H_{42}O_{10}$ M 562.656
Isol. from seeds of *S. sarmentosus*, *S. gerrardi*, *S. amboensis*, *S. courmontii*, *S. intermedius*, *S. schuchardtii* and *S. congoensis*. Fine needles (MeOH/Et_2O). Mp 123-126°, Mp 145° (double Mp). $[\alpha]_D^{15}$ +12.1° (Me_2CO).

3-O-D-Digitaloside: ***Panstroside***
$C_{30}H_{42}O_{11}$ M 578.655
Isol. from seeds of many *S.* spp. Needles (MeOH). Mp 230-233°. $[\alpha]_D$ +30° (MeOH).

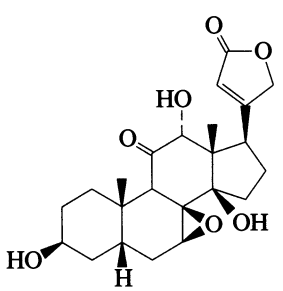
3-O-(Glucosyldigitaloside): ***Panstrosin***
$C_{36}H_{54}O_{16}$ M 742.813
Isol. from *S.* sp. Amorph. $[\alpha]_D^{20}$ −3.8° ($CHCl_3$). V. hygroscopic. Hydrol. gives panstroside and glucose.

3-O-α-L-Oleandroside: [98570-81-1]. ***Buchanin.*** *Cryptanoside A*
$C_{30}H_{42}O_{10}$ M 562.656
Constit. of *C. buchanani*. Cryst. (MeOH/Et_2O). Mp 230°. $[\alpha]_D$ −30° (c, 0.5 in MeOH).

3-O-[β-D-Glucopyranosyl-(1→4)-α-L-oleandroside]: [117332-57-7]. ***Cryptanoside C***
$C_{36}H_{52}O_{15}$ M 724.798
Constit. of *C. buchanani*. Cryst. (EtOAc/MeOH). Mp 206-209°. $[\alpha]_D$ −40° (c, 1 in MeOH).

Buzas, A. *et al*, *Helv. Chim. Acta*, 1950, **33**, 465 (*isol*)
Rosselet, J.P. *et al*, *Helv. Chim. Acta*, 1951, **34**, 2143 (*isol*)
Reichstein, T. *et al*, *Helv. Chim. Acta*, 1952, **35**, 152 (*isol*)
Turcovic, I., *J. Pharm. Belg.*, 1955, **10**, 77; *CA*, 49, 15172 (*Panstrosin*)
Taylor, D.A.H. *et al*, *J. Chem. Soc. C*, 1966, 790 (*pmr*)
Fuhrer, H. *et al*, *Helv. Chim. Acta*, 1969, **52**, 616.
Khare, M.P. *et al*, *J. Nepal Chem. Soc.*, 1983, **3**, 21; *CA*, **103**, 157298w (*Buchanin*)
Lardon, A. *et al*, *Helv. Chim. Acta*, 1987, **70**, 894 (*struct*)
Purashothaman, K.K. *et al*, *Rev. Latinoam. Quim.*, 1988, **19**, 28 (*Cryptanosides*)
Venkateswara, R. *et al*, *Phytochemistry*, 1989, **28**, 1203 (*isol, cryst struct, Cryptosin*)

7,8-Epoxy-3,12,14-trihydroxy-11-oxocard-20(22)-enolide E-10165



$C_{23}H_{30}O_7$ M 418.486

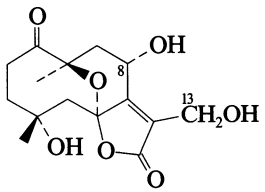
(3β,5β,7β,8β,12α)-form
Isosarverogenin

3-O-α-L-Oleandroside: [117332-55-5]. ***Cryptanoside B***
$C_{30}H_{42}O_{10}$ M 562.656
Constit. of *Cryptolepis buchanani*. Cryst. (MeOH). Mp 206-210°.

3-O-[β-D-Glucopyranosyl-(1→4)-α-L-oleandroside]: [117332-59-9]. ***Cryptanoside D***
$C_{36}H_{52}O_{15}$ M 724.798
Constit. of *C. buchanani*.

Purushothaman, K.K. *et al*, *Rev. Latinoam. Quim.*, 1988, **19**, 28 (*isol, pmr, cmr*)

6,10-Epoxy-4,8,13-trihydroxy-1-oxo-7(11)-germacren-12,6-olide E-10166



$C_{15}H_{20}O_7$ M 312.319

(4α,6R,8α,10R)-form

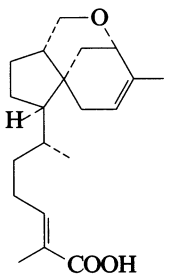
8,13-Di-Ac: [150375-70-5]. ***Spicatolide A***
$C_{19}H_{24}O_9$ M 396.393
Constit. of *Pseudoelephantopus spicatus*. Cryst. Mp 163.5-166°. $[\alpha]_D^{25}$ −131° (c, 0.313 in MeOH).

13-Et ether, 8-Ac: [150375-71-6]. ***Spicatolide B***
$C_{19}H_{26}O_8$ M 382.410
Constit. of *P. spicatus*. Cryst. Mp 102-103°.

Ragasa, C.Y. *et al*, *Phytochemistry*, 1993, **33**, 627 (*isol, pmr, cmr, cryst struct*)

5,19-Epoxy-3,14-viscidadien-16-oic acid E-10167

[110623-88-6]

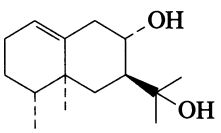


$C_{20}H_{30}O_3$ M 318.455
Constit. of Myoporaceae sp. Oil. $[\alpha]_D$ +51.7° (c, 0.6 in $CHCl_3$).

Forster, P.G. *et al*, *Aust. J. Chem.*, 1986, **39**, 2111 (*isol, pmr*)

1(10)-Eremophilene-8,11-diol E-10168

1(10)-Valencene-8,11-diol



$C_{15}H_{26}O_2$ M 238.369

(4α,5α,8α)-form

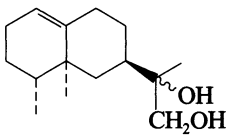
Constit. of *Litsea excelsa*. Cryst. (diisopropyl ether). Mp 176-178°. $[\alpha]_D$ +96° (c, 0.2 in $CHCl_3$).

Hakim, E.H. *et al*, *Aust. J. Chem.*, 1993, **46**, 1355 (*isol, pmr, cmr, cryst struct*)

1(10)-Eremophilene-11,12-diol E-10169

Tedonodiol

[74842-34-5]



$C_{15}H_{26}O_2$ M 238.369

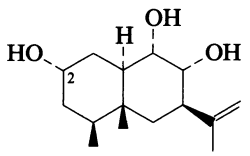
Constit. of *Tessaria dodoneifolia*.

Guerreiro, E. *et al*, *An. Asoc. Quim. Argent.*, 1979, **67**, 119 (*isol, pmr*)

11-Eremophilene-2,8,9-triol E-10170

Updated Entry replacing E-01366

*Decahydro-4*a,*5-dimethyl-3-(1-methylethenyl)-1,2,7-naphthalenetriol, 9CI*



(2α,8α,9α,10α*H*)-*form*

$C_{15}H_{26}O_3$ M 254.369

(2α,8α,9α,10αH)-form [53820-53-4] ***Lateriflorol***

Occurs as mixt. of esters in *Euryops lateriiflorus* and *E. imbricatus*. Cryst. (Et_2O/pet. ether). Mp 158°.

(8α,9α,10βH)-form

*2-Ketone: 8α,9α-Dihydroxy-10β*H*-eremophil-11-en-2-one*

$C_{15}H_{24}O_3$ M 252.353

Occurs as mixt. of esters in *E.* spp. Oil.

(2β,4α,5α,8α,9α,10β)-form [68715-84-4]

Eupestrol

9-Angeloyl:

$C_{20}H_{32}O_4$ M 336.470

Constit. of *E.* spp. Cryst. ($CHCl_3$). Mp 64°. $[\alpha]_D^{24}$ +13.2° (c, 0.62 in MeOH).

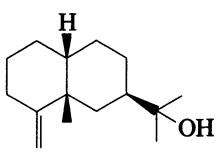
2-Ketone, 9-angeloyl:

$C_{20}H_{30}O_4$ M 334.455

Constit. of *E.* spp. Oil. $[\alpha]_D^{24}$ +50.3° (c, 4 in $CHCl_3$).

Bohlmann, F. *et al*, *Chem. Ber.*, 1974, **107**, 2730 (*isol, struct*)
Bohlmann, F. *et al*, *Phytochemistry*, 1978, **17**, 1135 (*isol, struct*)
Bohlmann, F. *et al*, *Justus Liebigs Ann. Chem.*, 1984, 1785 (*synth, struct*)

4(15)-Eremophilen-11-ol E-10171



$C_{15}H_{26}O$ M 222.370

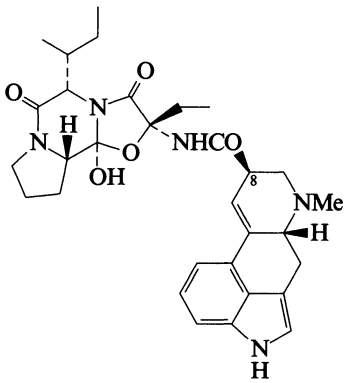
10β-form [68773-87-5]

Constit. of *Euryops* spp. Oil. $[\alpha]_D^{24}$ +33.1° (c, 0.32 in $CHCl_3$).

Bohlmann, F. *et al*, *Phytochemistry*, 1978, **17**, 1135 (*isol, pmr*)

β-Ergoptine E-10172

[65756-55-0]



$C_{31}H_{39}N_5O_5$ M 561.680

Isol. from ergot *Claviceps purpurea*. Mp 201-203° dec. $[\alpha]_D^{20}$ −163° (c, 1.0 in $CHCl_3$).

8-Epimer: [65794-73-2]. *β-Ergoptinine*

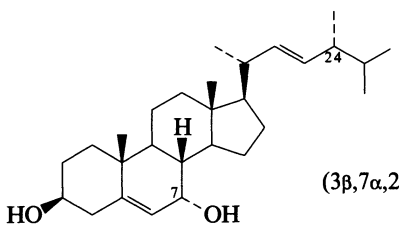
$C_{31}H_{39}N_5O_5$ M 561.680

Synthetic. Mp 205-206° dec. $[\alpha]_D^{20}$ +421° (c, 0.5 in $CHCl_3$).

Stadler, P.A. *et al*, *Experientia*, 1977, **33**, 1552 (*β-Ergoptinine*)
Plattner, R.D. *et al*, *J. Agric. Food Chem.*, 1983, **31**, 785 (*ms*)
Porter, J.K. *et al*, *J. Agric. Food Chem.*, 1987, **35**, 359 (*isol*)

Ergosta-5,22-diene-3,7-diol E-10173

24-Methylcholesta-5,22-diene-3,7-diol



(3β,7α,24*R*)-*form*

$C_{28}H_{46}O_2$ M 414.670

(3β,7α,24R)-form [145163-99-1]

Constit. of *Cliona copiosa*.

(3β,7α,24S)-form [145164-00-7]

Constit. of *C. copiosa*.

(3β,7β,24R)-form [69511-20-2]

Constit. of *C. copiosa*.

(3β,7β,24S)-form [99210-83-0]

Constit. of *C. copiosa* and *Haliclona oculata*. $[\alpha]_D^{20}$ −87.1° (c, 0.66 in $CHCl_3$).

Findlay, J.A. *et al*, *Can. J. Chem.*, 1985, **63**, 2406 (*isol, pmr, ms*)
Notaro, G. *et al*, *J. Nat. Prod. (Lloydia)*, 1992, **55**, 1588 (*isol, pmr, ms*)

Ergosta-5,24(28)-diene-3,7-diol E-10174

Updated Entry replacing E-01395

24-Methylenecholest-5-ene-3,7-diol

$C_{28}H_{46}O_2$ M 414.670

(3β,7α)-form [99081-81-9]

Constit. of *Entandrophragma utile*, *Pseudobersama mossambicensis* and *Stelodoryx chlorophylla*. Cryst. Mp 195°. The compds. previously assigned this struct. from *Haliclona oculata* have been shown to be incorrect.

24ξ,28-Epoxide: [145223-65-0]. *24,28-Epoxyergost-5-ene-3,7-diol*

$C_{28}H_{46}O_3$ M 430.670

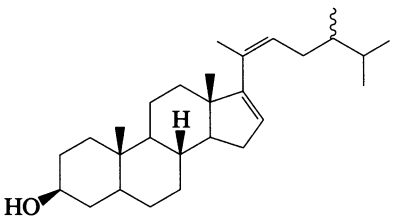
Constit. of *P. mossambicensis*. Amorph. solid. $[\alpha]_D^{20}$ −37° (c, 0.27 in $CHCl_3$).

(3β,7β)-form [99081-79-5]
Constit. of *S. chlorophylla*.

Findlay, J.A. *et al*, *Can. J. Chem.*, 1985, **63**, 2406.
Garcia, J. *et al*, *J. Nat. Prod.* (*Lloydia*), 1991, **54**, 136 (*isol, struct, pmr, cmr*)
Gunatilaka, A.A.L. *et al*, *J. Nat. Prod.* (*Lloydia*), 1992, **55**, 1648 (*isol, pmr, cmr*)
De Riccardis, F. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 282 (*isol, pmr, cmr, ms*)

Ergosta-16,20(22)-dien-3-ol E-10175

24-Methylcholesta-16,20(22)-dien-3-ol



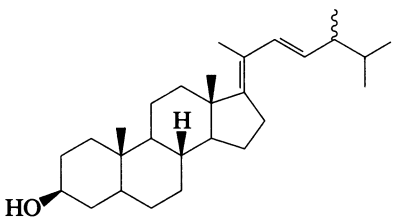
$C_{28}H_{46}O$ M 398.671

(3β,24ξ)-form [144686-41-9]
Constit. of a *Virgularia* sp. Needles (MeOH). Mp 140-142°. $[\alpha]_D^{25}$ −3.66° (c, 1.31 in $CHCl_3$).

Anjaneyulu, A.S.R. *et al*, *J. Indian Chem. Soc.*, 1992, **69**, 150 (*isol, pmr*)

Ergosta-17(20),22-dien-3-ol E-10176

24-Methylchloesta-17(20),22-dien-2-ol



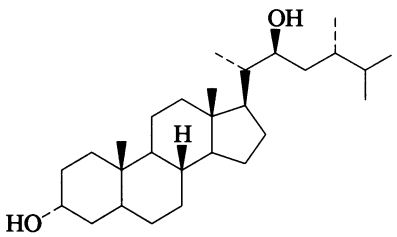
$C_{28}H_{46}O$ M 398.671

(3β,24ξ)-form [144686-42-0]
Constit. of *Virgularia* sp. Needles (MeOH). Mp 190-192°. $[\alpha]_D^{25}$ +45.58° (c, 1.8 in $CHCl_3$).

Anjaneyulu, A.S.R. *et al*, *J. Indian Chem. Soc.*, 1992, **69**, 150 (*isol, pmr*)

Ergostane-3,22-diol E-10177

24-Methylcholestane-3,22-diol



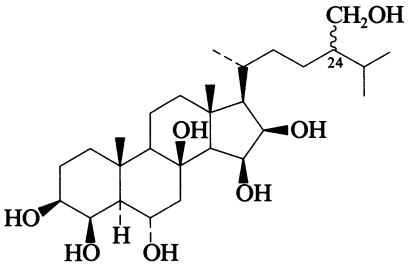
$C_{28}H_{50}O_2$ M 418.702

(3α,5α,22S,24S)-form [147802-34-4]
Constit. of *Abies pinsapo*. Cryst. (MeOH). Mp 234-235°. $[\alpha]_D$ +11.8° (c, 0.48 in $CHCl_3$).

Barrero, A.F. *et al*, *Phytochemistry*, 1993, **32**, 1261 (*isol, pmr, cmr*)

Ergostane-3,4,6,8,15,16,28-heptol E-10178

24-(Hydroxymethyl)cholestane-3,4,6,8,15,16-hexol



$C_{28}H_{50}O_7$ M 498.699

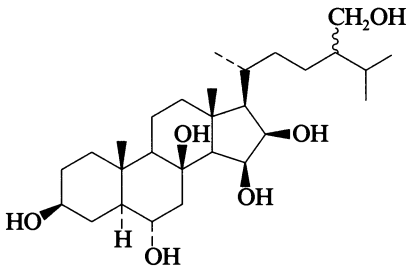
(3β,4β,5α,6α,15β,16β,24ξ)-form

28-O-[*2,4-Di*-O-*methyl*-β-D-*xylopyranosyl*-(*1→2*)-α-L-*arabinofuranoside*]: [107041-31-6]. ***Culcitoside C₂***
$C_{40}H_{70}O_{15}$ M 790.984
Isol. from the starfish *Culcita novaeguineae*. Mp 226-228°. $[\alpha]_D^{20}$ −18° (c, 0.1 in EtOH).

Kicha, A.A. *et al*, *Khim. Prir. Soedin.*, 1986, **22**, 592; *Chem. Nat. Compd.* (*Engl. Transl.*), 557.

Ergostane-3,6,8,15,16,28-hexol E-10179

24-(Hydroxymethyl)cholestane-3,6,8,15,16-pentol



$C_{28}H_{50}O_6$ M 482.699

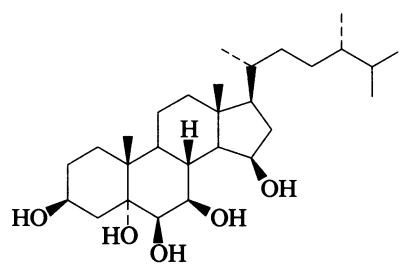
(3β,5α,6α,15β,16β,24ξ)-form

28-O-[*2,4-Di*-O-*methyl*-β-D-*xylopyranosyl*-(*1→2*)-α-L-*arabinofuranoside*]: [107041-32-7]. ***Culcitoside C₃***
$C_{40}H_{70}O_{14}$ M 774.985
Isol. from the starfish *Culcita novaeguineae*. Mp 228-230°. $[\alpha]_D^{20}$ −19.1° (c, 0.17 in EtOH).

Kicha, A.A. *et al*, *Khim. Prir. Soedin.*, 1986, **22**, 592; *Chem. Nat. Compd.* (*Engl. Transl.*), 557.

Ergostane-3,5,6,7,15-pentol E-10180

24-Methylcholestane-3,5,6,7,15-pentol

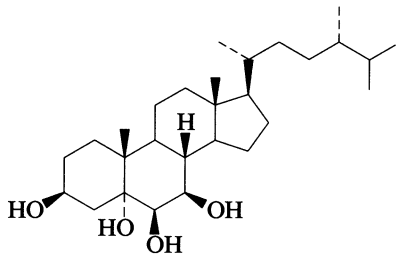


$C_{28}H_{50}O_5$ M 466.700

(3β,5α,6β,7β,15β,24S)-form [147170-09-0]
Constit. of *Lobophytum crassum*. Needles. Mp 212-215°. $[\alpha]_D$ +16° (c, 0.5 in Py).

Kobayashi, M. *et al*, *Chem. Pharm. Bull.*, 1993, **41**, 87 (*isol, pmr, cmr*)

Ergostane-3,5,6,7-tetrol E-10181



$C_{28}H_{50}O_4$ M 450.701

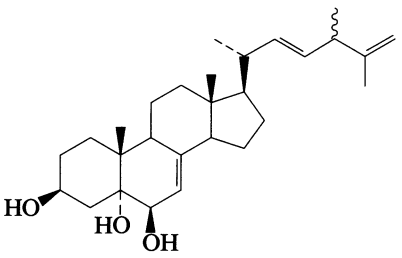
(3β,5α,6β,7β,24S)-form [80525-48-0]

Constit. of *Lobophytum crassum*, *Anthelia glauca* and a *Xenia* sp. Needles. Mp 212-215°. $[\alpha]_D$ +16° (c, 0.5 in Py).

Sjastrand, U. *et al*, *Steroids*, 1981, **38**, 347 (*isol*)
Kitagawa, I. *et al*, *Chem. Pharm. Bull.*, 1986, **34**, 4590 (*isol*)
Kobayashi, M. *et al*, *Chem. Pharm. Bull.*, 1993, **41**, 87 (*isol*, *pmr*, *cmr*)

Ergosta-7,22,25-triene-3,5,6-triol E-10182

24-Methylcholesta-7,22,25-triene-3,5,6-triol



$C_{28}H_{44}O_3$ M 428.654

(3β,5α,6β,22E,24ξ)-form

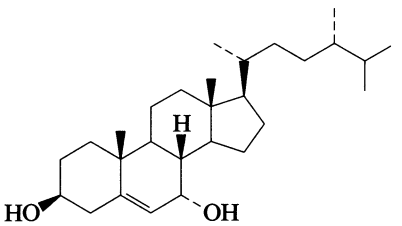
Biemnasterol

Constit. of a *Biemna* sp. Cryst. Mp 241-242°. $[\alpha]_D^{19}$ −7.6° (c, 0.43 in MeOH).

Zeng, C.-M. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 2016 (*isol*, *pmr*, *cmr*)

Ergost-5-ene-3,7-diol E-10183

24-Methylcholest-5-ene-3,7-diol



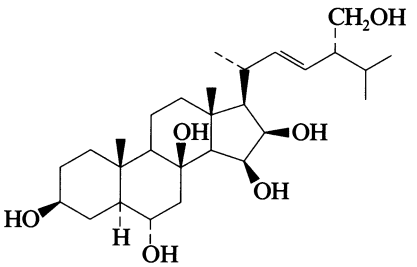
$C_{28}H_{48}O_2$ M 416.686

(3β,7α,24S)-form [71486-05-0]

Constit. of *Sclerophytum* sp. Needles. Mp 210-212°. $[\alpha]_D$ −75° (c, 0.38 in $CHCl_3$).

Cheng, K.-C. *et al*, *J. Chem. Res.*, *Synop.*, 1979, 84 (*synth*)
Kobayashi, M. *et al*, *Chem. Pharm. Bull.*, 1993, **41**, 87 (*isol*, *pmr*, *cmr*)

Ergost-22-ene-3,6,8,15,16,28-hexol E-10184



$C_{28}H_{48}O_6$ M 480.684

(3β,5α,6α,15β,16β,22E,24R)-form

28-O-(*6*-O-*Sulfo*-β-D-*glucopyranoside*): [123154-33-6].

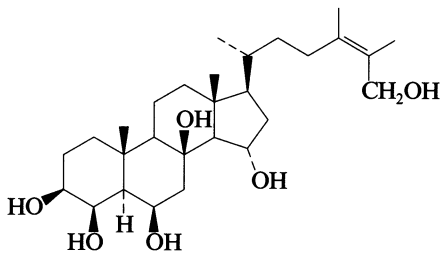
Pisasteroside A

$C_{34}H_{58}O_{14}S$ M 722.890

Isol. from the starfish *Pisaster giganteus* (as Na salt). $[\alpha]_D$ +4° (c, 0.8 in MeOH).

Zollo, F. *et al*, *J. Nat. Prod.* (*Lloydia*), 1989, **52**, 693.

Ergost-24-ene-3,4,6,8,15,26-hexol E-10185



$C_{28}H_{48}O_6$ M 480.684

(3β,4β,5α,6β,15α,24Z)-form

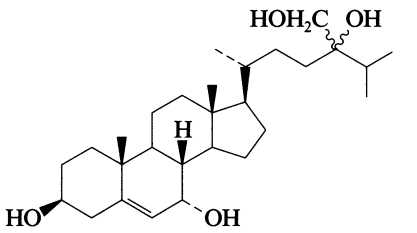
3-O-(*2*-O-*Methyl*-β-D-*arabinofuranoside*), *26*-O-α-L-*arabinofuranoside*: [134985-04-9]. ***Forbeside K***

$C_{39}H_{66}O_{14}$ M 758.942

Isol. from the starfish *Asterias forbesi*. Powder. Mp 221° dec. $[\alpha]_D$ −9.2° (c, 0.6 in H_2O).

Findlay, J.A. *et al*, *J. Nat. Prod.* (*Lloydia*), 1991, **54**, 428.

Ergost-5-ene-3,7,24,28-tetrol E-10186



$C_{28}H_{48}O_4$ M 448.685

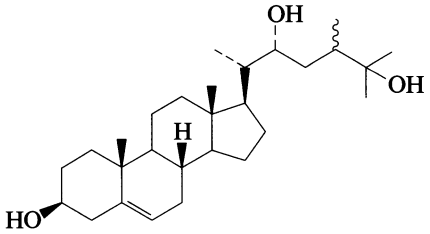
(3β,7α,24ξ)-form [145223-66-1]

Constit. of *Pseudobersama mossambicensis*. Cryst. (EtOAc/hexane). Mp 198-200°. $[\alpha]_D^{20}$ −55° (c, 0.7 in $CHCl_3$).

Gunatilaka, A.A.L. *et al*, *J. Nat. Prod.* (*Lloydia*), 1992, **55**, 1648 (*isol*, *pmr*, *cmr*)

Ergost-5-ene-3,22,25-triol E-10187

24-Methylcholest-5-ene-3,22,25-triol



$C_{28}H_{48}O_3$ M 432.685

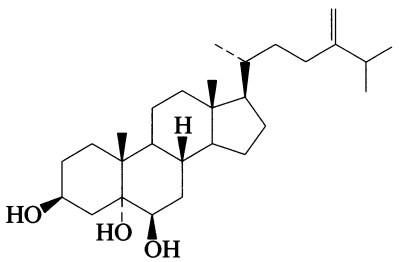
(3β,22R,24ξ)-form [144466-07-9]

Constit. of a *Lobophytum* sp. Cryst. Mp 232-233°. $[\alpha]_D^{25}$ −15° (c, 0.8 in $CHCl_3$).

Anjaneyulu, V. *et al*, *Indian J. Chem., Sect. B*, 1992, **31**, 708 (*isol, pmr, cmr*)

Ergost-24(28)-ene-3,5,6-triol E-10188

24-Methylenecholestone-3,5,6-triol



$C_{28}H_{48}O_3$ M 432.685

(3β,5α,6β)-form [59048-81-6]

Constit. of *Sinularia dissecta*. Needles. Mp 241-242°. $[\alpha]_D$ −4° (c, 0.26 in Py).

Bartolotto, M. *et al*, *Bull. Soc. Chim. Belg.*, 1976, **85**, 27 (*isol*)

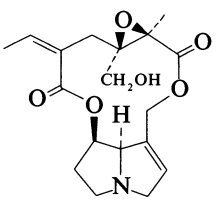
Kobayashi, M. *et al*, *Chem. Pharm. Bull.*, 1993, **41**, 87 (*isol, pmr, cmr*)

Erucifoline E-10189

Updated Entry replacing E-01515

12,13-Epoxy-19-hydroxysenecionan-11,16-dione, 9CI. Alkaloid SC

[40158-95-0]



$C_{18}H_{23}NO_6$ M 349.383

Cyclic retronecine diester. Alkaloid from *Senecio erucifolius, S. aegypticus, S. erraticus, S. jacobaea* and *S. persoonii* (Compositae). Cryst. (EtOAc/EtOH). Mp 195-197°. $[\alpha]_D^{22}$ −108° (c, 0.99 in $CHCl_3$).

Ac: **O-*Acetylerucifoline***

$C_{20}H_{25}NO_7$ M 391.420

Constit. of leaves and inflorescences of *S. jacobacea*. Also present in inflorescences of *S. erucifolius* (Compositae). Needles. Mp 127-129°.

N-*Oxide:* ***Erucifoline* N-*oxide***

$C_{18}H_{23}NO_7$ M 365.382

Alkaloid from whole plants of *S. persoonii* (Compositae). Glassy solid. $[\alpha]_D^{20}$ −49° (c, 1 in EtOH).

[40158-93-8, 67494-13-7]

Schröter, H.-B. *et al*, *Collect. Czech. Chem. Commun.*, 1960, **25**, 472 (*isol*)

Hrbek, J. *et al*, *Collect. Czech. Chem. Commun.*, 1972, **37**, 3918 (*cd*)

Sedmera, P. *et al*, *Collect. Czech. Chem. Commun.*, 1972, **37**, 4112 (*isol, pmr, struct*)

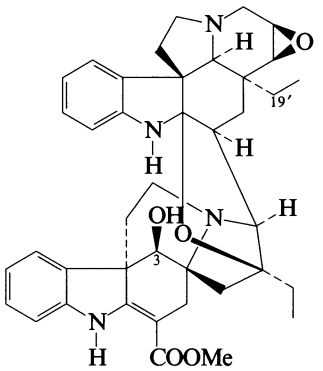
Witte, L. *et al*, *Phytochemistry*, 1992, **31**, 559 (*O-Acetylerucifoline*)

Roeder, E. *et al*, *Phytochemistry*, 1993, **32**, 1051 (*oxide*)

Ervafolidine, 9CI E-10190

Updated Entry replacing E-01517

[80293-76-1]



$C_{40}H_{46}N_4O_5$ M 662.827

Aspidosperma-Pseudo-*aspidosperma* Type dimer. Alkaloid from the leaves of *Stenosolen heterophyllus* (Apocynaceae). Cryst. (Et_2O/hexane). Mp 240°. $[\alpha]_D^{20}$ +20° (c, 0.05 in $CHCl_3$).

3-Epimer: [80338-95-0]. ***3-Epiervafolidine***

$C_{40}H_{46}N_4O_5$ M 662.827

Alkaloid from the leaves of *S. heterophyllus* (Apocynaceae). Cryst. (MeOH). Mp >260°. $[\alpha]_D^{20}$ +52° (c, 0.5 in $CHCl_3$).

19′R-Hydroxy: [80293-77-2]. ***19′R-Hydroxyervafolidine***

$C_{40}H_{46}N_4O_6$ M 678.827

Alkaloid from the leaves of *S. heterophyllus* (Apocynaceae). Cryst. (Me_2CO). $[\alpha]_D^{20}$ +33° (c, 0.5 in Py).

19′S-Hydroxy, 3-epimer: [80293-78-3]. ***19′S-Hydroxy-3-epiervafolidine***

$C_{40}H_{46}N_4O_6$ M 678.827

Alkaloid from the leaves of *S. heterophyllus* (Apocynaceae). Cryst. (Me_2CO/Et_2O). Mp 260°. $[\alpha]_D^{20}$ +74° (c, 1 in Py).

14′,15′-Deepoxy, 14′,15′-didehydro: [84716-74-5]. ***Ervafolidene***

$C_{40}H_{46}N_4O_4$ M 646.828

Alkaloid from *Pandaca caducifolia* (Apocynaceae). Cryst. (Me_2CO). Mp 212°. $[\alpha]_D$ +56° (c, 1.5 in MeOH).

14′,15′-Deepoxy, 14′,15′-didehydro, 3-epimer: [84774-04-9]. ***Epiervafolidene***

$C_{40}H_{46}N_4O_4$ M 646.828

Alkaloid from *P. caducifolia* (Apocynaceae). Amorph. $[\alpha]_D$ +35° (c, 2 in MeOH).

Zeches, M. *et al*, *J. Nat. Prod.* (*Lloydia*), 1982, **45**, 707 (*Ervafolidene, Epiervafolidene*)

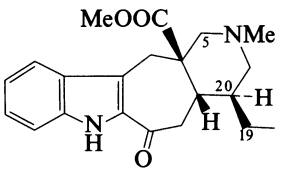
Henriques, A. *et al*, *J. Org. Chem.*, 1982, **47**, 803 (*isol, uv, ir, pmr, ms, struct*)

Ervatamine E-10191

Updated Entry replacing E-01522

Methyl 4-ethyl-2,3,4,4a,5,6,7,12-octahydro-2-methyl-6-oxopyrido[3',4':4,5]cyclohept[1,2-b]indole-12a(1H)-carboxylate, 9CI

[33257-13-5]



$C_{21}H_{26}N_2O_3$ M 354.448

Alkaloid from *Ervatamia orientalis* and *E. lifuana* (Apocynaceae). Na channel blocker in nerve fibres, local anaesthetic blocker. Prisms + 1MeOH (MeOH). Mp 92-98°. $[\alpha]_D$ −3.7° (c, 2.1 in $CHCl_3$).

Picrate: Yellow plates (Me_2CO). Mp 236-237° dec.

B,MeI: Yellow plates ($MeOH/Et_2O$). Mp 217-220° dec.

20-Epimer: [33495-49-7]. ***20-Epiervatamine***

$C_{21}H_{26}N_2O_3$ M 354.448

Alkaloid from *E. orientalis* and *E. lifuana* (Apocynaceae). Prisms (Et_2O/pet. ether). Mp 185-187° dec. $[\alpha]_D$ −22° (c, 1.1 in $CHCl_3$).

19,20-Didehydro: [33228-82-9]. ***19,20-Didehydroervatamine***

$C_{21}H_{24}N_2O_3$ M 352.432

Alkaloid from *E. orientalis* (Apocynaceae). Prisms (Et_2O). Mp 198-200° dec. $[\alpha]_D$ +52° (c, 1.0 in $CHCl_3$).

19,20-Didehydro, N^1-methoxy: [130263-09-1]. ***N^1-Methoxy-19,20-dehydroervatamine***

$C_{22}H_{26}N_2O_4$ M 382.458

Alkaloid from *E. malaccensis* (Apocynaceae). $[\alpha]_D$ −14° (c, 0.5 in $CHCl_3$).

19,20-Didehydro, 5-oxo: ***5-Oxo-19,20-dehydroervatamine***

$C_{21}H_{22}N_2O_4$ M 366.416

Alkaloid from leaves of *Tabernaemontana corymbosa* (Apocynaceae).

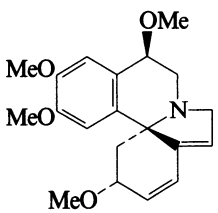
Knox, J.R. *et al, Tetrahedron Lett.*, 1971, 2149 (*struct, Ervatamine, 20-Epiervatamine, Didehydroervatamine*)
Husson, A. *et al, Tetrahedron*, 1973, **29**, 3095 (*synth, cryst struct*)
Riche, C., *Acta Crystallogr., Sect. B*, 1974, **30**, 610 (*cryst struct*)
Knox, J.R. *et al, Aust. J. Chem.*, 1975, **28**, 1813, 1825 (*isol, uv, ir, pmr, ms, derivs*)
Clivio, P. *et al, Phytochemistry*, 1990, **29**, 2693 (*N^1-Methoxy-19,20-dehydroervatamine*)
Kam, T.-S. *et al, Phytochemistry*, 1993, **32**, 1357 (*5-Oxo-19,20-dehydroervatamine*)

Erythristemine E-10192

Updated Entry replacing E-01564

1,2,6,7-Tetradehydro-3,11,15,16-tetramethoxyerythrinan, 9CI

[28619-41-2]



Absolute configuration

$C_{20}H_{25}NO_4$ M 343.422

Alkaloid from the leaves of *Erythrina lysistemon* and *E. abyssinica* and from the seeds of *E. arborescens* (Leguminosae). Pale-yellow prisms (pet. ether). Mp 127-129°. $[\alpha]_D^{22}$ +189° (c, 0.4 in $CHCl_3$).

Picrate: Mp 145-150°.

2-Bromo-4,6-dinitrophenolate: Mp 144-146°.

N-*Oxide:* ***Erythristemine N-oxide***

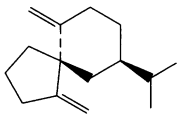
$C_{20}H_{25}NO_5$ M 359.421

Alkaloid from flowers of *Erythrina* x *bidwillii* (Leguminosae). $[\alpha]_D^{25}$ −3.8° (c, 0.01 in $CHCl_3$).

Ghosal, S. *et al, Phytochemistry*, 1972, **11**, 2101 (*isol*)
Barton, D.H.R. *et al, J. Chem. Soc., Perkin Trans. 1*, 1973, 874, (*isol, uv, ir, pmr, ms, struct*)
Hough, E., *Acta Crystallogr., Sect. B*, 1976, **32**, 1154 (*cryst struct, abs config*)
Sarragiotto, M.H. *et al, Can. J. Chem.*, 1981, **59**, 2771 (*synth, uv, pmr*)
Isobe, K. *et al, J. Chem. Soc., Perkin Trans. 1*, 1989, 1357 (*synth*)
Chawla, A.S. *et al, Phytochemistry*, 1992, **31**, 372 (*oxide*)

Erythrodiene E-10193

[138613-24-8]



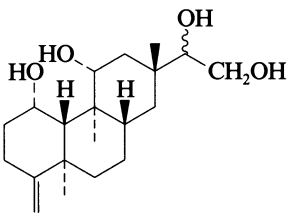
$C_{15}H_{24}$ M 204.355

Constit. of *Erythropodium caribaeorum*. Oil. $[\alpha]_D$ −30.8° (c, 0.24 in $CHCl_3$).

Pathirana, C. *et al, Tetrahedron Lett.*, 1993, **34**, 3371 (*isol, pmr, cmr, cryst struct*)

4(18)-Erythroxylene-1,11,15,16-tetrol E-10194

4(18)-Dolabrene-1,11,15,16-tetrol



$C_{20}H_{34}O_4$ M 338.486

(ent-1β,11β,15ξ)-form

1-Ac: [150036-45-6].

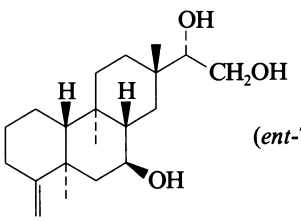
$C_{22}H_{36}O_5$ M 380.523

Constit. of *Erythroxylon sideroxyloides*.

Ansell, S.M. *et al, Phytochemistry*, 1993, **32**, 953 (*isol, pmr, cmr*)

4(18)-Erythroxylene-7,15,16-triol E-10195

4(18)-Dolabrene-7,15,16-triol



(*ent*-7α,15*R*)-*form*

$C_{20}H_{34}O_3$ M 322.487

(ent-7α,15R)-form [150036-63-8]

Constit. of *Erythroxylum pictum*.

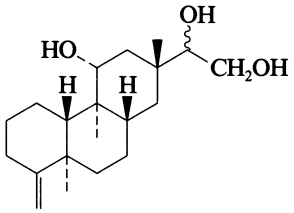
(ent-7α,15S)-form [150036-62-7]

Constit. of *E. pictum*.

Ansell, S.M. *et al, Phytochemistry*, 1993, **32**, 945 (*isol, pmr, cmr*)

4(18)-Erythroxylene-11,15,16-triol E-10196

4(18)-Dolabrene-11,15,16-triol



$C_{20}H_{34}O_3$ M 322.487

(ent-11β,15ξ)-form [150036-43-4]

Constit. of *Erythroxylon sideroxyloides*. Amorph. $[\alpha]_D$ +19° (CH_2Cl_2).

11-Ac: [150036-44-5].

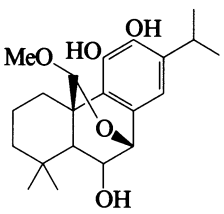
$C_{22}H_{36}O_4$ M 364.524

Constit. of *E. sideroxyloides*. Cryst. (hexane). Mp 108-112°. $[\alpha]_D$ −3° (CH_2Cl_2).

Ansell, S.M. *et al*, *Phytochemistry*, 1993, **32**, 953 (*isol, pmr, cmr*)

Esquirolin D E-10197

[136196-66-2]



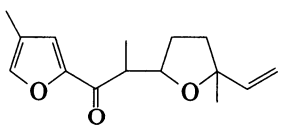
$C_{21}H_{30}O_5$ M 362.465

Constit. of *Coleus esquirolii*. Cryst. Mp 195-196°. $[\alpha]_D^{30}$ −25.7° (c, 0.6 in $CHCl_3$).

Li, C.M. *et al*, *Chin. Chem. Lett.*, 1991, **2**, 223 (*isol, pmr, cmr*)

2-(5-Ethenyltetrahydro-5-methyl-2-furanyl)-1-(4-methyl-2-furanyl)-1-propanone, 9CI E-10198

[148707-48-6]



$C_{15}H_{20}O_3$ M 248.321

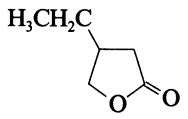
Constit. of *Rehmannia glutinosa*. Solid. $[\alpha]_D$ +12.6° (c, 0.2 in $CHCl_3$).

Oshima, Y. *et al*, *Phytochemistry*, 1993, **32**, 233 (*isol, pmr, cmr*)

4-Ethyldihydro-2(3*H*)-furanone E-10199

3-Hydroxymethylpentanoic acid γ-lactone. β-Ethyl-γ-butyrolactone. 3-Ethyl-4-butanolide

[16496-51-8]



$C_6H_{10}O_2$ M 114.144

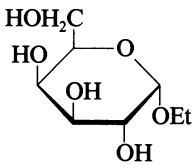
Constit. of Turkish tobacco.

(±)-form

Oil. Bp_{12} 99°.

Surzur, J.-M. *et al*, *Bull. Soc. Chim. Fr.*, 1970, 653 (*synth*)
Kametani, T. *et al*, *Chem. Pharm. Bull.*, 1985, **33**, 61 (*synth*)

Ethyl galactoside E-10200



α-D-Pyranose-*form*

$C_8H_{16}O_6$ M 208.211

α-D-Pyranose-form [15486-24-5] ***Eleutheroside C***

Constit. of *Acanthopanax* sp., *Adhatoda* sp., *Cassia* sp., *Clitoria* sp., *Eleutherococcus* sp., *Glycine max* and *Trigonella* sp. Cryst. (EtOH). Mp 140°. $[\alpha]_D$ +186° (H_2O).

Tetra-O-Ac: [31281-90-0].

$C_{16}H_{24}O_{10}$ M 376.360

Cryst. (pentane). Mp 87-88°. $[\alpha]_D^{20}$ +136° ($CHCl_3$).

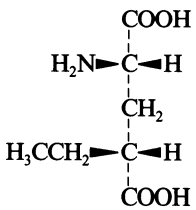
β-D-Pyranose-form [18997-88-1]

Constit. of *T. corniculata*. Cryst. (EtOH). Mp 159-161°. $[\alpha]_D^{21}$ −6° (c, 2 in H_2O).

Overend, W.G. *et al*, *J. Chem. Soc.*, 1962, 3429 (*synth*)
Ovodov, Y.S. *et al*, *Khim. Prir. Soedin.*, 1967, **3**, 63 (*isol*)
Kulshrestha, D.K. *et al*, *Chem. Ber.*, 1968, **101**, 2096 (*isol*)
Bruyne, C.K. *et al*, *Carbohydr. Res.*, 1972, **25**, 59 (*synth*)
Sishandri, T.R. *et al*, *Curr. Sci.*, 1973, **42**, 421 (*isol*)
Schroeder, L.R. *et al*, *Carbohydr. Res.*, 1974, **37**, 368 (*synth*)
Zamojski, A. *et al*, *Pol. J. Chem.* (*Rocz. Chem.*), 1975, **49**, 2113 (*synth*)
Van Heeswijk, W.A.R. *et al*, *Carbohydr. Res.*, 1977, **58**, 494 (*synth*)
Jain, M.P. *et al*, *Phytochemistry*, 1980, **19**, 1880 (*isol*)

4-Ethylglutamic acid, 9CI E-10201

[20913-68-2]



(2*S*,4*R*)-*form*

$C_7H_{13}NO_4$ M 175.184

Unspecified isomer isol. from *Caesalpinia tinctoria* seed.

(2S,4R)-form [93381-26-1]

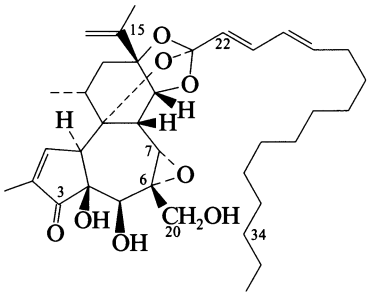
L-erythro-*form*

Isol. from the bulbs of *Tulipa gesneriana*.

[34605-38-4, 34605-39-5, 37520-44-8, 69637-75-8, 93381-27-2]

Shakhnazaryan, G.M. *et al*, *Zh. Org. Khim.*, 1968, **4**, 1914; *CA*, **70**, 29258w (*synth*)
Watson, R. *et al*, *Phytochemistry*, 1980, **20**, 2213 (*isol*)
Kasai, T. *et al*, *Agric. Biol. Chem.*, 1984, **48**, 2271 (*isol, pmr, cd*)

34-Ethylhuratoxin E-10202



$C_{36}H_{52}O_8$ M 612.802

▷ Derivs. are exp. carcinogens and irritants.

26,27-Didehydro: [57672-63-6]. ***Excoecaria factor*** A_1. *Excoecaria factor* B_1. *Hippomane factor* M_2
$C_{36}H_{50}O_8$ M 610.786
Constit. of *Excoecaria agallocha*, *E. bicolor* and *Hippomane mancinella.*

26,27-Didehydro, 5,20-di-Ac: [91851-66-0].
$C_{40}H_{54}O_{10}$ M 694.861
Constit. of *H. mancinella.*

26,27,28,29-Tetradehydro: [101409-52-3]. ***Excoecaria factor*** A_2. *Excoecaria factor* B_2
$C_{36}H_{48}O_8$ M 608.770
Constit. of *E. agallocha* and *E. bicolor.*

1,2,22,23,24,25-Hexahydro: [92260-58-7].
$C_{36}H_{58}O_8$ M 618.849
Constit. of *H. mancinella.*

15,16,22,23,24,25-Hexahydro: [91851-67-1].
$C_{36}H_{58}O_8$ M 618.849
Constit. of *H. mancinella.*

6,7-Deepoxy, 6-hydroxy, 7-chloro, 15,16,22,23,24,25-hexahydro: [91851-49-9].
$C_{36}H_{59}ClO_8$ M 655.310
Constit. of *H. mancinella.*

6,7-Deepoxy, 6-hydroxy, 7-chloro, 15,16,22,23,24,25-hexahydro, 5,20-di-Ac: [91851-50-2].
$C_{40}H_{63}ClO_{10}$ M 739.384
Constit. of *H. mancinella.*

5-Deoxy, 6,7-deepoxy, 6,7,26,27-tetradehydro: [91851-47-7].
$C_{36}H_{50}O_6$ M 578.787
Constit. of *H. mancinella.*

5-Deoxy, 6,7-deepoxy, 6,7,26,27-tetrahydro, 20-pentadecanoyl: [91851-52-4].
$C_{51}H_{78}O_7$ M 803.173
Constit. of *H. mancinella.*

5-Deoxy, 6,7-deepoxy, 6,7,26,27-tetradehydro, 20-hexadecanoyl: [91851-54-6].
$C_{52}H_{80}O_7$ M 817.200
Constit. of *H. mancinella.*

5-Deoxy, 6,7-deepoxy, 6,7,26,27-tetradehydro, 20-octadecanoyl: [91851-56-8].
$C_{54}H_{84}O_7$ M 845.253
Constit. of *H. mancinella.*

5-Deoxy, 6,7-deepoxy, 6,7,26,27-tetradehydro, 20-eicosanoyl: [91851-58-0].
$C_{56}H_{88}O_7$ M 873.307
Constit. of *H. mancinella.*

5-Deoxy, 6,7-deepoxy, 6,7,26,27-tetradehydro, 20-docosanoyl: [91851-60-4].
$C_{58}H_{92}O_7$ M 901.361
Constit. of *H. mancinella.*

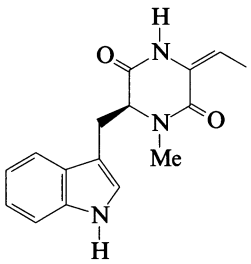
5-Deoxy, 6,7-deepoxy, 6,7,26,27-tetradehydro, 20-tetracosanoyl: [91851-62-6].
$C_{60}H_{96}O_7$ M 929.414
Constit. of *H. mancinella.*

5-Deoxy, 6,7-deepoxy, 6,7,26,27-tetradehydro, 20-hexacosanoyl: [91851-64-8].
$C_{62}H_{100}O_7$ M 957.468
Constit. of *H. mancinella.*

Adolf, W. *et al*, *J. Nat. Prod.* (*Lloydia*), 1984, **47**, 482 (*isol, derivs*)
Wiriyachitra, P. *et al*, *Planta Med.*, 1985, 368 (*Excoecaria factors*)

3-Ethylidene-6-(1*H*-indol-3-ylmethyl)-1-methyl-2,5-piperazinedione, 9CI E-10203

Cyclo(tryptophanyldehydrobutyrine). Tryptophandehydrobutyrine diketopiperazine. TDD
[55062-34-5]



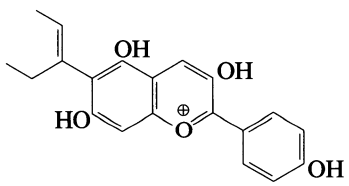
$C_{16}H_{17}N_3O_2$ M 283.329

(S)-form [75759-83-0]
Prod. by *Streptomyces spectabilis* and *S.* sp. MI513-bF5. Glutathione *S*-transferase inhibitor. V. pale yellow needles. Mp 121-123°. $[\alpha]_D^{24.5}$ +10.0° (c, 1.1 in 95% EtOH aq.). Config. not confirmed.

Kakinuma, K. *et al*, *J. Antibiot.*, 1974, **27**, 733 (*isol*)
Izumiya, N. *et al*, *Pept. Chem.*, 1977, **15**, 49 (*synth*)
Komagata, D. *et al*, *J. Antibiot.*, 1992, **45**, 1681 (*isol, props*)

6-(1-Ethyl-1-propenyl)-3,4′,5,7-tetrahydroxyflavylium(1+) E-10204

6-(1-Ethyl-1-propenyl)-3,5,7-trihydroxy-2-(4-hydroxyphenyl)-1-benzopyrylium



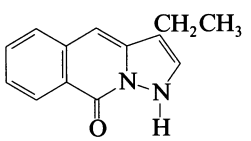
$C_{20}H_{19}O_5^{\oplus}$ M 339.367 (ion)
Struct. of side-chain improbable.

3-O-Diglucoside:
$C_{32}H_{39}O_{15}^{\oplus}$ M 663.651 (ion)
Constit. of the flowers of *Cassia marginata.*

Adinarayana, D. *et al*, *Indian J. Chem.*, 1966, **4**, 73.

3-Ethyl-1*H*-pyrazolo[1,5-b]isoquinolin-9-one E-10205

APHE 1
[146426-35-9]



$C_{13}H_{12}N_2O$ M 212.251

Prod. by *Streptoverticillium griseocarneum*. Shows antimicrobial and cytotoxic activities. Yellow powder. Mp 157-159°.

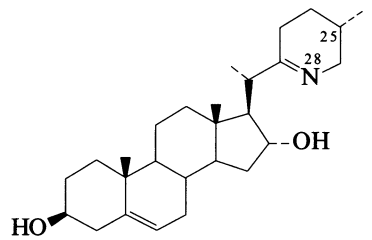
Fidalgo, M.L. *et al*, *J. Antibiot.*, 1992, **45**, 1759 (*isol, pmr, cmr, struct, props*)

Etioline E-10206

Updated Entry replacing E-01771

(*3β,16α*)-*16,28-Secosolanida-5,22(28)-diene-3,16-diol, 9CI. 22,26-Epiminocholesta-5,22*(N)-*diene-3β,16α-diol, 9CI. Veralosidine. Veralozidine. 16α-Hydroxyverazine*

[29271-49-6]



Absolute configuration

$C_{27}H_{43}NO_2$ M 413.642

Identity of Etioline and Veralosidine apparently not conclusively establ. Alkaloid from *Veratrum album* ssp. *lobelianum*, *V. grandiflorum* and *Solanum havanense* (Liliaceae, Solanaceae). Mp 153-155°. $[\alpha]_D^{26}$ −92.2° (c, 0.47 in EtOH).

16-O-*Ac:* [36506-65-7]. ***Veralosinine.*** *16*-O-*Acetyletioline. Veralozinine*
$C_{29}H_{45}NO_3$ M 455.679
Alkaloid from *V. lobelianum* (Liliaceae). Mp 161-163°. $[\alpha]_D^{25}$ −186.2° (c, 0.92 in $CHCl_3$).

Tri-Ac (*of 5,22-diene isomer*)*:* Cryst. (Me_2CO). Mp 193-195°. $[\alpha]_D^{22}$ +13.3° (c, 0.52 in EtOH).

3-O-[*β*-D-*Glucopyranosyl-*(*1→4*)-*β*-D-*glucopyranoside*]*:* [107783-36-8]. ***Etiolinine***
$C_{39}H_{63}NO_{12}$ M 737.926
Alkaloid from *Solanum havanense* (Solanaceae).

16-O-*Ac*, *3*-O-*β*-D-*Glucopyranoside:* [30511-97-8]. ***Veralosine.*** *Veralozine. Havanine*†
$C_{35}H_{55}NO_8$ M 617.821
Alkaloid from *V. album* ssp. *lobelianum* and from leaves of *S. havanense* (Liliaceae, Solanaceae). Mp 213-215° (186-187°). $[\alpha]_D$ −147.7° (MeOH), $[\alpha]_D^{25}$ −110.8° (c, 1 in MeOH). Struct. of Veralosine not certain and identity of Veralosine with Havanine not establ.

*22*R,N-*Dihydro:* [65027-01-2]. ***Teinemine.*** (*3β,16α,22α*)-*16,28-Secosolanid-5-ene-3,16-diol, 9CI*
$C_{27}H_{45}NO_2$ M 415.658
Isol. from *V. grandiflorum* terrestrial parts (Liliaceae). Plates (Me_2CO). Mp 204-209°. $[\alpha]_D^{20}$ −35.8° (c, 1.19 in $CHCl_3$).

*22*R,N-*Dihydro*, *3*-O-*β*-D-*glucopyranoside:* [123164-25-0]. ***Isocapsicastrine***
$C_{33}H_{55}NO_7$ M 577.800
Isol. from *S. capsicastrum*. Pale yellow powder ($MeOH/CHCl_3$). $[\alpha]_D^{25}$ +202° (c, 0.25 in Py).

*22*S,N-*Dihydro:* [65027-00-1]. ***Isoteinemine***
$C_{27}H_{45}NO_2$ M 415.658
Isol. from *V. grandiflorum* terrestrial parts (Liliaceae). Flakes (Me_2CO). Mp 217-220°.

*22*S,N-*Dihydro*, *3*-O-*β*-D-*galactopyranoside:* [107585-56-8]. ***Capsicastrine.*** *Isoteinemine galactoside*
$C_{33}H_{55}NO_7$ M 577.800
Alkaloid from root bark of *S. capsicastrum* (Solanaceae). Needles (Me_2CO). Mp 220-221°. $[\alpha]_D^{21}$ −25.5° (c, 0.1 in $CHCl_3$).

*22*S,N-*Dihydro*, *16*-O-*Ac:* [36069-45-1]. ***Muldamine.*** *Alkaloid Q*
$C_{29}H_{47}NO_3$ M 457.695
Alkaloid from *V. californicum* (Liliaceae). Mp 210-211°. $[\alpha]_D^{25}$ −95° (c, 1 in $EtOH/CHCl_3$ 3:1). C-Nor-D-homosteroid struct. originally assigned.
▷ Weakly teratogenic to hamsters. QG1320000.

25-Epimer, *22*R,*28-Dihydro:* [123123-41-1]. ***Capsimine***
$C_{27}H_{45}NO_2$ M 415.658
Constit. of *Solanum capsicastrum*. Prisms (MeOH) + $2H_2O$. Mp 264-267°. $[\alpha]_D^{25}$ −104° (c, 0.5 in MeOH).

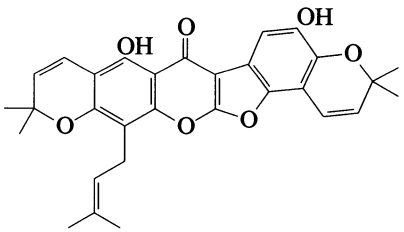
25-Epimer: [129938-55-2]. ***25-Isoetioline.*** *25*-epi-*Etioline*
$C_{27}H_{43}NO_2$ M 413.642
Alkaloid from the leaves and stems of *S. canense* and *S. fraxinifolium* (Solanaceae). Mp 141-143°. $[\alpha]_D^{20}$ +73.6° (c, 0.4 in $CHCl_3$).

25-Epimer, *22*R,*28-dihydro*, *3*-O-*β*-D-*glucoside:* ***Capsimine 3-O-β-D-glucoside***
$C_{33}H_{55}NO_7$ M 577.800
Alkaloid from root bark of *S. capsicastrum* (Solanaceae). Powder (MeOH). Mp 214-216°. $[\alpha]_D^{20}$ −68.8° (c, 0.05 in cyclohexane/EtOAc/MeOH).

Keeler, R.F., *Phytochemistry*, 1968, **7**, 303 (*Muldamine, isol*)
Khashimov, A.M. *et al*, *Khim. Prir. Soedin.*, 1970, **6**, 339; 1971, **7**, 779; *Chem. Nat. Compd.* (*Engl. Transl.*), 338, 751 (*isol, pmr*)
Kaneko, K. *et al*, *Tetrahedron Lett.*, 1971, 4251 (*isol, spectra*)
Moiseeva, G.P. *et al*, *Khim. Prir. Soedin.*, 1976, **12**, 623; *Chem. Nat. Compd.* (*Engl. Transl.*), 557 (*cd*)
Ripperger, H., *Pharmazie*, 1977, **32**, 537 (*isol*)
Kaneko, K. *et al*, *Phytochemistry*, 1977, **16**, 1620 (*Teinemine, Isoteinemine*)
Gaffield, W. *et al*, *Phytochemistry*, 1982, **21**, 2397 (*Muldamine, struct, pmr, ms*)
Basterrechea, M. *et al*, *Phytochemistry*, 1984, **23**, 2057 (*Havanine*)
Basterrechea, M.J. *et al*, *Rev. Cubana Quim.*, 1986, **2**, 71; *CA*, **106**, 153103t (*Etiolinine*)
Lin, C.-N. *et al*, *Phytochemistry*, 1987, **26**, 305 (*Capsicastrine*)
Lin, C.N. *et al*, *Planta Med.*, 1989, **55**, 48 (*Capsimine*)
Ripperger, H., *Phytochemistry*, 1990, **29**, 3375 (*25-Isoetioline*)
Le Thi Quyen, *et al*, *Justus Liebigs Ann. Chem.*, 1991, 143 (*synth*)
Gan, K.H. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 15 (*Capsimine 3-O-glucoside*)
Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th Ed., Van Nostrand-Reinhold, 1992, MRV750.

Euchretin D E-10207

[137319-37-0]



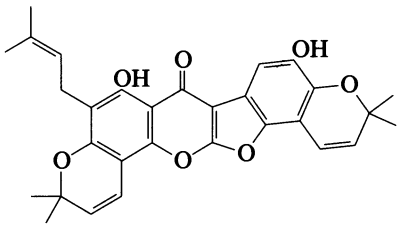
$C_{30}H_{28}O_7$ M 500.547

Constit. of the roots of *Euchresta formosana*. Pale yellow needles (MeOH). Mp 178-180°.

Mizuno, M. *et al*, *Phytochemistry*, 1991, **30**, 3095 (*isol*)

Euchretin E E-10208

[137319-38-1]



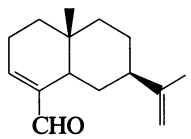
$C_{30}H_{28}O_7$ M 500.547

Constit. of the roots of *Euchresta formosana*. Pale yellow needles (MeOH). Mp 237-239°.

Mizuno, M. *et al*, *Phytochemistry*, 1991, **30**, 3095 (*isol*)

3,11-Eudesmadien-15-al E-10209

[150034-03-0]



$C_{15}H_{22}O$ M 218.338

Constit. of *Aquilaria agallocha* (agarwood). $[\alpha]_D^{30}$ −35.7° (c, 0.2 in $CHCl_3$).

Carboxylic acid: [150034-06-3]. ***3,11-Eudesmadien-15-oic acid***

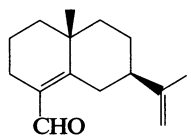
$C_{15}H_{22}O_2$ M 234.338

Constit. of *A. agallocha*. Cryst. (as Me ester). Mp 61.2° (Me ester). $[\alpha]_D^{22}$ −86.0° (c, 1 in $CHCl_3$)(Me ester).

Ishihara, M. *et al*, *Phytochemistry*, 1993, **33**, 1147 (*isol, pmr, cmr*)

4,11-Eudesmadien-15-al E-10210

[150034-05-2]



$C_{15}H_{22}O$ M 218.338

Constit. of *Aquilaria agallocha* (agarwood). $[\alpha]_D^{30}$ +83.7° (c, 0.8 in $CHCl_3$).

Carboxylic acid: [150071-58-2]. ***4,11-Eudesmadien-15-oic acid***

$C_{15}H_{22}O_2$ M 234.338

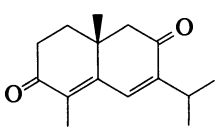
Constit. of *A. agallocha*. $[\alpha]_D^{27}$ +62.7° (c, 0.53 in $CHCl_3$) (Me ester).

Ishihara, M. *et al*, *Phytochemistry*, 1993, **33**, 1147 (*isol, pmr, cmr*)

4,6-Eudesmadiene-3,8-dione E-10211

8-Oxo-β-cyperone

[60824-93-3]



$C_{15}H_{20}O_2$ M 232.322

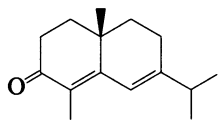
Constit. of *Isocoma wrightii* and *Haplopappus freemontii*. Oil. $[\alpha]_D^{20}$ +390° (c, 0.6 in $CHCl_3$).

Bohlmann, F. *et al*, *Phytochemistry*, 1976, 411 (*isol, pmr*)
Bohlmann, F. *et al*, *Chem. Ber.*, 1981, **114**, 2415 (*synth*)
Jakupovic, J. *et al*, *Planta Med.*, 1986, 411 (*isol, pmr, cmr*)
Cardona, L. *et al*, *Tetrahedron*, 1993, **49**, 7829 (*synth*)

4,6-Eudesmadien-3-one E-10212

4,6-Selinadien-3-one. ***β-Cyperone***

[23665-63-6]



$C_{15}H_{22}O$ M 218.338

Constit. of *Cyperus* oils. Oil. $[\alpha]_D$ +67.3° (c, 0.108 in $CHCl_3$).

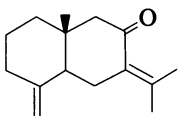
Greene, A.E. *et al*, *Tetrahedron Lett.*, 1971, 4147 (*synth*)
Kutney, J.P. *et al*, *Can. J. Chem.*, 1980, **58**, 2641 (*synth, pmr, cmr*)

4(15),7(11)-Eudesmadien-8-one E-10213

Updated Entry replacing E-01858

4(15),7(11)-Selinadien-8-one

[54707-47-0]



$C_{15}H_{22}O$ M 218.338

Constit. of *Atractylodes japonica* and *Peteraveria schultzii*. Antiinflammatory. Oil.

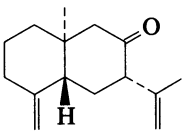
ent-form [64314-11-0] ***Ventricosin A***

Constit. of *Lophozia ventricosa*. Oil. $[\alpha]_D$ −80.5° (c, 1.14 in $CHCl_3$).

Bohlmann, F. *et al*, *Phytochemistry*, 1978, **17**, 567 (*isol, pmr*)
Endo, K. *et al*, *Bull. Chem. Soc. Jpn.*, 1979, **52**, 2439 (*struct*)
Endo, K. *et al*, *Chem. Pharm. Bull.*, 1979, **27**, 2954 (*isol*)
Banerjee, A.K. *et al*, *Indian J. Chem., Sect. B*, 1983, **22**, 1259 (*synth*)
Banerjee, A.K. *et al*, *J. Chem. Res., Synop.*, 1984, 284 (*synth*)
Connolly, J.D. *et al*, *Phytochemistry*, 1984, **23**, 1792 (*Ventricosin A, pmr, cmr*)

4(15),11-Eudesmadien-8-one E-10214

4(15),11-Selinadien-8-one



$C_{15}H_{22}O$ M 218.338

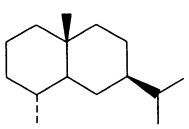
ent-form

Constit. of *Lophozia ventricosa*. Oil. $[\alpha]_D^{20}$ −18.9° (c, 1.1 in $CHCl_3$).

Tori, M. *et al*, *Phytochemistry*, 1993, **34**, 181 (*isol, pmr, cmr*)

Eudesmane E-10215

Selinane



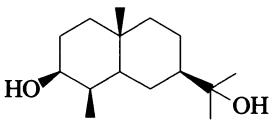
$C_{15}H_{28}$ M 208.386

4α-form [473-11-0]
Constit. of petroleum.

4β-form [30824-81-8]
Constit. of petroleum.

Philp, R.P. *et al*, *Geochim. Cosmochim. Acta*, 1981, **45**, 1173 (*isol*)
Alexander, R. *et al*, *J. Chem. Soc., Chem. Commun.*, 1983, 226 (*isol, synth, ms*)
Chen, X. *et al*, *Chin. Chem. Lett.*, 1992, **3**, 965 (*synth*)

3,11-Eudesmanediol E-10216



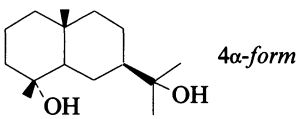
$C_{15}H_{28}O_2$ M 240.385

(3β,4β)-form [102490-02-8] ***Auberganol***
Constit. of *Solanum melongena*. Cryst. (EtOAc/hexane). Mp 173-173.5°. $[\alpha]_D$ −2.7°.

Murai, A. *et al*, *Bull. Chem. Soc. Jpn.*, 1982, **55**, 1191 (*synth*)
Stressl, A. *et al*, *Can. J. Chem.*, 1986, **64**, 611 (*isol, pmr, cmr*)

4,11-Eudesmanediol E-10217

Updated Entry replacing E-01863
4,11-Selinanediol



4α-*form*

$C_{15}H_{28}O_2$ M 240.385

4α-form [4666-84-6] ***Cryptomeridiol. Proximadiol***
Constit. of *Cryptomeria japonica, Cympobogon proximus, Widdringtonia dracomontana, Fokienia hodgkinsii, Callitris columellaris* and others. Antispasmodic. Cryst. Mp 138° (134.5-135.5°). $[\alpha]_D$ −33.3° ($CHCl_3$).

(4α,7βH)-form
Isodonsesquistin A
Constit. of *Isodon grandifolia* var. *atuntzensis*. Needles (Me_2CO). Mp 93-95°. $[\alpha]_D^{26}$ +24.6° (c, 0.16 in Py).

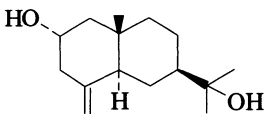
(4β,5β)-form
4,5-Diepicryptomeridiol
Constit. of *Pluchea arguta*. Cryst. Mp 104°. $[\alpha]_D^{29}$ +66.66° (c, 0.015 in $CHCl_3$).

(4β,5β,10α)-form
Constit. of *Ursinia trifida*.

Irwin, M.A. *et al*, *Phytochemistry*, 1973, **12**, 849 (*isol*)
Cruz, A. *et al*, *Phytochemistry*, 1973, **12**, 2549 (*isol*)
Renold, W. *et al*, *Helv. Chim. Acta*, 1979, **62**, 985 (*synth*)
Evans, F.E. *et al*, *Phytochemistry*, 1982, **21**, 937 (*isol*)
Kawamata, T. *et al*, *Bull. Chem. Soc. Jpn.*, 1988, **61**, 3770 (*synth*)
Ahmed, V.-U. *et al*, *J. Nat. Prod. (Lloydia)*, 1992, **55**, 731 (*isol, pmr, cmr*)
Jakupovic, J. *et al*, *Phytochemistry*, 1992, **31**, 863 (*isol, pmr*)
Shun-Hua, W. *et al*, *Phytochemistry*, 1993, **34**, 1176 (*Isodonsesquistin A*)

4(15)-Eudesmene-2,11-diol E-10218

Updated Entry replacing E-01886
4(15)-Selinene-2,11-diol



$C_{15}H_{26}O_2$ M 238.369

2α-form [21677-80-5] ***Pterocarpol***
Constit. of the heartwood of *Pterocarpus macrocarpus* and other *P.* spp. Cryst. (C_6H_6). Mp 104-105°. $[\alpha]_D$ +39° (c, 1.05 in $CHCl_3$).

11-O-β-D-Glucopyranoside: [126054-79-3]. ***Atractyloside C***
$C_{21}H_{36}O_7$ M 400.511
Constit. of *Atractylodes lancea*. Powder. $[\alpha]_D^{19}$ +12.0° (c, 0.95 in MeOH).

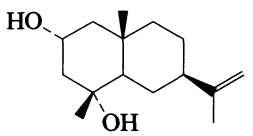
2,11-Di-O-β-D-glucopyranoside: [126054-80-6]. ***Atractyloside D***
$C_{26}H_{46}O_{12}$ M 550.642
Constit. of *A. lancea*. Powder. $[\alpha]_D^{17}$ −15.0° (c, 0.95 in MeOH).

2-O-[β-D-Apiofuranosyl-(1→6)-β-D-glucopyranoside], 11-O-β-D-glucopyranoside: [126054-81-7]. ***Atractyloside E***
$C_{31}H_{54}O_{16}$ M 682.758
Constit. of *A. lancea*. Powder. $[\alpha]_D^{30}$ −39.4° (c, 1 in MeOH).

2,11-Di-O-[β-D-apiofuranosyl-(1→6)-β-D-glucopyranoside]: [126054-82-8]. ***Atractyloside F***
$C_{36}H_{62}O_{20}$ M 814.874
Constit. of *A. lancea*. Powder. $[\alpha]_D^{19}$ −99.8° (c, 0.50 in MeOH).

Bahl, C.P. *et al*, *Tetrahedron*, 1968, **24**, 6231 (*isol, struct*)
Kukla, A.S. *et al*, *Indian J. Chem., Sect. B*, 1976, **14**, 905 (*abs config*)
Yahara, S. *et al*, *Chem. Pharm. Bull.*, 1989, **37**, 2995 (*Atractylosides*)

11-Eudesmene-2,4-diol E-10219

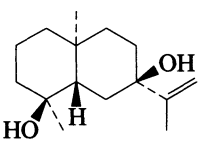


$C_{15}H_{26}O_2$ M 238.369

(2α,4α)-form [151563-71-2]
Constit. of *Nardostachys chinensis*. Oil. $[\alpha]_D$ −25.5° (c, 0.44 in MeOH).

Masuyama, K. *et al*, *Phytochemistry*, 1993, **34**, 567 (*isol, pmr, cmr*)

11-Eudesmene-4,7-diol E-10220



(*ent*-4α,7α)-*form*

$C_{15}H_{26}O_2$ M 238.369

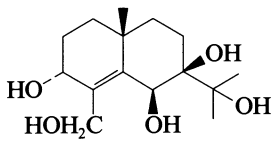
(ent-4α,7α)-form
Teucdiol A
Constit. of *Teucrium heterophyllum*. Cryst. Mp 75-77°.

(ent-4α,7β)-form
Teucdiol B

Constit. of *T. heterophyllum*. Gum.

Fraga, B.M. *et al*, *Phytochemistry*, 1993, **34**, 1083 (*isol, pmr, cmr, cryst struct, abs config*)

4-Eudesmene-3,6,7,11,15-pentol E-10221



$C_{15}H_{26}O_5$ M 286.367

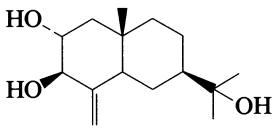
(3α,6β,7β)-form

11-O-(*3-Acetyl-2,4-diangeloyl-β-D-fucopyranoside*), *15-Ac:*
$C_{35}H_{52}O_{13}$ M 680.788
Constit. of *Calendula arvensis*.

Ahmed, A.A. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 1821 (*isol, pmr, cmr*)

4(15)-Eudesmene-2,3,11-triol E-10222

Updated Entry replacing E-01902



$C_{15}H_{26}O_3$ M 254.369

(2α,3β)-form [126054-89-5] ***Plucheol A***
Constit. of *Pluchea indica*. Amorph. powder. $[\alpha]_D^{21}$ +14.2° (c, 0.67 in MeOH).

11-O-*β-D-Glucopyranoside:* [126054-83-9]. ***Atractyloside G***
$C_{21}H_{36}O_8$ M 416.511
Constit. of *Atractylodes lancea*. Powder. $[\alpha]_D^{19}$ +2.2° (c, 0.045 in MeOH).

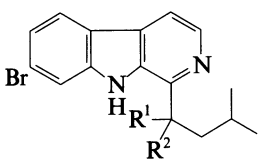
2-O-[*β-D-Apiopyranosyl*-(*1→6*)-*β-D-glucopyranoside*], *11*-O-*β-D-glucopyranoside:* [126054-84-0]. ***Atractyloside H***
$C_{31}H_{54}O_{17}$ M 698.757
Constit. of *A. lancea*. Powder. $[\alpha]_D^{27}$ +33.2° (c, 0.5 in MeOH).

Yahara, S. *et al*, *Chem. Pharm. Bull.*, 1989, **37**, 2995 (*Atractylosides*)
Uchiyama, T. *et al*, *Phytochemistry*, 1991, **30**, 655 (*isol, pmr, cmr*)

Eudistalbin A E-10223

7-Bromo-α-(2-methylpropyl)-9H-pyrido[3,4-b]indole-1-methanamine, 9CI

[142755-07-5]



R^1 = H, R^2 = NH_2

$C_{16}H_{18}BrN_3$ M 332.242
Alkaloid from the marine tunicate *Eudistoma album*. Exhibits cytotoxicity *in vitro* against KB human buccal carcinoma. Amorph. $[\alpha]_D$ −10° (c, 0.1 in MeOH).

Adesanya, S.A. *et al*, *J. Nat. Prod.* (*Lloydia*), 1992, **55**, 525 (*isol, uv, ir, pmr, cmr, ms, struct*)

Eudistalbin B E-10224

1-(7-Bromo-9H-pyrido[3,4-b]-indol-1-yl)-3-methyl-1-butanone, 9CI

[142755-08-6]

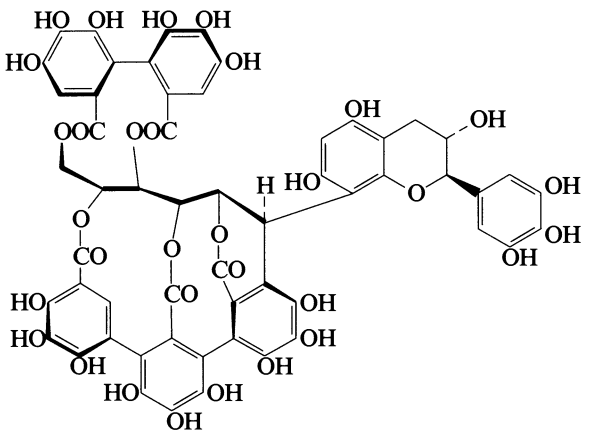
As Eudistalbin A, E-10223 with

R^1R^2 = O

$C_{16}H_{15}BrN_2O$ M 331.211
Alkaloid from the marine tunicate *Eudistoma album*. Amorph.

Adesanya, S.A. *et al*, *J. Nat. Prod.* (*Lloydia*), 1992, **55**, 525 (*isol, uv, ir, pmr, ms, struct*)

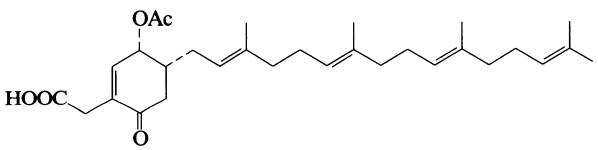
Eugenigradin A E-10225



$C_{56}H_{38}O_{32}$ M 1222.897
Derived from the bark of *Anogeissus acuminata* var. *lanceolata*.

Lin, T.-C. *et al*, *Chem. Pharm. Bull.*, 1991, **39**, 1144 (*struct*)

Eunicenone B E-10226

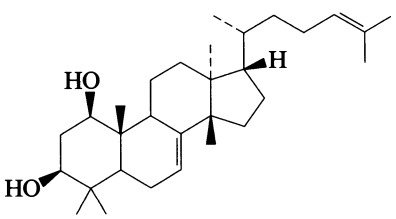


$C_{30}H_{44}O_5$ M 484.675
Constit. of a *Eunicea* sp. Oil. $[\alpha]_D$ +101° (c, 0.8 in $CHCl_3$).

O-*De-Ac, Me ester:* ***Eunicenone A***
$C_{29}H_{44}O_4$ M 456.664
Constit. of a *E.* sp. Oil. $[\alpha]_D$ +39.8° (c, 1.3 in $CHCl_3$).

Shin, J. *et al*, *Tetrahedron*, 1993, **49**, 9277 (*isol, pmr, cmr, cd*)

Eupha-7,24-diene-1,3-diol E-10227

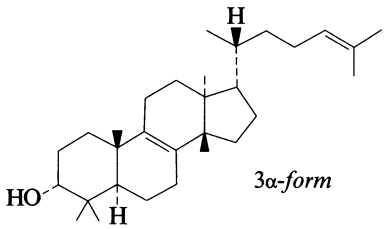


$C_{30}H_{50}O_2$ M 442.724

(1β,3β)-form [146356-83-4]
Constit. of *Garuga pinnata*. Fluffy solid. Mp 88-90°.
Venkatraman, G. *et al*, *Phytochemistry*, 1993, **32**, 161 (*isol, pmr, cmr*)

Eupha-8,24-dien-3-ol E-10228

Updated Entry replacing E-01976



$C_{30}H_{50}O$ M 426.724

3α-form [13879-06-6] ***Nerifoliol***
Constit. of *Euphorbia cattimandoo*. Cryst. (MeOH). Mp 131-132°. $[\alpha]_D$ +20° (c, 3.2 in $CHCl_3$).

3-Ketone: Eupha-8,24-dien-3-one. Euphone
Cryst. (MeOH). Mp 118-119°. $[\alpha]_D^{30}$ +70° (c, 1.2 in $CHCl_3$).

3β-form [514-47-6] ***Euphol***
Constit. of *E.* spp. Cryst. Mp 116°. $[\alpha]_D^{19.5}$ +32° ($CHCl_3$).

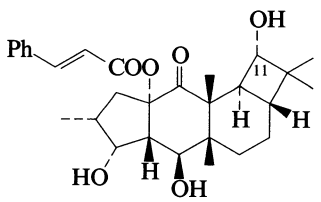
Ac: Cryst. Mp 117°. $[\alpha]_D^{30}$ +35°.

O-*Cinnamoyl:* ***Euphol cinnamate***
$C_{39}H_{56}O_2$ M 556.870
Constit. of *E. antiquorum*. Cryst. Mp 110-111°.

Newbold, G.T. *et al*, *J. Chem. Soc.*, 1944, 249 (*isol*)
Warren, F.L. *et al*, *J. Chem. Soc.*, 1958, 179 (*struct*)
Lavie, D. *et al*, *Tetrahedron*, 1963, **19**, 2255 (*pmr*)
Anjaneyulu, V. *et al*, *J. Indian Chem. Soc.*, 1968, **45**, 404 (*Nerifoliol*)
Knight, S.A., *Tetrahedron Lett.*, 1973, 83 (*cmr*)
Teresa, J. de P. *et al*, *Phytochemistry*, 1987, **26**, 1767 (*cmr*)
Bartlett, W.R. *et al*, *J. Org. Chem.*, 1990, **55**, 2215 (*synth*)
Gewali, M.B. *et al*, *Phytochemistry*, 1990, **29**, 1625 (*isol, pmr, cmr*)

Euphoractine A E-10229

[147526-85-0]



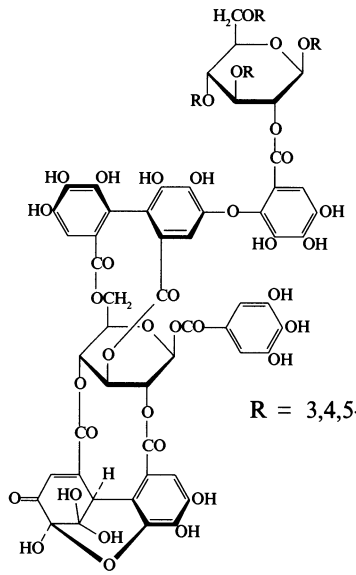
$C_{29}H_{38}O_6$ M 482.616
Constit. of *Euphorbia micractina*. Cryst. (EtOAc). Mp 208-210°. $[\alpha]_D^{24}$ +64.8° (c, 0.5 in $CHCl_3$).

Deacyl, 11-cinnamoyl: [147526-86-1]. ***Euphoractine B***
$C_{29}H_{38}O_6$ M 482.616
Constit. of *E. micractina*. Gum. $[\alpha]_D^{24}$ +11.63° (c, 0.92 in $CHCl_3$).

Shi, J.-G. *et al*, *Phytochemistry*, 1993, **32**, 208 (*isol, pmr, cmr, cryst struct*)

Euphorbin A E-10230

[118102-86-6]

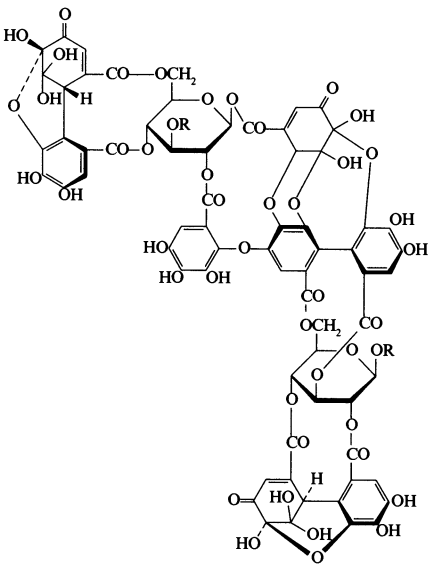


$C_{82}H_{58}O_{53}$ M 1891.328
Exhibits tautomerism with the alternative dibenzofuranoid struct. Ellagitannin constit. of *Euphorbia hirta*. Light yellow amorph. powder + $5H_2O$. $[\alpha]_D^{20}$ −43° (c, 1.0 in MeOH).

Yoshida, T. *et al*, *Chem. Pharm. Bull.*, 1988, **36**, 2940; 1991, **39**, 1137 (*isol, uv, pmr, struct, cmr*)

Euphorbin E E-10231

[129497-86-5]



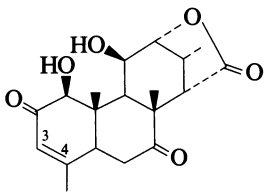
$C_{82}H_{52}O_{54}$ M 1901.280
Exists as an equilibrated mixt. of four isomers (each dehydrohexahydrodiphenoyl residue is capable of tautomerism to dibenzofuranoid isomer). Ellagitannin from *Euphorbia hirta*. Amorph. powder + $8H_2O$. $[\alpha]_D^{20}$ −48° (c, 1.0 in MeOH).

Yoshida, T. *et al*, *Chem. Pharm. Bull.*, 1990, **38**, 1113 (*struct, ms, pmr, cmr*)

Eurycomalactone E-10232

Updated Entry replacing E-02001

[23062-24-0]



$C_{19}H_{24}O_6$ M 348.395

Constit. of *Eurycoma longifolia*. Cryst. (MeOH). Mp 268-270°. $[\alpha]_D^{22}$ +104.2° (c, 0.144 in $CHCl_3$).

3,4α-Dihydro: [90584-30-8]. ***Dihydroeurycomalactone***

$C_{19}H_{26}O_6$ M 350.411

Isol. from *E. longifolia*. Cryst. (MeOH). Mp 247-248°. $[\alpha]_D$ +23°.

6α-Hydroxy: [142846-97-7]. ***6α-Hydroxyeurycomalactone***

$C_{19}H_{24}O_7$ M 364.394

Constit. of *E. longifolia*. Needles (MeOH). Mp 234-236°. $[\alpha]_D$ +180.4° (c, 0.18 in $CHCl_3$).

5,6-Didehydro: [90605-25-7]. ***5,6-Dehydroeurycomalactone***

$C_{19}H_{22}O_6$ M 346.379

Constit. of *E. longifolia*. Needles. Mp 285-286°. $[\alpha]_D$ −34.2° (c, 0.38 in MeOH).

7α-Alcohol: ***7α-Hydroxyeurycomalactone***

$C_{19}H_{26}O_6$ M 350.411

Constit. of *E. longifolia*. Needles. Mp 204-206°. $[\alpha]_D$ +36.3° (c, 0.27 in MeOH).

2α-Alcohol, 3,4α-dihydro, 6α-hydroxy:

$C_{19}H_{28}O_7$ M 368.426

Constit. of *E. longifolia*. Needles (MeOH). Mp 205-207°. $[\alpha]_D$ +29.3° (c, 0.27 in MeOH).

2α-Alcohol, 6α-hydroxy, $\Delta^{4,18}$-isomer:

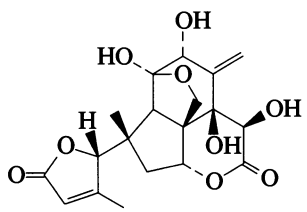
$C_{19}H_{26}O_7$ M 366.410

Constit. of *E. longifolia*. Needles (MeOH). Mp 208-210°. $[\alpha]_D$ +48.6° (c, 0.14 in MeOH).

Le-Van-Thoi, *et al*, *J. Org. Chem.*, 1970, **35**, 1104 (*isol, struct*)
Suong, N.-N. *et al*, *Tetrahedron Lett.*, 1982, **23**, 5159 (*cryst struct*)
Bates, R.B. *et al*, *J. Org. Chem.*, 1984, **49**, 2820 (*isol*)
Itokawa, H. *et al*, *Chem. Pharm. Bull.*, 1992, **40**, 1053 (*6α-Hydroxyeurycomalactone, 5,6-Dehydroeurycomalactone*)
Itokawa, H. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 1766 (*isol, pmr, cmr*)
Morita, H. *et al*, *Phytochemistry*, 1993, **33**, 691 (*7α-Hydroxyeurycomalactone*)

Eurylactone E-10233

[149180-47-2]

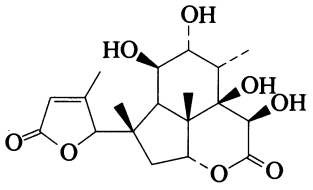


$C_{19}H_{22}O_9$ M 394.377

Constit. of *Eurycoma longifolia*. Cryst. (EtOAc). Mp 210-212°. $[\alpha]_D$ +62.4° (c, 0.17 in MeOH).

Itokawa, H. *et al*, *Chem. Pharm. Bull.*, 1993, **41**, 403 (*isol, pmr, cmr, cryst struct*)

Eurylactone A E-10234

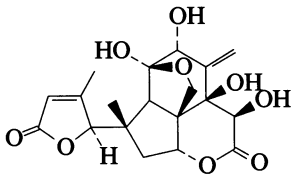


$C_{19}H_{26}O_8$ M 382.410

Constit. of *Eurycoma longifolia*. Needles (MeOH). Mp 148-150°. $[\alpha]_D$ +16.7° (c, 0.11 in MeOH).

Itokawa, H. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 1766 (*isol, pmr, cmr*)

Eurylactone B E-10235



$C_{19}H_{22}O_9$ M 394.377

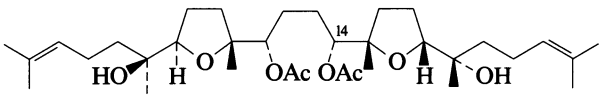
Constit. of *Eurycoma longifolia*. Needles (EtOAc). Mp 210-212°. $[\alpha]_D$ +62.4° (c, 0.17 in MeOH).

Itokawa, H. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 1766 (*isol, pmr, cmr*)

Eurylene E-10236

Updated Entry replacing E-02004

[134856-98-7]



$C_{34}H_{58}O_8$ M 594.827

Constit. of *Eurycoma longifolia*. Cryst. Mp 146-148°. $[\alpha]_D$ +4° (c, 0.14 in $CHCl_3$).

14-De-Ac:

$C_{32}H_{56}O_7$ M 552.790

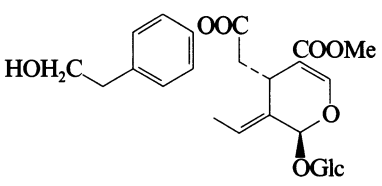
Constit. of *E. longifolia*. Needles. Mp 142-143°. $[\alpha]_D$ −23° (c, 0.44 in $CHCl_3$).

Itokawa, H. *et al*, *Tetrahedron Lett.*, 1991, **32**, 1803 (*isol, pmr, cmr, cryst struct, abs config*)
Morita, H. *et al*, *Phytochemistry*, 1993, **34**, 765 (*isol, pmr, cmr, cryst struct, abs config*)

Excelsioside E-10237

Updated Entry replacing E-02053

Formoside



$C_{25}H_{32}O_{12}$ M 524.521

Formoside and Excelsioside appear to be identical.

Constit. of *Fraxinus excelsior* and *F. formosana*. Foam or amorph. powder. $[\alpha]_D^{20}$ −159.3° (c, 0.94 in MeOH) (−143°).

O-β-D-Glucopyranoside: β-D-Glucopyranosylformoside

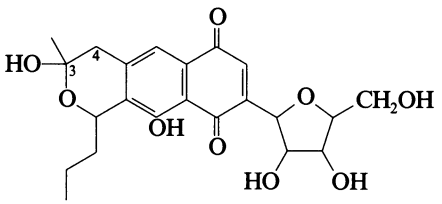
$C_{31}H_{42}O_{17}$ M 686.663

Constit. of *F. formosana*. Amorph. powder. $[\alpha]_D^{22}$ −105° (c, 0.33 in MeOH).

Damtoft, S. *et al*, *Phytochemistry*, 1992, **31**, 4197 (*isol, pmr, cmr*)
Tanahashi, T. *et al*, *Phytochemistry*, 1993, **32**, 133 (*isol, pmr, cmr*)

Exfoliamycin E-10238

[148084-37-1]



$C_{22}H_{26}O_9$ M 434.442
Naphthoquinone antibiotic. Related to Naphthopyranomycin, N-00050. Prod. by *Streptomyces exfoliatus*. Active against gram-positive bacteria. Orange-brown solid. Mp 90°. $[\alpha]_D^{20}$ +295° (c, 0.16 in MeOH).

3-Me ether: [148084-38-2]. ***3-O-Methylexfoliamycin***
$C_{23}H_{28}O_9$ M 448.469
Prod. by *S. exfoliatus*. Active against gram-positive bacteria. Orange-brown solid. Mp 129-131°. $[\alpha]_D^{20}$ +478° (c, 0.11 in MeOH).

3-Deoxy, 3,4-didehydro: [148084-39-3].
Anhydroexfoliamycin
$C_{22}H_{24}O_8$ M 416.427
Prod. by *S. exfoliatus*. Active against gram-positive bacteria. Dark red solid. Mp 167°. $[\alpha]_D^{20}$ +633° (c, 0.14 in MeOH).

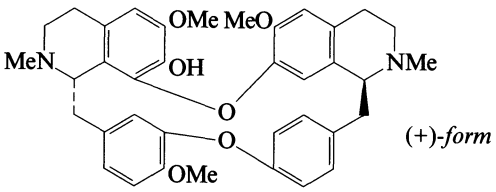
Potterat, O. *et al*, *J. Antibiot.*, 1993, **46**, 346 (*isol, struct*)

F

Fangchinoline F-10001

Updated Entry replacing F-00025

6,6',12-Trimethoxy-2,2'-dimethylberbaman-7-ol, 9CI



(+)-*form*

$C_{37}H_{40}N_2O_6$ M 608.733

Diastereoisomeric with Thalrugosine, T-01295.

(+)-***form*** [436-77-1]

12-O-Methylatherospermoline

Alkaloid from the roots of *Cyclea peltata, Triclisia subcordata* and *Stephania hernandifolia*, the tubers of *S. tetrandra*, and from the bark of *Daphnandra* sp. Dt-7 (Menispermaceae, Atherospermacaceae). Shows good *in vitro* antitumour activity against HeLa cells. Cryst. (Et_2O). Mp 240-242° dec. $[\alpha]_D^{24}$ +274° (c, 0.55 in MeOH).

Isomorph: Menisidine

$C_{37}H_4N_2O_6$ M 572.448

Isol. from the Chinese drug "Mu-fang-chi" (*S. tetrandra*) (Menispermaceae). Prismatic needles (EtOH). Mp 176°. $[\alpha]_D^{20}$ +260°. Transformed into Fangchinoline on heating at 160– 70° for 5 hr., and is almost certainly a metastable form of it.

Dipicrate: Mp 186°, Mp 225°.

Me ether: see *Tetrandrine, T-01149*

N^2-*Me:* [133744-51-1]. ***N^2-Methylfangchinoline***

$C_{38}H_{43}N_2O_6^{\oplus}$ M 623.767 (ion)

Alkaloid from the roots of *S. tetrandra* (Menispermaceae). Needles (Me_2CO/MeOH) (as chloride). Mp 205-208° (chloride). $[\alpha]_D$ +256° (c, 0.9 in MeOH).

2'-α-N-Oxide: [115648-96-9]. ***Fenfangjine B.*** *Fangchinoline 2'α-N-oxide*

$C_{37}H_{40}N_2O_7$ M 624.732

Alkaloid from 'Fen-Fang-Ji' (roots of *S. tetrandra*) (Menispermaceae). Prisms (EtOH). Mp 211-213°. $[\alpha]_D^{25}$ +242.5° (c, 0.640 in $CHCl_3$/MeOH).

2'β-N-Oxide: [115648-97-0]. ***Fenfangjine C.*** *Fangchinoline 2'β-N-oxide*

$C_{37}H_{40}N_2O_7$ M 624.732

Alkaloid from 'Fen-Fang-Ji' (roots of *S. tetrandra*) (Menispermaceae). Needles (EtOH). Mp 165-166°. $[\alpha]_D^{25}$ +239.4° (c, 0.630 in MeOH).

1,3,4-Tridehydro: [115439-62-8]. ***Fenfangjine D.*** *1,3,4-Tridehydrofangchinolinium*

$C_{37}H_{37}N_2O_6^{\oplus}$ M 605.709 (ion)

Quaternary alkaloid from 'Fen-Fang-Ji' (roots of *S. tetrandra*) (Menispermaceae).

1,3,4-Tridehydro, hydroxide:

$C_{37}H_{38}N_2O_7$ M 622.716

Angiotensin I-converting enzyme inhibitor. Orange amorph. powder + $\frac{1}{2}H_2O$.

1,3,4-Tridehydro, chloride:

$C_{37}H_{37}ClN_2O_6$ M 641.162

Orange granules ($MeOH/Me_2CO$). Mp >300°. $[\alpha]_D^{25}$ +67.8° (c, 0.116 in MeOH).

(−)-***form*** [10172-02-8] ***Limacine***

Alkaloid from *Limacia cuspidata, L. oblonga, Cyclea barbata, Pycnarrhena longifolia, P. novoguineensis, Colubrina faralaotra, Arcangelisia flava, Curarea candicans* and from a *Phaeanthus* sp. (possibly *P. macropodus*) (Menispermaceae, Annonaceae). Cryst. (C_6H_6/Me_2CO). Mp 154-156°. $[\alpha]_D$ −212° ($CHCl_3$).

2'α-N-Oxide: ***Limacine 2'α-N-oxide***

$C_{37}H_{40}N_2O_7$ M 624.732

Alkaloid from the roots of *Curarea candicans* (Menispermaceae). $[\alpha]_D$ −170° (c, 0.16 in $CHCl_3$).

2β-N-Oxide: ***Limacine 2β-N-oxide***

$C_{37}H_{40}N_2O_7$ M 624.732

Alkaloid from the roots of *C. candicans* (Menispermaceae). $[\alpha]_D$ −191° (c, 0.09 in $CHCl_3$).

2'β-N-Oxide: ***Limacine 2'β-N-oxide***

$C_{37}H_{40}N_2O_7$ M 624.732

Alkaloid from the roots of *C. candicans* (Menispermaceae). $[\alpha]_D$ −154° (c, 0.1 in $CHCl_3$).

N^2-*De-Me:* ***2-Norlimacine***

$C_{36}H_{38}N_2O_6$ M 594.706

Alkaloid from *Caryomene olivascens* (Menispermaceae). $[\alpha]_D$ −193° (c, 0.13 in $CHCl_3$).

$N^{2'}$-*De-Me:* ***2'-Norlimacine***

$C_{36}H_{38}N_2O_6$ M 594.706

Alkaloid from roots of *Cyclea barbata* (Menispermaceae). $[\alpha]_D$ −125° (c, 0.13 in $CHCl_3$).

Me ether: see *Tetrandrine, T-01149*

(±)-***form*** [38769-07-2] ***Cycleadrine***

Alkaloid from the roots of *Cyclea peltata*. Also isol. from the Thai drug Krung Kha Mao (*C. barbata*) (Menispermaceae). Cryst. (Me_2CO/hexane). Mp 160-162°.

B,2HI: Cryst. (EtOH aq.). Mp 223-224°.

[132160-49-7]

Hsing, C.-Y. *et al, Sci. Sin.* (*Engl. edn.*), 1958, **7**, 59; *CA*, **52**, 18494b (*struct*)

Kupchan, S.M. *et al, J. Pharm. Sci.*, 1961, **50**, 164, 819 (*isol, uv, Menisidine*)

Tomita, M. *et al, Yakugaku Zasshi*, 1967, **87**, 316, 793, 1560; *CA*, **67**, 32855g; **68**, 3048m, 84980j (*isol*)

Johns, S.R. *et al, Aust. J. Chem.*, 1968, **21**, 1387 (*isol*)

Bick, I.R.C. *et al, J. Chem. Soc., Perkin Trans. 1*, 1972, 2884 (*isol*)

Baldas, J. *et al, J. Chem. Soc., Perkin Trans. 2*, 1972, 592 (*ms*)

Kupchan, S.M. *et al, J. Org. Chem.*, 1973, **38**, 1846 (*isol, uv, pmr, ms, struct*)

Tackie, A.N. *et al, J. Nat. Prod.* (*Lloydia*), 1974, **37**, 1 (*isol, uv, ir, pmr, ms*)

Yupraphat, T. *et al, Planta Med.*, 1974, **25**, 315 (*isol*)

Guinaudeau, H. *et al, Planta Med.*, 1975, **27**, 304; 1976, **29**, 54 (*isol*)

Siwon, J. *et al, Phytochemistry*, 1981, **20**, 323 (*isol, uv, pmr, ms*)

Verpoorte, R. *et al, J. Nat. Prod.* (*Lloydia*), 1982, **45**, 582 (*isol, uv, pmr, ms*)

Lavault, M. *et al, J. Chem. Res., Synop.*, 1985, 248 (*Limacine oxides*)

Lavault, M. *et al, Chem. Pharm. Bull.*, 1986, **34**, 1148 (*2-Norlimacine*)

Deng, D. *et al, Huaxue Xuebao*, 1986, **44**, 39; *CA*, **105**, 172803s (*synth*)

Ogino, T. *et al, Heterocycles*, 1988, **27**, 1149 (*Fenfangjines*)

Deng, J. *et al*, *J. Nat. Prod.* (*Lloydia*), 1990, **53**, 993 (*N^2-Methylfangchinoline*)
Guinaudeau, H. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 1989 (*2'-Norlimacine*)

Fenugreekine F-10002

[55069-02-8]

C_{27} steroid sapogenin peptide ester. Isol. from the seeds of *Trigonella foenum-graecum*. Cryst. Mp 202-208°. $[\alpha]_D^{25}$ +43° (c, 0.528 in AcOH).

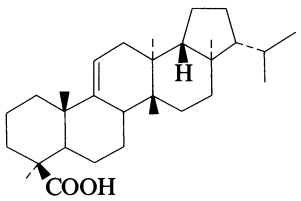
Ghosal, S. *et al*, *Phytochemistry*, 1974, **13**, 2247 (*isol*)
Totte, J. *et al*, *Farm. Tijdschr. Belg.*, 1983, **60**, 203 (*rev*)

9(11)-Fernen-24-oic acid F-10003

Updated Entry replacing F-00092

Davallic acid

[3675-06-7]



$C_{30}H_{48}O_2$ M 440.708

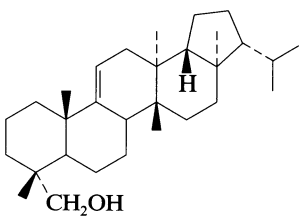
Constit. of *Davallia divaricata*. Cryst. Mp 283°. $[\alpha]_D$ +94.2°.

24-Alcohol: 9(11)-Fernen-24-ol. Davallol
$C_{30}H_{50}O$ M 426.724
Cryst. (hexane). Mp 177-179°. $[\alpha]_D$ −21.1° ($CHCl_3$).

Lin, Y.-Y. *et al*, *Chem. Pharm. Bull.*, 1965, **13**, 986 (*isol*)
Yow-Lam, O. *et al*, *Acta Crystallogr.*, 1966, **20**, 852.
Shiojima, K. *et al*, *Chem. Pharm. Bull.*, 1993, **41**, 268 (*pmr, cmr*)

9(11)-Fernen-23-ol F-10004

[70588-14-6]



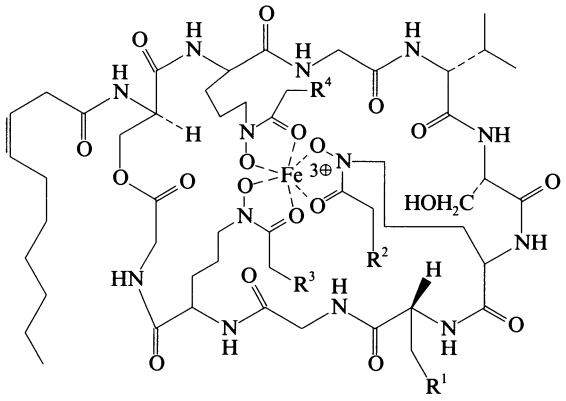
$C_{30}H_{50}O$ M 426.724

Constit. of *Adiantum pedatum* and of the crude drug Kutsui-po (*Davallia divaricata*). Plates (Et_2O/MeOH). Mp 187-190°. $[\alpha]_D^{23}$ −22.4° ($CHCl_3$).

Tanaka, Y. *et al*, *Shoyakugaku Zasshi*, 1978, **32**, 260; *CA*, **91**, 96562n (*isol*)
Shiojima, K. *et al*, *Chem. Pharm. Bull.*, 1993, **41**, 268 (*isol, pmr, cmr*)

Ferrocin F-10005

TAN 866. Antibiotic TAN 866



Ferrocin A $R^1 = R^2 = R^3 = R^4 = H$
Ferrocin B $R^1 = OH$, $R^2 = R^3 = R^4 = H$
Ferrocin C $R^1 = H$, $R^2 = R^3 = R^4 = CH_3$, H, H
Ferrocin D $R^1 = H$, $R^2 = R^3 = R^4 = CH_3$, H, H

Cyclic depsipeptide iron-containing antibiotic complex. Prod. by *Pseudomonas fluorescens*. Active against gram-negative bacteria. Posn. of additional Me group on Ferrocins C and D is not known.

Ferrocin A [114550-08-2]
TAN 866A. Antibiotic TAN 866A
$C_{51}H_{82}FeN_{13}O_{19}$ M 1237.131
Red-orange powder + $5H_2O$. $[\alpha]_D$ +170° (c, 0.1 in H_2O).

Ferrocin B [114562-40-2]
TAN 866B. Antibiotic TAN 866B
$C_{51}H_{82}FeN_{13}O_{20}$ M 1253.131
Red-orange powder + $6H_2O$. $[\alpha]_D$ +164° (c, 0.1 in H_2O).

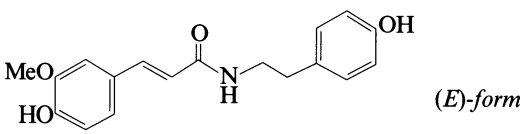
Ferrocin C [147736-85-4]
TAN 866C. Antibiotic TAN 866C
$C_{52}H_{84}FeN_{13}O_{19}$ M 1251.158
Red-orange powder +$4H_2O$. $[\alpha]_D$ +187° (c, 0.1 in H_2O). Full struct. not known.

Ferrocin D [147783-00-4]
TAN 866D. Antibiotic TAN 866D
$C_{52}H_{84}FeN_{13}O_{19}$ M 1251.158
Red-orange powder + $4H_2O$. $[\alpha]_D$ +176° (c, 0.1 in H_2O). Full struct. not known.

Katayama, N. *et al*, *J. Antibiot.*, 1993, **46**, 65, 287 (*isol, pmr, struct, props*)

N-Feruloyltyramine F-10006

Updated Entry replacing F-00146



(*E*)-*form*

$C_{18}H_{19}NO_4$ M 313.352

(E)-form

Alkaloid from the stems of *Tinospora tuberculata* (Menispermaceae). Plates + $1CHCl_3$ ($CHCl_3$/MeOH). Mp 91°.

Di-O-Ac: Needles (hexane/EtOAc). Mp 157-157.5°.
Demethoxy: ***Paprazine***
$C_{17}H_{17}NO_3$ M 283.326

Alkaloid from aerial parts of *Fumaria indica* (Fumariaceae). Amorph. solid.

(Z)-form

Alkaloid from the stems of *T. tuberculata* (Menispermaceae). Pale-yellow oil.

Di-O-Ac: Oil.

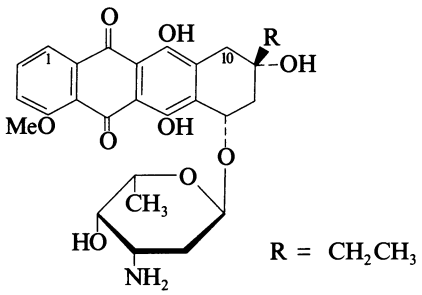
Fukuda, N. *et al*, *Chem. Pharm. Bull.*, 1983, **31**, 156 (*isol, uv, ir, pmr, cmr, ms, struct*)
Atta-ur-Rahman, *Phytochemistry*, 1992, **31**, 2869 (*Paprazine*)

Feudomycin A F-10007

Updated Entry replacing F-00150

β-Deoxodaunomycin

[79466-09-4]



$C_{27}H_{31}NO_9$ M 513.543

Anthracycline antibiotic. Isol. from *Streptomyces coeruleorubidus* ME 130 A4 blocked mutant. Antitumour agent. Red amorph. powder (hexane). Mp 158-163°. $[\alpha]_D^{23}$ +243° (c, 0.044 in MeOH).

Aglycone: [65360-31-8]. ***Feudomycinone A***
$C_{21}H_{20}O_7$ M 384.385
From *S. coeruleorubidus*. Red cryst. (Me_2CO). Mp 201-206°. $[\alpha]_D^{23}$ +181° (c, 0.02 in MeOH).

O-*De-Me:* [76034-18-9]. ***13-Deoxocarminomycin I.*** *D 788-11. Antibiotic D 788-11*
$C_{26}H_{29}NO_9$ M 499.516
From *S. peucetius carminatus*. Active against gram-positive and -negative bacteria and shows antitumour activity.

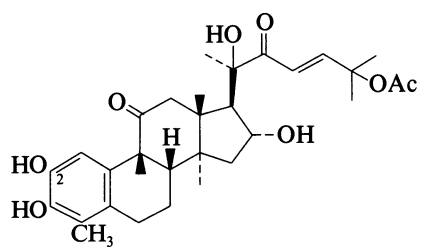
1-Hydroxy, O-*de-Me: 1-Hydroxy-13-deoxocarminomycin I*
$C_{26}H_{29}NO_{10}$ M 515.516
Prod. by a *S.* sp. blocked mutant strain. Red-violet powder. Mp 170-173°. $[\alpha]_D^{23}$ +43° (c, 0.002 in MeOH).

Smith, T.H. *et al*, *J. Med. Chem.*, 1978, **21**, 280 (*synth*)
Matsuzawa, Y. *et al*, *J. Antibiot.*, 1981, **34**, 1596 (*props*)
Oki, T. *et al*, *J. Antibiot.*, 1981, **34**, 783, 1229 (*isol, struct*)
Yoshimoto, A. *et al*, *J. Antibiot.*, 1992, **45**, 1609 (*1-Hydroxy-13-deoxocarminomycin I*)

Fevicordin A F-10008

Updated Entry replacing F-00153

[111250-02-3]



$C_{31}H_{42}O_8$ M 542.668

Constit. of seeds of *Fevillea cordifolia*. Amorph. powder. $[\alpha]_D^{21}$ +15° (c, 0.5 in MeOH).

2-O-β-D-Glucopyranoside: Fevicordin A glucoside
$C_{37}H_{52}O_{13}$ M 704.810
From *F. cordifolia* seeds. Needles (EtOAc). Mp 148°. $[\alpha]_D^{21}$ −24° (c, 0.5 in MeOH).

2-O-β-D-Gentiobioside: Fevicordin A gentiobioside
$C_{43}H_{62}O_{18}$ M 866.952
Constit. of *F. cordifolia*. Cryst. (EtOAc). Mp 165°. $[\alpha]_D$ −38° (c, 0.5 in MeOH).

O-*De-Ac*, *2-O-β-D-glucopyranoside: Fevicordin C glucoside*
$C_{35}H_{50}O_{12}$ M 662.773
Constit. of *F. cordifolia*. Needles (EtOAc). Mp 172-174°. $[\alpha]_D^{21}$ −33° (c, 0.5 in MeOH).

O-*De-Ac*, *2-O-β-D-gentiobioside: Fevicordin C gentiobioside*
$C_{41}H_{60}O_{17}$ M 824.915
Constit. of *F. cordifolia*. Amorph. powder. $[\alpha]_D^{21}$ −47° (c, 0.6 in MeOH).

23,24-Dihydro: ***Fevicordin B***
$C_{31}H_{44}O_8$ M 544.684
Constit. of *F. cordifolia*. Amorph. powder. $[\alpha]_D^{21}$ +7° (c, 0.4 in MeOH).

23,24-Dihydro, 2-O-β-D-glucopyranoside: Fevicordin B glucoside
$C_{37}H_{54}O_{13}$ M 706.826
Constit. of *F. cordifolia*. Needles (EtOAc). Mp 143-144°. $[\alpha]_D^{21}$ −27° (c, 0.5 in MeOH).

23,24-Dihydro, 2-O-β-D-gentiobioside: Fevicordin B gentiobioside
$C_{43}H_{64}O_{18}$ M 868.968
Constit. of *F. cordifolia*. Cryst. ($CHCl_3$ aq.). Mp 165-167°. $[\alpha]_D^{21}$ −36° (c, 0.4 in MeOH).

23,24-Dihydro, O-*de-Ac*, *2-O-β-D-glucopyranoside: Fevicordin D glucoside*
$C_{35}H_{52}O_{12}$ M 664.789
Constit. of *F. cordifolia*. Needles (EtOAc). Mp 157-158°. $[\alpha]_D^{21}$ −29° (c, 0.5 in MeOH).

23,24-Dihydro, O-*de-Ac*, *2-O-β-D-gentiobioside: Fevicordin D gentiobioside*
$C_{41}H_{62}O_{17}$ M 826.931
Constit. of *F. cordifolia*. Amorph. powder. $[\alpha]_D^{21}$ −43° (c, 0.5 in MeOH).

22-Deoxy, O-*de-Ac*, *2-O-β-D-glucopyranoside: Fevicordin E glucoside*
$C_{35}H_{52}O_{11}$ M 648.789
Constit. of *F. cordifolia*. Needles (EtOAc). Mp 159-161°. $[\alpha]_D^{21}$ −4° (c, 0.3 in $CHCl_3$).

22-Deoxy, O-*de-Ac*, *2-O-β-D-gentiobioside: Fevicordin E gentiobioside*
$C_{41}H_{62}O_{16}$ M 810.931
Constit. of *F. cordifolia*. Amorph. powder. $[\alpha]_D^{21}$ −43° (c, 0.5 in MeOH).

22S-Alcohol, O-*de-Ac*, *2-O-β-D-gentiobioside: Fevicordin F gentiobioside*
$C_{41}H_{62}O_{17}$ M 826.931
Constit. of *F. cordifolia*. Amorph. powder. $[\alpha]_D^{21}$ −26° (c, 0.4 in MeOH).

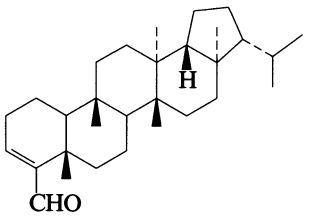
Achenbach, H. *et al*, *J. Chem. Soc., Chem. Commun.*, 1987, 441.
Achenbach, H. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 1506 (*isol, pmr, cmr*)

3-Filicen-23-al F-10009

Updated Entry replacing F-00175

Filicenal

[13843-88-4]



$C_{30}H_{48}O$ M 424.709

Constit. of *Adiantum pedatum*. Cryst. Mp 272° approx. $[\alpha]_D$ +74° (c, 0.5 in $CHCl_3$).

23-Carboxylic acid: [145103-38-4]. *3-Filicen-23-oic acid.* ***Filicenoic acid***

$C_{30}H_{48}O_2$ M 440.708

Constit. of *A. pedatum*. Powder ($CHCl_3$/MeOH). Mp >300°.

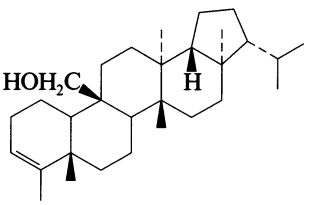
Ageta, H. *et al*, *Tetrahedron Lett.*, 1966, 6069.

Shiojima, K. *et al*, *Chem. Pharm. Bull.*, 1993, **41**, 268 (*Filicenoic acid*)

3-Filicen-25-ol F-10010

Filicenol B

[145103-37-3]

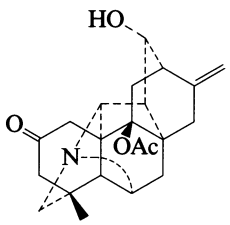


$C_{30}H_{50}O$ M 426.724

Constit. of *Adiantum monochlamys*. Cryst. (Me_2CO). Mp 218-221°. $[\alpha]_D$ +57.0° ($CHCl_3$).

Shiojima, K. *et al*, *Chem. Pharm. Bull.*, 1993, **41**, 262 (*isol, pmr, cmr*)

Fissumine F-10011



$C_{22}H_{27}NO_4$ M 369.460

Alkaloid from aerial parts of *Delphinium fissum* ssp. *anatolicum* (Ranunculaceae). Amorph. $[\alpha]_D^{20}$ −33.8° (c, 0.4 in $CHCl_3$).

Ulubelen, A. *et al*, *Phytochemistry*, 1993, **34**, 1165 (*isol, ir, pmr, cmr, ms, struct*)

Fistulin F-10012

[11024-36-5]

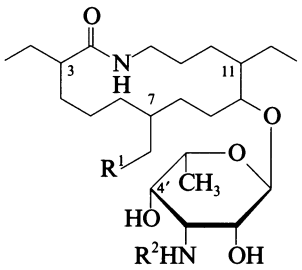
$C_{30}H_{20}O_{10}$ M 540.482

A bianthraquinone of unknown struct. Occurs as a rhamnoside in *Cassia fistula* flowers. Mp 360°.

Kumar, A. *et al*, *Indian J. Chem.*, 1966, **4**, 460 (*isol*)

Fluvirucin B F-10013

Updated Entry replacing F-00312



Fluvirucin B_1 R^1 = R^2 = H

Fluvirucin B_3 R^1 = CH_3, R^2 = H

Fluvirucin B_5 R^1 = CH_3, R^2 = $CONHCH_2CH_2Ph$

Identity of the Flavirucins with the Sch antibiotics does not seem fully establ. There are some discrepancies in Mp's and they could be stereoisomeric. Prod. by an unidentified actinomycete. Antiviral agent.

Fluvirucin B_1 [137428-64-9]

Sch 38516. Antibiotic Sch 38516

$C_{24}H_{46}N_2O_5$ M 442.638

Isol. from *Actinomadura vulgaris* ssp. *lanata*. Possesses antifungal props. Needles (MeOH). Mp 156-160° dec., Mp 262-263°. $[\alpha]_D^{26}$ −6.7° (c, 0.5 in DMSO). No stereochem. assigned to Flavirucin B_1. Sch 38516 possesses (3*R*,7*S*,11*S*) config.

4'-Epimer: ***Antibiotic Sch 38513.*** *Sch 38513*

$C_{24}H_{46}N_2O_5$ M 442.638

Prod. by *A.* spp.

Fluvirucin B_3 [137120-29-7]

Sch 39185. Antibiotic Sch 39185

$C_{25}H_{48}N_2O_5$ M 456.665

Needles (MeOH). Mp 263-266° (216-220° dec.). $[\alpha]_D^{26}$ −5.8° (c, 0.5 in MeOH).

4'-Epimer: [137120-28-6]. ***Antibiotic Sch 38518.*** *Sch 38518*

$C_{25}H_{48}N_2O_5$ M 456.665

Needles (MeOH). Mp 261-263° (220° dec.). $[\alpha]_D^{26}$ +9.7° (c, 0.5 in MeOH).

Fluvirucin B_5 [137120-14-0]

$C_{34}H_{57}N_3O_6$ M 603.841

Rods. Mp >210° dec.

4'-Epimer: [137019-45-5]. ***Fluvirucin B_4***

$C_{34}H_{57}N_3O_6$ M 603.841

Needles. Mp >245° dec.

[128563-23-5]

Hegde, V.R. *et al*, *J. Am. Chem. Soc.*, 1990, **112**, 6403 (*Sch 38516*)

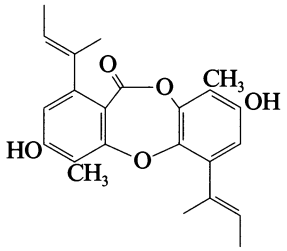
Naruse, N. *et al*, *J. Antibiot.*, 1991, **44**, 731, 741, 940 (*isol, struct, props*)

Hegde, V. *et al*, *J. Antibiot.*, 1992, **45**, 624 (*isol*)

Cooper, R. *et al*, *J. Antibiot.*, 1992, **45**, 633 (*isol*)

Folipastatin F-10014

[139959-71-0]



$C_{23}H_{24}O_5$ M 380.440

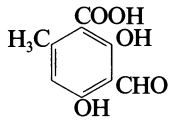
Depsidone. Metab. of *Aspergillus unguis*. Phospholipase A_2 inhibitor. Needles (EtOH aq.). Mp 246-248°. Similar to Unguinol, U-00097.

Hamano, K. *et al*, *J. Antibiot.*, 1992, **45**, 1195 (*isol, pmr, cmr, struct, props*)

3-Formyl-2,4-dihydroxy-6-methylbenzoic acid F-10015

2,4-Dihydroxy-6-methylisophthalaldehydic acid. ***Haematommic acid.*** *Hematommic acid*

[479-25-4]



$C_9H_8O_5$ M 196.159

Constit. of various lichens incl. *Alectoria* spp. *Haematomma* spp. and *Lethariella* sp. Mp 172-173°. Common component of lichen dimeric esters eg. Atranorin, A-03028.

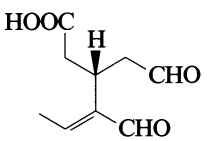
Me ester: [34874-90-3]. *Methyl haematommate*
$C_{10}H_{10}O_5$ M 210.186
Constit. of various lichens incl. *Centraria* sp. *Evernia* sp., *Parmelia* spp. and *Pyxine* sp. Cryst. (EtOH aq.). Mp 146°.

Et ester: [39503-14-5]. *Ethyl haematommate*
$C_{11}H_{12}O_5$ M 224.213
Constit. of various lichens incl. *Cetrariastrum* sp., *E.* sp., *L.* sp. and *Parmelia* spp. Cryst. (EtOH). Mp 112-113°.

[57439-17-5, 114973-10-3, 127725-07-9]

Macmillan, J.G. *et al*, *J. Org. Chem.*, 1977, **42**, 2526 (*synth*)
Sundholm, E.G. *et al*, *Chem. Scr.*, 1981, **18**, 233 (*cmr*)
Pulgarin, C. *et al*, *Helv. Chim. Acta*, 1989, **72**, 1061 (*synth*)

4-Formyl-3-(2-oxoethyl)-4-hexenoic acid F-10016



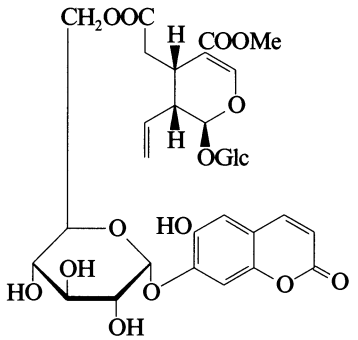
$C_9H_{12}O_4$ M 184.191

Not named in the paper. Constit. of the juice of ripe black olives (*Olea europaea*). Amorph. powder. $[\alpha]_D^{25}$ +6.5°. A secoiridoid.

Lo Scalzo, R. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 621 (*isol, pmr*)

Frachinoside F-10017

[142902-27-0]



$C_{32}H_{38}O_{19}$ M 726.641

Isol. from *Fraxinus chinensis* leaves. Powder. $[\alpha]_D^{16}$ −114.1° (c, 0.78 in MeOH).

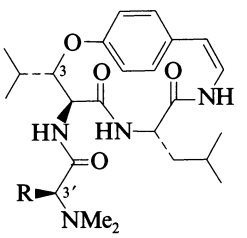
Kuwajima, H. *et al*, *Phytochemistry*, 1992, **31**, 1277.

Frangufoline F-10018

Updated Entry replacing F-00403

Sanjoinine A. Daechuine S1

[19526-09-1]



R = $PhCH_2$–

$C_{31}H_{42}N_4O_4$ M 534.697

Alkaloid from the leaves of *Rhamnus frangula*, *Euonymus europaeus*, *Melochia pyramidata* and *M. corchorifolia*, the roots of *Discaria longispina*, the bark of *Zizyphus mauritiana*, and the root bark of *Z. nummularia*. Also isol. from Sanjoin (seeds of *Z. vulgaris* var. *spinosus*) and from the stem bark of the Daechu tree (*Z. jujuba* var. *inermis*) (Rhamnaceae, Celastraceae, Sterculiaceae). Shows strong sedative activity. Needles (EtOH aq. or CH_2Cl_2/MeOH/Et_2O). Mp 244° (234-236°). $[\alpha]_D^{22}$ −299° (c, 0.1 in $CHCl_3$).

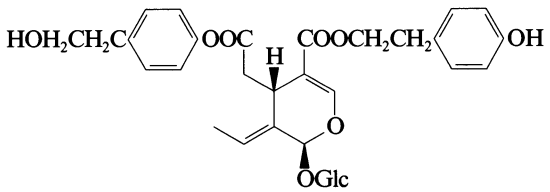
Dihydro: Needles (MeOH aq.). Mp 285°. $[\alpha]_D^{22}$ −66° (c, 0.1 in $CHCl_3$).

3'-Epimer: [107494-19-9]. ***Sanjoinine Ah***$_1$
$C_{31}H_{42}N_4O_4$ M 534.697
Alkaloid from the seeds of *Z. vulgaris spinosus*. Possible artifact.

Tschesche, R. *et al*, *Tetrahedron Lett.*, 1968, 2993, 3817; 1972, 2609 (*isol, pmr, ms, occur, struct*)
Mascaretti, O.A. *et al*, *Phytochemistry*, 1972, **11**, 1133 (*isol*)
Bishay, D.W. *et al*, *Phytochemistry*, 1973, **12**, 693 (*uv, ir, pmr, ms*)
Merkuza, V.M. *et al*, *Phytochemistry*, 1974, **13**, 1279 (*ir, ms*)
Tschesche, R. *et al*, *Tetrahedron*, 1975, **31**, 2944 (*isol*)
Lagarias, J.C. *et al*, *J. Nat. Prod.* (*Lloydia*), 1979, **42**, 663 (*isol, ms*)
Medina, E. *et al*, *Justus Liebigs Ann. Chem.*, 1981, 538 (*isol, ir, pmr, ms*)
Han, B.H. *et al*, *Pure Appl. Chem.*, 1989, **61**, 443 (*isol*)

Fraxiformoside F-10019

[142998-21-8]

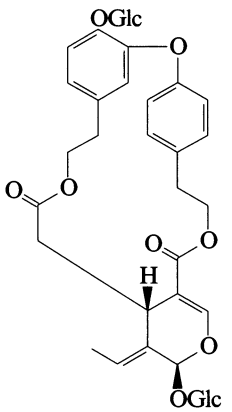


$C_{32}H_{38}O_{13}$ M 630.644

Constit. of *Fraxinus formosana*. Amorph. powder. $[\alpha]_D^{28}$ −118° (c, 1.1 in MeOH).

Tanahashi, T. *et al*, *Phytochemistry*, 1992, **31**, 2143 (*isol, pmr, cmr*)

Fraxuhdoside F-10020



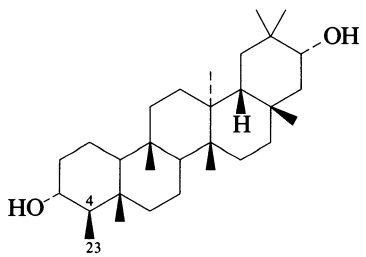
$C_{38}H_{46}O_{18}$ M 790.771

Constit. of *Fraxinus uhdei*. Powder. $[\alpha]_D^{25}$ −56° (c, 1 in MeOH).

Shen, Y.-C. *et al*, *Phytochemistry*, 1993, **33**, 1531 (*isol, pmr, cmr*)

3,21-Friedelanediol F-10021

Updated Entry replacing H-01834



(3α,21α)-*form*

$C_{30}H_{52}O_2$ M 444.740

(3α,21α)-form

Needles. Mp 308-310°. $[\alpha]_D^{30}$ +11.0° (c, 1 in $CHCl_3$).

Di-Ac:

$C_{34}H_{56}O_4$ M 528.814

Constit. of *Euphorbia tortilis*. Plates ($CHCl_3$/MeOH). Mp 299-301°. $[\alpha]_D^{30}$ +30° (c, 0.5 in $CHCl_3$).

3-Ketone: 21-Hydroxy-3-friedelanone

$C_{30}H_{50}O_2$ M 442.724

Constit. of *Siphonodon australe*. Cryst. Mp 264-268°. $[\alpha]_D$ −32° (c, 2.6 in $CHCl_3$).

4,23-Didehydro, 3-ketone: [59995-79-8]. ***21α-Hydroxy-4(23)-friedelen-3-one***

$C_{30}H_{48}O_2$ M 440.708

Constit. of *Phyllanthus reticulatus*. Cryst. (MeOH). Mp 265-266°. $[\alpha]_D$ +53° ($CHCl_3$).

(3β,21α)-form

21-Ac:

$C_{32}H_{54}O_3$ M 486.777

Constit. of *E. tortilis*. Plates ($CHCl_3$/MeOH). Mp 276-278°. $[\alpha]_D^{30}$ +17.0° (c, 1 in $CHCl_3$).

3-Ketone: Constit. of *S. australe*. Cryst. (C_6H_6). Mp 272-275°. $[\alpha]_D$ −15° (c, 2.2 in $CHCl_3$).

3,21-Diketone: [67991-66-6]. ***3,21-Friedelanedione***

Isol. from *S. australe*. Cryst. (EtOH). Mp 248-250°. $[\alpha]_D$ +115° (c, 2.6 in $CHCl_3$).

Clarke, B.J. *et al*, *Aust. J. Chem.*, 1970, **23**, 1651.

Hui, W.H. *et al*, *Phytochemistry*, 1976, **15**, 797.

Domingez, X.A. *et al*, *Rev. Latinoam. Quim.*, 1978, **9**, 33 (*isol, deriv*)

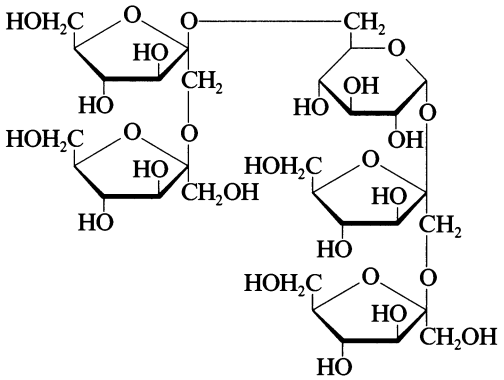
Gunatikala, A. *et al*, *Org. Magn. Reson.*, 1980, **14**, 415 (*cmr*)

Anjaneyulu, V. *et al*, *Phytochemistry*, 1993, **33**, 647 (*isol, pmr, cmr*)

β-D-Fructofuranosyl-(2→1)-β-D-fructofuranosyl-β-D-fructofuranosyl-(2→1)-β-D-fructofuranosyl-(2→6)-α-D-glucopyranoside, 9CI F-10022

β-D-Fructofuranosyl-(2→1)-β-D-fructofuranosyl-(2→6)-α-D-glucopyranosyl-(1→2)-β-D-fructofuranosyl-β-D-fructofuranoside

[71231-05-5]



$C_{30}H_{52}O_{26}$ M 828.725

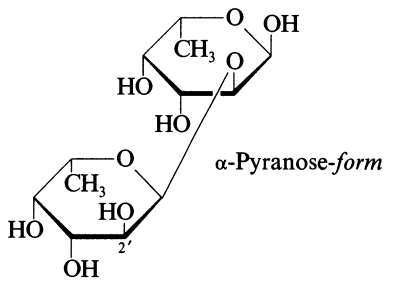
Isol. from the roots of *Asparagus officinalis*. $[\alpha]_D^{20}$ −6.6° (H_2O).

Shiomi, N. *et al*, *Agric. Biol. Chem.*, 1979, **43**, 1375 (*isol*)

2-*O*-α-L-Fucopyranosyl-L-fucose F-10023

2-O-(6-Deoxy-α-L-galactopyranosyl)-6-deoxy-L-galactose, 9CI

[20237-62-1]



α-Pyranose-*form*

$C_{12}H_{22}O_9$ M 310.300

Isol. from the partial acetolysate of the seaweed polysaccharide Fucoidin. Cryst. (EtOH). Mp 193-195° (185-190°). $[\alpha]_D^{25}$ −168.5° (c, 0.78 in H_2O).

α-Pyranose-form

Benzyl glycoside, 2'-benzyl:
$C_{26}H_{34}O_9$ M 490.549
Cryst. (EtOH). Mp 186-188°. $[\alpha]_D^{25}$ −186° (c, 0.77 in MeOH).

Benzyl glycoside, 2'-benzyl, 3,4-O-isopropylidene:
$C_{29}H_{38}O_9$ M 530.614
Cryst. (EtOH). Mp 143-145°. $[\alpha]_D^{25}$ −218° (c, 1.4 in $CHCl_3$).

Me glycoside: [71731-83-4]. *Methyl 2-O-α-L-fucopyranosyl-α-L-fucopyranoside*
$C_{13}H_{24}O_9$ M 324.327
Cryst. (EtOH). Mp 190-192°. $[\alpha]_D^{25}$ −227° (c, 0.57 in MeOH).

Me glycoside, 2'-benzyl: [71731-82-3].
$C_{20}H_{30}O_9$ M 414.452
Cryst. (EtOH). Mp 192-194°. $[\alpha]_D^{25}$ −201.2° (c, 1.03 in MeOH).

Me glycoside, 2'-benzyl, 3,4-O-isopropylidene: [71731-87-8].
$C_{23}H_{34}O_9$ M 454.516
Mp 155-157°. $[\alpha]_D^{25}$ −216° (c, 0.79 in $CHCl_3$).

β-Pyranose-form

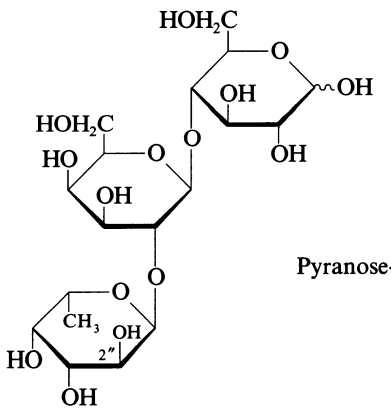
Me glycoside: Methyl 2-O-α-L-fucopyranosyl-β-L-fucopyranoside
$C_{13}H_{24}O_9$ M 324.327
Cryst. (EtOH). Mp 210-212°. $[\alpha]_D^{25}$ −91.4° (c, 0.70 in MeOH).

Me glycoside, 2'-benzyl: Cryst. (EtOH). Mp 193-195°. $[\alpha]_D^{25}$ −100° (c, 0.5 in MeOH).

O'Neill, A.N., *J. Am. Chem. Soc.*, 1954, **76**, 5074.
Cote, R.H., *J. Chem. Soc.*, 1959, 2248 (*isol*)
Percival, E., *Carbohydr. Res.*, 1967, **4**, 441 (*glc*)
Flowers, H.M., *Carbohydr. Res.*, 1979, **74**, 177 (*synth, pmr, deriv*)

α-L-Fucopyranosyl-(1→2)-β-D-galactopyranosyl-(1→4)-D-glucose, 9CI, 8CI F-10024

2'-Fucosyllactose
[41263-94-9]



Pyranose-*form*

$C_{18}H_{32}O_{15}$ M 488.442
Present in the free state in human milk. Mp 230-231°. $[\alpha]_D$ −53.5° → −57.5° (72h) (c, 2.0 in H_2O).

Phenylosazone: Mp 217°. $[\alpha]_D$ −29° (H_2O).
Tosylphenylosazone: Mp 205°. $[\alpha]_D$ −73°.

Pyranose-form [14843-73-3]

2",3",4"-Tribenzyl: [77680-93-4].
$C_{39}H_{50}O_{15}$ M 758.815
Cryst. (MeOH/Et_2O). Mp 122-125°. $[\alpha]_D$ −41° (c, 0.9 in $CHCl_3$/MeOH 2:1).

Kuhn, R. *et al*, *Chem. Ber.*, 1955, **88**, 1135; 1956, **89**, 2513 (*isol*)
Malpress, F.H. *et al*, *Biochem. J.*, 1958, **68**, 708.
Biswas, M. *et al*, *Biopolymers*, 1980, **19**, 1555 (*conformn*)
Abbas, S.A. *et al*, *Carbohydr. Res.*, 1981, **88**, 51.

Fulicin F-10025

[137182-25-3]

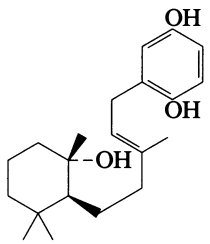
H-Phe-D-Asn-Glu-Phe-Val-NH_2

Isol. from the central ganglia of the African giant snail *Achatina fulica*. Neuropeptide which potentiates tetanic contraction of the penis retractor muscle of *A. fulica* at very low concentrations.

Ohta, N. *et al*, *Biochem. Biophys. Res. Commun.*, 1991, **178**, 486 (*isol*)

Fulvanin 2 F-10026

[149298-03-3]

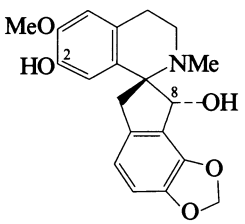


$C_{21}H_{32}O_3$ M 332.482
Constit. of *Reniera fulva*.

Casapullo, A. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 527 (*isol, pmr, cmr*)

Fumaritine F-10027

Updated Entry replacing F-00515
3',4',6,8-Tetrahydro-6'-methoxy-2'-methylspiro[7H-indeno[4,5-d]-1,3-dioxole-7,1'(2'H)-isoquinoline]-7',8-diol, 9CI



Probable absolute configuration

$C_{20}H_{21}NO_5$ M 355.390

Natural-form [24181-78-0]
Alkaloid from *Fumaria officinalis*, the roots of *F. schleicheri* and the leaves of *F. muralis* ssp. *boraei* (Fumariaceae). Needles (dry Et_2O). Mp 157°. Opt. rotn. not recorded.

B,HCl: Mp 224°.
B,HBr: Mp 219°.
N-*Oxide:* [60604-88-8]. ***Fumaritine N-oxide.*** *Alkaloid F_k-5*
$C_{20}H_{21}NO_6$ M 371.389
Alkaloid from *F. kralikii* and *F. officinalis* (Fumariaceae). Cryst. (C_6H_6/MeOH). Mp 204°.
8-Ac: see *Fumarophycine, F-00518*
N-*Me:* [82054-20-4]. ***Fumaritine N-methosalt***
$C_{21}H_{24}NO_5^{\oplus}$ M 370.424 (ion)
Tentatively identified as alkaloid in leaves of *F. muralis* ssp. *boraei* (Fumariaceae). No phys. data recorded.
Me ether: see *Fumaricine, F-00510*
N-*De-Me:* ***Norfumaritine***
$C_{19}H_{19}NO_5$ M 341.363

Alkaloid from leaves of *F. kralikii* (Fumariaceae).
Amorph. $[\alpha]_D^{25}$ −16° (c, 0.12 in $CHCl_3$).

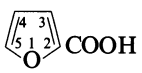
N-*Oxide, 8-deoxy:* ***Papracinine***
$C_{20}H_{21}NO_5$ M 355.390
Alkaloid from aerial parts of *F. indica* (Fumariaceae).
Amorph. solid. $[\alpha]_D$ +23° (MeOH).

(±)-***form*** [32420-39-6]
Synthetic. Prisms + $0.5H_2O$ (MeOH/Et_2O). Mp 193-194°.

Platonova, T.F. *et al, J. Gen. Chem. USSR (Engl. Transl.)*, 1956, **26**, 181; *CA*, **50**, 13960a-b (*isol*)
Manske, R.H.F., *Can. J. Chem.*, 1969, **47**, 1103 (*isol*)
MacLean, D.B. *et al, Can. J. Chem.*, 1969, **47**, 3593 (*pmr, ms, struct*)
Yu, C.K. *et al, Can. J. Chem.*, 1971, **49**, 3025 (*ms*)
Kishimoto, T. *et al, J. Chem. Soc. C*, 1971, 1644 (*synth, ir, pmr, ms*)
Kiryakov, Kh. *et al, Dokl. Bolg. Akad. Nauk*, 1976, **29**, 677; *CA*, **85**, 119633d (*isol, oxide*)
Kiryakov, H.G. *et al, Can. J. Chem.*, 1979, **57**, 53 (*ir, pmr, cmr, ms, Fumaritine, N-oxide*)
Hussain, S.F. *et al, Tetrahedron Lett.*, 1980, **21**, 1909 (*pmr, cd, abs config*)
Loukis, A. *et al, J. Pharm. Pharmacol., Suppl.*, 1981, **33**, 16P (*isol, Fumaritine, N-Me salt*)
Colton, M.D. *et al, J. Nat. Prod. (Lloydia)*, 1985, **48**, 846 (*Norfumaritine*)
Atta-ur-Rahman, *et al, Phytochemistry*, 1992, **31**, 2869 (*Papracinine*)

2-Furancarboxylic acid F-10028

Pyromucic acid. α-Furoic acid
[88-14-2]



$C_5H_4O_3$ M 112.085
Isol. from roots of *Phaseolus vulgaris*. Leaflets (H_2O). Mod. sol. cold H_2O, v. sol. hot. Mp 133-134°. Bp 230-232°, Bp_{20} 141-144°.
▷ LV1763000.

Me ester: [611-13-2].
$C_6H_6O_3$ M 126.112
Bp 181.3°.
▷ LV1950000.

Et ester: [614-99-3].
$C_7H_8O_3$ M 140.138
Mp 34°. Bp_{766} 195°, Bp_{95} 128°.
▷ LV1850000.

Anhydride: [615-08-7].
$C_{10}H_6O_5$ M 206.154
Needles (EtOH). Mp 73°. Bp 325° part. dec.

Chloride:
$C_5H_3ClO_2$ M 130.530
Mp −2°. Bp 173°, Bp_{10} 66°. Stable to water.
▷ Highly irritant.

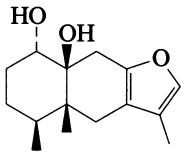
Amide: [609-38-1]. *2-Furancarboxamide*
$C_5H_5NO_2$ M 111.100
Mp 142-143°.

Hydrazide: [3326-71-4]. *2-Furoylhydrazine*
$C_5H_6N_2O_2$ M 126.115
Anal. reagent for carbohydrates. Cryst. (C_6H_6). Mp 78°.
▷ LV1925000.

Nitrile: [617-90-3]. *2-Cyanofuran. 2-Furancarbonitrile, 9CI*
C_5H_3NO M 93.085
Bp_{738} 146°.

Org. Synth., Coll. Vol., 4, 1963, 493 (*synth*)
Cook, M.J. *et al, Tetrahedron*, 1968, **24**, 4501 (*use, hydrazide*)
Takasugi, M. *et al, Chem. Lett.*, 1973, 445.
Chadwick, D.J. *et al, J. Chem. Soc., Perkin Trans. 1*, 1974, 1141 (*pmr*)
Gronowitz, S. *et al, Chem. Scr.*, 1975, **7**, 211 (*pmr, cmr*)
Lever, M. *et al, Anal. Biochem.*, 1984, **139**, 205 (*use, hydrazide*)
Murahashi, S.-I. *et al, J. Org. Chem.*, 1986, **51**, 898 (*synth, ir, pmr, ms*)
Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th Ed., Van Nostrand-Reinhold, 1992, EKM000, FQF000, MKH600.

Furanoeremophilane-1,10-diol F-10029



$C_{15}H_{22}O_3$ M 250.337

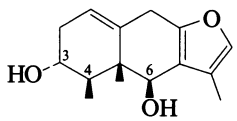
(*1α,10β*)-***form***
1-Tigloyl: [68773-23-9].
$C_{20}H_{28}O_4$ M 332.439
Constit. of *Euryops* spp. Oil.
1-(3-Methyl-2-pentenoyl): [68773-81-9].
$C_{21}H_{30}O_4$ M 346.466
Constit. of *E.* spp. Oil.

[68773-82-0]

Bohlmann, F. *et al, Phytochemistry*, 1978, **17**, 1138 (*isol, pmr*)

Furanoeremophil-1(10)-ene-3,6-diol F-10030

Updated Entry replacing F-00575
3,6-Dihydroxyfuranoeremophil-1(10)-ene



$C_{15}H_{20}O_3$ M 248.321

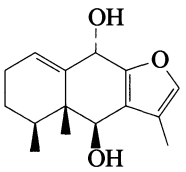
(*3α,6β*)-***form*** [68773-29-5]
3α,6β-Dihydroxyeuryopsin
Oil.

(*3β,6β*)-***form***
Cryst. (THF/petrol). Mp 231°.
6-Propanoyl, 3-Ac:
$C_{20}H_{26}O_5$ M 346.422
Constit. of *Senecio subumbellatus.*
6-(2-Methylpropanoyl), 3-Ac:
$C_{21}H_{28}O_5$ M 360.449
Constit. of *S. subumbellatus.*
6-(3-Methylbutanoyl):
$C_{20}H_{28}O_4$ M 332.439
Constit. of *S. subumbellatus.*
6-(3-Methylbutanoyl), 3-Ac:
$C_{22}H_{30}O_5$ M 374.476
Constit. of *S. subumbellatus.*
6-Angeloyl:
$C_{20}H_{26}O_4$ M 330.423
Constit. of *Euryops* spp. Oil.
6-Tigloyl:
$C_{20}H_{26}O_4$ M 330.423
Constit. of *E.* spp. Oil.
6-Angeloyl, 3-Ac:
$C_{22}H_{28}O_5$ M 372.460
Constit. of *E.* spp. Oil.
6-Tigloyl, 3-Ac:
$C_{22}H_{28}O_5$ M 372.460

Constit. of *E.* spp. Oil.
6-(3-Methyl-2-butenoyl):
$C_{20}H_{26}O_4$ M 330.423
Constit. of *E.* spp. Oil.
6-(3-Methyl-2-pentenoyl):
$C_{21}H_{28}O_4$ M 344.450
Constit. of *E.* spp. Oil.
6-(3-Methyl-2-pentenoyl), 3-Ac:
$C_{23}H_{30}O_5$ M 386.487
Constit. of *E.* spp. Oil.
6-(3-Methyl-2-butenoyl), 3-Ac:
$C_{22}H_{28}O_5$ M 372.460
Constit. of *E.* spp. Oil.

Bohlmann, F. *et al*, *Phytochemistry*, 1978, **17**, 1135 (*synth*)
Jakupovic, J. *et al*, *Phytochemistry*, 1991, **30**, 2691 (*isol, pmr*)

Furanoeremophil-1(10)-ene-6,9-diol F-10031



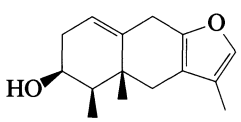
$C_{15}H_{20}O_3$ M 248.321

(6β,9α)-form
Cryst. Mp 70°.
6-Angeloyl: [68773-49-9].
$C_{20}H_{26}O_4$ M 330.423
Constit. of *Euryops* spp. Oil.
6-(2-Methylpropenoyl): [68773-50-2].
$C_{19}H_{24}O_4$ M 316.396
Constit. of *E. brevipapposus*. Oil.
6-(3-Methyl-2-butenoyl): [68773-51-3].
$C_{20}H_{26}O_4$ M 330.423
Constit. of *E. brevipapposus*. Oil.
9-Ketone: see *6-Hydroxyfuranoeremophil-1(10)-en-9-one, H-01845*

(6β,9β)-form
6-Angeloyl: [64185-33-7].
$C_{20}H_{26}O_4$ M 330.423
Constit. of *Senecio* spp. Oil.
6-(3-Methylbutanoyl): [64185-34-8].
$C_{20}H_{28}O_4$ M 332.439
Constit. of *S.* spp. Oil.
6-(3-Methyl-2-butenoyl): [64185-35-9].
$C_{20}H_{26}O_4$ M 330.423
Constit. of *S.* spp. Oil.
6-(2-Methylpropenoyl): [64185-36-0].
$C_{19}H_{24}O_4$ M 316.396
Constit. of *S.* spp. Oil.

Bohlmann, F. *et al*, *Phytochemistry*, 1977, **16**, 965; 1978, **17**, 1135 (*isol, pmr*)

Furanoeremophil-1(10)-en-3-ol F-10032



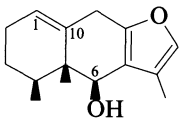
$C_{15}H_{20}O_2$ M 232.322

3β-form
3-Angeloyl:
$C_{20}H_{26}O_3$ M 314.424
Constit. of *Euryops* spp. Oil. $[\alpha]_D^{24}$ +23.5° (c, 0.6 in $CHCl_3$).
3-(3-Methyl-2-pentenoyl):
$C_{21}H_{28}O_3$ M 328.450
Constit. of *E.* spp. Oil.
3-(3-Methylpentanoyl):
$C_{21}H_{30}O_3$ M 330.466
Constit. of *E.* spp. Oil.

Bohlmann, F. *et al*, *Phytochemistry*, 1978, **17**, 1135 (*isol, pmr*)

Furanoeremophil-1(10)-en-6-ol F-10033

Updated Entry replacing F-00579
6-Hydroxy-1(10)-furanoeremophilene

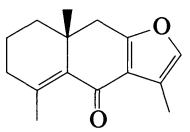


$C_{15}H_{20}O_2$ M 232.322

6β-form [65563-80-6]
6-Angeloyl: [40072-63-7]. ***6β-Angeloyloxyeuryopsin***
$C_{20}H_{26}O_3$ M 314.424
Constit. of *Euryops* spp. Oil. $[\alpha]_D^{24}$ +4.2° (c, 0.7 in $CHCl_3$).
6-Tigloyl: ***6β-Tigloyloxyeuryopsin***
$C_{20}H_{26}O_3$ M 314.424
Constit. of *E. empetrifolius*. Oil.
6-(2-Methylpropenoyl): ***6β-(2-Methylacryloyloxy)euryopsin***
$C_{19}H_{24}O_3$ M 300.397
Constit. of *E. brevipapposus*. Oil.
6-(3-Methyl-2-butenoyl): ***6β-Senecioyloxyeuryopsin***
$C_{20}H_{26}O_3$ M 314.424
Constit. of *E. brevipapposus*. Oil.

Bohlmann, F. *et al*, *Chem. Ber.*, 1972, **105**, 3523 (*isol*)
Bohlmann, F. *et al*, *Phytochemistry*, 1978, **17**, 1135 (*isol*)

Furanoeudesm-4-en-6-one F-10034

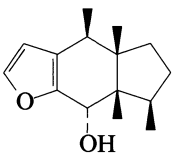


$C_{15}H_{18}O_2$ M 230.306
Constit. of *Ocotea pulchella*. Cryst. (Me_2CO). Mp 113-114°. $[\alpha]_D^{25}$ +62° (c, 1.24 in $CHCl_3$).

Botega, C. *et al*, *Phytochemistry*, 1993, **32**, 1331 (*isol, pmr, cmr*)

Furanopinguisanol F-10035

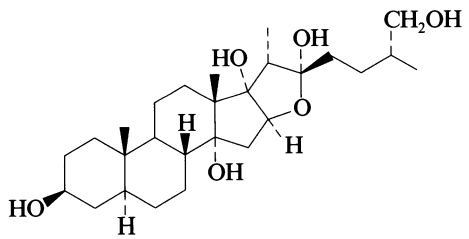
[147235-24-3]



$C_{15}H_{22}O_2$ M 234.338
Constit. of *Trocholejeunea sandvicensis*. Oil. $[\alpha]_D^{16}$ −1.96° (c, 0.51 in MeOH).

Tori, M. *et al*, *Phytochemistry*, 1993, **32**, 335 (*isol, pmr, cmr*)

Furostane-3,14,17,22,26-pentol F-10036



$C_{27}H_{46}O_6$ M 466.657

(3β,5α,22α,25R)-form

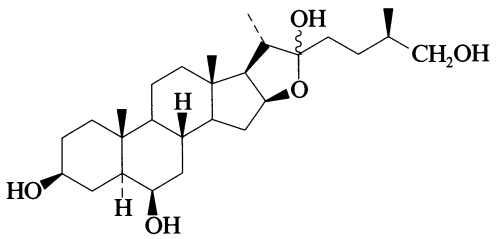
22-Me ether, 26-Ac, 3-O-neohesperidoside: [119152-52-2].
Pardarinoside A
$C_{42}H_{70}O_{16}$ M 831.005
Constit. of the bulbs of *Lilium pardarinum*. Amorph. powder. $[\alpha]_D^{27}$ −56.4° (c, 0.5 in MeOH).

22-Me ether, 26-Ac, 3-O-[α-L-rhamnopyranosyl-(1→2)[β-D-glucopyranosyl-(1→4)]-β-D-glucopyranoside]: [125477-03-4]. ***Pardarinoside C***
$C_{48}H_{82}O_{21}$ M 995.163
Constit. of the bulbs of *L. pardarium*. Amorph. powder. $[\alpha]_D^{22}$ −50.5° (c, 1.17 in MeOH).

22-Me ether, 26-Ac, 3-O-[α-L-arabinopyranosyl-(1→3)[α-L-rhamnopyranosyl-(1→2)]-β-D-glucopyranoside]: [125456-48-6]. ***Pardarinoside F***
$C_{47}H_{80}O_{20}$ M 965.137
Constit. of the bulbs of *L. pardarinum*. Amorph. powder. $[\alpha]_D^{22}$ −32.8° (c, 0.27 in MeOH).

Shimomura, H. *et al*, *Phytochemistry*, 1989, **28**, 3163.

Furostane-3,6,22,26-tetrol F-10037



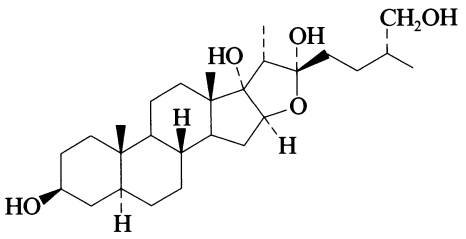
$C_{27}H_{46}O_5$ M 450.657

(3β,5α,6β,22ξ,25R)-form

3-O-[β-D-Glc-(1→3)-[β-D-Glc(1→3)-β-D-Glc-(1→2)]-β-D-Glc-(1→4)-β-D-Gal], 26-O-β-D-Glc: [126594-42-1]. ***Sativoside B1***
$C_{63}H_{106}O_{35}$ M 1423.509
Constit. of *Allium sativum*. Powder + $4H_2O$ (Me_2CO aq.). $[\alpha]_D^{26}$ −40.0° (c, 0.39 in H_2O).

Matsuura, H. *et al*, *Chem. Pharm. Bull.*, 1989, **37**, 2741.

Furostane-3,17,22,26-tetrol F-10038



$C_{27}H_{46}O_5$ M 450.657

(3β,5α,22α,25R)-form

22-Me ether, 26-Ac, 3-O-neohesperidoside: [119152-53-3].
Pardarinoside B
$C_{42}H_{70}O_{15}$ M 815.006
Constit. of the bulbs of *Lilium pardarinum*. Amorph. powder. $[\alpha]_D^{27}$ −62.0° (c, 0.5 in MeOH).

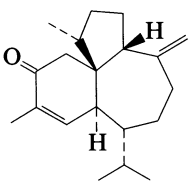
22-Me ether, 26-Ac, 3-O-[α-L-rhamnopyranosyl-(1→2)[β-D-glucopyranosyl-(1→4)]-β-D-glucopyranoside]: [125477-04-5]. ***Pardarinoside D***
$C_{48}H_{82}O_{20}$ M 979.164
Constit. of the bulbs of *L. pardarinum*. Amorph. powder. $[\alpha]_D^{22}$ −59.7° (c, 0.79 in MeOH).

22-Me ether, 26-Ac, 3-O-[α-L-arabinopyranosyl-(1→3)[α-L-rhamnopyranosyl-(1→2)]-β-D-glucopyranoside]: [125456-49-7]. ***Pardarinoside G***
$C_{47}H_{80}O_{19}$ M 949.138
Constit. of the bulbs of *L. pardarinum*. Amorph. powder. $[\alpha]_D^{22}$ −40.8° (c, 0.39 in MeOH).

Shimomura, H. *et al*, *Phytochemistry*, 1989, **28**, 3163.

Fusoxysporone F-10039

[145930-50-3]

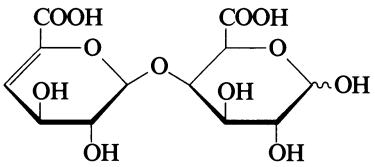


$C_{20}H_{30}O$ M 286.456
Metab. of *Fusarium oxysporum*. Viscous liq. $[\alpha]_D^{25}$ +146.6° (c, 0.5 in $CHCl_3$).

Abraham, W.-R. *et al*, *Tetrahedron*, 1992, **48**, 10559 (*isol, pmr, cmr*)

G

β-D-Galacto-4-enepyranuronosyl-D-galacturonic acid G-10001



Pyranose-*form*

$C_{12}H_{16}O_{12}$ M 352.251

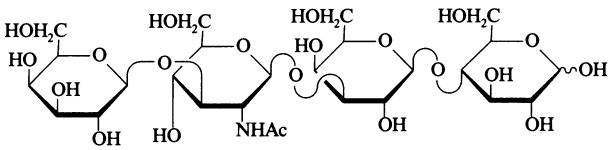
Isol. from the enzymic hydrolysate of pectin produced by the pectin-trans eliminase from *Bacillus polymyxa* or commericial pectinase. $[\alpha]_D$ +177.8° (H_2O).

Albersheim, P. *et al*, *Helv. Chim. Acta*, 1960, **43**, 1422 (*isol*)
Nagel, C.W. *et al*, *Arch. Biochem. Biophys.*, 1961, **94**, 328 (*isol*)
Hasegawa, S. *et al*, *J. Biol. Chem.*, 1962, **237**, 619 (*isol*)

β-D-Galactopyranosyl-(1→3)-2-acetamido-2-deoxy-β-D-glucopyranosyl-(1→3)-β-D-galactopyranosyl-(1→4)-D-glucose G-10002

Lacto-N-*tetraose*. *3²-β-Galactosyllacto*-N-*triose II*

[14116-68-8]



Pyranose-*form*

$C_{26}H_{45}NO_{21}$ M 707.636

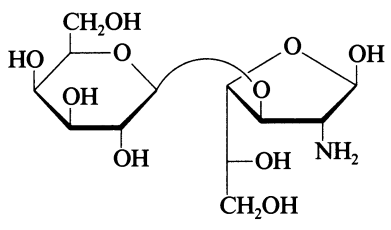
Present in the free state in human milk. Obt. from the partial acid hydrolysates of the penta- and higher saccharides present in human milk. $[\alpha]_D$ +25.5° (H_2O).

Phenylosazone: Mp 222-223°.

Kuhn, R. *et al*, *Chem. Ber.*, 1954, **87**, 289, 1553; 1956, **89**, 504, 1027, 2514; 1958, **91**, 364; 1960, **93**, 647 (*isol, struct*)
Malpress, F.H. *et al*, *Biochem. J.*, 1958, **68**, 708.
Dua, V.K. *et al*, *Anal. Biochem.*, 1983, **133**, 1 (*isol, hplc*)
Subramaniam, S. *et al*, *J. Am. Chem. Soc.*, 1986, **108**, 2068 (*pmr, cmr*)

β-D-Galactopyranosyl(1→3)-2-amino-2-deoxy-D-galactose G-10003

2-Amino-2-deoxy-3-O-β-D-galactopyranosyl-D-galactose



$C_{12}H_{23}NO_{10}$ M 341.314

β-Furanose-form

Isol. from the acid hydrostate of human blood group A, B, H and Le substances.

N-*Ac: 2-Acetamido-2-deoxy-3-O-β-D-galactopyranosyl-D-galactose. β-D-Galactopyranosyl(1→3)-2-acetamido-2-deoxy-D-galactose*

$C_{14}H_{25}NO_{11}$ M 383.352

TF-antigenic disaccharide (Thomsen-Friedenreich). $[\alpha]_D^{35}$ +34.5° (c, 0.3 in H_2O).

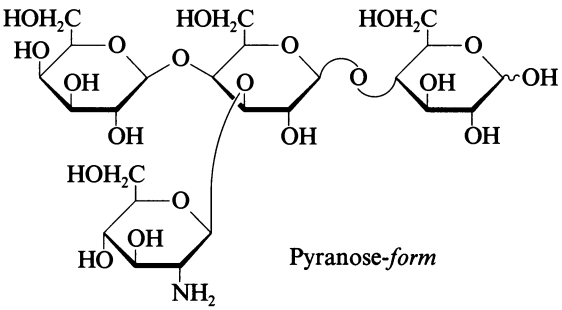
N-*Ac, Me glycoside, 5,6-O-isopropylidene:*

$C_{18}H_{31}NO_{11}$ M 437.443

$[\alpha]_D^{35}$ −57.3° (c, 2.48 in H_2O).

Painter, T.J. *et al*, *Chem. Ind. (London)*, 1962, 1535 (*isol*)
Flowers, H.M. *et al*, *J. Org. Chem.*, 1965, **30**, 2041 (*synth*)
Springer, G.F. *et al*, *Naturwissenschaften*, 1974, **61**, 457 (*biochem*)
Ghosh, R. *et al*, *J. Carbohydr. Chem.*, 1992, **11**, 71 (*synth, pmr*)

β-D-Galactopyranosyl-(1→4)-[2-amino-2-deoxy-β-D-glucopyranosyl-(1→3)]-β-D-galactopyranosyl-(1→4)-D-glucose G-10004



Pyranose-*form*

$C_{24}H_{43}NO_{20}$ M 665.598

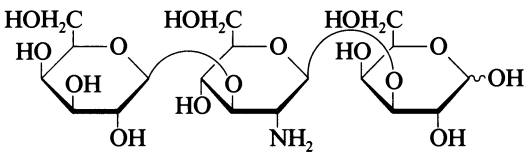
N-*Ac: Lacto*-N-*neotetraose*

$C_{26}H_{45}NO_{21}$ M 707.636

Isol. from the partial acid or enzymic hydrolysates of an *N*-acetylneuraminyllacto-*N*-neotetraose which is present in human milk. Cryst. + $3H_2O$. Mp 214-218°. $[\alpha]_D$ +27° (H_2O).

Kuhn, R. *et al*, *Chem. Ber.*, 1962, **95**, 513, 518 (*isol*)

β-D-Galactopyranosyl-(1→3)-2-amino-2-deoxy-β-D-glucopyranosyl-(1→3)-D-galactose G-10005



Pyranose-*form*

$C_{18}H_{33}NO_{15}$ M 503.456

N-*Ac: β-D-Glucopyranosyl-(1→3)-2-acetamido-2-deoxy-β-D-glucopyranosyl-(1→3)-D-galactose. Lacto*-N-*triose I*

$C_{20}H_{35}NO_{16}$ M 545.494

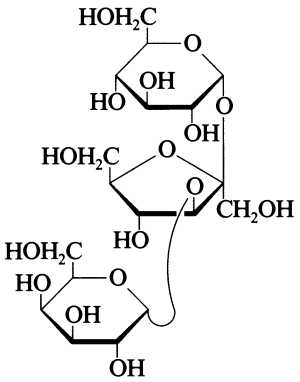
Isol. from the partial acid hydrol. of milk. Cryst. + $2H_2O$. Mp 202°. $[\alpha]_D$ +40.7° (H_2O).

N-*Ac, phenylosazone:* Mp 230°.

Kuhn, R. *et al*, *Chem. Ber.*, 1954, **87**, 289, 1553; 1956, **89**, 504, 1027, 2514; 1958, **91**, 364; 1960, **93**, 647 (*isol*)
Malpress, F.H. *et al*, *Biochem. J.*, 1958, **68**, 708.

α-D-Galactopyranosyl-(1→3)-β-D-fructofuranosyl α-D-glucopyranoside G-10006

[15397-05-4]



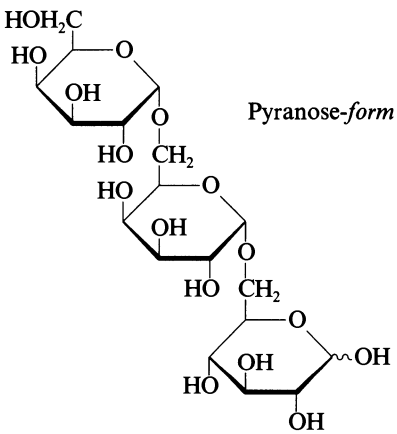
$C_{18}H_{32}O_{16}$ M 504.441
Isol. from the roots of *Silene inflata* and from *Lychnis dioica*. $[\alpha]_D^{20}$ +98.5° (H_2O).

Courtois, J.E. *et al*, *Bull. Soc. Chim. Biol.*, 1959, **41**, 1261 (*isol*)
Davy, J. *et al*, *CA*, 1966, **67**, 91053s (*isol*)

α-D-Galactopyranosyl-(1→6)-α-D-galactopyranosyl-(1→6)-D-glucose G-10007

Manninotriose

[13382-86-0]



Pyranose-*form*

$C_{18}H_{32}O_{16}$ M 504.441
Found free in cocoa beans, hazelnuts and in various plant mannans. Synth. by the transferase action of yeast, bacterial and other α-galactosidases on melibiose. $[\alpha]_D$ +167° (H_2O).

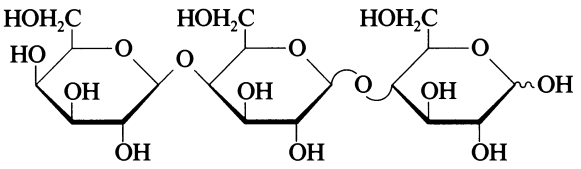
Phenylosazone: Mp 122°.

French, D., *Adv. Carbohydr. Chem.*, 1954, **4**, 149 (*synth*)
Bailey, R.W., *Biochem. J.*, 1963, **85**, 509 (*synth*)
Lombard, A. *et al*, *CA*, 1976, **85**, 59634t (*isol*)
Aamen, P., *J. Sci. Food Agric.*, 1979, **30**, 869 (*isol*)

β-D-Galactopyranosyl-(1→4)-β-D-galactopyranosyl-(1→4)-D-glucose G-10008

4'-Galactosyllactose

[6587-31-1]



Pyranose-*form*

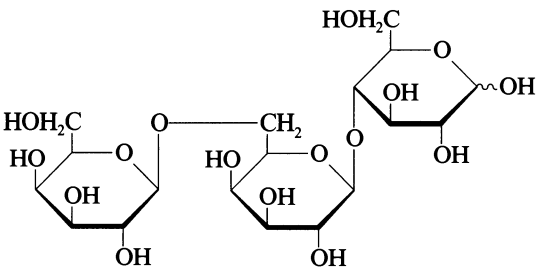
$C_{18}H_{32}O_{16}$ M 504.441
Synth. by enzymic transglycosylation from lactose by immobilised cells of *Cryptococcus laurenti*. Mp 229-231°. Stable on heating for 15 min at pH 3 at 120°. Sweet taste (25% of sucrose).

Ozawa, O. *et al*, *CA*, 1988, **109**, 169020m; 1991, **114**, 14149z (*synth, rev*)

β-D-Galactopyranosyl-(1→6)-β-D-galactopyranosyl-(1→4)-D-glucose G-10009

6'-Galactosyllactose

[32581-31-0]



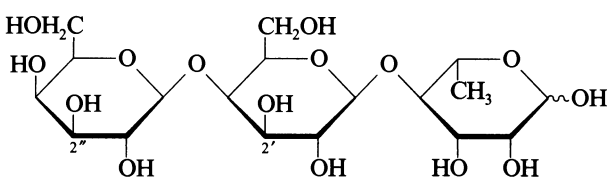
Pyranose-*form*

$C_{18}H_{32}O_{16}$ M 504.441
Formed by the transferase action on lactose of the β-galactosidases from *Saccharomyces fragilis*, *Aspergillus flavus* and *Penicillium chrysogenum*. Isol. from human milk and from the urine of blood group O, nonsecretor women during pregnancy and lactation. Powder. Mp 187° (sinters at 167°). $[\alpha]_D^{22}$ +36° (c, 1.0 in H_2O).

Phenylosazone: [68067-46-9].
Yellow needles (EtOH aq.). Mp 229-231°.

Pazur, J.H., *J. Biol. Chem.*, 1954, **208**, 439.
Ballio, A. *et al*, *Tetrahedron*, 1960, **9**, 125 (*isol*)
Yamashita, K. *et al*, *Arch. Biochem. Biophys.*, 1974, **161**, 164 (*isol*)
Hallgren, P. *et al*, *J. Biol. Chem.*, 1977, **252**, 1014, 1034 (*isol*)
Chung, T.G. *et al*, *Chem. Pharm. Bull.*, 1978, **26**, 2147 (*synth*)
Asp, N.G. *et al*, *Food Chem.*, 1980, **5**, 147 (*synth*)

β-D-Galactopyranosyl-(1→4)-β-D-galactopyranosyl-(1→4)-L-rhamnose G-10010



Pyranose-*form*

$C_{18}H_{32}O_{15}$ M 488.442

2′,2″-Di-O-Me: [35949-94-1]. *3-O-Methyl-β-D-galactopyranosyl-(1→4)-3-O-methyl-β-D-galactopyranosyl-(1→4)-L-rhamnose*

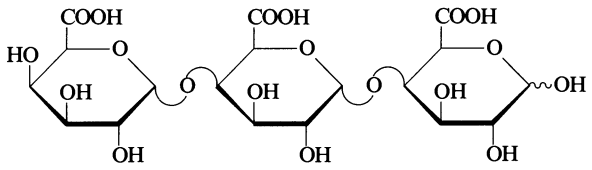
$C_{20}H_{36}O_{15}$ M 516.495

Constit. of the mucilaginous polysaccharide from the bark of *Ulmus fulva* (slippery elm). $[\alpha]_D^{23}$ +13° (c, 1.0 in H_2O).

Beveridge, R.J. *et al*, *Carbohydr. Res.*, 1971, **9**, 107 (*isol, synth*)

α-D-Galactopyranuronosyl-(1→4)-α-D-galactopyranuronosyl-(1→4)-D-galacturonic acid, 9CI, 8CI G-10011

[6037-45-2]



Pyranose-*form*

$C_{18}H_{26}O_{19}$ M 546.392

Isol. from enzymic hydrolysates (yeast or mould pectinases) of pectic acid. Also from partial acid hydrol. of *Medicago sativa* (lucerne) pectin. Mp 139-145° dec. $[\alpha]_D^{27}$ +185° (c, 0.12 in H_2O).

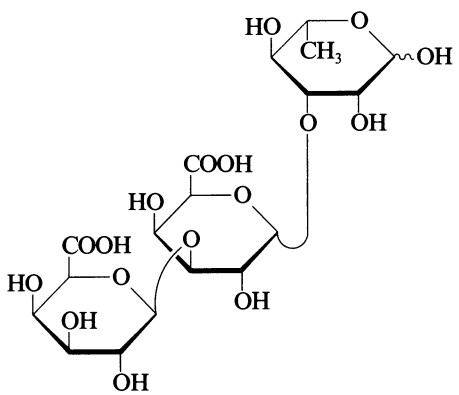
Pyranose-form

Ca salt: Cryst. + 1 or $7H_2O$. Mp 145-155° (monohydrate). $[\alpha]_D$ +154° (H_2O) (heptahydrate). Turns deep pink on melting.

Brucine salt: Cryst. $[\alpha]_D$ +25° (H_2O).

Phaff, H.J. *et al*, *Arch. Biochem. Biophys.*, 1954, **51**, 114; 1952, **36**, 231.
McCready, R.M. *et al*, *J. Am. Chem. Soc.*, 1954, **76**, 3035.
Aspinall, G.O. *et al*, *J. Chem. Soc.*, 1961, 4215 (*isol*)
Jones, J.K.N. *et al*, *J. Chem. Soc.*, 1964, 1361.
Banerji, N. *et al*, *Cellul. Chem. Technol.*, 1968, **2**, 655; *CA*, **71**, 82805h (*isol*)

β-D-Galactopyranuronosyl-(1→3)-β-D-galactopyranuronosyl-(1→3)-L-rhamnose G-10012



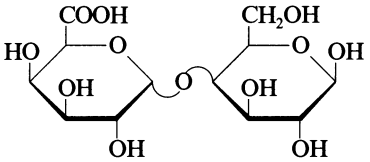
$C_{18}H_{28}O_{17}$ M 516.409

Isol. from the hydrolysate of the gum of *Rhizophora mangle*. $[\alpha]_D^{30}$ +120° (c, 0.1 in H_2O).

Sarkar, M. *et al*, *Indian J. Chem.*, 1973, **11**, 1129 (*isol*)

4-*O*-α-D-Galactopyranuronosyl-D-galactose, 9CI G-10013

[5887-86-5]



β-Pyranose-*form*

$C_{12}H_{20}O_{12}$ M 356.283

Constit. of *Sterculia urens* gum.

β-Pyranose-form

Me glycoside, 6′-Me ester, hexa-Ac:

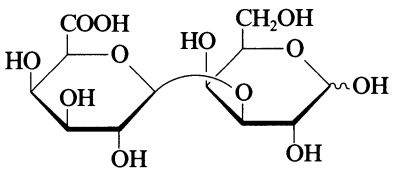
$C_{26}H_{36}O_{18}$ M 636.560

Cryst. (EtOH). Mp 228.7-229.4°. $[\alpha]_D^{22.5}$ +95.9° (c, 0.73 in $CHCl_3$).

Bajpai, K.S. *et al*, *Indian J. Chem.*, 1970, **8**, 48 (*isol*)
Fujiwara, T. *et al*, *Carbohydr. Res.*, 1982, **101**, 305.

3-*O*-β-D-Galactopyranuronosyl-D-galactose, 9CI G-10014

[7268-75-9]



Pyranose-*form*

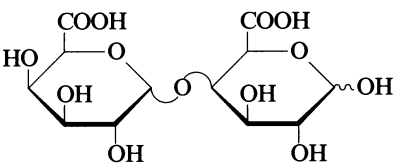
$C_{12}H_{20}O_{12}$ M 356.283

Isol. from the partial acid hydrolysate of *Rhizophora mangle* gum and from *Spondias dulcis* gum (Anacardiaceae). $[\alpha]_D$ +56.2° (H_2O).

Parikh, V.M. *et al*, *Can. J. Chem.*, 1966, **44**, 327.
Sarkar, M. *et al*, *Indian J. Chem.*, 1974, **11**, 1129 (*isol*)
Roy, A. *et al*, *Carbohydr. Res.*, 1975, **41**, 219.
Basu, S. *et al*, *Carbohydr. Res.*, 1981, **94**, 215 (*isol*)

4-*O*-α-D-Galactopyranuronosyl-D-galacturonic acid G-10015

[5894-59-7]



Pyranose-*form*

$C_{12}H_{18}O_{13}$ M 370.266

Prepd. from pectin by enzymic hydrol. using yeast or mould pectinases or by acid hydrol. Sole or major repeating unit of the pectin class of polysaccharides.

Ca salt: Cryst. + $5H_2O$. Mp 130° (part. melt). $[\alpha]_D$ +119° (H_2O). Becomes dark pink at 130-140°.

Brucine salt: Cryst. $[\alpha]_D$ −7.5° (H_2O).

Pyranose-form

Me glycoside, 6,6′-di-Me ester:

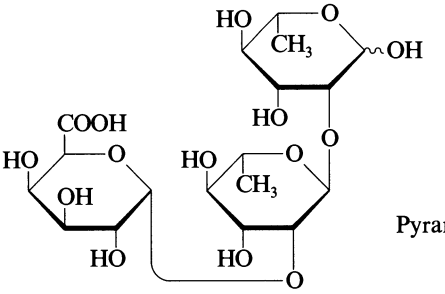
$C_{15}H_{24}O_{13}$ M 412.347

Mp 120-122°. $[\alpha]_D$ +162° (H_2O).

Phaff, H.J. *et al*, *Arch. Biochem. Biophys.*, 1952, **36**, 231; 1954, **51**, 102.
Derungs, R. *et al*, *Helv. Chim. Acta*, 1954, **37**, 657 (*isol*)

Gee, M. *et al*, *J. Org. Chem.*, 1958, **23**, 620 (*Me gly*)
Aspinall, G.O. *et al*, *J. Chem. Soc.*, 1961, 4215 (*isol*)
Jones, J.K.N. *et al*, *J. Chem. Soc.*, 1964, 1361.

α-D-Galactopyranuronosyl-(1→2)-α-L-rhamnopyranosyl-(1→2)-L-rhamnose G-10016



Pyranose-*form*

$C_{18}H_{30}O_{15}$ M 486.426
Isol. from the partial acid hydrolysate of Panniculatan a mucilaginous polysaccharide obt. from the inner bark of *Panniculata hydrangia*. $[\alpha]_D^{20}$ +80.3° (c, 0.3 in H_2O).

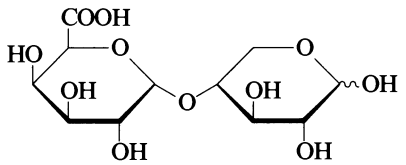
[65562-06-3]

Tomoda, M. *et al*, *Chem. Pharm. Bull.*, 1977, **25**, 2910 (*isol*)

4-*O*-α-D-Galactopyranuronosyl-D-xylose, 8CI G-10017

Aldobiouronic acid D_2

[10347-13-4]



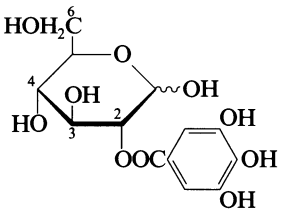
Pyranose-*form*

$C_{11}H_{18}O_{11}$ M 326.257
Isol. from the partial acid hydrolysate of maritime pine (*Pinus pinaster*) hemicellulose. $[\alpha]_D$ +67° (c, 0.37 in H_2O).

Roudier, A.J. *et al*, *Bull. Soc. Chim. Fr.*, 1960, **28**, 2074 (*isol*)

2-Galloylglucose G-10018

[98917-85-2]

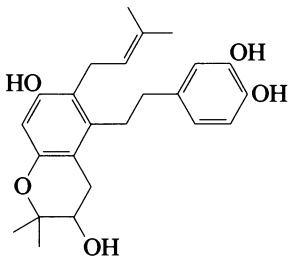


$C_{13}H_{16}O_{10}$ M 332.263
Constit. of commercial rhubarb (*Rheum* spp.). Amorph. powder + $1\frac{1}{2}H_2O$. $[\alpha]_D^{25}$ +28.9° (c, 1.0 in H_2O).

Schmidt, O.T. *et al*, *Justus Liebigs Ann. Chem.*, 1961, **649**, 137 (*struct*)
Kashiwada, Y. *et al*, *Phytochemistry*, 1988, **27**, 1473 (*isol*)

Gancaonin T G-10019

[134958-55-7]



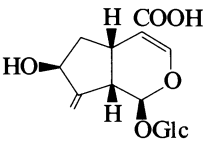
$C_{24}H_{30}O_5$ M 398.498
Constit. of *Glycyrrhiza uralensis*. Amorph. powder.

Fukai, T. *et al*, *Phytochemistry*, 1991, **30**, 1245 (*isol, pmr, cmr*)

Gardoside G-10020

Updated Entry replacing G-00142
8,10-Dehydrologanic acid

[54835-76-6]



$C_{16}H_{22}O_{10}$ M 374.344
Constit. of *Gardenia jasminoides*. Powder. $[\alpha]_D^{22}$ −33.6° (c, 0.4 in MeOH).

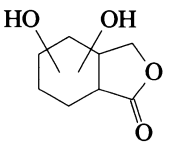
Penta-Ac: Cryst. (EtOH). Mp 209-211°. $[\alpha]_D^{22}$ −54.4° (c, 0.6 in $CHCl_3$).
7-(4-Hydroxybenzoyl):
$C_{23}H_{26}O_{12}$ M 494.451
Constit. of *Veronica anagallis-aquatica*. Amorph. powder.

Inouye, H. *et al*, *Phytochemistry*, 1974, **13**, 2219.
Lahloub, M.-F. *et al*, *Phytochemistry*, 1993, **33**, 401 (*deriv*)

Garlicin† G-10021

Hexahydrodihydroxy-1(3H)-isobenzofuranone

[126526-79-2]

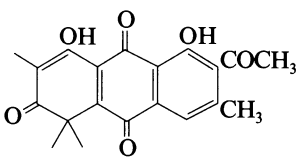


$C_8H_{12}O_4$ M 172.180
Exact struct. not known. Various analogues have been synthesised. Isol. from garlic (*Allium sativa*). Antimicrobial agent.

Nour, R.A. *et al*, *Justus Liebigs Ann. Chem.*, 1992, 383.

Garveatin A quinone G-10022

Updated Entry replacing G-00154



$C_{20}H_{18}O_6$ M 354.359

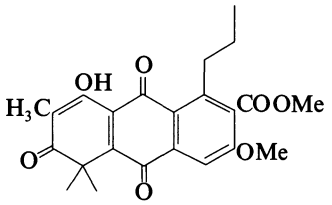
Constit. of *Garveia annulata*. Red oil. Some confusion over *CA* number.

Fahy, E. *et al*, *Can. J. Chem.*, 1987, **65**, 376.

Garvin A quinone G-10023

Updated Entry replacing G-00159

[99457-98-4]



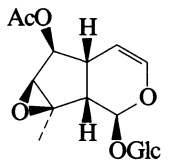
$C_{23}H_{24}O_7$ M 412.438

Metab. of *Garveia annulata*. Orange-red amorph. solid. Called Garveatin A quinone in index guide but *CA* gives this struct.

Fahy, E. *et al*, *J. Org. Chem.*, 1986, **51**, 57.

Genistifolin G-10024

[146714-10-5]



$C_{17}H_{24}O_{10}$ M 388.371

Constit. of *Linaria genistifolia*. Amorph. solid. $[\alpha]_D^{20}$ −80.16° (c, 0.6 in MeOH).

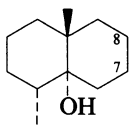
Ilieva, E. *et al*, *Z. Naturforsch., C*, 1992, **47**, 791 (*isol, pmr, cmr*)

Geosmin G-10025

Updated Entry replacing G-00238

Octahydro-4,8a-dimethyl-4a(2H)-naphthalenol, 9CI. 1,10-Dimethyl-9-decalol. 11,12,13-Trinor-5-eudesmanol

[19700-21-1]



Absolute configuration

$C_{12}H_{22}O$ M 182.305

Noreudesmane numbering shown. Odorous substance produced by *Streptomyces* spp. and blue-green algae. Oil with characteristic penetrating earthy odour. $[\alpha]_D^{25}$ *ca.* −140° (MeOH), $[\alpha]_D$ −16.5° ($CHCl_3$). Stereoisomers known synthetically.

7,8-Didehydro: 1,2,3,4,4a,5,8,8a-Octahydro-4,8a-dimethylnaphthalen-4a-ol. 11,12,13-Trinor-7-eudesmen-5-ol. ***Dehydrogeosmin***

$C_{12}H_{20}O$ M 180.289

Constit. of various cactus spp. flower scents. Oil.

(±)-***form*** [16423-19-1]

Oil, cryst. on standing. Mp 78-82°.

[5173-69-3, 5173-70-6, 16452-32-7, 23333-91-7, 62823-65-8, 73428-92-9]

Marshall, J.A. *et al*, *J. Org. Chem.*, 1966, **31**, 1020; 1968, **33**, 2593 (*synth*)

Gerber, N.N. *et al*, *Tetrahedron Lett.*, 1968, 2971 (*isol, struct*)

Ayer, W.A. *et al*, *Can. J. Chem.*, 1976, **54**, 3276 (*isol, struct, synth, abs config*)

Gerber, N.N., *J. Chem. Ecol.*, 1977, **3**, 475 (*isol*)

Gerber, N.N. *et al*, *Phytochemistry*, 1977, **16**, 2025 (*cmr*)

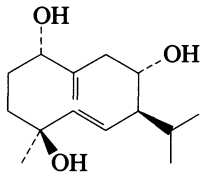
Gerber, N.N., *Dev. Ind. Microbiol.*, 1978, **20**, 225 (*rev*)

Kaiser, R. *et al*, *Helv. Chim. Acta*, 1990, **73**, 133 (*isol, synth, ms, pmr, cmr*)

Swarts, H.J. *et al*, *Tetrahedron*, 1992, **48**, 5497 (*synth*)

Huber, U. *et al*, *Helv. Chim. Acta*, 1993, **76**, 1949 (*synth, abs config*)

5,10(14)-Germacradiene-1,4,8-triol G-10026



$C_{15}H_{26}O_3$ M 254.369

(*1α,4β,5E,8α*)-***form***

4-Me ether: 4-Methoxy-5,10(14)-germacradiene-1,8-diol

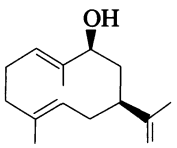
$C_{16}H_{28}O_3$ M 268.395

Constit. of *Artemisia sieberi*. Oil.

Marco, J.A. *et al*, *Phytochemistry*, 1993, **34**, 1061 (*isol, pmr, cmr*)

1(10),4,11-Germacratrien-9-ol G-10027

Updated Entry replacing G-00280



$C_{15}H_{24}O$ M 220.354

(*1(10)E,4E,9β*)-***form*** [50657-20-0] ***Agerol***

Constit. of *Achillea ageratum*. Cryst. Mp 63-64°. $[\alpha]_D^{20}$ +11.8° (c, 2 in MeOH).

1β,10β:4β,5β-Diepoxide: [53840-03-2]. *1,10:4,5-Diepoxy-11-germacren-9-ol.* ***Agerol diepoxide***

$C_{15}H_{24}O_3$ M 252.353

Constit. of *Achillea ageratum*.

Grandi, R. *et al*, *Tetrahedron Lett.*, 1973, 1765.

Bellesia, F. *et al*, *Phytochemistry*, 1975, **14**, 1737 (*Agerol diepoxide*)

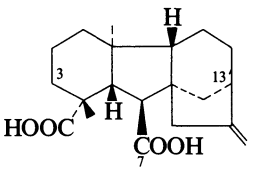
Pagnoni, V. *et al*, *J. Chem. Soc., Perkin Trans. 2*, 1978, 217 (*cryst struct*)

Gibberellin A_{12} G-10028

Updated Entry replacing G-00326

1,4a-Dimethyl-8-methylenegibbane-1,10-dicarboxylic acid, 9CI

[1164-45-0]



$C_{20}H_{28}O_4$ M 332.439

Metab. of *Gibberella fujikuroi*. Cryst. (EtOH/pet. ether). Mp 245-248°.

3β-Hydroxy: [4955-22-0]. ***Gibberellin A_{14}***

$C_{20}H_{28}O_5$ M 348.438

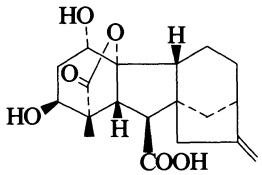
Metab. of *G. fujikuroi*. Cryst. (EtOAc/pet. ether). Mp 242-243°. $[\alpha]_D^{17}$ −73° (c, 0.4 in EtOH).

7-Aldehyde: [19436-07-8]. ***Gibberellin A_{12} 7-aldehyde***
$C_{20}H_{28}O_3$ M 316.439
Constit. of *Phaseolus* spp. *Pisum sativum* and other plant spp. Precursor of Gibberellin A_{12}.

Jones, K.C. *et al*, *Phytochemistry*, 1968, **7**, 283 (*struct*)
Bearder, J.R. *et al*, *Phytochemistry*, 1973, **12**, 2173 (*biosynth*)
Graebe, J.E. *et al*, *Phytochemistry*, 1974, **13**, 1433 (*biosynth*)
Mori, K. *et al*, *Tetrahedron*, 1976, **32**, 1497 (*synth*)
Nakata, T. *et al*, *Tetrahedron Lett.*, 1976, 1515 (*synth*)
Arraez, J.D. *et al*, *J. Chem. Soc., Perkin Trans. 1*, 1985, 207 (*epimer*)
Turnbull, C.G.N. *et al*, *Phytochemistry*, 1986, **25**, 97 (*biosynth*)
Zhu, Y.-X. *et al*, *Phytochemistry*, 1988, **27**, 2549 (*biosynth*)

Gibberellin A_{16} G-10029

Updated Entry replacing G-00329
[25509-93-7]



$C_{19}H_{24}O_6$ M 348.395
Metab. of *Gibberella fujikuroi*. Cryst. (MeOH aq.). Mp 157-165°.

1-Epimer: [72533-75-6]. ***Gibberellin A_{54}***
$C_{19}H_{24}O_6$ M 348.395
From *G. fujikuroi* and *Triticum aestivum*. Cryst. (Me_2CO/hexane). Mp 243-246°.

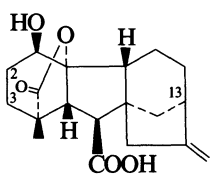
13-Hydroxy: [75082-54-1]. ***Gibberellin A_{57}***
$C_{19}H_{24}O_7$ M 364.394
From *G. fujikuroi*. Amorph.

1-Epimer, 2β-hydroxy: [132043-65-3]. ***Gibberellin A_{79}***
$C_{19}H_{24}O_7$ M 364.394
Constit. of *T. aestivum*.

McInnes, A.G. *et al*, *Can. J. Biochem.*, 1973, **51**, 1470 (*biosynth*)
Bearder, J.R. *et al*, *J. Chem. Soc., Perkin Trans. 1*, 1973, 2824 (*isol*)
Murofushi, N. *et al*, *Agric. Biol. Chem.*, 1979, **43**, 2179; 1980, **44**, 1583 (*derivs*)
Gaskin, P. *et al*, *Agric. Biol. Chem.*, 1980, **44**, 1589 (*deriv*)
Voigt, B. *et al*, *Tetrahedron*, 1983, **39**, 449 (*synth*)
Penny, M. *et al*, *Phytochemistry*, 1993, **33**, 951 (GA_{79})

Gibberellin A_{61} G-10030

Updated Entry replacing G-00343
[81826-98-4]



$C_{19}H_{24}O_5$ M 332.396
Constit. of *Triticum aestivum*. Cryst. (Me_2CO/pet. ether). Mp 257-259°.

13-Hydroxy: [81826-97-3]. ***Gibberellin A_{60}***
$C_{19}H_{24}O_6$ M 348.395
Constit. of *T. aestivum*. Cryst. (Me_2CO/pet. ether). Mp 245-247°.

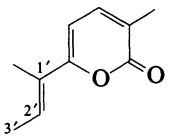
2,3-Didehydro: [81826-99-5]. ***Gibberellin A_{62}***
$C_{19}H_{22}O_5$ M 330.380
Constit. of *Pyrus malus*. Gum.

2β-Hydroxy: ***Gibberellin A_{90}***
$C_{19}H_{24}O_6$ M 348.395
Constit. of *T. aestivum*.

Kirkwood, P.S. *et al*, *J. Chem. Soc., Perkin Trans. 1*, 1982, 689 (*isol, struct, synth*)
Shimano, M. *et al*, *Chem. Pharm. Bull.*, 1990, **38**, 276 (*synth*)
Penny, M. *et al*, *Phytochemistry*, 1993, **33**, 951 (GA_{90})

Gibepyrone A G-10031

3-Methyl-6-(1-methyl-1-propenyl)-2H-pyran-2-one
[146446-05-1]



$C_{10}H_{12}O_2$ M 164.204
Metab. of *Gibberella fujikuroi*.

3'-Hydroxy: [146446-06-2]. ***Gibepyrone B***
$C_{10}H_{12}O_3$ M 180.203
Metab. of *G. fujikuroi*.

3'-Oxo: [146446-07-3]. ***Gibepyrone C***
$C_{10}H_{10}O_3$ M 178.187
Metab. of *G. fujikuroi*.

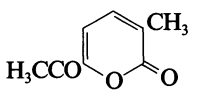
3'-Carboxylic acid: [146446-08-4]. ***Gibepyrone D***
$C_{10}H_{10}O_4$ M 194.187
Metab. of *G. fujikuroi*.

1',2'-Epoxide: [146446-10-8]. ***Gibepyrone E***
$C_{10}H_{12}O_3$ M 180.203
Metab. of *G. fujikuroi*.

Barrero, A.F. *et al*, *Tetrahedron*, 1993, **49**, 141 (*isol, pmr, cmr*)

Gibepyrone F G-10032

6-Acetyl-3-methyl-2H-pyran-2-one
[146446-11-9]

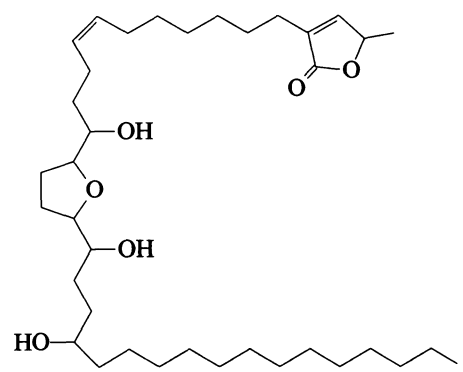


$C_8H_8O_3$ M 152.149
Metab. of *Gibberella fujikuroi*.

Barrero, A.F. *et al*, *Tetrahedron*, 1993, **49**, 141 (*isol, pmr, cmr*)

Giganenin G-10033

[143572-81-0]

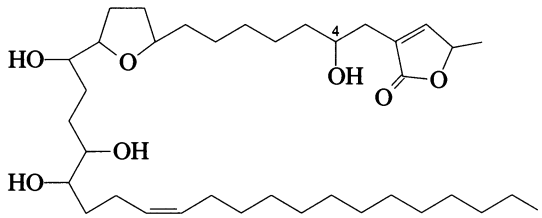


$C_{37}H_{66}O_6$ M 606.925
Constit. of *Goniothalamus giganteus*. Amorph. solid. Mp 60-62°. $[\alpha]_D^{25}$ +21.4° (c, 0.23 in MeOH).

Fang, X.-P. *et al*, *Heterocycles*, 1992, **34**, 1075 (*isol, pmr, cmr, ms*)

Gigantetronin G-10034

[145403-31-2]



$C_{37}H_{66}O_7$ M 622.924
Constit. of *Goniothalamus giganteus*. Wax. Mp 57-59°. $[\alpha]_D^{20}$ +10° (c, 0.2 in $CHCl_3$).

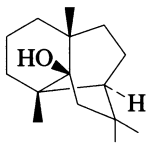
4-Deoxy: [145403-35-6]. ***Gigantrionenin***
$C_{37}H_{66}O_6$ M 606.925
Constit. of *G. giganteus*. Wax. Mp 55-57°. $[\alpha]_D$ +17° (c, 0.2 in $CHCl_3$).

Fang, X.-P. *et al*, *J. Nat. Prod.* (*Lloydia*), 1992, **55**, 1655 (*isol, pmr, cmr, ms*)

Ginsenol G-10035

Octahydro-2,2,4,7a-tetramethyl-1,4-ethano-3aH-inden-3a-ol, 9CI

[117591-80-7]



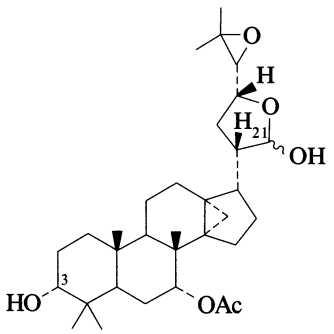
$C_{15}H_{26}O$ M 222.370
Isol. from the rootlets of *Panax ginseng*. Oil. $[\alpha]_D$ −18.3° (c, 1.1 in $CHCl_3$).

Iwabuchi, H. *et al*, *Chem. Pharm. Bull.*, 1988, **36**, 2447 (*isol, pmr, cmr, struct*)

Glabretol G-10036

Updated Entry replacing G-00386

[41943-01-5]



$C_{32}H_{50}O_6$ M 530.743
Constit. of *Guarea glabra*. Oil.

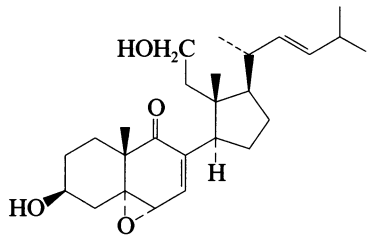
3,21-Diketone: Cryst. (EtOAc/Me_2CO). Mp 215-218°. $[\alpha]_D$ −35° ($CHCl_3$).

7-Deacetyl, 3-Ac:
$C_{32}H_{50}O_6$ M 530.743
Constit. of *Aglaia ferruginaea* and *Turraea obtusifolia*. Amorph.

7-Deacetyl, 3-tigloyl:
$C_{35}H_{54}O_6$ M 570.808
Constit. of *A. ferruginaea*. Amorph.

Ferguson, G. *et al*, *J. Chem. Soc., Perkin Trans. 1*, 1975, 491.
Mulholland, D.A. *et al*, *Phytochemistry*, 1993, **34**, 579 (*derivs*)

Glaciasterol A G-10037

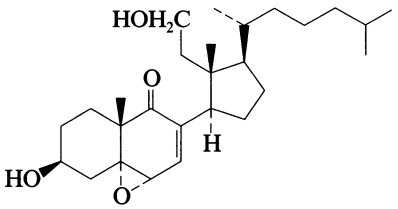


$C_{26}H_{40}O_4$ M 416.600
Constit. of *Aplysilla glacialis*. Amorph. solid.

[144369-45-9]

Pika, J. *et al*, *Can. J. Chem.*, 1992, **70**, 1506 (*isol, pmr, cmr*)

Glaciasterol B G-10038



$C_{27}H_{44}O_4$ M 432.642
Constit. of *Aplysilla glacialis*. Needles (MeOH aq.) (as di-Ac). Mp 55-57° (di-Ac).

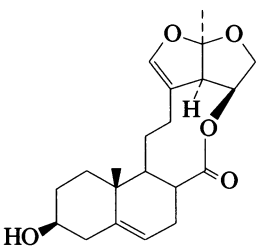
[144369-46-0]

Pika, J. *et al*, *Can. J. Chem.*, 1992, **70**, 1506 (*isol, pmr, cmr*)

Glaucogenin C G-10039

Updated Entry replacing G-00401

[82001-38-5]



$C_{21}H_{28}O_5$ M 360.449
Needles. Mp 205-206°. $[\alpha]_D$ +83.2° (c, 1.0 in MeOH).

Ac: Mp 234°. $[\alpha]_D$ +10.9° (c, 0.34 in $CDCl_3$).

3-O-α-L-Cymaropyranosyl-(1→4)-β-L-cymaropyranosyl-(1→4)-β-D-thevetopyranoside: [81474-88-6]. ***Glaucoside E***
$C_{42}H_{64}O_{15}$ M 808.959
From *C. glaucescens*. Amorph. powder. Mp 100-106°. $[\alpha]_D$ −21.4° (c, 1.02 in $CHCl_3$).

3-O-β-D-Thevetoside: [82001-46-5].
$C_{28}H_{40}O_9$ M 520.619
Constit. of *Cynanchum glaucescens*, the Chinese drug "Pai-ch'ien". Cryst. Mp 187-190.5°. $[\alpha]_D$ +27.4° (c, 1.03 in $CHCl_3$).

3-O-β-D-Oleandropyranoside: [97399-96-7]. ***Cynatratoside A***
$C_{28}H_{40}O_8$ M 504.619

Isol. from dried root of *C. atratum* (Pai-Wei). Needles + $\frac{1}{2}H_2O$. Mp 209-210°. $[\alpha]_D$ +15.5° (c, 1.00 in MeOH). Prob. artifact.

3-O-[α-L-*Cymaropyranosyl*-(*1→4*)-β-D-*digitoxopyranosyl*-(*1→4*)-β-D-*oleandropyranoside*]: [97399-97-8].

Cynatratoside B

$C_{41}H_{62}O_{14}$ M 778.932

From *C. atratum*. Amorph. powder + $\frac{1}{2}H_2O$. Mp 100-103°. $[\alpha]_D$ −21.5° (c, 1.0 in MeOH).

3-O-[α-D-*Oleandropyranosyl*-(*1→4*)-β-D-*digitoxopyranosyl*-(*1→4*)-α-D-*oleandropyranoside*]: [97465-76-4].

Cynatratoside C

$C_{41}H_{62}O_{14}$ M 778.932

From *C. atratum*. Amorph. powder + $\frac{1}{2}H_2O$. Mp 104-108°. $[\alpha]_D$ −7.2° (c, 1.0 in MeOH).

3-O-[β-D-*Glucopyranosyl*-(*1→4*)-α-L-*cymaropyranosyl*-(*1→4*)-D-*digitoxopyranosyl*-(*1→4*)-β-D-*oleandropyranoside*]: [97399-99-0]. ***Cynatratoside D***

$C_{47}H_{72}O_{19}$ M 941.074

From *C. atratum*. Amorph. powder + $\frac{1}{2}H_2O$. Mp 140-145°. $[\alpha]_D$ −25.8° (c, 1.0 in MeOH).

3-O-[α-D-*Glucopyranosyl*-(*1→4*)-β-D-*oleandropyranosyl*-(*1→4*)-β-D-*digitoxopyranosyl*-(*1→4*)-α-D-*oleandropyranoside*]: [97465-78-6]. ***Cynatratoside E***

$C_{47}H_{72}O_{19}$ M 941.074

From *C. atratum*. Amorph. powder + $1\frac{1}{2}H_2O$. Mp 150-155°. $[\alpha]_D$ −19.9° (c, 1.0 in MeOH).

3-O-[β-D-*Cymaropyranosyl*-(*1→4*)-α-L-*diginopyranosyl*-(*1→4*)-β-D-*cymaropyranoside*]: [100296-25-1].

Cynatratoside F

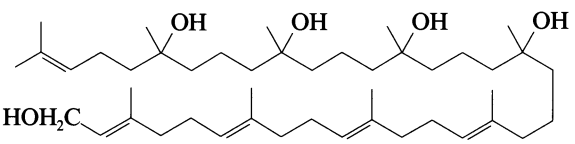
$C_{42}H_{64}O_{14}$ M 792.959

From *C. atratum*. Amorph. powder. Mp 106-113°. $[\alpha]_D$ −32.8° (c, 1 in $CHCl_3$).

Nakagawa, T. *et al*, *Chem. Pharm. Bull.*, 1983, **21**, 870 (*isol*)
Zhang, Z.-X. *et al*, *Chem. Pharm. Bull.*, 1985, **33**, 1507, 4188 (*isol*)

Glisoprenin A G-10040

[144376-62-5]



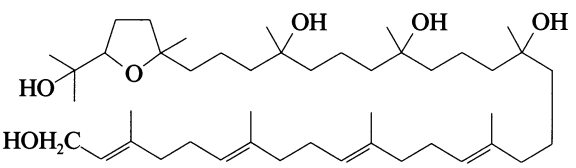
$C_{45}H_{82}O_5$ M 703.140

Prod. by *Gliocladium* sp. FO-1513. Inhibitor of acyl CoA: cholesterol acyltransferase. Oil. $[\alpha]_D^{18}$ +0.4° (c, 1 in $CHCl_3$).

Tomoda, H. *et al*, *J. Antibiot.*, 1992, **45**, 1202, 1669 (*isol, pmr, cmr, struct*)

Glisoprenin B G-10041

[144376-63-6]



$C_{45}H_{82}O_6$ M 719.139

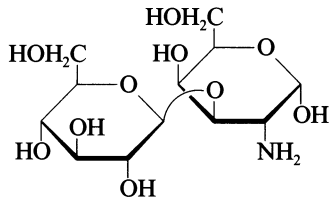
Prod. by *Gliocladium* sp. FO-1513. Inhibitor of acyl CoA: cholesterol acyltransferase. Oil. $[\alpha]_D^{18}$ −0.8° (c, 1 in $CHCl_3$).

Tomoda, H. *et al*, *J. Antibiot.*, 1992, **45**, 1202, 1669 (*isol, pmr, cmr, struct*)

β-D-Glucopyranosyl(1→3)-2-amino-2-deoxy-D-galactose G-10042

2-Amino-2-deoxy-3-O-(β-D-*glucopyranosyl*)-D-*galactose*, *8CI*. *3-β-Glucosylgalactosamine*

[1811-33-2]



$C_{12}H_{23}NO_{10}$ M 341.314

α-Pyranose-form

N-*Ac*: [31718-87-3]. *3-β-Glucosyl*-N-*acetylgalactosamine*

$C_{14}H_{25}NO_{11}$ M 383.352

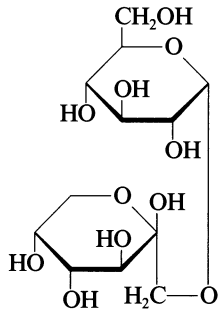
Isol. from the partial acid hydrolysate of reduced chondroitin. Cryst. + $2H_2O$. Mp 155-157°. $[\alpha]_D$ +19° (H_2O).

Davidson, E.A. *et al*, *J. Am. Chem. Soc.*, 1954, **76**, 5686.
Wolfrom, M.L. *et al*, *J. Am. Chem. Soc.*, 1960, **82**, 1673 (*isol*)

1-*O*-α-D-Glucopyranosyl-D-fructose, 9CI G-10043

Trehalulose

[51411-23-5]



β-Pyranose-*form*

$C_{12}H_{22}O_{11}$ M 342.299

Found (50% total carbohydrate content) in the honeydew produced by the sweet potato whitefly (*Bemisia tabaci*). Synthesised by the transferase action of yeast α-glucosidase on sucrose plus fructose. Anticaries sweetening agent. Amorph. powder. Mp 90-95°. $[\alpha]_D^{20}$ +50° (c, 1.0 in H_2O).

β-Pyranose-form [90689-37-5]

2,3:4,5-Di-O-*isopropylidene*, *2′,3′,4′,6′-tetrabenzyl*: [74024-22-9].

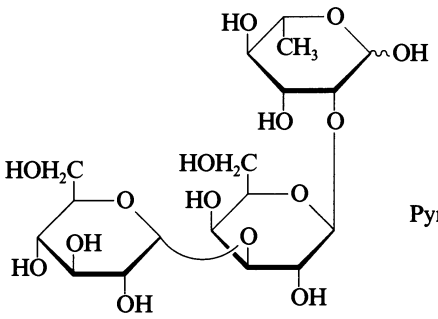
$C_{46}H_{54}O_{11}$ M 782.926

$[\alpha]_D^{22}$ +22.5° (c, 1.3 in $CHCl_3$).

Avigad, G., *Biochem. J.*, 1959, **73**, 587 (*synth*)
Pavia, A.A. *et al*, *Carbohydr. Res.*, 1980, **79**, 79 (*deriv*)
Munir, M. *et al*, *Carbohydr. Res.*, 1987, **164**, 477 (*synth*)
Bates, R.B. *et al*, *Carbohydr. Res.*, 1990, **201**, 342 (*isol, cmr, pmr*)

α-D-Glucopyranosyl-(1→3)-β-D-galactopyranosyl-(1→2)-L-rhamnose G-10044

[67109-67-5]



Pyranose-*form*

$C_{18}H_{32}O_{15}$ M 488.442

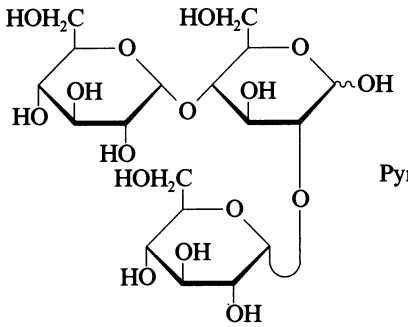
Constit. of the repeating unit of the capsular antigen of *Klebsiella* serotype K70. $[\alpha]_D$ +10° (H_2O).

Dutton, G.G.S. *et al*, *Carbohydr. Res.*, 1978, **62**, 321.

α-D-Glucopyranosyl-(1→2)-[α-D-glucopyranosyl-(1→4)]-D-glucose, 9CI G-10045

Centose

[34174-65-7]



Pyranose-*form*

$C_{18}H_{32}O_{16}$ M 504.441

Constit. of honey. $[\alpha]_D^{15}$ +142.3° (c, 0.59 in H_2O).

β-Pyranose-form [29581-60-0]

Undeca-Ac: [29581-59-7].

$C_{40}H_{54}O_{27}$ M 966.850

$[\alpha]_D^{15}$ +103° (c, 2.5 in $CHCl_3$).

Undeca-Me:

$C_{29}H_{54}O_{16}$ M 658.736

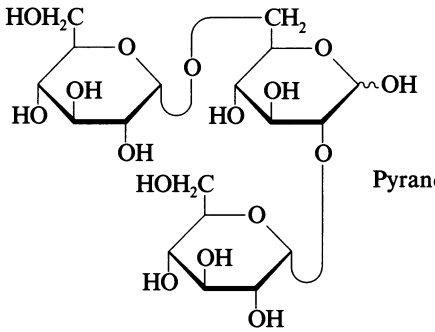
$[\alpha]_D^{25}$ +113° (c, 1.5 in $CHCl_3$).

[19774-14-2]

Siddiqui, I.R. *et al*, *Carbohydr. Res.*, 1968, **6**, 250 (*isol*)
Koeppen, B.H., *Carbohydr. Res.*, 1970, **13**, 417 (*synth*)
Nishi, K. *et al*, *Agric. Biol. Chem.*, 1975, **39**, 737 (*synth*)

α-D-Glucopyranosyl-(1→2)-[α-D-glucopyranosyl-(1→6)]-D-glucose, 9CI G-10046

[40983-71-9]



Pyranose-*form*

$C_{18}H_{32}O_{16}$ M 504.441

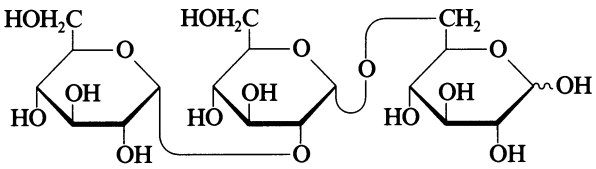
Product from acetylated dextran obt. from *Leuconostoc mesenteroides* strain NRRL B1397. $[\alpha]_D^{24}$ +153° (H_2O).

Sakakibara, K. *et al*, *Carbohydr. Res.*, 1972, **25**, 443.
Watanabe, T. *et al*, *Carbohydr. Res.*, 1980, **83**, 119.

α-D-Glucopyranosyl-(1→2)-α-D-glucopyranosyl-(1→6)-D-glucose, 9CI G-10047

6-α-Kojibiosylglucose

[40983-69-5]



Pyranose-*form*

$C_{18}H_{32}O_{16}$ M 504.441

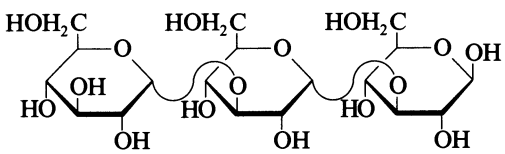
Isol. from acetylated Dextran obt. from *Leuconostoc mesenteroides* strain NRRL B1397. $[\alpha]_D^{24}$ +144° (H_2O).

Sakakibara, K. *et al*, *Carbohydr. Res.*, 1972, **25**, 443.
Pozsgay, V. *et al*, *Carbohydr. Res.*, 1979, **75**, 310.
Watanabe, T. *et al*, *Carbohydr. Res.*, 1980, **83**, 119.

α-D-Glucopyranosyl-(1→3)-α-D-glucopyranosyl-(1→3)-D-glucose, 8CI G-10048

Nigerotriose

[23393-12-6]



β-Pyranose-*form*

$C_{18}H_{32}O_{16}$ M 504.441

Isol. from the acetolysate of D-glucan from the bracket fungus *Leatiporus sulphureus* and from *Leuconostoc mesenteroides* B dextran. Amorph. powder. $[\alpha]_D^{17}$ +182.7° (c, 1.1 in H_2O), $[\alpha]_D^{14}$ +159° (c, 1.2 in H_2O).

β-Pyranose-form

Undeca-Ac:

$C_{40}H_{54}O_{27}$ M 966.850

Cryst. (EtOH). Mp 188-189°. $[\alpha]_D^{22}$ +105.9° (c, 1.1 in $CHCl_3$).

Me glycoside:

$C_{19}H_{34}O_{16}$ M 518.468

Cryst. (EtOH). Mp 214-215°. $[\alpha]_D^{19}$ +137.6° (c, 1.6 in H_2O).

Me glycoside, deca-Ac:

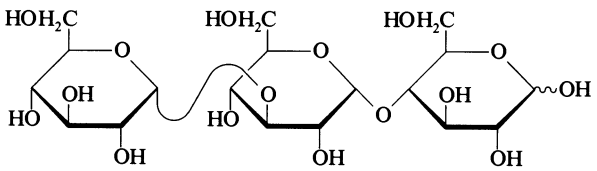
$C_{39}H_{54}O_{26}$ M 938.840

Cryst. (EtOH). Mp 183-186°. $[\alpha]_D^{19}$ +89.4° (c, 1.6 in $CHCl_3$).

Peat, S. *et al*, *J. Chem. Soc.*, 1961, 623.
Yamauchi, F. *et al*, *Agric. Biol. Chem.*, 1969, **33**, 103 (*isol*)
Shida, M. *et al*, *Carbohydr. Res.*, 1978, **60**, 117.
Takeo, K. *et al*, *Carbohydr. Res.*, 1983, **113**, 281 (*isol, synth*)

α-D-Glucopyranosyl-(1→3)-α-D-glucopyranosyl-(1→4)-D-glucose, 9CI G-10049

[69924-34-1]



Pyranose-*form*

$C_{18}H_{32}O_{16}$ M 504.441

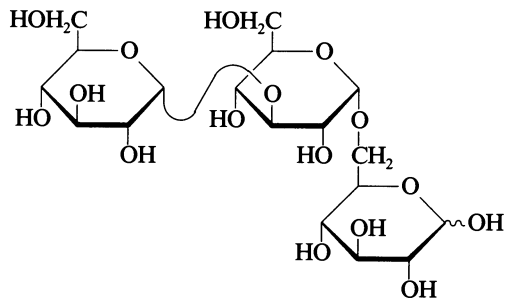
Formed by partial acid hydrolysis of nigeran and isolichenin and by enzymic hydrol. of elsinan. Possibly present in floridean starch. Powder. $[\alpha]_D^{25}$ +169.5° (c, 1.25 in H_2O).

Barker, S.A. *et al*, *J. Chem. Soc.*, 1957, 2448.
Peat, S. *et al*, *J. Chem. Soc.*, 1961, 623.
Lukomskaya, I.S., *Enzymologia*, 1962, **14**, 327 (*synth*)
Tsumuraya, Y. *et al*, *J. Appl. Biochem.*, 1979, **1**, 235 (*synth*)

α-D-Glucopyranosyl-(1→3)-[α-D-glucopyranosyl-(1→6)]-D-glucose G-10050

3,6-Di-α-glucosylglucose

[23393-11-5]



Pyranose-*form*

$C_{18}H_{32}O_{16}$ M 504.441

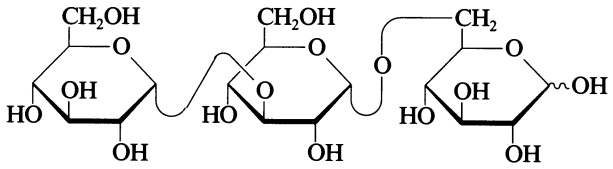
Prod. formed by acetolysed fragmentation of a dextran from *Leuconostoc mesenteroides* B. Foam + $1\frac{1}{2}H_2O$. $[\alpha]_D^{14}$ +133° (c, 0.7 in H_2O) (+120°).

Kto, S. *et al*, *Bull. Chem. Soc. Jpn.*, 1982, **55**, 2995 (*synth*)
Yamauchi, F. *et al*, *Agric. Biol. Chem.*, 1996, **33**, 103 (*isol*)

α-D-Glucopyranosyl-(1→3)-α-D-glucopyranosyl-(1→6)-D-glucose, 8CI G-10051

6-α-Nigerosylglucose

[23477-45-4]



Pyranose-*form*

$C_{18}H_{32}O_{16}$ M 504.441

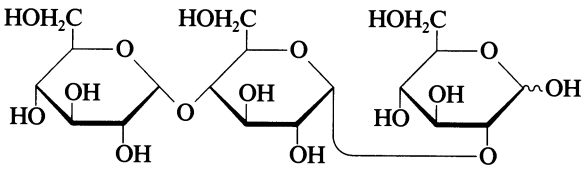
Formed by acetolysed fragmentation of a dextran from *Leuconostoc mesenteroides* B_4. $[\alpha]_D^{14}$ +153° (c, 2.5 in H_2O).

Yamauchi, F. *et al*, *Agric. Biol. Chem.*, 1969, **33**, 103, 1295 (*isol*)

α-D-Glucopyranosyl-(1→4)-α-D-glucopyranosyl-(1→2)-D-glucose G-10052

4-α-Glucosylkojibiose

[58274-01-4]



Pyranose-*form*

$C_{18}H_{32}O_{16}$ M 504.441

$[\alpha]_D^{22}$ +162° (c, 0.5 in H_2O). Constit. of honey. Transglycosylation product formed when cyclodextrin glycosyltransferase from *Bacillus megaterium* strain 5 is grown in a kojibiose medium.

α-Pyranose-form

Undeca-Ac:

$C_{40}H_{54}O_{27}$ M 966.850

Mp 105-106°. $[\alpha]_D^{22}$ +163° (c, 0.5 in $CHCl_3$).

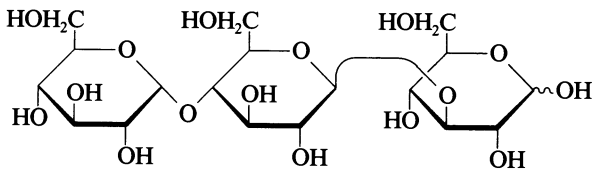
[21291-38-3]

Chiba, S. *et al*, *Agric. Biol. Chem.*, 1975, **39**, 2353.

α-D-Glucopyranosyl-(1→4)-α-D-glucopyranosyl-(1→3)-D-glucose, 9CI G-10053

3-α-Maltosylglucose

[69924-35-2]



Pyranose-*form*

$C_{18}H_{32}O_{16}$ M 504.441

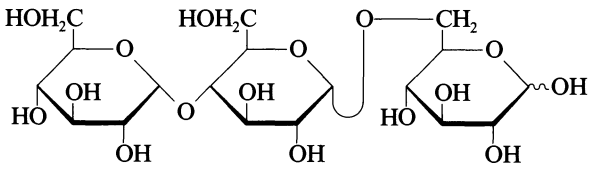
Isol. from the partial acid hydrolysate of nigeran and isolichenin.

Barker, S.A. *et al*, *J. Chem. Soc.*, 1957, 2448 (*isol*)
Peat, S. *et al*, *J. Chem. Soc.*, 1961, 623.

α-D-Glucopyranosyl-(1→4)-α-D-glucopyranosyl-(1→6)-D-glucose G-10054

6-α-Maltosylglucose. Isopanose

[32581-33-2]



Pyranose-*form*

$C_{18}H_{32}O_{16}$ M 504.441

Formed by acid or enzymatic hydrol. of amylopectin, glycogen, pullulan, floridean starch and in yeast glycogen. Present in honey and beer. $[\alpha]_D$ +128° (H_2O).

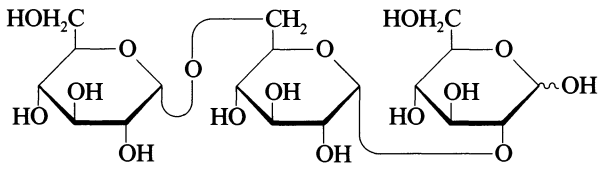
[3810-66-0]

Peat, S. *et al*, *J. Chem. Soc.*, 1959, 3223 (*isol*)
Pazur, J.H. *et al*, *J. Biol. Stand.*, 1960, **235**, 297 (*synth*)
Siddiqui, I.R. *et al*, *CA*, 1968, **69**, 95213h (*isol*)
Bethgate, G.N. *et al*, *Chem. Ind. (London)*, 1969, 520 (*isol*)
Ogawa, K. *et al*, *CA*, 1970, **72**, 117680z.
Sakano, Y. *et al*, *Carbohydr. Res.*, 1978, **61**, 175.

α-D-Glucopyranosyl-(1→6)-α-D-glucopyranosyl-(1→2)-D-glucose, 9CI G-10055

2-α-Isomaltosylglucose

[40983-70-8]



Pyranose-*form*

$C_{18}H_{32}O_{16}$ M 504.441

Isol. from acetylated dextran obt. from *Leuconostoc mesenteroides* strain NRRL B1397. Isol. from sake. Formed when *L. mesenteroides* was grown on a medium containing (1→2) linked glucobiose. $[\alpha]_D^{12}$ +148° (c, 1.8 in H_2O).

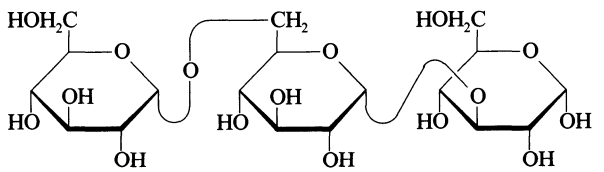
[25242-83-5, 55177-32-7]

Yamauchi, F. *et al*, *Agric. Biol. Chem.*, 1969, **33**, 1295 (*synth*)
Sakakibara, K. *et al*, *Carbohydr. Res.*, 1972, **25**, 443 (*synth*)
Baba, S. *et al*, *CA*, 1975, **82**, 153725h (*isol*)
Watanabe, T. *et al*, *Carbohydr. Res.*, 1980, **83**, 119.

α-D-Glucopyranosyl-(1→6)-α-D-glucopyranosyl-(1→3)-D-glucose, 8CI G-10056

3-α-Isomaltosylglucose

[23393-10-4]



α-Pyranose-*form*

$C_{18}H_{32}O_{16}$ M 504.441

$[\alpha]_D^{12}$ +155° (c, 0.7 in H_2O). Formed by acetolysed fragmentation of *Leuconostoc mesenteroides* B dextran formed when *L. mesenteroides* (NRRL B-512) was grown on a sucrose medium containing α(1→3) linked glucobiose as an acceptor. Constit. of honey. Synth. enzymically by the action of potato T-enzyme on nigerose.

α-Pyranose-form

Undeca-Ac:

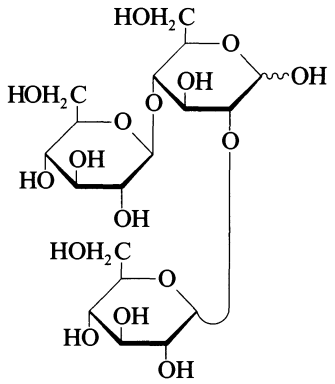
$C_{40}H_{54}O_{27}$ M 966.850

Cryst. (EtOH). Mp 120°. $[\alpha]_D^{22}$ +111° (c, 2.3 in $CHCl_3$).

[21291-02-1]

Abdullah, M. *et al*, *J. Chem. Soc.*, 1962, 176 (*synth*)
Siddiqui, I.R. *et al*, *CA*, 1968, **69**, 95213h (*isol*)
Yamauchi, F. *et al*, *Agric. Biol. Chem.*, 1969, **33**, 103, 1295 (*isol*)

α-D-Glucopyranosyl-(1→2)-[β-D-glucopyranosyl-(1→4)]-D-glucose G-10057



Pyranose-*form*

$C_{18}H_{32}O_{16}$ M 504.441

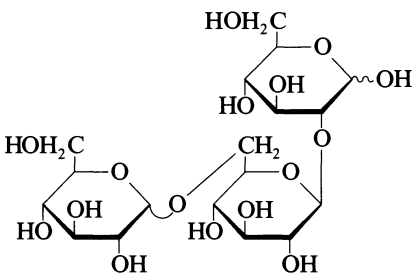
Formed when *Leuconostoc mesenteroides* (NRRLB-512) was grown on a medium containing β(1→4) linked glucobiose. $[\alpha]_D^{12}$ +98° (c, 0.9 in H_2O).

[25193-54-8]

Bailey, R.W. *et al*, *J. Chem. Soc.*, 1958, 1895.
Yamauchi, F. *et al*, *Agric. Biol. Chem.*, 1969, **33**, 1295.

α-D-Glucopyranosyl-(1→6)-β-D-glucopyranosyl-(1→2)-D-glucose G-10058

2-β-Isomaltosylglucose



Pyranose-*form*

$C_{18}H_{32}O_{16}$ M 504.441

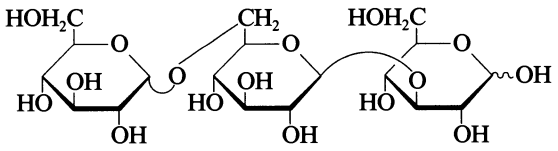
Formed when *Leuconostoc mesenteroides* (NRRL B-512) was grown on a medium containing β(1→2) linked glucobiose. $[\alpha]_D^{12}$ +81° (c, 0.4 in H_2O).

[25193-52-6]

Yamauchi, F. *et al*, *Agric. Biol. Chem.*, 1969, **33**, 1295.

α-D-Glucopyranosyl-(1→6)-β-D-glucopyranosyl-(1→3)-D-glucose G-10059

3-β-Isomaltosylglucose



Pyranose-*form*

$C_{18}H_{32}O_{16}$ M 504.441

Product formed when *Leuconostoc mesenteroides* (NRRL-B512) was grown on a medium containing β(1→3) linked glucobiose. Trace component of hydrolysate of 'insoluble' seaweed laminarin. $[\alpha]_D^{12}$ +88° (c, 0.7 in H_2O) (+67°).

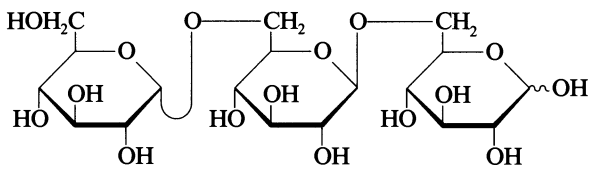
[25242-84-6]

Peat, S. *et al*, *J. Chem. Soc.*, 1958, 729 (*isol*)
Yamauchi, F. *et al*, *Agric. Biol. Chem.*, 1969, **33**, 1295 (*synth*)

α-D-Glucopyranosyl-(1→6)-β-D-glucopyranosyl-(1→6)-D-glucose, 9CI G-10060

6-β-Isomaltosylglucose

[73912-50-2]



Pyranose-*form*

$C_{18}H_{32}O_{16}$ M 504.441

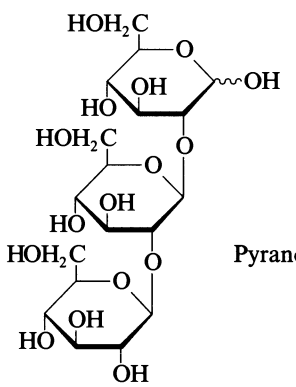
Product formed when *Leuconostoc mesenteroides* (NRRL B-512) was grown on a sucrose medium containing β(1→6) linked glucobiose. Constit. of nephritogenic glycopeptide from rat glomerular basement membrane. $[\alpha]_D^{12}$ +65° (c, 1.8 in H_2O).

[25193-56-0]

Yamauchi, F. *et al*, *Agric. Biol. Chem.*, 1969, **33**, 1295 (*synth*)
Shibata, S. *et al*, *Carbohydr. Res.*, 1980, **81**, 345.

β-D-Glucopyranosyl-(1→2)-β-D-glucopyranosyl-(1→2)-D-glucose, 8CI G-10061

[32581-40-1]



Pyranose-*form*

$C_{18}H_{32}O_{16}$ M 504.441

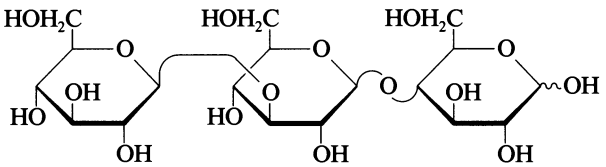
Prepd. from the partial acid hydrolysate of *Agrobacterium radiobacter* polysaccharide. Cryst. Mp 218-223°. $[\alpha]_D$ +11° (H_2O).

Gorin, P.A.J. *et al*, *Can. J. Chem.*, 1961, **39**, 1067.

β-D-Glucopyranosyl-(1→3)-β-D-glucopyranosyl-(1→4)-D-glucose, 9CI G-10062

4-β-Laminaribiosylglucose

[32581-38-7]



Pyranose-*form*

$C_{18}H_{32}O_{16}$ M 504.441

Present in the partial acid hydrolysates of lichenin and oat β-glucan. Cryst. (EtOH aq.). Mp 229-231°. $[\alpha]_D^{25}$ +13.0° (c, 1.4 in H_2O).

Undeca-Ac:

$C_{40}H_{54}O_{27}$ M 966.850

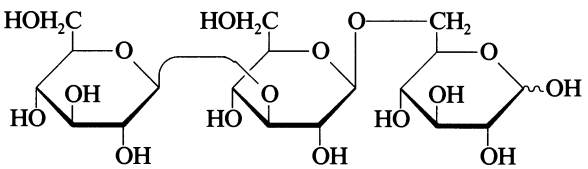
Cryst. (EtOH). Mp 120-122°. $[\alpha]_D$ −20° ($CHCl_3$).

Peat, S. *et al*, *J. Chem. Soc.*, 1957, 3916.
Parrish, F.W. *et al*, *Can. J. Chem.*, 1960, **38**, 2094 (*isol*)
Perlin, A.S. *et al*, *Can. J. Chem.*, 1962, **40**, 50 (*isol*)
Takeo, K. *et al*, *Carbohydr. Res.*, 1986, **147**, 265 (*synth*)

β-D-Glucopyranosyl-(1→3)-β-D-glucopyranosyl-(1→6)-D-glucose, 9CI G-10063

6-β-Laminaribiosylglucose. 3-β-Glucosylgentiobiose

[32581-37-6]



Pyranose-*form*

$C_{18}H_{32}O_{16}$ M 504.441

Isol. from partial acid hydrol. of insoluble laminarin and yeast β-glucan. Amorph. $[\alpha]_D$ −6° (H_2O).

Undeca-Ac:

$C_{40}H_{54}O_{27}$ M 966.850

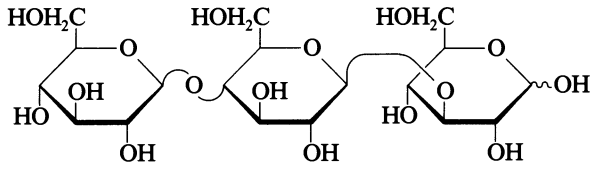
Needles (EtOH). Mp 216-217°. $[\alpha]_D$ −27.4° ($CHCl_3$).

Peat, S. *et al*, *J. Chem. Soc.*, 1958, 724, 3862; 1960, 175 (*isol, synth*)
Handa, N. *et al*, *Nature* (*London*), 1961, **192**, 1078 (*isol*)

β-D-Glucopyranosyl-(1→4)-β-D-glucopyranosyl-(1→3)-D-glucose, 9CI, 8CI G-10064

3-β-Cellobiosylglucose

[32581-36-5]



Pyranose-*form*

$C_{18}H_{32}O_{16}$ M 504.441

Obtd. from partial acid and enzymic hydrol. of lichenin, oat β-glucan, barley β-glucan and from the cell-wall of bamboo. Cryst. (EtOH aq.). Mp 236-239°. $[\alpha]_D^{25}$ +11.7° (c, 1.5 in H_2O).

Undeca-Ac:

$C_{40}H_{54}O_{27}$ M 966.850

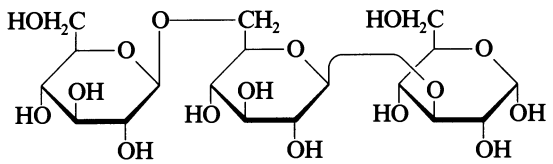
Cryst. Mp 108-110°. $[\alpha]_D$ −8.3° ($CHCl_3$).

Peat, S. *et al*, *J. Chem. Soc.*, 1957, 3916 (*isol*)
Moscatelli, E.A. *et al*, *J. Biol. Chem.*, 1961, **236**, 2858.
Perlin, A.S. *et al*, *Can. J. Chem.*, 1962, **40**, 50 (*isol*)
Yamamoto, R. *et al*, *Carbohydr. Res.*, 1978, **67**, 275.
Kato, Y. *et al*, *Carbohydr. Res.*, 1982, **109**, 233.
Takeo, K. *et al*, *Carbohydr. Res.*, 1986, **147**, 265 (*synth*)

β-D-Glucopyranosyl-(1→6)-β-D-glucopyranosyl-(1→3)-D-glucose, 9CI G-10065

3-β-Gentiobiosylglucose

[32581-32-1]



α-Pyranose-*form*

$C_{18}H_{32}O_{16}$ M 504.441

Isol. from the partial acid hydrolysates of sclerotia from *Sclerotinia libertiana*, laminarin, 'insoluble' laminarin, and yeast β-glucan. Constit. in the carbohydrate moiety of a highly toxic saponin of Lucerne *Medicago sativa*. Repeating unit of the extracellular β-D-glucan from the fungus *Botrytis cinerea* responsible for clarification difficulties in wine technology. Prisms + $2H_2O$. Mp 223-223° dec. $[\alpha]_D^{15}$ −4.35° → 1.58° (c, 1.0 in H_2O).

α-Pyranose-form

Undeca-Ac:

$C_{40}H_{54}O_{27}$ M 966.850

Cryst. (EtOH). Mp 179-180°. $[\alpha]_D^{15}$ −11° ($CHCl_3$).

β-Pyranose-form [47751-20-2]

Undeca-Ac: Prisms (EtOH). Mp 169-170°. $[\alpha]_D^{15}$ −27.9° ($CHCl_3$).

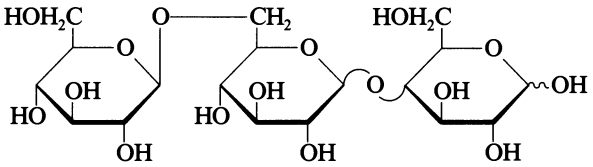
[34213-21-3]

Peat, S. *et al*, *J. Chem. Soc.*, 1960, 175; 1958, 3862 (*isol*, *synth*)
Turvey, J.R. *et al*, *J. Chem. Soc.*, 1960, 2366 (*synth*)
Handa, N. *et al*, *Nature* (*London*), 1961, **192**, 1078 (*isol*)
Gestetner, B., *Phytochemistry*, 1971, **10**, 2221 (*isol*)
Ueno, Y. *et al*, *Carbohydr. Res.*, 1973, **28**, 140 (*isol*)
Dubourdieu, D. *et al*, *Carbohydr. Res.*, 1981, **93**, 294 (*isol*)

β-D-Glucopyranosyl-(1→6)-β-D-glucopyranosyl-(1→4)-D-glucose G-10066

4-β-Gentiobiosylglucose

[100676-05-9]



Pyranose-*form*

$C_{18}H_{32}O_{16}$ M 504.441

Prod. by transferase action on cellobiose of β-glucosides of *Aspergillus niger*, barley and *Neurospora crassa*. Constit. of exopolysaccharide from *Rhizobium* sp. strain ANU280. Host specificity determinant in *R.* sp. $[\alpha]_D$ +10.2° (H_2O).

Undeca-Ac:

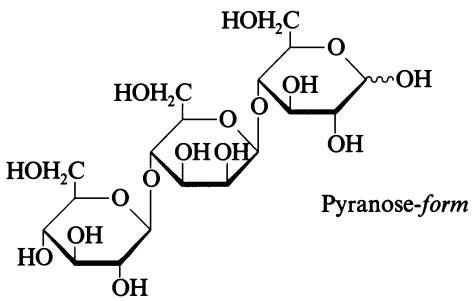
$C_{40}H_{54}O_{27}$ M 966.850

Cryst. Mp 205°. $[\alpha]_D$ −13° ($CHCl_3$).

Crook, E.M. *et al*, *Biochem. J.*, 1957, **65**, 1 (*isol*)
Anderson, F.B. *et al*, *Biochem. J.*, 1959, **71**, 407 (*isol*)
Berger, L.S. *et al*, *Biochem. Biophys. Res. Commun.*, 1961, **6**, 62 (*isol*)
Djordjevic, S.P. *et al*, *Carbohydr. Res.*, 1986, **148**, 87 (*isol*, *cmr*)

β-D-Glucopyranosyl-(1→4)-β-D-mannopyranosyl-(1→4)-D-glucose, 9CI G-10067

[59905-64-5]



Pyranose-*form*

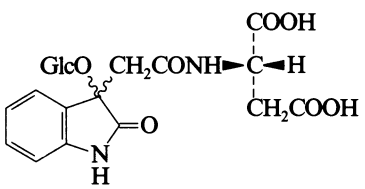
$C_{18}H_{32}O_{16}$ M 504.441

Isol. from the glucomannan from the fibres of Sunn hemp (*Crotalaria juncea*). $[\alpha]_D^{30}$ −8° (c, 0.6 in H_2O).

Das-gupta, P.C. *et al*, *Carbohydr. Res.*, 1976, **48**, 73 (*isol*)

N-[[3-(β-D-Glucopyranosyloxy)-2,3-dihydro-2-oxo-1*H*-indol-3-yl]acetyl] aspartic acid, 9CI G-10068

[99694-85-6]

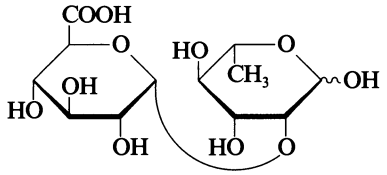


$C_{20}H_{24}N_2O_{12}$ M 484.416

Constit. of the seedlings of *Vicia faba*. Metab. of indolacetic acid. Powder.

Tsurumi, S. *et al*, *Plant Physiol.*, 1985, **79**, 667 (*isol*)

2-*O*-α-D-Glucopyranosyl-L-rhamnose G-10069



Pyranose-*form*

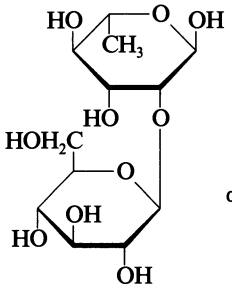
$C_{12}H_{20}O_{11}$ M 340.283

Isol. from a partial acid hydrolysate of *Brachychiton diversifolium* (*Sterculia caudata*) gum. $[\alpha]_D$ +63° (H_2O).

Hirst, E.L. *et al*, *J. Chem. Soc.*, 1958, 1942.

2-*O*-β-D-Glucopyranosyl-L-rhamnose G-10070

[55018-83-2]



α-Pyranose-*form*

$C_{12}H_{22}O_{10}$ M 326.300

Constit. in the repeating unit of the capsular antigen of *Klebsiella* K17. $[\alpha]_D^{24}$ +9.5° (c, 2.0 in H_2O).

α-Pyranose-form

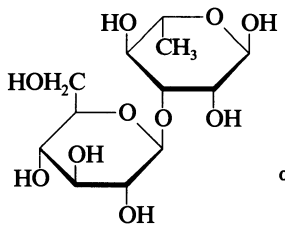
Benzyl glycoside: [55018-80-9].
$C_{19}H_{28}O_{10}$ M 416.424
Syrup. $[\alpha]_D^{24}$ −48.8° (c, 1.0 in EtOH).

Benzyl glycoside, hexa-Ac:
$C_{31}H_{40}O_{16}$ M 668.647
Mp 147-148°. $[\alpha]_D^{24}$ −46.6° (c, 1.0 in $CHCl_3$).

King, R.R. *et al*, *Can. J. Chem.*, 1974, **52**, 3913 (*synth*)
Colson, P. *et al*, *Carbohydr. Res.*, 1976, **47**, 1 (*cmr*)
Dutton, G.G.S. *et al*, *Carbohydr. Res.*, 1980, **80**, 147 (*occur*)

3-*O*-β-D-Glucopyranosyl-L-rhamnose G-10071

[55018-84-3]



α-Pyranose-*form*

$C_{12}H_{22}O_{10}$ M 326.300

Constit. of the repeating unit of the capsular antigens of *Klebsiella* K23, K48 and in the repeating unit of a teichuronic acid isol. from the cell walls of *Bacillus megaterium*. $[\alpha]_D^{24}$ −11.4° (c, 2.0 in H_2O).

α-Pyranose-form

Benzyl glycoside: [55018-78-5].
$C_{19}H_{28}O_{10}$ M 416.424
Syrup. $[\alpha]_D^{24}$ −68.4° (c, 1.0 in EtOH).

Benzyl glycoside, 2',3',4',6'-tetra-Ac:
$C_{27}H_{36}O_{14}$ M 584.573
Mp 138-139°. $[\alpha]_D^{24}$ −37.4° (c, 1.0 in $CHCl_3$).

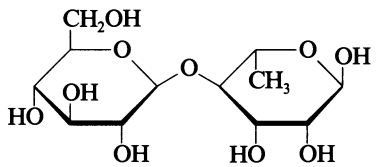
[81689-25-0]

King, R.R. *et al*, *Can. J. Chem.*, 1974, **52**, 3913 (*synth*)
Colson, P. *et al*, *Carbohydr. Res.*, 1976, **47**, 1 (*cmr*)
Gagnaire, D.Y. *et al*, *Macromolecules*, 1982, **15**, 126 (*nmr*)
Kenne, L. *et al*, *The Polysaccharides*, Academic Press, ed. Aspinall, G.O., 1983, **2**, 320, 323, 340 (*occur*)
Shashakov, A.S. *et al*, *Magn. Reson. Chem.*, 1988, **26**, 735 (*conformn*)

4-*O*-β-D-Glucopyranosyl-L-rhamnose G-10072

Scillabiose

[40525-07-3]



α-Pyranose-*form*

$C_{12}H_{22}O_{10}$ M 326.300

Isol. from the partial acid hydrolysate of glycosides from *Scilla maritima;* constit. in the repeating unit of the capsular antigen of *Klebsiella* K55. $[\alpha]_D$ −24.2° (c, 1.1 in H_2O).

Phenylosazone: Mp 164°.

α-Pyranose-form

Hepta-Ac: [39687-44-0].
$C_{26}H_{36}O_{17}$ M 620.560
Cryst. (2-propanol). Mp 139-140°. $[\alpha]_D$ −62.3° (c, 2.6 in $CHCl_3$).

Me glycoside: [39687-45-1].
$C_{13}H_{24}O_{10}$ M 340.327
$[\alpha]_D$ −57.5° (c, 1.5 in MeOH).

Me glycoside, 2,3-O-isopropylidene, tetra-Ac: [39687-43-9].
$C_{24}H_{36}O_{14}$ M 548.540
Cryst. (EtOH). Mp 158.5-159°. $[\alpha]_D$ −30.6° (c, 1.7 in $CHCl_3$).

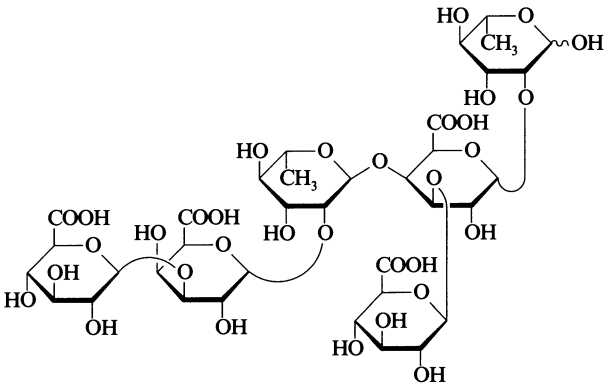
β-Pyranose-form

1,2-Methylorthoacetate, penta-Ac: Cryst. (Et_2O/petrol). Mp 206°. $[\alpha]_D^{20}$ +1.03° (c, 1.65 in $CHCl_3$).

Stoll, A. *et al*, *Helv. Chim. Acta*, 1952, **35**, 2495 (*isol*)
Bebault, G.M. *et al*, *Can. J. Chem.*, 1972, **50**, 3373 (*synth*)
Torgov, V.I. *et al*, *Izv. Akad. Nauk SSSR, Ser. Khim.*, 1975, 455; *Bull. Acad. Sci. USSR, Div. Chem. Sci.* (*Engl. Transl.*), 1975, 385 (*β-form deriv*)
Bebault, G.M. *et al*, *Carbohydr. Res.*, 1978, **64**, 199 (*occur*)
Shashkov, A.S. *et al*, *Magn. Reson. Chem.*, 1988, **26**, 735 (*cmr*)

β-D-Glucopyranuronosyl-(1→3)-α-D-galactopyranuronosyl-(1→2)-α-L-rhamnopyranosyl-(1→4)-[β-D-glucopyranuronosyl-(1→3)]-α-D-galactopyranuronosyl-(1→2)-L-rhamnopyranose G-10073

[71562-84-0]

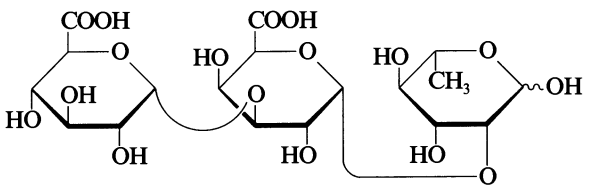


$C_{36}H_{54}O_{33}$ M 1014.803

Isol. from the hydrolysate of the mucilage in the roots of *Abelmoschus manihot*, *Althaea officinalis* and from the inner bark of *Hydrangia paniculata*. Powder. Mp 172-176° dec. $[\alpha]_D^{20}$ +81.4° (c, 1.4 in H_2O).

Tomoda, M. *et al*, *Chem. Pharm. Bull.*, 1977, **25**, 1357, 2910; 1979, **27**, 1651; 1980, **28**, 824.

α-D-Glucopyranuronosyl-(1→3)-α-D-galactopyranuronosyl-(1→2)-L-rhamnose G-10074



Pyranose-*form*

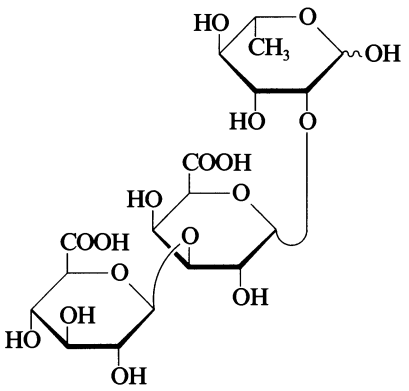
$C_{18}H_{28}O_{17}$ M 516.409

Isol. from the partial acid hydrolysate of Panniculatan a mucilaginous polysaccharide obt. from the inner bark of *Panniculata hydrangia*. $[\alpha]_D^{20}$ +79.4° (c, 1.2 in H_2O).

[65562-08-5]

Tomoda, M. *et al*, *Chem. Pharm. Bull.*, 1977, **25**, 2910 (*isol*)

β-D-Glucopyranuronosyl-(1→3)-α-D-galactopyranuronosyl-(1→2)-L-rhamnose G-10075



$C_{18}H_{28}O_{17}$ M 516.409

Isol. from the partial acid hydrolsates of bark of the kapok tree (*Ceiba pentandra*), bark of *Hydrangia paniculata*, mucilage of *Abelmoschus manihot* and gums of *Sterculia setigera* and *S. caudata*. $[\alpha]_D$ +84.5° (H_2O).

[122620-32-0]

Aspinall, G.O. *et al*, *J. Chem. Soc.*, 1965, 4325.

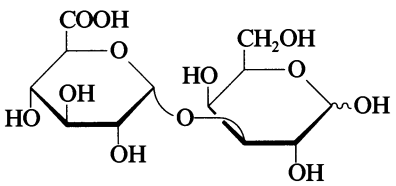
Tomoda, M. *et al*, *Chem. Pharm. Bull.*, 1979, **27**, 1651 (*isol*)

Tomoda, M. *et al*, *Carbohydr. Res.*, 1986, **151**, 29; 1989, **190**, 323 (*isol*)

Raju, S.T. *et al*, *Carbohydr. Res.*, 1989, **191**, 321 (*isol*)

3-*O*-α-D-Glucopyranuronosyl-D-galactose, 9CI G-10076

[96688-25-4]



Pyranose-*form*

$C_{12}H_{20}O_{12}$ M 356.283

Isol. from the partial acid hydrolysates of ketha (*Feronia elephantum*) gum and mesquite (*Prosopsis juliflora*) gum (probably present in the original polymer as a 4-Me deriv.).

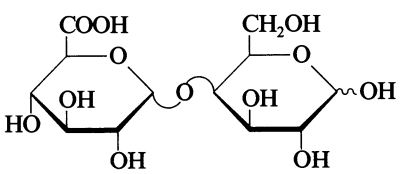
Me glycoside, hexa-Me ether, Me ester:
$C_{20}H_{36}O_{12}$ M 468.497
$Bp_{0.2}$ 175°.

White, E.V., *J. Am. Chem. Soc.*, 1947, **69**, 2264.

Mathur, G.P. *et al*, *J. Sci. Ind. Res., Sect. B*, 1954, **13**, 452 (*isol*)

4-*O*-α-D-Glucopyranuronosyl-D-galactose G-10077

[14402-41-6]



$C_{12}H_{20}O_{12}$ M 356.283

Isol. from partial acid hydrolysates of *Acacia karoo*, neem (*Melia azadirachta*), *Terminalia tomentosa* gums and from tragacanthic acid, the major polysaccharide component of gum tragacanth. $[\alpha]_D$ +87° (c, 1.4 in H_2O), $[\alpha]_D^{20}$ +58° (c, 1.2 in H_2O).

Ba salt: $[\alpha]_D$ +110° (+67°)(H_2O).

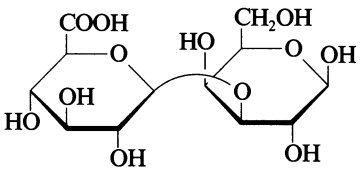
Me glycoside, hexa-Me, Me ester:
$C_{20}H_{36}O_{12}$ M 468.497
$Bp_{0.5-1}$ 195-225° (bath).

Mukherjee, S.H. *et al, J. Am. Chem. Soc.*, 1955, **77**, 422.
Charlson, A.J. *et al, J. Chem. Soc.*, 1955, 1428 (*isol*)
Aspinall, G.O. *et al, J. Chem. Soc. C*, 1967, 1086 (*isol*)
Audichya, J.D. *et al, Indian J. Chem., Sect. B*, 1976, **14**, 601 (*isol*)

3-*O*-β-D-Glucopyranuronosyl-D-galactose, G-10078

9CI, 8CI

[14446-49-2]



β-Pyranose-*form*

$C_{12}H_{20}O_{12}$ M 356.283

Constit. of Chondroitin 4-sulfate and isol. from the partial acid hydrolysate of the capsular polysaccharides of *Escherichia coli* K12, *Klebsiella* K type 20 and from *Terminalia tomentosa* gum. $[\alpha]_D^{30}$ +11.8° (c, 1.7 in H_2O).

6'-Me ester: [16741-26-7].
$C_{13}H_{22}O_{12}$ M 370.310
Syrup. $[\alpha]_D^{25}$ −5.5° (c, 0.55 in H_2O).

β-Pyranose-form

Benzyl glycoside: [16741-24-5].
$C_{19}H_{26}O_{12}$ M 446.407
Prisms (EtOH). Mp 160-162° dec. $[\alpha]_D^{25}$ −41.3° (c, 1.0 in H_2O).

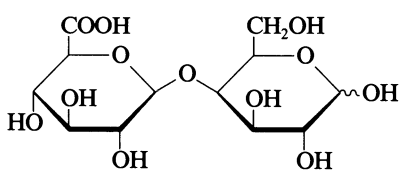
Benzyl glycoside, Me ester: [16741-23-4].
$C_{20}H_{28}O_{12}$ M 460.434
Cryst. (EtOH). Mp 205-207°. $[\alpha]_D^{22}$ −38.5° (c, 1.0 in H_2O).

Benzylglycoside, hexa-Ac, Me ester:
$C_{32}H_{40}O_{18}$ M 712.657
Mp 154-155°. $[\alpha]_D^{30}$ −43.3° (c, 0.9 in $CHCl_3$).

[4343-50-4, 16741-22-3]

Roden, L., *Biochim. Biophys. Acta*, 1966, **127**, 252 (*isol*)
Flowers, H.M., *Carbohydr. Res.*, 1967, **4**, 312 (*synth*)
Choy, Y.M. *et al, J. Bacteriol.*, 1972, **112**, 635 (*occur*)
Audichya, T.D. *et al, Indian J. Chem., Sect. B*, 1976, **14**, 601.
Rohrmann, K. *et al, Eur. J. Biochem.*, 1985, **148**, 463 (*occur*)

4-*O*-β-D-Glucopyranuronosyl-D-galactose G-10079



Pyranose-*form*

$C_{12}H_{20}O_{12}$ M 356.283

Isol. from the partial acid hydrolysate of the extracellular polysaccharide from *Xanthomonas stewartii*. $[\alpha]_D$ +15° (H_2O).

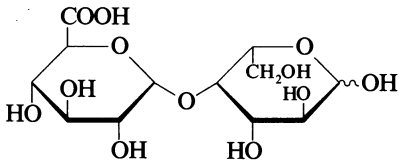
[29388-50-9]

Gorin, P.A.J. *et al, Can. J. Chem.*, 1961, **39**, 2282 (*isol*)
Bajpai, K.S. *et al, Carbohydr. Res.*, 1970, **14**, 259 (*ir*)

4-*O*-α-D-Glucopyranuronosyl-L-galactose, G-10080

9CI

[50692-51-8]



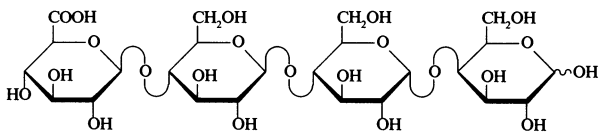
Pyranose-*form*

$C_{12}H_{20}O_{12}$ M 356.283

Isol. from the partial acid hydrolysate of the polysaccharide from the red alga *Anatheca dentata*. $[\alpha]_D^{20}$ +24° (c, 0.5 in H_2O).

Nunn, J.R. *et al, Carbohydr. Res.*, 1973, **29**, 281.

β-D-Glucopyranuronosyl-(1→4)-β-D-glucopyranosyl-(1→4)-α-D-glucopyranosyl-(1→4)-D-galactose G-10081



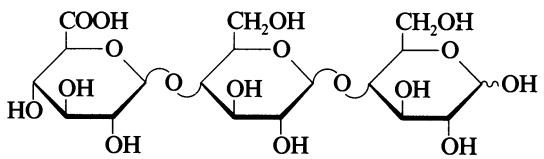
Pyranose-*form*

$C_{24}H_{40}O_{22}$ M 680.567

Isol. from the partial acid hydrolysate of *Pneumococcus* type VIII capsular polysaccharide. $[\alpha]_D$ +65° (H_2O).

Jones, J.K.N. *et al, J. Am. Chem. Soc.*, 1957, **79**, 2787.

β-D-Glucopyranuronosyl-(1→4)-β-D-glucopyranosyl-(1→4)-D-glucose G-10082



Pyranose-*form*

$C_{18}H_{30}O_{17}$ M 518.425

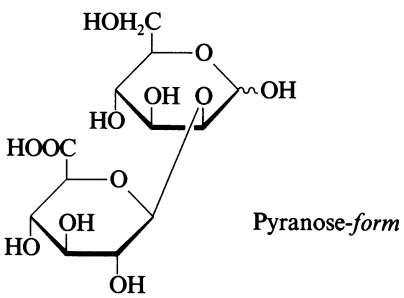
Isol. from the partial acid hydrolysate of *Pneumococcus* type VIII capsular polysaccharide. $[\alpha]_D$ +12° (H_2O).

Jones, J.K.N. *et al, J. Am. Chem. Soc.*, 1957, **79**, 2787.

2-*O*-β-D-Glucopyranuronosyl-D-mannose, G-10083

8CI

[4539-91-7]



Pyranose-*form*

$C_{12}H_{20}O_{12}$ M 356.283

Present as a structural unit in plant gums. Isol. from or detected in partial acid hydrolysates of gums from the following plants, damson (*Prunus insitia*), cherry (*P. cerasus*), *Anogeissus lattifolia* (gum ghatti), *A. schimperi*, *Hakea acicularis*, *Virgilia oroboides*, *Albizzia zygia*, and *Asparagus filicinus*. Also isol. from the partial acid hydrolysates of the extracellular polysaccharides of *Xanthomonas oryzae* and *X. campestris*. $[\alpha]_D$ −32° (H_2O).

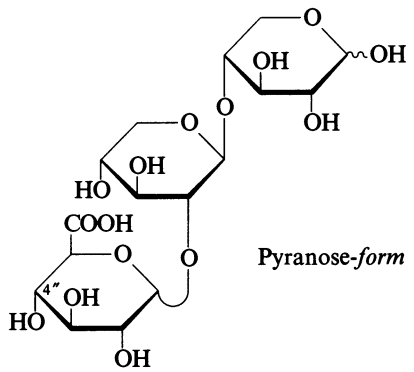
Ba salt: $[\alpha]_D$ −30° (H_2O).

Me glycoside, hexa-Me, 6′-Me ester: [70051-79-5].
$C_{20}H_{36}O_{12}$ M 468.497
Mp 141°. $[\alpha]_D$ −22° ($CHCl_3$).

[52554-63-9, 52554-64-0]

Stephen, A.M., *J. Chem. Soc.*, 1956, 4487.
Drummond, D.W. *et al*, *J. Chem. Soc.*, 1961, 3908 (*isol*)
Smith, F., *J. Chem. Soc.*, 1961, 4892 (*isol, Me gly*)
Sloneker, J.H. *et al*, *Can. J. Chem.*, 1962, **40**, 2066 (*isol*)
Misaki, A. *et al*, *Can. J. Chem.*, 1962, **40**, 2204 (*isol*)

α-D-Glucopyranuronosyl-(1→2)-β-D-xylopyranosyl-(1→4)-D-xylose G-10084



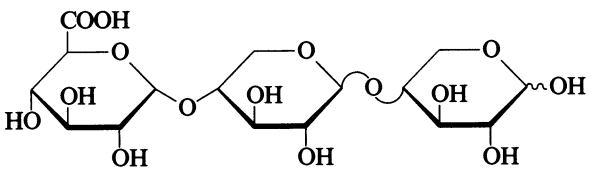
Pyranose-*form*

$C_{16}H_{26}O_{15}$ M 458.372

$O^{4''}$-*Me:* [10365-86-3]. *4-O-Methyl-α-D-glucopyranosyl-(1→2)-β-D-xylopyranosyl-(1→4)-D-xylose*
$C_{17}H_{28}O_{15}$ M 472.399
Isol. from the partial acid hydrolysates of white spruce (*Picea glauca*), western hemlock (*Tsuga heterophylla*), jute fibre, maritime pine (*Pinus pinaster*), aspen (*Populus tremuloides*) hemicelluloses. Prob. also from white elm (*Ulmus americana*), milkweed (*Asclepias sysiaca*) floss and oat hull hemicelluloses. Cryst. + $3H_2O$. Mp 180-187°. $[\alpha]_D$ +59° (H_2O).

Hamilton, J.K. *et al*, *J. Am. Chem. Soc.*, 1957, **79**, 6464 (*isol*)
Roudier, A.J. *et al*, *Bull. Soc. Chim. Fr.*, 1960, **28**, 2074 (*isol*)
Srivastava, H.C. *et al*, *J. Org. Chem.*, 1961, **26**, 3958 (*isol*)
Timell, T.E., *J. Org. Chem.*, 1962, **27**, 1804.

α-D-Glucopyranuronosyl-(1→4)-β-D-xylopyranosyl-(1→4)-D-xylose G-10085



Pyranose-*form*

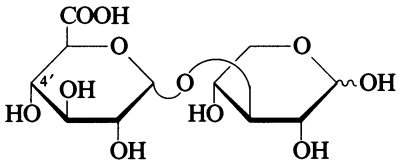
$C_{16}H_{26}O_{15}$ M 458.372

Isol. from the partial acid hydrolysate of corn-hull hemicellulose. $[\alpha]_D$ +38° (H_2O).

Whistler, R.L. *et al*, *J. Am. Chem. Soc.*, 1955, **77**, 2212 (*isol*)

3-*O*-α-D-Glucopyranuronosyl-D-xylose, 9CI G-10086

[85269-45-0]



Pyranose-*form*

$C_{11}H_{18}O_{11}$ M 326.257
Isol. from partial acid hydrolysates of sunflower (*Helianthus annus*) head hemicellulose, pear cell-wall xylan, from various wheat-straw preparations and from corn hulls. $[\alpha]_D$ +18° to + 57° (H_2O).

Pyranose-form

4′-Me: [66634-88-6]. *3-O-(4-O-Methyl-α-D-glucopyranuronosyl)-D-xylose, 9CI*
$C_{12}H_{20}O_{11}$ M 340.283
Minor component of *Pinus radiata* hemicellulose, may be present in trace amts. in other hemiculluloses. $[\alpha]_D$ +65° (H_2O).

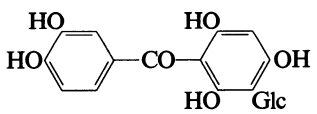
Hexa-Me:
$C_{17}H_{30}O_{11}$ M 410.417
$[\alpha]_D$ +12.4° (H_2O).

Chanda, S.K. *et al*, *J. Chem. Soc.*, 1951, 1240.
Adams, G.A., *Can. J. Chem.*, 1952, **30**, 698; 1953, **31**, 134 (*isol*)
Bishop, C.T., *Can. J. Chem.*, 1953, **31**, 134; 1955, **33**, 1521 (*isol*)
Aspinall, G.O. *et al*, *J. Chem. Soc.*, 1954, 1731 (*isol*)
Brasch, D.J. *et al*, *Tappi*, 1956, **39**, 581, 768 (*isol, deriv*)
Bailey, R.W., *Oligosaccharides*, Pergamon, 1965, **4**, 137 (*occur, deriv*)
Yoshida, S. *et al*, *Agric. Biol. Chem.*, 1990, **54**, 1319 (*isol*)

3-Glucosyl-2,3′,4,4′,6-pentahydroxybenzophenone G-10087

3-Glucosylmaclurin

[92631-83-9]



$C_{19}H_{20}O_{11}$ M 424.360
Constit. of leaves of *Mangifera indica*. Yellow amorph. powder. $[\alpha]_D^{25}$ +33.2° (c, 0.9 in MeOH).

6″-(p-Hydroxybenzoyl): [92665-82-2].
$C_{26}H_{24}O_{13}$ M 544.468
Constit. of leaves of *M. indica*. Yellow amorph. powder. $[\alpha]_D^{31}$ −50.0° (c, 0.80 in MeOH).

6″-(p-Hydroxybenzoyl), 2″-(3,4,5-trihydroxybenzoyl): [92631-84-0].
$C_{33}H_{28}O_{17}$ M 696.574
Constit. of leaves of *M. indica*. Yellow amorph. powder. $[\alpha]_D^{24}$ −181.3° (c, 0.4 in MeOH).

2″-(p-Hydroxybenzoyl), 6″-(3,4,5-trihydroxybenzoyl): [92631-85-1].
$C_{33}H_{28}O_{17}$ M 696.574
Constit. of leaves of *M. indica*. Pale yellow needles (H_2O). Mp 193-194°. $[\alpha]_D^{24}$ −143.8° (c, 0.4 in MeOH).

2″,3″,6″-Tris-(3,4,5-trihydroxybenzoyl): [92631-86-2].
$C_{40}H_{32}O_{23}$ M 880.679

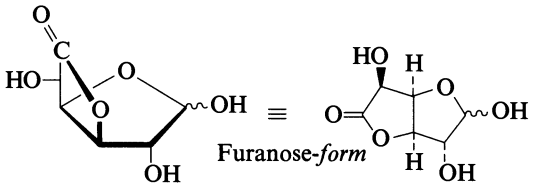
Constit. of leaves of *M. indica*. Yellow amorph. powder + $1H_2O$. $[\alpha]_D^{30}$ −48.8° (c, 0.4 in MeOH).

Tanaka, T. *et al*, *Chem. Pharm. Bull.*, 1984, **32**, 2676.

Glucurono-6,3-lactone, 9CI, 8CI G-10088

***Glucurolactone*, INN.** *Glucuronolactone. Dicurone. Glucoxyguronsan. Numerous tradenames*

[63-29-6]



$C_6H_8O_6$ M 176.126

Antiarthritic drug, detoxicant.

D-form [32449-92-6]

Found in many plant gums in polymeric combination with other carbohydrates. Important structural constituent of practically all fibrous and connective tissues in the animal organism. Mp 177°. $[\alpha]_D^{22}$ +19.4° (H_2O).

▷ LD_{50} (rat, orl) 10700 mg/kg. LZ8930000.

Oxime:

$C_6H_9NO_6$ M 191.140

Mp 151°. $[\alpha]_D$ +14.4° (H_2O).

5-Benzyl:

$C_{13}H_{14}O_6$ M 266.250

$[\alpha]_D^{20}$ −3.0° (5 min.) (c, 2.0 in Py).

5-Pivaloyl: Mp 155-157°. $[\alpha]_D$ +92° → +48° ($CHCl_3$/Py).

2,5-Dipivaloyl: Mp 169-170°. $[\alpha]_D$ +102° → +45° ($CHCl_3$/Py).

α-D-form

1,2-O-Cyclohexylidene: 1,2-O-Cyclohexylidene-α-D-glucurono-6,3-lactone

$C_{12}H_{16}O_6$ M 256.255

Mp 148-149°. $[\alpha]_D^{20}$ +48.1° (c, 2.0 in $CHCl_3$).

α-1,2-O-Cyclohexylidene, 5-benzyl:

$C_{19}H_{22}O_6$ M 346.379

Mp 94-95°. $[\alpha]_D^{20}$ +48.5° (c, 2.0 in $CHCl_3$).

1,2-O-Cyclohexylidene, 5-mesyl: Mp 139-140°. $[\alpha]_D^{20}$ +43.4° (c, 2.1 in $CHCl_3$).

1,2,5-Tri-Ac: 1,2,5-Tri-O-acetyl-α-D-glucurono-6,3-lactone

$C_{12}H_{14}O_9$ M 302.237

Mp 110-112°. $[\alpha]_D^{24}$ +203.6° ($CHCl_3$).

β-D-form

1,2,5-Tri-Ac: 1,2,5-Tri-O-acetyl-β-D-glucurono-6,3-lactone

Mp 194-195°. $[\alpha]_D^{23}$ +84.1° ($CHCl_3$).

α-D-furanose-form

Me glycoside: Methyl α-D-glucofuranosidurono-6,3-lactone

$C_7H_{10}O_6$ M 190.152

Mp 148°. $[\alpha]_D^{23}$ +149° (H_2O), $[\alpha]_D^{23}$ +167° (EtOH).

Me glycoside, 5-benzyl, 2-Me:

$C_{15}H_{18}O_6$ M 294.304

Mp 117-118°. $[\alpha]_D^{20}$ +107.1° (c, 1.0 in $CHCl_3$).

Me glycoside, 2,5-di-Me:

$C_9H_{14}O_6$ M 218.206

Mp 129-130°. $[\alpha]_D^{24}$ +151° (c, 0.4 in $CHCl_3$).

β-D-furanose-form

Me glycoside: Methyl β-D-furanosidurono-6,3-lactone

$C_7H_{10}O_6$ M 190.152

Mp 139°. $[\alpha]_D^{23}$ −59° (H_2O), $[\alpha]_D^{23}$ −61° (EtOH).

Me glycoside, 5-benzyl, 2-Me:

$C_{15}H_{18}O_6$ M 294.304

$[\alpha]_D^{20}$ −7.5° (c, 1.0 in $CHCl_3$).

Me glycoside, 2,5-di-Me:

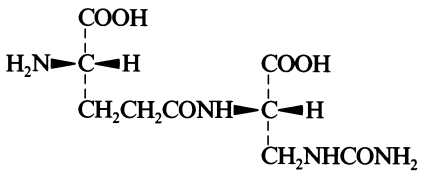
$C_9H_{14}O_6$ M 218.206

Mp 90-91°. $[\alpha]_D^{24}$ −2.3° (c, 0.9 in $CHCl_3$), $[\alpha]_D^{24}$ +2.0° (c, 1.0 inH_2O).

Reeves, R.E. *et al*, *J. Am. Chem. Soc.*, 1940, **62**, 1616.
Teague, R.S., *Adv. Carbohydr. Chem.*, 1954, **9**, 185 (*rev*)
Paulsen, H. *et al*, *Chem. Ber.*, 1966, **99**, 908.
Jeffrey, G.A. *et al*, *J. Chem. Soc., Chem. Commun.*, 1966, 211.
Timpe, W. *et al*, *Carbohydr. Res.*, 1975, **39**, 53.
Koester, R. *et al*, *Justus Liebigs Ann. Chem.*, 1975, 752 (*synth, pmr*)
Keglević, D. *et al*, *Carbohydr. Res.*, 1981, **92**, 51.
Litvak, M.M. *et al*, *Bioorg. Khim.*, 1982, **8**, 1133 (*synth*)
Salem, M.A. *et al*, *Carbohydr. Res.*, 1982, **101**, 255 (*synth*)
Negwer, M., *Organic-Chemical Drugs and their Synonyms*, 6th Ed., Akademie-Verlag, Berlin, 1987, 463.
Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th Ed., Van Nostrand-Reinhold, 1992, GFM000.

γ-Glutamylalbizziine G-10089

3-[(Aminocarbonyl)amino]-N-γ-glutamylalanine, 9CI



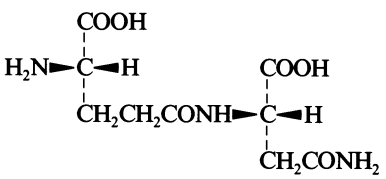
$C_9H_{16}N_4O_6$ M 276.249

L-L-form [38681-06-0]

Isol. from *Acacia georginae* seeds. $[\alpha]_D^{20}$ +0.8° (c, 1.12 in H_2O).

Ito, K. *et al*, *Phytochemistry*, 1972, **11**, 2541 (*isol*)

γ-Glutamylasparagine G-10090



$C_9H_{15}N_3O_6$ M 261.234

L-L-form [38681-07-1]

Isol. from the seeds of *Acacia georginae*.

Ito, K. *et al*, *Phytochemistry*, 1972, **11**, 2541 (*isol*)
Kasai, T. *et al*, *Agric. Biol. Chem.*, 1973, **37**, 685, 2155 (*synth, pmr*)

N^{γ}-Glutamylaspartic acid G-10091

$HOOCCH(NH_2)CH_2CH_2CONHCH(COOH)CH_2COOH$

$C_9H_{14}N_2O_7$ M 262.219

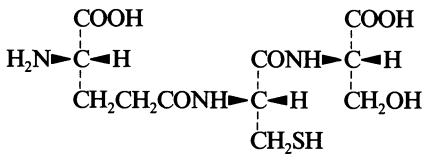
L-L-form [16804-55-0]

Constit. of seeds of *Vigna radiata*, *Vicia faba* and *Acacia georginae*. Mp 192-195° dec. $[\alpha]_D^{18}$ +19.5° (c, 2 in *N* HCl).

Le Quesne, W.J. *et al*, *J. Chem. Soc.*, 1950, 1954 (*synth*)
Taschner, E. *et al*, *Justus Liebigs Ann. Chem.*, 1961, **646**, 127 (*synth*)
Klieger, E. *et al*, *Justus Liebigs Ann. Chem.*, 1963, **661**, 193 (*synth*)
Ishikawa, Y. *et al*, *Agric. Biol. Chem.*, 1967, **31**, 490 (*synth*)
Meguro, H. *et al*, *Agric. Biol. Chem.*, 1968, **32**, 518 (*ord*)
Ito, K. *et al*, *Phytochemistry*, 1972, **11**, 2541 (*occur*)
Kasai, T. *et al*, *Phytochemistry*, 1986, **25**, 679 (*occur*)

γ-Glutamylcysteinylserine G-10092

[144331-30-6]

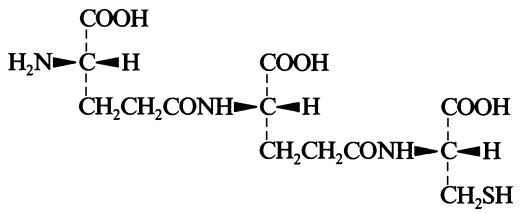


$C_{11}H_{19}N_3O_7S$ M 337.353

Constit. of many grasses incl. *Triticum aestivum*. Glutathione analogue.

Klapheck, S. *et al*, *Bot. Acta*, 1992, **105**, 174 (*isol*)

γ-Glutamyl-γ-glutamylcysteine G-10093



$C_{13}H_{21}N_3O_8S$ M 379.390

L-L-L-form

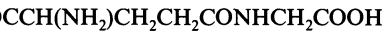
S-*Me:* [102148-93-6]. (*γ-Glutamyl-γ-glutamyl*)-S-*methylcysteine*

$C_{14}H_{23}N_3O_8S$ M 393.417

Constit. of the seeds of *Vigna radiata*.

Kasai, T. *et al*, *Phytochemistry*, 1986, **25**, 679.

N^{γ}-Glutamylglycine G-10094



$C_7H_{12}N_2O_5$ M 204.182

L-form

Cryst. (EtOH aq.). Mp 191-192°. $[\alpha]_D^{20}$ +10.4° (c, 1.154 in H_2O).

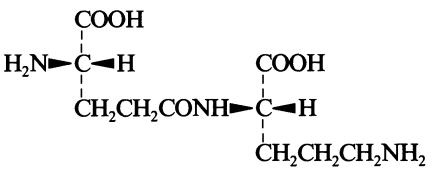
Z-Glu-Gly-OH: Cryst. (Et_2O/pet. ether). Mp 158°.

Taschner, E. *et al*, *Justus Liebigs Ann. Chem.*, 1961, **646**, 127 (*synth*)

Schröder, E. *et al*, *Justus Liebigs Ann. Chem.*, 1962, **656**, 190; 1963, **661**, 193 (*synth*)

Losse, G. *et al*, *Chem. Ber.*, 1963, **96**, 204 (*synth*)

N^{2}-γ-Glutamylornithine G-10095



$C_{10}H_{19}N_3O_5$ M 261.277

L-L-form [56523-61-6]

Constit. of the mushroom *Lentinus edodes*. Also found in human urine. Cryst. + $1H_2O$. Mp 209°. $[\alpha]_D^{25}$ +5.2° (c, 1 in 1*M* HCl).

N^5-*Ac:* [102148-92-5]. N^5-*Acetyl*-N^2-*γ-glutamylornithine*, *9CI*

$C_{12}H_{21}N_3O_6$ M 303.314

Constit. of the seeds of *Vigna radiata*. $[\alpha]_D^{22}$ −6.7° (c, 2.3 in H_2O).

Losse, G. *et al*, *Justus Liebigs Ann. Chem.*, 1964, **676**, 232 (*synth*)

Lou, M.F., *Biochemistry*, 1975, **14**, 3503 (*isol*)

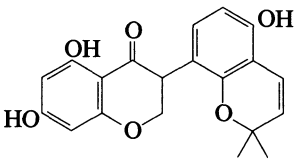
Aoyagi, Y. *et al*, *Agric. Biol. Chem.*, 1982, **46**, 1939 (*isol*)

Roesel, R.A. *et al*, *Clin. Chim. Acta*, 1984, **140**, 133 (*occur*)

Kasai, T. *et al*, *Phytochemistry*, 1986, **25**, 679 (N^5-*Acetyl*-N^2-*glutamylornithine*)

Glyasperin F G-10096

[145382-61-2]



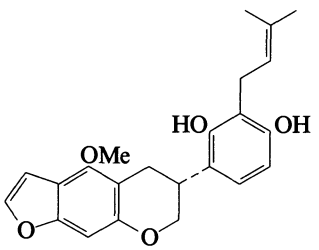
$C_{20}H_{18}O_6$ M 354.359

Isol. from the roots of *Glycyrrhiza aspera*. Needles (Me_2CO). Mp 164-166°. $[\alpha]_D^{20}$ −4.6° (c, 0.5 in $Me_2CO/CHCl_3$).

Zeng, L. *et al*, *Heterocycles*, 1992, **34**, 1813 (*isol, pmr, cmr, struct*)

Glyasperin G G-10097

[145382-62-3]



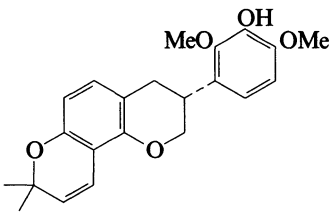
$C_{23}H_{24}O_5$ M 380.440

Isol. from the roots of *Glycyrrhiza aspera*. Amorph. powder. $[\alpha]_D^{20}$ +8.3° (c, 0.19 in $CHCl_3$).

Zeng, L. *et al*, *Heterocycles*, 1992, **34**, 1813 (*isol, pmr, cmr, struct*)

Glyasperin H G-10098

[145382-63-4]



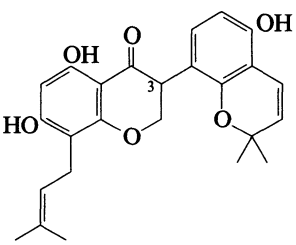
$C_{22}H_{24}O_5$ M 368.429

Isol. from the roots of *Glycyrrhiza aspera*. Prisms (Me_2CO). Mp 58-60°. $[\alpha]_D^{20}$ +8.0° (c, 0.1 in $CHCl_3$).

Zeng, L. *et al*, *Heterocycles*, 1992, **34**, 1813 (*isol, pmr, cmr, struct*)

Glyasperin J G-10099

[145382-65-6]

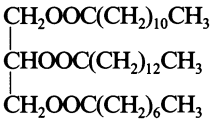


$C_{25}H_{26}O_6$ M 422.477
Isol. from the roots of *Glycyrrhiza aspera*. Amorph. powder. $[\alpha]_D^{20}$ −39° (c, 0.69 in MeOH). C-3 config. not determined.

Zeng, L. *et al*, *Heterocycles*, 1992, **34**, 1813 (*isol, pmr, cmr, struct*)

Glycerol 1-dodecanoate 2-tetradecanoate 3-octanoate G-10100

2-Myristocaprylolaurin. α-Caprylo-β-myristo-α'-laurin



$C_{37}H_{70}O_6$ M 610.956
Isol. from coconut oil. Cryst. Mp 14.1°.

Bomer, A., *Chem.-Ztg.*, 1914, **38**, 844 (*isol*)
Heiduschka, A. *et al*, *J. Prakt. Chem.*, 1928, **120**, 145 (*synth*)

Glycerol 1-(9-octadecenoate) 2-octanoate 3-tetradecanoate G-10101

2-Caprylooleomyristin. α-Oleo-β-caprylo-α'-myristin

$C_{43}H_{80}O_6$ M 693.101
Isol. from palm kernel oil. Cryst. Mp 14.8°.

Heiduschka, A. *et al*, *J. Prakt. Chem.*, 1928, **120**, 145 (*synth*)

Glycerol tri-9,11,13,15-octadecatetraenoate G-10102

Triparinarin

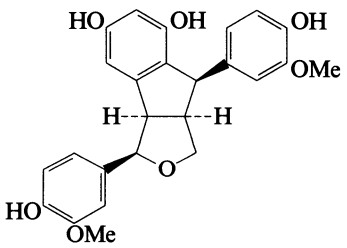
$C_{57}H_{86}O_6$ M 867.303
Isol. from the seed fat of *Parinarium laurinium*. Cryst. Mp 49-50°.

Riley, J.P., *J. Chem. Soc.*, 1951, 291 (*isol*)

Gnetifolin F G-10103

3,3a,8,8a-Tetrahydro-3,8-bis(4-hydroxy-3-methoxyphenyl)-1H-indeno[1,2-c]furan-5,7-diol, 9CI

[140208-77-1]

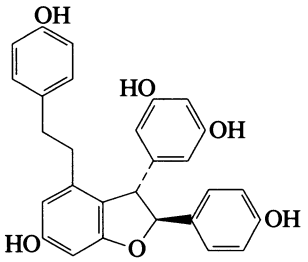


$C_{25}H_{24}O_7$ M 436.460
Constit. of the lianas of *Gnetum parvifolium*. Off-white prisms (C_6H_6/EtOH). Mp 144-148°. Racemic.

Lin, M. *et al*, *Phytochemistry*, 1991, **30**, 4201 (*isol, pmr, cmr, cryst struct*)

Gnetin F G-10104

[105093-75-2]

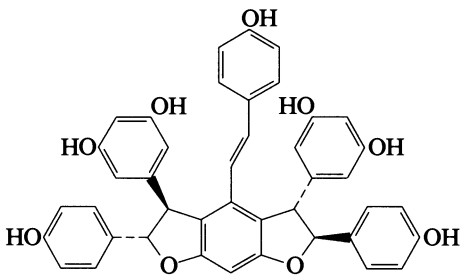


$C_{28}H_{24}O_6$ M 456.494
Constit. of *Welwitschia mirabilis*. Mp 127-128°.

Lins, A.P. *et al*, *Bull. Soc. Chim. Belg.*, 1986, **95**, 737 (*isol, pmr, cmr*)

Gnetin H G-10105

[105132-92-1]

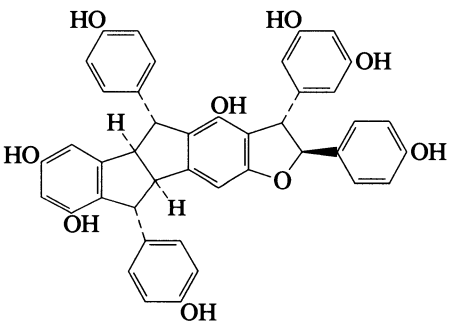


$C_{42}H_{32}O_9$ M 680.709
Constit. of *Welwitschia mirabilis*. Mp 184-186°.

Lins, A.P. *et al*, *Bull. Soc. Chim. Belg.*, 1986, **95**, 737 (*isol, pmr, cmr*)

Gnetin I G-10106

[105093-74-1]



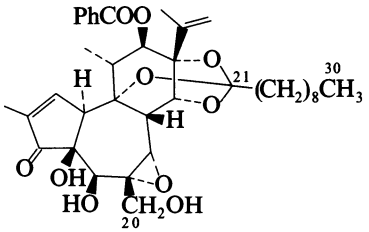
$C_{42}H_{32}O_9$ M 680.709
Constit. of *Welwitschia mirabilis*. Mp 203-205°.

Lins, A.P. *et al*, *Bull. Soc. Chim. Belg.*, 1986, **95**, 737 (*isol, pmr, cmr*)

Gnidilatin G-10107

Updated Entry replacing G-00625

[60195-69-9]



$C_{37}H_{48}O_{10}$ M 652.780

Constit. of *Gnidia latifolia*. Antileukaemic agent. Oil. $[\alpha]_D^{23}$ +52° (c, 0.24 in $CHCl_3$).

20-Hexadecanoyl: [60195-67-7]. ***Gnidilatin 20-palmitalte***

$C_{53}H_{78}O_{11}$ M 891.193

Constit. of *G. latifolia*. Oil. $[\alpha]_D^{23}$ +45° (c, 0.58 in $CHCl_3$).

De(benzoyloxy): [1404-62-2]. ***Simplexin.*** *Wikstrotoxin. Pimelea factor P_1. Dapnopsis factor R_3*

$C_{30}H_{44}O_8$ M 532.673

Isol. from *Pimelea simplex* and *Wikstroemia monticola*. Responsible for St. George disease in cattle.

▷ Toxic. VW7780000.

De(benzoyloxy), 22,23,24,25,26,27-hexadehydro: [99305-57-4]. ***Excoecaria factor B_4.*** *Excoecaria factor O_1. Peddiea factor V_1*

$C_{30}H_{38}O_8$ M 526.625

Constit. of *Excoecaria oppositifolia* and *Peddiea volkensii*.

De(benzoyloxy), 22,23,24,25-tetradehydro: [92219-48-2]. ***Excoecariatoxin.*** *Excoecaria factor A_3. Excoecaria factor B_3*

$C_{30}H_{40}O_8$ M 528.641

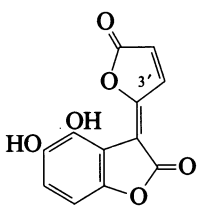
Constit. of *Daphne* sp., *Diarthron* sp., *E.* spp. and *Synaptholepsis* sp. $[\alpha]_D^{23}$ +55° (c, 0.73 in $CHCl_3$).

Kupchan, S.M. *et al, J. Org. Chem.*, 1976, **41**, 3850 (*Gnidilatin*)
Zayed, S. *et al, Experientia*, 1977, **33**, 1554 (*Simplexin*)
Jolad, S.D. *et al, J. Nat. Prod.* (*Lloydia*), 1983, **46**, 675 (*isol, cmr, Simplexin*)
Adolf, W. *et al, Phytochemistry*, 1985, **24**, 2047 (*Peddiea factors*)
Wiriyachitra, P. *et al, Planta Med.*, 1985, 368 (*Excoecaria factor O, Excoecariatoxin*)

Gomphilactone G-10108

5,6-Dihydroxy-3-(5-oxo-2(5H)-furanylidene)-2(3H)-benzofuranone, 9CI

[78570-66-8]



$C_{12}H_6O_6$ M 246.176

Constit. of the fruiting bodies of *Gomphidus glutinosus* and *G. maculatus*. Dark red cryst. (EtOAc/$CHCl_3$). Mp 192-195°.

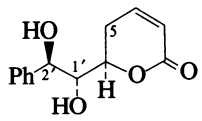
Jaegers, E. *et al, Z. Naturforsch., C*, 1981, **36**, 488 (*isol*)

Goniodiol G-10109

Updated Entry replacing G-00650

6-(1,2-Dihydroxy-2-phenylethyl)-5,6-dihydro-2H-pyran-2-one, 9CI

[96422-52-5]



Absolute configuration

$C_{13}H_{14}O_4$ M 234.251

Constit. of *Goniothalamus* spp. Cryst. ($CHCl_3$). Mp 110°. $[\alpha]_D^{30}$ +75.76° ($CHCl_3$).

1'-Ac: [96422-53-6]. ***Goniodiol monoacetate***

$C_{15}H_{16}O_5$ M 276.288

From *G.* spp. Cryst. ($CHCl_3$/pet. ether). Mp 140°. $[\alpha]_D^{30}$ +145.66° ($CHCl_3$).

Di-Ac: [96405-61-7]. ***Goniodiol diacetate***

$C_{17}H_{18}O_6$ M 318.326

From *G.* spp. Cryst. ($CHCl_3$/pet. ether). Mp 150°. $[\alpha]_D^{30}$ +84.5° ($CHCl_3$).

5β-Hydroxy: [96405-62-8]. ***Goniotriol***

$C_{13}H_{14}O_5$ M 250.251

From *G.* spp. Flakes (MeOH). Mp 173°. $[\alpha]_D^{30}$ +161.11° (Py).

5β-Hydroxy, 2'-Ac: ***8-Acetylgoniotriol***

$C_{15}H_{16}O_6$ M 292.288

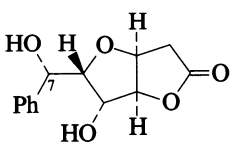
Constit. of *G. giganteus*. Cryst. (EtOAc/hexane). Mp 158-159°. $[\alpha]_D^{22}$ +30° (c, 0.4 in EtOH).

Talapatra, S.K. *et al, Indian J. Chem., Sect. B*, 1985, **24**, 29.
Alkofahi, A. *et al, J. Nat. Prod.* (*Lloydia*), 1989, **52**, 1371 (*cryst struct*)
Fang, X.-P. *et al, J. Chem. Soc., Perkin Trans. 1*, 1990, 1655 (*8-Acetylgoniotriol*)
Fang, X.-P. *et al, J. Nat. Prod.* (*Lloydia*), 1991, **54**, 1034 (*cryst struct*)
Wu, Y.-C. *et al, J. Nat. Prod.* (*Lloydia*), 1991, **54**, 1077 (*cryst struct*)
Shing, T.K.M. *et al, J. Chem. Soc., Perkin Trans. 1*, 1992, 1907 (*synth*)
Wu, Y.-C. *et al, Phytochemistry*, 1992, **31**, 2851 (*isol, pmr, cmr*)
Shing, T.K.M. *et al, Tetrahedron Lett.*, 1992, **33**, 3333 (*synth, abs config*)

Goniofufurone G-10110

3,6-Anhydro-2-deoxy-7-C-phenyl-ido-heptonic acid γ-lactone, 9CI

[129578-06-9]



Relative configuration

$C_{13}H_{14}O_5$ M 250.251

Isol. from the stem bark of *Goniothalamus giganteus*. Cytotoxin. Cryst. (EtOAc/hexane). Mp 152-154°. $[\alpha]_D^{22}$ +9° (c, 0.5 in EtOH).

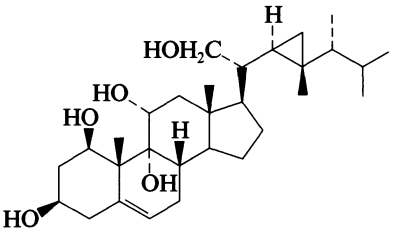
7-Epimer: [136778-39-7]. ***Epigoniofufurone***

$C_{13}H_{14}O_5$ M 250.251

Isol. from the stem bark of *G. giganteus*. Mp 190-192°. $[\alpha]_D^{22}$ +108° (c, 0.2 in EtOH).

Fang, X.P. *et al, J. Chem. Soc., Perkin Trans. 1*, 1990, 1655 (*isol, pmr, cmr, struct*)
Fang, X.P. *et al, J. Nat. Prod.* (*Lloydia*), 1991, **54**, 1034 (*epimer*)
Murphy, P.J. *et al, J. Chem. Soc., Chem. Commun.*, 1992, 1096 (*synth*)
Shing, T.K.M. *et al, Tetrahedron*, 1992, **48**, 8659 (*synth, abs config*)

Gorgost-5-ene-1,3,9,11,21-pentol G-10111

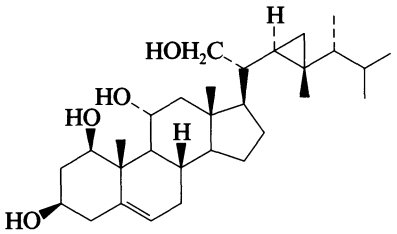


$C_{30}H_{50}O_5$ M 490.722

(1β,3β,9α,11α)-form [147151-92-6]
Constit. of *Lobophytum strictum*. Cryst. Mp 301-303°. $[\alpha]_D$ −33° (c, 0.78 in Py).

Kobayashi, M. *et al*, *J. Chem. Res., Synop.*, 1993, 112 (*isol, pmr, cmr*)

Gorgost-5-ene-1,3,11,21-tetrol G-10112



$C_{30}H_{50}O_4$ M 474.723

(1β,3β,11α)-form [147151-93-7]
Constit. of *Lobophytum strictum*. Cryst. Mp 270-272°. $[\alpha]_D$ −23° (c, 1.2 in Py).

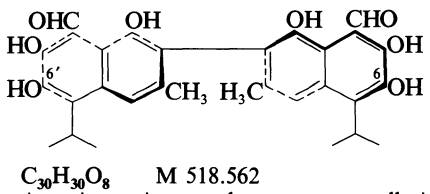
Kobayashi, M. *et al*, *J. Chem. Res., Synop.*, 1993, 112 (*isol, pmr, cmr*)

Gossypol G-10113

Updated Entry replacing G-00672

1,1',6,6',7,7'-Hexahydroxy-3,3'-dimethyl-5,5'-bis(1-methylethyl)-[2,2'-binaphthalene]-8,8'-dicarboxaldehyde, 9CI. Thespesin

[303-45-7]



Absolute configuration

$C_{30}H_{30}O_8$ M 518.562

Atropisomeric compd., occurs naturally in both (+)- and (±)-forms. Tautomeric in polar solvents with intramolecular bis-lactol and bis-ketol tautomers.

▷ DU3100000.

(+)-form [20300-26-9]
Constit. of *Thespesia populnea*. Pale-yellow needles (pet. ether), deep-yellow prisms + Me_2CO (Me_2CO), large elongated plates (Me_2CO aq.). Mp 181-183°. $[\alpha]_D^{19}$ +445° (c, 0.15 in $CHCl_3$).

▷ LD_{50} (mus, ipr) 35 mg/kg. Exp. reprod. effects. DU3101000.

Hexa-Me ether: [17273-30-2].
Mp 242-244°. $[\alpha]_D$ +177° ($CHCl_3$).

(±)-form [40112-23-0]
Toxic component of cotton boll cavities. Used as 0.2% EtOH soln. for detn. of Sn(*IV*); for photometric detn. of Ge. Antispermatogenic props. Male antifertility agent, undergoing widespread trials in the Peoples' Republic of China. Shows anti-HIV activity. Cryst. in three forms (Et_2O, $CHCl_3$, pet. ether). Mp 184°, Mp 199°, Mp 214°.

▷ Adverse effects reported when used therapeutically. Exp. reprod. effects.

Hexa-Ac: [30719-67-6].
Mp 276-279°.

▷ Exp. reprod. effects. DU3103000.

Bisphenylhydrazone: Yellow plates (C_6H_6). Mp 303°.

6-Me ether: [54302-42-0].
$C_{31}H_{32}O_8$ M 532.589
Constit. of the roots of *Gossypium* spp. Yellow cryst. (C_6H_6/hexane). Mp 146-149°.

6,6'-Di-Me ether: [1110-58-3].
$C_{32}H_{34}O_8$ M 546.616
From *G.* spp. Golden-yellow cryst. (C_6H_6/hexane). Mp 181-184°.

Hexa-Me ether: Cryst. in three forms, two colourless and one red. Mp 158-160° (red), Mp 221°, Mp 231-232°.

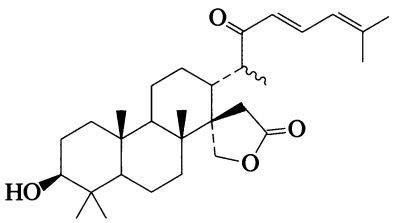
2-Aminoethylsulfonate: [87606-98-2]. *GSN (as disodium salt). Metaphin (as disodium salt)*
Immunosuppressive, antiviral agent.

[62770-38-1, 90141-22-3]

Vioque-Pizarro, A., *Anal. Chim. Acta*, 1951, **5**, 529 (*detn, Sn*)
Adams, R. *et al*, *Chem. Rev.*, 1960, **60**, 555 (*rev*)
Bell, A., *Phytopathology*, 1967, **57**, 759.
Bhakuni, D.S. *et al*, *Experientia*, 1968, **24**, 109 (*isol*)
King, T.J. *et al*, *Tetrahedron Lett.*, 1968, 261 (*isol*)
Wood, A.B. *et al*, *Chem. Ind. (London)*, 1969, 1738 (*conformn*)
Edwards, J.D., *J. Am. Oil Chem. Soc.*, 1970, **47**, 441 (*synth*)
Abou-Donia, M.B. *et al*, *Lipids*, 1970, **5**, 938 (*metab*)
Talipov, S.T. *et al*, *Zh. Anal. Khim.*, 1970, **25**, 1420 (*detn, Ge*)
Stipanovic, R.D. *et al*, *Phytochemistry*, 1975, **14**, 1077.
O'Brien, D.H. *et al*, *J. Org. Chem.*, 1978, **43**, 1105 (*nmr*)
Aripov, U.A. *et al*, *Khim.-Farm. Zh.*, 1983, **17**, 908 (*pharmacol, deriv*)
Sega, S.J. *et al*, *Gossypol*, Plenum Press, N.Y., 1985 (*book*)
Masciadri, R. *et al*, *J. Chem. Soc., Chem. Commun.*, 1985, 1573 (*biosynth*)
Talipov, S.A. *et al*, *Khim. Prir. Soedin.*, 1985, **21**, 835; 1986, **22**, 112; *Chem. Nat. Compd. (Engl. Transl.)*, 797, 108 (*cryst struct*)
Ibragimov, B.T. *et al*, *Khim. Prir. Soedin.*, 1985, **21**, 837; 1986, **22**, 113; *Chem. Nat. Compd. (Engl. Transl.)*, 799, 110 (*cryst struct*)
Wu, D.F. *et al*, *Clin. Pharmacol. Ther. (St. Louis)*, 1986, **39**, 613 (*pharmacol*)
Stipanovic, R.D. *et al*, *J. Chem. Soc., Chem. Commun.*, 1986, 100 (*biosynth*)
Sampath, D.S. *et al*, *J. Chem. Soc., Chem. Commun.*, 1986, 649 (*cd, resoln*)
Lacombe, L. *et al*, *J. Nat. Prod. (Lloydia)*, 1987, **50**, 277 (*cmr*)
Tyson, R., *Chem. Ind. (London)*, 1988, 118 (*hplc, resoln*)
Huang, L. *et al*, *Collect. Czech. Chem. Commun.*, 1988, **53**, 2664 (*cd, abs config*)
Lin, T.-S., *Antimicrob. Agents Chemother.*, 1989, **33**, 2149 (*anti-HIV activity*)
Wu, D.F., *Drugs*, 1989, **38**, 333 (*pharmacol*)
Brzezinski, B. *et al*, *J. Mol. Struct.*, 1990, **239**, 23 (*tautom, ir*)
Marciniak, B. *et al*, *J. Chem. Soc., Perkin Trans. 2*, 1991, 1359 (*pmr, tautom*)
Jaroszewski, J.W. *et al*, *Chirality*, 1992, **4**, 216 (*props*)
Jaroszewski, J.W. *et al*, *Planta Med.*, 1992, **58**, 454 (*occur*)
Martindale, The Extra Pharmacopoeia, 30th edn., Pharmaceutical Press, London, 1993, 1375-2.
Akhila, A. *et al*, *Phytochemistry*, 1993, **33**, 335 (*biosynth*)
Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th Ed., Van Nostrand-Reinhold, 1992, GJM000, GJM025, GJM030, GJM035.

Gouanogenin A G-10114

[147727-65-9]



$C_{30}H_{46}O_4$ M 470.691

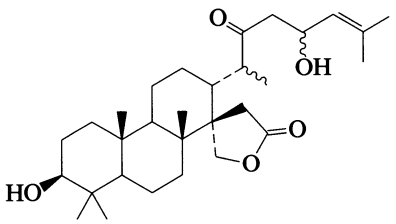
Sapogenin from *Gouania lupuloides*. Cryst. Mp 195-200°.

3-O-[α-L-*Rhamnopyranosyl*-(*1*→*6*)-β-D-*glucopyranoside*]:
[149124-78-7]. ***Gouanoside A***
$C_{42}H_{66}O_{13}$ M 778.976
Constit. of *G. lupuloides*. Amorph. solid.

Kennelly, E.J. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 402 (*isol, pmr, cmr*)

Gouanogenin B G-10115

[147727-66-0]



$C_{30}H_{48}O_5$ M 488.706

Sapogenin from *Gouania lupuloides*. Glass.

3-[O-α-L-*Rhamnopyranosyl*-(*1*→*6*)-β-D-*glucopyranoside*]:
[149124-79-8]. ***Gouanoside B***
$C_{42}H_{68}O_{14}$ M 796.991
Constit. of *G. lupuloides*. Amorph. solid.

Kennelly, E.J. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 402 (*isol, pmr, cmr*)

Graecunin A G-10116

[67621-48-1]

Spirostanol saponin of unknown struct. Constit. of the leaves of *Trigonella foenum-graecum*. Amorph. powder.

Varshney, I.P. *et al*, *J. Indian Chem. Soc.*, 1977, **54**, 1135 (*isol*)
Varshney, I.P. *et al*, *J. Nat. Prod.* (*Lloydia*), 1984, **47**, 44 (*isol*)

Graecunin B G-10117

[67621-49-2]

Spirostanol saponin of unknown struct. Constit. of the leaves of *Trigonella foenum-graecum*. Amorph. powder. Mp 154-156°. $[\alpha]_D$ −46.0° (EtOH).

Varshney, I.P. *et al*, *J. Indian Chem. Soc.*, 1977, **54**, 1135 (*isol*)
Varshney, I.P. *et al*, *J. Nat. Prod.* (*Lloydia*), 1984, **47**, 44 (*isol*)

Graecunin C G-10118

[67621-50-5]

Spirostanol saponin of unknown struct. Constit. of the leaves of *Trigonella foenum-graecum*. Amorph. powder. Mp 147-149°. $[\alpha]_D$ +9.5° (EtOH).

Varshney, I.P. *et al*, *J. Indian Chem. Soc.*, 1977, **54**, 1135 (*isol*)
Varshney, I.P. *et al*, *J. Nat. Prod.* (*Lloydia*), 1984, **47**, 44 (*isol*)

Graecunin D G-10119

[74350-29-1]

Spirostanol saponin of unknown struct. Constit. of the leaves of *Trigonella foenum-graecum*. Amorph. powder. Mp 141-142°. $[\alpha]_D$ +49.0° (EtOH).

Varshney, I.P. *et al*, *J. Nat. Prod.* (*Lloydia*), 1984, **47**, 44.

Graecunin F G-10120

[89899-79-6]

Spirostanol saponin of unknown struct. Constit. of the leaves of *Trigonella foenum-graecum*. Amorph. powder.

Varshney, I.P. *et al*, *J. Nat. Prod.* (*Lloydia*), 1984, **47**, 44 (*isol*)

Graecunin H G-10121

[71123-80-3]

Spirostanol saponin of unknown struct. Constit. of the seeds of *Trigonella foenum-graecum*. Amorph. powder. Mp 181-182°. $[\alpha]_D$ −72.0° (EtOH).

Varshney, I.P. *et al*, *Indian J. Chem., Sect. B*, 1978, **16**, 1134 (*isol*)

Graecunin I G-10122

[71123-81-4]

Spirostanol saponin of unknown struct. Constit. of the seeds of *Trigonella foenum-graecum*. Amorph. powder. Mp 193-194°. $[\alpha]_D$ −84.0° (EtOH).

Varshney, I.P. *et al*, *Indian J. Chem., Sect. B*, 1978, **16**, 1134 (*isol*)

Graecunin J G-10123

[71123-82-5]

Spirostanol saponin of unknown struct. Constit. of the seeds of *Trigonella foenum-graecum*. Amorph. powder. Mp 186-187°. $[\alpha]_D$ −25.2° (EtOH).

Varshney, I.P. *et al*, *Indian J. Chem., Sect. B*, 1978, **16**, 1134 (*isol*)

Graecunin K G-10124

[71123-83-6]

Spirostanol saponin of unknown struct. Constit. of the seeds of *Trigonella foenum-graecum*. Amorph. powder. Mp 195-196°. $[\alpha]_D$ −44° (EtOH).

Varshney, I.P. *et al*, *Indian J. Chem., Sect. B*, 1978, **16**, 1134 (*isol*)

Graecunin L G-10125

[71123-84-7]

Spirostanol saponin of unknown struct. Constit. of the seeds of *Trigonella foenum-graecum*. Amorph. powder. Mp 252-253°.

Varshney, I.P. *et al*, *Indian J. Chem., Sect. B*, 1978, **16**, 1134 (*isol*)

Graecunin M G-10126

Spirostanol saponin of unknown struct. Constit. of the seeds of *Trigonella foenum-graecum*. Amorph. powder.

Varshney, I.P. *et al*, *Indian J. Chem., Sect. B*, 1978, **16**, 1134 (*isol*)

Graecunin N G-10127

[71123-86-9]

Spirostanol saponin of unknown struct. Constit. of the seeds of *Trigonella foenum-graecum*. Amorph. struct. Mp 238-239°. $[\alpha]_D$ −45.7° (EtOH).

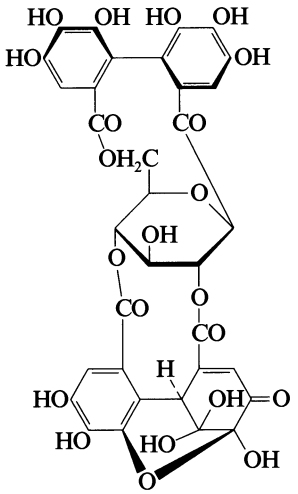
Varshney, I.P. *et al*, *Indian J. Chem., Sect. B*, 1978, **16**, 1134 (*isol*)

Granatin A G-10128

Updated Entry replacing G-00700

1,6-(S)-Hexahydroxydiphenoyl-2,4-(S)-dehydrohexahydroxydiphenoyl-β-D-glucopyranose

[73683-70-2]



$C_{34}H_{24}O_{22}$ M 784.550

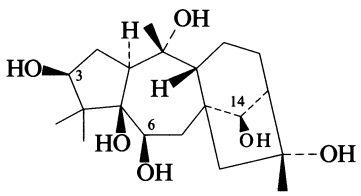
Exists as an equilibrated mixt. of two isomers, the other being the alternative debenzofuranoid ketal. Major tannin constit. isol. from the leaves of *Punica granatum* and *Davidia involucrata*. Yellow amorph. powder + $1H_2O$. $[\alpha]_D^{20}$ +9.5° (c, 0.5 in MeOH).

Haddock, E.A. *et al*, *J. Chem. Soc., Perkin Trans. 1*, 1982, 2535 (*pmr, cmr*)

Tanaka, T. *et al*, *Chem. Pharm. Bull.*, 1990, **38**, 2424 (*struct*)

3,5,6,10,14,16-Grayanotoxanehexol G-10129

Updated Entry replacing G-00739



$C_{20}H_{34}O_6$ M 370.485

(1α,3β,5β,6β,10α,14β,16α)-form [4678-45-9] ***Grayanotoxin III.*** *Andromedol*

Toxic constit. of *Leucothoe grayana*. Cryst. + ½EtOAc. Mp 218° dec. $[\alpha]_D^{15}$ −12°.

▷ Toxic. PB9190000.

14-Ac: [4720-09-6]. ***Grayanotoxin I.*** *Andromedotoxin*

$C_{22}H_{36}O_7$ M 412.522

Toxic agent from *Rhododendron, Kalmia, Leucothoe* and *Lyonia* spp. Cryst. (EtOAc/pentane). Mp 267-270°. $[\alpha]_D^{25}$ −8.8° (c, 2.3 in EtOH).

▷ PB9195000.

6,14-Di-Ac: [30460-34-5]. ***Rhodojaponin IV***

$C_{24}H_{38}O_8$ M 454.559

Constit. of *R.* spp. Cryst. Mp 245-247°.

14-Propanoyl: [23984-17-0]. ***Asebotoxin I***

$C_{23}H_{38}O_7$ M 426.549

Constit. of flowers of *Pieris japonica*. Cryst. Mp 196-198°.

▷ PB9201000.

14-(2S-Hydroxypropanoyl): [75796-14-4]. ***Asebotoxin X***

$C_{23}H_{38}O_8$ M 442.548

Isol. from *P. japonica*.

3-Ketone: [30272-18-5]. *5β,6β,10α,14R,16α-Pentahydroxy-3-grayanotoxanone.* ***Grayanotoxin V***

$C_{20}H_{32}O_6$ M 368.469

Constit. of *L. grayana* leaves. Cryst. (EtOAc). Mp 230-232° dec. $[\alpha]_D$ −61.5° (c, 1 in MeOH).

3-Ketone, 14-Ac: [39012-12-9]. ***Grayanotoxin XIV***

$C_{22}H_{34}O_7$ M 410.506

Constit. of *L. grayana*. Cryst. Mp 242-243°. $[\alpha]_D$ −51° (c, 1 in MeOH).

3,6-Diketone: [59740-27-1]. *5β,10α,14R,16α-Tetrahydroxy-3,6-grayanotoxanedione.* ***Grayanotoxin XVII***

$C_{20}H_{30}O_6$ M 366.453

Constit. of *L. grayana*. Cryst. (MeOH). Mp 268-270° dec. $[\alpha]_D$ −157.3° (c, 1 in MeOH).

14-(2-Hydroxypropanoyl): [76036-12-9]. ***Pieristoxin I***

$C_{23}H_{38}O_8$ M 442.548

Constit. of *P. japonica*. Amorph. powder. May be identical with Asebotoxin X above.

Tallent, W.H. *et al*, *J. Am. Chem. Soc.*, 1957, **79**, 4548 (*struct*)

Kakisawa, H. *et al*, *Tetrahedron Lett.*, 1962, 215 (*struct*)

Hikino, H. *et al*, *Chem. Pharm. Bull.*, 1969, **17**, 854; 1970, **18**, 1071, 2357 (*stereochem, isol*)

Okuno, T. *et al*, *Tetrahedron*, 1970, **26**, 4765 (*isol*)

Narayanan, P. *et al*, *Tetrahedron Lett.*, 1970, 3943 (*cryst struct*)

Hamanaka, N. *et al*, *Chem. Lett.*, 1972, 779 (*isol*)

Gasa, S. *et al*, *Bull. Chem. Soc. Jpn.*, 1976, **49**, 835 (*Grayanotoxin XVII*)

Jawad, F.H. *et al*, *Biomed. Mass Spectrom.*, 1977, **4**, 331 (*ms*)

Masutani, T. *et al*, *Agric. Biol. Chem.*, 1979, **43**, 631 (*cmr*)

Katai, M. *et al*, *Chem. Pharm. Bull.*, 1980, **28**, 3124 (*Pieristoxin I*)

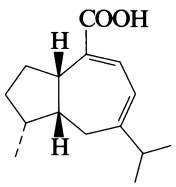
Sakakibara, J. *et al*, *Yakugaku Zasshi*, 1980, **100**, 540; *CA*, **94**, 4132h (*Asebotoxin X*)

Burke, J.W. *et al*, *J. Nat. Prod.* (*Lloydia*), 1990, **53**, 131 (*isol, pmr, cmr*)

Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th Ed., Van Nostrand-Reinhold, 1992, AOO375.

7,9-Guaiadien-14-oic acid G-10130

Updated Entry replacing G-00798



$C_{15}H_{22}O_2$ M 234.338

Struct. revised in 1993. Formerly assigned as 1,3-guaiadien-15-oic acid.

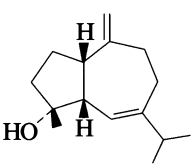
(1β,4α,5β)-form [54928-04-0] ***Jatamansic acid***

Constit. of *Nardostachys jatamansi*. Cryst. (EtOH). Mp 123°. $[\alpha]_D$ −394° ($CHCl_3$).

Rücker, G. *et al*, *Phytochemistry*, 1993, **33**, 141 (*pmr, cmr, cryst struct*)

6,10(14)-Guaiadien-4-ol G-10131

Updated Entry replacing G-00805



$C_{15}H_{24}O$ M 220.354

(*1β,4α,5α*)-*form* [87827-55-2] ***Alismol***
Constit. of *Alisma plantago-aquatica*. Oil. $[\alpha]_D$ +8.7° (c, 0.24 in $CHCl_3$). Struct. revised in 1992.

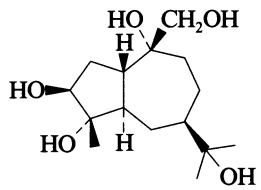
(*1ξ,4α,5α*)-*form* [72646-96-9]
Constit. of *Athanasia dregeana*. Oil. $[\alpha]_D^{24}$ −27.5° (c, 2 in $CHCl_3$).

(*1α,4α,5β*)-*form*
Constit. of *Nephthea chabrolii*. Oil. $[\alpha]_D$ 0° (c, 0.1 in $CHCl_3$).

Ac:
$C_{17}H_{26}O_2$ M 262.391
Constit. of *Lemnalia africana*. Oil. $[\alpha]_D$ 0° (c, 0.1 in $CHCl_3$).

Bohlmann, F. *et al*, *Phytochemistry*, 1979, **18**, 995.
Bowden, B.F. *et al*, *Aust. J. Chem.*, 1980, **33**, 1833 (*isol, pmr, cmr*)
Oshima, Y. *et al*, *Phytochemistry*, 1983, **22**, 183.
Yoshikawa, M. *et al*, *Chem. Pharm. Bull.*, 1992, **40**, 2582 (*cmr, struct*)
Jurek, Y. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 508 (*isol, pmr, cmr*)

3,4,10,11,14-Guaianepentol G-10132



$C_{15}H_{28}O_5$ M 288.383

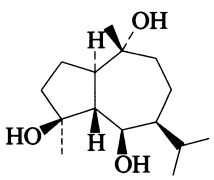
(*1β,3β,4α,5α,10α*)-*form*

11-O-β-D-*Glucopyranoside:* [126054-78-2]. ***Atractyloside B***
Constit. of *Atractylodes lancea*. Powder. $[\alpha]_D^{27}$ −7.8° (c, 1 in MeOH).

2-Ketone, 11-O-β-D-*glucopyranoside:* [126054-77-1]. ***Atractyloside A***
$C_{21}H_{36}O_{10}$ M 448.509
Constit. of *A. lancea*. Needles. Mp 227-230°. $[\alpha]_D^{27}$ +20.0° (c, 0.52 in MeOH aq.).

Yahara, S. *et al*, *Chem. Pharm. Bull.*, 1989, **37**, 2995 (*isol, pmr, cmr, cryst struct*)

4,6,10-Guaianetriol G-10133



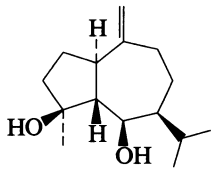
$C_{15}H_{28}O_3$ M 256.384

(*1α,4β,5β,6β,10α*)-*form*
Teuclatriol
Constit. of *Teucrium leucocladum*. Amorph. solid. Mp 50-60°. $[\alpha]_D^{24}$ +16.9° (c, 0.438 in $CHCl_3$).

(*1α,4β,5β,6β,10β*)-*form*
10-Epiteuclatriol
Constit. of *T. leucocladium*. Thick oil. $[\alpha]_D^{24}$ +17.8° (c, 0.29 in $CHCl_3$).

Bruno, M. *et al*, *Phytochemistry*, 1993, **34**, 245 (*isol, pmr, cmr*)

10(14)-Guaiene-4,6-diol G-10134



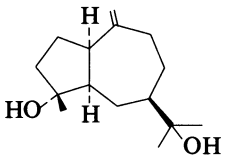
$C_{15}H_{26}O_2$ M 238.369

(*1α,4β,5β,6β*)-*form*
Teucladiol
Constit. of *Teucrium leucocladum*. Thick oil. $[\alpha]_D^{24}$ +2.9° (c, 0.175 in $CHCl_3$).

Bruno, M. *et al*, *Phytochemistry*, 1993, **34**, 245 (*isol, pmr, cmr*)

10(14)-Guaiene-4,11-diol G-10135

Updated Entry replacing G-00842



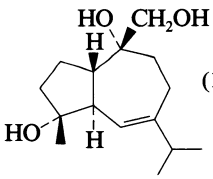
$C_{15}H_{26}O_2$ M 238.369

(*1α,4α,5α*)-*form* [65647-30-5] ***Pleocarpenene***
Constit. of *Chenopodium botrys* and *Pleocarphus revolutus*. Cryst. (Et_2O). Mp 117°. $[\alpha]_D$ −35° (c, 1.2 in MeOH).

11-Ac: [74799-29-4].
$C_{17}H_{28}O_3$ M 280.406
Constit. of *C. botrys*. Oil. $[\alpha]_D$ +20° (c, 0.9 in $CHCl_3$).

Gapalakrishna, E.M. *et al*, *Cryst. Struct. Commun.*, 1977, **6**, 655 (*cryst struct*)
de Pascual, T.-J. *et al*, *Tetrahedron*, 1980, **36**, 371.
Bohlmann, F. *et al*, *J. Nat. Prod.* (*Lloydia*), 1988, **51**, 509 (*isol*)

6-Guaiene-4,10,14-triol G-10136



(1β,4α,5α,10α)-*form*

$C_{15}H_{26}O_3$ M 254.369

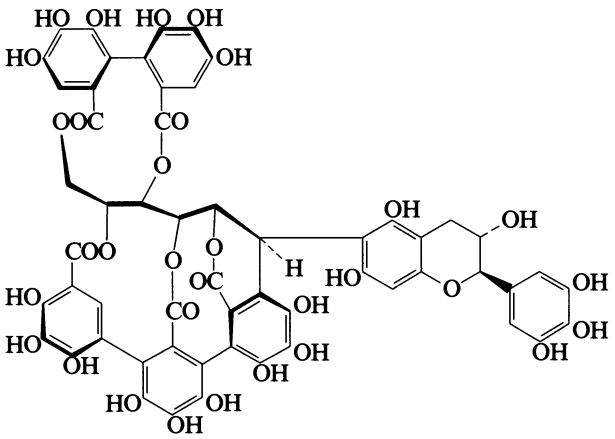
(*1β,4α,5α,10α*)-*form* [147368-35-2] ***Orientalol B***
Constit. of *Alisma orientale*. Oil. $[\alpha]_D^{20}$ 0° (c, 0.83 in MeOH).

(*1β,4α,5α,10β*)-*form* [147368-34-1] ***Orientalol A***
Constit. of *A. orientale*. Oil. $[\alpha]_D^{20}$ 0° (c, 0.83 in MeOH).

Yoshikawa, M. *et al*, *Chem. Pharm. Bull.*, 1992, **40**, 2582 (*isol, pmr, cmr*)

Guajavin B G-10137

[145826-23-9]



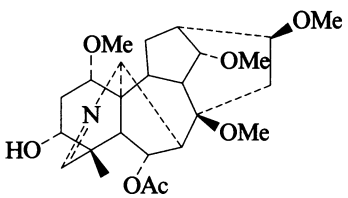
$C_{56}H_{38}O_{32}$ M 1222.897

Isol. from the bark of *Psidium guajava*. Pale brown amorph. powder + $8H_2O$. $[\alpha]_D^{21}$ +27.5° (c, 1.1 in MeOH).

Tanaka, T. *et al*, *Chem. Pharm. Bull.*, 1992, **40**, 2092 (*synth, pmr, cmr*)

Guenerine G-10138

[149998-33-4]



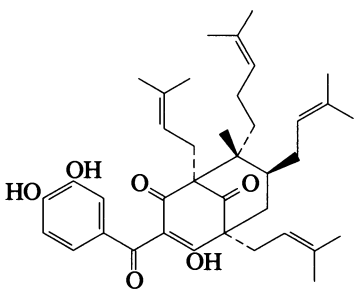
$C_{25}H_{37}NO_7$ M 463.570

Alkaloid from aerial parts of *Delphinium gueneri* (Ranunculaceae). $[\alpha]_D^{22}$ −23.3° (c, 0.1 in MeOH).

Ulubelen, A. *et al*, *Phytochemistry*, 1993, **33**, 213 (*isol, ir, pmr, cmr, ms, struct*)

Guttiferone A G-10139

[147687-34-1]



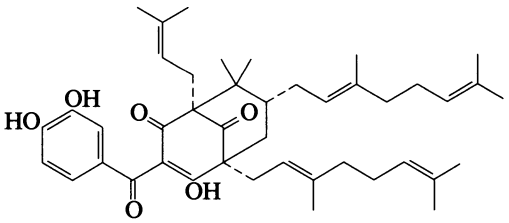
$C_{38}H_{50}O_6$ M 602.809

Constit. of *Symphonia globulifera* and *Garcinia livingstonei*. Shows HIV-inhibitory activity. Yellow oil. $[\alpha]_D$ +34° (c, 1.7 in $CHCl_3$).

Gustafson, K.R. *et al*, *Tetrahedron*, 1992, **48**, 10093 (*isol, pmr, cmr*)

Guttiferone B G-10140

[147687-35-2]



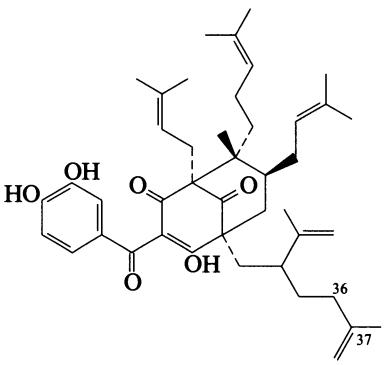
$C_{43}H_{58}O_6$ M 670.928

Constit. of *Symphonia globulifera*. Shows HIV-inhibitory activity. Yellow oil. $[\alpha]_D$ −44° (c, 0.5 in $CHCl_3$).

Gustafson, K.R. *et al*, *Tetrahedron*, 1992, **48**, 10093 (*isol, pmr, cmr*)

Guttiferone C G-10141

[147687-36-3]



$C_{43}H_{58}O_6$ M 670.928

Constit. of *Symphonia globulifera*. Shows HIV-inhibitory activity.

Δ^{36}-*Isomer:* [147687-37-4]. ***Guttiferone D***

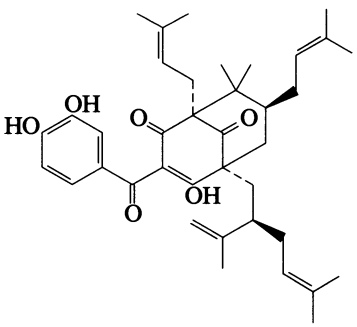
$C_{43}H_{58}O_6$ M 670.928

Constit. of *S. globulifera*. Shows HIV-inhibitory activity.

Gustafson, K.R. *et al*, *Tetrahedron*, 1992, **48**, 10093 (*isol, pmr, cmr*)

Guttiferone E G-10142

[147782-04-5]



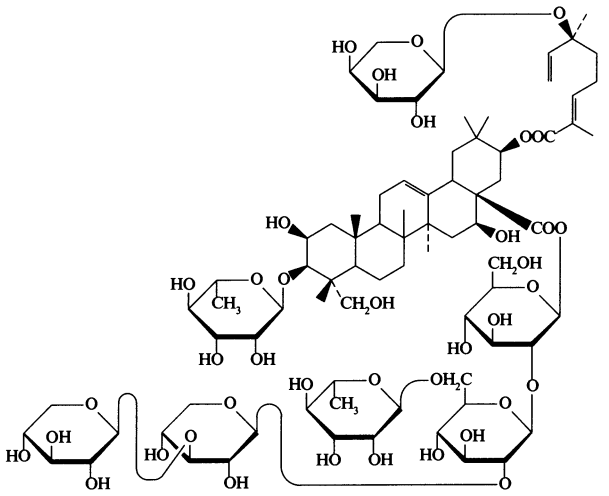
$C_{38}H_{50}O_6$ M 602.809

Constit. of *Garcinia livingstonei* and *Clusia ovalifolia*. Shows HIV-inhibitory activity. Yellow oil. $[\alpha]_D$ +101° (c, 0.5 in $CHCl_3$).

Gustafson, K.R. *et al*, *Tetrahedron*, 1992, **48**, 10093 (*isol, pmr, cmr*)

Gymnocladussaponin D G-10143

[100830-55-5]



$C_{89}H_{142}O_{41}$ M 1868.076

Saponin from fruits of *Gymnocladus chinensis*. Hygroscopic powder + $6H_2O$. Mp 196-200°. $[\alpha]_D^{25}$ −6.4° (c, 1.0 in MeOH). An additional acyl group was isolated but point of attachment is unclear.

Konoshima, T. *et al*, *Chem. Pharm. Bull.*, 1985, **33**, 4732.

Gymnocladussaponin D_1 G-10144

[110172-55-9]

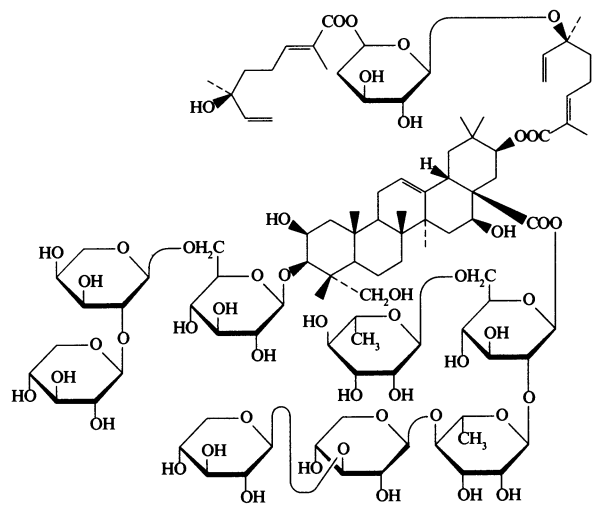
$C_{94}H_{148}O_{41}$ M 1934.179

Struct. not yet fully detd. A complex glycoside closely related to the other gymnocladussaponins but having two 2,6-dimethyl-6-hydroxyoctadienoyl residues. Saponin from fruits of *Gymnocladus chinensis*. Powder + $8H_2O$. $[\alpha]_D^{23}$ +28.0° (c, 1.1 in MeOH).

Konoshima, T. *et al*, *Chem. Pharm. Bull.*, 1987, **35**, 1982.

Gymnocladussaponin F_1 G-10145

[110065-68-4]



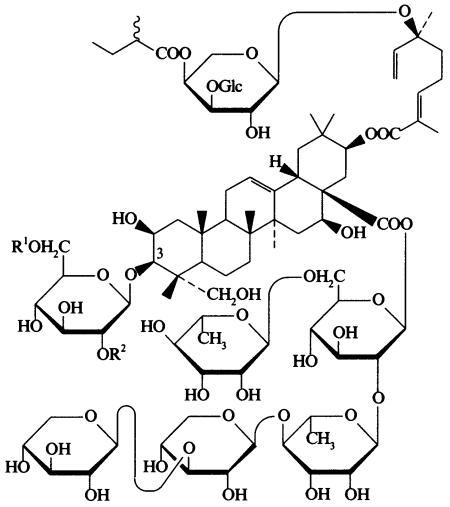
$C_{99}H_{156}O_{49}$ M 2130.292

Saponin from fruits of *Gymnocladus chinensis*. Hygroscopic powder + $7H_2O$. $[\alpha]_D^{23}$ −2.0° (c, 0.71 in MeOH).

Konoshima, T. *et al*, *Chem. Pharm. Bull.*, 1987, **35**, 1982.

Gymnocladussaponin F_2 G-10146

[110065-69-5]



R^1 = H, R^2 = Glc

$C_{96}H_{154}O_{50}$ M 2108.243

Complex glycoside of 2,3,16,21,23-Pentahydroxy-12-oleanen-28-oic acid, P-00667. Saponin from fruits of *Gymnocladus chinensis*. Hygroscopic powder. $[\alpha]_D^{23}$ −3.6° (c, 0.77 in MeOH).

O^3-*Deglycosyl*, O^3-α-*L*-*rhamnopyranosyl:* [110065-67-3].

Gymnocladussaponin E

$C_{90}H_{144}O_{44}$ M 1930.101

Saponin from *G. chinensis*. Hygroscopic powder + $2H_2O$. $[\alpha]_D^{23}$ −5.4° (c, 0.76 in MeOH).

Konoshima, T. *et al*, *Chem. Pharm. Bull.*, 1987, **35**, 1982.

Gymnocladussaponin G G-10147

[108886-09-5]

As Gymnocladussaponin F_2, G-10146 with

R^1 = β-*D*-Xyl(1→2)-α-*L*-Ara, R^2 = H

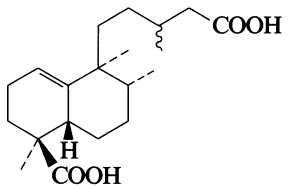
$C_{100}H_{160}O_{53}$ M 2210.332

Saponin from fruits of *Gymnocladus chinensis*. Hygroscopic powder + $1H_2O$. $[\alpha]_D^{27}$ −4.8° (c, 1.2 in MeOH).

Konoshima, T. *et al*, *Chem. Pharm. Bull.*, 1987, **35**, 46.

H

1(10)-Halimene-15,19-dioic acid H-10001



$C_{20}H_{32}O_4$ M 336.470

ent-form

Isol. (as di-Me ester) from seed-pod resin of *Hymenaea courbaril.*

[52591-97-6, 52591-98-7]

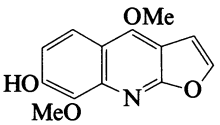
Khoo, S.F. *et al, Tetrahedron*, 1973, **29**, 3379 (*isol*)

Haplopine H-10002

Updated Entry replacing H-00099

*4,8-Dimethoxyfuro[2,3-*b*]quinolin-7-ol, 9CI. 7-Hydroxy-4,8-dimethoxyfuro[2,3-*b*]quinoline*

[5876-17-5]



$C_{13}H_{11}NO_4$ M 245.234

Alkaloid from *Haplophyllum robustum, Zanthoxylum (Fagara) cuspidatum, Monnieria trifolia* and *Melicope lasioneura* (Rutaceae). Mp 203-204°.

O-*β-D-Glucopyranoside:* [74201-15-3]. ***Glycohaplopine***
$C_{19}H_{21}NO_9$ M 407.376
Alkaloid from the aerial parts of *H. perforatum* (Rutaceae). Mp 217-218°. $[\alpha]_D$ −41° (c, 0.516 in Py).

α-*L-Mannopyranoside:* [55740-45-9]. ***Glycoperine***
$C_{19}H_{21}NO_9$ M 407.376
Alkaloid from *H. perforatum* (Rutaceae). Cryst. (MeOH). Mp 224-225°. $[\alpha]_D$ −66.3° (c, 2.32 in Py).

O-[*β-D-Glucopyranosyl(1→3)-α-L-rhamnopyranoside*]: [115345-33-0]. ***Haplosinine***
$C_{25}H_{31}NO_{13}$ M 553.519
Alkaloid from aerial parts of *H. perforatum* (Rutaceae). Mp 227-228°. $[\alpha]_D^{25}$ −74° (c, 2.83 in Py).

O-(*3-Methyl-2-butenyl*): [23417-92-7]. ***7-Isopentenyloxy-γ-fagarine.*** *4,8-Dimethoxy-7-[(3-methyl-2-butenyl)oxy]furo[2,3-*b*]quinoline, 9CI. 8-Methoxy-7-prenyloxydictamnine*
$C_{18}H_{19}NO_4$ M 313.352
Alkaloid from *Ptelea aptera, M. lasioneura* and *Choisya ternata* (biosynth.) (Rutaceae). Cryst. (MeOH). Mp 101-103°.

O-(*4-Hydroxy-3-methyl-2-butenyl*): [58480-57-2]. ***Haplatine.*** *Myrtifoline*
$C_{18}H_{19}NO_5$ M 329.352
Alkaloid from *H. latifolium* (Rutaceae) and *H. myrtifolium*. Cryst. (C_6H_6). Mp 139-140°.

O-(*3-Methyl-2-oxobutyl*): see *Evoxoidine, E-02048*

O-(*2,3-Epoxy-3-methylbutyl*): [24099-25-0]. ***7-(2,3-Epoxy-3-methylbutoxy)-4,8-dimethoxyfuro[2,3-*b*]quinoline,*** **8CI**
$C_{18}H_{19}NO_5$ M 329.352
Alkaloid from the branch ends of *E. xanthoxyloides* (Rutaceae). Cryst. (Et_2O/hexane). Mp 141-144°. $[\alpha]_D$ +13° ($CHCl_3$).

O-(*2,3-Dihydroxy-3-methylbutyl*): see *Evoxine, E-02047*

O-(*2-Hydroxy-3-methyl-3-butenyl*): [6989-38-4]. ***Evodine***†
$C_{18}H_{19}NO_5$ M 329.352
Alkaloid from the leaves of *Evodia xanthoxyloides* (Rutaceae). Mp 153-154°. $[\alpha]_D^{20}$ −3° (c, 1.0 in $CHCl_3$). Abs. config. not detd.

O-(*2-Acetoxy-3-methyl-3-butenyl*): Plates (cyclohexane or EtOH aq.). Mp 126-127°.

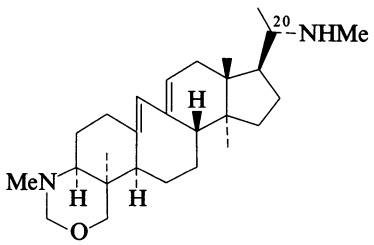
Me ether: see *4,7,8-Trimethoxyfuro[2,3-*b*]quinoline, T-02758*

Prager, R.H. *et al, Aust. J. Chem.*, 1962, **15**, 301 (*Evodine*)
Sidyakin, G.P. *et al, Dokl. Akad. Nauk SSSR*, 1962, **19**, 39; *CA*, **57**, 15170 (*isol, struct, uv, ir*)
Dreyer, D.L., *Phytochemistry*, 1969, **8**, 1013 (*isol, uv, pmr, struct, deriv*)
Dreyer, D.L., *J. Org. Chem.*, 1970, **35**, 2420 (*isol, uv, pmr, struct, deriv*)
Grundon, M.F. *et al, J. Chem. Soc., Perkin Trans. 1*, 1974, 2181 (*biosynth, uv, deriv*)
Akhmedzhanova, V.I. *et al, Khim. Prir. Soedin.*, 1974, **10**, 680; *Chem. Nat. Compd.* (*Engl. Transl.*), 706 (*Glycoperine*)
Nesmelova, E.F. *et al, Khim. Prir. Soedin.*, 1975, **11**, 666; *Chem. Nat. Compd.* (*Engl. Transl.*), 706 (*Haplatine*)
Abdullaeva, K.A. *et al, Khim. Prir. Soedin.*, 1979, **18**, 873; *Chem. Nat. Compd.* (*Engl. Transl.*), 782 (*Glycohaplopine*)
Moulis, C. *et al, Planta Med.*, 1981, **42**, 400 (*isol, uv, pmr, ms*)
Tillequin, F. *et al, J. Nat. Prod.* (*Lloydia*), 1982, **45**, 486 (*isol*)
Rasulova, Kh.A. *et al, Khim. Prir. Soedin.*, 1987, **23**, 876; *Chem. Nat. Compd.* (*Engl. Transl.*), 731 (*Haplosinine*)

Harappamine H-10003

Updated Entry replacing H-00100

[84679-85-6]



$C_{27}H_{44}N_2O$ M 412.657

Alkaloid from the leaves of *Buxus papilosa* (Buxaceae). Gum.

N^{20}-*Formyl:* **N-*Formylharappamine***
$C_{28}H_{44}N_2O_2$ M 440.668
Alkaloid from the leaves of *B. papilosa* (Buxaceae). Amorph. $[\alpha]_D$ +40° (c, 0.50 in $CHCl_3$).

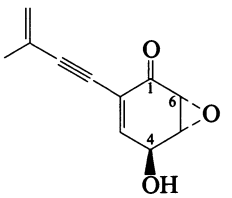
N^{20}-*Formyl,* N-*de-Me:* ***Papillamidine.*** N-*Formyl*-N-*demethylharappamine*
$C_{27}H_{42}N_2O_2$ M 426.641
Alkaloid from the leaves of *B. papilosa* (Buxaceae). Amorph. $[\alpha]_D$ 0° ($CHCl_3$).

N^{20}-*De-Me:* ***N^b-Demethylharappamine***
$C_{26}H_{42}N_2O$ M 398.631
Alkaloid from roots of *B. papilosa* (Buxaceae). Amorph. solid. $[\alpha]_D^{20}$ +12.4° ($CHCl_3$).

Atta-ur-Rahman, *et al*, *Z. Naturforsch., B*, 1984, **39**, 524 (*isol, uv, ir, pmr, cmr, ms, struct*)
Atta-ur-Rahman, *et al*, *Heterocycles*, 1988, **27**, 89 (*Papillamidine*)
Choudhary, M.I. *et al*, *Phytochemistry*, 1988, **27**, 1561 (*N-Formylharappamine*)
Atta-ur-Rahman, *et al*, *J. Nat. Prod.* (*Lloydia*), 1992, **55**, 1063 (*N^b-Demethylharappamine*)

Harveynone H-10004

5-Hydroxy-3-(3-methyl-3-buten-1-ynyl)-7-oxabicyclo[4.1.0] hept-3-en-2-one, 9CI. 5,6-Epoxy-4-hydroxy-2-(3-methyl-3-buten-1-ynyl)-2-cyclohexen-1-one



(+)-*form*

$C_{11}H_{10}O_3$ M 190.198
The name Harveynone originally applied to the (−)-form.

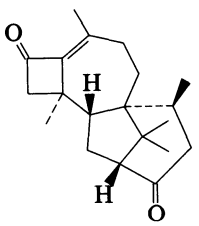
(+)-***form***
Metab. of *Pestalotiopsis theae*. Phytotoxin. Light yellow oil. $[\alpha]_D^{25}$ +147° (c, 0.82 in MeOH).

(−)-***form*** [125555-67-1]
Isol. from *Curvularia harveyi*. Inhibitor of spindle formation in sea urchin eggs.

Kobayashi, A. *et al*, *CA*, 1990, **112**, 115410.
Nagata, T. *et al*, *Biosci., Biotechnol., Biochem.*, 1992, **56**, 810 (*isol, cmr, pmr, bibl*)

Harziandione H-10005

[145525-30-0]

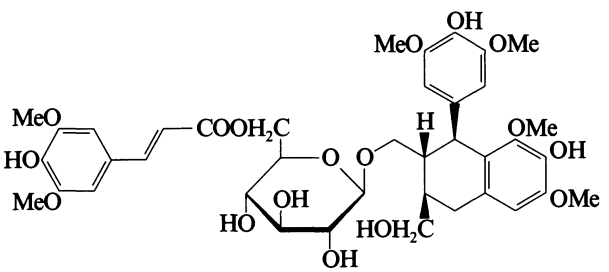


$C_{20}H_{28}O_2$ M 300.440
Metab. of *Trichoderma harzianum*. Cryst. (diisopropyl ether). Mp 74-75°. $[\alpha]_D$ +116.5° (c, 0.9 in $CHCl_3$).

Ghisalberti, E.L. *et al*, *J. Nat. Prod.* (*Lloydia*), 1992, **55**, 1690 (*isol, pmr, cmr, cryst struct*)

Hazaleanin B H-10006

[147742-23-2]

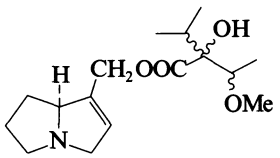


$C_{39}H_{48}O_{17}$ M 788.798
Constit. of the bark of *Fagara rhetza*. Amorph. solid. $[\alpha]_D^{26}$ +7.5° (c, 1.1 in MeOH).

Shibuya, H. *et al*, *Chem. Pharm. Bull.*, 1992, **40**, 2639 (*isol, pmr, cmr, struct*)

Heleurine H-10007

Updated Entry replacing H-00152
Alkaloid C
[488-00-6]



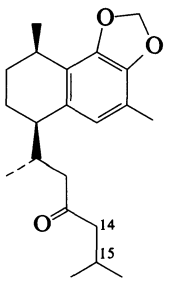
$C_{16}H_{27}NO_4$ M 297.394
Ester of (−)-Supinidine with Heliotric acid. Alkaloid from *Heliotropium indicum* and *H. europaeum* (Boraginaceae). Large transparent prisms. Sol. H_2O. Mp 67-68°. $[\alpha]_D^{16}$ −12.0° (c, 5.15 in EtOH). Discolours rapidly unless v. pure.

▷ EK7879200.

N-*Oxide:* [132886-10-3]. ***Heleurine* N-*oxide***
$C_{16}H_{27}NO_5$ M 313.393
Alkaloid from aerial parts of *H. hirsutissimum* (Boraginaceae). Gummy solid. $[\alpha]_D^{20}$ +19.5° (c, 0.55 in $CHCl_3$).

Culvenor, C.C.J., *Aust. J. Chem.*, 1954, **7**, 287 (*isol*)
Hoque, M. *et al*, *CA*, 1977, **86**, 40191v (*isol*)
Mackay, M.F. *et al*, *Acta Crystallogr., Sect. C*, 1985, **41**, 722 (*cryst struct*)
Constantinidis, T. *et al*, *Phytochemistry*, 1993, **32**, 1335 (*oxide*)

Helioporin B H-10008



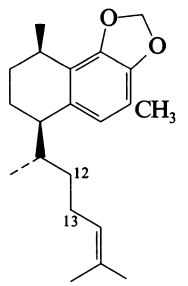
$C_{21}H_{30}O_3$ M 330.466
Constit. of *Heliopora coerula*. Oil. $[\alpha]_D^{24}$ +18.8° (c, 2.55 in $CHCl_3$).

14,15-Didehydro: ***Helioporin C***
$C_{21}H_{28}O_3$ M 328.450
Constit. of *H. coerula*. Oil. $[\alpha]_D^{22}$ +8.3° (c, 0.58 in $CHCl_3$).

Tanaka, J. *et al*, *Tetrahedron*, 1993, **49**, 811 (*isol, pmr, cmr*)

Helioporin D H-10009

[138264-51-4]



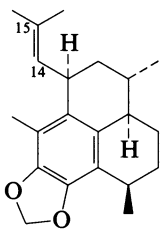
$C_{21}H_{30}O_2$ M 314.467
Constit. of *Heliopora coerula*. Oil. $[\alpha]_D^{23}$ +6.3° (c, 0.36 in $CHCl_3$).

12,13-Didehydro (E-): [138264-54-7]. ***Helioporin G***
$C_{21}H_{28}O_2$ M 312.451
Constit. of *H. coerula*. Oil. $[\alpha]_D^{23}$ −50° (c, 0.69 in $CHCl_3$).

12,13-Didehydro (Z-): [138264-53-6]. ***Helioporin F***
$C_{21}H_{28}O_2$ M 312.451
Constit. of *H. coerula*. Oil. $[\alpha]_D^{23}$ −17° (c, 0.23 in $CHCl_3$).

Tanaka, J. *et al*, *Tetrahedron*, 1993, **49**, 811 (*isol, pmr, cmr*)

Helioporin E H-10010



$C_{21}H_{28}O_2$ M 312.451
Constit. of *Heliopora coerulea*. Oil. $[\alpha]_D^{23}$ +111° (c, 0.55 in $CHCl_3$).

14α,15-Epoxide: ***Helioporin A***
$C_{21}H_{28}O_3$ M 328.450
Constit. of *H. coerulea*. Oil. $[\alpha]_D^{24}$ +65° (c, 4.4 in $CHCl_3$).

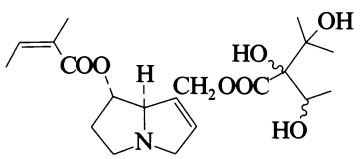
Tanaka, J. *et al*, *Tetrahedron*, 1993, **49**, 811 (*isol, pmr, cmr*)

Heliosupine H-10011

Updated Entry replacing H-00173

Cynoglossophine

[32728-78-2]



$C_{20}H_{31}NO_7$ M 397.467
Ester of heliotridine with angelic (see 2-Methyl-2-butenoic acid, M-00844) and echimidinic acids (see 2,3-Dihydroxy-2-(1-hydroxyethyl)-3-methylbutanoic acid, D-02050). Alkaloid from *Heliotropium supinum* and *Cynoglossum* spp. (Boraginaceae). Shows antitumour activity. Gum. $[\alpha]_D$ −4.3° (c, 5.1 in EtOH).

▷ MH6000000.

Picrate: Cryst. + H_2O. Mp 102-106° (97-100°). Dehydrates to a gum on drying *in vacuo*.

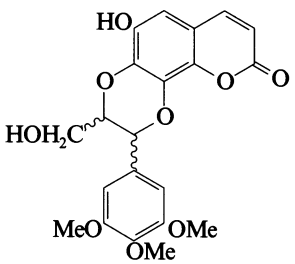
3′-Ac: [31514-30-4]. ***Acetylheliosupine***
$C_{22}H_{33}NO_8$ M 439.505
Minor alkaloid from *C. officinale* and from *Myosotis sylvatica* (Boraginaceae). $[\alpha]_D^{24.5}$ −1.8° (c, 0.567 in EtOH). Acetylated at the secondary OH group. Originally considered to be the 2′-Ac deriv.

3′-Ac, N-*oxide:* ***3′-Acetylheliosupine N-oxide***
$C_{22}H_{33}NO_9$ M 455.504
Alkaloid from aerial parts of *H. hirsutissimum* (Boraginaceae). Oil. $[\alpha]_D^{20}$ +14.9° (c, 0.35 in $CHCl_3$).

Denisova, S.I. *et al*, *Dokl. Akad. Nauk SSSR, Ser. Khim.*, 1953, **93**, 59; *CA*, **49**, 3992h (*isol*)
Culvenor, C.C.J., *Aust. J. Chem.*, 1956, **9**, 512 (*struct*)
Crout, D.H.G., *J. Chem. Soc. C*, 1966, 1968; 1967, 1233 (*biosynth*)
Pedersen, E., *Dan. Tidsskr. Farm.*, 1970, **44**, 287; *CA*, **74**, 72780e (*isol, deriv*)
Pedersen, G. *et al*, *Org. Mass Spectrom.*, 1970, **4**, 249 (*ms*)
Man'ko, I. *et al*, *Khim. Prir. Soedin.*, 1971, **7**, 537; *Chem. Nat. Compd.* (*Engl. Transl.*), 523 (*isol*)
Zalkow, L.H. *et al*, *J. Nat. Prod.* (*Lloydia*), 1979, **42**, 612 (*isol*)
Smith, L.W. *et al*, *J. Nat. Prod.* (*Lloydia*), 1981, **44**, 129 (*occur, deriv*)
Jones, A.J. *et al*, *Aust. J. Chem.*, 1982, **35**, 1173 (*cmr*)
Resch, J.F. *et al*, *Phytochemistry*, 1982, **21**, 2430 (*uv, pmr, cmr, ms, struct, deriv*)
Constantinidis, T. *et al*, *Phytochemistry*, 1993, **32**, 1335 (*3′-Acetylheliosupine-N-oxide*)

Hemidesmin 1 H-10012

[143050-11-7]

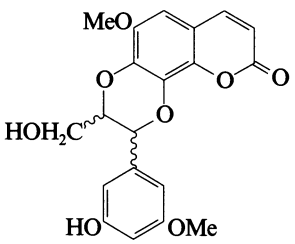


$C_{21}H_{20}O_9$ M 416.384
Isol. from the roots of *Hemidesmus indicus*. Cryst. (EtOAc/MeOH). Mp 232-234°. Racemic.

Das, P.C. *et al*, *Indian J. Chem., Sect. B*, 1992, **31**, 342 (*isol, pmr*)

Hemidesmin 2 H-10013

[143050-12-8]



$C_{20}H_{18}O_8$ M 386.357
Isol. from the roots of *Hemidesmus indicus*. Amorph. Mp 245-250°. Racemic.

Das, P.C. *et al*, *Indian J. Chem., Sect. B*, 1992, **31**, 342 (*isol, pmr*)

3,6,9,12,15,18-Heneicosahexaene H-10014

[127702-72-1]

$H_3C(CH_2CH{=}CH)_6CH_2CH_3$

$C_{21}H_{32}$ M 284.484

All-(Z)-form [29118-86-3]

Isol. from marine algae and plankton. Ir *v* 3020, 715 (C=C) cm^{-1}.

[32779-95-6]

Lee, R.F. *et al*, *Biochim. Biophys. Acta*, 1970, **202**, 386 (*isol, struct, ms*)
Blumer, M. *et al*, *Mar. Biol. (Berlin)*, 1970, **6**, 226 (*isol, struct, uv, ir, ms*)
Wright, J.L.C., *Phytochemistry*, 1980, **19**, 143 (*cmr*)

20-Heptacosenoic acid H-10015

$H_3C(CH_2)_5CH{=}CH(CH_2)_{18}COOH$

$C_{27}H_{52}O_2$ M 408.707

(Z)-form [140197-98-4]

Constit. of the sponge *Amphimedon compressa*.

Carballeira, N.M. *et al*, *J. Nat. Prod. (Lloydia)*, 1992, **55**, 333.

6,9-Heptadecadiene, 9CI H-10016

[81265-03-4]

$H_3C(CH_2)_6CH{=}CHCH_2CH{=}CH(CH_2)_4CH_3$

$C_{17}H_{32}$ M 236.440

Found in Australian formicine ants.

(6Z,9Z)-form [133410-67-0]

Constit. of *Dermatophagoides* sp.

[132833-56-8, 132833-58-0]

Brophy, J.J. *et al*, *Insect Biochem.*, 1982, **12**, 215 (*isol*)
Hutzinger, M.W. *et al*, *J. Org. Chem.*, 1991, **56**, 2918 (*synth, isomers, pmr, cmr, ms*)

9,16-Heptadecadiene-4,6-diyn-3-ol, 8CI H-10017

Updated Entry replacing H-00258

$H_2C{=}CH(CH_2)_5CH{=}CHCH_2C{\equiv}CC{\equiv}CCH(OH)CH_2CH_3$

$C_{17}H_{24}O$ M 244.376

(Z)-form [24587-16-4]

Constit. of *Coreopsis gigantea* and aerial parts of *Diotis maritima*. Oil.

9,10-Epoxide, Ac: [142465-54-1]. ***Ginsenoyne H***

$C_{19}H_{26}O_3$ M 302.413

Isol. from the roots of *Panax ginseng*. Oil. $[\alpha]_D$ −208.9° (c, 2.27 in $CHCl_3$).

Bohlmann, F. *et al*, *Chem. Ber.*, 1969, **102**, 1691.
de Pascual, T.J., *An. Quim.*, 1977, **73**, 1525; *CA*, **89**, 176303c.
Hirakura, K. *et al*, *Phytochemistry*, 1991, **30**, 4053 (*Ginsenoyne H*)

1,9-Heptadecadiene-4,6-diyn-3-one H-10018

Updated Entry replacing H-00260

$H_3C(CH_2)_6CH{=}CHCH_2C{\equiv}CC{\equiv}CCOCH{=}CH_2$

$C_{17}H_{22}O$ M 242.360

(Z)-form [4117-11-7] ***Falcarinone***

Isol. from *Falcaria vulgaris*, *Oenanthe* spp. *Sium sisarum*, *Chaerophyllum temulum*, *Eryngium planum*, *Galinsoga paviflora*, *Hedera helix* etc. Pale-yellow oil.

9,10-Epoxide: see *Panaxydol, P-00102*

Bohlmann, F. *et al*, *Chem. Ber.*, 1961, **94**, 958; 1962, **95**, 1320; 1965, **98**, 3010.

Heptadecanoic acid H-10019

Margaric acid. Daturinic acid

[506-12-7]

$H_3C(CH_2)_{15}COOH$

$C_{17}H_{34}O_2$ M 270.454

Constit. of *Erythrina crista-galli* trunkwood and bark. Common constit. of lipids. Used (with octadecanoic acid) for amino acid sequencing in peptides. Cryst. (pet. ether). Mp 62-63°.

▷ LD_{50} (mus, ivn) 36 mg/kg. MI3850000.

Me ester: [1731-92-6].
$C_{18}H_{36}O_2$ M 284.481
Cryst. (EtOH). Mp 30°. Bp_9 184-187°.

Et ester: [14010-23-2].
$C_{19}H_{38}O_2$ M 298.508
Cryst. (EtOH aq.). Mp 28°. Bp_5 185°.

Amide: [25844-13-7].
$C_{17}H_{35}NO$ M 269.470
Cryst. (EtOH). Mp 108°.

Nitrile: [5399-02-0].
$C_{17}H_{33}N$ M 251.454
Cryst. (EtOH). Mp 34°. Bp_{10} 185°.

Bricas, E. *et al*, *Biochemistry*, 1965, **4**, 2254 (*use*)
Buchta, E. *et al*, *Justus Liebigs Ann. Chem.*, 1966, **698**, 93 (*synth*)
Imamura, H. *et al*, *Gigu Daigaku Nogakubu Kenkyu Hokoku*, 1981, 77; *CA*, **96**, 196524y (*occur*)
Bengsch, E. *et al*, *J. Magn. Reson.*, 1986, **68**, 1 (*cmr*)
Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th Ed., Van Nostrand-Reinhold, 1992, HAS500.

3,6,9-Heptadecatriene, 9CI H-10020

Updated Entry replacing H-00295

[81265-04-5]

$H_3C(CH_2)_6CH{=}CHCH_2CH{=}CHCH_2CH{=}CHCH_2CH_3$

$C_{17}H_{30}$ M 234.424

(All-Z)-form [109877-47-6]

Found in *Semiothisa* sp. and female *Tephrina arenacearria*. Sex pheromone.

3R,4S*-Epoxide:* [109877-48-7]. *3,4-Epoxy-6,9-heptadecadiene. 2-Ethyl-3-(2,5-tridecadienyl)oxirane, 9CI*
Constit. of the sex pheromones of *S.* spp. and *T. arenacearia*.

6R,7S*-Epoxide:* [109877-49-8]. *6,7-Epoxy-3,9-heptadecadiene. 2-(2-Decenyl)-3-(2-pentenyl)oxirane, 9CI*
$C_{17}H_{30}O$ M 250.423
Constit. of the sex pheromones of *S.* spp. and *T. arenacearia*.

9R,10S*-Epoxide:* [109877-51-2]. *9,10-Epoxy-6,9-heptadecadiene. 2-Heptyl-3-(2,5-octadienyl)oxirane, 9CI*
Constit. of sex pheromone of *T. arenacearia*.

[129938-28-9, 130193-58-7, 130194-36-4]

Millar, J.G. *et al*, *J. Chem. Ecol.*, 1987, **13**, 1371; 1990, **16**, 2317 (*isol, synth, ms, pmr, ir*)
Sabharwal, a. *et al*, *J. Indian Chem. Soc.*, 1990, **67**, 173 (*synth*)
Toth, M. *et al*, *Z. Naturforsch., C*, 1991, **46**, 257 (*isol, synth*)

1,8,10-Heptadecatriene-4,6-diyne-3,12-diol H-10021

$H_3C(CH_2)_4CH(OH)CH{=}CHCH{=}CHC{\equiv}CC{\equiv}CCH(OH)CH{=}CH_2$

$C_{17}H_{22}O_2$ M 258.360

(all-E)-form [143966-10-3]

Constit. of *Panax ginseng*.

Lutomski, J. *et al*, *Herba Pol.*, 1991, **37**, 113 (*isol*)

1,9,16-Heptadecatriene-4,6-diyn-3-ol H-10022

Updated Entry replacing H-00310

[88153-63-3]

$H_2C{=}CH(CH_2)_5CH{=}CHCH_2C{\equiv}CC{\equiv}CCH(OH)CH{=}CH_2$

$C_{17}H_{22}O$ M 242.360

(−)-*(Z)-form* [36150-08-0] ***Dehydrofalcarinol***
Isol. from roots of *Artemisia atrata*, *A. borealis* and *Nidorella* sp. Pale-yellow oil. $[\alpha]_D^{23}$ −5.0° (c, 13.9 in Et_2O).

Ac: [78516-98-0].
$C_{19}H_{24}O_2$ M 284.397
Isol. from *Viguiera* sp. Oil.

9,10-Epoxide: [139163-34-1]. *9,10-Epoxy-1,16-heptadecadiene-4,6-diyn-3-ol.* ***Ginsenoyne A***
$C_{17}H_{22}O_2$ M 258.360
Isol. from the root of *Panax ginseng*. Oil. $[\alpha]_D$ −121.9° (c, 1.0 in $CHCl_3$). λ_{max} 201, 230, 243, 256 nm (EtOH).

9,10-Epoxide, Ac: [142449-71-6]. ***Ginsenoyne F***
$C_{19}H_{24}O_3$ M 300.397
Isol. from the roots of *P. ginseng*. Oil. $[\alpha]_D$ −54.2° (c, 2.35 in $CHCl_3$).

[13894-97-8]

Bohlmann, F. *et al*, *Chem. Ber.*, 1966, **99**, 3552 (*isol, ir, pmr, struct*)
Bohlmann, F. *et al*, *Phytochemistry*, 1981, **20**, 113 (*isol*)
Harada, R. *et al*, *Phytochemistry*, 1982, **21**, 2009 (*isol*)
Wang, Y. *et al*, *Phytochemistry*, 1990, **29**, 3101 (*isol, struct, bibl, pmr, cmr*)
Hirakura, K. *et al*, *Phytochemistry*, 1991, **30**, 3327, 4053 (*isol, ir, uv, ms, pmr, cmr*)

8-Heptadecene-4,6-diyne-3,10-diol H-10023

$H_3C(CH_2)_6CH(OH)CH{=}CHC{\equiv}CC{\equiv}CCH(OH)CH_2CH_3$

$C_{17}H_{26}O_2$ M 262.391

(E)-form

10-Ac: [143966-09-0]. *10-Acetoxy-8-heptadecene-4,6-diyn-3-ol*
$C_{19}H_{28}O_3$ M 304.428
Constit. of *Panax gingseng*.

Lutomski, J. *et al*, *Herba Pol.*, 1991, **37**, 113 (*isol*)

1-Heptadecene-4,6-diyne-3,9,10-triol, 9CI H-10024

Updated Entry replacing H-00331

Panaxytriol. *Falcarintriol*

[87005-03-6]

$H_2C{=}CHCH(OH)C{\equiv}CC{\equiv}CCH_2CH(OH)CH(OH)(CH_2)_6CH_3$

$C_{17}H_{26}O_3$ M 278.391
Isol. from *Panax ginseng*. Also from *P. quinquefolium*. Shows antitumour activity. Needles (H_2O).

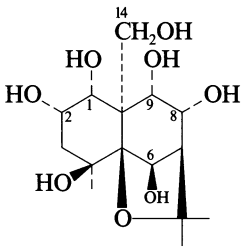
10-Ac: [122855-48-5]. ***10-Acetylpanaxytriol***
$C_{19}H_{28}O_4$ M 320.428
Constit. of the roots of *P. ginseng*. Cytotoxic.

10-Me ether: [133921-57-0]. *10-Methoxy-1-heptadecene-4,6-diyne-3,9-diol, 9CI. PQ 1*
$C_{18}H_{28}O_3$ M 292.417
Isol. from *P. quinquefolium*. Shows some antileukaemic props. Oil. $[\alpha]_D$ −21.7° (c, 0.58 in MeOH).

Matsunaga, H. *et al*, *Chem. Pharm. Bull.*, 1989, **37**, 1279 (*isol, uv, pmr, cmr, synth*)
Kim, S.I. *et al*, *Yakhak Hoechi*, 1989, **33**, 118; *CA*, **111**, 146363 (*10-Acetyl panaxytriol*)
Fujimoto, Y. *et al*, *Chem. Pharm. Bull.*, 1991, **39**, 521 (*isol, ms, cmr, struct*)

1,2,4,6,8,9,14-Heptahydroxydihydro-β-agarofuran H-10025

Updated Entry replacing H-00379



(1α,2α,4β,6β,8α,9α)-*form*

$C_{15}H_{26}O_8$ M 334.366

(1α,2α,4β,6β,8α,9α)-form

9-Benzoyl, 1,2,6,8,14-penta-Ac: [116159-73-0]. ***Celangulin***
$C_{32}H_{40}O_{14}$ M 648.660
Constit. of *Celastrus angulatus*. Insect antifeedant. Amorph. powder.

1,9-Dibenzoyl, 2,6,8,14-tetra-Ac: ***2α,6β,8α,14-Tetraacetoxy-1α,9α-dibenzoyloxy-4β-hydroxydihydro-β-agarofuran***
$C_{37}H_{42}O_{14}$ M 710.730
Constit. of *Maytenus canariensis*. Amorph. solid. Mp 50-52°.

9-Benzoyl, 14-(2-methylbutanoyl), 1,2,6,8-tetra-Ac: ***Celangulin IV***
$C_{35}H_{46}O_{14}$ M 690.740
Constit. of *C. angulatus*. Amorph. powder. $[\alpha]_D^{18}$ +7.6° (c, 0.893 in $CHCl_3$).

8-Ketone, 1,9-dibenzoyl, 2,6,14-tri-Ac: [111950-43-7]. ***Triptofordin E***
$C_{35}H_{38}O_{13}$ M 666.677
Isol. from *Tripterygium wilfordii*. Granules (MeOH). Mp 116-118°. $[\alpha]_D^{27}$ +47.4° (c, 0.25 in MeOH).

8-(3-Pyridinecarbonyl), 9-benzoyl, 2-(2-methylpropanoyl), 1,14-di-Ac: ***1,14-Diacetoxy-9-benzoyloxy-4,6-dihydroxy-2-isobutanoyloxy-8-nicotinoyloxydihydro-β-agarofuran***
$C_{36}H_{43}NO_{13}$ M 697.735
Alkaloid from *C. angulatus* (Celastraceae). Insect antifeedant. Amorph. $[\alpha]_D^{20}$ +43.4° (c, 0.52 in MeOH).

8-Ketone, 9-benzoyl, 1,2,6,14-tetra-Ac:
$C_{30}H_{36}O_{13}$ M 604.607
Constit. of *M. canariensis*. Amorph. solid ($CHCl_3$). Mp 117-118°. $[\alpha]_D^{25}$ −6.8° (c, 0.63 in $CHCl_3$).

8-Ketone, 1,9-dibenzoyl, 2,6,14-tri-Ac:
$C_{35}H_{38}O_{13}$ M 666.677
Constit. of *M. canariensis*. Oil. $[\alpha]_D^{25}$ +11.6° (c, 0.68 in $CHCl_3$).

1,8,9-Tribenzoyl, 2,6,14-tri-Ac:
$C_{42}H_{44}O_{14}$ M 772.801
Constit. of *M. canariensis*. Oil. $[\alpha]_D^{25}$ +49.0° (c, 0.68 in $CHCl_3$).

(1α,2α,4β,6β,8α,9β)-form

2,8,9-Tribenzoyl, 1,6,14-tri-Ac: [111950-73-3]. ***8α-Benzoyloxyacetylpringleine***
$C_{42}H_{44}O_{14}$ M 772.801
Isol. from *C. pringlei*. Amorph. powder. Mp 98°.

2-(3-Furoyl), 8,14-bis(2-methylpropanoyl), 9-(3-pyridinecarbonyl), 1,6-di-Ac:
$C_{38}H_{47}NO_{15}$ M 757.787
Constit. of *C. angulatus*. Amorph. $[\alpha]_D^{20}$ +45.8° (c, 0.52 in MeOH).

9-(3-Furoyl), 2,14-bis(2-methylpropanoyl), 1,6,8-tri-Ac:
$C_{34}H_{46}O_{15}$ M 694.728
Constit. of *C. gemmatus*. Amorph. powder. $[\alpha]_D^{25}$ −22° (c, 0.5 in $CHCl_3$).

8,9-Bis-(3-furancarbonyl), 14-(2-methylbutanoyl), 1,2,6-tri-Ac: ***Celangulin II***
$C_{36}H_{44}O_{16}$ M 732.734
Constit. of *C. angulatus*. Amorph. powder. $[\alpha]_D^{18}$ −28.2° (c, 0.865 in $CHCl_3$).

9-Benzoyl, 14-(2-methylbutanoyl), 1,2,6,8-tetra-Ac: ***Celangulin III***
$C_{35}H_{46}O_{14}$ M 690.740
Constit. of *C. angulatus*. Amorph. powder. $[\alpha]_D^{18}$ −2.8° (c, 0.750 in $CHCl_3$).

2,6,8-Tri-(3-pyridinecarbonyl),9-benzoyl, 1,14-di-Ac: ***Cangorin A***
$C_{44}H_{43}N_3O_{14}$ M 837.835
Constit. of *Maytenus ilicifolia*. Amorph. solid. Mp 136-140°. $[\alpha]_D$ +45.7° (c, 0.37 in $CHCl_3$).

1,2,8-Tri-(3-pyridinecarbonyl), 6,9-dibenzyl, 14-Ac: ***Cangorin B***
$C_{49}H_{45}N_3O_{14}$ M 899.906
Constit. of *M. ilicifolia*. Amorph. solid. Mp 137-141°. $[\alpha]_D$ +77.3° (c, 0.33 in $CHCl_3$).

2,8-Di(3-pyridinecarbonyl),6,9-dibenzoyl,1,14-di-Ac: ***Cangorin C***
$C_{45}H_{44}N_2O_{14}$ M 836.848
Constit. of *M. ilicifolia*. Amorph. solid. Mp 122-126°. $[\alpha]_D$ −45.0° (c, 0.36 in $CHCl_3$).

2,8-Di-(3-pyridinecarbonyl),9-benzoyl,1,6,14-tri-Ac: ***Cangorin D***
$C_{40}H_{42}N_2O_{14}$ M 774.777
Constit. of *M. ilicifolia*. Amorph. solid. Mp 123-138°. $[\alpha]_D$ +11.2° (c, 0.2 in $CHCl_3$).

1,2-Di-(3-pyridinecarbonyl), 8,9-dibenzoyl, 6,14-di-Ac: ***Cangorin E***
$C_{45}H_{44}N_2O_{14}$ M 836.848
Constit. of *M. ilicifolia*. Amorph. solid. Mp 103-108°. $[\alpha]_D$ +26.3° (c, 0.19 in $CHCl_3$).

(1α,2α,4β,6β,8β,9α)-form

2-(2-Methylpropanoyl), 8-(3-pyridinecarbonyl), 9-benzoyl, 1,14-di-Ac:
$C_{36}H_{43}NO_{13}$ M 697.735
Constit. of *C. angulatus*. Amorph. $[\alpha]_D^{20}$ +43.4° (c, 0.52 in MeOH).

9-Benzoyl, 8,14-bis(methylpropanoyl), 1,2-di-Ac: ***Angulatin A***
$C_{34}H_{46}O_{13}$ M 662.730
Constit. of *C. angulatus*. Cryst. (MeOH aq.). Mp 199-200°. $[\alpha]_D^{15}$ −8.13° (c, 0.369 in $CHCl_3$).

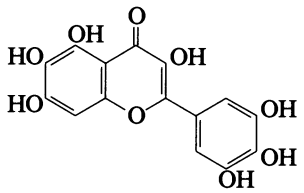
9-Benzoyl, 2,14-bis-(2-methylpropanoyl), 1,8-di-Ac:
$C_{34}H_{46}O_{13}$ M 662.730
Constit. of *C. gemmatus*. Amorph. powder. $[\alpha]_D^{25}$ −12.5° (c, 0.48 in $CHCl_3$).

Takaishi, Y. *et al*, *Phytochemistry*, 1987, **26**, 2581 (*Triptofordin E*)
Sánchez, A.A. *et al*, *Phytochemistry*, 1987, **26**, 2631 (*Benzoyloxyacetylpringleine*)
Wakabayashi, N. *et al*, *J. Nat. Prod.* (*Lloydia*), 1988, **51**, 537 (*Celangulin*)
González, A.G. *et al*, *Phytochemistry*, 1989, **28**, 173.
Wang, M.T. *et al*, *Chin. Chem. Lett.*, 1991, **2**, 537 (*Angulatin A*)
Ji-Kai, L. *et al*, *Phytochemistry*, 1991, **30**, 3437.
Maotian, W. *et al*, *Phytochemistry*, 1991, **30**, 3931 (*Angulatin A*)
Wu, W.J. *et al*, *J. Nat. Prod.* (*Lloydia*), 1992, **55**, 1294 (*Celangulins*)
Yonggiang, T. *et al*, *Phytochemistry*, 1992, **31**, 1281 (*deriv*)
Itokawa, H. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 1479 (*cangorins*)
González, A.G. *et al*, *Tetrahedron*, 1993, **49**, 6637 (*derivs*)

3,3′,4′,5,5′,6,7-Heptahydroxyflavone H-10026

Updated Entry replacing H-00394

3,5,6,7-Tetrahydroxy-2-(3,4,5-trihydroxyphenyl)-4H-1-benzopyran-4-one, 9CI. 3′,4′,5,5′,6,7-Hexahydroxyflavonol. 6-Hydroxymyricetin



$C_{15}H_{10}O_9$ M 334.239

3,6-Di-Me ether: [101021-26-5]. *3′,4′,5,5′,7-Pentahydroxy-3,6-dimethoxyflavone*
$C_{17}H_{14}O_9$ M 362.292
Isol. from *Alluaudia ascendens* and *Gutierrezia* spp. No phys. props. reported.

4′,6-Di-Me ether: [71328-59-1]. *3,3′,5,5′,7-Pentahydroxy-4′,6-dimethoxyflavone*
$C_{17}H_{14}O_9$ M 362.292
Isol. from *A. ascendens*. No phys. props. reported.

3,3′,5′-Tri-Me ether: [72357-38-1]. *4′,5,6,7-Tetrahydroxy-3,3′,5′-trimethoxyflavone*
$C_{18}H_{16}O_9$ M 376.319
Isol. from *Gardenia fosbergii*. Mp 229-232°.

3,3′,6-Tri-Me ether: [74517-68-3]. *3′,4′,5,7-Tetrahydroxy-3,5′,6-trimethoxyflavone*
$C_{18}H_{16}O_9$ M 376.319
Isol. from *A.* spp., *Decarya* sp. and *Gutierrezia microcephala*. No phys. props. reported.

3,4′,6-Tri-Me ether: [71325-91-2]. *3′,5,5′,7-Tetrahydroxy-3,4′,6-trimethoxyflavone*
$C_{18}H_{16}O_9$ M 376.319
Isol. from *A.* spp., *D.* sp. and *G. grandis*. No phys. props. reported.

3′,5′,6-Tri-Me ether, 3-O-β-D-glucopyranoside: [67963-64-8].
$C_{24}H_{26}O_{14}$ M 538.461
Isol. from *Tillandsia usneoides*.

3′,4′,6-Tri-Me ether: [139889-56-8]. *3,5,5′,7-Tetrahydroxy-3′,4′,6-trimethoxyflavone*
$C_{18}H_{16}O_9$ M 376.319
Isol. from *Premna oligotricha*. Amorph. solid. Mp 253°.

3,3′,4′,6-Tetra-Me ether: [30250-30-7]. *3′,5,7-Trihydroxy-3,4′,5′,6-tetramethoxyflavone, 8CI*
$C_{19}H_{18}O_9$ M 390.346
Constit. of stem and thorns of *Decarya madagascariensis* and aerial parts of *Artemisia ludoviciana* and from *Gutierrezia microcephala*. Yellow needles (MeOH). Mp 163.5-164.5°.

3′,4′,5′,6-Tetra-Me ether, tri-Ac: [30429-35-7].
Cryst. (Et_2O). Mp 126-127°.

3,3′,5′,6-Tetra-Me ether: [63296-16-2]. *4′,5,7-Trihydroxy-3,3′,5′,6-tetramethoxyflavone*
$C_{19}H_{18}O_9$ M 390.346
Isol. from *Tillandsia usneoides* and *Gutierrezia* sp. Yellow cryst. (MeOH).

3,3′,5′,6-Tetra-Me ether, 7-O-β-D-glucopyranoside: [67963-63-7].
$C_{25}H_{28}O_{14}$ M 552.488
Isol. from *T. usneoides*.

3,4′,6,7-Tetra-Me ether: [58840-32-7]. *3′,5,5′-Trihydroxy-3,4′,6,7-tetramethoxyflavone*
$C_{19}H_{18}O_9$ M 390.346
Isol. from *Eremophila fraseri* and *Gardenia cramerii*. Yellow plates (C_6H_6/EtOH). Mp 176-178°.

3,3′,4′,7-Tetra-Me ether: [34211-16-0]. *3′,5,6-Trihydroxy-3,4′,5′,7-tetramethoxyflavone.* ***Apuleitrin***

$C_{19}H_{18}O_9$ M 390.346
Isol. from *Apuleia leiocarpa*. Yellow plates (EtOAc/pet. ether). Mp 175-177°.

3',4',6,7-Tetra-Me ether: [139889-55-7]. *3,5,5'-Trihydroxy-3',4',6,7-tetramethoxyflavone*
$C_{19}H_{18}O_9$ M 390.346
Isol. from *P. oligotricha*. Yellow needles (MeOH). Mp 211°.

3,4',5',6,7-Penta-Me ether: [72357-40-5]. *3',5-Dihydroxy,3,4',5',6,7-pentamethoxyflavone*
$C_{20}H_{20}O_9$ M 404.373
Constit. of *Centipeda orbicularis* and *Gardenia fosbergii*. Also isol. from *Cleome* spp. Yellow cryst. Mp 217-218°.

3,3',5',6,7-Penta-Me ether: [76444-62-7]. *4',5-Dihydroxy-3,3',5',6,7-pentamethoxyflavone*. ***Murrayanol***
$C_{20}H_{20}O_9$ M 404.373
Isol. from fruit of *Murraya omphalocarpa*. Yellow needles (MeOH). Mp 236-237°.

3,3',4',5,7-Penta-Me ether: [34318-34-8]. *3',6-Dihydroxy-3,4',5,5',7-pentamethoxyflavone*. ***Apuleirin***
$C_{20}H_{20}O_9$ M 404.373
Isol. from the heartwood of *Apuleia leiocarpa*. Yellow needles (CCl_4/pet. ether). Mp 218-220°.

3,3',5,5',6,7-Hexa-Me ether: [77390-47-7]. *4'-Hydroxy-3,3',5,5',6,7-hexamethoxyflavone*
$C_{21}H_{22}O_9$ M 418.399
Isol. from leaves of *Murraya paniculata*. Cryst. (MeOH/$CHCl_3$). Mp 245°.

3,3',4',5',6,7-Hexa-Me ether: [17245-31-7]. *5-Hydroxy-3,3',4',5',6,7-hexamethoxyflavone*
$C_{21}H_{22}O_9$ M 418.399
Isol. from *Centipeda orbicularis* and *C. amplyocarpa*. Mp 176-178°.

3,3',4',5',6,7-Hexa-Me ether, Ac: [17245-32-8].
Mp 183-184° (176-178°).

Hepta-Me ether: [17245-30-6]. *3,3',4',5,5',6,7-Heptamethoxyflavone*
$C_{22}H_{24}O_9$ M 432.426
Isol. from *M. omphalocarpa* and *M. paniculata*. Needles (MeOH). Mp 156-157° (153-154°).

3,3',5-Tri-Me, 4',5':6,7-bis(methylene)ether: [132185-75-2]. *3,3',5-Trimethoxy-4',5':6,7-bis(methylenedioxy)flavone*
$C_{20}H_{16}O_9$ M 400.341
Isol. from *Polygonum minus*. Needles. Mp 252-253°.

Jefferies, P.R. *et al*, *Aust. J. Chem.*, 1962, **15**, 532 (*3',5,5'-Trihydroxy-3,4',6,7-tetramethoxyflavone*)
Dreyer, D.L., *J. Org. Chem.*, 1968, **33**, 3574 (*synth, uv, pmr*)
Nakayama, M. *et al*, *Bull. Chem. Soc. Jpn.*, 1970, **43**, 3276 (*synth, derivs*)
Braz Filho, R. *et al*, *Phytochemistry*, 1971, **10**, 2433 (*Apuleitrin*)
Kalra, A.J. *et al*, *Indian J. Chem., Sect. B*, 1977, **15**, 393 (*isol, synth, Apuleirin*)
Lewis, D.S. *et al*, *Phytochemistry*, 1977, **16**, 1114 (*4',5,7-Trihydroxy-3,3',5',6-tetramethoxyflavone*)
Williams, C.A., *Phytochemistry*, 1978, **17**, 729 (*glycosides*)
Gunatilaka, H.A.L. *et al*, *J. Chem. Res., Synop.*, 1979, 216 (*derivs*)
Bohlmann, F. *et al*, *Phytochemistry*, 1979, **18**, 1067, 1069 (*isol, pmr, ms*)
Rabesa, Z.A. *et al*, *Phytochemistry*, 1979, **18**, 360; 1980, **19**, 710 (*isol, uv, pmr*)
Wu, T.S. *et al*, *Phytochemistry*, 1980, **19**, 2227 (*isol, uv, ir, pmr, ms*)
Quijano, L. *et al*, *Phytochemistry*, 1980, **19**, 2439 (*Agecorynin D*)
de Silva, L.B. *et al*, *Phytochemistry*, 1980, **19**, 2794 (*isol, uv, pmr, ms*)
Liu, Y.-L. *et al*, *Phytochemistry*, 1982, **21**, 209 (*isol*)
Sharma, P.K. *et al*, *Acta Chim. Hung.*, 1983, **112**, 27 (*isol, synth*)
Fang, N. *et al*, *Phytochemistry*, 1985, **24**, 2693; 1986, **26**, 235, 927 (*derivs*)
Horie, T. *et al*, *Chem. Pharm. Bull.*, 1989, **37**, 1216 (*synth, derivs*)
Urones, J.G. *et al*, *Phytochemistry*, 1990, **29**, 3687 (*Bismethylene ether*)
Habtemarium, S. *et al*, *Z. Naturforsch., B*, 1992, **47**, 144 (*3,5,5'-Trihydroxy-3',4',6,7-tetramethoxyflavone, 3,5,5',7-tetrahydroxy-3',4',6-trimethoxyflavone*)

Heptanedioic acid, 9CI H-10027

Pimelic acid. Pentane-1,5-dicarboxylic acid
[111-16-0]

$HOOC(CH_2)_5COOH$

$C_7H_{12}O_4$ M 160.169
Isol. from stems and leaves of *Anthyllis sericea*. Prisms (H_2O). Mp 104-105°. Bp_{10} 212°. pK_{a1} 4.46; pK_{a2} 5.58 (25°). Nonvolatile in steam.
▷ TK3677000.

Me ester: [20291-40-1].
$C_8H_{14}O_4$ M 174.196
Bp_{18} 181-182°.

Me ester, chloride:
$C_8H_{13}ClO_3$ M 192.642
Bp_{17} 135-136°.

Di-Me ester: [1732-08-7].
$C_9H_{16}O_4$ M 188.223
Bp_{11} 121-122°.

Bis-4-bromophenacyl ester: Cryst. (EtOH). Mp 136.6°.

Dichloride: [142-79-0].
$C_7H_{10}Cl_2O_2$ M 197.060
Bp_{15} 137°.

Dinitrile: [646-20-8]. *1,5-Dicyanopentane. Pimelonitrile*
$C_7H_{10}N_2$ M 122.169
Bp_{14} 175-176°. Solidifies to a glass.
▷ LD_{50} (mus, orl) 126 mg/kg. MI9020000.

Org. Synth., Coll. Vol., 2, 1943, 531, 535 (*synth*)
Smiley, R.A. *et al*, *J. Org. Chem.*, 1960, **25**, 257 (*nitrile*)
Radell, J. *et al*, *J. Phys. Chem.*, 1967, **71**, 1596 (*cryst struct*)
Angelo, B., *C. R. Hebd. Seances Acad. Sci.*, 1971, **273**, 1767 (*synth*)
Williamson, K.L. *et al*, *J. Magn. Reson.*, 1978, **30**, 367 (*cmr*)
Marco, J.A. *et al*, *Phytochemistry*, 1978, **17**, 1438 (*occur*)
Ruholl, H. *et al*, *Synthesis*, 1988, 54 (*synth, pmr*)
Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th Ed., Van Nostrand-Reinhold, 1992, HBD000, PIG000.

8,28-Heptatriacontadien-2-one, 9CI H-10028

$H_3C(CH_2)_7CH{=}CH(CH_2)_{18}CH{=}CH(CH_2)_5COCH_3$

$C_{37}H_{70}O$ M 530.959
(Z,Z)-form [133530-22-0]
Isol. from the snake *Boiga irregularis*.

Murata, Y. *et al*, *J. Nat. Prod.* (*Lloydia*), 1991, **54**, 233 (*isol, pmr, cmr*)

1-Heptatriacontanol H-10029

$H_3C(CH_2)_{35}CH_2OH$

$C_{37}H_{76}O$ M 537.007
Constit. of *Erythrina stricta* bark. Cryst. (C_6H_6). Mp 91.2°.

Tasumi, M. *et al*, *Spectrochim. Acta*, 1964, **20**, 629 (*synth, ir*)
Singh, H. *et al*, *J. Nat. Prod.* (*Lloydia*), 1981, **44**, 526 (*isol*)

28-Heptatriaconten-2-one, 9CI H-10030

$H_3C(CH_2)_7CH{=}CH(CH_2)_{25}COCH_3$

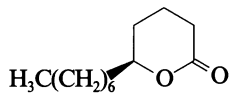
$C_{37}H_{72}O$ M 532.975
(Z)-form [130385-26-1]
Isol. from the snakes *Boiga irregularis* and *Thamnophis sirtalis parietalis*. Sex attractant pheromone.

Mason, R.T. *et al*, *J. Chem. Ecol.*, 1990, **16**, 2353 (*isol*)
Murata, Y. *et al*, *J. Nat. Prod.* (*Lloydia*), 1991, **54**, 233 (*isol, pmr, cmr*)

6-Heptyltetrahydro-2*H*-pyran-2-one, 9CI H-10031

δ-Dodecalactone. Dodecan-5-olide

[713-95-1]



(*S*)-*form*

$C_{12}H_{22}O_2$ M 198.305
Isol. from coconut oil.

(*S*)-*form* [108943-47-1]
$[\alpha]_D$ −48.8°.

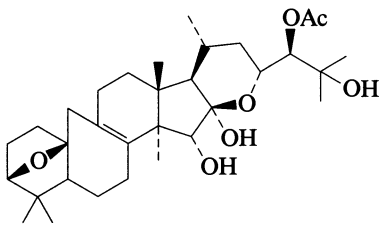
(±)-*form* [3051-22-7]
Liq. Mp −12°. $Bp_{0.03}$ 100-103°. n_D^{25} 1.4684 (1.4571).

[16400-73-0]

Taylor, R.J. *et al*, *CA*, 1961, **55**, 390 (*synth*)
Allen, R.R. *et al*, *Chem. Ind.* (*London*), 1965, 1560 (*isol, ir*)
Parliament, T.H. *et al*, *Chem. Ind.* (*London*), 1966, 1845 (*synth*)
Lamberti, V. *et al*, *Recl. Trav. Chim. Pays-Bas* (*J. R. Neth. Chem. Soc.*), 1967, **86**, 504 (*synth*)
Kohver, O., *Tetrahedron*, 1970, **26**, 2391 (*abs config, ord, cd*)
Opdyke, D.L.J., *Food Cosmet. Toxicol.*, 1979, **17**, 773 (*rev, tox*)
Bianco, L. *et al*, *Tetrahedron Lett.*, 1988, **29**, 1915.

Heracleifolinol H-10032

[151201-78-4]

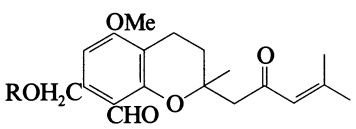


$C_{32}H_{50}O_7$ M 546.743
Constit. of *Cimicifuga heracleifolia*. Needles. Mp 238-239°. $[\alpha]_D$ +33.8° (c, 0.45 in $CHCl_3$).

Li, J.X. *et al*, *Chem. Pharm. Bull.*, 1993, **41**, 832 (*isol, pmr, cmr*)

Hericenone F H-10033

[141996-36-3]



R = $-CO(CH_2)_{14}CH_3$

$C_{35}H_{54}O_6$ M 570.808
Constit. of the mushroom *Hericium erinaceum*. Pale yellow oil. Racemic.

Kawagishi, H. *et al*, *Phytochemistry*, 1993, **32**, 175 (*isol, pmr, cmr*)

Hericenone G H-10034

[141973-36-6]

As Hericenone F, H-10033 with

R = $-CO(CH_2)_{16}CH_3$

$C_{37}H_{58}O_6$ M 598.862
Const. of the mushroom *Hericium erinaceum*. Pale yellow plates ($CHCl_3$/EtOH). Mp 56-58°.

Kawagishi, H. *et al*, *Phytochemistry*, 1993, **32**, 175 (*isol, pmr, cmr*)

Hericenone H H-10035

[141973-37-7]

As Hericenone F, H-10033 with

R = $-CO(CH_2)_7CH{=}CHCH_2CH{=}CH(CH_2)_4CH_3$

$C_{37}H_{54}O_6$ M 594.830
Constit. of the mushroom *Hericium erinaceum*. Pale yellow oil.

Kawagishi, H. *et al*, *Phytochemistry*, 1993, **32**, 175 (*isol, pmr, cmr*)

17,20-Hexacosadienoic acid H-10036

[59708-85-9]

$H_3C(CH_2)_4CH{=}CHCH_2CH{=}CH(CH_2)_{15}COOH$

$C_{26}H_{48}O_2$ M 392.664
(*Z,Z*)-*form* [76014-34-1]
Found in the marine sponge *Microciona prolifera*.

Me ester:
$C_{27}H_{50}O_2$ M 406.691
Ir ν_{CO} 1742 cm^{-1}.

Morales, R.W. *et al*, *Biochim. Biophys. Acta*, 1976, **431**, 206 (*isol*)
Kling, M.R. *et al*, *J. Chem. Soc., Perkin Trans. 1*, 1993, 1183 (*synth, ir, ms*)

19-Hexacosenal H-10037

$H_3C(CH_2)_5CH{=}CH(CH_2)_{17}CHO$

$C_{26}H_{50}O$ M 378.680
(*Z*)-*form* [140163-49-1]
Constit. of the sponge *Amphimedon compressa*.

Carballeira, N.M. *et al*, *J. Nat. Prod.* (*Lloydia*), 1992, **55**, 333.

4,9-Hexadecadienoic acid H-10038

$H_3C(CH_2)_5CH{=}CH(CH_2)_3CH{=}CHCH_2CH_2COOH$

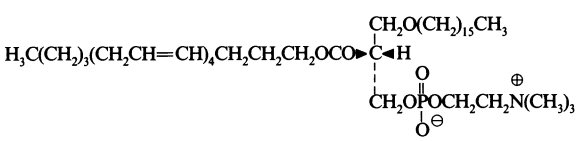
$C_{16}H_{28}O_2$ M 252.396
(*Z,Z*)-*form* [133177-84-1]
Constit. of the lipid fraction from *Prochlorothrix hollandica*.

Gombos, Z. *et al*, *Plant Cell Physiol.*, 1991, **32**, 73 (*isol*)

1-*O*-Hexadecyl-2-*O*-arachidonoyl-*sn*-glycero-3-phosphocholine H-10039

7-[(Hexadecyloxy)methyl]-4-hydroxy-N,N,N-trimethyl-9-oxo-3,5,8-trioxa-4-phosphaoctacosa-13,16,19,22-tetraen-1-aminium hydroxide, inner salt, 4-oxide. Arachidonyl-PAF

[86288-11-1]



$C_{44}H_{82}NO_7P$ M 768.108
Main source of arachidonic acid from human neutrophils and macrophages.

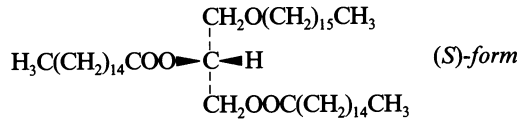
Robinson, M. *et al*, *J. Biol. Chem.*, 1985, **260**, 7889 (*biosynth*)

Kramer, R.M. *et al*, *Biochim. Biophys. Acta*, 1988, **959**, 269 (*synth, biochem*)
Leslie, C.C., *Methods Enzymol.*, 1990, **187**, 216 (*synth, props*)

1-*O*-Hexadecyl-2,3-di-*O*-hexadecanoylglycerol H-10040

1-Hexadecyloxy-2,3-dihexadecanoyloxypropane

[1116-45-6]



(*S*)-*form*

$C_{51}H_{100}O_5$ M 793.348

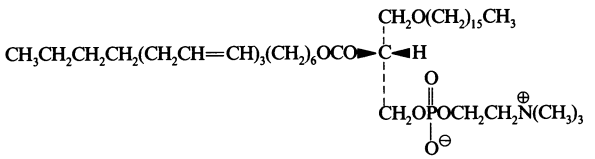
Isol. from the soft coral *Lobophytum* spp. Commercially available. Solid. Mp 56-57°. $[\alpha]_D^{20}$ +7.40° (c, 1.0 in $CHCl_3$).

Subrahmanyam, C. *et al*, *Tetrahedron*, 1992, **48**, 3111 (*isol, pmr, cmr*)
Chenevert, R. *et al*, *J. Org. Chem.*, 1993, **58**, 1054 (*synth, ir, pmr, cmr*)

1-*O*-Hexadecyl-2-*O*-dihomogammalinolenoyl-*sn*-glycero-3-phosphocholine H-10041

DHLA-PAF

[131907-73-8]



$C_{44}H_{84}NO_7P$ M 770.124

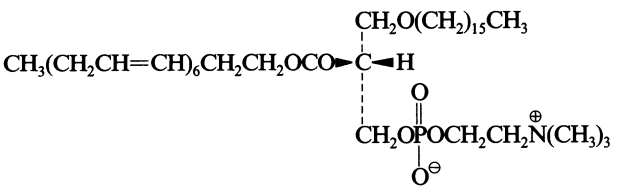
Isol. from the Japanese oyster *Crassostrea gigas*. PAF precursor.

Jeong, B.Y., *Lipids*, 1990, **25**, 624 (*isol*)

1-*O*-Hexadecyl-2-*O*-docosahexaenoyl-*sn*-glycero-3-phosphocholine H-10042

DCHA-PAF

[97717-93-6]



$C_{46}H_{82}NO_7P$ M 792.130

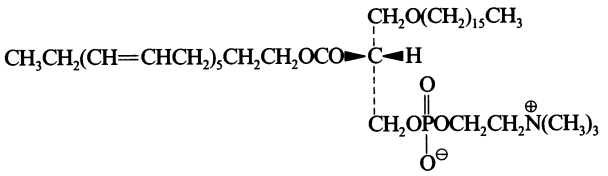
Isol. from the Japanese oyster *Crassostrea gigas*. PAF precursor.

Robinson, M. *et al*, *J. Biol. Chem.*, 1985, **260**, 7889 (*synth*)
Jeong, B.Y. *et al*, *Lipids*, 1990, **25**, 624 (*isol*)

1-*O*-Hexadecyl-2-*O*-eicosapentaenoyl-*sn*-glycero-3-phosphocholine H-10043

EPA-PAF

[132196-28-2]

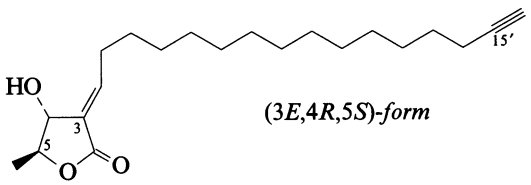


$C_{44}H_{80}NO_7P$ M 766.092

Isol. from the Japanese oyster *Crassostrea gigas*. PAF precursor.

Jeong, B.Y., *Lipids*, 1990, **25**, 624 (*isol*)

3-(15-Hexadecynylidene)dihydro-4-hydroxy-5-methyl-2(3*H*)-furanone H-10044



(3*E*,4*R*,5*S*)-*form*

$C_{21}H_{34}O_3$ M 334.498

(3E,4R,5S)-form [71339-54-3] ***Isodihydromahubynolide A***
Isol. from the trunkwood of *Clinostemon mahuba*. Mp 64-65°. $[\alpha]_D^{24}$ +42.4°.

15′,16′-Dihydro: [71339-52-1]. ***Isodihydromahubenolide A***
$C_{21}H_{36}O_3$ M 336.514
From *C. mahuba*. Mp 45-46°. $[\alpha]_D^{24}$ +37.1°.

15′,15′,16′,16′-Tetrahydro: [71359-05-2]. ***Isodihydromahubanolide A***
$C_{21}H_{38}O_3$ M 338.529
From *C. mahuba*. Mp 49-50°. $[\alpha]_D^{24}$ +36.6°.

(3E,4S,5S)-form [71325-96-7] ***Isodihydromahubynolide B***
From *C. mahuba*. Mp 79-80°. $[\alpha]_D^{24}$ −90.2°.

15′,16′-Dihydro: [71325-94-5]. ***Isodihydromahubenolide B***
$C_{21}H_{36}O_3$ M 336.514
From *C. mahuba*. Mp 66-67°. $[\alpha]_D^{24}$ −96.5°.

15′,15′,16′,16′-Tetrahydro: [71358-20-8]. ***Isodihydromahubanolide B***
$C_{21}H_{38}O_3$ M 338.529
From *C. mahuba*. Mp 70-71° (78-79°). $[\alpha]_D^{24}$ −93.3°, $[\alpha]_D^{21}$ −102° (dioxan).

(3Z,4R,5S)-form [71339-53-2] ***Dihydromahubynolide A***
From *C. mahuba*. Mp 61-63°. $[\alpha]_D^{24}$ +9.0°.

15′,16′-Dihydro: [71339-51-0]. ***Dihydromahubenolide A***
$C_{21}H_{36}O_3$ M 336.514
From *C. mahuba*. Mp 48-50°. $[\alpha]_D^{24}$ +8.5°.

15′,15′,16′,16′-Tetrahydro: [71359-04-1]. ***Dihydromahubanolide A***
$C_{21}H_{38}O_3$ M 338.529
From *C. mahuba*.

(3Z,4S,5S)-form [71325-95-6] ***Dihydromahubynolide B***
From *C. mahuba*. Mp 55-56°. $[\alpha]_D^{24}$ −32.6°.

15′,16′-Dihydro: [71325-93-4]. ***Dihydromahubenolide B***
$C_{21}H_{36}O_3$ M 336.514
From *C. mahuba*. Mp 46-47°. $[\alpha]_D^{24}$ −35.1°.

15′,16′-Tetrahydro: [71325-97-8]. ***Dihydromahubanolide B***
$C_{21}H_{38}O_3$ M 338.529
From *C. mahuba*. Mp 66-67°. $[\alpha]_D^{21}$ −37° (dioxan).

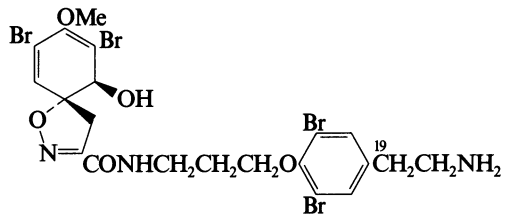
[71358-21-9, 78339-87-4, 78339-88-5, 78339-89-6, 121703-31-9]

Rollinson, S.W. *et al*, *J. Am. Chem. Soc.*, 1981, **103**, 4114 (*synth*)
Amos, R.A. *et al*, *J. Am. Chem. Soc.*, 1981, **103**, 4114 (*Dihydromahubanolide B*)
Martinez, J.C. *et al*, *Phytochemistry*, 1981, **20**, 459 (*isol*)
Tanaka, K. *et al*, *Bull. Chem. Soc. Jpn.*, 1982, **55**, 3935 (*Dihydromahubanolide B, Isodihydromahubanolide B*)
Ortuno, R.M. *et al*, *Tetrahedron*, 1988, **44**, 5139 (*abs config*)
Wood, W.W. *et al*, *J. Chem. Soc., Perkin Trans. 1*, 1990, 3201 (*synth*)

Hexadellin A H-10045

Updated Entry replacing H-00625

[121135-00-0]



$C_{21}H_{23}Br_4N_3O_5$ M 717.046

Metab. from the deep water sponge *Hexadella* sp.

19-Hydroxy, N-*Ac:* [150417-69-9]. ***Aplysinamisine III***
$C_{23}H_{25}Br_4N_3O_7$ M 775.082
Isol. from the Caribbean sponge *Aplysina cauliformis*. Semisolid. $[\alpha]_D^{26}$ +69.0° (c, 6.4 in MeOH).

Morris, S.A. *et al*, *Can. J. Chem.*, 1989, **67**, 677 (*isol, ir, pmr, cmr, ms, struct*)
Rodríguez, A.D. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 907 (*Aplysinamisine III*)

2,4-Hexadien-1-ol, 9CI H-10046

4-Ethylidenecrotonyl alcohol. Sorbyl alcohol

[111-28-4]

$H_3CCH{=}CHCH{=}CHCH_2OH$

$C_6H_{10}O$ M 98.144

Sex pheromone component of many insect species. Needles. Mp 30.5-31.5°. Bp_{12} 76-77°. Steam-volatile.

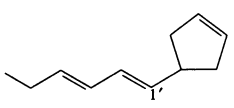
▷ Skin and eye irritant. LD_{50} (rat, orl) 2140 mg/kg. LD_{50} (rat, skn) 1010 mg/kg. MM3325000.

3,5-Dinitrobenzoyl: Yellow needles (pet. ether). Mp 85°.

Reichstein, T. *et al*, *Helv. Chim. Acta*, 1932, **15**, 261 (*synth*)
Baldwin, J.E. *et al*, *J. Am. Chem. Soc.*, 1974, **96**, 1542 (*synth*)
Paquette, L.A. *et al*, *J. Am. Chem. Soc.*, 1982, **104**, 4411 (*synth, spectra*)
Vinczer, P. *et al*, *Org. Prep. Proced. Int.*, 1992, **24**, 349 (***synth***, *pmr, bibl*)
Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th Ed., Van Nostrand-Reinhold, 1992, HCS500.

4-(1,3-Hexadienyl)-1-cyclopentene H-10047

1-(3-Cyclopenten-1-yl)-1,3-hexadiene



$C_{11}H_{16}$ M 148.247

(1'E,3'E)-form [143520-77-8]
Constit. of the brown alga *Dictyopteris acrostichoides*.

3',4'-Dihydro: [107531-28-2]. ***4-(1-Hexenyl)cyclopentene.*** *1-(3-Cyclopenten-1-yl)-1-hexene*
$C_{11}H_{18}$ M 150.263
Constit. of *D.* spp. and *Scytosiphon lomentaria*.

(1'E,3'Z)-form [143520-76-7]
Constit. of *D. acrostichoides*.

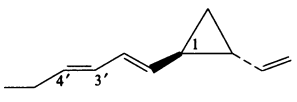
Kajiwara, T. *et al*, *Phytochemistry*, 1989, **28**, 636 (*isol, deriv*)
Wirth, D. *et al*, *Helv. Chim. Acta*, 1992, **34**, 734.

1-(1,3-Hexadienyl)-2-vinylcyclopropane H-10048

Updated Entry replacing H-00629

1-Ethenyl-2-(1,3-hexadienyl)cyclopropane, 9CI. ***Dictyopterene B.*** *Hormosirene*

[50265-58-2]



(1*R*,1'*E*,2*R*,3'*E*)-*form*

$C_{11}H_{16}$ M 148.247

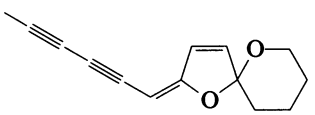
(1R,1'E,2R,3'E)-form [103833-89-2]
Isol. from *Dictyopteris acrostichoides*.

3',4'-Dihydro: [25047-20-5]. *1-(1-Hexenyl)-2-vinylcyclopropane.* ***Dictyopterene A***
$C_{11}H_{18}$ M 150.263
Isol. from *D.* spp. and from *Spermatochnus paradoxus*. Oil. $[\alpha]_D^{21}$ +77° (c, 0.5 in EtOH).

(1R,1'E,2R,3'Z)-form [29837-20-5]
Constit. of the essential oil of algae *D.* spp. Oil. $Bp_{0.3}$ 62°. $[\alpha]_D^{24}$ −43° (c, 10.1 in $CHCl_3$). The (*R,R*)-form is usually secreted exclusively by the female gametes, but both enantiomers are attractive to the male gametes of some species.

Weinstein, B. *et al*, *J. Chem. Soc., Chem. Commun.*, 1971, 940 (*synth*)
Moore, R.E. *et al*, *J. Org. Chem.*, 1974, **39**, 2201 (*isol*)
Müller, D.G. *et al*, *Naturwissenschaften*, 1981, **67**, 476.
Jaenicke, L. *et al*, *Angew. Chem., Int. Ed. Engl.*, 1982, **21**, 643 (*rev*)
Müller, D.G. *et al*, *Experientia*, 1984, **40**, 211 (*isol*)
Colobert, F. *et al*, *Tetrahedron Lett.*, 1985, **26**, 2779 (*synth*)
Dorsch, D. *et al*, *Tetrahedron Lett.*, 1985, **26**, 3319 (*synth*)
Abraham, W.D. *et al*, *J. Am. Chem. Soc.*, 1991, **113**, 2313 (*synth*)
Grandjean, D. *et al*, *Tetrahedron*, 1991, **47**, 1215 (*synth*)
Wirth, D. *et al*, *Helv. Chim. Acta*, 1992, **34**, 734 (*occur*)

2-(2,4-Hexadiynylidene)-1,6-dioxaspiro[4.5]dec-3-ene H-10049



(*E*)-*form*

$C_{14}H_{14}O_2$ M 214.263

(E)-form [3306-40-9]
Constit. of *Chrysanthemum* spp. and of *Artemisia princeps*, also of roots of *Tanacetum vulgare*. Mp 83°. $[\alpha]_{546}^{20}$ +29° (c, 2.0 in Et_2O). Also descr. as resinous liq.

8-O-Ac: 8-Acetoxy-2-(2,4-hexadiynylidene)-1,6-dioxaspiro[4.5]dec-3-ene
$C_{16}H_{16}O_4$ M 272.300
Isol. from roots of *C. arcticum*. λ_{max} 240, 254, 310, 318 nm. Not obt. pure.

8-O-(3-Methylbutanoyl): 8-Isovaleryloxy-2-(2,4-hexadiynylidene)-1,6-dioxaspiro[4.5]dec-3-ene
$C_{19}H_{22}O_4$ M 314.380
Isol. from roots of *Artemisia pedemontana*. Cryst. (pet. ether). Mp 93-94°. $[\alpha]_D^{23}$ +7.7° (c, 1.71 in Et_2O).

(Z)-form [5535-87-5]
Constit. of the roots of *C. arcticum, C. serotinum, C. pyrethrum*, and *A. princeps*. Mp 78°. $[\alpha]_D$ 0°. Both isomers also descr. as resinous liquids.

8-O-Ac: Isol. from roots of *C. arcticum*, *C. serotinum* and *A. pedemontana*. Cryst. (Et_2O/pet. ether). Mp 127°. $[\alpha]_D^{23}$ +15.2° (c, 3.08 in Et_2O).

8-O-(3-Methylbutanoyl): Isol. from roots of *A. pedemontana*. Cryst. (pet. ether). Mp 87-88°. $[\alpha]_D^{23}$ −35.1° (c, 2.45 in Et_2O).

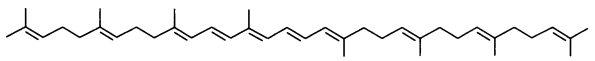
Deoxy, 3,4-epoxy: 2-(2,4-Hexadiynylidene)-3,4-epoxy-1,6-dioxaspiro[4.5]decane
$C_{14}H_{14}O_3$ M 230.263
Isol. from roots of *C. pyrethrum*. λ_{max} 224, 264, 276.5, 291.5 nm. No stereochem.

Bohlmann, F. *et al*, *Chem. Ber.*, 1960, **93**, 1937; 1961, **94**, 3193; 1963, **96**, 226; 1964, **97**, 1179; 1966, **99**, 990, 1830, 2416.
Yano, K. *et al*, *Phytochemistry*, 1972, **11**, 2577.

7,7′,8,8′,11,12-Hexahydrolycopene H-10050

Updated Entry replacing H-00654

7,7′,8,8′,11,12-Hexahydro-ψ,ψ-carotene. ***Phytofluene***
[540-05-6]



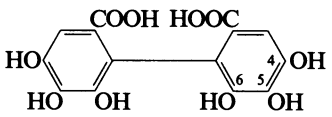
$C_{40}H_{62}$ M 542.930
Constit. of *Neurospora* spp. and other microorganisms. Widespread in plants. Pale-yellow oil with brilliant green fluorescence. The (all-*E*) and several mono- and di-Z isomers appear to occur naturally.

9Z-form
9-cis-Phytofluene
$C_{40}H_{62}$ M 542.930
Constit. of *Dunaliella bardawil*. Pale yellow liq.

(15Z,9′Z)-form [72746-34-0]
Isol. from *Lycopersicon esculentum* var. 'Tangella'. Yellow oil with intense blue-green fluorescence. λ_{max} 249, 257, 331, 348, 367 nm (hexane).

Zechmeister, L. *et al*, *Arch. Biochem. Biophys.*, 1953, **47**, 160 (*occur*)
Davis, J.B. *et al*, *J. Chem. Soc. C*, 1966, 2154 (*isol, struct*)
Karrer, W. *et al*, *Konstitution und Vorkommen der Organischen Pflanzenstoffe*, 2nd Ed., Birkhäuser Verlag, Basel, 1972-1985, no. 1817 (*occur*)
Brown, D.J. *et al*, *Biochem. Soc. Trans.*, 1975, **3**, 741 (*biosynth*)
Clough, J.M. *et al*, *J. Chem. Soc., Perkin Trans. 1*, 1983, 3011 (*15Z, 9′Z-form, ir, pmr, cmr*)
Frecknall, E.A. *et al*, *Phytochemistry*, 1984, **23**, 1707 (*occur*)
Ebenezer, W.J. *et al*, *J. Chem. Soc., Perkin Trans. 1*, 1993, 1869 (*9Z-isomer*)

4,4′,5,5′,6,6′-Hexahydroxy-2,2′-biphenyldicarboxylic acid H-10051



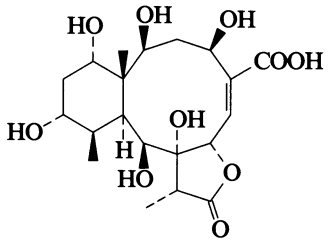
$C_{14}H_{10}O_{10}$ M 338.227

5,6:5′,6′-Bis(methylene), 4,4′-di-Me ether, di-Me ester: [73536-69-3]. *Dimethyl 4,4′-dimethoxy-5,6:5′,6′-bis(methylenedioxy)biphenyl-2,2′-dicarboxylate*
$C_{20}H_{18}O_{10}$ M 418.356
Constit. of *Astragalus membranaceus* ssp. *mongholicus* and *Fructus schizandrae*. Antihepatopathic agent.

[111897-19-9, 111897-25-7, 111897-26-8]

Liu, G., *Yaoxue Xuebao*, 1983, **18**, 714; *CA*, **100**, 61163 (*isol, props*)
Zhang, C. *et al*, *Kexue Tongbao* (*Foreign Lang. edn.*), 1987, **32**, 72; *CA*, **108**, 21463s (*resoln*)
He, Z.Q. *et al*, *Yaoxue Xuebao*, 1990, **25**, 694; *CA*, **114**, 58918u (*isol*)
Zhan, S. *et al*, *Chin. Chem. Lett.*, 1992, **3**, 29 (*synth*)
Wu, W.L. *et al*, *Eur. J. Med. Chem.* (*Chim. Ther.*), 1992, **27**, 353 (*synth*)

2,4,8,9,12,14-Hexahydroxy-5-briaren-18,7-olid-16-oic acid H-10052

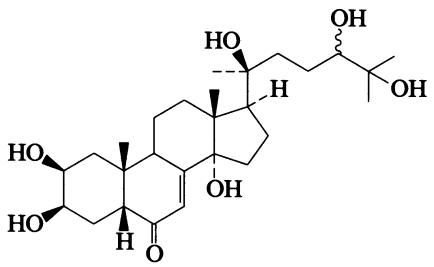


$C_{20}H_{30}O_{10}$ M 430.451

4-(3-Acetoxybutanoyl), 2,9,12,14-tetra-Ac, Me ester: ***Erythrolide J***
$C_{35}H_{48}O_{17}$ M 740.754
Constit. of *Erythropodium caribaeorum*. Amorph. solid. $[\alpha]_D$ +17.3° (c, 0.33 in $CHCl_3$).

Dookran, R. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 1051 (*isol, pmr, cmr*)

2,3,14,20,24,25-Hexahydroxycholest-7-en-6-one H-10053



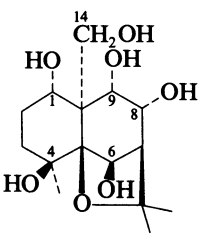
$C_{27}H_{44}O_7$ M 480.640

(2β,3β,5β,14α,20S,24ξ)-form [146959-88-8]
Constit. of *Vitex pinnata*. Amorph. solid (MeOH/EtOAc). Mp 198-200°. $[\alpha]_D^{25}$ +41.2° (c, 0.2 in MeOH).

Suksamrarn, A. *et al*, *Phytochemistry*, 1993, **32**, 303 (*isol, pmr, cmr*)

1,4,6,8,9,14-Hexahydroxydihydro-β-agarofuran H-10054

Updated Entry replacing H-00689



(1α,4β,6β,8α,9α)-*form*

$C_{15}H_{26}O_7$ M 318.366

(1α,4β,6β,8α,9α)-form
ent-*5α,11-Epoxy-1β,4α,6α,8β,9β,14-eudesmanehexol. Isoalatol*

1,9-Dibenzoyl, 6,8,14-Tri-Ac: ***6β,8α,14-Triacetoxy-1α,9α-dibenzoyloxy-4β-hydroxydihydro-β-agarofuran***
$C_{35}H_{40}O_{12}$ M 652.694
Constit. of *Maytenus canariensis*. Cryst. Mp 212-213°.

1-Cinnamoyl, 9-benzoyl, 6,8,14-tri-Ac: [112018-96-9]. ***Triptofordin D2***
$C_{37}H_{42}O_{12}$ M 678.732
Constit. of *Tripterygium wilfordii*. Needles (MeOH). Mp 103-109°. $[\alpha]_D^{27}$ −3.5° (c, 0.28 in MeOH).

1-(E-Cinnamoyl), 8-(3-pyridinecarbonyl), 9-benzoyl, 6,14-di-Ac: [112494-33-4]. ***Triptofordinine A1***
$C_{41}H_{43}NO_{12}$ M 741.790
Alkaloid from leaves of *Tripterygium wilfordii* var. *regelii* (Celastraceae). Mp 193-194°. $[\alpha]_D$ −81.4° (MeOH).

1-(Z-Cinnamoyl), 8-(3-pyridinecarbonyl), 9-benzoyl, 6,14-di-Ac: [112571-89-8]. ***Triptofordinine A2***
$C_{41}H_{43}NO_{12}$ M 741.790
Alkaloid from *T. wilfordii* var. *regelii*. Mp 93-94°. $[\alpha]_D$ −101.0° (MeOH).

9-Benzoyl, 8-(2-methylbutanoyl), 1,6,14-tri-Ac: ***1α,6β,14-Triacetoxy-9α-benzoyloxy-4β-hydroxy-8α-(2-methylbutanoyloxy)dihydro-β-agarofuran***
$C_{33}H_{44}O_{12}$ M 632.703
Constit. of *Maytenus canariensis*. Amorph. solid. Mp 57°.

1,9-Dibenzoyl, 8-(2-methylbutanoyl), 6,14-di-Ac: ***6β,14-Diacetoxy-1α,9α-dibenzoyloxy-4β-hydroxy-8α-(2-methylbutanoyloxy)dihydro-β-agarofuran***
$C_{38}H_{46}O_{12}$ M 694.774
Constit. of *M. canariensis*. Amorph. solid. Mp 62°.

1-(3-Pyridinecarbonyl): ***Tripterregeline A***
$C_{21}H_{29}NO_8$ M 423.462
Alkaloid from the stem bark of *Tripterygium regelii* (Celastraceae).

9-(3-Pyridinecarbonyl), 1-benzoyl: ***Tripterregeline B***
$C_{28}H_{33}NO_9$ M 527.570
Alkaloid from the stem bark of *T. regelii* (Celastraceae).

9-(3-Pyridinecarbonyl), 1-benzoyl, 8,14-di-Ac: ***Tripterregeline C***
$C_{32}H_{37}NO_{11}$ M 611.644
Alkaloid from the stem bark of *T. regelii* (Celastraceae).

9-Benzoyl, 1,6,8,14-tetra-Ac:
$C_{30}H_{38}O_{12}$ M 590.623
Constit. of *M. canariensis*. Amorph. solid ($CHCl_3$). Mp 75-76°. $[\alpha]_D^{25}$ −21.7° (c, 0.35 in $CHCl_3$).

9-Benzoyl, 6,8,14-tri-Ac:
$C_{28}H_{36}O_{11}$ M 548.586
Constit. of *M. canariensis*. Oil. $[\alpha]_D^{25}$ +25.0° (c, 0.22 in $CHCl_3$).

9-Benzoyl, 1,6,14-tri-Ac:
$C_{28}H_{36}O_{11}$ M 548.586
Constit. of *M. canariensis*. Oil. $[\alpha]_D^{25}$ −23.3° (c, 0.25 in $CHCl_3$).

8,9-Dibenzoyl, 6,14-di-Ac:
$C_{33}H_{38}O_{11}$ M 610.657
Constit. of *M. canariensis*. Oil. $[\alpha]_D^{25}$ −39.7° (c, 0.37 in $CHCl_3$).

1,8,9-Tribenzoyl, 6,14-di-Ac:
$C_{40}H_{42}O_{12}$ M 714.765
Constit. of *M. canariensis*. Amorph. solid ($CHCl_3$). Mp 174-175°. $[\alpha]_D^{25}$ +52.7° (c, 2.3 in $CHCl_3$).

(1α,4β,6β,8β,9α)-form
ent-*5α,11-Epoxy-1β,4α,6α,8α,9β,14-eudesmanehexol*

1-Benzoyl, 9,14-di-Ac: [107602-75-5]. *9α,14-Diacetoxy-1α-benzoyloxy-4β,6β,8β-trihydroxydihydro-β-agarofuran*
$C_{26}H_{34}O_{10}$ M 506.549
Constit. of *Rzedowskia tolantonguensis*. Cryst. (EtOAc/hexane). Mp 278-281°.

1-Benzoyl, 6,9,14-tri-Ac: [107602-77-7]. *6β,9α,14-Triacetoxy-1α-benzoyloxy-4β,8β-dihydroxydihydro-β-agarofuran*
$C_{28}H_{36}O_{11}$ M 548.586
From *R. tolantonguensis*. Cryst. (EtOAc/hexane). Mp 142-145°.

1-Benzoyl, 6,8,9,14-tetra-Ac: [107602-74-4]. *6β,8β,9α,14-Tetraacetoxy-1α-benzoyloxy-4β-hydroxydihydro-β-agarofuran*
$C_{30}H_{38}O_{12}$ M 590.623
From *R. tolantonguensis*. Cryst. (EtOAc/hexane). Mp 210-212°.

1,8-Dibenzoyl, 9,14-di-Ac: [107602-78-8]. *9α,14-Diacetoxy-1α,8β-dibenzoyloxy-4β,8β-dihydroxydihydro-β-agarofuran*
$C_{33}H_{38}O_{11}$ M 610.657
From *R. tolantonguensis*. Cryst. (EtOAc/C_6H_6). Mp 202-204°.

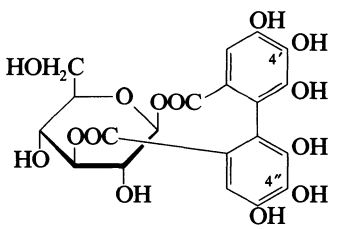
8-Ketone, 1-benzoyl, 6,9,14-tri-Ac: [107602-76-6]. *6β,9α,14-Triacetoxy-1α-benzoyloxy-4β-hydroxy-8-oxodihydro-β-agarofuran*
$C_{28}H_{34}O_{11}$ M 546.570
From *R. tolantonguensis*. Cryst. (EtOAc/hexane). Mp 224-226°.

8-Ketone, 1-cinnamoyl, 9-benzoyl, 6,14-di-Ac: [111950-42-6]. ***Triptofordin D1***
$C_{35}H_{38}O_{11}$ M 634.679
Constit. of *T. wilfordii*. Needles (MeOH). Mp 224-226°. $[\alpha]_D^{27}$ +56.1° (c, 0.25 in MeOH).

[128197-56-8, 128385-39-7]

González, A.G. *et al*, *Heterocycles*, 1986, **24**, 3379.
Takaishi, Y. *et al*, *Chem. Pharm. Bull.*, 1987, **35**, 3534 (*Triptofordinins*)
Takaishi, Y. *et al*, *Phytochemistry*, 1987, **26**, 2581 (*Triptofordins*)
Han, B.H. *et al*, *Arch. Pharmacal. Res.*, 1989, **12**, 310 (*Tripterregelines*)
González, A.G. *et al*, *Phytochemistry*, 1989, **28**, 173; 1990, **29**, 2577.
González, A.G. *et al*, *Tetrahedron*, 1993, **49**, 697 (*derivs*)

1,3-Hexahydroxydiphenoylglucose H-10055



$C_{20}H_{18}O_{14}$ M 482.354

β-D-Pyranose-form

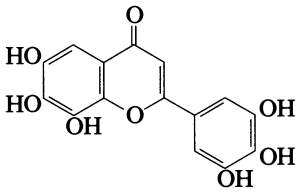
4',4''-Di-Me ether: [87042-28-2].
$C_{22}H_{22}O_{14}$ M 510.407
Isol. from the roots of *Prosopis juliflora*.

Malhotra, S. *et al*, *Curr. Sci.*, 1983, **52**, 583 (*isol*)

3′,4′,5′,6,7,8-Hexahydroxyflavone H-10056

6,7,8-Trihydroxy-2-(3,4,5-trihydroxyphenyl)-4H-1-benzopyran-4-one, 9CI

[132186-54-0]

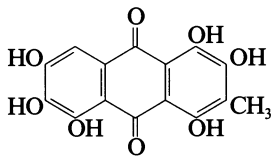


$C_{15}H_{10}O_8$ M 318.239
Cryst. Mp 302°.

8-O-β-D-Glucopyranoside: [132186-53-9]. ***Atyloside***
$C_{21}H_{20}O_{13}$ M 480.381
Isol. from *Atylosia scarabaeoides*. Yellow microcryst. (MeOH). Mp 245°.

Gupta, R.K. *et al*, *Indian J. Chem., Sect. B*, 1990, **29**, 1154.

1,2,4,5,6,7-Hexahydroxy-3-methylanthraquinone H-10057



$C_{15}H_{10}O_8$ M 318.239

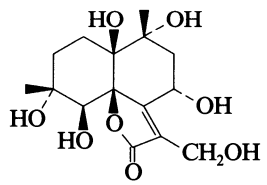
1-Me ether: [81126-80-9]. *2,4,5,6,7-Pentahydroxy-1-methoxy-3-methylanthraquinone*
$C_{16}H_{12}O_8$ M 332.266
Isol. from the seeds of *Cassia javanica*. Mp 170° (as per-Ac).

Hexa-Me ether: [81126-82-1]. *1,2,4,5,6,7-Hexamethoxy-3-methylanthraquinone*
$C_{21}H_{22}O_8$ M 402.400
Mp 220°.

Tiwari, R.D. *et al*, *Planta Med.*, 1981, **43**, 381.

1,4,5,8,10,13-Hexahydroxy-7(11)-muurolen-12,6-olide H-10058

Updated Entry replacing H-00763



(1β,4α,5β,6β,8α,10α)-*form*

$C_{15}H_{22}O_8$ M 330.334

(1β,4α,5β,6β,8α,10α)-form

5,8,10-Tri-Ac:
$C_{21}H_{28}O_{11}$ M 456.446
Constit. of *Vernonia nudiflora*. Gum.

5,8,10,13-Tetra-Ac:
$C_{23}H_{30}O_{12}$ M 498.483
Constit. of *Chrysolaena verbascifolia*. Gum.

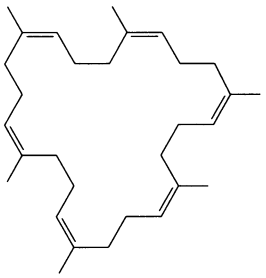
13-Tigloyl, 5,8,10-tri-Ac:
$C_{26}H_{34}O_{12}$ M 538.547
Constit. of *V. jalcana*. Gum.

(1β,4β,5β,6β,8α,10α)-form

5,8,10,13-Tetra-Ac:
$C_{23}H_{30}O_{12}$ M 498.483
Constit. of *Lessingianthus rubricaulis*. Gum.

Bardón, A. *et al*, *Phytochemistry*, 1992, **31**, 609; 1993, **34**, 253 (*isol, pmr*)

1,5,9,13,17,21-Hexamethyl-1,5,9,13,17,21-cyclotetracosahexaene H-10059



$C_{30}H_{48}$ M 408.709

(all-Z)-form
Constit. of *Alangium ridleyi*. Wax.

Ng, A.-S. *et al*, *Phytochemistry*, 1993, **33**, 243 (*isol, pmr, cmr*)

Hexanedioic acid, 9CI H-10060

Adipic acid. Butane-1,4-dicarboxylic acid

[124-04-9]

$HOOCCH_2CH_2CH_2CH_2COOH$

$C_6H_{10}O_4$ M 146.143
Obt. industrially by oxidn. of cyclohexane by air/catalyst followed by HNO_3. Constit. of leaves and stems of *Anthyllis sericea*. Used in manuf. of nylons, also plasticisers, resins and as food acidulant. Used in pptn. of Al, Zr, U(*VI*) and standardization of base solns. Important industrial chemical, 46th in order of volume for USA in 1990 (production 0.82 million tons/year). Monoclinic cryst. (HNO_3). Sol. EtOH; spar. sol. Et_2O; mod. sol. H_2O. Mp 153°, Mp 149-150°. Bp_{15} 216°. pK_{a1} 4.41; pK_{a2} 5.41 (20°), pK_{a1} 4.44; pK_{a2} 5.44 (25°). Sublimes. Does not readily form a monomeric anhydride; forms a polymeric anhydride which gives the unstable monomer on dist.

▷ AU8400000.

Me ester: [627-91-8].
$C_7H_{12}O_4$ M 160.169
Mp 3°. Bp_{10} 162°.

Di-Me ester: [627-93-0].
$C_8H_{14}O_4$ M 174.196
Fp 0°, Mp 8°.
▷ AV1645000.

Dichloride: [111-50-2].
$C_6H_8Cl_2O_2$ M 183.033
Bp_{18} 130-132° sl. dec.

Monoamide: Adipamic acid
$C_6H_{11}NO_3$ M 145.158
Needles (H_2O). Mp 125-130°.

Diamide: [628-94-4]. *Hexanediamide. Adipamide*
$C_6H_{12}N_2O_2$ M 144.173
Mp 220°.
▷ AU7800000.

Dinitrile: [111-69-3]. *1,4-Dicyanobutane. Adiponitrile*
$C_6H_8N_2$ M 108.143
Sol. EtOH, $CHCl_3$; insol. H_2O, Et_2O, CS_2. Mp 0-1°. Bp_{20} 181°.
▷ High oral toxicity. Emits HCN on combustion. AV2625000.

Hill, J.W., *J. Am. Chem. Soc.*, 1930, **52**, 4110 (*anhydride*)
Org. Synth., Coll. Vol., 1, 1932, 18 (*synth*)
Henne, A.L. *et al*, *J. Am. Chem. Soc.*, 1943, **65**, 752 (*synth*)
Welcher, F., *Organic Analytical Reagents*, Van Nostrand, New York, 1947, **2**, 22 (*synth, standard*)
Jain, B.D., *Curr. Sci.*, 1963, **32**, 66 (*pptn*)
Tanaka, K., *Hydrocarbon Process.*, 1974, **53**, 114 (*rev*)
Marco, J.A. *et al*, *Phytochemistry*, 1978, **17**, 1438 (*occur*)
Kirk-Othmer Encycl. Chem. Technol., 3rd Ed., Wiley, N.Y., 1978-1984, **1**, 510 (*rev*)
Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th Ed., Van Nostrand-Reinhold, 1992, AEN000, AEN250, AER250, DOQ300.

4,12,23,27,42-Hexatetracontapentaene-1,18,21,45-tetrayne-3,20,44,?-tetrol H-10061

Petroformyne 5

[128646-05-9]

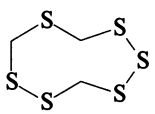
$C_{46}H_{68}O_4$ M 685.041

Posn. of one hydroxyl grp. not known. Constit. of the sponge *Petrosia ficiformis*.

Cimino, G. *et al*, *J. Nat. Prod.* (*Lloydia*), 1990, **53**, 345.

1,2,3,5,6,8-Hexathionane, 9CI H-10062

[103439-80-1]



$C_3H_6S_6$ M 234.476

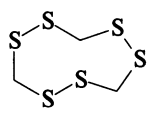
Constit. of the mushroom *Lentinus edodes*.

Chen, C.C. *et al*, *ACS Symp. Ser.*, 1986, **317**, 176 (*occur*)
Chen, C.C. *et al*, *J. Agric. Food Chem.*, 1986, **34**, 830 (*occur*)

1,2,4,5,7,8-Hexathionane, 9CI H-10063

1,2,4,5,7,8-Hexathiacyclononane

[81531-38-6]



$C_3H_6S_6$ M 234.476

Constit. of the seeds of *Parkia speciosa*. Shows antibacterial and antifungal activities. Yellow oil with strong typical odour of Parkia beans. Attempted recryst. from dioxan gave cryst. containing only 4S atoms.

Gmelin, R. *et al*, *Phytochemistry*, 1981, **20**, 2521 (*isol*)
Holzmann, G. *et al*, *Org. Mass Spectrom.*, 1982, **17**, 165 (*ms*)

6,27-Hexatriacontadien-2-one, 9CI H-10064

$H_3C(CH_2)_7CH{=}CH(CH_2)_{19}CH{=}CH(CH_2)_3COCH_3$

$C_{36}H_{68}O$ M 516.933

(Z,Z)-form [133530-19-5]

Isol. from the snake *Boiga irregularis*.

Murata, Y. *et al*, *J. Nat. Prod.* (*Lloydia*), 1991, **54**, 233.

8,27-Hexatriacontadien-2-one, 9CI H-10065

$H_3C(CH_2)_7CH{=}CH(CH_2)_{17}CH{=}CH(CH_2)_5COCH_3$

$C_{36}H_{68}O$ M 516.933

(Z,Z)-form [133530-20-8]

Isol. from the snake *Boiga irregularis*.

Murata, Y. *et al*, *J. Nat. Prod.* (*Lloydia*), 1991, **54**, 233 (*isol, pmr, cmr*)

1-Hexatriacontanol H-10066

[82741-64-8]

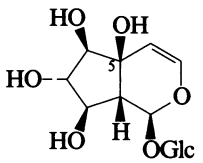
$H_3C(CH_2)_{34}CH_2OH$

$C_{36}H_{74}O$ M 522.980

Constit. of *Erythrina stricta* bark. Mp 93.5-94.5°.

Singh, H. *et al*, *J. Nat. Prod.* (*Lloydia*), 1981, **44**, 526 (*occur*)
Huang, H.C. *et al*, *J. Org. Chem.*, 1982, **47**, 4018 (*synth, pmr*)

Holmioside H-10067



$C_{14}H_{22}O_{11}$ M 366.321

Constit. of *Retzia capensis*. Foam. $[\alpha]_D^{20}$ −154° (c, 0.5 in H_2O).

5-Deoxy: ***5-Deoxyholmioside***

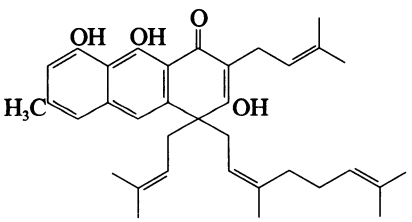
$C_{14}H_{22}O_{10}$ M 350.322

Constit. of *R. capensis*. $[\alpha]_D^{21}$ −172° (c, 0.4 in H_2O).

Damtoft, S. *et al*, *Phytochemistry*, 1993, **34**, 239 (*isol, pmr, cmr*)

Homoferruginin B H-10068

[120090-79-1]



$C_{35}H_{44}O_4$ M 528.730

Constit. of *Psorospermum glaberrimum*. Oil.

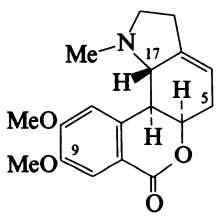
Botta, B. *et al*, *Tetrahedron*, 1988, **44**, 7193.

Homolycorine H-10069

Updated Entry replacing H-00984

Narcipoetine

[477-20-3]



$C_{18}H_{21}NO_4$ M 315.368

Alkaloid from *Narcissus poeticus* and from many other spp. in the Amaryllidaceae. Mp 175°. $[\alpha]_D$ +85° (95% EtOH).

B,HCl: Mp 285°.

Picrate: Mp 268°.

N-*Oxide* (α-): [119308-26-8]. ***Homolycorine* N-*oxide***
$C_{18}H_{21}NO_5$ M 331.368
Alkaloid from *Lapiedra martinezii*. Cryst. + H_2O (MeOH aq.). Mp 134-136°. $[\alpha]_D^{25}$ +27.4° (c, 0.1 in MeOH).

O^9-*De-Me:* [6879-81-8]. ***9-Demethylhomolycorine***
$C_{17}H_{19}NO_4$ M 301.341
Alkaloid from *Lycoris radiata*, the bulbs of *N. confusus* and *Crinum defixum* and the leaves of *Leucojum aestivum*. Also isol. from aerial parts of *N. papyraceus* (Amaryllidaceae). Needles (EtOAc or H_2O). Mp 138-140°, Mp 213-214°, Mp 270-272°. $[\alpha]_D$ +96.4° (c, 0.28 in $CHCl_3$). Variation in Mp due to polymorphism.

O^9-*De-Me*, O^9-*Ac:* ***9-O-Demethyl-9-O-acetylhomolycorine***
$C_{19}H_{21}NO_5$ M 343.379
Alkaloid from whole plants of *Narcissus vasconicus* (Amaryllidaceae). Cryst. Mp 186-188°. $[\alpha]_D^{20}$ +70.4° (c, 0.54 in EtOH). Erroneously descr. as 8-*O*-Acetylhomolycorine in the lit.

O^9-*De-Me*, N-*oxide* (α-): [128517-02-2]. ***9-Demethylhomolycorine* α-N-*oxide***
$C_{17}H_{19}NO_5$ M 317.341
Alkaloid from aerial parts of *N. papyraceus* (Amaryllidaceae). Cryst. (EtOH). Mp 153-154°. $[\alpha]_D^{23}$ +19° (c, 0.1 in MeOH).

5α-Hydroxy: [13255-05-5]. ***5α-Hydroxyhomolycorine***
$C_{18}H_{21}NO_5$ M 331.368
Alkaloid from the bulbs of *C. defixum* (Amaryllidaceae). Cryst. (Me_2CO/MeOH). Mp 168-170°.

5α-Hydroxy, 10-O-*de-Me:* [119309-00-1]. ***5α-Hydroxy-10-O-demethylhomolycorine.*** *2α-Hydroxy-9*-O-*demethylhomolycorine*
$C_{17}H_{19}NO_5$ M 317.341
Alkaloid from *N. tortifolius* (Amaryllidaceae). Cryst. ($MeOH/CH_2Cl_2$). Mp 272-275°. $[\alpha]_D$ +98.8° (c, 0.52 in EtOH).

Stereoisomer (?): ***Penarcine***
$C_{18}H_{21}NO_4$ M 315.368
Isol. from *N. cyclamineus* hybrid "Peeping Tom" (Amaryllidaceae). Mp 171-172°. $[\alpha]_D$ +110° ($CHCl_3$). Tentative struct., config. unknown.

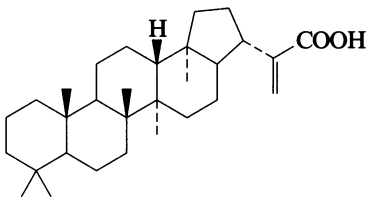
17-Epimer: [66537-26-6]. ***Epihomolycorine***
$C_{18}H_{21}NO_4$ M 315.368
Alkaloid from the bulbs of *Hippeastrum ananuca* (Amaryllidaceae).

Boit, H.-G. *et al, Chem. Ber.*, 1955, **88**, 133 (*ir, struct*)
Boit, H.-G. *et al, Naturwissenschaften*, 1958, **45**, 262 (*Penarcine*)
Uyeo, S. *et al, J. Chem. Soc.*, 1959, 172 (*9-Demethylhomolycorine*)
Kitagawa, T. *et al, J. Chem. Soc.*, 1959, 3741 (*struct*)
Hawksworth, W.A. *et al, J. Chem. Soc.*, 1965, 1991 (*pmr*)
Pacheco, P. *et al, Rev. Latinoam. Quim.*, 1978, **9**, 28; *CA*, **89**, 103746q (*epimer*)
Kobayashi, S. *et al, Chem. Pharm. Bull.*, 1985, **33**, 5258 (*9-Demethylhomolycorine*)
Jeffs, P.W. *et al, J. Org. Chem.*, 1985, **50**, 1732 (*9-Demethylhomolycorine, 5α-Hydroxyhomolycorine*)
Bastida, J. *et al, J. Nat. Prod.* (*Lloydia*), 1987, **50**, 199 (*9-Demethylhomolycorine*)
Suau, R. *et al, Phytochemistry*, 1988, **27**, 3285 (*isol, uv, ir, pmr, cmr, ms, struct, oxide*)
Suau, R. *et al, Heterocycles*, 1990, **31**, 517 (*9-Demethylhomolycorine α-N-oxide*)
Bastida, J. *et al, Phytochemistry*, 1990, **29**, 2683 (*5-Hydroxy-10-O-demethylhomolycorine*)
Kihara, M. *et al, Chem. Pharm. Bull.*, 1991, **39**, 1849 (*9-O-Demethylhomolycorine*)
Bastida, J. *et al, J. Nat. Prod.* (*Lloydia*), 1992, **55**, 122 (*9-Demethyl-9-acetylhomolycorine*)

22(30)-Hopen-29-oic acid H-10070

Tuberosic acid

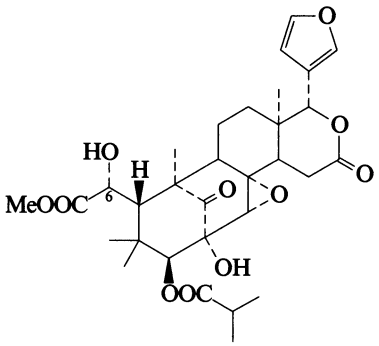
[149747-31-9]



$C_{30}H_{48}O_2$ M 440.708
Constit. of *Nephrolepsis tuberosa*. Cryst. Mp 266-268°.

Dutta, C.P. *et al, Phytochemistry*, 1993, **33**, 240 (*isol, pmr, cmr*)

Humilinolide A H-10071

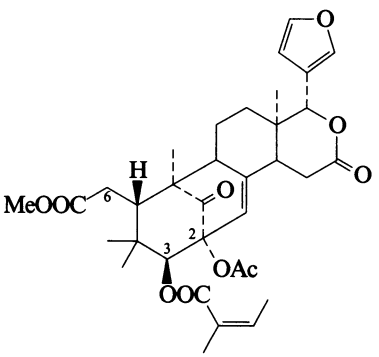


$C_{31}H_{40}O_{11}$ M 588.650
Constit. of *Swertenia humilis*. Cryst. (EtOAc/isopropyl ether). Mp 256°. $[\alpha]_D$ −78.5° (c, 2.7 in $CHCl_3$).

6-Ac: ***Humilinolide B***
$C_{33}H_{42}O_{12}$ M 630.688
Constit. of *S. humilis*. Cryst. (EtOAc/isopropyl ether). Mp 280-282°. $[\alpha]_D$ −68.5° (c, 2 in $CHCl_3$).

Segura-Correa, R. *et al, J. Nat. Prod.* (*Lloydia*), 1993, **56**, 1567 (*isol, pmr, cmr, cryst struct*)

Humilinolide C H-10072



$C_{34}H_{42}O_{10}$ M 610.700
Constit. of *Swertenia humilis*. Cryst. (EtOAc/isopropyl ether). Mp 211-212°. $[\alpha]_D$ −55° (c, 2 in $CHCl_3$).

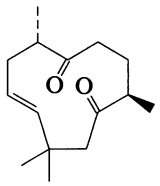
6α-Acetoxy, 2,3-dideacyl, 3-Ac: ***Humilinolide D***
$C_{31}H_{38}O_{11}$ M 586.635

Constit. of *S. humilis*. Cryst. (EtOAc/isopropyl ether). Mp 263-264°. $[\alpha]_D$ −76.5° (c, 2 in $CHCl_3$).

Segura-Correa, R. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 1567 (*isol, pmr, cmr*)

9-Humulene-2,6-dione H-10073

[147914-20-3]



$C_{15}H_{24}O_2$ M 236.353

Constit. of *Lippia integrifolia*. Oil. $[\alpha]_D$ +201° (c, 0.36 in $CHCl_3$).

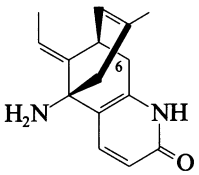
Catalán, C.A.N. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 381 (*isol, pmr, cmr*)

Huperzine A H-10074

Updated Entry replacing H-01108

Selagine. Fordine

[102518-79-6]



$C_{15}H_{18}N_2O$ M 242.320

Identity of Selagine with Huperzine A established in 1989. Alkaloid from *Lycopodium serratum* (= *Huperzia serrata*), *L. selago*, *L. saururus*, *L. erythraeum* and *L. gnidioides* (Lycopodiaceae). Shows very strong anticholinesterase activity and markedly increases efficiency for learning and memory in animals. Currently under clinical investigation in China for treatment of myasthenia gravis and Alzheimer's disease. Mp 230° (224-226°, 214-215°). $[\alpha]_D^{24.5}$ −150.4° (c, 0.498 in MeOH), $[\alpha]_D$ −99°.

(Z)-*Isomer(?)*: [92138-20-0]. ***Isoselagine***
$C_{15}H_{18}N_2O$ M 242.320
Alkaloid from *L. serratum* var. *longipetalum* (Lycopodiaceae). Potent analgesic in mice. Mp 228-229°. $[\alpha]_D$ −96°. Tentative struct. Poss. identical with Huperzine A.

6β-Hydroxy: [125295-13-8]. ***6β-Hydroxyhuperzine A***
$C_{15}H_{18}N_2O_2$ M 258.319
Minor alkaloid from *L. selago* (Lycopodiaceae). Cryst. (Me_2CO/MeOH). Mp 207-210°. $[\alpha]_D$ −206° (c, 0.37 in MeOH).

[103735-86-0, 120786-18-7, 130791-77-4, 132435-40-6]

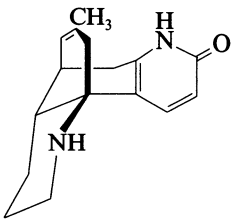
Valenta, Z. *et al*, *Tetrahedron Lett.*, 1960, **No. 10**, 26 (*isol, uv, ir, pmr*)
Yoshimura, H. *et al*, *Tetrahedron Lett.*, 1960, **No. 12**, 14 (*Selagine*)
Chen, C.H. *et al*, *T'ai-wan Yao Hsueh Tsa Chih*, 1984, **36**, 1; *CA*, **101**, 143940w (*Isoselagine*)
Liu, J.-S. *et al*, *Can. J. Chem.*, 1986, **64**, 837 (*uv, ir, pmr, cmr, struct*)
Liu, J. *et al*, *Huaxue Xuebao*, 1986, **44**, 1035; *CA*, **107**, 115821p (*struct*)
Ayer, W.A. *et al*, *Can. J. Chem.*, 1989, **67**, 1538 (*6β-Hydroxyhuperzine A, Isoselagine*)
Xia, Y. *et al*, *J. Am. Chem. Soc.*, 1989, **111**, 4116 (*synth*)
Qian, L. *et al*, *Tetrahedron Lett.*, 1989, **30**, 2089 (*synth*)
Geib, S.J. *et al*, *Acta Crystallogr., Sect. C*, 1991, **47**, 824 (*cryst struct*)
Yamada, F. *et al*, *J. Am. Chem. Soc.*, 1991, **113**, 4695 (*synth*)
Kozikowski, A.P. *et al*, *J. Org. Chem.*, 1991, **56**, 4636 (*synth*)
Kozikowski, A.P. *et al*, *Adv. Med.*, 1992, **1**, 175 (*rev, synth, props*)

Huperzine B H-10075

Updated Entry replacing H-01109

8,15-Didehydro-1(18H)-lycodinone, 9CI. Fordimine

[103548-82-9]



$C_{16}H_{20}N_2O$ M 256.347

Alkaloid from *Lycopodium serratum* (Lycopodiaceae). Also isol. from *Huperzia serrata* and *Phlegmariurus fordii*. Exhibits marked anticholinesterase activity. Mp 270-271°. $[\alpha]_D^{25}$ −54.2° (c, 0.203 in MeOH).

N-*Me:* **N-*Methylhuperzine B***
$C_{17}H_{22}N_2O$ M 270.374
Alkaloid from *L. serratum* (*Huperzia serrata*) (Lycopodiaceae).

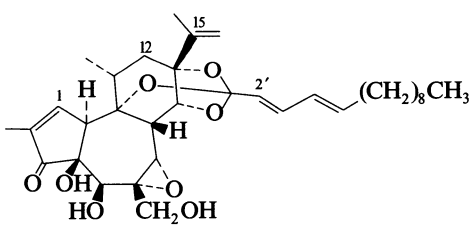
Liu, J.-S. *et al*, *Can. J. Chem.*, 1986, **64**, 837 (*uv, ir, pmr, cmr, struct*)
Liu, J. *et al*, *Huaxue Xuebao*, 1986, **44**, 1035; *CA*, **107**, 115821p (*struct*)
Li, J. *et al*, *Zhongcaoyao*, 1987, **18**, 50; *CA*, **107**, 93545x (*deriv*)
Chu, B.M. *et al*, *Yaoxue Xuebao*, 1988, **23**, 115; *CA*, **109**, 70347.

Huratoxin H-10076

Updated Entry replacing H-01111

Hippomane factor M_1

[33465-16-6]



$C_{34}H_{48}O_8$ M 584.748

Isol. from *Hura crepitans*. Also found in *Hippomane mancinella*, *Pimelea* sp., *Wikstroemia monticola* and *W. retusa*. Glassy resin. $[\alpha]_D^{28}$ +55.1° (c, 2.7 in $CHCl_3$).

▷ Toxic.

12β-Acetoxy: [73061-92-4]. ***Subtoxin A.*** *12-Acetoxyhuratoxin*
$C_{36}H_{50}O_{10}$ M 642.785
Isol. from *Stellera chamaejasme* and *W. retusa*. Oil. $[\alpha]_D$ +39°, $[\alpha]_D^{25}$ +11.3° (c, 0.85 in $CHCl_3$).

12β-Acetoxy, 14'-Methyl:
$C_{37}H_{52}O_{10}$ M 656.812
Constit. of *W. retusa*. Glassy oil. $[\alpha]_D^{26}$ +7.9° ($CHCl_3$). Alkyl side chain has one extra carbon.

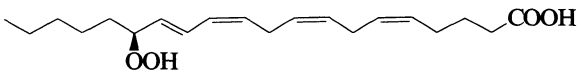
5,20-Di-Ac: [91851-65-9]. *5,20-Diacetylhuratoxin*
$C_{38}H_{52}O_{10}$ M 668.823
Constit. of *H. mancinella*.

20-Hexadecanoyl: [57672-64-7]. *20-Hexadecanoylhuratoxin*
$C_{50}H_{78}O_9$ M 823.161
Constit. of *H. mancinella.*
20-Octadecanoyl: [57672-65-8]. *20-Octadecanoylhuratoxin*
$C_{52}H_{82}O_9$ M 851.214
Constit. of *H. mancinella.*
20-Eicosanoyl: [57672-66-9]. *20-Eicosanoylhuratoxin*
$C_{54}H_{86}O_9$ M 879.268
Constit. of *H. mancinella.*
20-Docosanoyl: [57672-67-0]. *20-Docosanoylhuratoxin*
$C_{56}H_{90}O_9$ M 907.322
Constit. of *H. mancinella.*
20-Tetracosanoyl: [57672-68-1]. *20-Tetracosanoylhuratoxin*
$C_{58}H_{94}O_9$ M 935.375
Constit. of *H. mancinella.*
20-Hexacosanoyl: [57672-69-2]. *20-Hexacosanoylhuratoxin*
$C_{60}H_{98}O_9$ M 963.429
Constit. of *H. mancinella.*
1,2,2',3',4',5'-Hexahydro: [92260-57-6].
$C_{34}H_{54}O_8$ M 590.796
Constit. of *H. mancinella.*
15,16,2',3',4',5'-Hexahydro: [36136-24-0].
$C_{34}H_{54}O_8$ M 590.796
Constit. of *H. mancinella.*
3-Alcohol, 1,2,15,16,2',3',4',5'-octahydro: [91851-68-2].
$C_{34}H_{58}O_8$ M 594.827
Constit. of *H. mancinella.*
5-Deoxy, 6,7-deepoxy, 6,7-didehydro: [91851-46-6].
$C_{34}H_{48}O_6$ M 552.750
Constit. of *H. mancinella.*
5-Deoxy, 6,7-deepoxy, 6,7-didehydro, 20-pentadecanoyl: [91851-51-3].
$C_{49}H_{76}O_7$ M 777.135
Constit. of *H. mancinella.*
5-Deoxy, 6,7-deepoxy, 6,7-didehydro, 20-hexadecanoyl: [91851-53-5].
$C_{50}H_{78}O_7$ M 791.162
Constit. of *H. mancinella.*
5-Deoxy, 6,7-deepoxy, 6,7-didehydro, 20-octadecanoyl: [91851-55-7].
$C_{52}H_{82}O_7$ M 819.216
Constit. of *H. mancinella.*
5-Deoxy, 6,7-deepoxy, 6,7-didehydro, 20-eicosanoyl: [91851-57-9].
$C_{54}H_{86}O_7$ M 847.269
Constit. of *H. mancinella.*
5-Deoxy, 6,7-deepoxy, 6,7-didehydro, 20-docosanoyl: [91851-59-1].
$C_{56}H_{90}O_7$ M 875.323
Constit. of *H. mancinella.*
5-Deoxy, 6,7-deepoxy, 6,7-didehydro, 20-tetracosanoyl: [91851-61-5].
$C_{58}H_{94}O_7$ M 903.376
Constit. of *H. mancinella.*
5-Deoxy, 6,7-deepoxy, 6,7-didehydro, 20-hexacosanoyl: [91851-63-7].
$C_{60}H_{98}O_7$ M 931.430
Constit. of *H. mancinella.*
6,7-Deepoxy, 6-hydroxy, 7-chloro, 2',3',4',5'-tetrahydro: [91851-48-8].
$C_{34}H_{53}ClO_8$ M 625.241
Constit. of *H. mancinella.*

Sakata, K. *et al, Agric. Biol. Chem.*, 1971, **35**, 1084, 2113 (*isol, cryst struct*)
Freeman, P.W. *et al, Aust. J. Chem.*, 1979, **32**, 2495 (*Subtoxin A*)
Niwa, M. *et al, Chem. Pharm. Bull.*, 1982, **30**, 4518 (*Subtoxin A*)
Jolad, S.D. *et al, J. Nat. Prod.* (*Lloydia*), 1983, **46**, 675 (*cmr*)
Adolf, W. *et al, J. Nat. Prod.* (*Lloydia*), 1984, **47**, 482 (*isol, derivs*)
Yaga, S. *et al, Phytochemistry*, 1993, **32**, 141 (*isol, pmr, cmr*)

15-Hydroperoxy-5,8,11,13-eicosatetraenoic acid H-10077

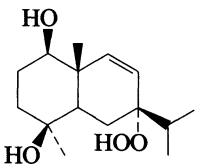
Updated Entry replacing H-01158
15-HPETE



$C_{20}H_{32}O_4$ M 336.470
(15S,5Z,8Z,11Z,13E)-form [70981-96-3]
Metab. of arachidonic acid. $[\alpha]_D$ −4.6° (MeOH).
Me ester: [77026-90-5].
$C_{21}H_{34}O_4$ M 350.497
$[\alpha]_D$ −3.5° (MeOH).
(15RS,5Z,8Z,11Z,13E)-form [73804-66-7]
Obt. from arachidonic acid by autoxidn. or photooxygenation.

Baldwin, J.E. *et al, J. Chem. Soc., Perkin Trans. 1*, 1979, 115 (*synth*)
Porter, N.A. *et al, J. Org. Chem.*, 1979, **44**, 3177 (*synth, ms*)
Corey, E.J. *et al, J. Am. Chem. Soc.*, 1980, **102**, 1433 (*synth*)
Boeynaems, J.M. *et al, Prostaglandins*, 1980, **19**, 87 (*synth*)
Terao, J. *et al, Agric. Biol. Chem.*, 1981, **45**, 587 (*synth*)
Porter, N.A. *et al, J. Am. Chem. Soc.*, 1981, **103**, 6447 (*synth*)
Dussault, P. *et al, J. Org. Chem.*, 1992, **57**, 1952 (*synth*)

7-Hydroperoxy-8-eudesmene-1,4-diol H-10078

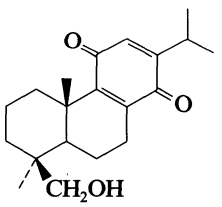


$C_{15}H_{26}O_4$ M 270.368
(1β,4β,7α)-form
4-Cinnamoyl:
$C_{24}H_{32}O_5$ M 400.514
Constit. of *Brintonia discoidea.* Powder.

Lu, T. *et al, Phytochemistry*, 1993, **34**, 737 (*isol, pmr, cmr*)

19-Hydroxy-8,12-abietadiene-11,14-dione H-10079

Triptoquinonol
[142937-48-2]



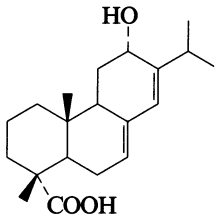
$C_{20}H_{28}O_3$ M 316.439
Constit. of *Tripterygium regelii.* Golden needles. Mp 165-166°. $[\alpha]_D^{15}$ −6.92° (c, 0.37 in $CHCl_3$).
19-Aldehyde: [142937-47-1]. *11,14-Dioxo-8,12-abietadien-19-al.* ***Triptoquinonal***
$C_{20}H_{26}O_3$ M 314.424
Constit. of *T. regelii.* Golden needles. Mp 127-128°. $[\alpha]_D^{15}$ −1.82° (c, 0.44 in $CHCl_3$).
19-Carboxylic acid: [96160-44-0]. *11,14-Dioxo-8,12-abietadien-19-oic acid.* ***Triptoquinonoic acid B***
$C_{20}H_{26}O_4$ M 330.423

Constit. of *T. regelii*. Golden prisms. Mp 212-213°. $[\alpha]_D^{15}$ +75.18° (c, 1.43 in $CHCl_3$).

Shen, J.H. *et al*, *Chin. Chem. Lett.*, 1992, **3**, 113 (*isol, pmr, cmr*)

12-Hydroxy-7,13-abietadien-18-oic acid H-10080

12-Hydroxyabietic acid



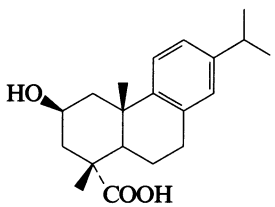
$C_{20}H_{30}O_3$ M 318.455

12α-form [3484-61-5]

Constit. of *Pinus sylvestris*, *P. massoniana* and an *Abies* sp.

Barrero, A.F. *et al*, *Phytochemistry*, 1990, **29**, 593 (*isol, pmr*)
Cheung, A.T. *et al*, *Tetrahedron*, 1993, **49**, 7903 (*isol, pmr, cmr*)

2-Hydroxy-8,11,13-abietatrien-18-oic acid H-10081



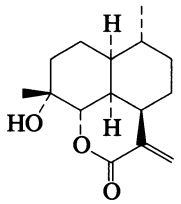
$C_{20}H_{28}O_3$ M 316.439

2β-form [79777-86-9]

Constit. of *Pinus massoniana*.

Cheung, H.T.A. *et al*, *Tetrahedron*, 1993, **49**, 7903 (*isol, pmr, cmr*)

4-Hydroxy-11(13)-amorphen-12,5-olide H-10082



$C_{15}H_{22}O_3$ M 250.337

(4α,5α)-form [92691-97-9] ***Artemislactone***

Constit. of *Artemisia annua*.

Zhu, D. *et al*, *Huaxue Xuebao*, 1984, **42**, 937 (*isol, pmr, synth*)
Zhou, W.S., *Pure Appl. Chem.*, 1986, **58**, 817 (*synth*)

11-Hydroxyandrosta-1,4-diene-3,17-dione H-10083

1-Dehydro-11-hydroxyandrostenedione

$C_{19}H_{24}O_3$ M 300.397

11α-form [7801-18-5] ***Kurchinin***

Obt. from the incubation of 11α-hydroxypregn-4-ene-3,20-dione with *Fusarium javanicum* or 5α-androstane-3,17-dione with *Acromyrmex* fungus and constit. of *Holarrhena pubescens*. Mp 160-162°, Mp 212-214° (190-192°). $[\alpha]_D$ +86.5° (c, 1.01 in $CHCl_3$).

Ac:

$C_{21}H_{26}O_4$ M 342.434
Mp 243-245°. $[\alpha]_D^{23}$ +101°.

11β-form [898-84-0]

Obt. from the incubation of 11β-hydroxyandrost-4-ene-3,17-dione with *Corynebacterium simplex* or *Arthrobacter simplex*. Cryst. (Me_2CO). Mp 186.5-189°.

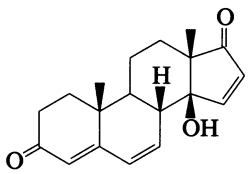
17-Oxime:

$C_{19}H_{25}NO_3$ M 315.411
Mp 168-169°.

[76976-49-3]

U.S. Pat., 2 902 498, (1959); *CA*, **54**, 5756 (*synth, uv, ir*)
Charney, W. *et al*, *Tetrahedron*, 1962, **18**, 591 (*synth, 11β-form*)
Singh, K. *et al*, *Steroids*, 1963, **2**, 513 (*synth, uv, ir, 11β-form*)
Demarco, P.V. *et al*, *J. Am. Chem. Soc.*, 1968, **90**, 5480 (*pmr, 11β-form*)
Jones, E.R.H. *et al*, *J. Chem. Soc., Perkin Trans. 1*, 1975, 1552 (*synth, pmr, 11α-form*)
Simons, S.S. *et al*, *Steroids*, 1981, **37**, 281 (*synth, ir, ms, 11β-form*)
Holland, H.L. *et al*, *Can. J. Chem.*, 1985, **63**, 1127 (*synth, cmr, 11α-form*)
Jasiczak, J. *et al*, *Tetrahedron Lett.*, 1985, **26**, 5221 (*synth, ir, pmr, 11β-form*)
Siddiqui, B.S. *et al*, *Phytochemistry*, 1993, **33**, 925 (*Kurchinin*)

14-Hydroxyandrosta-4,6,15-triene-3,17-dione H-10084



$C_{19}H_{22}O_3$ M 298.381

14β-form

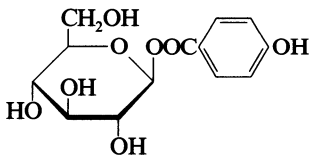
Disformone

Constit. of *Dischida formosana*. Cryst. ($CHCl_3$/MeOH). Mp 238-240°. $[\alpha]_D^{20}$ +258° (c, 1 in $CHCl_3$).

Chen, Z.-S. *et al*, *Phytochemistry*, 1993, **34**, 783 (*isol, pmr, cryst struct*)

1-(4-Hydroxybenzoyl)glucose H-10085

Glucopyranose 1-(4-hydroxybenzoate), 8CI



$C_{13}H_{16}O_8$ M 300.265

β-D-form [25545-07-7]

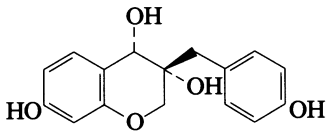
Constit. of stems and flowers of *Caesalpinia japonica*. Also isol. from *Catalpa bignonioides* and *Antirrhinum majus*. Clusters of needles (H_2O). Mp 232°.

Fischer, E. *et al*, *Ber.*, 1919, **52**, 829 (*synth*)
Birkofer, L. *et al*, *Z. Naturforsch., B*, 1961, **16**, 249 (*isol*)
Birkofer, L. *et al*, *Justus Liebigs Ann. Chem.*, 1969, **725**, 196 (*pmr*)
Klick, S. *et al*, *J. Chromatogr.*, 1988, **441**, 335 (*hplc*)
Tabata, M. *et al*, *Phytochemistry*, 1988, **27**, 809.

3-(4-Hydroxybenzyl)-3,4,7-chromantriol H-10086

3,4-Dihydro-3-[(4-hydroxyphenyl)methyl]-2H-1-benzopyran-3,4,7-triol, 9CI

[110064-52-3]



$C_{16}H_{16}O_5$ M 288.299

(3R,4S)-form [111254-20-7] ***3'-Deoxysappanol***

Constit. of the heartwood of *Caesalpina sappa*. Needles (Me_2CO/hexane). Mp 182-183°. $[\alpha]_D^{25}$ +54.5° (c, 0.77 in MeOH).

4-Me ether: [112408-68-1]. *3-(4-Hydroxybenzyl)-4-methoxy-3,7-chromandiol. **3'-Deoxy-4-O-methylsappanol***

$C_{17}H_{18}O_5$ M 302.326

Constit. of *C. japonica*. Needles. Mp 100-101°. $[\alpha]_D^{25}$ +40.7° (c, 0.37 in MeOH).

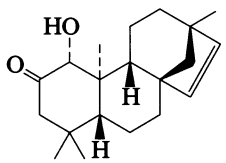
4',7-Di-Me ether: [111321-27-8].

Needles. Mp 154-156°. $[\alpha]_D^{25}$ +31° (c, 0.29 in $CHCl_3$).

Namikoshi, M. *et al*, *Chem. Pharm. Bull.*, 1987, **35**, 2761, 3568 (*pmr, cmr, abs config*)

Namikoshi, M. *et al*, *Phytochemistry*, 1987, **26**, 1831 (*isol*)

1-Hydroxy-15-beyeren-2-one H-10087



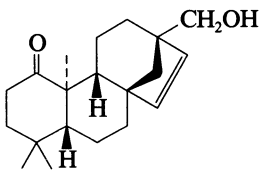
$C_{20}H_{30}O_2$ M 302.456

(ent-1β)-form [39036-31-2]

Constit. of *Erythroxylum australe*. Cryst. (MeOH). Mp 106-107°. $[\alpha]_D$ +34° (CH_2Cl_2).

Ansell, S.M. *et al*, *Phytochemistry*, 1993, **32**, 937 (*isol*)

17-Hydroxy-15-beyeren-1-one H-10088



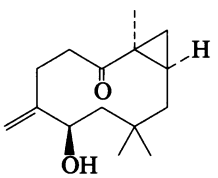
$C_{20}H_{30}O_2$ M 302.456

ent-form [150036-75-2]

Constit. of *Erythroxylum australe*. Cryst. (hexane). Mp 120-121°. $[\alpha]_D$ −25° (CH_2Cl_2).

Ansell, S.M. *et al*, *Phytochemistry*, 1993, **32**, 937 (*isol, pmr, cmr*)

2-Hydroxy-3(15)-bicyclohumulen-6-one H-10089



$C_{15}H_{24}O_2$ M 236.353

Constit. of *Jubula japonica*. Unstable oil. $[\alpha]_D^{21}$ +163° (c, 0.08 in $CHCl_3$).

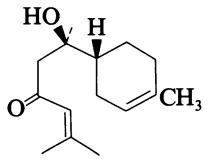
Toyota, M. *et al*, *Phytochemistry*, 1993, **34**, 1135 (*isol, pmr, cmr*)

7-Hydroxy-2,10-bisaboladien-9-one H-10090

Updated Entry replacing H-01307

α-Bisabololone. *α-Bisabolone*

[62697-50-1]



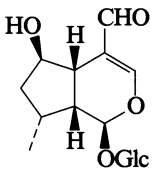
$C_{15}H_{24}O_2$ M 236.353

Constit. of *Chrysanthemum flosculosum*. Oil. $[\alpha]_D$ −20.8° (c, 1 in $CHCl_3$).

[38043-98-0]

Bohlmann, F. *et al*, *Tetrahedron Lett.*, 1972, 1295 (*isol, struct*)
Vig, O.P. *et al*, *Indian J. Chem., Sect. B*, 1976, **14**, 929 (*synth*)
Malanco, F.L. *et al*, *Synth. Commun.*, 1976, **6**, 515 (*synth*)
Kergomard, A. *et al*, *Tetrahedron*, 1977, **33**, 2215 (*synth, abs config*)

6-Hydroxyboschnaloside H-10091



$C_{16}H_{24}O_9$ M 360.360

6β-form [135626-18-5]

Constit. of *Penstemon virens* and *Orthocarpus purpurascens*. Solid. Mp 100-105°. $[\alpha]_D^{24}$ −79.7° (c, 3.1 in H_2O).

6-(8-Hydroxy-2,6-dimethyl-2E,6E-octadienoyl):

$C_{26}H_{38}O_{11}$ M 526.580

Constit. of *P.* spp. Cryst. Mp 117-119°. $[\alpha]_D^{25}$ −94° (c, 0.9 in MeOH).

6-(2,6-Dimethyl-8-oxo-2E,6ξ-octadienoyl):

$C_{26}H_{36}O_{11}$ M 524.564

Constit. of *P.* spp.

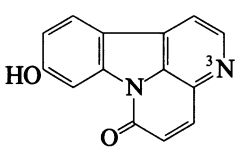
Boros, C.A. *et al*, *J. Nat. Prod.* (*Lloydia*), 1991, **54**, 506 (*isol, uv, pmr, cmr*)
Abdel-Kader, M.S. *et al*, *Phytochemistry*, 1993, **34**, 1367 (*isol, pmr, cmr*)

9-Hydroxycanthin-6-one H-10092

Updated Entry replacing H-01358

9-Hydroxy-6H-indolo[3,2,1-de][1,5]naphthyridin-6-one, 9CI

[138544-91-9]



$C_{14}H_8N_2O_2$ M 236.229

Alkaloid from the wood of *Simaba multiflora*, from the roots of *Eurycoma longifolia* and from stems of *Picrolemma granatensis* (Simaroubaceae). Yellow needles. Mp 288-293° (285-286°). The nat. prod. from *S. multiflora* has been reassigned this struct. by Kardono, *et al.*

N^3-*Oxide:* [137739-75-4]. ***9-Hydroxycanthin-6-one*** N^3***-oxide***
$C_{14}H_8N_2O_3$ M 252.229
Alkaloid from the roots of *E. longifolia* (Simaroubaceae). Red needles. Mp 248-250° dec.

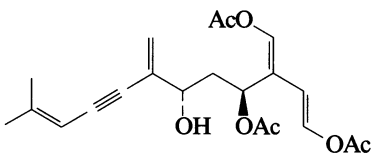
Me ether: [74991-91-6]. ***9-Methoxycanthin-6-one.*** *9-Methoxy-6H-indolo[3,2,1-de][1,5]naphthyridin-6-one, 9CI. 8-Methoxycanthin-6-one (incorr.)*
$C_{15}H_{10}N_2O_2$ M 250.256
Alkaloid from the trunk bark of *Simaba cuspidata*, the stem bark of *S. multiflora* and stems and stem bark of *P. granatensis* (Simaroubaceae). Yellow cryst. (EtOH). Mp 178-180°.

Me ether, N^3*-oxide:* [137739-74-3]. ***9-Methoxycanthin-6-one*** N^3***-oxide***
$C_{15}H_{10}N_2O_3$ M 266.256
Alkaloid from the roots of *E. longifolia* and stems of *P. granatensis* (Simaroubaceae). Reddish-yellow powder. Mp 238-240° (193° dec.).

Giesbrecht, A.M. *et al, Phytochemistry*, 1980, **19**, 313 (*isol, uv, ir, pmr, ms, struct*)
Polonsky, J. *et al, Tetrahedron Lett.*, 1982, **23**, 869 (*isol, uv, ir, pmr, struct*)
Kardono, L.B.S. *et al, J. Nat. Prod.* (*Lloydia*), 1991, **54**, 1360 (*isol, uv, ir, ms, pmr, cmr*)
Rodrigues Fo, E. *et al, Phytochemistry*, 1992, **31**, 2499 (*9-Methoxycanthin-6-one 3-N-oxide*)

6-Hydroxy-$\Delta^{7,(14)}$-caulerpenyne H-10093

[149183-81-3]

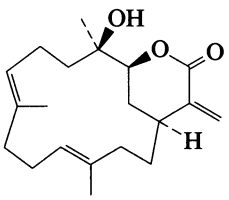


$C_{21}H_{26}O_7$ M 390.432
Constit. of *Caulerpa taxifolia.* Oil. $[\alpha]_D^{20}$ −53.7° (c, 0.095 in EtOH).

[149183-83-5]

Guerriero, A. *et al, Helv. Chim. Acta*, 1993, **76**, 855 (*isol, pmr, cmr*)

4-Hydroxy-7,11,15(17)-cembratrien-16,3-olide H-10094

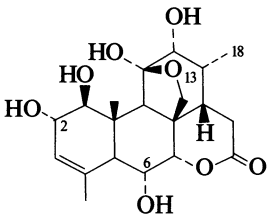


$C_{20}H_{30}O_3$ M 318.455
(1S,3S,4R,7E,11E)-form [148149-82-0] ***14-Deoxycrassin***
Constit. of *Pseudoplexaura porosa.* Oil. $[\alpha]_D^{26}$ +29.6° (c, 0.24 in $CHCl_3$).

Rodríguez, A.D. *et al, Experientia*, 1993, **49**, 179 (*isol, pmr, cmr*)

6-Hydroxychaparrin H-10095

Updated Entry replacing H-01385



$C_{20}H_{28}O_8$ M 396.436
6α-form

6-Tigloyl: ***6α-Tigloyloxychaparrin***
$C_{25}H_{34}O_9$ M 478.538
Isol. from *Simaba multiflora* and *Quassia multiflora.* Cryst. (EtOH/MeOH). Mp 280-286°.

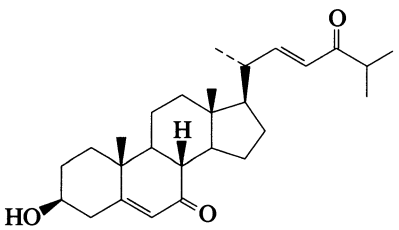
2-Ketone: [69343-48-2]. ***6-Hydroxychaparrinone***
$C_{20}H_{26}O_8$ M 394.421
Constit. of *Q. multifolia.* Needles (MeOH). Mp 233-235°.

2-Ketone, 6-tigloyl: [69423-70-7].
$C_{25}H_{32}O_9$ M 476.522
Constit. of *Q. multiflora.*

13β,18-Didehydro, 2-ketone: [87733-57-1]. ***Shinjulactone E***
$C_{20}H_{24}O_8$ M 392.405
Constit. of bark of *Ailanthus altissima.* Amorph. solid.

Polonsky, J. *et al, J. Nat. Prod.* (*Lloydia*), 1980, **43**, 503 (*isol, pmr*)
Polonsky, J. *et al, Tetrahedron Lett.*, 1982, **23**, 869 (*Tigloyloxychaparrin*)
Furuno, T. *et al, Bull. Chem. Soc. Jpn.*, 1984, **57**, 2484 (*Shinjulactone E*)
Carter, C.A.G. *et al, J. Nat. Prod.* (*Lloydia*), 1993, **56**, 130 (*isol, pmr, cmr*)

3-Hydroxycholesta-5,22-diene-7,24-dione H-10096

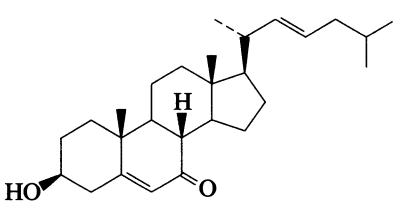


$C_{27}H_{40}O_3$ M 412.611
(3β,22E)-form [147641-71-2]
Constit. of *Stelodoryx chlorophylla.* $[\alpha]_D$ −40° (c, 0.2 in $CHCl_3$).

De Riccardis, F. *et al, J. Nat. Prod.* (*Lloydia*), 1993, **56**, 282 (*isol, pmr, ms*)

3-Hydroxycholesta-5,22-dien-7-one H-10097

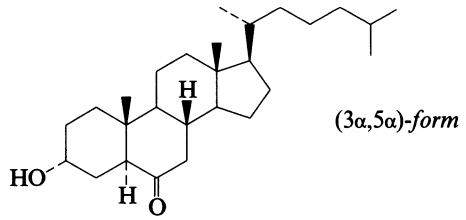
Updated Entry replacing H-01386



$C_{27}H_{42}O_2$ M 398.628
(3β,22E)-form [118964-36-6]
Constit. of *Callibbepharis lanceolata, Cliona capiosa, Laurencia pinnatifida* and *Lithophyllum incrustans.*

Quiñoa, E. *et al*, *An. Quim., Ser. C*, 1988, **84**, 267 (*isol, pmr*)
Notaro, G. *et al*, *J. Nat. Prod.* (*Lloydia*), 1992, **55**, 1588 (*isol, pmr, ms*)

3-Hydroxycholestan-6-one, 9CI H-10098



$C_{27}H_{46}O_2$ M 402.659

(3α,5α)-form [6579-82-4]
Cryst. (Et_2O/MeOH). Mp 160°.

Ac: [21513-83-7].
$C_{29}H_{48}O_3$ M 444.696
Cryst. (Et_2O/MeOH). Mp 107-108°.

Me ether: [21513-82-6]. *3-Methoxycholestan-6-one*
$C_{28}H_{48}O_2$ M 416.686
Cryst. (MeOH). Mp 111°. $[\alpha]_D$ −4° (c, 1.2 in $CHCl_3$).

(3α,5β)-form [21513-78-0]
Cryst. (petrol). Mp 85-86°. $[\alpha]_D$ −43° (c, 1.4 in $CHCl_3$).

Ac: Cryst. (MeOH). Mp 142-143°. $[\alpha]_D$ −21°.

Me ether: [21513-79-1].
Cryst. (MeOH). Mp 85-86°. $[\alpha]_D$ −32° (c, 0.55 in $CHCl_3$).

(3β,5α)-form [1175-06-0]
Trace constit. of *Mandervilla pentlandia* roots. Cryst. (MeOH). Mp 142-143°. $[\alpha]_D^{24}$ −5.1° ($CHCl_3$).

Ac: [1256-83-3].
Cryst. (MeOH). Mp 127-128°. $[\alpha]_D^{24}$ −15.5° ($CHCl_3$).

Me ether: [5837-39-8].
Cryst. (MeOH). Mp 92°. $[\alpha]_D^{19}$ −11.2°.

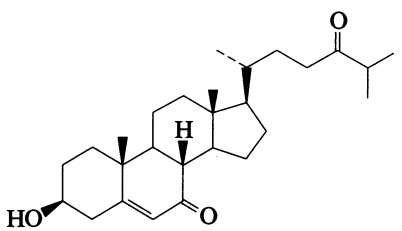
(3β,5β)-form [5837-32-1]
Cryst. Mp 93-95°. $[\alpha]_D$ −29° (c, 1.2 in $CHCl_3$).

Ac: Cryst. (Et_2O/MeOH). Mp 130-132°. $[\alpha]_D$ −27° (c, 0.6 in $CHCl_3$).

Me ether: [5837-31-0].
Cryst. (MeOH). Mp 110-111°. $[\alpha]_D$ −42° (c, 0.4 in $CHCl_3$).

Dobson, R.M. *et al*, *J. Org. Chem.*, 1948, **13**, 424 (*synth*)
Herbest, H.B. *et al*, *J. Chem. Soc.*, 1957, 4765 (*synth*)
Jones, D.N. *et al*, *J. Chem. Soc. C*, 1966, 846; 1969, 1208 (*synth*)
Cabrera, G. *et al*, *Phytochemistry*, 1991, **30**, 1239 (*isol*)

3-Hydroxycholest-5-ene-7,24-dione H-10099

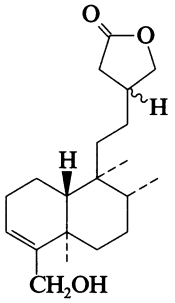


$C_{27}H_{42}O_3$ M 414.627

3β-form [147641-72-3]
Constit. of *Stelodoryx chlorophylla*. $[\alpha]_D$ −27.5° (c, 0.1 in $CHCl_3$).

De Riccardis, F. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 282 (*isol, pmr, ms*)

18-Hydroxy-3-cleroden-15,16-olide H-10100



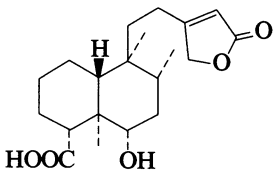
$C_{20}H_{32}O_3$ M 320.471

(ent-13ξ)-form
Constit. of *Baccharis trinervis*. Oil.

Kuroyanagi, M. *et al*, *Phytochemistry*, 1993, **34**, 1377 (*isol, pmr, cmr*)

6-Hydroxy-13-cleroden-15,16-olid-18-oic acid H-10101

Updated Entry replacing H-01436



$C_{20}H_{30}O_5$ M 350.454

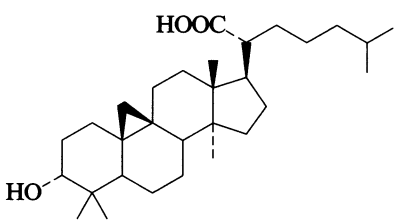
(ent-4αH,6β)-form

Me ester: ***Deacetylajugarin IV***
$C_{21}H_{32}O_5$ M 364.481
Constit. of *Ajuga ciliata* var. *villosior*. Cryst. (EtOAc). Mp 206-207°. $[\alpha]_D^{22}$ −16° (c, 0.1 in $CHCl_3$).

Me ester, Ac: [82225-47-6]. ***Ajugarin IV***
$C_{23}H_{34}O_6$ M 406.518
Constit. of *A. remota*. Shows insecticidal and antifeedant activity. Cryst. Mp 119-120.5°. $[\alpha]_D$ −57.5° (c, 0.06 in $CHCl_3$).

Kubo, I. *et al*, *J. Chem. Soc., Chem. Commun.*, 1982, 618 (*isol*)
Kende, A.S. *et al*, *Tetrahedron Lett.*, 1982, **23**, 1751 (*synth*)
Shimomura, H. *et al*, *Chem. Pharm. Bull.*, 1989, **37**, 988 (*Deacetylajugarin IV*)

3-Hydroxycycloartan-21-oic acid H-10102



$C_{30}H_{50}O_3$ M 458.723

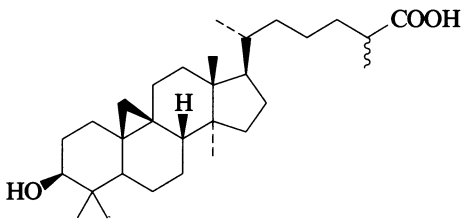
3α-form

Ac: [145671-15-4].
$C_{32}H_{52}O_4$ M 500.760
Constit. of *Notholaena candida*.

3-Ketone: [145644-02-6]. *3-Oxocycloartan-21-oic acid*
$C_{30}H_{48}O_3$ M 456.707
Constit. of *N. candida*.

Arriaga-Giner, F.J. *et al*, *Z. Naturforsch., C*, 1992, **47**, 508 (*isol, pmr, cmr*)

3-Hydroxycycloartan-26-oic acid H-10103



$C_{30}H_{50}O_3$ M 458.723

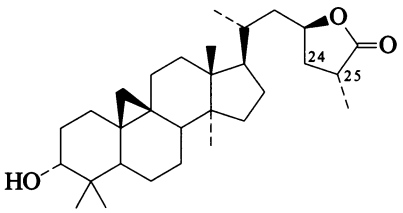
(3β,25ξ)-form

3-Me ether: 3-Methoxycycloartan-26-oic acid
$C_{31}H_{52}O_3$ M 472.750
Constit. of *Pseudotsuga japonica*. Cryst. Mp 168-169.5°. $[\alpha]_D^{23}$ +33.2° (c, 0.34 in $CHCl_3$).

Tanaka, R. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 1753 (*isol, pmr, cmr*)

3-Hydroxycycloartan-26,23-olide H-10104

Updated Entry replacing H-01445



$C_{30}H_{48}O_3$ M 456.707

(3α,23R,25R)-form [140366-14-9]
Constit. of *Abies marocana*. Cryst. (Et_2O). Mp 165-167°. $[\alpha]_D$ +27.2° (c, 1.46 in $CHCl_3$).

24,25-Didehydro: [140709-02-0]. ***3-Hydroxycycloart-24-en-26,23-olide***
$C_{30}H_{46}O_3$ M 454.692
Constit. of *A. marocana*. Cryst. (Et_2O). Mp 179-180°. $[\alpha]_D$ +27.8° (c, 1 in $CHCl_3$).

3-Me ether: [147852-63-9]. ***3-Methoxycycloartan-26,23-olide***
$C_{31}H_{50}O_3$ M 470.734
Constit. of *A. pinsapo*. Cryst. (MeOH). Mp 170-171°. $[\alpha]_D$ +35.2° (c, 1.06 in $CHCl_3$).

[140388-67-6]

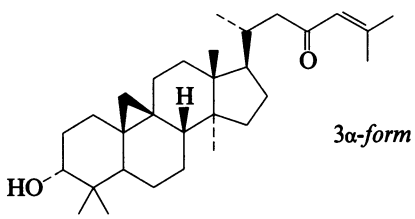
Barrero, A.F. *et al*, *Phytochemistry*, 1992, **31**, 615; 1993, **32**, 1261 (*isol, pmr, cmr*)

3-Hydroxycycloart-24-en-23-one H-10105

Updated Entry replacing C-02246

3-Hydroxy-9,19-cyclolanost-24-en-23-one

[141946-48-7]



3α-form

$C_{30}H_{48}O_2$ M 440.708
Cryst. Mp 133-135°. $[\alpha]_D^{25}$ +20.5° (c, 4.2 in $CHCl_3$).

3α-form
Constit. of *Monocyclanthus vignei*. Cryst. (Me_2CO). Mp 111-113°. $[\alpha]_D^{21}$ +15° (c, 0.4 in $CHCl_3$).

3β-form
Constit. of *M. vignei*. Cryst. (Me_2CO). Mp 130°. $[\alpha]_D^{21}$ +18° (c, 0.9 in $CHCl_3$).

3-Ketone: ***Cycloart-24-ene-3,23,dione.*** *9,19-Cyclolanost-24-ene-3,23-dione*
$C_{30}H_{46}O_2$ M 438.692
Constit. of *M. vignei* and *Gardenia* spp. Cryst. ($CHCl_3$/MeOH). Mp 137-138°. $[\alpha]_D^{21}$ +6° (c, 0.85 in $CHCl_3$).

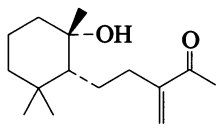
3-Ketone, 23-alcohol(1): 23-Hydroxycycloart-24-en-3-one
$C_{30}H_{48}O_2$ M 440.708
Constit. of *Guarea trichiloides*. Cryst. Mp 154-156°. $[\alpha]_D$ +27.0° (c, 1.01 in $CHCl_3$).

3-Ketone, 23-alcohol(2):
$C_{30}H_{48}O_2$ M 440.708
Constit. of *G. trichilioides*. Cryst. Mp 134-136°. $[\alpha]_D^{25}$ +52.7° (c, 1.27 in $CHCl_3$). 23-Epimer of the isomer above.

Davies, N.W. *et al*, *Phytochemistry*, 1992, **31**, 159 (*isol, pmr, ms*)
Achenbach, H. *et al*, *Phytochemistry*, 1992, **31**, 4263 (*isol, pmr, cmr*)
Furlan, M. *et al*, *Phytochemistry*, 1993, **32**, 1519 (*isol, pmr, cmr*)

7-Hydroxy-6,11-cyclofarnes-3(15)-en-2-one H-10106

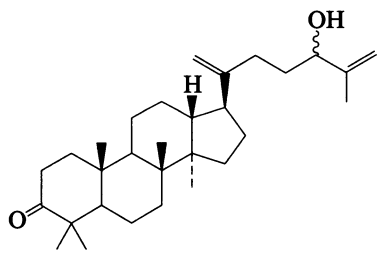
[145631-62-5]



$C_{15}H_{26}O_2$ M 238.369
Constit. of *Premna oligotricha*. Oil. $[\alpha]_D$ −17° (c, 0.1 in $CHCl_3$).

Habtemariam, S. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 140 (*isol, pmr, cmr*)

24-Hydroxydammara-20,25-dien-3-one H-10107



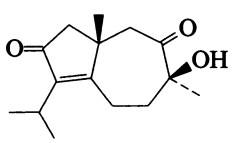
$C_{30}H_{48}O_2$ M 440.708

24ξ-form [148808-22-4]
Constit. of *Chisocheton macrophyllus*. Cryst. (hexane). Mp 154-155°. $[\alpha]_D^{20}$ +82.6° (c, 0.26 in $CHCl_3$).

[148808-23-5]

Inada, A. *et al*, *Chem. Pharm. Bull.*, 1993, **41**, 617 (*isol, pmr, cmr*)

8-Hydroxy-4-daucene-3,9-dione H-10108



$C_{15}H_{22}O_3$ M 250.337

8-β-form [103701-26-4]
Webiol

Cryst. (Me_2CO/pet. ether). Mp 64-66°.

8-Angeloyl: [103701-27-5].
$C_{20}H_{28}O_4$ M 332.439
Constit. of *Ferula linkii*. Gum.

8-(2,3-Epoxy-3-methylbutanoyl): [103701-28-6].
$C_{20}H_{28}O_5$ M 348.438
Constit. of *F. linkii*. Cryst. Mp 82-84°.

Díaz, J.G. *et al*, *Phytochemistry*, 1986, **25**, 1161 (*isol, pmr, cmr, cryst struct*)

10-Hydroxy-8-decenoic acid H-10109

[79728-54-4]

$HOCH_2CH{=}CH(CH_2)_6COOH$

$C_{10}H_{18}O_3$ M 186.250

(E)-form [106541-97-3]
Isol. from the injured fruit bodies of *Cantharellus tubaeformis*.

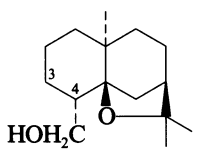
Me ester: [67803-47-8].
$C_{11}H_{20}O_3$ M 200.277
$Bp_{0.04}$ 115°.

Ac, Me ester: [67803-46-7].
$Bp_{0.13}$ 115°.

[69152-90-5]

Ranganathan, D. *et al*, *Tetrahedron*, 1980, **36**, 1869 (*synth*)
Baker, S.R. *et al*, *Tetrahedron Lett.*, 1983, **24**, 4469 (*synth*)
Pang, Z. *et al*, *Acta Chem. Scand.*, 1992, **46**, 301 (*isol, synth, pmr*)

15-Hydroxydihydro-β-agarofuran H-10110



4α-*form*

$C_{15}H_{26}O_2$ M 238.369

4α-form [105013-72-7] ***Baimuxinol***
Constit. of *Aquilaria sinensis*. Cryst. Mp 128-130°. $[\alpha]_D^{20}$ −83° (c, 0.56 in $CHCl_3$).

3,4-Didehydro: [105013-74-9]. ***Dehydrobaimuxinol***
$C_{15}H_{24}O_2$ M 236.353
Constit. of *A. sinensis*. Cryst. Mp 142-143°. $[\alpha]_D^{22}$ +22.1° (c, 1.18 in $CHCl_3$).

4β-form [122798-42-9] ***Isobaimuxinol***
Constit. of *A. sinensis*. Needles. Mp 73-75° (86-89°). $[\alpha]_D^{16}$ −64° (c, 0.095 in $CHCl_3$).

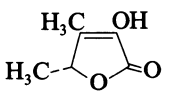
15-Carboxylic acid: Dihydro-β-agarofuran-15-oic acid. ***Baimuxifuranic acid***
$C_{15}H_{24}O_3$ M 252.353
Constit. of *A. sinensis*. Prisms. Mp 203-205°. $[\alpha]_D$ −83.5° (c, 0.13 in $CHCl_3$).

Yang, J.S. *et al*, *Acta Pharm. Sin.*, 1986, **21**, 516; 1989, **24**, 264 (*isol*)
Liu, Q. *et al*, *Chin. Chem. Lett.*, 1991, **2**, 425; 1992, **3**, 495 (*synth*)
Yang, J.S. *et al*, *Chin. Chem. Lett.*, 1992, **3**, 983 (*Baimuxifuranic acid*)

3-Hydroxy-4,5-dimethyl-2(5*H*)-furanone, 9CI H-10111

2-Hydroxy-3,4-dimethyl-2-butene-1,4-olide. Sotolone

[87021-36-1]



(*R*)-*form*

$C_6H_8O_3$ M 128.127
Key compd. for sugar flavour; insect attractant.

(R)-form [87068-70-0]
$[\alpha]_D^{23.5}$ −6.5° (c, 1.15 in Et_2O).

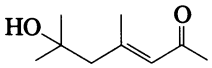
(S)-form [87068-69-7]
$[\alpha]_D^{23.5}$ +7.1° (c, 1.55 in Et_2O).

(±)-form
$Bp_{0.5}$ 87-88°. n_D^{20} 1.4295.

Sulser, H. *et al*, *Z. Lebensm.-Unters. -Forsch.*, 1972, **148**, 215 (*synth*)
Rödel, W. *et al*, *Nahrung*, 1974, **18**, 133 (*synth*)
Takahashi, K. *et al*, *Agric. Biol. Chem.*, 1976, **40**, 325 (*isol*)
Okada, K. *et al*, *Agric. Biol. Chem.*, 1983, **47**, 1071 (*synth*)

6-Hydroxy-4,6-dimethyl-3-hepten-2-one H-10112

[83348-17-8]



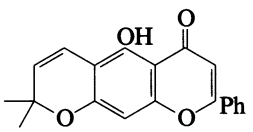
$C_9H_{16}O_2$ M 156.224
Prod. by *Streptomyces olivaceus*. Also found in *Capsicum annum* var. *angulosum*. No phys. props. reported.

Kimura, K. *et al*, *CA*, 1982, **97**, 159552 (*isol*)
Grote, R. *et al*, *Justus Liebigs Ann. Chem.*, 1990, 525 (*isol, pmr, cmr*)

5-Hydroxy-8,8-dimethyl-2-phenyl-2*H*,6*H*-benzo[1,2-*b*:5,4-*b'*]dipyran-6-one, 9CI H-10113

5-Hydroxy-6,6-dimethylpyrano[2,3:7,6]flavone

[34187-26-3]



$C_{20}H_{16}O_4$ M 320.344
Pale yellow needles (MeOH). Mp 188°.

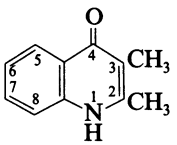
Me ether: [74517-64-9]. *5-Methoxy-6,6-dimethylpyrano[2,3:7,6]flavone*
$C_{21}H_{18}O_4$ M 334.371
Constit. of the seeds of *Tephrosia praecans*. Mp 182-183° (177-180°).

Jain, A.C. *et al*, *J. Org. Chem.*, 1974, **39**, 1149 (*synth*)
Camele, G. *et al*, *Phytochemistry*, 1980, **19**, 707 (*isol*)
Ahluwalia, V.K. *et al*, *Indian J. Chem., Sect. B*, 1982, **21**, 101 (*synth*)

4-Hydroxy-2,3-dimethylquinoline H-10114

2,3-Dimethyl-4(1H)-quinolinone, 9CI

[58596-45-5]



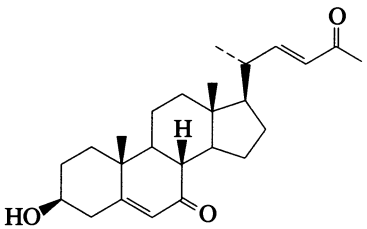
$C_{11}H_{11}NO$ M 173.214
Alkaloid from aerial parts of *Boronia lanceolata* (Rutaceae). Prisms + H_2O (H_2O). Spar. sol. EtOH. Mp 315°. Subl. at ca. 300°.

N-*Acetoxymethyl:* ***1-Acetoxymethyl-2,3-dimethyl-4(1H)-quinolinone***
$C_{14}H_{15}NO_3$ M 245.277

Alkaloid from aerial parts of *B. lanceolata* (Rutaceae). Needles ($CHCl_3$/MeOH). Mp 175-178°.

Conrad, M. *et al*, *Ber.*, 1891, **24**, 2991.
Mander-Jones, B. *et al*, *CA*, 1933, **27**, 1350.
Royer, R. *et al*, *J. Chem. Soc.*, 1948, 106.
Scheuer, P.J. *et al*, *J. Chem. Soc.*, 1963, 5569.
Ahsan, M. *et al*, *Phytochemistry*, 1993, **33**, 1507 (*isol, uv, ir, pmr, cmr, ms, struct*)

3-Hydroxy-26,27-dinorcholesta-5,22-diene-7,24-dione H-10115



$C_{25}H_{36}O_3$ M 384.558

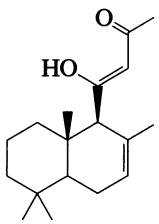
(3β,22E)-form [147641-73-4]
Constit. of *Stelodoryx chlorophylla*. $[\alpha]_D$ −60° (c, 0.3 in $CHCl_3$).

De Riccardis, F. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 282 (*isol, pmr, cmr, ms*)

11-Hydroxy-14,15-dinor-7,11-labdadien-13-one H-10116

Sollasin F

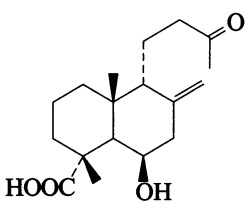
[149298-02-2]



$C_{18}H_{28}O_2$ M 276.418
Enolised β-diketone. Constit. of *Poecillastra sollani*. Oil. $[\alpha]_D^{24}$ +92.5° (c, 0.28 in $CHCl_3$).

Killday, K.B. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 500 (*isol, pmr, cmr*)

6-Hydroxy-14,15-dinor-13-oxo-8(17)-labden-18-oic acid H-10117



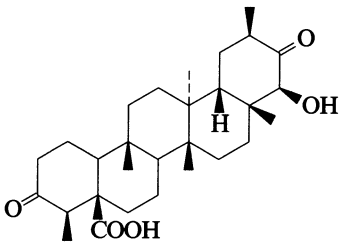
$C_{18}H_{28}O_4$ M 308.417

(6β,9βH)-form

6-Benzoyl: [116425-29-7]. ***Scoparic acid B***
$C_{25}H_{32}O_5$ M 412.525
Constit. of *Scoparia dulcis*. Amorph. powder. $[\alpha]_D$ −9.8° (c, 0.63 in $CHCl_3$).

Hayashi, T. *et al*, *J. Nat. Prod.* (*Lloydia*), 1992, **55**, 1748 (*isol, pmr, cmr*)

22-Hydroxy-3,21-dioxo-29-nor-24-friedelanoic acid H-10118



$C_{29}H_{44}O_5$ M 472.664

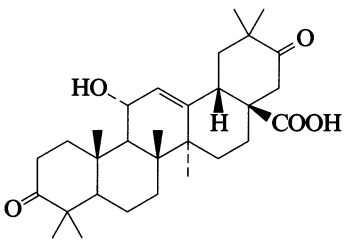
22β-form

Me ester: [144629-88-9].
$C_{30}H_{46}O_5$ M 486.690
Constit. of *Trypterygium wilfordii*. Yellow cryst (EtOH). Mp 250-251°. $[\alpha]_D^{22}$ +101.4° (c, 0.22 in MeOH).

Kutney, J.P. *et al*, *Can. J. Chem.*, 1992, **70**, 1455 (*isol, pmr, cmr, cryst struct*)

11-Hydroxy-3,21-dioxo-12-oleanen-28-oic acid H-10119

Updated Entry replacing H-01593



$C_{30}H_{44}O_5$ M 484.675

11α-form [72933-74-5] ***Propapyriogenin A_2***
Isol. from *Tetrapanax papyriferum*.

[α-L-*Rhamnopyranosyl*(1→4)-β-D-*glucopyranosyl*(1→6)-β-D-*glucopyranosyl*] *ester:* [72938-19-3]. ***Papyrioside L IIc***
$C_{48}H_{74}O_{19}$ M 955.101
Isol. from *T. papyriferum*. Powder. Mp 188-191°. $[\alpha]_D$ −47.1° (c, 0.1 in EtOH).

[α-L-*Rhamnopyranosyl*(1→4)-β-D-*glucopyranosyl*(1→6)-β-D-*glucopyranosyl*] *ester, 11-Me ether:* [59112-65-1]. ***Papyrioside L IIa***
$C_{49}H_{76}O_{19}$ M 969.128
Constit. of *T. papyriferum*. Powder. Mp 182-183°. $[\alpha]_D$ −39° (c, 0.82 in $CHCl_3$). Artifact.

3α-Alcohol, [α-L-*rhamnopyranosyl*(1→4)-β-D-*glucopyranosyl*(1→6)-β-D-*glucopyranosyl*] *ester:* [72933-68-7]. ***Papyrioside L IId***
$C_{48}H_{76}O_{19}$ M 957.117
Isol. from *T. papyriferum*. Powder. Mp 185-190°. $[\alpha]_D$ −39.3° (c, 0.15 in EtOH).

Me ether: [72933-73-4]. *11α-Methoxy-3,21-dioxo-12-oleanen-28-oic acid.* ***Propapyriogenin A_1***
$C_{31}H_{46}O_5$ M 498.701
Isol. from *T. papyriferum*. Cryst. (Et_2O/C_6H_6). Mp 142-145°. $[\alpha]_D$ −30° (c, 0.1 in EtOH).

3α-Alcohol, 11-Me ether, [α-L-*rhamnopyranosyl*-(1→4)-β-D-*glucopyranosyl*-(1→6)-β-D-*glucopyranosyl*] *ester:* [72933-67-6]. ***Papyrioside L IIb***
$C_{49}H_{78}O_{19}$ M 971.144

Constit. of *T. papyriferum*. Cryst. Mp 178-182°. $[\alpha]_D$ −37.8° (c, 0.27 in EtOH).

Amagaya, S. *et al*, *J. Chem. Soc., Perkin Trans. 1*, 1977, 1801; 1979, 2044.

5-Hydroxy-9-dotriacontanone, 9CI H-10120

[132923-40-1]

$H_3C(CH_2)_{22}CO(CH_2)_3CH(OH)(CH_2)_3CH_3$

$C_{32}H_{64}O_2$ M 480.856

Isol. from bulbs of *Crinum augustum*. Mp 80-82°.

Abd El-Hafiz, M.A., *Phytochemistry*, 1990, **29**, 3936 (*isol, ir, ms, pmr*)

7-Hydroxy-2-dotriacontanone H-10121

[146356-94-7]

$H_3C(CH_2)_{24}CH(OH)(CH_2)_4COCH_3$

$C_{32}H_{64}O_2$ M 480.856

Constit. of the shoots of *Leucas aspera*. Cryst. (C_6H_6/EtOAc). Mp 84-85°.

Ac: Mp 67-68°.

Misra, T.N. *et al*, *Phytochemistry*, 1993, **32**, 199 (*isol, pmr*)

25-Hydroxy-3-dotriacontanone, 9CI H-10122

8-Hydroxy-30-dotriacontanone

[94413-31-7]

$H_3C(CH_2)_6CH(OH)(CH_2)_{21}COCH_2CH_3$

$C_{32}H_{64}O_2$ M 480.856

Isol. from leaves and stems of *Duboisia myoporoides*. Mp 76-77°.

Shukla, Y.N. *et al*, *Phytochemistry*, 1984, **23**, 1516 (*isol, ir, ms*)

25-Hydroxy-6-dotriacontanone, 9CI H-10123

[87314-41-8]

$H_3C(CH_2)_6CH(OH)(CH_2)_{18}CO(CH_2)_4CH_3$

$C_{32}H_{64}O_2$ M 480.856

Isol. from aerial parts of *Artemisia roxburghiana*.

Prasad, A.V.K. *et al*, *Indian J. Chem., Sect. B*, 1983, **22**, 610 (*isol, pmr, ir, ms*)

30-Hydroxy-5-dotriacontanone, 9CI H-10124

[92122-80-0]

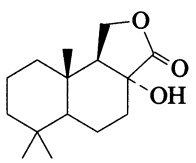
$H_3CCH_2CH(OH)(CH_2)_{24}CO(CH_2)_3CH_3$

$C_{32}H_{64}O_2$ M 480.856

Isol. from leaves and stems of *Duboisia myoporoides*. Mp 75-76°.

Shukla, Y.N. *et al*, *Phytochemistry*, 1984, **23**, 799 (*isol, ir, pmr, ms*)

8-Hydroxy-12,11-drimanolide H-10125



$C_{15}H_{24}O_3$ M 252.353

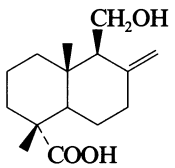
8α-form [145400-85-7] ***Peniopholide***

Constit. of *Peniophora polygonia*. Cryst. Mp 119.5-120.5°. $[\alpha]_D^{21}$ −5.2° (c, 0.48 in MeOH).

Ayer, W.A. *et al*, *J. Nat. Prod.* (*Lloydia*), 1992, **55**, 1454 (*isol, pmr, cmr*)

11-Hydroxy-8(12)-drimen-13-oic acid H-10126

[151029-03-7]

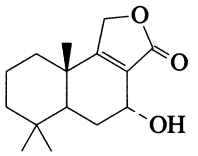


$C_{15}H_{24}O_3$ M 252.353

Constit. of *Cryptoporus volvatus*. Powder. Mp 224-225°. $[\alpha]_D$ +26.6° (c, 1.09 in MeOH).

Takahashi, H. *et al*, *Phytochemistry*, 1993, **33**, 1055 (*isol, pmr, cmr*)

7-Hydroxy-8-drimen-12,11-olide H-10127



$C_{15}H_{22}O_3$ M 250.337

7α-form [145512-54-5] ***7α-Hydroxyconfertifolin***

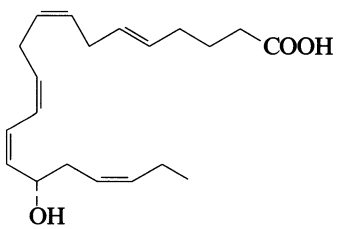
Constit. of *Peniophora polygonia*. Cryst. Mp 216-218°. $[\alpha]_D^{21}$ +34.4° (c, 0.27 in MeOH).

Ayer, W.A. *et al*, *J. Nat. Prod.* (*Lloydia*), 1992, **55**, 1454 (*isol, pmr, cmr*)

15-Hydroxy-5,8,11,13,17-eicosapentaenoic acid H-10128

15-HEPE

[97850-14-1]



$C_{20}H_{30}O_3$ M 318.455

(5E,8Z,11Z,13Z,15S,17Z)-form [86282-92-0]

Prod. by *Skeletonema costatum*. Autoinhibitor.

[88852-33-9, 104758-12-5]

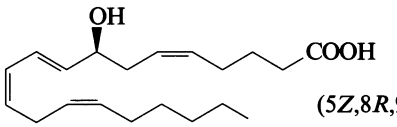
Mitchell, P.D. *et al*, *Biochem. Soc. Trans.*, 1984, **12**, 839.

Fogh, K. *et al*, *Biomed. Environ. Mass Spectrom.*, 1988, **17**, 459 (*synth, ms*)

Imada, N. *et al*, *CA*, 1992, **117**, 229789, 248273 (*isol, pmr, cmr*)

8-Hydroxy-5,9,11,14-eicosatetraenoic acid, 9CI H-10129

8-HETE



(5*Z*,8*R*,9*E*,11*Z*,14*Z*)-*form*

$C_{20}H_{32}O_3$ M 320.471

(5Z,8R,9E,11Z,14Z)-form [105500-09-2]
Isol. from the black coral *Leiopathes* sp. $[\alpha]_D^{20}$ +4.0° (c, 0.48 in $CHCl_3$). Uv 236.5 (21150) nm (95% EtOH).

Et ester: [117333-02-5].
$C_{22}H_{36}O_3$ M 348.525
Isol. from *L.* sp. $[\alpha]_D^{20}$ +4.5° (c, 0.32 in $CHCl_3$).

8-Oxo: [116539-62-9]. *8-Keto-5,9,11,14-eicosatetraenoic acid. 8-Oxo-ETE. 8-KETE*
$C_{20}H_{30}O_3$ M 318.455
Arachidonic acid metab.

(8S,5Z,9E,11Z,14Z)-form [98462-03-4]
Metab. of arachidonic acid.

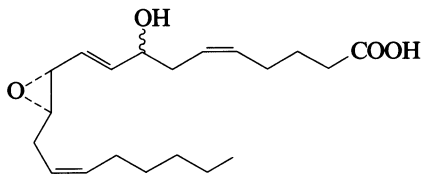
Me ester:
$C_{21}H_{34}O_3$ M 334.498
Oil. $[\alpha]_D^{22}$ −4.75° (c, 0.4 in $CHCl_3$).

[70968-93-3, 79495-84-4, 100896-77-3]

Porter, N.A. *et al, J. Org. Chem.*, 1979, **44**, 3177 (*synth, ms*)
Boeynaems, J.M. *et al, Anal. Biochem.*, 1980, **104**, 259 (*synth*)
Rabinovitch, H. *et al, Lipids*, 1981, **16**, 518 (*metab*)
Adams, J. *et al, Tetrahedron Lett.*, 1984, **25**, 35 (*synth*)
Just, G. *et al, J. Org. Chem.*, 1986, **51**, 4796 (*synth, ms, pmr*)
Yadagiri, P. *et al, Tetrahedron Lett.*, 1986, **27**, 6039 (*synth*)
Wiseman, J.S. *et al, Biochem. Biophys. Res. Commun.*, 1988, **154**, 544 (*synth*)
Guerriero, A. *et al, Helv. Chim. Acta*, 1988, **71**, 1094 (*synth, uv, ir, pmr, cmr*)
Kuehn, H. *et al, Eicosanoids*, 1991, **4**, 9 (*biosynth*)

8-Hydroxy-11,12-epoxy-5,9,14-eicosatrienoic acid H-10130

Hepoxilin A. Hepoxilin A_3



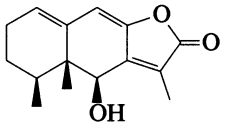
$C_{20}H_{32}O_4$ M 336.470

(5Z,9E,11S,12S,14Z)-form
Metab. of arachidonic acid also prod. in pancreatic islet cells. 8-Epimers sepd. but no phys. props. given.

Me ester: Methyl 8-hydroxy-10-[3-(2-octenyl)oxiranyl]-5,9-decadienoate. Hepoxilin A_3 methyl ester
$C_{21}H_{34}O_4$ M 350.497
Two diastereoisomers sepd. by flash chromatog.

Pace-Asciak, C.R. *et al, J. Biol. Chem.*, 1983, **258**, 6835 (*isol*)
Corey, E.J. *et al, Tetrahedron Lett.*, 1984, **25**, 5119 (*synth, pmr*)
Chabert, P. *et al, Tetrahedron Lett.*, 1989, **30**, 2545 (*synth*)

6-Hydroxy-1(10),7(11),8-eremophilatrien-12,8-olide H-10131



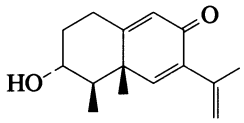
$C_{15}H_{18}O_3$ M 246.305

6β-form
6-Hydroxyliguarenolide

Ac: [64197-41-7].
$C_{17}H_{20}O_4$ M 288.343
Constit. of *Euryops* spp. Oil.

Bohlmann, F. *et al, Phytochemistry*, 1978, **17**, 1135 (*isol, pmr*)

3-Hydroxy-6,9,11-eremophilatrien-8-one H-10132

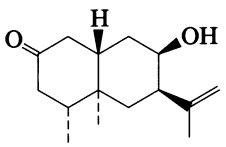


$C_{15}H_{20}O_2$ M 234.338

3α-form
Metab. of *Drechslera gigantea.* $[\alpha]_D$ +2.2° (c, 0.5 in $CHCl_3$).

Sugawara, F. *et al, Biosci., Biotechnol., Biochem.*, 1993, **57**, 236 (*isol, pmr*)

8-Hydroxy-11-eremophilen-2-one H-10133



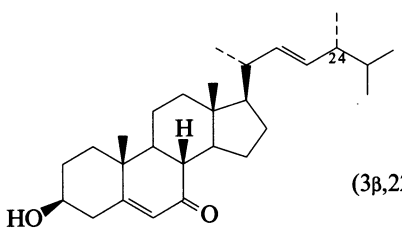
$C_{15}H_{24}O_2$ M 236.353

(4α,5α,8β)-form [69847-01-4]
Constit. of *Ligularia tussilaginea.*

Kurihara, T. *et al, CA*, 1979, **90**, 152387c (*isol, pmr*)

3-Hydroxyergosta-5,22-dien-7-one H-10134

3-Hydroxy-24-methylcholesta-5,22-dien-7-one



(3β,22*E*,24*R*)-*form*

$C_{28}H_{44}O_2$ M 412.654

(3β,22E,24R)-form [145163-96-8]
Constit. of *Cliona copiosa.*

(3β,22E,24S)-form [99081-78-4]
Constit. of *C. copiosa.*

Notaro, G. *et al, J. Nat. Prod.* (*Lloydia*), 1992, **55**, 1588 (*isol, pmr, ms*)

N-(1-Hydroxyethyl)benzanilide H-10135

N-(*1-Hydroxyethyl*)-N-*phenylbenzamide*. N-*Benzoyl*-N-*phenylaminomethylcarbinol*

$PhCONPhCH(OH)CH_3$

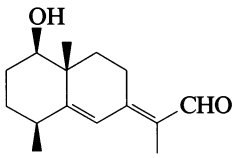
$C_{15}H_{15}NO_2$ M 241.289

Alkaloid from *Oxytropis muricata*. Cryst. ($CHCl_3$). Mp 147-149°.

B,HCl: Cryst. Mp 194-197°.

Duboshina, Z.N. *et al*, *Zh. Obshch. Khim.*, 1963, **33**, 2071; *CA*, **59**, 12851h (*isol*)

1-Hydroxy-5,7(11)-eudesmadien-12-al H-10136



(1β,7(11)*E*)-*form*

$C_{15}H_{22}O_2$ M 234.338

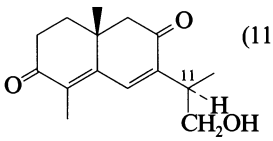
(1β,7(11)E)-form [85431-43-2] ***Vernostipulal B***
Constit. of *Vernonia stipulacea*. Oil.

(1β,7(11)Z)-form [85431-42-1] ***Vernostipulal A***
Constit. of *V. stipulacea*. Gum.

Bohlmann, F. *et al*, *Phytochemistry*, 1982, **21**, 2263 (*isol, pmr*)

12-Hydroxy-4,6-eudesmadiene-3,8-dione H-10137

12-Hydroxy-8-oxo-β-cyperone



(11*R*)-*form*

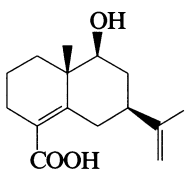
$C_{15}H_{20}O_3$ M 248.321

(11R)-form [106010-40-6]
Constit. of *Haplopappus freemontii*. Oil.

(11S)-form [106010-39-3]
Constit. of *H. freemontii*. Oil. $[\alpha]_D^{21}$ +388° (c, 0.13 in $CHCl_3$).

Jakupovic, J. *et al*, *Planta Med.*, 1986, 411 (*isol, pmr, cmr*)
Cardona, L. *et al*, *Tetrahedron*, 1993, **49**, 7829 (*synth*)

9-Hydroxy-4,11-eudesmadien-15-oic acid H-10138



$C_{15}H_{22}O_3$ M 250.337

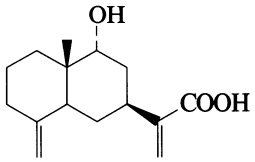
9β-form [150034-07-4]
Constit. of *Aquilaria agallocha* (agarwood). $[\alpha]_D^{22}$ +91.5° (c, 0.8 in $CHCl_3$) (Me ester).

Ichihara, M. *et al*, *Phytochemistry*, 1993, **33**, 1147 (*isol, pmr, cmr*)

9-Hydroxy-4(15),11(13)-eudesmadien-12-oic acid H-10139

Updated Entry replacing H-01750

9-Hydroxycostic acid



9α-*form*

$C_{15}H_{22}O_3$ M 250.337

9α-form
Isol. from *Fluorensia macrophylla*. Oil.

9β-form [94190-55-3]
Isol. from *F. macrophylla*.

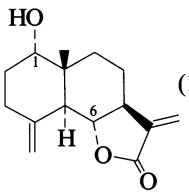
Ac: [126217-92-3].
$C_{17}H_{24}O_4$ M 292.374
Constit. of *A. tournefortiana*. Oil (as Me ester). $[\alpha]_D^{24}$ +41° (c, 0.51 in $CHCl_3$)(Me ester).

9-Ketone: [94190-53-1]. *9-Oxo-4(15),11(13)-eudesmadien-12-oic acid.* ***9-Oxocostic acid***
$C_{15}H_{20}O_3$ M 248.321
Isol. from *F. macrophylla* and *Artemisia tournefortiani*. Cryst. (as Me ester). Mp 46° (Me ester).

Bohlmann, F. *et al*, *Phytochemistry*, 1984, **23**, 1445.
Sanz, J.F. *et al*, *Justus Liebigs Ann. Chem.*, 1990, 541 (*isol, pmr, cmr*)
Marco, J.A. *et al*, *Magn. Reson. Chem.*, 1992, **30**, 678 (*cmr*)

1-Hydroxy-4(15),11(13)-eudesmadien-12,6-olide H-10140

Updated Entry replacing H-01757



(1α,6α)-*form*

$C_{15}H_{20}O_3$ M 248.321

(1α,6α)-form
Constit. of *Schistostephium rotundifolium*. Gum. $[\alpha]_D^{24}$ +132° (c, 0.75 in $CHCl_3$).

(1β,6α)-form [28254-53-7] ***Reynosin***
Constit. of *Ambrosia confertiflora*. Cryst. (C_6H_6/cyclohexane). Mp 145-146°. $[\alpha]_D^{25}$ +180° (c, 0.12 in EtOH).

1-O-β-D-Glucopyranoside: [111618-85-0]. ***Sonchuside D***
$C_{21}H_{30}O_8$ M 410.463
Constit. of *Sonchus oleraceus* and *S. asper*. Amorph. powder. $[\alpha]_D^{25}$ +64.3° (c, 0.14 in MeOH).

11α,13-Dihydro: [32223-12-4]. ***Dihydroreynosin***
$C_{15}H_{22}O_3$ M 250.337
Constit. of *Artemisia canariensis* and *Michelia compressa*. Cryst. (hexane). Mp 136-137°. Struct. revised in 1990.

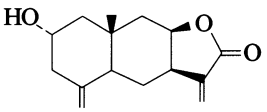
11β,13-Dihydro: ***11-Epidihydroreynosin***
$C_{15}H_{22}O_3$ M 250.337
Constit. of *A. herba-alba* and *Centaurea ornata*. Needles (Et_2O/hexane). Mp 142-145°. $[\alpha]_D^{24}$ +1.8° (c, 0.9 in $CHCl_3$).

Yoshioko, H. *et al*, *Phytochemistry*, 1970, **9**, 823 (*isol, struct*)

Ando, M. *et al*, *Tetrahedron*, 1977, **33**, 2785 (*synth*)
Rodrigues, A.A.S. *et al*, *Phytochemistry*, 1978, **17**, 953 (*synth*)
Bohlmann, F. *et al*, *Phytochemistry*, 1982, **21**, 1666; 1983, **22**, 1623 (*isol, struct*)
Gonzalez, A.G. *et al*, *Phytochemistry*, 1983, **22**, 1509 (*isol*)
Van Hijfte, L. *et al*, *Tetrahedron*, 1984, **40**, 4371 (*synth*)
Miyase, T. *et al*, *Chem. Pharm. Bull.*, 1987, **35**, 2869 (*Sonchuside D*)
Navarro, J.J. *et al*, *J. Nat. Prod.* (*Lloydia*), 1990, **53**, 573 (*isol, pmr, cmr, struct*)

2-Hydroxy-4(15),11(13)-eudesmadien-12,8-olide H-10141

Updated Entry replacing H-01763



$C_{15}H_{20}O_3$ M 248.321

(2α,8β)-form [5938-03-4] ***Ivalin***

Constit. of *Iva microcephala* and *I. imbriata*. Cryst. (C_6H_6/pet. ether). Mp 130-132°. $[\alpha]_D^{23}$ +142° (c, 1.03 in $CHCl_3$).

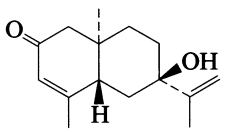
11α,13-Dihydro: 2-Hydroxy-4(15)-eudesmen-12,8-olide. ***11,13-Dihydroivalin***

$C_{15}H_{22}O_3$ M 250.337

Constit. of *Inula graveolens*.

Herz, W. *et al*, *J. Org. Chem.*, 1962, **27**, 905 (*isol, struct*)
Tomioka, K. *et al*, *Tetrahedron Lett.*, 1984, **25**, 333 (*synth*)
Topça, G. *et al*, *Phytochemistry*, 1993, **33**, 407 (*Dihydroivalin*)

7-Hydroxy-3,11-eudesmadien-2-one H-10142



$C_{15}H_{20}O_2$ M 232.322

MF given as $C_{15}H_{20}O$ in paper.

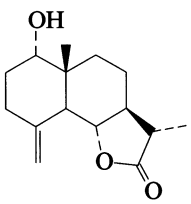
(ent-7α)-form

Teucrenone

Constit. of *Teucrium heterophyllum*. Gum.

Fraga, B.M. *et al*, *Phytochemistry*, 1993, **34**, 1083 (*isol, pmr, cmr*)

1-Hydroxy-4(15)-eudesmen-12,6-olide H-10143



$C_{15}H_{22}O_3$ M 250.337

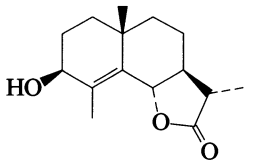
(1α,6α,11βH)-form [82292-50-0]

$C_{15}H_{22}O_3$ M 250.337

Constit. of *Artemisia spicigera*. Oil. $[\alpha]_D$ +56° (c, 1.9 in $CHCl_3$).

Marco, J.A. *et al*, *Phytochemistry*, 1993, **32**, 460 (*isol, pmr, cmr*)

3-Hydroxy-4-eudesmen-12,6-olide H-10144



$C_{15}H_{22}O_3$ M 250.337

(3β,6α,11βH)-form

Needles ($CHCl_3$/hexane). Mp 173-175°.

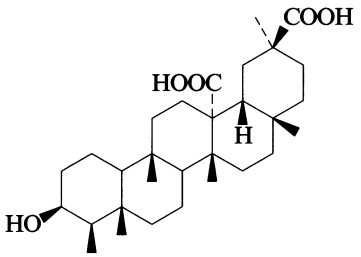
3-O-β-D-Glucopyranoside: [111618-84-9]. ***Sonchuside C***

$C_{21}H_{32}O_8$ M 412.479

Constit. of *Sonchus oleraceus*. Amorph. powder. $[\alpha]_D^{25}$ −12.0° (c, 0.5 in MeOH).

Miyase, T. *et al*, *Chem. Pharm. Bull.*, 1987, **35**, 2869 (*isol, pmr, cmr*)

3-Hydroxy-27,29-friedelanedioic acid H-10145



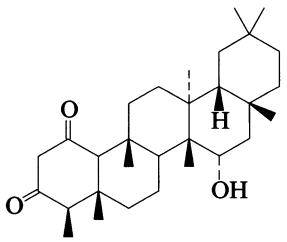
$C_{30}H_{48}O_5$ M 488.706

3β-form

Constit. of *Phyllobotryon spathulatum*. Amorph. solid. Mp 332-333°. $[\alpha]_D$ +5° (c, 0.1 in MeOH).

Gibbons, S. *et al*, *Phytochemistry*, 1993, **34**, 273 (*isol, pmr, cmr, cryst struct*)

15-Hydroxy-1,3-friedelanedione H-10146



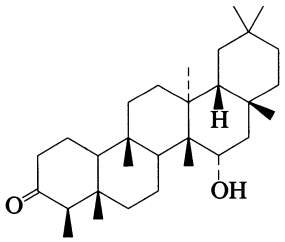
$C_{30}H_{48}O_3$ M 456.707

15α-form [145223-63-8]

Constit. of *Peritassa compta*. Cryst. Mp 245-248°. $[\alpha]_D$ −19.8° (c, 0.16 in $CHCl_3$).

Klais, J. *et al*, *J. Nat. Prod.* (*Lloydia*), 1992, **55**, 1626 (*isol, pmr, cmr*)

15-Hydroxy-3-friedelanone H-10147



$C_{30}H_{50}O_2$ M 442.724

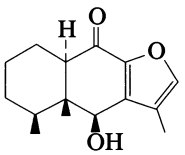
15α-form [145223-62-7] ***15α-Hydroxyfriedelin***
Constit. of *Peritassa compta*. Cryst. Mp 275-276°. $[\alpha]_D$ −32.1° (c, 0.4 in HCl_3).

15-Ketone: [69999-74-2]. ***3,15-Friedelanedione***
$C_{30}H_{48}O_2$ M 440.708
Constit. of *P. compta*. Cryst. Mp 269-271°. $[\alpha]_D$ −0.6° (c, 0.8 in HCl_3).

Kloss, J. *et al*, *J. Nat. Prod.* (*Lloydia*), 1992, **55**, 1626 (*isol, pmr, cmr*)

6-Hydroxyfuranoeremophilan-9-one H-10148

Updated Entry replacing H-01843
6-Hydroxy-9-oxofuranoeremophilane



(6β,10α*H*)-*form*

$C_{15}H_{20}O_3$ M 248.321

(6β,10αH)-form

Ac: [24405-85-4]. ***Dihydrodecompositin***
$C_{17}H_{22}O_4$ M 290.358
Constit. of *Euryops* spp. Oil.

Angeloyl: [24405-77-4].
$C_{20}H_{26}O_4$ M 330.423
Constit. of *Senecio umbellatus*. Oil.

3-Methylbutanoyl: [55050-52-7].
$C_{20}H_{28}O_4$ M 332.439
Constit. of *S. umbellatus*. Oil.

3-Methylpentanoyl: [59742-00-6].
$C_{21}H_{30}O_4$ M 346.466
Constit. of *S. praecox*. Oil.

3-Methyl-2-pentenoyl: [59742-01-7].
$C_{21}H_{28}O_4$ M 344.450
Constit. of *S. praecox*. Oil.

Methylpropenoyl: [24405-84-3].
$C_{19}H_{24}O_4$ M 316.396
Constit. of *S. umbellatus*. Cryst. (Et_2O/pet. ether). Mp 95°.

3-Methyl-2-butenoyl: [59742-08-4].
$C_{20}H_{26}O_4$ M 330.423
Constit. of *S. praecox*. Oil.

Propanoyl:
$C_{18}H_{24}O_4$ M 304.385
Constit. of *S. pachyphyllos*.

O-(*2,3-Epoxy-2-methylbutanoyl*): [68773-72-8].
$C_{20}H_{26}O_5$ M 346.422
Constit. of *Euryops* spp. Oil.

O-*Tigloyl:*
$C_{20}H_{26}O_4$ M 330.423
Constit. of *E.* spp. Oil.

(6β,10βH)-form [24405-68-3]
Constit. of *S. tricephalus*. Cryst. (Et_2O/C_6H_6). Mp 164-167°. $[\alpha]_D^{24}$ −45° (c, 0.6 in $CHCl_3$).

Ac:
$C_{17}H_{22}O_4$ M 290.358
Constit. of *S. tricephalus*. Oil. $[\alpha]_D^{24}$ −41° (c, 2.94 in $CHCl_3$).

O-*Methylpropenoyl:* [53820-45-4].
Constit. of *E. spathaceus*. Cryst. (Et_2O/pet. ether). Mp 109.5°.

Angeloyl:
$C_{20}H_{26}O_4$ M 330.423
Constit. of *S. tricephalus*.

O-(*3-Methyl-2-butenoyl*):
$C_{20}H_{26}O_4$ M 330.423
Constit. of *E.* spp. Oil.

O-*Tigloyl:*
$C_{20}H_{26}O_4$ M 330.423
Constit. of *E.* spp. Oil.

O-(*2-Methyl-2-propenoyl*):
$C_{19}H_{24}O_4$ M 316.396
Constit. of *E.* spp. Oil.

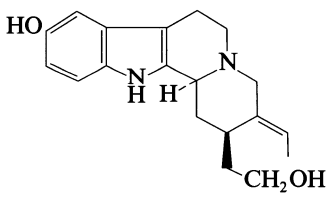
O-(*2-Methylpropanoyl*):
$C_{19}H_{26}O_4$ M 318.412
Constit. of *E.* spp. Oil. $[\alpha]_D^{24}$ −95.0° (c, 1.45 in $CHCl_3$).

6-Ketone: [18452-51-2]. ***Furanoeremophilane-6,9-dione***
$C_{15}H_{18}O_3$ M 246.305
Constit. of *S. lanceus*. Oil. $Bp_{0.1}$ 140°. $[\alpha]_D^{24}$ +10° (c, 0.7 in $CHCl_3$).

Samek, Z. *et al*, *Collect. Czech. Chem. Commun.*, 1969, **34**, 2792 (*struct*)
Bohlmann, F. *et al*, *Chem. Ber.*, 1972, **105**, 3523; 1974, **107**, 2912; 1976, **109**, 819 (*isol*)
Bohlmann, F. *et al*, *Justus Liebigs Ann. Chem.*, 1976, 1487 (*synth*)
Bohlmann, F. *et al*, *Phytochemistry*, 1978, **17**, 1135 (*isol, pmr*)
Yamakawa, K. *et al*, *Chem. Pharm. Bull.*, 1981, **29**, 3474 (*synth*)
Bohlmann, F. *et al*, *Bull. Soc. Chim. Belg.*, 1986, **95**, 707 (*isol*)
Ahmed, M. *et al*, *Phytochemistry*, 1991, **30**, 2078 (*propanoyl*)
Rodriguez, M.L. *et al*, *Acta Crystallogr., Sect. C*, 1992, **48**, 143 (*cryst struct*)

10-Hydroxygeissoschizol H-10149

Updated Entry replacing H-01854
Huntabrine. Huntrabrine
[6870-18-4]



$C_{19}H_{24}N_2O_2$ M 312.411
Alkaloid from *Amsonia elliptica*, *Rauwolfia vomitoria* and *Ervatamia hainanensis* (Apocynaceae).

N-*Metho salt:* ***Huntrabrine N-metho salt***
$C_{20}H_{27}N_2O_2^{\oplus}$ M 327.445 (ion)
Quaternary alkaloid from *Hunteria eburnea* and *Pleiocarpa mutica* (Apocynaceae).

N-*Me, chloride:*
$C_{20}H_{27}ClN_2O_2$ M 362.898
Cryst. (MeOH aq.). Mp 282-286° dec. $[\alpha]_D^{26}$ +56° (c, 0.585 in H_2O).

N-*Me, picrate:* Cryst. (MeOH). Mp 104-105°.

Me ether: [15266-60-1]. ***10-Methoxygeissoschizol.*** *19,20-Dehydro-10-methoxydihydrocorynantheol. Alkaloid AD-VI*

$C_{20}H_{26}N_2O_2$ M 326.438
Alkaloid from *Aspidosperma discolor, A. oblongum, A. marcgravianum, R. vomitoria, R. obscura* and *Neisosperma kilneri* (Apocynaceae). Cryst. (MeOH/Et_2O or Me_2CO/pentane). Mp 184-185° dec. (181-182.5°). $[\alpha]_D^{24}$ −64.5° (−42°) (c, 0.916 in pentane).

Me ether, Ac: Amorph.

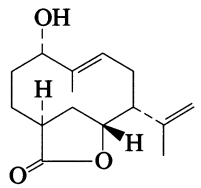
Me ether, picrate: Cryst. (MeOH aq.). Mp 186-194° dec.

Me ether, styphnate: Cryst. (MeOH/Et_2O or Me_2CO aq.). Mp 153-155°.

Me ether, N-*Me:* ***10-Methoxy-4-methylgeissoschizol***
$C_{21}H_{29}N_2O_2^{\oplus}$ M 341.472 (ion)
Quaternary alkaloid from bark of *A. pruinosum* (Apocynaceae). Mp 171-173°. $[\alpha]_D^{25}$ +36.04° (c, 1.0 in MeOH). Counterion not specified.

Bartlett, M.F. *et al, J. Org. Chem.*, 1963, **28**, 1445 (*N*-Metho salt)
Khan, Z.M. *et al, Helv. Chim. Acta*, 1965, **48**, 1957 (*N*-Metho salt)
Gilbert, B. *et al, Tetrahedron*, 1965, **21**, 1141 (*10-Methoxygeissoschizol*)
Dastoor, N.J. *et al, Helv. Chim. Acta*, 1967, **50**, 213 (*10-Methoxygeissoschizol*)
Sakai, S. *et al, Yakugaku Zasshi*, 1973, **93**, 483; *CA*, **79**, 63538h (*isol*)
Feng, X.Z. *et al, Planta Med.*, 1982, **44**, 212 (*isol*)
Iwu, M.M. *et al, Planta Med.*, 1982, **45**, 105 (*isol*)
Nunes, D.S. *et al, Phytochemistry*, 1992, **31**, 2507 (*10-Methoxy-4-methylgeissoschizol*)

1-Hydroxy-9,11-germacradien-15,6-olide H-10150

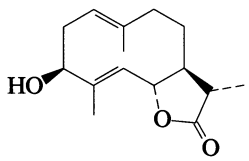


$C_{15}H_{22}O_3$ M 250.337

(1α,6α,7βH,9E)-form [104613-44-7] ***Versciolactone B***
Constit. of *Aristolochia versicolar*. Cryst. Mp 135-136°.

Zhang, J. *et al, Yaoxue Xuebao*, 1986, **21**, 273; *CA*, **105**, 149709g (*isol, pmr, cmr*)

3-Hydroxy-1(10),4-germacradien-12,6-olide H-10151



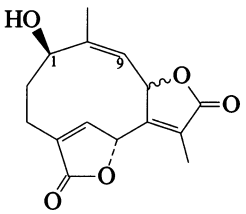
$C_{15}H_{22}O_3$ M 250.337

(1(10)E,3β,4E,6α,11βH)-form
Amorph. powder.

3-O-β-D-Glucopyranoside: [111618-82-7]. ***Sonchuside A***
$C_{21}H_{32}O_8$ M 412.479
Constit. of *Sonchus oleraceus*. Amorph. powder. $[\alpha]_D^{25}$ +29.1° (c, 0.55 in MeOH).

Miyase, T. *et al, Chem. Pharm. Bull.*, 1987, **35**, 2869 (*isol, pmr, cmr*)

1-Hydroxy-4,7(11),9-germacratriene-12,8:15,6-olide H-10152



(1β,6α,8ξ,9*Z*)-*form*

$C_{15}H_{16}O_5$ M 276.288

(1β,6α,8ξ,9Z)-form

Ac: [145940-29-0]. ***Zeylaninone***
$C_{17}H_{18}O_6$ M 318.326
Constit. of *Neolitsea acutotrinervia*. Plates. Mp 206-208°.

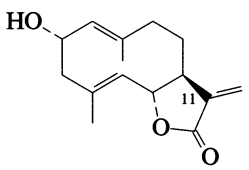
(1β,6β,8ξ,9E)-form

4α,5α-Epoxide: [145963-73-1]. *4,5-Epoxy-1-hydroxy-7(11),9-germacradiene-12,8:15,6-diolide.* ***Acutotrinone***
$C_{15}H_{16}O_6$ M 292.288
Constit. of *N. acutotrinervia*. Plates (Me_2CO/hexane). Mp 212-214°.

Li, W.-S., *J. Nat. Prod.* (*Lloydia*), 1992, **55**, 1614 (*isol, pmr, cmr*)

1-Hydroxy-1(10),4,11(13)-germacratrien-12,6-olide H-10153

Updated Entry replacing H-01870



(1(10)*E*,2α,4*E*,6α)-*form*

$C_{15}H_{20}O_3$ M 248.321

(1(10)E,2α,4E,6α)-form [19888-11-0] ***Tamaulipin A***
Constit. of *Ambrosia confertiflora*. Cryst. ($CHCl_3$). Mp 159-160°. $[\alpha]_D$ +171° (c, 1.08 in MeOH).

11β,13-Dihydro: 2α-Hydroxy-1(10)E,4E-germacradien-12,6α-olide. ***Dihydrotamaulipin A.*** *2α-Hydroxycostunolide*
$C_{15}H_{22}O_3$ M 250.337
Isol. from *A. confertiflora*. Cryst. (Et_2O). Mp 119-120°.

11β,13-Dihydro, Ac: Cryst. (Et_2O). Mp 140°. $[\alpha]_D$ +133° (c, 0.85 in MeOH).

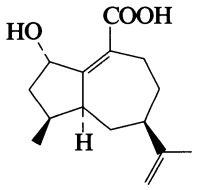
11β,13-Dihydro, 2-O-β-D-glucopyranoside: ***Ratibinolide III***
$C_{21}H_{32}O_8$ M 412.479
Constit. of *Ratibida latipalearis*. Cryst. Mp 155-158°. $[\alpha]_D$ +17° (c, 1 in MeOH).

(1(10)Z,2α,4Z,6α)-form [62948-60-1]
Isol. from *Chrysanthemum poteriifolium*.

(1(10)Z,2α,4Z,6β)-form
Constit. of *Geigeria rigida*. Gum.

Fischer, N.H. *et al, Tetrahedron*, 1968, **24**, 4091 (*isol, struct*)
Bhacca, N.S. *et al, J. Chem. Soc., Chem. Commun.*, 1969, 68 (*struct*)
Bohlmann, F. *et al, Phytochemistry*, 1977, **16**, 137 (*isol*)
Witt, M.E. *et al, J. Chem. Soc., Perkin Trans. 2*, 1978, 204 (*cryst struct*)
Zdero, C. *et al, Phytochemistry*, 1989, **28**, 3105 (*isol, pmr*)
Jiminez, A. *et al, Phytochemistry*, 1993, **34**, 1079 (*Ratibinolide III*)

2-Hydroxy-1(10),11-guaiadien-15-oic acid H-10154



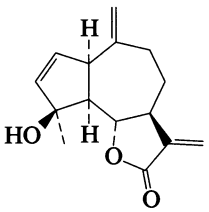
$C_{15}H_{22}O_3$ M 250.337

(2α,4β,5α)-form [146201-43-6]
Constit. of agarwood *Aquilaria agallocha*. Oil. $[\alpha]_D^{26}$ −32.1° (c, 0.05 in $CHCl_3$).

Ishihara, M. *et al*, *Tetrahedron*, 1992, **48**, 10265 (*synth, pmr, cmr*)

4-Hydroxy-2,10(14),11(13)-guaiatrien-12,6-olide H-10155

Updated Entry replacing H-01920



$C_{15}H_{18}O_3$ M 246.305

(4β,6α)-form [126705-54-2]
Constit. of *Peyrousea umbellata*. Gum.

(4α,6α)-form
Constit. of *Artemisia feddei*. Gum.

11β,13-Dihydro: 4-Hydroxy-2,10(14)-guaiadien-12,6-olide
$C_{15}H_{20}O_3$ M 248.321
Constit. of *A. feddei*. Gum.

Zdero, C. *et al*, *Phytochemistry*, 1989, **28**, 3101 (*isol, pmr*)
Tan, R.X. *et al*, *Planta Med.*, 1992, **58**, 459 (*isol, pmr*)

14-Hydroxyheneicosanoic acid, 9CI H-10156

[97534-12-8]

$H_3C(CH_2)_6CH(OH)(CH_2)_{12}COOH$

$C_{21}H_{42}O_3$ M 342.561
Constit. of the rhizomes of *Panax pseudo-ginseng*. Mp 84°.

Shukla, Y.N. *et al*, *Phytochemistry*, 1985, **24**, 1091 (*isol*)

15-Hydroxyheneicosanoic acid, 9CI H-10157

[79097-24-8]

$H_3C(CH_2)_5CH(OH)(CH_2)_{13}COOH$

$C_{21}H_{42}O_3$ M 342.561
Constit. of the leaves and stems of *Hyoscyamus muticus*. Cryst. (C_6H_6/hexane). Mp 80-82°.

Goswami, A. *et al*, *Phytochemistry*, 1981, **20**, 1315 (*isol*)

9-Hydroxy-3-hentriacontanone, 9CI H-10158

[132923-41-2]

$H_3C(CH_2)_{21}CH(OH)(CH_2)_5COCH_2CH_3$

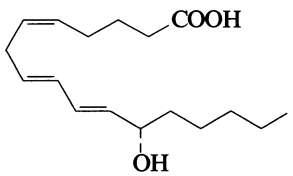
$C_{31}H_{62}O_2$ M 466.830
Isol. from bulbs of *Crinum augustum*. Mp 76-78°.

Abd El-Hafiz, M.A., *Phytochemistry*, 1990, **29**, 3936 (*isol, ir, ms, pmr*)

12-Hydroxy-5,8,10-heptadecatrienoic acid H-10159

12-HHT

[50683-78-8]



(S)-form

$C_{17}H_{28}O_3$ M 280.406
Stimulates prostacyclin production.

(5Z,8E,10E,12S)-form [54397-84-1]
Major metab. of arachidonic acid.

Me ester: [79171-56-5].
$C_{18}H_{30}O_3$ M 294.433
Oil. $[\alpha]_D^{25}$ +7.5° (c, 0.2 in $CHCl_3$). Uv λ_{max} 240 nm (MeOH).

12-Ketone: [103374-38-5]. *12-Oxo-5,8,10-heptadecatrienoic acid. 12-KHT*
Arachidonic acid metab. produced by human leukaemia cells. Formed from keto-PGH_2 by prostacyclin synthase and thromboxane synthase.

[81585-98-0, 81610-84-6, 100679-07-0]

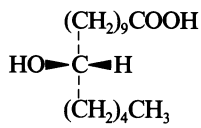
Hamberg, M. *et al*, *Proc. Natl. Acad. Sci. U.S.A.*, 1974, **71**, 3400, 3824 (*biosynth, isol, uv, ms*)
Russell, S.W. *et al*, *J. Chem. Soc., Perkin Trans. 1*, 1982, 545 (*synth, pmr, ir, ms*)
Sirois, P. *et al*, *Prostaglandins*, 1982, **24**, 405 (*biosynth*)
Agins, A.P. *et al*, *Biochem. Pharmacol.*, 1987, **36**, 1799 (*biosynth*)
Hecker, M. *et al*, *Eicosanoids*, 1988, **1**, 19 (*biosynth*)
De Montarby, L. *et al*, *Bull. Soc. Chim. Fr.*, 1989, 419 (*synth, pmr, cmr, ir*)
Nicolaou, K.C. *et al*, *J. Chem. Soc., Perkin Trans. 1*, 1989, 2131 (*synth, pmr*)
Suzuki, M. *et al*, *J. Org. Chem.*, 1989, **54**, 5292 (*synth, ir, pmr*)

11-Hydroxyhexadecanoic acid H-10160

Updated Entry replacing H-01966

11-Hydroxypalmitic acid. Jalapinolic acid. Scammonolic acid. Turpetholic acid E

[502-75-0]



(S)-form

$C_{16}H_{32}O_3$ M 272.427

(S)-form [13717-17-4]
Occurs in jalap and Scammony resins (*Ipomoea orizabensis* and *Convolvulus scammonia*) and other *I.* spp., in glycosidic form. Cryst. (EtOAc). Mp 68-69°. $[\alpha]_D$ +0.79° ($CHCl_3$).

Me ester: [60368-18-5].
$C_{17}H_{34}O_3$ M 286.454
Cryst. (pet. ether or EtOAc). Mp 40.5-41.5°, Mp 47-49°. Bp_3 183-186°.

Et ester:
$C_{18}H_{36}O_3$ M 300.481
Cryst. Mp 47-48°.

Ac:
$C_{18}H_{34}O_4$ M 314.464
Oil. Bp_{50} 224-225°.

O-[α-L-*Rhamnopyranosyl*(1→4)-α-L-*rhamnopyranoside*]: [68124-11-8]. ***Muricatin B***
$C_{28}H_{52}O_{11}$ M 564.712

Isol. from *I. muricata*. Syrup. $[\alpha]_D^{26}$ −56.6° (c, 0.495 in EtOH)(synthetic).

O-*Glycoside: Jalapinic acid. Scammoninic acid. Scammonic acid*

Isol. from *I. orizabensis* and *C. scammonia*. Hygroscopic solid. Mp 66°. Gives Jalapinolic acid, glucose, rhamnose and rhodeose on hydrol. May not be homogeneous.

11-O-[*β*-D-*Glucopyranosyl*-(*1→3*)-*α*-L-*rhamnopyranosyl*-(*1→3*)-*β*-D-*glucopyranosyl*-(*1→3*)-*β*-D-*glucopyranoside*]: [66895-65-6]. ***Turpethinic acid E***

$C_{40}H_{72}O_{22}$ M 904.996

Isol. from *Ipomoea turpethum*.

O-[*α*-L-*Rhamnopyranosyl*(*1→?*)-*α*-L-*rhamnopyranosyl*(*1→?*)-*α*-L-*rhamnopyranosyl*(*1→?*)-*α*-L-*rhamnopyranosyl*(*1→?*)-*α*-L-*rhamnopyranoside*]: [89382-36-5]. ***Quamoclitic acid***

$C_{46}H_{82}O_{23}$ M 1003.140

Isol. from *Ipomoea quamoclit, I. lacunosa, I. pandurata* and *Convolvulus al-sirensis*. Mp 129-131° (as Me ester). $[\alpha]_D^{22}$ −67.6° (c, 0.93 in H_2O) (Me ester). Struct. not fully determined. Glycosidic linkages are (1→3) or (1→4).

O-[*β*-D-*Glucopyranosyl*-(*1→3*)[*α*-L-*rhamnnopyranosyl*-(*1→4*)]-*α*-L-*rhamnopyranosyl*-(*1→4*)-*α*-L-*rhamnopyranosyl*-(*1→2*)-*β*-D-*fucopyranoside*]: [120583-62-2]. ***Operculinic acid A.*** *Mammoside J*

$C_{46}H_{82}O_{24}$ M 1019.139

Constit. of the roots of *I. operculata*. Powder (MeOH aq.). Mp 172-174° dec. $[\alpha]_D^{18}$ −63.6° (c, 1 in MeOH).

O-[*β*-D-*Glucopyranosyl*-(*1→3*)[*α*-L-*rhamnopyranosyl*-(*1→4*)]-*α*-L-*rhamnopyranosyl*-(*1→4*)-*α*-L-*rhamnopyranosyl*-(*1→2*)-*β*-D-*glucopyranoside*]: [126572-20-1]. ***Operculinic acid B***

$C_{46}H_{82}O_{25}$ M 1035.139

Constit. of the roots of *I. operculata*. Powder (MeOH aq.). Mp 169-171° dec. $[\alpha]_D^{24}$ −80.9° (c, 2.6 in MeOH).

O-[*α*-L-*Rhamnopyranosyl*-(*1→4*)-*α*-L-*rhamnopyranosyl*-(*1→4*)-*α*-L-*rhamnopyranosyl*-(*1→2*)-*β*-D-*fucopyranoside*]: [126642-32-8]. ***Operculinic acid C***

$C_{40}H_{72}O_{19}$ M 856.997

Constit. of the roots of *I. operculata*. Powder (MeOH aq.). Mp 116-120°. $[\alpha]_D^{18}$ −84.0° (c, 1.9 in MeOH).

O-[*β*-D-*Glucopyranosyl*-(*1→3*)[*α*-L-*rhamnopyranosyl*-(*1→4*)]-*α*-L-*rhamnopyranosyl*-(*1→4*)-*α*-L-*rhamnopyranosyl*-(*1→2*)-*β*-D-*xylopyranoside*]: [126465-32-5]. ***Operculinic acid D***

$C_{45}H_{80}O_{24}$ M 1005.113

Constit. of the roots of *I. operculata*. Powder (MeOH aq.). Mp 175-177° dec. $[\alpha]_D^{16}$ −88.6° (c, 0.7 in MeOH).

O-[*α*-L-*Rhamnopyranosyl*-(*1→4*)-*α*-L-*rhamnopyranosyl*-(*1→4*)-*α*-L-*rhamnopyranosyl*-(*1→2*)-*β*-D-*glucopyranoside*]: [126465-33-6]. ***Operculinic acid E***

$C_{40}H_{72}O_{20}$ M 872.997

Constit. of the roots of *I. operculata*. Powder. Mp 114-116° dec. $[\alpha]_D^{18}$ −76.8° (c, 1.6 in MeOH).

O-[*α*-L-*Rhamnopyranosyl*-(*1→4*)-*α*-L-*rhamnopyranosyl*-(*1→4*)-*α*-L-*rhamnopyranosyl*-(*1→2*)-*β*-D-*xylopyranoside*]: [132333-81-4]. ***Operculinic acid F***

$C_{39}H_{70}O_{19}$ M 842.971

Constit. of the roots of *I. operculata*. Powder. Mp 104-109° dec. $[\alpha]_D^{32}$ −97.9° (c, 2.2 in MeOH).

O-[2-O-*Methyl*-*β*-D-*glucopyranosyl*-(*1→3*)[*α*-L-*rhamnopyranosyl*-(*1→4*)]-*α*-L-*rhamnopyranosyl*-(*1→4*)-*α*-L-*rhamnopyranosyl*-(*1→2*)-*β*-D-*fucopyranoside*]: [132333-82-5]. ***Operculinic acid G***

$C_{47}H_{84}O_{24}$ M 1033.166

Constit. of the roots of *I. operculata*. Powder. Mp 110-114° dec. $[\alpha]_D^{24}$ −62.0° (c, 1.3 in MeOH).

(±)-*form*

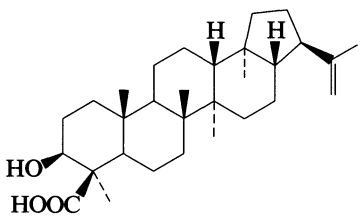
Cryst. (EtOAc). Mp 68-69°.

Me ester: Cryst. (pet. ether). Mp 40.5-41.5°. Bp_3 183-186°.

[114926-99-7, 121043-05-8, 121153-17-1]

Power, F.B. *et al, J. Chem. Soc.*, 1912, **101**, 398 (*isol*)
Davies, C.A. *et al, J. Am. Chem. Soc.*, 1928, **50**, 1754 (*synth*)
Bauer, K.H. *et al, Arch. Pharm. (Weinheim, Ger.)*, 1934, **272**, 841 (*Jalapinic acid*)
Smith, C.R. *et al, Phytochemistry*, 1964, **3**, 289 (*isol*)
Khanna, S.N. *et al, Phytochemistry*, 1967, **6**, 735.
Tulloch, A.P., *Phytochemistry*, 1976, **15**, 1153 (*isol*)
Wagner, H. *et al, Phytochemistry*, 1977, **16**, 715 (*glc, ms*)
Liptak, A. *et al, Phytochemistry*, 1978, **17**, 997 (*Muricatin B*)
Wagner, H. *et al, Planta Med.*, 1978, **33**, 144 (*Turpethinic acid E*)
Wagner, H. *et al, Planta Med.*, 1983, **49**, 154 (*isol, ms*)
Shibuya, H. *et al, Chem. Pharm. Bull.*, 1989, **37**, 260 (*synth, abs config*)
Ono, M. *et al, Chem. Pharm. Bull.*, 1989, **37**, 3209; 1990, **38**, 2650 (*Operculinic acids*)

3-Hydroxy-22(29)-hopen-24-oic acid H-10161



$C_{30}H_{48}O_3$ M 456.707

3β-form

24→3 Lactone: 22(29)-Hopen-24,3-olide

$C_{30}H_{46}O_2$ M 438.692

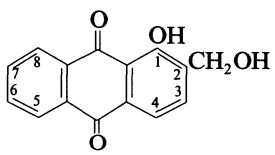
Constit. of *Ficus insipida*. Needles. Mp 172-174°. Rare *β*-lactone.

Lopes, D. *et al, Phytochemistry*, 1993, **34**, 279 (*isol, pmr, cmr*)

1-Hydroxy-2-hydroxymethylanthraquinone H-10162

1-Hydroxy-2-hydroxymethyl-9,10-anthracenedione, 9CI. ***Digiferruginol***

[24094-45-9]

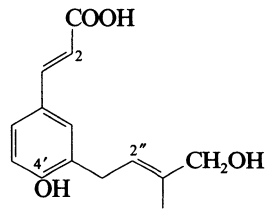


$C_{15}H_{10}O_4$ M 254.242

Constit. of *Streptocarpus dunnii, Rubia tinctorum* and *Digitalis* spp. Also obt. from *Damnacanthus indica* and *Morinda officinalis*. Yellow needles (MeOH). Mp 212.5-215° (210°).

Stockigt, J. *et al, Phytochemistry*, 1973, **12**, 2389 (*isol, synth*)
Bredereck, K. *et al, Justus Liebigs Ann. Chem.*, 1975, 972 (*synth*)
Imre, S. *et al, Phytochemistry*, 1975, **14**, 2310 (*isol, ir, pmr, uv*)
Chang, P. *et al, J. Nat. Prod. (Lloydia)*, 1985, **48**, 948 (*synth*)

3-[4-Hydroxy-3-(4-hydroxy-3-methyl-2-butenyl)phenyl]-2-propenoic acid, 9CI H-10163



(2*E*,2″*E*)-*form*

$C_{14}H_{16}O_4$ M 248.278

(2E,2″E)-form

Me ester: [131615-26-4].
$C_{15}H_{18}O_4$ M 262.305
Constit. of *Artemisia marschalliana* and *A. xanthochroa.*

4′-Ac, Me ester: [131559-47-2].
$C_{17}H_{20}O_5$ M 304.342
Constit. of *A. xanthochroa.*

4′-Me ether, Me ester: [131573-89-2].
$C_{16}H_{20}O_4$ M 276.332
Constit. of *A. xanthochroa.*

(2E,2″Z)-form

Me ester: [131616-49-4].
Constit. of *A. xanthrochroa.*

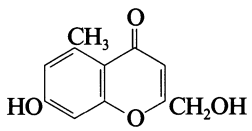
(2Z,2″E)-form

Me ester: [131615-27-5].
Constit. of *A. xanthochroa.*

Mericli, A.H. *et al, Fitoterapia*, 1990, **61**, 145 (*isol*)
Jakupovic, J. *et al, Phytochemistry*, 1990, **29**, 3683 (*isol*)

7-Hydroxy-2-(hydroxymethyl)-5-methyl-4*H*-1-benzopyran-4-one H-10164

7-Hydroxy-2-(hydroxymethyl)-5-methylchromone
[143553-00-8]

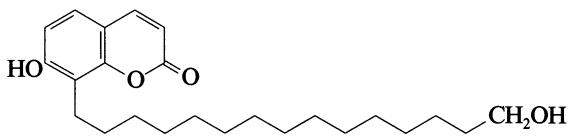


$C_{11}H_{10}O_4$ M 206.198
Prod. by *Penicillium* sp. No. 31f. Plant growth promotor.
Needles ($CHCl_3$/MeOH). Mp 231-234°.

Kimura, Y. *et al, Biosci., Biotechnol., Biochem.*, 1992, **56**, 1138 (*isol, pmr, cmr*)

7-Hydroxy-8-(15-hydroxypentadecyl)-2*H*-1-benzopyran-2-one H-10165

7-Hydroxy-8-(15-hydroxypentadecyl)coumarin



$C_{24}H_{36}O_4$ M 388.546

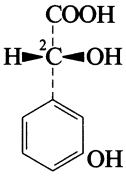
7-Me ether: [79901-66-9]. *8-(15-Hydroxypentadecyl)-7-methoxy-2H-benzopyran-2-one, 9CI*
$C_{25}H_{38}O_4$ M 402.573
Isol. from the bark of *Erythrina stricta.*

Singh, H. *et al, J. Nat. Prod.* (*Lloydia*), 1981, **44**, 526 (*isol, ir, uv, pmr*)

2-Hydroxy-2-(3-hydroxyphenyl)acetic acid H-10166

Updated Entry replacing H-02035

α,3-Dihydroxybenzeneacetic acid, 9CI. m-*Hydroxymandelic acid, 8CI.* α,*3-Dihydroxyphenylacetic acid. 3-Hydroxyphenylglycollic acid.* α,*3-Dihydroxy-α-toluic acid*
[17119-15-2]



(*R*)-*form*

$C_8H_8O_4$ M 168.149

(R)-form

Nitrile, 2-O-β-D-Glucopyranoside: [41753-54-2]. ***Holocalin***
$C_{14}H_{17}NO_7$ M 311.291
Cyanogenic glucoside from seeds of *Holocalyx balansae.*
Mp 154-155°. $[\alpha]_D^{20}$ −59.1° (c, 1.14 in EtOH).

(S)-form

Nitrile, 2-O-β-D-Glucopyranoside: [645-02-3]. ***Zierin***
$C_{14}H_{17}NO_7$ M 311.291
Isol. from above ground parts of *Zieria laevigata.*
Needles ($EtOAc/CHCl_3$). Mp 156° (softens at 153°).
$[\alpha]_D^{20.3}$ −29.5°.

Nitrile, 2-O-[β-D-xylopyranosyl-(1→6)-β-D-glucopyranoside]: [82083-98-5]. ***Zierinxyloside***
$C_{19}H_{25}NO_{11}$ M 443.407
Constit. of the fruit of *Xeranthemum cylindraceum.*

Nitrile, 2-O-[[5-O-[4-β-D-(glucopyranosyloxy)caffeoyl]-β-D-apiofuranosyl]-(1→4)-β-D-xylopyranosyl-(1→6)-β-D-glucopyranoside]: [129761-12-2]. ***Xeranthin***
$C_{39}H_{49}NO_{23}$ M 899.809
Constit. of the fruit of *X. cylindraceum.* Powder. $[\alpha]_D^{20}$ −88.1° (c, 1.29 in MeOH).

(±)-form

Mp 131-132°. Has been resolved, but the abs. config. of the parent acid does not appear to be known.

Et ester:
$C_{10}H_{12}O_4$ M 196.202
Mp 104°.

3-Me ether, Et ester:
$C_{11}H_{14}O_4$ M 210.229
Bp_{14} 169°.

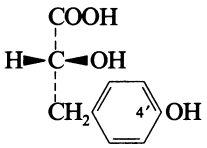
Nitrile: [53313-95-4].
$C_8H_7NO_2$ M 149.149
Mp 111-112°.

Lévy, J. *et al, Bull. Soc. Chim. Fr.*, 1931, **49**, 1721.
Finnemore, H. *et al, J. Proc. R. Soc. N.S.W.*, 1936, **70**, 135 (*Zierin*)
Shaw, K.N.F. *et al, J. Org. Chem.*, 1956, **21**, 1149 (*synth*)
Deljac, A. *et al, CA*, 1967, **12**, 181 (*resoln*)
Jensen, S.R. *et al, Acta Chem. Scand.*, 1973, **27**, 2661 (*isol*)
Gmelin, R. *et al, Phytochemistry*, 1973, **12**, 457 (*Holocalin*)
Schwarzmaier, U., *Chem. Ber.*, 1976, **109**, 3250 (*pmr, Zierin*)
Moehrle, H. *et al, Pharmazie*, 1980, **35**, 756 (*synth, Zierin*)
Huebel, W. *et al, Planta Med.*, 1982, **44**, 178 (*Zierinxyloside*)
Schwind, P. *et al, Phytochemistry*, 1990, **29**, 1903 (*Xeranthin, Zierinxyloside*)

2-Hydroxy-3-(4-hydroxyphenyl)propanoic acid H-10167

α,4-Dihydroxybenzenepropanoic acid, 9CI. 3-(4-Hydroxyphenyl)lactic acid, 8CI

[306-23-0]



$C_9H_{10}O_4$ M 182.176

Constit. of human urine and various plant spp. Metab. of tyrosine in humans. Config. not detd. for most occurrences.

▷ Tumorigenic.

(R)-form [89919-57-3]

Isol. from the heartwood of *Pterocarpus marsupium*. Mp 169-170° (164-165°). $[\alpha]_D^{26}$ −19.6° (c, 1.3 in H_2O).

(S)-form [23508-35-2]

Metab. of *Ceratocystis* spp.

(±)-form [6482-98-0]

Cryst. Mp 147.5-149° (139-140°).

4'-Me ether: [28030-15-1]. *2-Hydroxy-3-(4-methoxyphenyl) propanoic acid*

$C_{10}H_{12}O_4$ M 196.202

Constit. of barley, rye and wheat. Cryst. ($CHCl_3$/pet. ether) or (EtOAc/pet. ether). Mp 104-105° (88°).

Amide, 4'-Me ether: [105955-69-9]. *2-Hydroxy-3-(4-methoxyphenyl)propanamide. 3-(4-Methoxyphenyl) lactamide*

$C_{10}H_{13}NO_3$ M 195.218

Cryst. ($CHCl_3$/pet. ether). Mp 145°.

Di-Me ether: [87387-83-5]. *2-Methoxy-3-(4-methoxyphenyl) propanoic acid*

$C_{11}H_{14}O_4$ M 210.229

Constit. of barley, rye and wheat.

4'-Me ether, Me ester: [55301-58-1].

$C_{11}H_{14}O_4$ M 210.229

Oil. $Bp_{0.1}$ 35°.

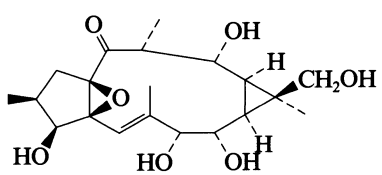
Di-Me ether, Me ester:

$C_{12}H_{16}O_4$ M 224.256

Oil. $Bp_{0.5}$ 120°.

Bubl, E.C. *et al, J. Am. Chem. Soc.*, 1951, **73**, 4972 (*synth*)
Holden, J.T. *et al, J. Biol. Chem.*, 1951, **191**, 559 (*synth*)
Buckle, A.L.J. *et al, J. Chem. Soc.*, 1954, 3981 (*synth*)
Matsuura, T. *et al, J. Am. Chem. Soc.*, 1959, **81**, 871 (*synth*)
Stoessl, A., *Biochem. Biophys. Res. Commun.*, 1969, **35**, 186 (*isol, synth*)
Rauschenbach, M.O. *et al, Cancer Res.*, 1975, **35**, 577 (*tox*)
Danifshefsky, S. *et al, J. Am. Chem. Soc.*, 1979, **101**, 7013 (*synth, pmr*)
Lohaus, E. *et al, Z. Naturforsch., C*, 1983, **38**, 524 (*occur*)
Maurya, R. *et al, J. Nat. Prod. (Lloydia)*, 1984, **47**, 179 (*isol*)
Gowal, H. *et al, Helv. Chim. Acta*, 1985, **68**, 2132 (*synth*)
Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th Ed., Van Nostrand-Reinhold, 1992, HNG700.

19-Hydroxyingol H-10168



$C_{20}H_{30}O_7$ M 382.453

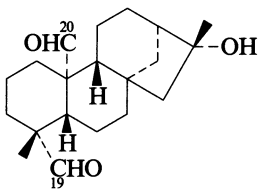
19-(3-Pyridinecarbonyl), 8-benzoyl, 3,7,12-tri-Ac:

$C_{39}H_{43}NO_{12}$ M 717.768

Constit. of *Euphorbia marginata*.

Branch, S.K. *et al, Magn. Reson. Chem.*, 1992, **30**, 632 (*isol, pmr, cmr*)

16-Hydroxy-19,20-kauranedial H-10169



$C_{20}H_{30}O_3$ M 318.455

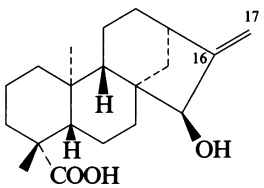
(ent-16β)-form [149249-33-2]

Constit. of *Ryparosa acuminata*. Needles (EtOAc/hexane). Mp 204-206° dec. $[\alpha]_D$ −10° (c, 0.09 in $CHCl_3$).

Shaari, K. *et al, Aust. J. Chem.*, 1993, **46**, 739 (*isol, pmr, cmr*)

15-Hydroxy-16-kauren-19-oic acid H-10170

Updated Entry replacing H-02131



(*ent*-15α)-*form*

$C_{20}H_{30}O_3$ M 318.455

(ent-15α)-form [6619-95-0]

Constit. of *Phebalium rude* and *Mikania* spp. Cryst. (MeOH aq.). Mp 209-210°. $[\alpha]_D^{20}$ −107° (c, 1.1 in EtOH).

15-Ac: [6619-97-2]. ***Xylopic acid***

$C_{22}H_{32}O_4$ M 360.492

Constit. of *Xylopia aethiopica* and *Eupatorium deltoideum*. Cryst. (EtOAc). Mp 259-260°. $[\alpha]_D$ −144° (c, 1.2 in $CHCl_3$).

β-D-Glucopyranosyl ester: [60129-63-7]. ***Paniculoside I***

$C_{26}H_{40}O_8$ M 480.597

Constit. of *Stevia paniculata* and *Platycarpha carlinoides*. Cryst. (MeOH aq.). Mp 134-136°. $[\alpha]_D^{23}$ −69.9° (c, 0.21 in MeOH).

β-D-Allopyranosyl ester:

$C_{26}H_{40}O_8$ M 480.597

Isol. from *P. carlinoides*.

O-β-D-Glucopyranoside, β-D-glucopyranosyl ester: [65606-29-3]. ***Paniculoside V. Crispioside A***

$C_{32}H_{50}O_{13}$ M 642.739

Constit. of *Stevia paniculata, S. ovata* and *Francoeuria crispa*. Cryst. (C_6H_6/EtOAc). Mp 170-172.5°. $[\alpha]_D^{23}$ +61° (c, 0.2 in MeOH).

Glycoside: ***Doronicoside D***

$C_{24}H_{66}O_{21}$ M 690.773

Isol. from *Doronicum macrophyllum*. Cryst. (MeOH aq.). Mp 110-118°. $[\alpha]_D$ −36.3° (c, 1.129 in MeOH). Contains D-Xyl, L-Ara and 2 D-Mann.

Angeloyl: [77399-93-0].

$C_{25}H_{36}O_4$ M 400.557

From *Aspilia parvifolia* and *S.* spp. Gum. Not obt. pure.

Tigloyl: [77399-94-1].

$C_{25}H_{36}O_4$ M 400.557

Isol. from *Aspilia parvifolia* and *Solidago* spp. Gum. Not obt. pure.

3-Methyl-2-butenoyl: [77355-68-1].
$C_{25}H_{36}O_4$ M 400.557
From *S.* spp. Gum. Not obt. pure.

16ξ,17-Epoxide,15-tigloyl: [79435-56-6].
$C_{25}H_{36}O_5$ M 416.556
From *A. parvifolia*. Gum (as Me ester). $[\alpha]_D^{24}$ −49.3° (c, 0.8 in $CHCl_3$) (Me ester).

15-O-α-L-Arabinopyranoside: ***Rufososide A***
$C_{25}H_{38}O_7$ M 450.571
Constit. of *Senecio rufus*. Prisms (MeOH). Mp 157-158°. $[\alpha]_D^{18}$ −84.2° (c, 1 in MeOH).

15-O-α-L-Arabinopyranoside, β-D-glucopyranosyl ester: ***Rufososide***
$C_{31}H_{48}O_{12}$ M 612.713
Constit. of *S. rufus*. Needles (MeOH). Mp 180-182°. $[\alpha]_D^{18}$ −75.5° (c, 1 in MeOH).

(ent-15β)-form [22338-69-8] ***Grandiflorolic acid***
Constit. of *Espeletia schultzii, E. timotensis, E. weddelii, Enhydra fluctuans, Aralia cordata* and other spp. Shows gibberellin-like activity. Cryst. Mp 216-218°.

Ac: [22343-40-4].
$C_{22}H_{32}O_4$ M 360.492
Constit. of *Espeletia schultzii* and several other spp. Cryst. Mp 173-174°. $[\alpha]_D^{20}$ −84.9°.

Angeloyl: [32381-03-6].
$C_{25}H_{36}O_4$ M 400.557
Constit. of *Enhydra fluctuans* and a number of other plants. Cryst. Mp 193-195°.

3-Methylbutanoyl: [32381-02-5].
$C_{25}H_{38}O_4$ M 402.573
Constit. of *E. fluctuans* and a number of other plants. Cryst. Mp 169-170°. $[\alpha]_D$ −74.5° ($CHCl_3$).

Benzoyl: [67664-92-0].
$C_{27}H_{34}O_4$ M 422.563
Isol. from *Mikania* spp. Oil (as Me ester).

Tigloyl: [53586-31-5].
$C_{25}H_{36}O_4$ M 400.557
From *A., Grazielia, Wedelia* and others.

3-Methyl-2-butenoyl: [53586-30-4].
$C_{25}H_{36}O_4$ M 400.557
Isol. from *Viguiera, Ichthyothere* spp. and others.

2-Methylpropenoyl: [78853-03-9].
$C_{24}H_{34}O_4$ M 386.530
From *I., V.*, and *Mikania* spp. Gum (as Me ester). $[\alpha]_D^{24}$ −60.3° (c, 1.7 in $CHCl_3$) (Me ester).

2-Methylpropanoyl:
$C_{24}H_{36}O_4$ M 388.546
Isol. from *E. purpurascens, Mikania* spp. and others.

Cinnamoyl: [65513-87-3]. ***Cinnamoylgrandifloric acid***
$C_{29}H_{36}O_4$ M 448.601
Isol. from *Montanoa pteropoda* and *Mikania* spp. Cryst. (hexane). Mp 211-213°. $[\alpha]_D^{22}$ +70°.

2,3-Epoxy-2-methylbutanoyl: [88664-25-9].
Epoxyangeloxygrandifloric acid
$C_{25}H_{36}O_5$ M 416.556
Isol. from *Helianthus, W.* and *Viguiera* spp. Gum (as Me ester).

2,3-Dihydroxy-2-methylbutanoyl: [93888-83-6].
$C_{25}H_{38}O_6$ M 434.572
Isol. from *W.* spp.

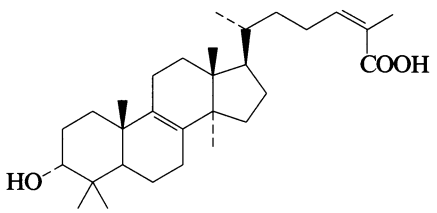
2-Methylbutanoyl: [90041-98-8].
$C_{25}H_{38}O_4$ M 402.573
From *V.* spp. Not obt. pure.

16α,17-Epoxide,15-angeloyl: [63898-23-7]. ***Perymenic acid***
$C_{25}H_{36}O_5$ M 416.556
Isol. from *Perymenium ecuadorium*, also *Smallanthus fruticosus, Wedelia pinetorum* and *Aspilia pluriseta*. Oil (as Me ester). $[\alpha]_D^{24}$ −54° (c, 1.28 in $CHCl_3$) (Me ester).

15-Ketone: [6620-00-4]. ***ent-15-Oxo-16-kauren-19-oic acid***
$C_{20}H_{28}O_3$ M 316.439
Isol. from *Pteris longipes* and *Viguiera dentata*. Tablets (C_6H_6/hexane). Mp 211-213°. $[\alpha]_D^{20}$ −169.0° (c, 1.19 in MeOH).

Cannon, J.R. *et al, Aust. J. Chem.*, 1966, **19**, 861.
Ekong, D.E.U. *et al, J. Chem. Soc. C*, 1968, 311 (*derivs*)
Brieskorn, C.H. *et al, Chem. Ber.*, 1969, **102**, 2621 (*struct*)
Pakrashi, S.C. *et al, Indian J. Chem.*, 1971, **9**, 84 (*isol*)
Yamasaki, K. *et al, Chem. Pharm. Bull.*, 1977, **25**, 2895 (*derivs*)
Alieva, Sh.A. *et al, Khim. Prir. Soedin.*, 1977, **13**, 658; *Chem. Nat. Compd.* (*Engl. Transl.*), 546 (*Doronicoside D*)
Bohlmann, F. *et al, Phytochemistry*, 1977, **16**, 786; 1978, **17**, 483; 1980, **19**, 2655; 1981, **20**, 522, 751 (*derivs*)
Vichnewski, W. *et al, Phytochemistry*, 1977, **16**, 2028 (*Cinnamoylgrandifloric acid*)
Panizo, F.M. *et al, An. Quim.*, 1979, **75**, 428 (*isol*)
Murakami, T. *et al, Chem. Pharm. Bull.*, 1981, **29**, 657 (*15-Oxo-16-kauren-19-oic acid*)
Herz, W. *et al, Phytochemistry*, 1983, **22**, 2021 (*Epoxyangeloxygrandifloric acid*)
Hutchison, M. *et al, J. Chem. Soc., Perkin Trans. 1*, 1984, 2363 (*cmr*)
Zdero, C. *et al, Phytochemistry*, 1989, **28**, 2745 (*allosyl ester*)
Abdel-Mogib, M. *et al, Phytochemistry*, 1990, **29**, 2581.
Cheng, D.-L. *et al, Phytochemistry*, 1993, **32**, 151 (*Rufososides*)

3-Hydroxylanosta-8,24-dien-26-oic acid H-10171

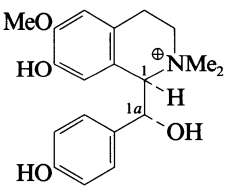


$C_{30}H_{48}O_3$ M 456.707

(3α,24Z)-form [90365-58-5] ***Anwuweizic acid***
Constit. of *Schisandra sphenanthera*.

Liu, J. *et al, Huaxue Xuebao*, 1984, **42**, 264; *CA*, **101**, 3913q.

1*a*-Hydroxymagnocurarine H-10172



(1R,1aR)-form

$C_{19}H_{24}NO_4^{\oplus}$ M 330.403 (ion)

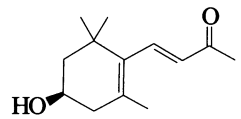
(1R,1aR)-form
Alkaloid from stems of *Cryptocarya konishii* (Lauraceae).

Perchlorate:
$C_{19}H_{24}ClNO_8$ M 429.853
Amorph. solid. Mp 142°. $[\alpha]_D^{24.5}$ +35° (c, 0.50 in MeOH).

Lee, S.-S. *et al, J. Nat. Prod.* (*Lloydia*), 1993, **56**, 1971 (*isol, uv, ir, pmr, cmr, ms, cd, struct*)

3-Hydroxy-5,7-megastigmadien-9-one H-10173

Updated Entry replacing H-02201



$C_{13}H_{20}O_2$ M 208.300

(3R,7E)-form

3-Hydroxy-β-ionone

Constit. of *Phaseolus vulgaris*. Oil. $[\alpha]_D^{22}$ −140.5° (c, 0.1 in $CHCl_3$).

2-Methylpropanoyl: [37704-28-2]. ***Quiesone***

$C_{17}H_{26}O_3$ M 278.391

Isol. from *Peronospora tabacina*. Germination inhibitor. Oil.

7α,8α-Epoxide, 3-O-β-D-glucopyranoside: [108906-51-0]. ***Icariside B₂***

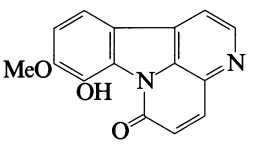
$C_{19}H_{30}O_8$ M 386.441

Constit. of *Epidermium grandiflorum* var. *thumbergianum*. Needles (MeOH/EtOAc). Mp 172.5-174°. $[\alpha]_D^{25}$ −102.1° (c, 0.97 in MeOH).

Leppik, R.A. *et al*, *Phytochemistry*, 1972, **11**, 2055 (*isol*)
Mori, K. *et al*, *Agric. Biol. Chem.*, 1973, **37**, 2899 (*synth*)
Miyase, T. *et al*, *Chem. Pharm. Bull.*, 1987, **35**, 1109 (*Icariside B₂*)
Kato-Noguchi, H. *et al*, *Phytochemistry*, 1993, **33**, 553 (*isol, pmr, cmr*)

8-Hydroxy-9-methoxycanthin-6-one H-10174

[143257-71-0]



$C_{15}H_{10}N_2O_3$ M 266.256

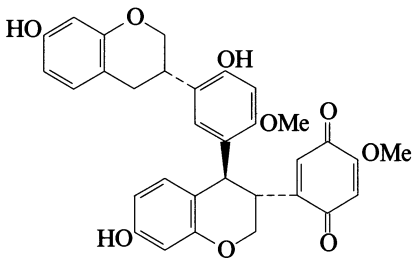
Alkaloid from the stem bark of *Picrolemma granatensis* (Simaroubaceae). Yellow needles. Mp 198-201°.

Rodrigues Fo, E. *et al*, *Phytochemistry*, 1992, **31**, 2499 (*isol, uv, ir, pmr, cmr, ms, struct*)

7-Hydroxy-4′-methoxyisoflavan-2′,5′-quinone(4→5′)-2′,7-dihydroxy-4′-methoxyisoflavan H-10175

2-[7-Hydroxy-3-[4-hydroxy-5-(7-hydroxychroman-3-yl)-2-methoxyphenyl]chroman-3-yl]-4-methoxy-1,4-benzoquinone

[100478-03-3]



$C_{32}H_{28}O_9$ M 556.568

Constit. of the heartwood of *Dalbergia odorifera*. Yellow powder. $[\alpha]_D^{18}$ −123.2° (c, 0.50 in MeOH).

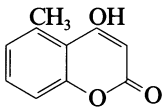
Yahara, S. *et al*, *Chem. Pharm. Bull.*, 1989, **37**, 979 (*isol*)

4-Hydroxy-5-methyl-2*H*-1-benzopyran-2-one, 9CI H-10176

Updated Entry replacing H-02309

4-Hydroxy-5-methylcoumarin

[24631-87-6]



$C_{10}H_8O_3$ M 176.171

Found in *Gerbera anandria* and as various esters in *Mutisia orbignyana*. Cryst. (EtOH aq.). Mp 233-234°.

O-β-D-Glucopyranoside: [76474-54-9]. ***Gerberinside***

$C_{16}H_{18}O_8$ M 338.313

Constit. of *Ethulia conyzoides*, *Gerbera jamesonii*, *G. anandria*, *Leibnitzia anandria* and *Onoseris gnaphaloides*. Cryst. Mp 153-154° (150°). $[\alpha]_D^{21}$ −109° (MeOH), $[\alpha]_D^{20}$ −57.2° (c, 0.25 in Py).

O-Cellobioside:

$C_{22}H_{28}O_{13}$ M 500.455

Constit. of *G. anandria*. Cryst. Mp 217-219°. $[\alpha]_D^{21}$ −94° (MeOH).

O-Gentiobioside:

$C_{22}H_{28}O_{13}$ M 500.455

Constit. of *G. anandria*. Cryst. Mp 155-157°. $[\alpha]_D^{21}$ −80° (MeOH).

O-[α-L-Rhamnopyranosyl-(1→6)-β-D-glucopyranoside]: [100360-71-2]. *4-Rutinosyloxy-5-methylcoumarin*

$C_{22}H_{28}O_{12}$ M 484.456

Constit. of *G. jamesonii*. Needles (H_2O). Mp 240-241° dec. $[\alpha]_D^{22}$ −79.4° (c, 0.2 in Py).

Me ether: [53091-74-0]. *4-Methoxy-5-methyl-2H-1-benzopyran-2-one. 4-Methoxy-5-methylcoumarin.* ***Ekersenin.*** *Pereflorin*

$C_{11}H_{10}O_3$ M 190.198

Occurs in *Perezia multiflora* and *Ekebergia senegalensis*. Cryst. (Et_2O/pet. ether). Mp 165°. The prod. from *E. senegalensis* was originally incorr. descr. as the 8-hydroxy isomer.

O-(3-Methyl-2-butenyl): [41753-51-9]. *5-Methyl-4-prenyloxycoumarin.* ***Gerberacoumarin***

$C_{15}H_{16}O_3$ M 244.290

Found in roots of *G. crocea*. Cryst. (Et_2O/pet. ether). Mp 99°.

O-(6-Oxo-3-methyl-2,4-hexadienyl) (E,E−)*:* ***4-(5-Formyl-3-methyl-2,4-pentadienyl)-5-methylcoumarin***

$C_{17}H_{16}O_4$ M 284.311

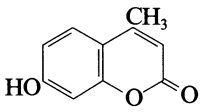
Constit. of *M. orbignyana*. Oil.

Matsui, K. *et al*, *Nippon Kagaku Zasshi*, 1957, **78**, 517; *CA*, **53**, 5257 (*synth*)
Bohlmann, F. *et al*, *Chem. Ber.*, 1973, **106**, 382 (*Gerberacoumarin*)
Venturella, P. *et al*, *Heterocycles*, 1974, **2**, 345 (*synth*)
Bohlmann, F. *et al*, *Phytochemistry*, 1977, **16**, 239 (*isol, deriv*)
Ahluwahlia, V.K. *et al*, *Indian J. Chem., Sect. B*, 1978, **16**, 436 (*synth*)
Okogun, J.I. *et al*, *Tetrahedron*, 1978, **34**, 1221 (*isol, deriv*)
Nagumo, S. *et al*, *Chem. Pharm. Bull.*, 1985, **33**, 4803 (*Gerberinside*)
Chatterjea, J.N. *et al*, *Indian J. Chem., Sect. B*, 1986, **25**, 796 (*synth*)
Gu, L.-H. *et al*, *Yaoxue Xuebao*, 1987, **22**, 272 (*glycosides*)
Zdero, C. *et al*, *Phytochemistry*, 1988, **27**, 891 (*deriv*)

7-Hydroxy-4-methyl-2*H*-1-benzopyran-2-one, 9CI H-10177

7-Hydroxy-4-methylcoumarin. 4-Methylumbelliferone. Coumarin 4. ***Hymecromone,*** **INN, JAN, USAN.** *Cantabiline. BMU. Pilot 447. Hymechromone. Other proprietary names*

[90-33-5]



$C_{10}H_8O_3$ M 176.171

Isol. from young branches of *Dalbergia volubilis* and from *Eupatorium pauciflorum*. Used in tunable lasers. Choleretic, spasmolytic and sunscreen agent. Used as a 1% soln. in aq. EtOH for detn. of Al; fluorescence acid-base indicator (pH >7.0, blue fluorescence). Needles (EtOH). Mp 194-195°. pK_a 7.80 (25°). Phototautomerises.

▷ GN7000000.

Ac: [2747-05-9].
$C_{12}H_{10}O_4$ M 218.209
Isol. from *Trigonella foenumgraecum*. Cryst. Mp 153-154° (150-151°).

Benzoyl: [66185-72-6].
$C_{17}H_{12}O_4$ M 280.279
Needles (EtOH). Mp 159-160°.

Dihydrogen phosphate: [3368-04-5].
$C_{10}H_9O_6P$ M 256.151
Substrate for phosphatase. Cryst. (Et_2O). Mp 214-216°.

Me ether: [2555-28-4]. *7-Methoxy-4-methyl-2H-1-benzopyran-4-one. 7-Methoxy-4-methylcoumarin*
$C_{11}H_{10}O_3$ M 190.198
Needles (EtOH). Mp 159°.

[5980-33-6, 103764-33-6]

v. Pechmann, H. *et al, Ber.*, 1883, **16**, 2122 (*synth*)
Org. Synth., Coll. Vol., 3, 1955, 282 (*synth*)
Fernley, H.N. *et al, Biochem. J.*, 1965, **97**, 95; 1966, **99**, 39; 1967, **102**, 48 (*synth, phosphate*)
Aguila, J.F., *Talanta*, 1967, **14**, 1195 (*synth, detn, Al*)
Kappe, T. *et al, Org. Prep. Proced.*, 1969, **1**, 61 (*synth*)
White, I.N.H. *et al, Biochim. Biophys. Acta*, 1971, **229**, 193 (*use, phosphate*)
Bishop, E., *Indicators*, Pergamon, Oxford, 1972, 695 (*use, indicator*)
Trozzolo, A.M. *et al, J. Am. Chem. Soc.*, 1974, **96**, 4699 (*tautom*)
Shimizu, S. *et al, Acta Crystallogr., Sect. B*, 1975, **31**, 1287 (*cryst struct*)
Sojka, S.A., *J. Org. Chem.*, 1975, **40**, 1175 (*cmr*)
Bhardwaj, D.K. *et al, Indian J. Chem., Sect. B*, 1977, **15**, 94 (*isol, acetate*)
Chawla, H.M. *et al, Indian J. Chem., Sect. B*, 1977, **15**, 492 (*isol*)
Krejcoves, J. *et al, Collect. Czech. Chem. Commun.*, 1979, **44**, 2211 (*synth*)
Kauffman, J.M., *Appl. Opt.*, 1980, **19**, 3431 (*use*)
Sankar, S.S. *et al, Org. Magn. Reson.*, 1982, **19**, 222 (*cmr*)
Taylor, R.T. *et al, Synthesis*, 1982, 672 (*synth*)
Martindale, The Extra Pharmacopoeia, 28th/29th Ed., Pharmaceutical Press, London, 1982/1989, 3725.
Chaudhari, D.D., *Chem. Ind. (London)*, 1983, **24**, 568 (*synth*)
Sinha, P.K. *et al, Histochem. J.*, 1984, **16**, 334 (*use, phosphate*)
Anthony, F.A. *et al, Anal. Biochem.*, 1986, **155**, 103 (*use, phosphate*)
Negwer, M., *Organic-Chemical Drugs and their Synonyms*, 6th Ed., Akademie-Verlag, Berlin, 1987, 1420.
Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th Ed., Van Nostrand-Reinhold, 1992, HMB000, MKP500.

2-Hydroxy-6-methylbenzyl alcohol H-10178

2-Hydroxy-6-methylbenzenemethanol. 2-Hydroxymethyl-3-methylphenol

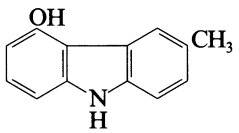
$C_8H_{10}O_2$ M 138.166

Consist. of *Acourtiana nana*. Cryst. Mp 107° (83-84°).

Dunning, B. *et al, J. Am. Chem. Soc.*, 1936, **58**, 1565 (*synth*)
Bruce, J.M. *et al, J. Chem. Soc., Perkin Trans. 1*, 1974, 288 (*synth, ir, pmr*)
Nagata, W. *et al, Synthesis*, 1979, 365 (*synth*)
Zdero, C. *et al, Phytochemistry*, 1991, **30**, 2695 (*isol, pmr, cmr*)

5-Hydroxy-3-methyl-9*H*-carbazole H-10179

6-Methyl-9H-carbazol-4-ol



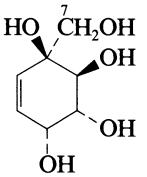
$C_{13}H_{11}NO$ M 197.236

Me ether: [143438-96-4]. *5-Methoxy-3-methyl-9H-carbazole, 9CI.* ***Glycozolicine***
$C_{14}H_{13}NO$ M 211.263
Alkaloid from roots of *Glycosmis pentaphylla* (Rutaceae). Cryst. (C_6H_6/pet. ether). Mp 135°.

Jash, S.S. *et al, Phytochemistry*, 1992, **31**, 2503.

1-(Hydroxymethyl)-5-cyclohexene-1,2,3,4-tetrol H-10180

1-Hydroxymethylconduritol



(1*S*,2*S*,3*R*,4*R*)-*form*

$C_7H_{12}O_5$ M 176.169

(1S,2S,3R,4R)-form

1-Hydroxymethylconduritol E

4,7-Dibenzoyl: [134476-91-8]. ***Piperenol B***
$C_{21}H_{20}O_7$ M 384.385
Isol. from *Piper cubeb*. Semi-solid. $[\alpha]_D$ +50° (c, 1 in MeOH).

(1S,2S,3R,4S)-form

3,7-Dibenzoyl: [120160-94-3].
$C_{21}H_{20}O_7$ M 384.385
Isol. from the stem bark of *Monanthotaxis buschananii*. Needles (EtOAc/ pet. ether). Mp 178-183°. $[\alpha]_D$ −100° (c, 0.24 in EtOH).

(1RS,2RS,3SR,4RS)-form

3,4,7-Tri-Ac: [86861-69-0].
Cryst. (EtOH). Mp 100.5-102°.

2,3,4,7-Tetra-Ac: [86157-99-5].
Syrup.

Penta-Ac: [81692-25-3].
Syrup.

(1RS,2SR,3RS,4SR)-form

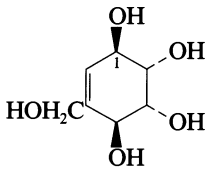
Penta-Ac: [109958-70-5].
Cryst. (EtOH). Mp 97.5-98.5°.

Ogawa, S. *et al, Bull. Chem. Soc. Jpn.*, 1983, **56**, 505, 1161; 1990, **63**, 1549 (*synth, derivs*)
Ogawa, S. *et al, Carbohydr. Res.*, 1986, **156**, 273 (*synth, derivs*)
Liang, G.Y. *et al, Phytochemistry*, 1988, **27**, 3857 (*isol, derivs*)
Taneja, S.C. *et al, Phytochemistry*, 1991, **30**, 871 (*Piperenol B*)

5-(Hydroxymethyl)-5-cyclohexene-1,2,3,4-tetrol, 9CI H-10181

Updated Entry replacing H-02355

3,4,5,6-Tetrahydroxy-1-cyclohexene-1-methanol



(1*R*,2*S*,3*R*,4*S*)-*form*

$C_7H_{12}O_5$ M 176.169

(1R,2S,3R,4S)-form

1',3-Dibenzoyl: [134476-89-4]. ***Piperenol A***
$C_{21}H_{20}O_7$ M 384.385
Isol. from *Piper clarkii* and *P. cubeb*. Cryst. (EtOAc/hexane). Mp 48-49°. $[\alpha]_D$ +14.6° (c, 0.5 in MeOH).

1-Ac, 1',3-dibenzoyl: [134476-90-7]. ***Acetylpiperenol A***
$C_{23}H_{22}O_8$ M 426.422
Isol. from *P. clarkii*. Semi-solid. $[\alpha]_D$ +12.0° (c, 0.5 in MeOH).

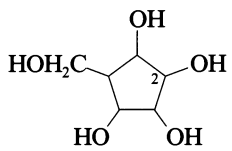
(1S,2S,3S,4R)-form [111136-25-5] ***Streptol***
Isol. from *Streptomyces* sp. 1409. Plant growth regulator.

(1RS,2RS,3RS,4SR)-form [86195-44-0]
Cryst. (EtOH). Mp 139.5-141°.

(1RS,2SR,3SR,4SR)-form [86195-45-1]
Cryst. (EtOH aq.). Mp 150.5-151.5°.

Toyokuni, T. *et al*, *Bull. Chem. Soc. Jpn.*, 1983, **56**, 505 (*synth*)
Isogai, A. *et al*, *Agric. Biol. Chem.*, 1987, **51**, 2277 (*isol, struct*)
Taneja, S.C. *et al*, *Phytochemistry*, 1991, **30**, 871 (*Piperenol A*)

5-(Hydroxymethyl)-1,2,3,4-cyclopentanetetrol H-10182

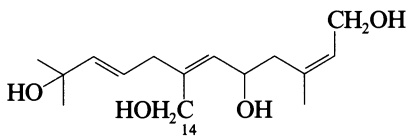


$C_6H_{12}O_5$ M 164.158

2-Me ether: [142878-30-6]. *3-(Hydroxymethyl)-5-methoxy-1,2,4-cyclopentanetriol, 9CI.* ***Salpantiol***
$C_7H_{14}O_5$ M 178.185
Constit. of the flowers of *Salpianthus arenarius*. Exhibits parasympathomimetic activity.

Perez-Gutierrez, R.M. *et al*, *Pharm. Acta Helv.*, 1992, **67**, 156.

7-Hydroxymethyl-3,11-dimethyl-2,6,9-dodecatriene-1,5,11-triol H-10183

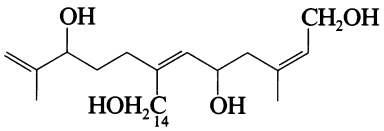


$C_{15}H_{26}O_4$ M 270.368

1,5,14-Tri-Ac:
$C_{21}H_{32}O_7$ M 396.480
Constit. of *Tanacetum densum* ssp. *sivasicum*. Oil.

Gören, N., *Phytochemistry*, 1993, **34**, 743 (*isol, pmr, cmr*)

7-Hydroxymethyl-3,11-dimethyl-2,6,11-dodecatriene-1,5,10-triol H-10184



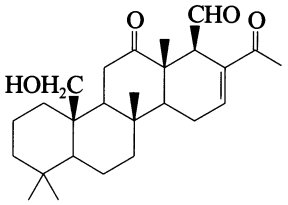
$C_{15}H_{26}O_4$ M 270.368

1,5,14-Tri-Ac:
$C_{21}H_{32}O_7$ M 396.480
Constit. of *Tanacetum densum* ssp. *sivasicum*. Oil.

Gören, N., *Phytochemistry*, 1993, **34**, 743 (*isol, pmr, cmr*)

22-Hydroxy-24-methyl-12,24-dioxo-16-scalaren-25-al H-10185

[75587-67-6]



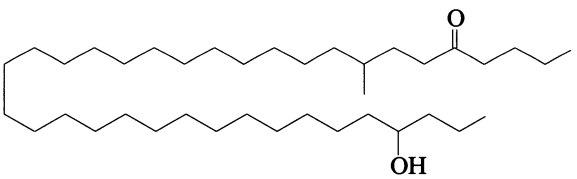
$C_{26}H_{38}O_4$ M 414.584
Constit. of a *Phyllospongia* sp. Cryst. (EtOAc/pet. ether). Mp 204° dec. $[\alpha]_D^{21}$ +110° (c, 1 in $CHCl_3$).

Ac: [75587-68-7].
$C_{28}H_{40}O_5$ M 456.621
Constit. of a *P.* sp. Cryst. (EtOAc/pet. ether). Mp 193.5-194.1°. $[\alpha]_D$ +95.4° (c, 1.27 in $CHCl_3$).

Kazlauskas, R. *et al*, *Aust. J. Chem.*, 1980, **33**, 1783 (*isol, pmr, cryst struct*)

34-Hydroxy-8-methyl-5-heptatriacontanone, 9CI H-10186

[133956-31-7]

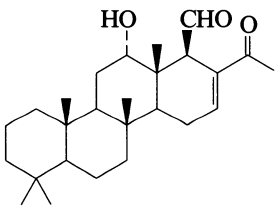


$C_{38}H_{76}O_2$ M 565.017
Constit. of the leaves of *Adenocalymma alliaceum*. Cryst. (MeOH). Mp 91-92°.

Ac: [133956-33-9].
Mp 83-84°.

Misra, T.N. *et al*, *Phytochemistry*, 1991, **30**, 541 (*isol*)

12-Hydroxy-24-methyl-24-oxo-16-scalaren-25-al H-10187



$C_{26}H_{40}O_3$ M 400.600

12α-form

Ac: [75605-86-6].
$C_{28}H_{42}O_4$ M 442.637
Constit. of a *Phyllospongia* sp. Unstable yellow form. $[\alpha]_D$ +32° (c, 0.35 in MeOH).

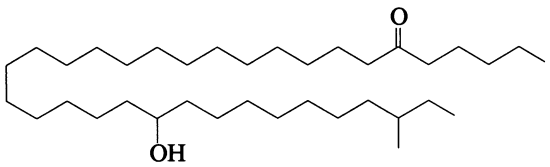
12β-form [75795-89-0]

3-Hydroxybutanoyl: [75605-85-5]. ***Dendalone***
$C_{30}H_{46}O_5$ M 486.690
Constit. of a *P.* sp. Antiinflammatory. Glass. $[\alpha]_D$ +12° (c, 0.4 in $CHCl_3$).

Buckle, P.J. *et al*, *Agents Actions*, 1980, **10**, 361 (*pharmacol*)
Kazlauskas, R. *et al*, *Aust. J. Chem.*, 1980, **33**, 1783 (*isol, pmr*)

25-Hydroxy-33-methyl-6-pentatriacontanone H-10188

[129355-87-9]



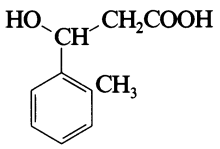
$C_{36}H_{72}O_2$ M 536.964
Constit. of the rhizomes of *Curculigo orchioides*. Cryst. (C_6H_6). Mp 92°.

2,4-Dinitrophenylhydrazone: [129355-88-0].
Cryst. (MeOH). Mp 99-101°.

Mehta, B.K. *et al*, *Indian J. Chem., Sect. B*, 1990, **29**, 493 (*isol, pmr*)

3-Hydroxy-3-(2-methylphenyl)propanoic acid H-10189

β-Hydroxy-2-methylbenzenepropanoic acid



$C_{10}H_{12}O_3$ M 180.203

(±)-*form*

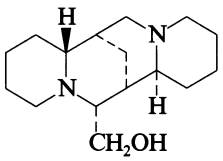
Et ester: [70200-17-8]. *U 89901. Antibiotic U 89901*
$C_{12}H_{16}O_3$ M 208.257
Bp_5 145°.

Amide: [146669-24-1]. *3-Hydroxy-3-(2-methylphenyl) propanamide. U 77864. Antibiotic U 77864*
$C_{10}H_{13}NO_2$ M 179.218
Prod. by *Streptomyces griseoluteus*. Exhibits antitumour props. Cryst. (MeOH). Mp 190-195°.

Ayi, A.I. *et al*, *Tetrahedron Lett.*, 1978, 4507 (*synth*)
Harper, D.E. *et al*, *J. Antibiot.*, 1992, **45**, 1827 (*U 77864*)

10-Hydroxymethylsparteine H-10190

[139112-20-2]



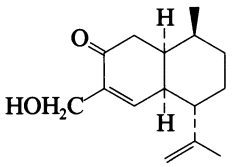
$C_{16}H_{28}N_2O$ M 264.410

Constit. of *Genista sessilfolia* (Leguminosae). Mp 168-170° (as picrate).

Nasution, M.P. *et al*, *Tetrahedron Lett.*, 1991, **32**, 5915.

15-Hydroxy-4,11-muuroladien-3-one H-10191

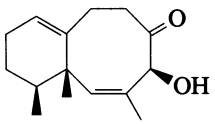
[149507-88-0]



$C_{15}H_{22}O_2$ M 234.338
Constit. of *Pteridium esculentum*. Oil. $[\alpha]_D$ +13° (c, 1 in MeOH).

Tanaka, N. *et al*, *Phytochemistry*, 1993, **32**, 1037 (*isol, pmr, cmr*)

4-Hydroxy-2,8-neolemnadien-5-one H-10192



$C_{15}H_{22}O_2$ M 234.338

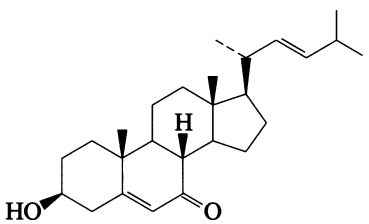
4β-form

Ac: [148371-04-4].
$C_{17}H_{24}O_3$ M 276.375
Constit. of *Lemnalia africana*. Oil. $[\alpha]_D$ +441° (c, 0.2 in $CHCl_3$). Related to Neolemnane, N-00220.

Jurek, J. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 508 (*isol, pmr, cmr*)

3-Hydroxy-24-norcholesta-5,22-dien-7-one H-10193

3-Hydroxy-26,27-dinorergosta-5,22-dien-7-one



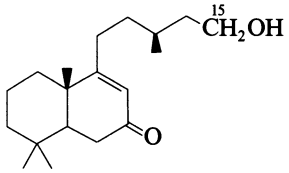
$C_{26}H_{40}O_2$ M 384.601

(3β,22E)-form [145075-01-0]
Constit. of *Cliona copiosa*.

Notaro, G. *et al*, *J. Nat. Prod.* (*Lloydia*), 1992, **55**, 1588 (*isol, pmr, cmr*)

15-Hydroxy-17-nor-8-labden-7-one H-10194

Updated Entry replacing H-02513



$C_{19}H_{32}O_2$ M 292.461

13S-form [108657-51-8] ***Havardiol***
Constit. of *Grindelia havardii*. Oil. $[\alpha]_D^{25}$ +22.4° (c, 0.3 in $CHCl_3$).

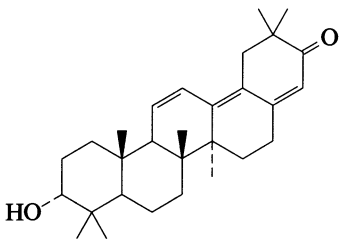
15-Carboxylic acid: [108657-50-7]. *17-Nor-7-oxo-8-labden-15-oic acid.* ***Havardic acid F***
$C_{19}H_{30}O_3$ M 306.444
From *G. havardii*. Cryst. (as Me ester). Mp 82-83° (Me ester). $[\alpha]_D^{25}$ +31.3° (c, 0.5 in $CHCl_3$) (Me ester).

13ξ-form

Ac: [147743-15-5]. *15-Acetoxy-17-nor-8-labden-7-one*
$C_{21}H_{34}O_3$ M 334.498
Constit. of *Halimium verticialltum*. Oil. $[\alpha]_D^{22}$ +29.1° (c, 0.8 in $CHCl_3$).

Jolad, S.D. *et al*, *Phytochemistry*, 1987, **26**, 483.
Urones, J.G. *et al*, *Phytochemistry*, 1993, **32**, 401 (*isol, pmr, cmr*)

3-Hydroxy-28-nor-11,13(18),17(22)-oleanatrien-21-one H-10195



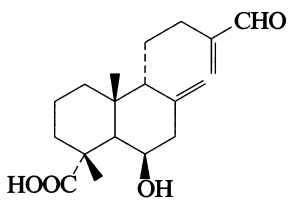
$C_{29}H_{42}O_2$ M 422.650

3α-form [72938-20-6] ***Papyriogenin I***
Constit. of *Tetrapanax papyriferum*. Cryst. Mp 255-257°.

3-Ketone: [72933-71-2]. *28-Nor-11,13(18),17(22)-oleanatriene-3,21-dione*
$C_{29}H_{40}O_2$ M 420.634
Constit. of *T. papyriferum*. Cryst. Mp 127-131°.

Amagaya, S. *et al*, *J. Chem. Soc., Perkin Trans. 1*, 1979, 2044 (*synth*)
Amagaya, S. *et al*, *CA*, 1980, **92**, 152980g (*isol*)

6-Hydroxy-15-nor-14-oxo-8(17),13(16)-labdadien-18-oic acid H-10196



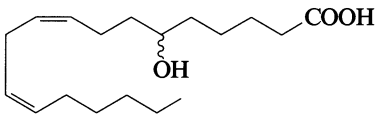
$C_{19}H_{28}O_4$ M 320.428

(6β,9βH)-form

6-Benzoyl: [116425-28-6]. ***Scoparic acid C***
$C_{26}H_{32}O_5$ M 424.536
Constit. of *Scoparia dulcis*. Amorph. powder. $[\alpha]_D^{22}$ −13.9° (c, 0.69 in $CHCl_3$).

Hayashi, T. *et al*, *J. Nat. Prod.* (*Lloydia*), 1992, **55**, 1748 (*isol, pmr, cmr*)

6-Hydroxy-9,12-octadecadienoic acid H-10197



$C_{18}H_{32}O_3$ M 296.449

(9Z,12Z)-form

6-Hydroxylinoleic acid

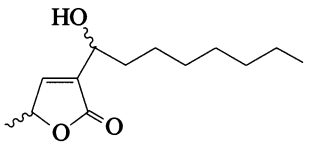
6-Ac: [137052-51-8]. ***6-Acetoxylinoleic acid***
$C_{20}H_{34}O_4$ M 338.486
Isol. from the marine alga *Spatoglossum pacificum*. Pollen growth inhibitor. $[\alpha]_D^{23}$ −1.04° (c, 0.5 in $CHCl_3$). C-6 config. not determined.

Tazaki, H. *et al*, *Agric. Biol. Chem.*, 1991, **55**, 2149 (*isol*)

3-(1-Hydroxyoctyl)-5-methyl-2(5*H*)-furanone, 9CI H-10198

Acaterin

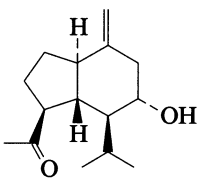
[144398-20-9]



$C_{13}H_{22}O_3$ M 226.315
Prod. by *Pseudomonas* sp. A92. Inhibitor acyl-CoA: cholesterol acyltransferase. Light brown oil.

Naganuma, S. *et al*, *J. Antibiot.*, 1992, **45**, 1217 (*isol, cmr, struct, props*)

8-Hydroxy-10(14)-oplopen-4-one H-10199

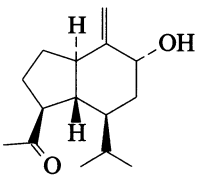


$C_{15}H_{24}O_2$ M 236.353

8α-form
Constit. of *Artemisia sieberi*. Needles (Et_2O/hexane). Mp 147-148°. $[\alpha]_D$ +13.5° (c, 1.1 in $CHCl_3$).

Marco, J.A. *et al*, *Phytochemistry*, 1993, **34**, 1061 (*isol, pmr, cmr*)

9-Hydroxy-10(14)-oplopen-4-one H-10200



$C_{15}H_{24}O_2$ M 236.353

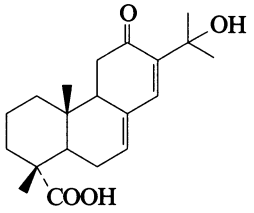
9α-form [147545-38-8] ***Tuberonone***
Constit. of *Solanum tuberosum*. $[\alpha]_D^{20}$ −33.1° (c, 0.048 in MeOH).

9β-form
Constit. of *Artemisia sieberi*. Oil. $[\alpha]_D$ −11.5° (c, 0.9 in $CHCl_3$).

Matsuura, H. *et al*, *Biosci., Biotechnol., Biochem.*, 1992, **56**, 1890 (*isol, pmr, cmr*)
Marco, J.A. *et al*, *Phytochemistry*, 1993, **34**, 1061 (*isol, pmr, cmr*)

15-Hydroxy-12-oxo-7,13-abietadien-18-oic acid H-10201

[151480-67-0]

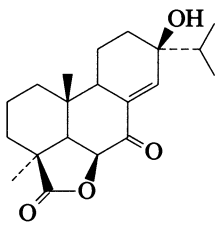


$C_{20}H_{28}O_4$ M 332.439

Constit. of *Pinus massoniana*. Cryst. (EtOAc/hexane). Mp 175-180°.

Cheung, H.T.A. *et al*, *Tetrahedron*, 1993, **49**, 7903 (*isol*, *pmr*, *cmr*)

13-Hydroxy-7-oxo-8(14)-abieten-19,6-olide H-10202



$C_{20}H_{28}O_4$ M 332.439

(6β,13β)-form [151484-86-5] ***Juniperolide***

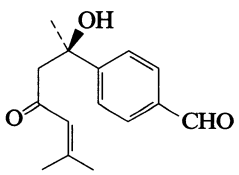
Constit. of *Juniperus chinensis*. Cryst. ($EtOAc/C_6H_6/Et_2O$/hexane). Mp 191.5-193°. $[\alpha]_D^{25}$ +8.5° (c, 3.2 in MeOH).

Fang, J.-M. *et al*, *Phytochemistry*, 1993, **33**, 1169 (*isol*, *pmr*, *cmr*, *cryst struct*)

7-Hydroxy-9-oxo-1,3,5,10-bisabolatetraen-15-al H-10203

Peniophoral

[145904-72-9]

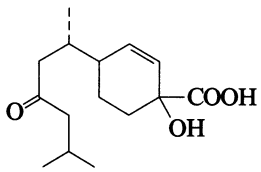


$C_{15}H_{18}O_3$ M 246.305

Metab. of *Peniophora polygonia*. Oil. $[\alpha]_D^{21}$ +32.6° (c, 0.23 in MeOH).

Ayer, W.A. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 85 (*isol*, *pmr*, *cmr*)

3-Hydroxy-9-oxo-1-bisabolen-15-oic acid H-10204



$C_{15}H_{24}O_4$ M 268.352

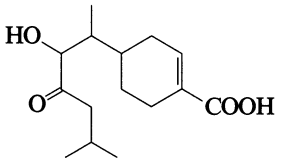
Me ester: [149537-82-6].

$C_{16}H_{26}O_4$ M 282.379

Constit. of *Abies sachalinensis*. Pale yellow oil. $[\alpha]_D^{26}$ +70° (c, 0.45 in EtOH).

Kawai, K. *et al*, *Phytochemistry*, 1993, **32**, 1163 (*isol*, *pmr*, *cmr*)

8-Hydroxy-9-oxo-2-bisabolen-15-oic acid H-10205



$C_{15}H_{24}O_4$ M 268.352

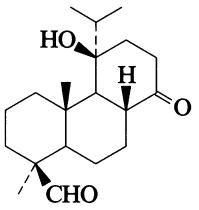
Me ester: [149537-81-5].

$C_{16}H_{26}O_4$ M 282.379

Constit. of *Abies sachalinensis*. Pale yellow oil. $[\alpha]_D^{28}$ +29° (c, 0.2 in EtOH).

Kawai, K. *et al*, *Phytochemistry*, 1993, **32**, 1163 (*isol*, *pmr*, *cmr*)

11-Hydroxy-14-oxo-19-chinanal H-10206



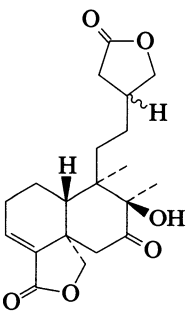
$C_{20}H_{32}O_3$ M 320.471

11β-form [151484-90-1] ***Chinanoxal***

Constit. of *Juniperus chinensis*. Solid.

Fang, J.-M. *et al*, *Phytochemistry*, 1993, **33**, 1169 (*isol*, *pmr*, *cmr*, *cryst struct*)

8-Hydroxy-7-oxo-3-clerodene-15,16:18,19-diolide H-10207



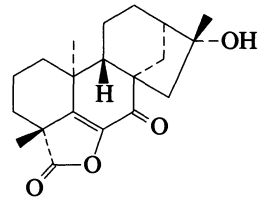
$C_{20}H_{26}O_6$ M 362.422

(ent-8α,13ξ)-form

Constit. of *Baccharis articulata*. Prisms. Mp 156-158°. $[\alpha]_D^{25}$ −17.5° (c, 0.6 in $CHCl_3$).

Dai, J. *et al*, *Phytochemistry*, 1993, **34**, 1087 (*isol*, *pmr*, *cmr*)

16-Hydroxy-7-oxo-5-kauren-19,6-olide H-10208



$C_{20}H_{26}O_4$ M 330.423

(ent-16β)-form

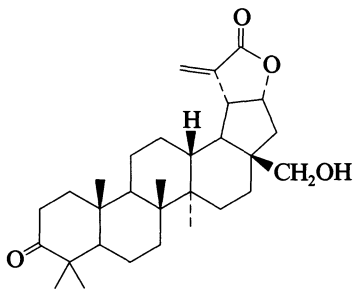
Ac: [149471-14-7]. ***Stevionolide***

$C_{22}H_{28}O_5$ M 372.460

Constit. of *Stevia lucida*. Needles ($CHCl_3$). Mp 226-227°. $[\alpha]_D$ −18.3° (c, 0.18 in $CHCl_3$).

Amaro-Luis, J.M. *et al*, *Phytochemistry*, 1993, **32**, 1611 (*isol, pmr, cmr*)

28-Hydroxy-3-oxo-20(29)-lupen-30,21-olide H-10209



$C_{30}H_{44}O_4$ M 468.675

21α-form

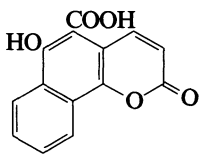
Ochraceolide E

Constit. of *Kokoona ochracea*. Cryst. ($CHCl_3$). Mp 233-235°. $[\alpha]_D^{25}$ +29° (c, 0.1 in MeOH).

Ngassapa, O. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 1676 (*isol, pmr, cmr*)

6-Hydroxy-2-oxo-2*H*-naptho[1,2-*b*]pyran-5-carboxylic acid H-10210

5-Carboxy-6-hydroxy-7,8-benzocoumarin



$C_{14}H_8O_5$ M 256.214

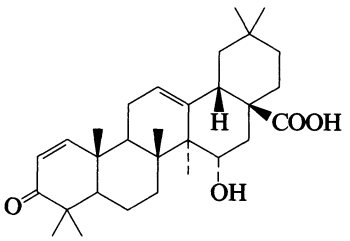
Me ester: [142182-54-5]. ***Rubilactone***

$C_{15}H_{10}O_5$ M 270.241

Isol. from the roots of *Rubia cordifolia*.

Hua, H.M. *et al*, *Yaoxue Xuebao*, 1992, **27**, 279; *CA*, **117**, 44582.

15-Hydroxy-3-oxooleana-1,12-dien-28-oic acid H-10211



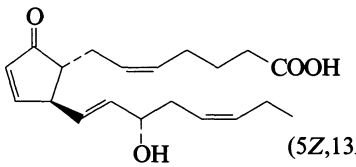
$C_{30}H_{44}O_4$ M 468.675

15α-form [149260-89-9] ***Glomeric acid***

Constit. of *Pfaffia glomerata*. Needles. Mp 264-266°. $[\alpha]_D$ +74° (c, 0.5 in $CHCl_3$).

Shiobara, Y. *et al*, *Phytochemistry*, 1993, **32**, 1527 (*isol, pmr, cmr*)

15-Hydroxy-9-oxo-5,10,13,17-prostatetraenoic acid H-10212



(5*Z*,13*E*,15*S*,17*Z*)-*form*

$C_{20}H_{28}O_4$ M 332.439

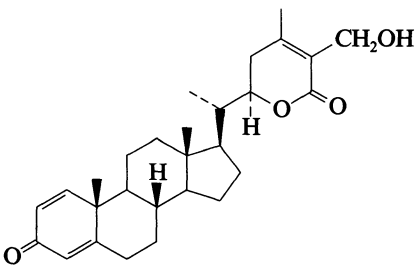
(5Z,13E,15S,17Z)-form [36614-31-0] ***Prostaglandin A_3***

Isol. from seminal fluid of sheep.

Ger. Pat., 2 314 519, (1973); *CA*, **80**, 595645 (*isom*)

Schevchenko, V.P. *et al*, *J. Labelled Compd. Radiopharm.*, 1989, **27**, 1177 (*synth*)

27-Hydroxy-3-oxowitha-1,4,24-trienolide H-10213



$C_{28}H_{38}O_4$ M 438.606

(22R)-form [150417-74-6] ***Withasomidienone***

Constit. of *Withania somnifera*. $[\alpha]_D^{25}$ +13.2° (c, 0.075 in MeOH).

Att-ur-Rahman, *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 1000 (*isol, pmr, nmr*)

43-Hydroxy-2,44-pentatetracontapentaenediynoic acid H-10214

$C_{45}H_{72}O_3$ M 661.062

Me ester: [128646-24-2]. ***Petroformyne B***

$C_{46}H_{74}O_8$ M 755.086

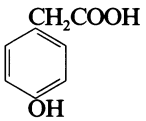
Constit. of the sponge *Petrosia ficiformis*. Posn. of ethylenic groups not determined.

Cimino, G. *et al*, *J. Nat. Prod.* (*Lloydia*), 1990, **53**, 345.

4-Hydroxyphenylacetic acid H-10215

4-Hydroxybenzeneacetic acid, 9CI. p-*Hydroxy-α-toluic acid*

[156-38-7]



$C_8H_8O_3$ M 152.149

Constit. of *Melilotus officinalis*. Needles (H_2O). Sol. EtOH, Et_2O, hot H_2O. Mp 148-150°.

▷ AI2680000.

K salt: [83053-47-8].

Powdery solid. Mp >300°.

Amide: [17194-82-0].

$C_8H_9NO_2$ M 151.165

Leaflets (H_2O). Mp 175°.

Nitrile: [14191-95-8]. *4-Hydroxybenzeneacetonitrile.* p-*Hydroxybenzyl cyanide. 4-(Cyanomethyl)phenol*

C_8H_7NO M 133.149

Isol. from *Brassica alba* as a dec. product of Sinalbin. Needles (H_2O). Mp 72°. Bp 330°.

▷ AM0530000.

Et ether: [4919-33-9]. *4-Ethoxyphenylacetic acid*

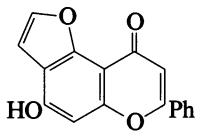
$C_{10}H_{12}O_3$ M 180.203

Leaflets (H_2O). Mp 88-89°.

Looker, J.H., *J. Org. Chem.*, 1954, **19**, 784 (*synth*)
Kawakishi, S. *et al*, *Agric. Biol. Chem.*, 1967, **7**, 823 (*isol, synth, nitrile*)
Kuchar, M., *Collect. Czech. Chem. Commun.*, 1977, **42**, 1723 (*synth*)
Shapiro, B.L. *et al*, *J. Phys. Chem. Ref. Data*, 1977, **6**, 919 (*nmr*)
Wahlund, K.G., *J. Liq. Chromatogr.*, 1981, **4**, 309 (*chromatog*)
Li, S. *et al*, *CA*, 1984, **100**, 117826y (*isol, nitrile*)
Bodor, N. *et al*, *J. Med. Chem.*, 1988, **31**, 1651 (*synth*)
Dombrowicz, E. *et al*, *Pharmazie*, 1991, **46**, 156; *CA*, **114**, 225712f (*isol*)

7-Hydroxy-2-phenyl-4*H*-furo[2,3-*f*][1]benzopyran-9-one H-10216

7-Hydroxyfurano[2″,3″:5,6]flavone



$C_{17}H_{10}O_4$ M 278.264

Me ether: [60077-59-0]. *7-Methoxy-2-phenyl-4*H*-furo[2,3-f][1]benzopyran-9-one*

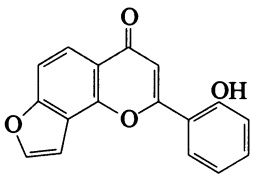
$C_{18}H_{12}O_4$ M 292.290

Isol. from the leaves of *Pongamia glabra*. Pale yellow needles ($CHCl_3$/pet. ether). Mp 233°.

Malik, S.B. *et al*, *Indian J. Chem., Sect. B*, 1976, **14**, 229.

2-(2-Hydroxyphenyl)-4*H*-furo[2,3-*h*]-1-benzopyran-4-one, 9CI H-10217

2′-Hydroxyfurano[2″,3″:7,8]flavone



$C_{17}H_{10}O_4$ M 278.264

Me ether: [73937-46-9]. *2′-Methoxyfurano[2″,3″:7,8]flavone*

$C_{18}H_{12}O_4$ M 292.290

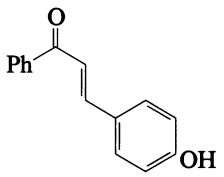
Isol. from the seeds of *Pongamia glabra*. Cryst. (EtOH). Mp 180-181°.

Pathak, V.P. *et al*, *Planta Med.*, 1983, **49**, 61.

3-(4-Hydroxyphenyl)-1-phenyl-2-propen-1-one, 9CI H-10218

4-Hydroxychalcone, 8CI. ω-p-*Hydroxybenzylideneacetophenone. (4-Hydroxystyryl) phenyl ketone*

[20426-12-4]



$C_{15}H_{12}O_2$ M 224.259

Constit. of *Glycyrrhiza glabra* roots. Yellow cryst. (C_6H_6). Mp 128°, Mp 182-183°.

Me ether: [959-33-1]. *4-Methoxychalcone. Anisylideneacetophenone.* p-*Methoxystyryl phenyl ketone. Anisalacetophenone*

$C_{16}H_{14}O_2$ M 238.285

Yellow needles. Mp 77-78°. Bp_{19} 187.5-188°.

Ac:

$C_{17}H_{14}O_3$ M 266.296

Mp 129-131°.

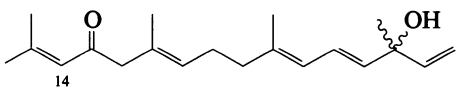
[22252-15-9, 30925-52-1]

Shriner, R.L. *et al*, *J. Am. Chem. Soc.*, 1930, **52**, 2538.
Davey, W. *et al*, *J. Chem. Soc.*, 1958, 1230 (*deriv*)
Wittmann, H. *et al*, *Monatsh. Chem.*, 1966, **97**, 896.
Rabinovich, D. *et al*, *J. Chem. Soc. B*, 1970, 6 (*cryst struct, deriv*)
Dinya, Z. *et al*, *Acta Chim. Acad. Sci. Hung.*, 1972, **73**, 453.
Hoton-Dorge, M. *et al*, *J. Pharm. Belg.*, 1974, **29**, 560; *CA*, **83**, 111099x (*isol*)

3-Hydroxy-1,4,6,10,14-phytapentaen-13-one H-10219

Updated Entry replacing H-02893

14-Hydroxy-2,6,10,14-tetramethyl-2,6,10,12,15-hexadecapentaen-4-one



$C_{20}H_{30}O_2$ M 302.456

(3ξ,4E,6E,10E)-form [144101-92-8] ***Styxenol A***

Constit. of *Myrmekioderma styx*. $[\alpha]_D^{25}$ +13.4° (c, 0.091 in hexane), $[\alpha]_D$ +15.1° (CH_2Cl_2).

14,15-Dihydro: [144101-94-0]. ***3-Hydroxy-1,4,6,10-phytatetraen-13-one***

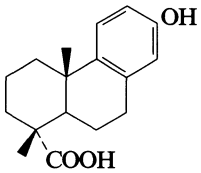
$C_{20}H_{32}O_2$ M 304.472

Isol. from *M. styx*. $[\alpha]_D^{25}$ +12.3° (c, 0.013 in hexane).

Albrizio, S. *et al*, *J. Nat. Prod.* (*Lloydia*), 1992, **55**, 1287 (*isol, pmr, cmr*)
Sennett, S.H. *et al*, *J. Nat. Prod.* (*Lloydia*), 1992, **55**, 1421 (*isol, pmr, cmr*)

13-Hydroxy-8,11,13-podocarpatrien-18-oic acid H-10220

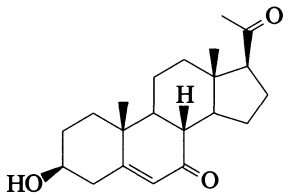
[61597-83-9]



$C_{17}H_{22}O_3$ M 274.359
Constit. of *Pinus massoniana.*

Cheung, H.T.A. *et al, Tetrahedron*, 1993, **48**, 7903 (*isol, pmr, cmr*)

3-Hydroxypregn-5-ene-7,20-dione, 9CI H-10221



$C_{21}H_{30}O_3$ M 330.466

3β-form [33530-84-6]
Constit. of *Stelodoryx chlorophylla.* Mp 209-210°. $[\alpha]_D$ −45.8° (c, 0.4 in $CHCl_3$).

Ac:
$C_{23}H_{32}O_4$ M 372.503
Mp 152.5°. $[\alpha]_D^{20}$ −74.6° (c, 1.2 in $CHCl_3$).

(3β,17α)-form [16649-41-5]
Cryst. (MeOH). Mp 182-183°. $[\alpha]_D^{25}$ −191° (c, 1 in $CHCl_3$).

Ac: [16649-44-8].
Cryst. (EtOAc/hexane). Mp 217-218°.

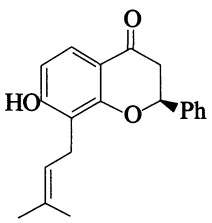
Schenck, G.O. *et al, Justus Liebigs Ann. Chem.*, 1958, **618**, 202 (*synth, uv*)
Rubin, M.B. *et al, J. Org. Chem.*, 1968, **33**, 2794 (*synth, uv, ir*)
De Riccardis, F. *et al, J. Nat. Prod.* (*Lloydia*), 1993, **56**, 282 (*isol, pmr, cmr, ms*)

7-Hydroxy-8-prenylflavanone H-10222

Updated Entry replacing H-02940

2,3-Dihydro-7-hydroxy-8-(3-methyl-2-butenyl)-2-phenyl-4H-1-benzopyran-4-one. ***Ovaliflavanone B***

[53258-99-4]



$C_{20}H_{20}O_3$ M 308.376

(S)-form
Isol. from *Milletia ovalifolia* and *Tephrosia* spp. Mp 144-145°.

Me ether: [38965-75-2]. *7-Methoxy-8-prenylflavanone.* ***Isoderricin A***
$C_{21}H_{22}O_3$ M 322.403
Constit. of *Dahlstedtia pentaphylla* and *Derris sericea.* Cryst. (EtOH). Mp 103-104°. $[\alpha]_D^{28}$ −91.1° (c, 1 in $CHCl_3$).

(±)-form [129314-39-2]
Isol. from the roots of *Glycyrrhiza pallidiflora.* Cryst. (EtOAc/hexane). Mp 141-144°.

[124355-21-1]

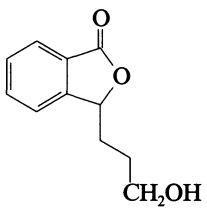
Do Nascimento, M.C. *et al, Phytochemistry*, 1972, **11**, 3023 (*Isoderricin A*)
Gupta, R.K. *et al, Phytochemistry*, 1976, **15**, 832, 2011 (*isol*)
Islam, A. *et al, Indian J. Chem., Sect. B*, 1981, **20**, 21 (*synth*)
Khan, H.A. *et al, Phytochemistry*, 1986, **25**, 767 (*isol*)
Garcez, F.R. *et al, Phytochemistry*, 1988, **27**, 1079 (*Isoderricin A*)
Sakamoto, Y. *et al, Bull. Chem. Soc. Jpn.*, 1989, **62**, 2450 (*cmr, props*)
Fukai, T. *et al, Heterocycles*, 1990, **31**, 643 (*isol*)

3-(3-Hydroxypropyl)phthalide H-10223

Updated Entry replacing H-02949

3-(3-Hydroxypropyl)-1(3H)-isobenzofuranone, 9CI

[124888-91-1]



$C_{11}H_{12}O_3$ M 192.214
Constit. of *Gentiana pedicellata.*

O-*Rutinoside:* [104669-04-7]. ***Pedirutinoside***
$C_{23}H_{32}O_{12}$ M 500.499
Constit. of *G. pedicellata.*

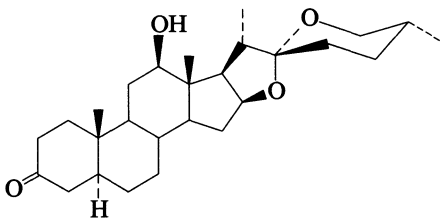
O-β-D-*Glucopyranoside:* [124183-39-7]. ***Pediglucoside***
$C_{17}H_{22}O_8$ M 354.356
Isol. from the aerial parts of *Gentiana pyrenaica.*

O-[6-O-(*4-hydroxy-3-methoxybenzoyl*)-β-D-*glucopyranoside*]: [124183-38-6]. ***6'-Vanilloylpediglucoside***
$C_{25}H_{28}O_{11}$ M 504.490
Isol. from the aerial parts of *G. pyrenaica.*

Chulia, A.J. *et al, J. Nat. Prod.* (*Lloydia*), 1986, **49**, 514 (*Pedirutinoside*)
Garcia, J. *et al, Phytochemistry*, 1989, **28**, 1759 (*Pediglucoside*)
Garcia, J. *et al, Planta Med.*, 1989, **55**, 405 (*isol, pmr*)

12-Hydroxyspirostan-3-one H-10224

Updated Entry replacing H-03025



$C_{27}H_{42}O_4$ M 430.626

(5α,12β,25R)-form [4235-32-9] ***Hispidogenin***
Aglycone from *Solanum hispidum,* also isol. from *Asparagus umbellatus.* Cryst. Mp 208°. $[\alpha]_D$ −45.7° ($CHCl_3$).

Ac: Mp 212°. $[\alpha]_D$ −51° ($CHCl_3$).

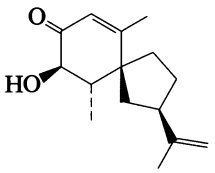
Dirhamnoside: ***Hispidin***†
$C_{39}H_{62}O_{12}$ M 722.912
Glycoside of *S. hispidum.* Mp 312-315°. $[\alpha]_D$ −64° (Py).

(5α,12α,25S)-form [32244-96-5] ***Toruogenin***
Constit. of *S. toruum.*

Maiti, P.C. *et al, Chem. Ind. (London)*, 1965, 1653.
Diaz, R.F. *et al, An. Quim.*, 1967, **63**, 927.
Morales, M. *et al, Rev. Latinoam. Quim.*, 1970, **1**, 1 (*Toruogenin*)

3-Hydroxy-1(10),11-spirovetivadien-2-one H-10225

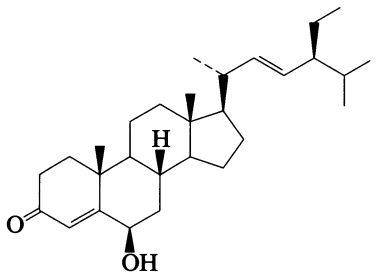
3-Hydroxysolavetivone
[78216-55-4]



$C_{15}H_{22}O_2$ M 234.338
Stress metab. from Virginia tobacco leaves. Oil.

Anderson, R.C. *et al, J. Chem. Soc., Chem. Commun.*, 1977, 127 (*isol*)
Iwata, C. *et al, Chem. Pharm. Bull.*, 1989, **37**, 2643 (*synth*)

6-Hydroxystigmasta-4,22-dien-3-one H-10226



$C_{29}H_{46}O_2$ M 426.681
(6β,22E)-form [36450-01-8]
Constit. of the roots of *Phaseolus vulgaris* and the stems of *Phoenix dactylifera*. Cryst. (EtOH). Mp 210-212°. $[\alpha]_D$ +8° ($CHCl_3$).
Ac: [36450-03-0].
Cryst. (hexane). Mp 107-109°. $[\alpha]_D$ +16° ($CHCl_3$).

Katsui, N. *et al, Bull. Chem. Soc. Jpn.*, 1972, **45**, 223 (*isol*)
Fernandez, M.I. *et al, Phytochemistry*, 1983, **22**, 2087 (*isol*)
Galagovsky, L.R. *et al, J. Chem. Res., Synop.*, 1990, 366 (*synth, pmr*)

N^2-(2-Hydroxysuccinoyl)arginine H-10227

N^2-*(3-Carboxy-2-hydroxy-1-oxopropyl)arginine, 9CI*
[87605-92-3]

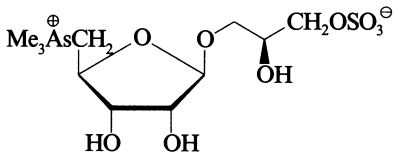
$HOOCCH_2CH(OH)CONHCH(COOH)$
$CH_2CH_2CH_2NHC(=NH)NH_2$

$C_{10}H_{18}N_4O_6$ M 290.275
Constit. of the seeds of *Vicia faba*, the tubers of *Smilax china* and the shoots of apple and pear trees.

Kasai, T. *et al, Phytochemistry*, 1983, **22**, 147; 1984, **23**, 19 (*isol*)

2-Hydroxy-3-(sulfooxy)propyl-5-deoxy-5-(trimethylarsonio)-β-D-ribofuranoside, 9CI H-10228

[138382-73-7]

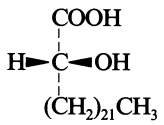


$C_{11}H_{23}AsO_9S$ M 406.285
Constit. of the kidney of the giant clam *Tridacna maxima.*
[115299-23-5]

Fracesconi, K.A. *et al, J. Chem. Soc., Perkin Trans. 1*, 1992, 1349 (*isol*)

2-Hydroxytetracosanoic acid H-10229

Cerebronic acid. *Phrenosic acid. Phrenosinic acid*
[544-57-0]



(R)-form

$C_{24}H_{48}O_3$ M 384.641
Constit. of various glycosphingolipids. Isol. from wheat, corn, other plant spp., lichens and sponges.

(R)-form [26632-11-1]
Isol. from *Penicillium* cultures; *Polyporus umbllatus* and *Aspergillus flavus*. Cryst. ($CHCl_3$); plates (Me_2CO). Mp 104.5-105.5° (99.5-100°). $[\alpha]_D^{25}$ +3.4° (c, 1.6 in Py).
Me ester:
$C_{25}H_{50}O_3$ M 398.668
Mp 64-65°. $[\alpha]_D$ −3.25° (c, 0.92 in $CHCl_3$).
Ac: [127061-75-0].
$C_{26}H_{50}O_4$ M 426.679
Cryst. (pet. ether). Mp 81.5-82.5°. $[\alpha]_D^{20}$ +8.46° (c, 1.01 in $CHCl_3$).

(±)-form [139237-67-5]
Cryst. (C_6H_6). Mp 99.5-100°.

[2433-95-6, 54563-85-8, 54563-86-9, 54563-87-0, 54563-88-1, 73580-21-9, 132842-33-2]

Ashton, R. *et al, J. Chem. Soc.*, 1936, 283 (*synth*)
Muller, A., *Ber.*, 1939, **72B**, 615 (*synth*)
Yoshioka, I. *et al, Yakugaku Zasshi*, 1964, **84**, 742 (*isol, deriv*)
Vacheron, H.J. *et al, Phytochemistry*, 1968, **7**, 1645 (*isol*)
Hoshi, M. *et al, J. Biol. Chem.*, 1973, **248**, 4123 (*pharmacol*)
Tatsumi, K. *et al, Arch. Biochem. Biophys.*, 1974, **165**, 656 (*abs config*)
Florentina, N. *et al, Chem. Phys. Lipids*, 1984, **34**, 257 (*synth*)
Koike, K. *et al, Carbohydr. Res.*, 1987, **162**, 237 (*synth*)
Yamagata, K. *et al, J. Chem. Soc., Perkin Trans. 1*, 1990, 3355 (*synth*)
Sugiyama, S. *et al, Justus Liebigs Ann. Chem.*, 1990, 1063 (*synth*)
Sugai, T. *et al, Tetrahedron Lett.*, 1991, **32**, 7063 (*synth, bibl*)

3-Hydroxytetracosanoic acid H-10230

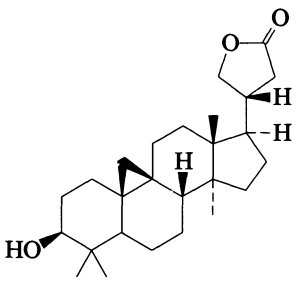
[91297-89-1]

$H_3C(CH_2)_{20}CH(OH)CH_2COOH$

$C_{24}H_{48}O_3$ M 384.641
Constit. of the bark and latex of *Parahancornia arnapa.* Also found in marine sediments.

Sobrinho, D.C. *et al, J. Braz. Chem. Soc.*, 1991, **2**, 15 (*isol*)

3-Hydroxy-24,25,26,27-tetranorcycloartan-23,21-olide H-10231



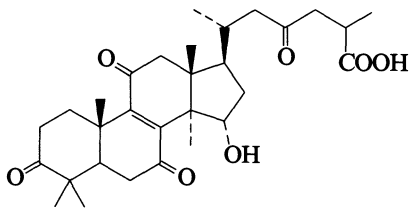
$C_{26}H_{40}O_3$ M 400.600

3β-form [146257-61-6]

Constit. of *Monocyclanthus vignei* . Cryst. (Me_2CO). Mp 219-220°. $[\alpha]_D^{21}$ +48° (c, 0.7 in $CHCl_3$).

Achenbach, H. *et al, Phytochemistry*, 1992, **31**, 4263 (*isol, pmr, cmr*)

15-Hydroxy-3,7,11,23-tetraoxolanost-8-en-26-oic acid H-10232



$C_{30}H_{42}O_7$ M 514.658

(15α,25ξ)-form [100440-26-4] ***Ganoderic acid J***

$C_{30}H_{42}O_7$ M 514.658

Metab. of *Ganoderma lucidum*.

Nishitoba, T. *et al, Agric. Biol. Chem.*, 1985, **49**, 3637 (*isol, pmr, cmr*)

32-Hydroxy-5-tetratriacontanone H-10233

[79105-74-1]

$H_3CCH_2CH(OH)(CH_2)_{26}CO(CH_2)_3CH_3$

$C_{34}H_{68}O_2$ M 508.910

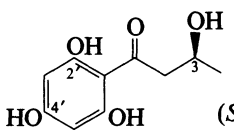
Constit. of the leaves and stems of *Hyoscyamus muticus*. Cryst. (C_6H_6/hexane). Mp 76-77°.

Goswami, A. *et al, Phytochemistry*, 1981, **20**, 1315 (*isol*)

3-Hydroxy-1-(2,4,6-trihydroxyphenyl)-1-butanone H-10234

Updated Entry replacing H-03111

[72896-79-8]



(*S*)-*form*

$C_{10}H_{12}O_5$ M 212.202

(S)-form

2′,4′-Di-Me ether, 3-O-β-D-glucopyranoside: [129784-28-7]. ***Onioside***

$C_{18}H_{26}O_{10}$ M 402.397

Constit. of the fronds of *Diplazium nipponicum*.

(ξ)-form

2′,4′-Di-Me ether, 3-O-β-D-alloside: [75995-21-0]. *3-Allosyloxy-1-(2-hydroxy-4,6-dimethoxyphenyl)-1-butanone*

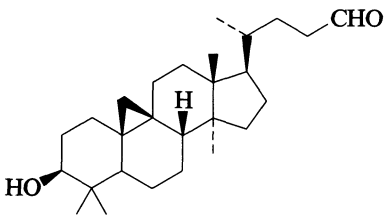
$C_{18}H_{26}O_{10}$ M 402.397

Isol. from fern *Arachniodes standishii*. Amorph. $[\alpha]_D$ −25°.

Tanaka, N. *et al, Chem. Pharm. Bull.*, 1980, **28**, 3070.

Hori, K. *et al, Yakugaku Zasshi*, 1990, **110**, 315 (*Onioside*)

3-Hydroxy-25,26,27-trinorcycloartan-24-al H-10235



$C_{27}H_{44}O_2$ M 400.643

3β-form

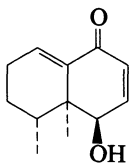
Wrightal

Constit. of *Wrightia tinctoria*. Cryst. Mp 99°. $[\alpha]_D^{20}$ +18.33° (c, 1 in MeOH).

Ramchandra, P. *et al, J. Nat. Prod.* (*Lloydia*), 1993, **56**, 1811 (*isol, pmr, cmr*)

6-Hydroxy-11,12,13-trinor-1(10),7-nardosinadien-9-one H-10236

6-Hydroxy-11,12,13-trinor-1(10),7-eremophiladien-9-one



$C_{12}H_{16}O_2$ M 192.257

6β-form [53859-06-6] ***Deoxonarchinal A***

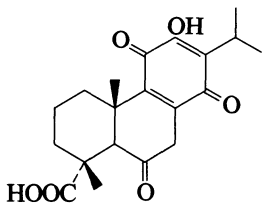
Constit. of *Nardostachys chinensis*. Needles. Mp 105-109°. $[\alpha]_D$ −186° (c, 0.21 in $CHCl_3$).

Itokawa, H. *et al, Chem. Pharm. Bull.*, 1993, **41**, 1183 (*isol, pmr, cmr*)

12-Hydroxy-6,11,14-trioxo-8,12-abietadien-18-oic acid H-10237

6-Oxoroyleanone-18-oic acid

[145700-87-4]



$C_{20}H_{24}O_6$ M 360.406

Constit. of *Salvia divaricata*. Light yellow amorph. solid.

Me ether: [145700-88-5]. *12-Methoxy-6,11,14-trioxo-8,12-abietadien-18-oic acid*

$C_{21}H_{26}O_6$ M 374.433

Constit. of *S. divaricata*. Light yellow amorph. solid.

Ulubelen, A. *et al, J. Nat. Prod.* (*Lloydia*), 1992, **55**, 1518 (*isol, pmr, cmr*)

41-Hydroxy-2,42-tritetracontapentaenediynoic acid H-10238

$C_{43}H_{68}O_3$ M 633.008

Me ester: [128646-22-0]. ***Petroformyne A***
$C_{44}H_{70}O_3$ M 647.035
Constit. of the sponge *Petrosia ficiformis*. Posns. of ethylenic groups not determined.

Cimino, G. *et al*, *J. Nat. Prod.* (*Lloydia*), 1990, **53**, 345.

4-Hydroxy-16,18-tritriacontanedione H-10239

[97191-41-8]

$H_3C(CH_2)_{14}COCH_2CO(CH_2)_{11}CH(OH)CH_2CH_2CH_3$

$C_{33}H_{64}O_3$ M 508.867
Constit. of the leaf waxes of *Eucalyptus globulus*.

Osawa, T. *et al*, *J. Agric. Food Chem.*, 1985, **33**, 777 (*occur*)

18-Hydroxy-16-tritriacontanone H-10240

[97191-42-9]

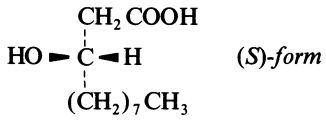
$H_3C(CH_2)_{14}CH(OH)CH_2CO(CH_2)_{14}CH_3$

$C_{33}H_{66}O_2$ M 494.883
Constit. of the leaf waxes of *Eucalyptus globulus*.

Osawa, T. *et al*, *J. Agric. Food Chem.*, 1985, **33**, 777 (*occur*)

3-Hydroxyundecanoic acid, 9CI H-10241

[40165-88-6]



(*S*)-*form*

$C_{11}H_{22}O_3$ M 202.293

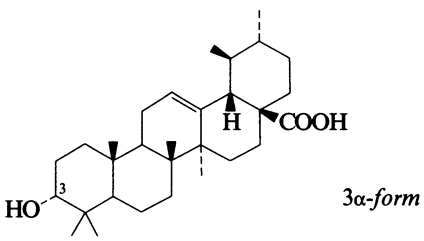
(*S*)-*form* [66997-62-4]
Mp 64-65°. $[\alpha]_D^{18}$ +17.1° (c, 2.1 in $CHCl_3$).

(±)-*form*
Occurs in *Pseudomonas maltophilia*. Cryst. (pet. ether). Mp 73-73.5°.

Skogh, M., *Acta Chem. Scand.*, 1952, **6**, 809 (*synth*)
Moss, C.W. *et al*, *J. Bacteriol.*, 1973, **114**, 1018 (*ms, ir*)
Tahara, S. *et al*, *Agric. Biol. Chem.*, 1978, **42**, 879 (*synth*)

3-Hydroxy-12-ursen-28-oic acid H-10242

Updated Entry replacing H-03166



3α-*form*

$C_{30}H_{48}O_3$ M 456.707

3α-form [989-30-0] ***3-Epiursolic acid***
Constit. of *Salvia lanata*, *Glechoma* spp. Cryst. (EtOAc/pet. ether). Mp 240-245°. $[\alpha]_D$ +98° ($CHCl_3$).

3β-form [77-52-1] ***Ursolic acid.*** *Micromerol. Formosolic acid. Forucosolic acid. Bungeolic acid. Prunol. Urson*
Constit. of *Rhododendron* spp. and *Epigaea asiatica*, also found in wax of apples, pears and other fruits. V. widely distributed in plants. Cryst. (Et_2O). Mp 291°. $[\alpha]_D$ +66° (EtOH). Identity of Formosolic (?Forucosolic) acid not clear from abstr.

Me ester: [32208-45-0].
$C_{31}H_{50}O_3$ M 470.734
Constit. of *Gymnocolea inflata*, *Lyonia formosa* and others. Cryst. (EtOH). Mp 230°.

Ac: [7372-30-7]. ***Acetylursolic acid***
$C_{32}H_{50}O_4$ M 498.745
Isol. from various plants, e.g. *Leptospermum scoparium*. Cryst. (EtOH aq.). Mp 285°. $[\alpha]_D^{20}$ +71.5° ($CHCl_3$).

Ac, 2-methoxybenzyl ester: [56973-20-7].
$C_{40}H_{58}O_5$ M 618.895
Isol. from roots of *Harpagophytum procumbens*.

Ac, 4-methoxybenzyl ester: [56973-19-4].
$C_{40}H_{58}O_5$ M 618.895
Isol. from *H. procumbens* roots.

3-(4-Hydroxycinnamoyl): [50627-73-1].
$C_{39}H_{54}O_5$ M 602.853
Isol. from *Tripetaleia paniculata*.

Formyl: ***Formylursolic acid***
$C_{31}H_{48}O_4$ M 484.718
Constit. of *Lavandula spica*. Cryst. Mp 223-226°. $[\alpha]_D^{22}$ +81.4° (c, 0.126 in $CHCl_3$).

3-Ketone: [6246-46-4]. *3-Oxo-12-ursen-28-oic acid.* ***Ursonic acid***
$C_{30}H_{46}O_3$ M 454.692
Constit. of dammar resin, *Rubus fruticosus* and other plants. Cryst. (MeOH). Mp 270-275° dec. $[\alpha]_D$ +80° (c, 0.9 in $CHCl_3$).

3-Ketone, Me ester: [989-72-0].
Isol. from *Euphorbia caducifolia*. Cryst. (MeOH). Mp 192-194°. $[\alpha]_D$ +86° (c, 0.5 in $CHCl_3$).

3-O-β-D-Glucuronopyranoside, 28-O-β-D-glucopyranosyl ester: [117804-09-8]. ***Cynarasaponin C***
$C_{42}H_{66}O_{14}$ M 794.975
Constit. of *Cynara cardunculus*. Powder + $1\frac{1}{2}H_2O$ (as Me ester). $[\alpha]_D^{21}$ −7.5° (c, 0.93 in MeOH)(Me ester).

3-O-[α-L-Arabinopyranosyl-(1→2)-β-D-glucuronopyranoside]: [117804-08-7]. ***Cynarasaponin B***
$C_{41}H_{64}O_{13}$ M 764.949
Constit. of *C. cardunculus*. Powder + $1\frac{1}{2}H_2O$ (as di-Me ester). $[\alpha]_D^{21}$ +9.7° (c, 1.81 in MeOH)(Me ester).

3-O-[α-L-Arabinopyranosyl-(1→2)-β-D-glucuronopyranoside], 28-O-β-D-glucopyranosyl ester: [117804-07-6]. ***Cynarasaponin A***
$C_{47}H_{74}O_{18}$ M 927.091
Constit. of *C. cardunculus*. Powder + $1\frac{1}{2}H_2O$ (as Me ester). $[\alpha]_D^{25}$ +4.1° (c, 1.33 in MeOH)(Me ester).

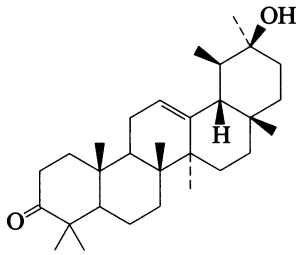
Malonyl ester: [143070-05-7]. ***Cynoterpene***
$C_{33}H_{50}O_6$ M 542.754
Constit. of *Cynomorium songaricum*. Cryst. Mp 214-217°.

[74984-66-0, 117804-17-8, 117804-18-9, 117804-25-8]

Ruzicka, L. *et al*, *Helv. Chim. Acta*, 1945, **28**, 199 (*struct*)
Mills, J.S. *et al*, *J. Chem. Soc.*, 1955, 3132 (*Ursonic acid*)
Huneck, S. *et al*, *J. Prakt. Chem.*, 1968, **38**, 233 (*ms*)
Huneck, S. *et al*, *Phytochemistry*, 1971, **10**, 3279 (*isol*)
Mezzetti, T. *et al*, *Planta Med.*, 1971, **20**, 244 (*struct*)
Karrer, W. *et al*, *Konstitution und Vorkommen der Organischen Pflanzenstoffe*, 2nd Ed., Birkhäuser Verlag, Basel, 1972-1985, no. 2015 (*occur*)
Yasue, M. *et al*, *Yakugaku Zasshi*, 1973, **93**, 687 (*p-Hydroxycinnamoyl*)
Seo, S. *et al*, *J. Chem. Soc., Chem. Commun.*, 1975, 270, 954 (*biosynth, pmr*)

Seo, S. *et al*, *Tetrahedron Lett.*, 1975, 7 (*cmr*)
Yankov, L.K. *et al*, *CA*, 1980, **93**, 150418b (*Formosolic acid*)
Mukherjee, K.S. *et al*, *Phytochemistry*, 1982, **21**, 2416 (*isol*)
Tomita, Y. *et al*, *J. Chem. Soc., Chem. Commun.*, 1985, 1087 (*biosynth*)
Seo, S. *et al*, *J. Chem. Soc., Chem. Commun.*, 1986, 1141 (*biosynth*)
Shimizu, S. *et al*, *Chem. Pharm. Bull.*, 1988, **36**, 2466 (*Cynarasaponins*)
Simon, A. *et al*, *Acta Crystallogr., Sect. C*, 1992, **48**, 726 (*cryst struct*)
Ma, C.M. *et al*, *Chin. Chem. Lett.*, 1992, **3**, 281 (*Cynoterpene*)
Papanov, G. *et al*, *Phytochemistry*, 1992, **31**, 1424 (*Formylursolic acid*)

20-Hydroxy-12-ursen-3-one H-10243



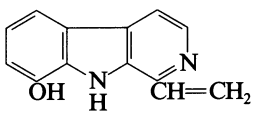
$C_{30}H_{48}O_2$ M 440.708

20β-form [150148-82-6]
Constit. of *Rosmarinus officinalis*. Amorph. $[\alpha]_D^{20}$ +107.3° (c, 0.4 in $CHCl_3$).

Ganeva, Y. *et al*, *Planta Med.*, 1993, **59**, 276 (*isol, pmr, cmr*)

8-Hydroxy-1-vinyl-β-carboline H-10244

Updated Entry replacing H-03173
1-Ethenyl-9H-pyrido[3,4-b]indol-8-ol, 9CI
[138683-69-9]

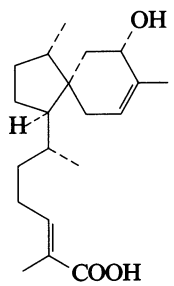


$C_{13}H_{10}N_2O$ M 210.235
Alkaloid from the marine bryozoan *Cribricellina cribraria* and *Catenicella cribraria*. Exhibits cytotoxicity. Yellow oil. Pmr data revised in 1993.

Prinsep, M.R. *et al*, *J. Nat. Prod.* (*Lloydia*), 1991, **54**, 1068 (*isol, uv, ir, pmr, cmr, struct*)
Beutler, J.A. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 1825 (*isol, pmr*)

5-Hydroxy-3,14-viscidadien-16-oic acid H-10245

[151310-20-2]

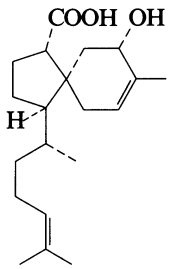


$C_{20}H_{32}O_3$ M 320.471
Constit. of *Eremophila punctata*. Oil. $Bp_{0.15}$ 215-220° (bath). $[\alpha]_D$ +67° (c, 0.04 in $CHCl_3$).

5-Ketone: [151310-19-9]. *5-Oxo-3,14-viscidadien-16-oic acid*
$C_{20}H_{30}O_3$ M 318.455
Constit. of *E. punctata*. Oil. $Bp_{0.15}$ 230-232° (bath). $[\alpha]_D$ +125° (c, 0.3 in $CHCl_3$).

Forster, P.G. *et al*, *Phytochemistry*, 1993, **32**, 1225 (*isol, pmr, cmr*)

5-Hydroxy-3,14-viscidadien-19-oic acid H-10246

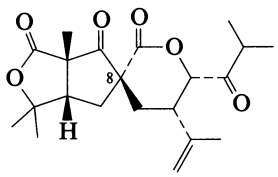


$C_{20}H_{32}O_3$ M 320.471
Constit. of *Eremophila alatisepala*.

Me ester: [110623-84-2].
$C_{21}H_{34}O_3$ M 334.498
Constit. of *E. verticillata*. Oil. $Bp_{0.3}$ 190° (bath). $[\alpha]_D$ +64.3° (c, 1.9 in $CHCl_3$).

Forster, P.G. *et al*, *Aust. J. Chem.*, 1986, **39**, 2111 (*isol, pmr*)
Forster, P.G. *et al*, *Phytochemistry*, 1993, **32**, 1225 (*isol, cmr*)

Hyperireflexolide A H-10247



$C_{21}H_{28}O_6$ M 376.449
Constit. of *Hypericum reflexum*. Cryst. (Et_2O/hexane). Mp 183-186°.

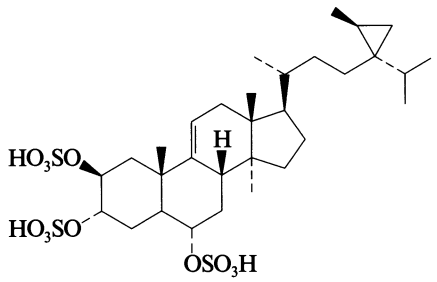
8-Epimer: ***Hyperireflexolide B***
$C_{21}H_{28}O_6$ M 376.449
Constit. of *H. reflexum*. Oil.

Cardona, L. *et al*, *Phytochemistry*, 1993, **33**, 1185 (*isol, pmr, cmr, cryst struct*)

I

Ibisterol I-10001

[148101-50-2]

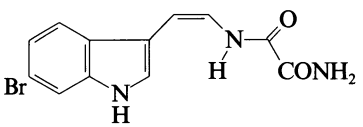


$C_{31}H_{52}O_{12}S_3$ M 712.943
Constit. of a *Topsentia* sp.

McKee, T.C. *et al*, *Tetrahedron Lett.*, 1993, **34**, 389 (*isol, pmr, cmr*)

Igzamide I-10002

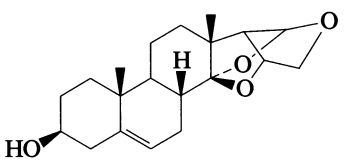
[149355-80-6]



$C_{12}H_{10}BrN_3O_2$ M 308.134
Alkaloid from the northeastern Pacific sponge *Plocamissma igzo*. Yellow solid.

Dumdei, E. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 792 (*isol, uv, ir, pmr, cmr, ms, struct*)

Illustrol I-10003



$C_{20}H_{28}O_4$ M 332.439
Constit. of *Mandevilla illustris*. Needles (as acetate). Mp 210° (acetate).

Yunes, R.A. *et al*, *Phytochemistry*, 1993, **34**, 787 (*isol, pmr, cmr*)

Incarnatrin I-10004

$C_{21}H_{20}O_{12}$ M 464.382
Flavonoid glycoside of unknown struct. Constit. of the flowering tops of *Trifolium incarnatum*. Pale yellow needles + $3H_2O$ (H_2O). Softens at 165°, dec. at 242-245°.

Rogerson, H., *J. Chem. Soc.*, 1910, **97**, 1004 (*isol*)

Incarnatyl alcohol I-10005

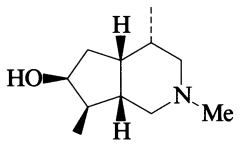
$C_{34}H_{70}O$ M 494.926
Struct. unknown. Constit. of the flowering tops of *Trifolium incarnatum*. Also obt. from the wax of the bumble bee. Needles (EtOAc/EtOH). Mp 74-75° (72-74°).

Benzoyl: Mp 55°.

Rogerson, H., *J. Chem. Soc.*, 1910, **97**, 1004 (*isol*)

Incarvilline I-10006

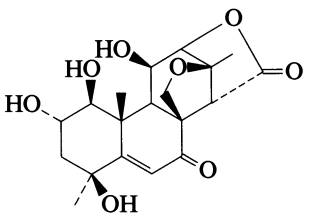
[145307-22-8]



$C_{11}H_{21}NO$ M 183.293
Alkaloid from aerial parts of *Incarvillea sinensis* (Bignoniaceae). Mp 93.4-93.8°. $[\alpha]_D^{24}$ −8.0° (c, 1.24 in $CHCl_3$).

Chi, Y.-M. *et al*, *Phytochemistry*, 1992, **31**, 2930 (*isol, ir, pmr, cmr, ms, struct*)

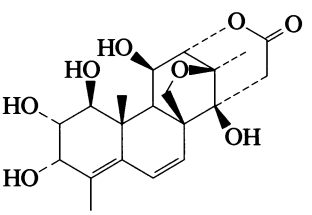
Indaquassin A I-10007



$C_{19}H_{24}O_8$ M 380.394
Constit. of *Quassia indica*. Amorph. powder. $[\alpha]_D^{19}$ −19.5° (c, 0.8 in Py).

Koike, K. *et al*, *Phytochemistry*, 1993, **34**, 505 (*isol, pmr, cmr*)

Indaquassin B I-10008



$C_{20}H_{26}O_8$ M 394.421
Constit. of *Quassia indica*. Amorph. powder. $[\alpha]_D^{19}$ +98° (c, 0.4 in Py).

Koike, K. *et al*, *Phytochemistry*, 1993, **34**, 505 (*isol, pmr, cmr*)

Indocentoic acid I-10009

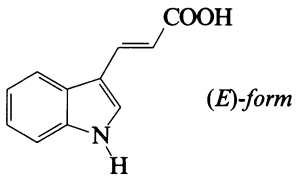
Struct. unknown. Isol. from *Centella asiatica*. Mp 272°. $[\alpha]_D$ +38.6° (Py).

Bhattacharyya, S.C., *J. Indian Chem. Soc.*, 1956, **33**, 893.

3-(1*H*-Indol-3-yl)-2-propenoic acid I-10010

1H-Indole-3-propenoic acid. 3-(3-Indolyl)acrylic acid

[1204-06-4]



(E)-form

$C_{11}H_9NO_2$ M 187.198

Major auxin from roots of *Lens culinaris* (Leguminosae).

(E)-form

Red-brown cryst. (H_2O or AcOH). Mp 195-196°.

Me ester:

$C_{12}H_{11}NO_2$ M 201.224

Cryst. (C_6H_6). Mp 153-154°.

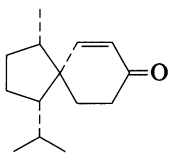
Me ester, N-Ac:

$C_{14}H_{13}NO_3$ M 243.262

Cryst. (C_6H_6). Mp 179-180°.

Furst, A. *et al, Arch. Biochem. Biophys.*, 1951, **31**, 190 (*synth*)
Inhoffen, H.H., *Justus Liebigs Ann. Chem.*, 1963, **668**, 108.
Rappe, C., *Acta Chem. Scand.*, 1964, **18**, 818 (*config*)
Hofinger, M. *et al, Phytochemistry*, 1970, **9**, 1757 (*isol*)
Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th Ed., Van Nostrand-Reinhold, 1992, ICO000.

Inflatenone I-10011



$C_{14}H_{22}O$ M 206.327

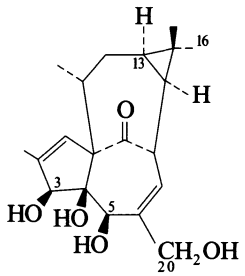
Constit. of *Gymnocolea inflata*. Oil. $[\alpha]_D^{21}$ −7.94° (c, 0.75 in $CHCl_3$).

Tori, M. *et al, Phytochemistry*, 1993, **34**, 281 (*isol, pmr, cmr*)

Ingenol I-10012

Updated Entry replacing I-00156

[30220-46-3]



$C_{20}H_{28}O_5$ M 348.438

Exists as free alcohol and as mono- or di-esters in *Euphorbia* spp. Resin.

▷ Esters are highly irritant and carcinogenic.

3,5,20-Tri-Ac: Cryst. Mp 195-197°.

3-Hexadecanoyl: [52557-26-3]. ***3-Hexadecanoylingenol. Euphorbia factor I_1***

$C_{36}H_{58}O_6$ M 586.851

Constit. of the latex of *E. ingens* and of *E. lathyris*. Oil. $[\alpha]_D^{20}$ +29.8° (c, 0.22 in MeOH).

▷ Irritant. Carcinogenic.

20-Hexadecanoyl: [39071-33-5]. ***20-Palmitoylingenol. Euphorbia factor I_2***

$C_{36}H_{58}O_6$ M 586.851

Constit. of *E. sieboldiana, E. ingens, E. lathyris, E. serrata*. Syrup. $[\alpha]_D^{23}$ −23.7° (c, 0.3 in $CHCl_3$).

3-(2E,4Z-Decadienoyl): [84680-59-1]. ***Euphorbia factor E_1***

$C_{30}H_{42}O_6$ M 498.658

Constit. of *E. esula*. Euphorbia factor H_5 and Euphorbia factor H_6 are geometrical isomers of the acyl group.

▷ Irritant.

3-(2,4,6-Decatrienoyl): [84680-60-4]. ***Euphorbia factor E_2***

$C_{30}H_{40}O_6$ M 496.642

Constit. of *E. esula*. Euphorbia factor H_2 and Euphorbia factor I_6 are geometrical isomers of the acyl group.

▷ Irritant.

3-(2,4,6,8-Dodecatetraenoyl): [84638-37-9]. ***Euphorbia factor E_3***

$C_{32}H_{42}O_6$ M 522.680

Constit. of *E. esula*. Euphorbia factor H_3 is a geometrical isomer of the acyl group.

▷ Irritant.

3-Angeloyl: [75567-37-2]. ***3-O-Angeloylingenol. Euphorbia factor An_1. Euphorbia factor H_1***

$C_{25}H_{34}O_6$ M 430.540

Constit. of *E.* spp.

3-(2,4,6-Decatrienoyl), 16-angeloyloxy: [52557-27-4]. ***Euphorbia factor I_5***

$C_{35}H_{46}O_8$ M 594.744

Constit. of *E. ingens*. Presumed here to be 2,4,6-decatrienoyl; posn. of double bonds not explicit.

3-Angeloyl, 20-Ac: [82425-35-2]. ***Euphorbia factor Pe_1***

$C_{27}H_{36}O_7$ M 472.577

Constit. of *E.* spp. $[\alpha]_D^{25}$ +24.9° (c, 0.13 in $CHCl_3$).

5-Deoxy: ***5-Deoxyingenol***

$C_{20}H_{28}O_4$ M 332.439

Occurs as esters in *E.* spp. Cryst. (as di-Ac). Mp 205-207° (di-Ac).

20-Deoxy: [54706-99-9]. ***20-Deoxyingenol***

$C_{20}H_{28}O_4$ M 332.439

Occurs as esters in *E. kansui* and *E. paralias*. Cryst. Mp 201-203°.

20-Deoxy, 3-hexanoyl: [75567-39-4].

$C_{26}H_{38}O_5$ M 430.583

Constit. of *E. paralias*.

▷ Irritant.

20-Deoxy, 5-benzoyl: [54706-97-7]. ***Euphorbia factor P_2. 5-Benzoyl-20-deoxyingenol***

$C_{27}H_{32}O_5$ M 436.547

Constit. of *E. kansui* and other *E.* spp.

20-Deoxy, 3,5-dibenzoyl: [91413-71-7]. ***Euphorbia factor P_8***

$C_{34}H_{36}O_6$ M 540.655

Constit. of *E.* spp.

20-Deoxy, 3-hexanoyl, 5-benzoyl: [91431-62-8]. ***Euphorbia factor P_9***

$C_{33}H_{42}O_6$ M 534.691

Constit. of *E.* spp.

20-Deoxy, 3-angeloyl: [75567-38-3]. ***3-Angeloyl-20-deoxyingenol. Euphorbia factor H_8. Euphorbia factor Pe_2***

$C_{25}H_{34}O_5$ M 414.541

Constit. of *E. paralias* and other *E.* spp.

20-Deoxy, 5-angeloyl: [91413-73-9]. ***5-Angeloyl-20-deoxyingenol.*** *Euphorbia factor* H_4
$C_{25}H_{34}O_5$ M 414.541
Constit. of *E.* spp.
20-Deoxy, 3-(2E,4Z,6-decatrienoyl): [84283-55-6].
$C_{30}H_{40}O_5$ M 480.643
Constit. of *E. biglandulosa.*
20-Deoxy, 5-(2E,4Z,6-decatrienoyl): [84283-56-7].
Euphorbia factor H_7
$C_{30}H_{40}O_5$ M 480.643
Constit. of *E. biglandulosa* and other *E.* spp.
20-Deoxy, 16-acetoxy, 3-angeloyl: [88262-77-5]. ***Euphorbia factor*** Q_1
$C_{27}H_{36}O_7$ M 472.577
Constit. of *E.* spp. Oil. $[\alpha]_D^{25}$ +16.9° (c, 0.28 in $CHCl_3$).
20-Deoxy, 16-benzoyloxy, 3-benzoyl: [91413-69-3].
Euphorbia factor P_6
$C_{34}H_{36}O_7$ M 556.654
Constit. of *E.* spp.
20-Deoxy, 13-(phenylacetyloxy), 16-(benzoyloxy), 3-benzoyl: [91413-67-1]. ***Euphorbia factor*** P_3
$C_{42}H_{42}O_9$ M 690.788
Constit. of *E.* spp.
20-Deoxy, 13,16-bis(benzoyloxy), 3-benzoyl: [91413-68-2].
Euphorbia factor P_5
$C_{41}H_{40}O_9$ M 676.762
Constit. of *E.* spp.

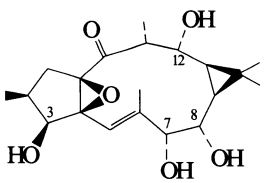
[52557-28-5, 91464-81-2, 91464-82-3, 91464-83-4]

Zeichmeister, K. *et al, Tetrahedron Lett.*, 1970, 4075 (*cryst struct*)
Uemura, D. *et al, Tetrahedron Lett.*, 1971, 3673; 1974, 2527 (*isol*)
Opferkuch, H.J. *et al, Tetrahedron Lett.*, 1974, 261 (*isol*)
Sayed, M.D. *et al, Experientia*, 1980, **36**, 1206 (*esters*)
Falsone, G. *et al, Arch. Pharm. (Weinheim, Ger.)*, 1982, **315**, 1026.
Seip, E.H. *et al, Planta Med.*, 1982, **46**, 215 (*esters*)
Sorg, B. *et al, Z. Naturforsch., B*, 1982, **37**, 748 (*synth, esters*)
Evans, F.J. *et al, Prog. Chem. Org. Nat. Prod.*, 1983, **44**, 1 (*rev*)
Lin, L.-J. *et al, J. Nat. Prod. (Lloydia)*, 1983, **46**, 723 (*esters*)
Gotta, H. *et al, Z. Naturforsch., B*, 1984, **39**, 683 (*isol, esters*)
Fürstenberger, G. *et al, J. Nat. Prod. (Lloydia)*, 1986, **49**, 386 (*isol*)
Jia, Z. *et al, Planta Med.*, 1991, **57**, 569 (*20-Palmitoylingenol*)
Bagavathi, R. *et al, Z. Naturforsch., B*, 1991, **46**, 1425 (*isol, pmr, cmr*)

Ingol I-10013

Updated Entry replacing I-00157

[51847-86-0]



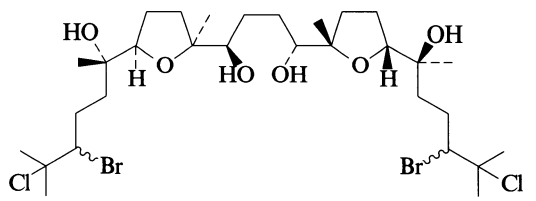
$C_{20}H_{30}O_6$ M 366.453
Hydrol. prod. from *Euphorbia ingens* and *E. kamerunica.* Antineoplastic agent.

Tetra-Ac: [51906-02-6].
$C_{28}H_{38}O_{10}$ M 534.602
Constit. of *E. kamerunica.* Cryst. (isopropyl ether). Mp 172-175°.
12-Tigloyl, 3,7,8-tri-Ac: [81427-04-5].
$C_{31}H_{42}O_{10}$ M 574.667
Constit. of *E. kamerunica.*
12-Tigloyl, 3,7-di-Ac: [81980-37-2].
$C_{29}H_{40}O_9$ M 532.630
Constit. of *E. kamerunica.*
3,7,12-Tri-Ac, O^8*-Me:* [77573-15-0]. ***Tirucalicine***
$C_{27}H_{38}O_9$ M 506.592
Constit. of *E. tirucalli.* Needles (EtOH). Mp 148-150°. $[\alpha]_D$ +16.13° (c, 3.41 in $CHCl_3$).
7-Tigloyl, O^8*-Me, 3,12-di-Ac:* [89984-06-5].
$C_{30}H_{42}O_9$ M 546.656
Constit. of latex of *E. kamerunica.*
O^7*-Benzoyl,* O^8*-Me, 3,12-di-Ac:* [89984-05-4].
$C_{32}H_{40}O_9$ M 568.663
Constit. of *E. kamerunica.*
7-Tigloyl, 3,8,12-tri-Ac: [92910-93-5].
$C_{31}H_{42}O_{10}$ M 574.667
Constit. of *E. kamerunica.*
7-Angeloyl, 3,8,12-tri-Ac: [92998-77-1].
$C_{31}H_{42}O_{10}$ M 574.667
Constit. of *E. kamerunica.*
7-Angeloyl, O^8*-Me, 3,12-Di-Ac:* [90027-10-4].
$C_{30}H_{42}O_9$ M 546.656
Constit. of *E. kamerunica.*
8-(2-Methylbutanoyl), 3,7,12-tri-Ac:
$C_{31}H_{44}O_{10}$ M 576.683
Constit. of *E. tirucalli.* Oil. $[\alpha]_D$ +92° ($CHCl_3$).
8-Benzoyl, 3,12-di-Ac:
$C_{30}H_{38}O_8$ M 526.625
Constit. of *E. antiquorum.* $[\alpha]_D$ −21.8° (c, 0.16 in $CHCl_3$).
8-Tigloyl, 12-Ac:
$C_{27}H_{38}O_8$ M 490.592
Constit. of *E. antiquorum.* $[\alpha]_D$ +10° (c, 0.16 in $CHCl_3$).
8-Tigloyl:
$C_{25}H_{36}O_7$ M 448.555
Constit. of *E. antiquorum.* $[\alpha]_D$ +21.8° (c, 0.12 in $CHCl_3$).
8-Tigloyl, 3,12-di-Ac:
$C_{29}H_{40}O_9$ M 532.630
Constit. of *E. antiquorum.* $[\alpha]_D$ −16.2° (c, 0.13 in $CHCl_3$).

Lotter, H. *et al, Tetrahedron Lett.*, 1979, 77 (*cryst struct*)
Abo, K. *et al, Phytochemistry*, 1981, **20**, 2535 (*derivs*)
Evans, F.J. *et al, Prog. Chem. Org. Nat. Prod.*, 1983, **44**, 1 (*rev*)
Connolly, J.D. *et al, Tetrahedron Lett.*, 1984, **25**, 3773 (*struct, deriv*)
Khan, A.Q. *et al, Heterocycles*, 1988, **27**, 2851.
Gewali, M.B. *et al, Chem. Pharm. Bull.*, 1989, **37**, 1547 (*derivs*)
Khan, A.Q. *et al, J. Nat. Prod. (Lloydia)*, 1990, **53**, 728 (*isol, deriv*)

Intricatetraol I-10014

[150527-31-4]



$C_{30}H_{54}Br_2Cl_2O_6$ M 741.466
Metab. of *Laurencia intricata.* Cryst. (MeOH). Mp 109-111°. $[\alpha]_D^{20}$ +53.0° (c, 0.625 in $CHCl_3$).

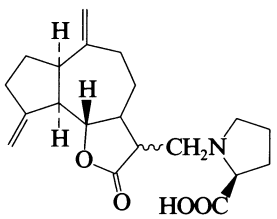
Suzuki, M. *et al, Phytochemistry*, 1993, **33**, 651 (*isol, pmr, cmr*)

Involucratine I-10015

Updated Entry replacing I-00207

1-[[Dodecahydro-6,9-bis(methylene)-2-oxoazuleno[4,5-b] furan-3-yl]methyl]proline, 9CI. Saussureamine B

[126209-82-3]



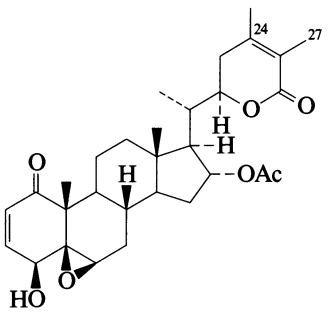
$C_{20}H_{27}NO_4$ M 345.438

Alkaloid from *Saussurea involucrata* and *S. lappa* (Compositae). Powder. $[\alpha]_D$ −25.9° (MeOH). Involucratine and Saussureamine B not compared.

Li, Y. *et al*, *Phytochemistry*, 1989, **28**, 3395 (*Involucratine*)
Yoshikawa, M. *et al*, *Chem. Pharm. Bull.*, 1993, **41**, 214 (*Saussureamine B*)

Iochromolide I-10016

Updated Entry replacing I-00209



$C_{30}H_{40}O_7$ M 512.642

Constit. of *Iochroma coccineum*. Cryst. (EtOAc). Mp 146-154°.

27-Hydroxy: ***27-Hydroxyiochromolide***

$C_{30}H_{40}O_8$ M 528.641

Constit. of *I. coccineum*. Cryst. (EtOAc). Mp 242-244°.

24β,25α-Dihydro: ***24,25-Dihydroiochromolide***

$C_{30}H_{42}O_7$ M 514.658

Constit. of *I. coccineum*. Cryst. (MeOH). Mp 191-196°.

Alfonso, D. *et al*, *J. Nat. Prod.* (*Lloydia*), 1991, **54**, 1576 (*isol, pmr, cmr, cryst struct*)
Alfonso, D. *et al*, *Phytochemistry*, 1993, **34**, 517 (*isol, pmr, cmr, cryst struct*)

3-Iodo-2-propenoic acid, 9CI I-10017

3-Iodoacrylic acid, 8CI

[71815-44-6]

IHC=CHCOOH

$C_3H_3IO_2$ M 197.960

Minor component of the aq. extract of Hawaiian red alga *Asparagopsis taxiformis*.

(E)-form [6372-02-7]

pK_a 5.59 (25°, 80% 2-methoxyethanol aq.).

Me ester: [6213-88-3].

Liq. d 2.11. $Bp_{18.2}$ 61°.

Et ester: [31930-37-7].

$C_5H_7IO_2$ M 226.014

Liq. d_4^{22} 1.738. Bp_{10} 74-75°. n_D^{22} 1.526.

(Z)-form [6214-35-3]

Slightly yellow solid. Mp 67-68° (63-65°). pK_a 5.85 (25°, 80% 2-methoxyethanol aq.).

Me ester: [6214-23-9].

$C_4H_5IO_2$ M 211.987

Liq. (slightly yellow). d 2.14. $Bp_{12.2}$ 62-63°.

Et ester: [31930-36-6].

Liq. d_4^{22} 1.770. Bp_{10} 83-84°. n_D^{22} 1.530.

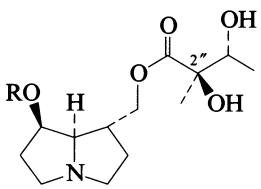
Amide: [137627-61-3].

C_3H_4INO M 196.975

Solid. Mp 98-102°.

Stolz, F., *Ber.*, 1886, **19**, 536 (*synth*)
Bowden, K. *et al*, *J. Chem. Soc. B*, 1970, 1466 (*synth, pmr*)
Biougne, J. *et al*, *C. R. Hebd. Seances Acad. Sci. Ser. C*, 1971, **272**, 858 (*Et ester, synth, pmr, ir*)
Brouwer, H. *et al*, *Can. J. Chem.*, 1972, **50**, 601 (*cmr, pmr*)
Bowden, K. *et al*, *J. Chem. Soc., Perkin Trans. 2*, 1972, 206 (*pKa*)
Topek, K. *et al*, *Collect. Czech. Chem. Commun.*, 1978, **43**, 2395 (*synth*)
Woolard, F.X. *et al*, *Phytochemistry*, 1979, **18**, 617 (*isol, glc, synth*)
Jung, M.E. *et al*, *Tetrahedron Lett.*, 1983, **24**, 3973 (*synth, pmr*)
Moss, R.A. *et al*, *J. Am. Chem. Soc.*, 1989, **111**, 6729 (*synth, pmr, ir, glc, Z-form, Me ester*)
Ma, S. *et al*, *J. Chem. Soc., Chem. Commun.*, 1990, 1643 (*Z-form, Et ester, synth*)
Ma, S. *et al*, *J. Org. Chem.*, 1992, **57**, 709 (*Z-form, synth, pmr, ir, ms*)

Ipanguline A I-10018



R = $PhCH_2CO$

$C_{21}H_{29}NO_6$ M 391.463

Alkaloid from seeds of *Ipomoea hederifolia* (Convolvulaceae). Oil. $[\alpha]_D^{21}$ −69° (c, 0.98 in MeOH).

2″-Epimer: ***Isoipanguline A***

$C_{21}H_{29}NO_6$ M 391.463

Alkaloid from seeds of *I. hederifolia* (Convolvulaceae). Oil. $[\alpha]_D^{21}$ −61° (c, 1.47 in MeOH).

Jennett-Siems, K. *et al*, *Phytochemistry*, 1993, **34**, 437 (*isol, pmr, cmr, ms, struct*)

Ipanguline B I-10019

As Ipanguline A, I-10018 with

R = 2-hydroxybenzoyl

$C_{20}H_{27}NO_7$ M 393.436

Alkaloid from above-ground parts (without fruits) of *Ipomoea hederifolia* (Convolvulaceae).

2″-Epimer: ***Isoipanguline B***

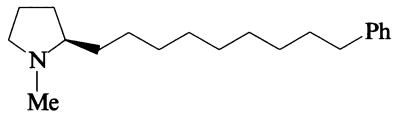
$C_{20}H_{27}NO_7$ M 393.436

Alkaloid from above-ground parts (without fruits) of *I. hederifolia* (Convolvulaceae). Oil. $[\alpha]_D^{21}$ −108° (c, 0.90 in MeOH).

Jennett-Siems, K. *et al*, *Phytochemistry*, 1993, **34**, 437 (*isol, pmr, cmr, ms, struct*)

Irniine I-10020

1-Methyl-2-(9-phenylnonyl)pyrrolidine, 9CI



$C_{20}H_{33}N$ M 287.487

(R)-form [144425-08-1]

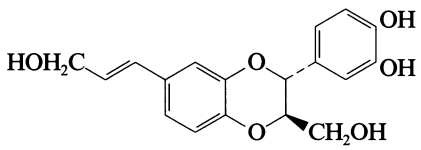
Alkaloid from the tubers of *Arisarum vulgare* (Araceae). Oil. $[\alpha]_D^{21}$ −35° (c, 0.2 in CH_2Cl_2). Abs. config. tentative, based on opt. rotn. only.

▷ Toxic.

Melhaoui, A. *et al*, *J. Nat. Prod.* (*Lloydia*), 1992, **55**, 950 (*isol, ir, pmr, cmr, ms, struct*)

Isoamericanol A I-10021

[121620-06-2]



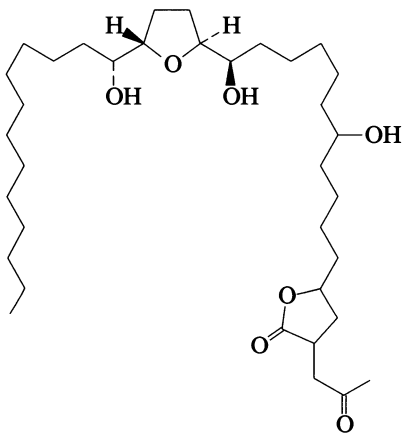
$C_{18}H_{18}O_6$ M 330.337

Isol. from the seeds of *Phytolacca americana*. Shows neurotrophic activity. Prisms (Me_2CO/EtOAc). Mp 157-159°. Racemic.

Fukuyama, Y. *et al*, *Chem. Pharm. Bull.*, 1992, **40**, 252 (*isol, pmr, cmr, struct*)

Isoannoreticuin I-10022

[142474-61-1]



$C_{35}H_{64}O_7$ M 596.886

Acetogenin isol. from *Annona reticulata*. Cytotoxic. Amorph. powder. $[\alpha]_D^{24}$ +9.7° (c, 0.33 in $CHCl_3$).

Wu, Y.-C. *et al*, *Heterocycles*, 1992, **34**, 667 (*isol, pmr, cmr*)

Isoauroside I-10023

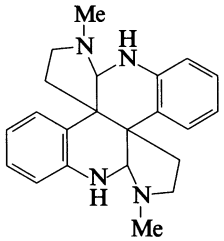
Foleroside

Flavonoid of unknown struct. Constit. of the aerial parts of *Glycyrrhiza glabra*.

Litvinenko, V.I. *et al*, *Rastit. Resur.*, 1972, **8**, 35 (*isol*)

Isocalycanthine I-10024

[1399-92-4]



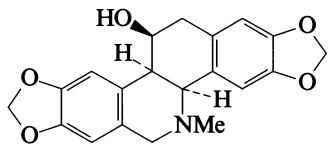
$C_{22}H_{26}N_4$ M 346.474

Alkaloid from stem bark and fruits of *Psychotria forsteriana* (Rubiaceae). Mp 253°. $[\alpha]_D^{20}$ −150° (c, 2.5 in EtOH).

Adjibade, Y. *et al*, *Phytochemistry*, 1992, **31**, 317 (*isol, uv, ir, pmr, cmr, ms, struct*)

Isochelidonine I-10025

[142741-30-8]



$C_{20}H_{19}NO_5$ M 353.374

Alkaloid from aerial parts of *Chelidonium majus* (Papaveraceae). Cryst. (EtOH). Mp 124-125°. $[\alpha]_D$ +72° (c, 0.23 in EtOH).

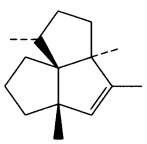
De Rosa, S. *et al*, *Phytochemistry*, 1992, **31**, 1085 (*isol, uv, ir, pmr, struct*)

2-Isocomene I-10026

Updated Entry replacing I-00356

α-Isocomene. *Berkheyaradulene. Isocomene*

[65372-78-3]



$C_{15}H_{24}$ M 204.355

Constit. of *Isocoma wrightii* and *Berkheya radula*. Oil. $Bp_{0.35}$ 65-70° (bath). $[\alpha]_D^{24}$ −85° (c, 3.5 in $CHCl_3$).

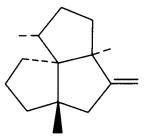
Bohlmann, F. *et al*, *Chem. Ber.*, 1977, **110**, 3777 (*isol*)
Zalkow, L.H. *et al*, *J. Chem. Soc., Chem. Commun.*, 1977, 456 (*isol*)
Pirrung, M.C. *et al*, *J. Am. Chem. Soc.*, 1979, **101**, 7130; 1981, **103**, 82 (*synth*)
Paquette, L.A. *et al*, *J. Am. Chem. Soc.*, 1981, **103**, 1835 (*synth*)
Dauben, W.G. *et al*, *J. Org. Chem.*, 1981, **46**, 1103 (*synth*)
Oppolzer, W. *et al*, *Tetrahedron*, 1981, **37**, 4359 (*synth*)
Wender, P.A. *et al*, *Tetrahedron*, 1981, **37**, 4445 (*synth*)
Wenkert, E. *et al*, *J. Am. Chem. Soc.*, 1983, **105**, 2030 (*synth*)
Ranu, B.C. *et al*, *Tetrahedron Lett.*, 1984, **25**, 2447 (*synth*)
Tobe, Y. *et al*, *J. Chem. Soc., Chem. Commun.*, 1985, 898 (*synth*)
Manzardo, G.G.G. *et al*, *Helv. Chim. Acta*, 1986, **69**, 659 (*synth*)
Snider, B.B. *et al*, *J. Org. Chem.*, 1988, **53**, 4508 (*synth*)
Fitjer, L. *et al*, *J. Org. Chem.*, 1993, **58**, 6171 (*abs config*)

3(13)-Isocomene I-10027

Updated Entry replacing I-00357

β-Isocomene

[74311-15-2]



$C_{15}H_{24}$ M 204.355

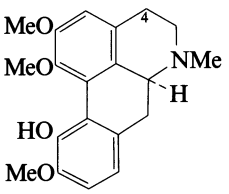
Constit. of *Berkheya* spp. Oil.

Bohlmann, F. *et al*, *Phytochemistry*, 1979, **18**, 1831 (*isol*)
Oppolzer, W. *et al*, *Tetrahedron*, 1981, **37**, 4359 (*synth*)
Tobe, Y. *et al*, *J. Chem. Soc., Chem. Commun.*, 1985, 898 (*synth*)
Willmore, N.D. *et al*, *J. Org. Chem.*, 1992, **57**, 1216 (*synth*)
Fitjer, L. *et al*, *J. Org. Chem.*, 1993, **58**, 6171 (*abs config*)

Isocorydine I-10028

Updated Entry replacing I-00368

11-Hydroxy-1,2,10-trimethoxyaporphine. Artabotrin. Luteanine†. Corytuberine methyl ether†



(*S*)-*form*

$C_{20}H_{23}NO_4$ M 341.406

(***S*)-*form*** [475-67-2]

Alkaloid from a wide variety of genera in the Annonaceae (*Annona, Enantia, Asimina, Arbabotrys*), Berberidaceae (*Dehaasia, Berberis, Mahonia*), Lauraceae (*Cryptocarya, Dehaasia, Beilschmiedia, Litsea, Phoebe, Ocotea*), Menispermaceae (*Stephania*), Monimiaceae (*Peumus*), Fumariaceae (*Corydalis, Dicentra*), Papaveraceae (*Glaucium, Papaver, Dicranostigma*), Ranunculaceae (*Thalictrum*), Rhamnaceae (*Phylica*), Hernandiaceae (*Hernandia*), Atherospermataceae (*Atherosperma, Doryphora*) and Pteridophyllaceae (*Pteridophyllum*). Adrenocytic, sedative and cholinergic agent. Shows virtually no antitussive activity. Mp 185°. $[\alpha]_D^{23}$ +215° (c, 1 in $CHCl_3$).

▷ LD_{50} (rat, ipr) 10.9 mg/kg.

N-*Oxide:* [25405-80-5]. ***Isocorydine* N-*oxide***

$C_{20}H_{23}NO_5$ M 357.405

Alkaloid from the leaves of *Berberis integerrima* (Berberidaceae). Amorph. solid. Mp 228-229°.

N-*Oxide; B,HCl:* Mp 228-229°.

N-*Me:* see *Menisperine, M-00469*

N-*De-Me:* see *Norisocorydine, N-00737*

4β-Hydroxy: ***Crabbine***

$C_{20}H_{23}NO_5$ M 357.405

Alkaloid from whole plants of *Corydalis lutea* (Fumariaceae).

(±)-***form*** [36284-37-4]

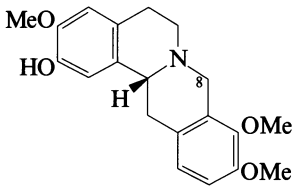
Mp 151-152°.

Gadamer, J., *Arch. Pharm.* (*Weinheim, Ger.*), 1911, **249**, 641 (*isol*)
Comin, J. *et al*, *J. Org. Chem.*, 1954, **19**, 1774 (*isol, uv, struct*)
Kuck, A.M. *et al*, *J. Org. Chem.*, 1961, **26**, 5253 (*synth, uv*)
Jackson, A.H. *et al*, *J. Chem. Soc. C*, 1966, 2181 (*ms*)
Johns, S.R. *et al*, *Aust. J. Chem.*, 1967, **20**, 1277 (*isol, pmr*)
Karimov, A. *et al*, *Khim. Prir. Soedin.*, 1978, **14**, 419; *Chem. Nat. Compd.* (*Engl. Transl.*), 360 (*oxide*)
Marsaioli, A.J. *et al*, *Phytochemistry*, 1979, **18**, 165 (*cmr*)
Ringdahl, B. *et al*, *J. Nat. Prod.* (*Lloydia*), 1981, **44**, 80 (*cd*)
Toure, S. *et al*, *Acta Crystallogr., Sect. C*, 1985, **41**, 1827 (*cryst struct*)
Yang, M.-H. *et al*, *Phytochemistry*, 1993, **33**, 943 (*Crabbine*)

Isocorypalmine I-10029

Updated Entry replacing I-00372

5,8,13,13a-Tetrahydro-3,9,10-trimethoxy-6H-dibenzo[a,g]*quinolizin-2-ol, 9CI. 3,9,10-Trimethoxyberbin-2-ol, 8CI. 2-Hydroxy-3,9,10-trimethoxytetrahydroprotoberberine. Tetrahydrocolumbamine. Casealutine*



(*R*)-*form*

$C_{20}H_{23}NO_4$ M 341.406

(***R*)-*form*** [53447-14-6]

Alkaloid from *Corydalis cava*, in partially racemised form (Fumariaceae). Cryst. (MeOH). Mp 239-241° (220-222°). $[\alpha]_D$ +303° ($CHCl_3$).

(***S*)-*form*** [483-34-1]

Alkaloid from the leaves of *Bocconia frutescens, C. lutea, C. ophiocarpa*, other *C.* spp., *Dicranostigma* spp., *Glaucium fimbrilligerum, Hydrastis canadensis, Thalictrum* spp., *Pachypodanthium confine* and *Tinomiscium petiolare* (Papaveraceae, Ranunculaceae, Annonaceae). Mp 241-242°.

▷ NQ7685000.

β-N-Me: ***β-N-Methylisocorypalminium***

$C_{21}H_{26}NO_4^{\oplus}$ M 356.441 (ion)

Quaternary alkaloid from *Glaucium squamigerum*. Prisms (MeOH) (as iodide). Mp 175-176° (iodide). $[\alpha]_D^{24}$ −127° (c, 0.13 in MeOH).

8-Oxo: ***8-Oxoisocorypalmine***

$C_{20}H_{21}NO_5$ M 355.390

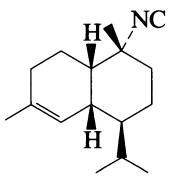
Alkaloid from stems of *Coscinium fenestratum* (Menispermaceae). Gum. $[\alpha]_D$ −222° (c, 0.072 in $CHCl_3$).

(±)-***form*** [6487-33-8]

Alkaloid from *Corydalis cava* (Fumariaceae). Prisms ($CHCl_3$/MeOH). Mp 221-222° (215-216°).

Corrodi, H. *et al*, *Helv. Chim. Acta*, 1956, **39**, 889.
Tomita, M. *et al*, *Yakugaku Zasshi*, 1967, **87**, 881 (*isol*)
Naruto, S. *et al*, *Phytochemistry*, 1972, **11**, 2462 (*isol*)
Slavík, J. *et al*, *Collect. Czech. Chem. Commun.*, 1975, **40**, 3206; 1979, **44**, 2261; 1984, **49**, 1318 (*isol, N-Methylcorypalminium*)
Battersby, A.R. *et al*, *J. Chem. Soc., Perkin Trans. 1*, 1975, 1147 (*biosynth*)
Casnaw, J. *et al*, *Anal. Biochem.*, 1976, **74**, 343 (*glc, ms*)
Pinho, P.M.M. *et al*, *Phytochemistry*, 1992, **31**, 1403 (*8-Oxoisocorypalmine*)

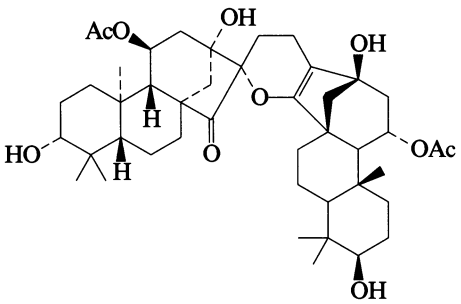
10-Isocyano-4-amorphene I-10030



$C_{16}H_{25}N$ M 231.380

10α-form [145632-88-8]
Constit. of *Acanthella* cf. *cavernosa*. $[\alpha]_D$ +101° (c, 0.52 in MeOH).
Fusetani, N. *et al*, *Tetrahedron Lett.*, 1992, **33**, 6823 (*isol, pmr, cmr*)

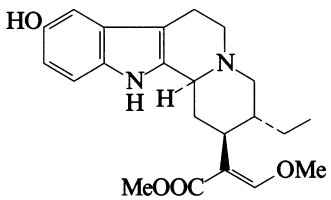
Isodopharicin E I-10031



$C_{44}H_{64}O_{10}$ M 752.984
Constit. of *Isodon pharicus*. Needles. Mp 240-241°. $[\alpha]_D^{16}$ −144° (c, 0.25 in EtOH).
Wang, Z.M. *et al*, *Chin. Chem. Lett.*, 1991, **2**, 847 (*isol, pmr, cmr*)

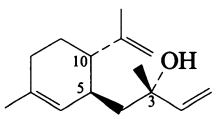
Isogambirine I-10032

[142934-41-6]



$C_{22}H_{28}N_2O_4$ M 384.474
Alkaloid from leaves of *Uncaria callophylla* (Rubiaceae).
Kam, T.-S. *et al*, *Phytochemistry*, 1992, **31**, 2031 (*isol, uv, pmr, cmr, ms, struct*)

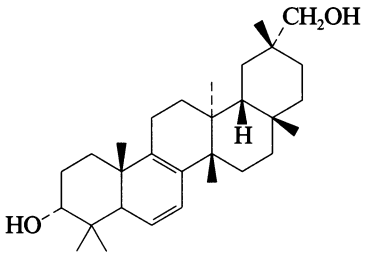
Isohumbertiol I-10033



$C_{15}H_{24}O$ M 220.354
(3S,5S,10S)-form [146924-31-4] ***Isohumbertiol A***
Constit. of *Baccharis dracunculifolia*.
(3S,5S,10R)-form [146924-32-5] ***Isohumbertiol B***
Constit. of *B. dracunculifolia*.
(3S,5R,10R)-form [146924-33-6] ***Isohumbertiol C***
Constit. of *B. dracunculifolia*.
(3S,5R,10S)-form [146924-34-7] ***Isohumbertiol D***
Constit. of *B. dracunculifolia*.
Weyerstahl, P. *et al*, *Justus Liebigs Ann. Chem.*, 1992, 1325 (*isol, pmr, cmr, synth*)

Isokarounidiol I-10034

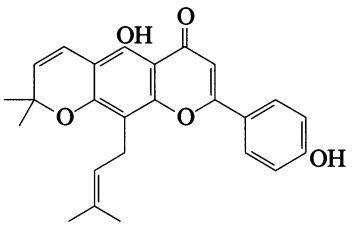
[147658-98-8]



$C_{30}H_{48}O_2$ M 440.708
Constit. of *Trichosanthes kirilowii*. Cryst. Mp 246-248°.
Akihisa, T. *et al*, *J. Org. Chem.*, 1993, **58**, 1959 (*isol, pmr, cmr*)

Isolaxifolin I-10035

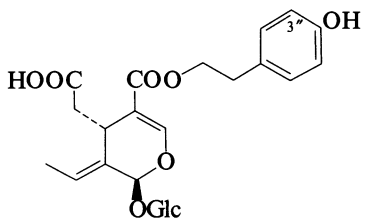
[144049-82-1]



$C_{25}H_{24}O_5$ M 404.462
Constit. of the roots of *Derris laxiflora*. Mp 230-232°.
Lin, Y.-L. *et al*, *Chem. Pharm. Bull.*, 1991, **39**, 3132 (*isol, pmr, cmr*)

Isoligustrosidic acid I-10036

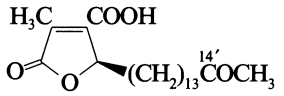
Updated Entry replacing I-00516



$C_{24}H_{30}O_{12}$ M 510.494
Isol. from *Fraxinus formosana*. Amorph. powder. $[\alpha]_D^{22}$ −142° (c, 0.9 in MeOH).
Me ester: [108789-18-0]. ***Isoligustroside***
$C_{25}H_{32}O_{12}$ M 524.521
Constit. of *Syringa vulgaris*. Cryst. (as penta-Ac). Mp 45-50° (penta-Ac). $[\alpha]_D^{30}$ −122.7° (c, 1.1 in $CHCl_3$) (penta-Ac).
(4-Hydroxyphenyl)ethyl ester: ***Framoside***
$C_{32}H_{38}O_{13}$ M 630.644
Constit. of *F. formosana*. Amorph. powder. $[\alpha]_D^{22}$ −108° (c, 0.15 in MeOH).
3″-Hydroxy, Me ester: [108789-17-9]. ***Isooleuropein***
$C_{25}H_{32}O_{13}$ M 540.520
Constit. of *S. vulgaris*. Amorph. solid. $[\alpha]_D$ −105.4° ($CHCl_3$) (hexa-Ac).
Kikuchi, M. *et al*, *CA*, 1987, **107**, 28255 (*Isooleuropein*)
Kikuchi, M. *et al*, *Yakugaku Zasshi*, 1987, **107**, 245 (*Isoligustroside*)
Tanahashi, T. *et al*, *Phytochemistry*, 1993, **32**, 133 (*Isoligustrosidic acid*)

Isomuronic acid I-10037

Updated Entry replacing I-00550



(*R*)-form

$C_{21}H_{34}O_5$ M 366.497

(R)-form [70579-66-7]

Isol. from the lichen *Neuropogon trachycarpus*. Microcryst. (Me_2CO/hexane). Mp 108-109°. $[\alpha]_D^{24}$ +24.7° (c, 0.006 in $CHCl_3$).

14′ξ-Alcohol: [75716-00-6]. ***Neuropogolic acid***

$C_{21}H_{36}O_5$ M 368.512

From *N. trachycarpus*. Microcryst. (Me_2CO aq.). Mp 111-112°. $[\alpha]_D^{23}$ +22.4° (c, 0.013 in $CHCl_3$).

(S)-form [72960-05-5] ***Dehydroconstipatic acid***

$C_{21}H_{34}O_5$ M 366.497

Isol. from lichen *Parmelia barbata*. Needles (C_6H_6). Mp 91-92°. $[\alpha]_D^{25}$ −73.5° ($CHCl_3$).

14′ξ-Alcohol: [73036-28-9]. ***Constipatic acid***

$C_{21}H_{36}O_5$ M 368.512

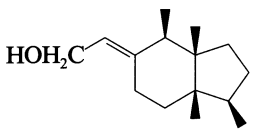
Isol. from *P. constipata*. Flakes (AcOH). Mp 108-109°. $[\alpha]_D^{25}$ −24° ($CHCl_3$).

Chester, D. *et al*, *Aust. J. Chem.*, 1979, **32**, 2565 (*Constipatic acid, Dehydroconstipatic acid*)

Bodo, B. *et al*, *Phytochemistry*, 1980, **19**, 1117; 1982, **21**, 2355 (*Isomuronic acid, Neuropogolic acid*)

Isonaviculol I-10038

[147235-23-2]



$C_{15}H_{26}O$ M 222.370

Constit. of *Frullanoides densifolia*. Oil. $[\alpha]_D^{25}$ −17.9° (c, 0.84 in $CHCl_3$).

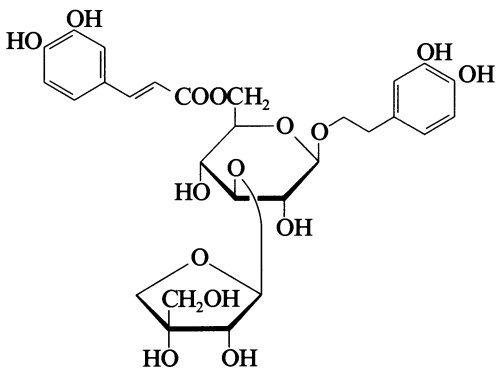
[122768-96-1]

Tori, M. *et al*, *Phytochemistry*, 1993, **32**, 335 (*isol, pmr, cmr*)

Isonuomioside A I-10039

*2-(3,4-Dihydroxyphenyl)ethyl 3-*O*-D-apio-β-D-furanosyl-β-D-glucopyranoside 6-[3-(3,4-dihydroxyphenyl)-2-propenoate]*

[135463-05-7]

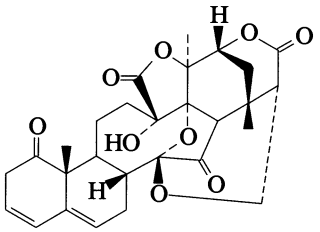


$C_{28}H_{34}O_{15}$ M 610.568

Isol. from leaves of nuo-mi-xang-cao (Acanthaceae, prob. *Strobilanthus* sp.). Pale yellow powder. $[\alpha]_D^{22}$ −54.7° (c, 0.53 in MeOH).

Kasai, R. *et al*, *Chem. Pharm. Bull.*, 1991, **39**, 927 (*isol, cmr, pmr*)

Isophysalin B I-10040

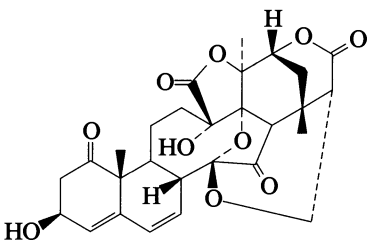


$C_{28}H_{30}O_9$ M 510.540

Constit. of *Physalis alkekengi*. Amorph. solid. $[\alpha]_D$ −86° (c, 0.37 in MeOH).

Sunayama, R. *et al*, *Phytochemistry*, 1993, **34**, 529 (*isol, pmr, cmr*)

Isophysalin G I-10041

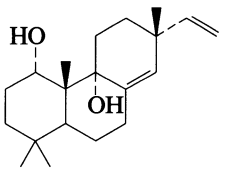


$C_{28}H_{30}O_{10}$ M 526.539

Constit. of *Physalis alkekengi*. Amorph. solid. $[\alpha]_D$ −32° (c, 0.19 in $CHCl_3$).

Sunayama, R. *et al*, *Phytochemistry*, 1993, **34**, 529 (*isol, pmr, cmr*)

8(14),15-Isopimaradiene-1,9-diol I-10042



$C_{20}H_{32}O_2$ M 304.472

(1α,9α)-form [147568-34-1]

Constit. of chung-ngang (*Kaempferia* sp.). Cryst. (EtOAc). Mp 221-222°. $[\alpha]_D^{25}$ +64.7° (c, 0.64 in $CHCl_3$).

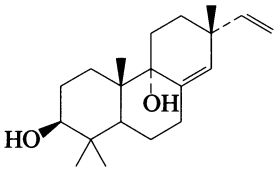
1-Ketone: [147568-33-0]. *9-Hydroxy-8(14),15-isopimaradien-1-one*

$C_{20}H_{30}O_2$ M 302.456

Constit. of chung-ngang (*K.* sp.). Needles (hexane). Mp 100-101°. $[\alpha]_D$ +30.3° (c, 0.37 in $CHCl_3$).

Prawat, U. *et al*, *Phytochemistry*, 1993, **32**, 991 (*isol, pmr, cmr, cryst struct*)

8(14),15-Isopimaradiene-3,9-diol I-10043



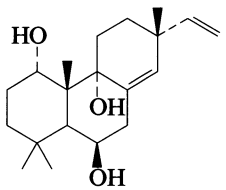
$C_{20}H_{32}O_2$ M 304.472

(3β,9α)-form [150943-96-7]
Phytoalexin from rice leaves. Needles. Mp 123-124°. $[\alpha]_D^{25}$ −26° (c, 0.1 in MeOH).

Kato, H. *et al*, *Phytochemistry*, 1993, **33**, 79 (*isol, pmr, cmr*)

8(14),15-Isopimaradiene-1,6,9-triol I-10044

8(14),15-Sandaracopimaradiene-1,6,9-triol



$C_{20}H_{32}O_3$ M 320.471

(1α,6β,9α)-form [147568-38-5]
Constit. of chung-ngang (*Kaempferia* sp.). Cryst. (EtOAc/hexane). Mp 227-228°. $[\alpha]_D^{25}$ +27.9° (c, 0.56 in $CHCl_3$).

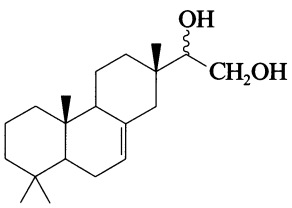
6-Ac: [147568-37-4].
$C_{22}H_{34}O_4$ M 362.508
Constit. of chung-ngang (*K.* sp.). Cryst. (EtOAc/hexane). Mp 199-200°. $[\alpha]_D^{25}$ −38.5° (c, 0.58 in $ChCl_3$).

1-Ketone: [147568-36-3]. *6,9-Dihydroxy-8(14),15-isopimaradien-1-one*
$C_{20}H_{30}O_3$ M 318.455
Constit. of chung-ngang (*K.* sp.). Cryst. (EtOAc/hexane). Mp 154-155°. $[\alpha]_D^{25}$ +4.8° (c, 0.73 in $CHCl_3$).

1-Ketone, 6-Ac: [147568-35-2].
$C_{22}H_{32}O_4$ M 360.492
Constit. of chung-ngang (*K.* sp.). Cryst. (hexane). Mp 100-101°. $[\alpha]_D^{25}$ −63.1° (c, 0.4 in $CHCl_3$).

Prawat, U. *et al*, *Phytochemistry*, 1993, **32**, 991 (*isol, pmr, cmr, cryst struct*)

7-Isopimarene-15,16-diol I-10045



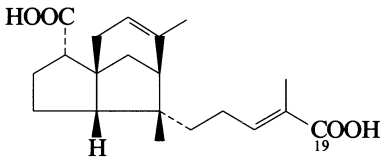
$C_{20}H_{34}O_2$ M 306.487

(15ξ)-form
Esquirolin B
Constit. of *Coleus esquirolii*. Cryst. Mp 95-96°. $[\alpha]_D^{27}$ −100° (c, 0.08 in $CHCl_3$).

15,16-O-Isopropylidene: [136196-65-1]. ***Esquirolin C***
$C_{23}H_{38}O_2$ M 346.552
Constit. of *C. esquirolii*. Cryst. Mp 63-65°. $[\alpha]_D^{26}$ +13.6° (c, 0.22 in $CHCl_3$).

Li, C.M. *et al*, *Chin. Chem. Lett.*, 1991, **2**, 223 (*isol, pmr, cmr*)

12-Isoprenyl-3-cedrene-14,19-dioic acid I-10046



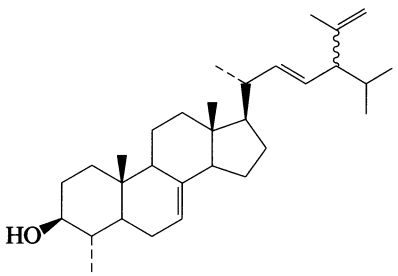
$C_{20}H_{28}O_4$ M 332.439

19-Me ester: [145631-63-6].
$C_{21}H_{30}O_4$ M 346.466
Constit. of *Eremophila georgei*. Microcryst. Mp 76-77.5°. $[\alpha]_D$ −119° (c, 0.5 in $CHCl_3$).

Forster, P.G. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 147 (*isol, pmr, cmr*)

24-Isopropenyl-4-methylcholesta-7,22-dien-3-ol I-10047

4,28-Dimethylstigmasta-7,22,28-trien-3-ol



$C_{31}H_{50}O$ M 438.735

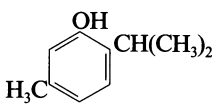
(3β,4α,5α,22E,24ξ)-form [150148-79-1] ***Violasterol A***
Constit. of *Viola formosana*. Needles. Mp 191-193°. $[\alpha]_D^{25}$ +5° (c, 0.2 in $CHCl_3$).

Lee, S.-W. *et al*, *J. Chin. Chem. Soc.* (*Peking*), 1993, **40**, 305 (*isol, pmr, cmr*)

2-Isopropyl-5-methylphenol I-10048

Updated Entry replacing I-00735

5-Methyl-2-(1-methylethyl)phenol, 9CI. p-*Mentha-1,3,5-trien-3-ol.* p-*Cymen-3-ol, 8CI. 6-Isopropyl*-m-*cresol. 3-Hydroxy-4-isopropyltoluene. 3-Hydroxy*-p-*cymene.* ***Thymol.*** *Thymianic acid* (*obsol.*). *Thymianic camphor* (*obsol.*)
[89-83-8]



$C_{10}H_{14}O$ M 150.220
Found in many essential oils. Esp. found in the Labiateae. Rich sources are thyme oil, seed oil of *Ptychotis ajowan* and oils of *Monarda punctata* and *Ocimum* spp. Perfumery and flavour ingredient. Gives red or orange products with Ti, W (in conc. H_2SO_4). Plates (EtOAc or AcOH or Me_2CO) with odour of thyme. Mp 51.5°. Bp 233.5°, Bp_{10} 115°. pK_{a1} 10.62 (20°).

▷ XP2275000.

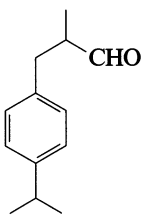
Ac: [528-79-0].
$C_{12}H_{16}O_2$ M 192.257
Bp 242-243°.

Benzoyl: [6380-29-6].
$C_{17}H_{18}O_2$ M 254.328
Plates. Mp 33°.
O-β-D-Glucopyranoside:
$C_{16}H_{24}O_6$ M 312.362
Constit. of *Jasonia montana.*
O-[β-Apio-β-D-furanosyl-(1→6)-β-D-glucopyranoside]:
[133733-92-3]. ***Plucheoside C***
$C_{21}H_{32}O_{10}$ M 444.478
Constit. of *Pluchea indica.* Powder. $[\alpha]_D^{22}$ −72.7° (c, 1.5 in MeOH).
Me ether: [1076-56-8]. *1-Isopropyl-2-methoxy-4-methylbenzene. 2-Isopropyl-5-methylanisole.* ***Thymol methyl ether***
$C_{11}H_{16}O$ M 164.247
Naturally occurring, e.g. in oil of *Crithmum maritimum* and *Orthodon hadai, Citrus* spp., *Pulicaria dysenterica, Arnica montana.* Gives red or orange products with Ti, W (in conc. H_2SO_4). Oil with ethereal odour. Bp_{745} 211-212°, Bp_{15} 94-96°.
Et ether: [4732-12-1]. *2-Ethoxy-1-isopropyl-4-methylbenzene*
$C_{12}H_{18}O$ M 178.274
Bp 224-228°.

Austerweil, G. *et al, Bull. Soc. Chim. Fr.*, 1927, **41**, 454.
Fujita, Y., *CA*, 1947, **41**, 3585 (*isol, deriv*)
v. Sydow, E., *Acta Chem. Scand.*, 1963, **17**, 2504 (*ms*)
Schulte, K.E. *et al, Arch. Pharm. (Weinheim, Ger.)*, 1963, **296**, 353 (*isol, synth, deriv*)
Yamazaki, M. *et al, Chem. Pharm. Bull.*, 1963, **11**, 363 (*biosynth*)
Kraus, M. *et al, Collect. Czech. Chem. Commun.*, 1963, **28**, 1877 (*synth*)
Uldrickies, J. *et al, CA*, 1965, **63**, 11408 (*synth*)
Morris, W.W., *J. Assoc. Off. Anal. Chem.*, 1973, **56**, 1037 (*ir*)
Sandell, E.B. *et al, Photometric Determination of Traces of Metals*, General Aspects, Wiley, New York, 1978, 301.
Ahmed, A.A. *et al, Phytochemistry*, 1990, **29**, 3658 (*glucoside*)
Uchiyama, T. *et al, Phytochemistry*, 1991, **30**, 655 (*Plucheoside C*)
Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th Ed., Van Nostrand-Reinhold, 1992, TFX810.

3-(4-Isopropylphenyl)-2-methylpropanal I-10049

α-Methyl-4-(1-methylethyl)benzenepropanol, 9CI. p-*Isopropyl-α-methylhydrocinnamaldehyde, 8CI. Cyclamen aldehyde*
[103-95-7]

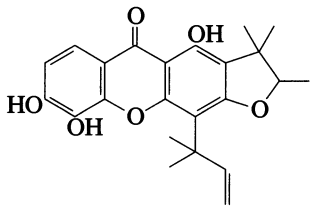


$C_{13}H_{18}O$ M 190.285
Constit. of blackberries, starfruit and oil of nutmeg. Used in the food and perfumery industries. Liq. with odour of cyclamen and lily of the valley. Bp_3 104-105°, Bp_1 92°.
2,4-Dinitrophenylhydrazone: [14501-58-7].
Cryst. Mp 112-112.5°.
Semicarbazone: [7200-97-7].
Cryst. Mp 172-172.5°.
[74648-06-9, 74648-07-0, 80949-77-5]

Naves, Y.R., *Manuf. Chem.*, 1948, **19**, 10 (*rev, synth*)
Beets, M.G.J. *et al, Recl. Trav. Chim. Pays-Bas (J. R. Neth. Chem. Soc.)*, 1951, **70**, 25 (*synth*)
Normant, H. *et al, Bull. Soc. Chim. Fr.*, 1959, 459 (*synth*)
Berends, W. *et al, Perfum. Essent. Oil Rec.*, 1967, **58**, 372 (*rev, synth, use*)
Kogami, K. *et al, Bull. Chem. Soc. Jpn.*, 1972, **45**, 604; 1973, **46**, 3562 (*synth*)
Morris, W.W., *J. Assoc. Off. Anal. Chem.*, 1973, **56**, 1037 (*ir*)
Opdyke, D.L.J., *Food Cosmet. Toxicol.*, 1974, **12**, 397 (*rev, use*)
Chalk, A.J. *et al, J. Org. Chem.*, 1976, **41**, 1206 (*synth*)
Garbers, C.F. *et al, S. Afr. J. Chem.*, 1980, **33**, 27 (*synth*)
Yokowo, Y. *et al, Nippon Kagaku Kaishi*, 1981, 1904; *CA*, **96**, 122332 (*synth*)
Virgilio, J.A. *et al, Org. Prep. Proced. Int.*, 1982, **14**, 9 (*synth*)
Nishimura, A. *et al, Nippon Kagaku Kaishi*, 1985, 558; *CA*, **104**, 109137 (*synth*)

Isorheediaxanthone B I-10050

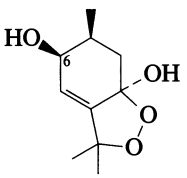
[88147-99-3]



$C_{23}H_{24}O_6$ M 396.439
Constit. of *Garcinia pyrifera* and *Rheedia gardneriana.* Yellow clusters (pet. ether). Mp 218°. $[\alpha]_D$ +25° (c, 0.1 in Me_2CO).

Delle Monache, G. *et al, J. Nat. Prod. (Lloydia)*, 1983, **46**, 655 (*isol, pmr*)
Ampofo, S.A. *et al, Phytochemistry*, 1986, **25**, 2351 (*isol, pmr*)

Isosaturejol I-10051

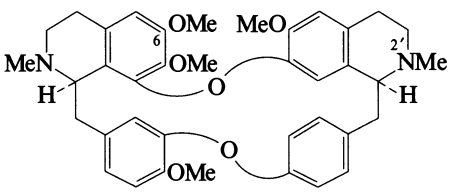


$C_{10}H_{16}O_4$ M 200.234
6-Ac: ***Acetylisosaturejol***
$C_{12}H_{18}O_5$ M 242.271
Constit. of *Satureja gilliesii.* Cryst. (CH_2Cl_2/pet. ether). Mp 100-102°.

Labbé, C. *et al, Phytochemistry*, 1993, **34**, 441 (*isol, pmr, cmr*)

Isotetrandrine I-10052

Updated Entry replacing I-00832
6,6',7,12-Tetramethoxy-2,2'-dimethylberbaman, 9CI. 1-Isotetrandrine. O-Methylberbamine
[477-57-6]



$C_{38}H_{42}N_2O_6$ M 622.760
Alkaloid from *Atherosperma moschatum, Berberis empetrifolia, B. kawakamii, B. mingetsensis, B. morrisonensis, B. poiretii, B. thunbergii, Cyclea barbata, Doryphora aromatica, Isopyrum thalictroides, Laurelia sempervirens, Limaciopsis loangensis, Mahonia japonica, M. lomariifolia, M. morrisonensis, M. philippinensis, Pycnarrhena australiana, P. manillensis, Stephania*

cepharantha, *S. elegans*, *Thalictrum foetidum*, *Tiliacora funifera*, and *Triclisia gilletii* (Atherospermataceae, Berberidaceae, Menispermaceae, Ranunculaceae). Shows *in vitro* antitumour activity against HeLa cells and Ehrlich ascites. Prisms (MeOH). Mp 182-183°. $[\alpha]_D^{20}$ +150.7° (c, 0.85 in $CHCl_3$).

▷ LD_{50} (mus, orl) 6400 mg/kg. LD_{50} (mus, ipr) 160 mg/kg. NX7285000.

2'-N-Oxide: [70191-83-2]. ***Isotetrandrine* N-*2'*-oxide**
$C_{38}H_{42}N_2O_7$ M 638.759
Alkaloid from the roots of *Limaciopsis loangensis* (Menispermaceae). Cryst. (MeOH). Mp 191-192°. $[\alpha]_D$ +94° ($CHCl_3$).

2'-N-De-Me: [70191-82-1]. ***2'-Norisotetrandrine***
$C_{37}H_{40}N_2O_6$ M 608.733
Alkaloid from the roots of *L. loangensis* (Menispermaceae). Noncryst. $[\alpha]_D$ +26° ($CHCl_3$).

$N^{2'}$-*Me:* [68331-87-3]. ***2'-N-Methylisotetrandrine***
$C_{39}H_{45}N_2O_6^{\oplus}$ M 637.794 (ion)
Quaternary alkaloid from shoots of *B. oblonga* (Berberidaceae). Cryst. (THF) (as iodide). Mp 221-222° (iodide). $[\alpha]_D$ +29.5° (c, 0.1 in $CHCl_3$).

2-N-De-Me: ***2-Norisotetrandrine***
$C_{37}H_{40}N_2O_6$ M 608.733
Alkaloid from the tubers of *Stephania pierrii* (Menispermaceae). $[\alpha]_D$ +100° (c, 0.16 in $CHCl_3$).

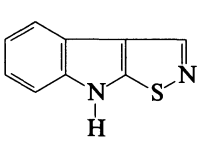
O^6-*De-Me:* ***Cycleabarbatine.*** *6-O-Demethylisotetrandrine*
$C_{37}H_{40}N_2O_6$ M 608.733
Alkaloid from roots of *Cyclea barbata* (Menispermaceae). $[\alpha]_D$ +20° (c, 0.1 in $CHCl_3$).

Bick, I.R.C. *et al*, *Aust. J. Chem.*, 1956, **9**, 111; 1980, **33**, 225 (*isol, synth*)
Tomita, M. *et al*, *Yakugaku Zasshi*, 1960, **80**, 845; *CA*, **54**, 23187h (*isol*)
Yang, T.-H. *et al*, *Yakugaku Zasshi*, 1960, **80**, 847; *CA*, **54**, 23187i (*isol*)
Battersby, A.R. *et al*, *J. Chem. Soc.*, 1965, 2239 (*uv, ord*)
Falco, M.R. *et al*, *Tetrahedron Lett.*, 1968, 1953 (*pmr*)
Sioumis, A.A. *et al*, *Aust. J. Chem.*, 1972, **25**, 2251 (*isol*)
Baldas, J. *et al*, *J. Chem. Soc., Perkin Trans. 1*, 1972, 592 (*ms*)
Tackie, A.N. *et al*, *J. Nat. Prod.* (*Lloydia*), 1974, **37**, 1 (*isol, uv, pmr, ms*)
Ayim, J.S.K. *et al*, *J. Nat. Prod.* (*Lloydia*), 1977, **40**, 561 (*isol*)
Moiseeva, G.P. *et al*, *Khim. Prir. Soedin.*, 1979, **15**, 818; *Chem. Nat. Compd.* (*Engl. Transl.*), 723 (*cd, abs config*)
Cavé, A. *et al*, *Planta Med.*, 1979, **35**, 31 (*derivs*)
Bhakuni, D.S. *et al*, *Tetrahedron*, 1980, **36**, 2149 (*biosynth*)
Moulis, C., *J. Nat. Prod.* (*Lloydia*), 1981, **44**, 101 (*isol, uv, ir, pmr, ms*)
Singh, R.S. *et al*, *J. Nat. Prod.* (*Lloydia*), 1981, **44**, 664 (*isol, uv, pmr, ms*)
Nakova, E. *et al*, *Khim. Prir. Soedin.*, 1985, **21**, 86, 91; *Chem. Nat. Compd.* (*Engl. Transl.*), 83, 88 (*synth*)
Karimov, A. *et al*, *Khim. Prir. Soedin.*, 1986, **22**, 249; *Chem. Nat. Compd.* (*Engl. Transl.*), 235 (*2'-N*-Methylisotetrandrine)
Buck, K.T., *Alkaloids* (*N.Y.*), 1987, **30**, 62, 119.
Tantisewie, B. *et al*, *J. Nat. Prod.* (*Lloydia*), 1989, **52**, 846 (*2-Norisotetrandrine*)
Guinaudeau, H. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 1989 (*Cycleabarbatine*)

8*H*-Isothiazolo[5,4-*b*]indole, 9CI I-10053

Brassilexin

[119752-76-0]



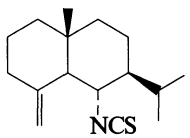
$C_9H_6N_2S$ M 174.226

Isol. from leaves of *Brassica juncea* (Cruciferae). Phytoalexin. Microcryst. Mp 164-167°.

N-*Ac:*
$C_{11}H_8N_2OS$ M 216.263
Mp 172-178°.

Devys, M. *et al*, *Tetrahedron Lett.*, 1988, **29**, 6447 (*isol, uv, ir, pmr, cmr, ms, struct*)
Devys, M. *et al*, *Synthesis*, 1990, 214 (*synth, ir, uv, pmr, ms*)

6-Isothiocyanato-4(15)-eudesmene I-10054



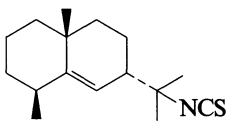
$C_{16}H_{25}NS$ M 263.446

6α-form [149820-62-2] ***Acanthene B***
Constit. of an *Acanthella* sp. and *Cadlina luteomarginata*. Solid. $[\alpha]_D$ −34° (c, 0.18 in $CHCl_3$).

6-Formamide: [149820-63-3].
6-Formamido-4(15)-eudesmene. ***Acanthene C***
$C_{16}H_{27}NO$ M 249.395
Constit. of an *A.* sp. and *C. luteomarginata*. Amorph. solid. Has —NHCHO replacing NCS.

Burgoyne, D.L. *et al*, *Tetrahedron*, 1993, **49**, 4503 (*isol, pmr, cmr*)

12-Isothiocyanato-5-eudesmene I-10055



$C_{16}H_{25}NS$ M 263.446

(4β,7βH)-form [108639-31-2]
Constit. of *Acanthella klethra*.

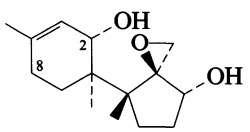
Angerhofer, C.K. *et al*, *J. Nat. Prod.* (*Lloydia*), 1992, **55**, 1787 (*isol*)

Isotrichodiol I-10056

Updated Entry replacing I-00889

12,13-Epoxy-9,10-trichodiene-2,11-diol

[130369-84-5]



$C_{15}H_{24}O_3$ M 252.353
Metab. of *Fusarium culmorum*. An intermediate in the biosynthesis of trichothecenes.

2-Deoxy: [136208-91-8]. ***12,13-Epoxy-9,10-trichodien-11-ol***
$C_{15}H_{24}O_2$ M 236.353
From *F. culmorum*.

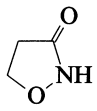
8α-Hydroxy: ***8α-Hydroxyisotrichodiol***
$C_{15}H_{24}O_4$ M 268.352
Metab. of *F. culmorum*. Viscous oil.

Zamir, L.O. *et al*, *J. Chem. Soc., Chem. Commun.*, 1991, 1033 (*deriv*)
Hesketh, A.R. *et al*, *Phytochemistry*, 1991, **30**, 2237; 1993, **32**, 105 (*isol, pmr, cmr, biosynth, 8-Hydroxyisotrichodiol*)

3-Isoxazolidinone, 9CI I-10057

3-Isoxazolidone

[1192-07-0]



$C_3H_5NO_2$ M 87.078

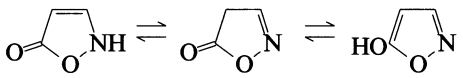
Isol. from seedlings of *Canavalia ensiformis*. Cryst. Mp 70°.

Shunk, C.H. *et al*, *J. Org. Chem.*, 1957, **22**, 76 (*synth*)
Olive, J.L. *et al*, *Bull. Soc. Chim. Fr.*, 1976, 1589 (*synth, pmr*)
Sugii, M. *et al*, *Phytochemistry*, 1981, **20**, 451 (*isol*)

5(4*H*)-Isoxazolone, 9CI I-10058

2-Isoxazolin-5-one, 8CI. 5-Isoxazolol. 5-Hydroxyisoxazole

[1072-48-6]



2*H*-Oxo-form 4*H*-Oxo-form *OH*-form

$C_3H_3NO_2$ M 85.062

Exists in several tautomeric forms. 2*H*-Oxo-form predominates in aq. soln., 4*H*-Oxo-form in gas phase. Cryst. Mp 67-69°.

2H-Oxo-form [43228-53-1]

5(2H)-Isoxazolone

N-(*2-Aminoethyl*): [54019-50-0]. *2-(2-Aminoethyl)-3-isoxazolin-5-one*

$C_5H_8N_2O_2$ M 128.130

Constit. of the seedlings of *Lathyrus odoratus*.

N-(*β-Glutaminylaminoethyl*): [53987-20-5]. *2-(β-Glutaminylaminoethyl)-3-isoxazolin-5-one*

$C_{10}H_{15}N_3O_5$ M 257.246

Constit. of the seedlings of *L. odoratus*.

N-*β-D-Glucopyranosyl*: [51581-00-1]. *2-β-D-Glucopyranosyl-3-isoxazolin-5-one*

$C_9H_{13}NO_7$ M 247.204

Constit. of the seedlings of *L. odoratus* and from the defence secretion of *Chrysomela tremulae*. Amorph. solid.

N-[*6-O-(3-Nitropropanoyl)-β-D-glucopyranosyl*]: [83566-20-5]. *2-[6-(3-Nitropropanoyl)-β-D-glucopyranosyl]-3-isoxazolin-5-one*

$C_{12}H_{16}N_2O_{10}$ M 348.266

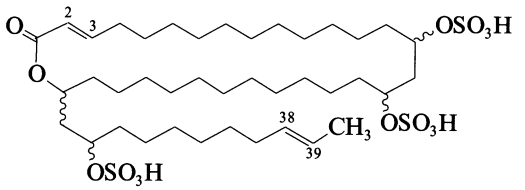
Constit. of the defence secretion of *C. tremulae*. Amorph. solid.

De Sarlo, F. *et al*, *J. Chem. Soc. C*, 1971, 86 (*synth*)
Teysseyre, J. *et al*, *J. Mol. Struct.*, 1972, **12**, 191 (*tautom*)
Van Rompuy, L. *et al*, *Biochem. Biophys. Res. Commun.*, 1974, **56**, 199.
Lambien, F. *et al*, *Biochem. Biophys. Res. Commun.*, 1974, **61**, 155.
Kuo, Y.-H. *et al*, *Plant Physiol.*, 1982, **70**, 1283.
Pasteels, J.M. *et al*, *Tetrahedron*, 1982, **38**, 1891.
Ikegami, F. *et al*, *Phytochemistry*, 1984, **23**, 1567 (*derivs*)
Karelson, M.M. *et al*, *J. Chem. Soc., Perkin Trans. 2*, 1990, 195 (*tautom*)

Izumenolide I-10059

16,18-Bis(sulfooxy)-30-[2-(sulfooxy)-9-undecenyl] oxacyclotriacont-3-en-2-one, 9CI. EM 4615. Antibiotic EM 4615. M-GTFI

[76265-39-9]



$C_{40}H_{74}O_{14}S_3$ M 875.214

Izumenolide and M-GTFI have some gross struct. Prod. by *Micromonospora chalcea izumensis* and *M. narashinoensis* (M-GTFI). β-Lactamase inhibitor.

Tri-Na salt: Amorph. hygroscopic solid. $[\alpha]_D^{21}$ −8.5° (c, 1 in H_2O). No definite Mp.

38,39-Dihydro, 39-sulfooxy: [85756-56-5]. ***Antibiotic MG 299A.*** *MG 299A*

$C_{40}H_{76}O_{18}S_4$ M 973.294

Prod. by *M* sp. MG299-fF. Enzyme inhibitor.

2,3,38,39-Tetrahydro, 39-sulfooxy: [85756-55-4]. ***Antibiotic MG 299B.*** *MG 299B*

$C_{40}H_{78}O_{18}S_4$ M 975.309

Prod. by *M*. sp. MG299-fF. Enzyme inhibitor.

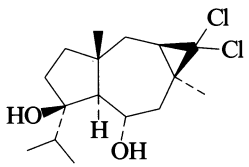
[72980-20-2, 120021-28-5, 121313-79-9]

Ger. Pat., 2 920 293, (1979); *CA*, **92**, 126901 (*isol*)
Liu, W.C. *et al*, *J. Antibiot.*, 1980, **33**, 1256 (*isol, props*)
Bush, K. *et al*, *J. Antibiot.*, 1980, **33**, 1262, 1560 (*props*)
Parker, W.L. *et al*, *Tetrahedron, Suppl.*, 1981, **37**, 275 (*struct, uv, ir, pmr, cmr*)
Japan. Pat., 82 200 380, (1982); *CA*, **98**, 214166f (*Antibiotic MG 299*)
Ueda, M. *et al*, *J. Enzyme Inhib.*, 1988, **2**, 173; 1989, **2**, 279 (*M-GTFI*)

J

Jaeschkenol J-10001

[149301-85-9]

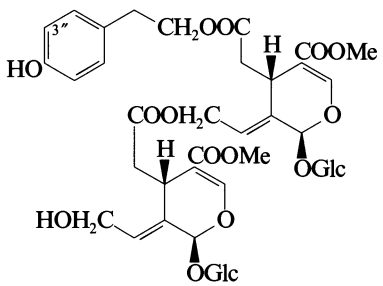


$C_{16}H_{26}Cl_2O_2$ M 319.269
Constit. of *Ferula jaeschkeana*. Needles (EtOH). Mp 131°. $[\alpha]_D^{20}$ +52.8° (c, 1 in $CHCl_3$).

Garg, S.N. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 539 (*isol, pmr, cmr, cryst struct*)

Jasamplexoside A J-10002

[147764-93-0]



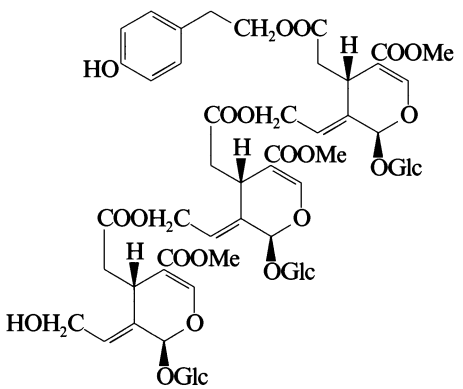
$C_{42}H_{54}O_{24}$ M 942.874
Constit. of *Jasminum amplexicaule*. Powder. $[\alpha]_D^{25}$ −178° (c, 1.19 in MeOH).

3″-Hydroxy: [147742-02-7]. ***Jasamplexoside B***
$C_{42}H_{54}O_{25}$ M 958.874
Constit. of *J. amplexicaule*. Powder. $[\alpha]_D^{29}$ −174° (c, 0.27 in MeOH).

Tanahashi, T. *et al*, *Planta Med.*, 1992, **58**, 552 (*isol, pmr, cmr*)

Jasamplexoside C J-10003

[147742-01-6]

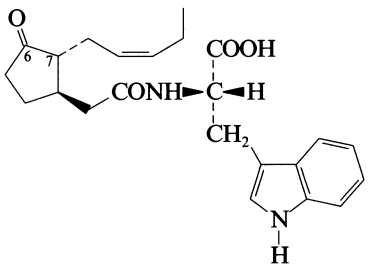


$C_{59}H_{76}O_{35}$ M 1345.228
Constit. of *Jasminum amplexicaule*. Powder. $[\alpha]_D^{28}$ −162° (c, 0.4 in MeOH).

Tanahashi, T. *et al*, *Planta Med.*, 1992, **58**, 552 (*isol, pmr, cmr*)

N-Jasmonoyltryptophan J-10004

[113762-87-1]



$C_{23}H_{28}N_2O_4$ M 396.485
Isol. from flowers of *Vicia faba*. Mp 149-150° (synthetic). $[\alpha]_D^{25}$ −32.1° (synthetic).

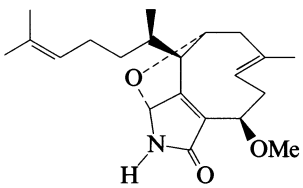
7-Epimer, 6α-alcohol: [113762-88-2]. ***N*-Cucurbinoyltryptophan**
$C_{23}H_{30}N_2O_4$ M 398.501
Isol. from flowers of *V. faba*. Tentative struct.

[120330-95-2]

Brueckner, C. *et al*, *Phytochemistry*, 1988, **27**, 275 (*isol*)
Kramell, R. *et al*, *Tetrahedron*, 1988, 5791 (*synth*)
Schneider, G. *et al*, *J. Chromatogr.*, 1989, **483**, 459 (*chromatog*)

Joalin J-10005

[150999-04-5]



$C_{21}H_{31}NO_3$ M 345.481
Constit. of a *Dictyota* sp. Semicryst. $[\alpha]_D^{29}$ −59° (c, 0.01 in $CHCl_3$).

Guella, G. *et al*, *J. Chem. Soc., Perkin Trans. 1*, 1993, 1545 (*isol, pmr, cmr*)

Juglanin† J-10006

$C_{27}H_{22}O_{18}$ M 634.460
Ester of glucose, 2 × gallic acid and hexahydroxydiphenic acid, isomeric with Corilagin, C-01829. Struct. not fully known. Isol. from walnuts (*Juglans regia*). Powder. Mp 235-237° dec. $[\alpha]_D^{20}$ +52° (H_2O).

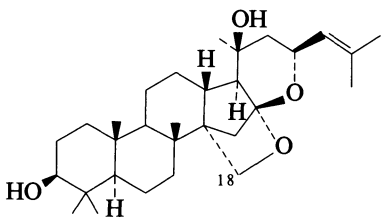
Jurd, L., *J. Am. Chem. Soc.*, 1958, **80**, 2249.

Jujubogenin J-10007

Updated Entry replacing J-00137

16,18:16,23-Diepoxydammar-24-ene-3,20-diol

[54815-36-0]



$C_{30}H_{48}O_4$ M 472.707

Cryst. (MeOH). Mp 250-252°. $[\alpha]_D^{25}$ −36° (c, 0.069 in EtOH).

3-O-[α-L-*Rhamnopyranosyl*-(*1*→*2*)-O-[O-β-D-*glucopyranosyl*-(*1*→*6*)-O-[β-D-*xylopyranosyl*-(*1*→*2*)]-β-D-*glucopyranosyl*-(*1*→*3*)]-α-L-*arabinopyranoside*]: [55466-04-1]. ***Jujuboside A***

$C_{58}H_{94}O_{26}$ M 1207.365

Constit. of *Zizyphus jujuba*. Cryst. Mp 211-216°. $[\alpha]_D^{24}$ −50.1° (c, 0.43 in MeOH).

3-O-[α-L-*Rhamnopyranosyl*-(*1*→*2*)-O-[O-β-D-*xylopyranosyl*-(*1*→*2*)-β-D-*glucopyranosyl*-(*1*→*3*)]-α-L-*arabinopyranoside*]: [55466-05-2]. ***Jujuboside B***

$C_{52}H_{84}O_{21}$ M 1045.223

Constit. of *Z. jujuba*. Cryst. Mp 222-225°. $[\alpha]_D^{24}$ −42.0° (c, 0.5 in MeOH).

3-O-[(*2*-O-β-D-*Xylopyranosyl*)-*3*-O-(*2*-O-β-D-*xylopyranosyl*-*6*-O-β-D-*glycopyranosyl*-β-D-*glucopyranosyl*)-α-L-*arabinopyranoside*]: [68144-22-9]. ***Hovenoside D***

$C_{57}H_{92}O_{26}$ M 1193.338

Constit. of *Hovenia dulcis*. Powder (butanol). Mp 205-210°. $[\alpha]_D$ −29.6° (c, 0.5 in MeOH).

3-O-[(*2*-O-β-D-*Xylopyranosyl*)-*3*-O-(*2*-O-β-D-*xylopyranosyl*-β-D-*glucopyranosyl*)-α-L-*arabinopyranoside*]: [55466-01-8]. ***Hovenoside G***

$C_{51}H_{82}O_{21}$ M 1031.196

Constit. of *H. dulcis*. Cryst. $[\alpha]_D$ −26.4° (c, 1 in MeOH).

3-O-[(*2*-O-β-D-*Xylopyranosyl*)-*3*-O-β-D-*glucopyranosyl*-α-L-*arabinopyranoside*]: [68665-70-3]. ***Hovenoside I***

$C_{46}H_{74}O_{17}$ M 899.080

Constit. of *H. dulcis*. Cryst. (MeOH). Mp 272-274°. $[\alpha]_D$ −24.2° (c, 0.5 in MeOH).

3-O-[α-L-*Arabinopyranosyl*-(*1*→*3*)-[β-D-*glucopyranosyl*-(*1*→*2*)]-*6-deoxy*-α-L-*talopyranoside*]: [88100-00-9].

Zizynummin

$C_{47}H_{76}O_{17}$ M 913.107

Constit. of leaves of *Z. nummularia*. Cryst. (MeOH). Mp 255-260°. $[\alpha]_D^{20}$ −44.85° (c, 1.00 in MeOH).

3-O-[α-L-*Rhamnopyranosyl*(*1*→*4*)-α-L-*arabinopyranoside*], *20*-O-(*2,3-di*-O-*acetyl*-α-L-*rhamnopyranoside*): [73667-51-3]. ***Ziziphin***

$C_{51}H_{80}O_{18}$ M 981.182

Constit. of leaves of *Z. jujuba*. Sweetness inhibiting factor. Cryst. Mp 213-215°. $[\alpha]_D^{25}$ −39.6° (c, 1.01 in MeOH).

3-O-[β-D-*Glucopyranosyl*-(*1*→*3*)-[β-D-*quinovopyranosyl*-(*1*→*2*)]-α-L-*arabinopyranoside*]: [146503-30-2]. ***Hoduloside III***

$C_{47}H_{76}O_{17}$ M 913.107

Constit. of *H. dulcis*. Needles (MeOH). Mp 297-299°. $[\alpha]_D^{22}$ −36.9° (c, 1 in Py).

3-O-[β-D-*Glucopyranosyl*-(*1*→*3*)-[β-D-*glucopyranosyl*-(*1*→*2*)]-α-L-*arabinopyranoside*]: [146445-91-2]. ***Hoduloside IV***

$C_{47}H_{76}O_{18}$ M 929.107

Constit. of *H. dulcis*. Needles (MeOH). Mp 246-248°. $[\alpha]_D^{22}$ −12.9° (c, 3.5 in MeOH).

3-O-[β-D-*Glucopyranosyl*-(*1*→*3*)-[α-L-*rhamnopyranosyl*-(*1*→*2*)]-β-D-*glucopyranoside*]: [146445-92-3]. ***Hoduloside V***

$C_{48}H_{78}O_{18}$ M 943.133

Constit. of *H. dulcis*. Needles (MeOH). Mp 215-217°. $[\alpha]_D^{22}$ −31.4° (c, 4.3 in MeOH).

3-O-[β-D-*Glucopyranosyl*-(*1*→*3*)-[α-L-*rhamnopyranosyl*-(*1*→*2*)]-α-L-*arabinopyranoside*]: [77943-83-0]. ***Saponin C_2***

$C_{47}H_{76}O_{17}$ M 913.107

Constit. of *H. dulcis*. Needles (MeOH). Mp 288-290°. $[\alpha]_D^{22}$ 0° (c, 5.8 in Py).

3-O-[α-L-*Arabinofuranosyl*-(*1*→*3*)-α-L-*arabinopyranoside*]: ***Bacoside A_1***

$C_{40}H_{64}O_{12}$ M 736.938

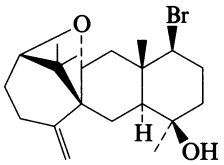
Constit. of *Bacopa monniera*. Needles (MeOH). Mp 240°.

Kawai, K.-I. *et al*, *Acta Crystallogr., Sect. B*, 1974, **30**, 2886 (*cryst struct*)
Inoue, O. *et al*, *J. Chem. Res., Synop.*, 1978, 144 (*cmr*)
Inoue, O. *et al*, *J. Chem. Soc., Perkin Trans. 1*, 1978, 1289 (*Hovenosides*)
Kawai, K.-I. *et al*, *Phytochemistry*, 1978, **17**, 287 (*synth*)
Otsuka, H. *et al*, *Phytochemistry*, 1978, **17**, 1349 (*Jujubosides struct*)
Sharma, S.C. *et al*, *Phytochemistry*, 1983, **22**, 1469 (*Zizynummin*)
Kurihara, Y. *et al*, *Tetrahedron*, 1988, **44**, 61 (*Ziziphin*)
Yoshikawa, K. *et al*, *Chem. Pharm. Bull.*, 1992, **40**, 2287 (*Hodulosides*)
Jain, P. *et al*, *Phytochemistry*, 1993, **33**, 449 (*Bacoside A_1*)

K

Kahukuene A K-10001

[146293-93-8]

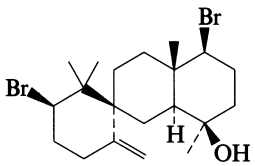


$C_{20}H_{31}BrO_2$ M 383.368
Constit. of *Laurencia majuscula*. Oil. $[\alpha]_D$ +25° (c, 1.12 in $CHCl_3$).

Brennan, M.R. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 76 (*isol, pmr, cmr*)

Kahukuene B K-10002

[146293-94-9]

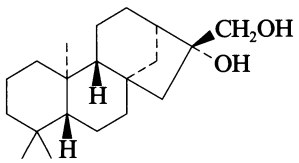


$C_{20}H_{32}Br_2O$ M 448.280
Constit. of *Laurencia majuscula*. Oil. $[\alpha]_D$ +29° (c, 0.3 in $CHCl_3$).

Brennan, M.R. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 76 (*isol, pmr, cmr*)

16,17-Kauranediol K-10003

Updated Entry replacing K-00098



(*ent*-16β)-*form*

$C_{20}H_{34}O_2$ M 306.487

(ent-16β)-form [16836-31-0]
Constit. of fresh bulbs of *Fritillaria thunbergii*. Also from *Morithamnus crassus*, *Croton sublyratus* and other plants. Cryst. (MeOH). Mp 188-189°. $[\alpha]_D^{20}$ −47.0° (c, 2.1 in $CHCl_3$).

17-Ac: ***Esquirolin A***
$C_{22}H_{36}O_3$ M 348.525
Constit. of *Coleus esquirolii*. Cryst. Mp 147-148°. $[\alpha]_D^{27}$ +483.3° (c, 0.06 in $CHCl_3$).

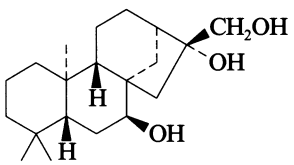
(ent-16α)-form [84711-16-0]
ent-*16α,17-Kauranediol*
From *F. thunbergii*, *Jamesonia scammanae*, *Bahia ambrosioides* and *Petunia patagonica*. Needles (MeOH). Mp 177° (168°). $[\alpha]_D^{20}$ −45.5° (c, 1.2 in $CHCl_3$).

17-Ac: [84799-25-7].
$C_{22}H_{36}O_3$ M 348.525
From *P. patagonica*. Cryst. (butanone). Mp 150-152°.

16-Me ether: [84678-18-2]. **ent-*16α-Methoxy-17-kauranol***
$C_{21}H_{36}O_2$ M 320.514
From *F. thunbergii*. Needles (MeOH). Mp 171-173°. $[\alpha]_D^{17}$ −45.6° (c, 1.1 in $CHCl_3$).

Kalinovskii, A.I. *et al*, *Izv. Akad. Nauk SSSR, Ser. Khim.*, 1972, 567 (*ms*)
Bohlmann, F. *et al*, *Phytochemistry*, 1980, **19**, 2769.
Kitazawa, E. *et al*, *Phytochemistry*, 1981, **20**, 287.
Kitajima, J. *et al*, *Chem. Pharm. Bull.*, 1982, **30**, 3912, 3922.
Guerreiro, E. *et al*, *Phytochemistry*, 1984, **23**, 2871.
Zdero, C. *et al*, *Phytochemistry*, 1990, **29**, 205.
Li, C.-M. *et al*, *CA*, 1991, **115**, 252107q (*Esquirolin A*)

7,16,17-Kauranetriol K-10004



$C_{20}H_{34}O_3$ M 322.487

(ent-7α,16β)-form [145700-97-6]
Constit. of *Calibrachoa parviflora*. Cryst. (EtOAc). Mp 220-221°. $[\alpha]_D$ +3° (c, 1 in EtOH).

7-Ac: [145700-98-7]. ent-*7α-Acetoxy-16β,17-kauranediol*
$C_{22}H_{36}O_4$ M 364.524
Constit. of *C. parviflora*. Cryst. (EtOAc/pentane). Mp 160-163°. $[\alpha]_D$ +16° (c, 0.5 in $CHCl_3$).

17-(2-Methylbutanoyl), 7-Ac: [145700-96-5].
$C_{27}H_{44}O_5$ M 448.642
Constit. of *C. parviflora*. Cryst. (EtOAc/heptane). Mp 163-165°. $[\alpha]_D$ +2°.

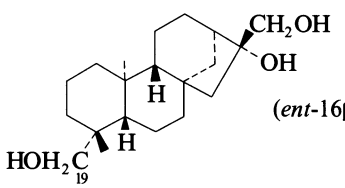
7-Ketone: [145701-00-4]. ***16,17-Dihydroxy-7-kauranone***
$C_{20}H_{32}O_3$ M 320.471
Constit. of *C. parviflora*. Cryst. (heptane). Mp 168-170°. $[\alpha]_D$ −12°.

7-Ketone, 17-Ac: [145701-01-5].
$C_{22}H_{34}O_4$ M 362.508
Constit. of *C. parviflora*. Cryst. (EtOAc/heptane). Mp 149-151°. $[\alpha]_D$ −23°.

Elliger, C.A. *et al*, *J. Nat. Prod.* (*Lloydia*), 1992, **55**, 1477 (*isol, pmr, cmr, cryst struct*)

16,17,19-Kauranetriol K-10005

Updated Entry replacing K-00116



(*ent*-16β*OH*)-*form*

$C_{20}H_{34}O_3$ M 322.487

(ent-16βOH)-form [58648-76-3]
Minor constit. of *Ricinocarpus stylosus*. Also from *Beyeria* spp., *Turbina corymbosa* and others. Cryst. (EtOAc). Mp 224-226°. $[\alpha]_D$ −38° (c, 3 in EtOH).

Tri-Ac: Cryst. (pet. ether). Mp 149-150°. $[\alpha]_D$ −63° (c, 1.1 in $CHCl_3$).

19-O-β-D-Glucopyranoside: [74008-24-5]. *Corymbositin. Corimbositin*
Obt. by partial hydrol. of Corymbosin. Isol. from the fern *Lindsaea javanensis*. Hygroscopic cryst. + $1\frac{1}{2}H_2O$ (MeOH aq.). Mp 220-222°. $[\alpha]_D$ −61.7°. Originally incorr. considered to be a C_{23} aglycone.

19-(4-O-Methylglucopyranoside): [61667-46-7]. ***Microlepin***
$C_{27}H_{46}O_8$ M 498.656
Constit. of *Microlepia marginata*. Cryst. (EtOH). Mp 235-236.5°. $[\alpha]_D^{21}$ −59° (c, 1 in MeOH).

19-O-(4-O-Methyl-β-D-glucopyranoside), O^{17}-Ac: ***17-O-Acetylmicrolepin***
$C_{29}H_{48}O_9$ M 540.693
Constit. of *M. marginata*. Needles (MeOH). Mp 113-117°. $[\alpha]_D^{20}$ −44.3° (c, 0.70 in MeOH).

19-O-(6-O-Acetyl-4-O-methyl-β-D-glucopyranoside): ***6′-Acetylmicrolepin***
$C_{29}H_{48}O_9$ M 540.693
Constit. of *M. marginata*. Needles (MeOH/hexane). Mp 154-156°. $[\alpha]_D^{20}$ −54.3° (c, 0.35 in MeOH).

17,19-Di-O-β-D-glucopyranoside: ***Corymbosin†***. *Corimbosin*
$C_{32}H_{54}O_{13}$ M 646.771
Constit. of seeds of *T. corymbosa*. Cryst. + $\frac{1}{2}H_2O$ (MeOH aq.). Mp 305-306°. $[\alpha]_D^{25}$ −59.2° (c, 3 in Py).

19-Aldehyde: [130430-92-1]. **ent-*16β,17-Dihydroxy-19-kauranal***
$C_{20}H_{32}O_3$ M 320.471
Isol. from *Baccharis potosina*.

19-Carboxylic acid: [3301-61-9]. **ent-*16β,17-Dihydroxy-19-kauranoic acid***
$C_{20}H_{32}O_4$ M 336.470
Constit. of *B.* spp., *R. stylosus, Helichrysum diosmifolium, Siegesbeckia* spp. and others. Cryst. (MeOH/EtOAc). Mp 260-262°. $[\alpha]_D$ −88° (c, 1.8 in Py).

19-Carboxylic acid, β-D-glucopyranosyl ester: [65562-09-6]. ***Paniculoside IV. Crispioside B***
$C_{26}H_{42}O_9$ M 498.612
Constit. of *Stevia paniculata, S. ovata, Francoeuria crispa* and *Rubus suavissimus*. Cryst. (MeOH). Mp 149-153°. $[\alpha]_D^{18.5}$ +65.6° (c, 0.25 in MeOH).

19-Carboxylic acid, 16,17-di-Ac: [74410-58-5].
$C_{24}H_{36}O_6$ M 420.545
Isol. from *Eupatorium tinifolium*.

19-Carboxylic acid, β-D-glucopyranosyl ester: [142631-50-3]. ***Suavioside E***
$C_{26}H_{42}O_9$ M 498.612
Constit. of *R. suavissimus*. Amorph. powder. $[\alpha]_D^{25}$ −1.84° (c, 0.38 in MeOH).

(ent-16αOH)-form

17,19-Di-O-β-D-glucopyranoside: ***Epicorymbosin***
$C_{32}H_{54}O_{13}$ M 646.771
Constit. of *T. corymbosa*. Cryst. (MeOH). Mp 261-262°. $[\alpha]_D^{25}$ −60° (c, 0.0025 in MeOH).

19-Carboxylic acid: [74365-74-5]. **ent-*16α,17-Dihydroxy-19-kauranoic acid***
$C_{20}H_{32}O_4$ M 336.470
Constit. of fronds of *Dipteris conjugata*. Also from *E. tinifolium, Aster ageratoides* and others. Needles (MeOH). Mp 309-311° (285-290°). $[\alpha]_D^{25}$ −70° (c, 1.0 in Py) (−47.62°).

19-Carboxylic acid, Me ester: [74410-21-2].
From *E. tinifolium*.

19-Carboxylic acid, β-D-glucopyranosyl ester, 17-Ac:
$C_{28}H_{44}O_{10}$ M 540.650
Isol. from *A. ageratoides*. Powder (Me_2CO). Mp 138-140°. $[\alpha]_D^{24}$ −62.73° (c, 0.15 in MeoH).

19-Carboxylic acid, β-D-glucopyranosyl ester, 16-Ac:
$C_{28}H_{44}O_{10}$ M 540.650
Constit. of *Ageratoides turcz*. Powder (Me_2CO). Mp 138-140°. $[\alpha]_D^{24}$ −62.7° (c, 0.15 in MeOH).

19-Carboxylic acid, 17-Ac:
$C_{22}H_{34}O_5$ M 378.508
Constit. of *Aster tongolensis*. Gum.

19-Carboxylic acid, 19-β-D-glucopyranosyl ester:
$C_{26}H_{42}O_9$ M 498.612
Constit. of *A. tongolensis*. Amorph. powder.

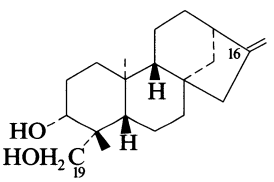
19-Carboxylic acid, 19-β-D-glucopyranosyl ester, 17-Ac:
$C_{28}H_{44}O_{10}$ M 540.650
Constit. of *A. tongolensis*. Gum.

[20547-77-7]

Jefferies, P.R. *et al, Aust. J. Chem.*, 1964, **17**, 915; 1965, **18**, 1444, 2005.
Tanaka, N. *et al, Chem. Pharm. Bull.*, 1975, **23**, 152; 1976, **24**, 2891 (*acid, Microlepin*)
Yamasaki, K. *et al, Chem. Pharm. Bull.*, 1977, **25**, 2895 (*Paniculoside IV*)
Garcia Jimenez, F. *et al, Rev. Latinoam. Quim.*, 1979, **10**, 181; *CA*, **93**, 26719m (*Corymbosin*)
Moreno, B. *et al, Farmaco, Ed. Sci.*, 1980, **35**, 457; *CA*, **93**, 66078h (*isol, derivs*)
Kuraishi, T. *et al, Chem. Pharm. Bull.*, 1983, **31**, 1494.
Satake, T. *et al, Chem. Pharm. Bull.*, 1983, **31**, 3865 (*isol, glucoside*)
Jakupovic, J. *et al, Phytochemistry*, 1990, **29**, 2217 (*ent-16,17-Dihydroxy-19-kauranal*)
Abdel-Mogib, M. *et al, Phytochemistry*, 1990, **29**, 2581 (*cmr, derivs*)
Ohtani, K. *et al, Phytochemistry*, 1992, **31**, 1553 (*Suavioside E, Paniculoside IV*)
Cheng, D.L. *et al, Chin. Chem. Lett.*, 1993, **4**, 39 (*deriv*)
García, J.F. *et al, J. Nat. Prod.* (*Lloydia*), 1993, **56**, 771 (*Epicorymbosin*)
Tan, R.X. *et al, J. Nat. Prod.* (*Lloydia*), 1993, **56**, 1917 (*isol, pmr, cmr*)
Cheng, D.L. *et al, Phytochemistry*, 1993, **33**, 1181 (*derivs*)

16-Kaurene-3,19-diol K-10006

Updated Entry replacing K-00134



(*ent*-3β)-*form*

$C_{20}H_{32}O_2$ M 304.472

(ent-3β)-form [18524-59-9]
Constit. of *Beyeria leschenaultii, Helichrysum dendroideum* and *Stachys lanata*. Cryst. (EtOAc). Mp 190° (184-185°). $[\alpha]_D$ −66° (c, 1.66 in $CHCl_3$).

Di-Ac: Cryst. (MeOH aq.). Mp 113-114°. $[\alpha]_D$ −66° (c, 1.95 in $CHCl_3$).

19-Succinoyl ester: [17904-36-8].
$C_{24}H_{36}O_5$ M 404.545
Constit. of *Goodenia ramelii, G. strophiolata* and metab. of *Gibberella fujikuroi*. Cryst. (MeOH aq.). Mp 155-157°. $[\alpha]_D$ −78° (c, 1.7 in EtOH).

19-Aldehyde, 16α,17-epoxide, 3-angeloyl: [74635-57-7]. **ent-*3β-Angeloyloxy-16β,17-epoxy-19-kauranal***
$C_{25}H_{36}O_4$ M 400.557
Isol. from *Smallanthus uvedalia*. Oil. $[\alpha]_D^{24}$ −105.2° (c, 0.26 in $CHCl_3$).

19-Carboxylic acid: [66556-91-0]. **ent-*3β-Hydroxy-16-kauren-19-oic acid***
$C_{20}H_{30}O_3$ M 318.455
Constit. of *Stachys lanata, Bedfordia salicina* and others. Cryst. Mp 207-210°.

19-Carboxylic acid, 3-Ac: [70224-43-0].
$C_{22}H_{32}O_4$ M 360.492
Constit. of *S. lanata* and *Helichrysum* spp. Cryst. (EtOAc). Mp 255-260°.

19-Carboxylic acid, O-(3-methylbutanoyl): [74647-03-3].
$C_{25}H_{38}O_4$ M 402.573
Constit. of *Smallanthus uvedalia*. Oil (as Me ester). $[\alpha]_D^{24}$ −39° (c, 0.2 in $CHCl_3$) (Me ester).

19-Carboxylic acid, 3-angeloyl: [74635-61-3].
$C_{25}H_{36}O_4$ M 400.557
Isol. from *Wedelia trilobata* and *S. uvedalia*. Oil (as Me ester). $[\alpha]_D^{24}$ −69° (c, 3.1 in $CHCl_3$).

19-Carboxylic acid, 3-tigloyl: [79406-09-0].
$C_{25}H_{36}O_4$ M 400.557
From *W. trilobata*, *W. grandiflora* and *W. prostrata*. Cryst. Mp 153-155°. $[\alpha]_D$ −74° (c, 0.2 in $CHCl_3$).

19-Carboxylic acid, 3-(3-methyl-2-butenoyl): [74635-62-4].
$C_{25}H_{36}O_4$ M 400.557
From *S. uvedalia*. Oil (as Me ester) (not pure).

19-Carboxylic acid, 3-(3-methylbutanoyl): [74635-55-5].
$C_{25}H_{38}O_4$ M 402.573
From *S. uvedalia*. Oil (as Me ester) (not pure). $[\alpha]_D^{24}$ −39° (c, 0.2 in $CHCl_3$).

19-Carboxylic acid, 3-cinnamoyl: [79406-10-3].
$C_{29}H_{36}O_4$ M 448.601
Isol. from *W. trilobata* and *W. prostrata*. Cryst. Mp 53-55°. $[\alpha]_D$ −129° (c, 0.02 in $CHCl_3$).

(ent-3α)-form

19-Carboxylic acid, 3-Ac: [66673-14-1].
From *Helichrysum heterolasium*.

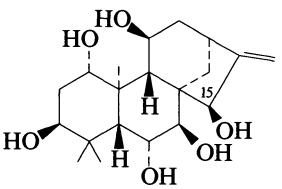
19-Carboxylic acid, 3-(3-methyl-2-butenoyl): [64086-30-2].
From *W.* spp. Oil (as Me ester).

[22488-91-1, 82508-73-4]

Baddeley, G.W. *et al*, *Tetrahedron*, 1964, **20**, 1983 (*isol, struct*)
Lloyd, H.A. *et al*, *Tetrahedron Lett.*, 1967, 4891 (*isol*)
Coates, P. *et al*, *Tetrahedron*, 1968, **24**, 795 (*isol, struct*)
Lunnon, M.W. *et al*, *J. Chem. Soc., Perkin Trans. 1*, 1977, 2317 (*synth*)
Bohlmann, F. *et al*, *Phytochemistry*, 1977, **16**, 579; 1980, **19**, 107 (*isol*)
Piozzi, F. *et al*, *Phytochemistry*, 1980, **19**, 1237 (*isol*)
Ragasa, C.Y. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 387 (*isol, pmr, cmr*)

16-Kaurene-1,3,6,7,11,15-hexol K-10007

Updated Entry replacing P-00620



$C_{20}H_{32}O_6$ M 368.469

(ent-1β,3α,6β,7α,11α,15α)-form

3-Ac: ***Inflexarabdosin F***
$C_{22}H_{34}O_7$ M 410.506
Constit. of *Rabdosia inflexa* and *R. forrestii*. Needles. Mp 207-209° dec.

3,7-Di-Ac: ***Forrestin B***
$C_{24}H_{36}O_8$ M 452.544
Constit. of *R. forrestii*. Needles. Mp 228-229°.

1,7,11-Tri-Ac: ***Forrestin C***
$C_{26}H_{38}O_9$ M 494.581
Constit. of *R. forrestii*. Needles. Mp 291-292°. $[\alpha]_D$ −29.44° (c, 0.523 in MeOH).

7,11,15-Tri-Ac:
$C_{26}H_{38}O_9$ M 494.581
Constit. of *R. forrestii*. Needles. Mp 251-254°.

6,7,11,15-Tetra-Ac: ***Forrestin D***
$C_{28}H_{40}O_{10}$ M 536.618
Constit. of *R. forrestii*. Needles. Mp 136-138°, Mp 224-226° (double Mp). $[\alpha]_D$ −46.01° (c, 0.489 in MeOH).

1,6,7,11,15-Penta-Ac: ***Forrestin A***
$C_{30}H_{42}O_{11}$ M 578.655
Constit. of *R. forrestii*. Needles. Mp 276-278°. $[\alpha]_D$ −27.93° (c, 0.537 in MeOH).

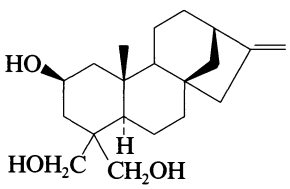
15-Ketone, 1,7,11-tri-Ac: [119763-89-2]. ent-*1β,7α,11α-Triacetoxy-3α,6β-dihydroxy-16-kauren-15-one.* ***Weisiensin A***
$C_{26}H_{36}O_9$ M 492.565
Constit. of *R. weisiensis*. Needles. Mp 298-300°.

6,15-Diketone,1,7,11-tri-Ac: [109974-30-3]. ent-*1β,7α,11α-Triacetoxy-3α-hydroxy-16-kaurene-6,15-dione.* ***Adenanthin***
$C_{26}H_{34}O_9$ M 490.549
Isol. from *R. adenantha*. Shows bacteriostatic, antiinflammatory and antitumour props. Mp 255° dec. $[\alpha]_D^{13}$ −76° (c, 0.25 in $CHCl_3$). Revised struct.

Xu, Y.-L. *et al*, *Tetrahedron Lett.*, 1987, **28**, 499 (*Adenanthin*)
Yunlong, X. *et al*, *Phytochemistry*, 1989, **28**, 1978 (*Weisiensin A*)
Xu, Y. *et al*, *Phytochemistry*, 1993, **34**, 461 (*Forrestins, Inflexarabdosin F*)

16-Kaurene-2,18,19-triol K-10008

Updated Entry replacing D-02140



$C_{20}H_{32}O_3$ M 320.471

2α-form

Constit. of *Psiadia arabica*. Needles (MeOH/EtOAc). Mp 237-238°. $[\alpha]_D^{22}$ −69° (c, 0.1 in $CHCl_3$).

2β-form

Constit. of *P. arabica*. Needles (MeOH/EtOAc). Mp 220-221°. $[\alpha]_D^{22}$ −38° (c, 0.1 in $CHCl_3$).

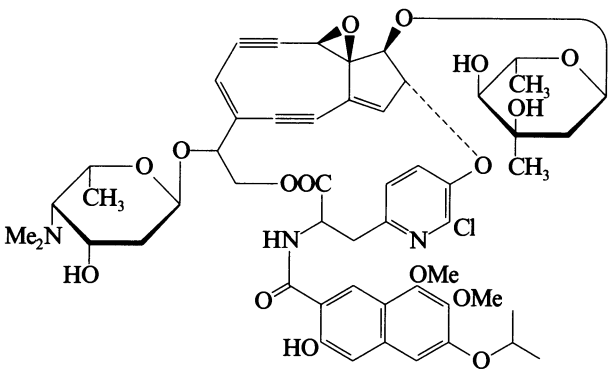
2ξ-form

2-Ketone: [144525-20-2]. *18,19-Dihydroxy-16-kauren-2-one.* ***Psiadin***
$C_{20}H_{30}O_3$ M 318.455
Constit. of *P. arabica*. Needles ($CHCl_3$/EtOAc). Mp 164-165°. $[\alpha]_D^{22}$ −120° (c, 0.01 in $CHCl_3$).

Mossa, J.S. *et al*, *Phytochemistry*, 1992, **31**, 2863 (*isol, pmr, cmr, cryst struct*)
El-Domiaty, M.E. *et al*, *Phytochemistry*, 1993, **34**, 467 (*isol, abs config*)

Kedarcidin K-10009

[128512-39-0]

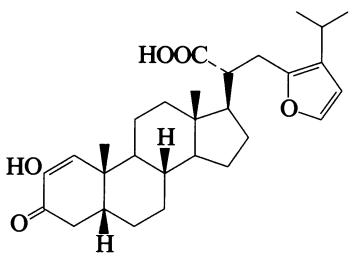


Chromoprotein antibiotic. Struct. of chromophore shown. Apoprotein moiety is a linear polypeptide consisting of 114 AA residues of known struct. Prod. by *Streptoalloteichus* sp. LS85-6. Antitumour agent. Active against gram-positive bacteria. Buff powder.

Lam, K.S. *et al*, *J. Antibiot.*, 1991, **44**, 472 (*props*)
Leet, J.E. *et al*, *J. Am. Chem. Soc.*, 1992, **114**, 7946 (*struct*)
Hofstead, S.J. *et al*, *J. Antibiot.*, 1992, **45**, 1250 (*isol*)

Kiheisterone A K-10010

[144436-06-6]

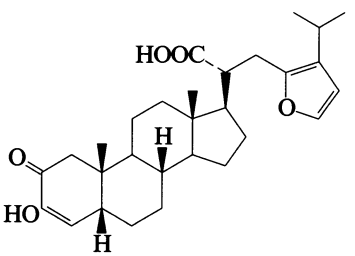


$C_{29}H_{40}O_5$ M 468.632
Constit. of Maui sponge. Glass. $[\alpha]_D$ +144° (c, 1.72 in MeOH).

Carney, J.R. *et al*, *J. Org. Chem.*, 1992, **57**, 6637 (*isol, pmr, cmr*)

Kiheisterone B K-10011

[144436-07-7]



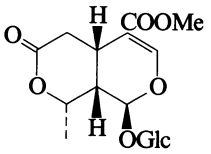
$C_{29}H_{40}O_5$ M 468.632
Constit. of Maui sponge. Needles. Mp 223-225°. $[\alpha]_D$ +19° (c, 0.7 in $CHCl_3$).

Carney, J.R. *et al*, *J. Org. Chem.*, 1992, **57**, 6637 (*isol, pmr, cmr*)

Kingiside K-10012

Updated Entry replacing K-00239

[25406-67-1]



$C_{17}H_{24}O_{11}$ M 404.370
Constit. of *Lonicera alpigena*. Noncryst. $[\alpha]_D^{20}$ −90° (MeOH).

Tetra-Ac: Mp 165-166°. $[\alpha]_D$ −80° (c, 1 in $CHCl_3$).

Aglucone: [74848-77-4]. ***Kingiside aglycone***
$C_{11}H_{14}O_6$ M 242.228
Constit. of *Strychnos spinosa*. Oil. $[\alpha]_D^{20}$ +137° (c, 7.5 in MeOH).

6'-(4-Hydroxy-3-methoxybenzoyl): ***6'-Vanilloylkingiside***
$C_{25}H_{30}O_{14}$ M 554.504
Constit. of *Gentiana pyrenaica*.

Parent acid: ***Kingisidic acid***
$C_{16}H_{22}O_{11}$ M 390.343
Constit. of *Citronella gongonha*. Foam. $[\alpha]_D^{22}$ −106° (c, 0.7 in MeOH).

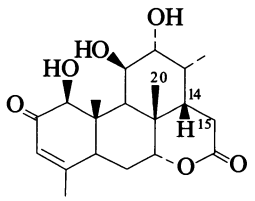
Parent acid, 8-epimer: ***8-Epikingsidic acid***
$C_{16}H_{22}O_{11}$ M 390.343
Constit. of *C. gongonha*. Foam. $[\alpha]_D$ −21° (c, 0.9 in MeOH).

Souzu, I. *et al*, *Tetrahedron Lett.*, 1969, 2725 (*isol*)
Bailleul, F. *et al*, *J. Nat. Prod.* (*Lloydia*), 1981, **44**, 573 (*isol*)
Msonthi, J.D. *et al*, *Phytochemistry*, 1985, **24**, 771 (*isol*)
Garcia, J. *et al*, *Phytochemistry*, 1990, **29**, 3353 (*Vanilloylkingiside*)
Damtoft, S. *et al*, *Phytochemistry*, 1993, **32**, 1071 (*Kingisidic acid*)

Klaineanone K-10013

Updated Entry replacing K-00250

[4668-74-0]



$C_{20}H_{28}O_6$ M 364.438
Constit. of the fruits of *Hannoa klaineana*. Cryst. (EtOAc). Mp 253-258°. $[\alpha]_D$ −52° (c, 1 in Py).

15β-Hydroxy: [56316-76-8]. ***15-Hydroxyklaineanone***
$C_{20}H_{28}O_7$ M 380.437
Constit. of *Perriera orientalis*. Cryst. Mp 221-224°. $[\alpha]_D$ +70° (c, 0.8 in MeOH).

14β,15β-Dihydroxy: ***14β,15β-Dihydroxyklaineanone***
$C_{20}H_{28}O_8$ M 396.436
Constit. of *Eurycoma longifolia*. Cytotoxic. Cryst. Mp 134-135°. $[\alpha]_D$ +53.8° (c, 0.29 in MeOH).

20-Hydroxy: [92678-86-9]. ***Shinjulactone G***
$C_{20}H_{28}O_7$ M 380.437
Isol. from *Ailanthus altissima*. Cryst. Mp 274-277°. $[\alpha]_D^{26}$ +6.5° (c, 1.2 in Py).

11-Ketone: ***11-Dehydroklaineanone***
$C_{20}H_{26}O_6$ M 362.422
Constit. of *E. longifolia*. Needles. Mp 141-142°. $[\alpha]_D$ −14.2° (c, 0.11 in MeOH).

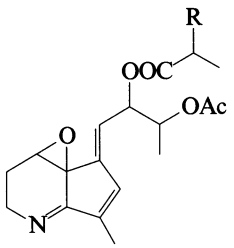
Δ^4-Isomer, 14β,15β-dihydroxy, 2α-alcohol:
$C_{20}H_{30}O_8$ M 398.452

Constit. of *E. longifolia*. Cryst. (toluene). Mp 148-150°. $[\alpha]_D$ +93.7° (c, 0.19 in MeOH).

Polonsky, J. *et al*, *Bull. Soc. Chim. Fr.*, 1965, 2793.
Polonsky, J. *et al*, *C. R. Hebd. Seances Acad. Sci.*, 1975, **280**, 1149 (*15-Hydroxyklaineanone*)
Ishibashi, M. *et al*, *Bull. Chem. Soc. Jpn.*, 1984, **57**, 2013 (*Shinjulactone G*)
Morita, H. *et al*, *Chem. Lett.*, 1990, 749 (*Dihydroxyklaineanone*)
Itokawa, H. *et al*, *Chem. Pharm. Bull.*, 1992, **40**, 1053; 1993, **41**, 403 (*Dehydroklaineanone, deriv*)

Kobutimycin A K-10014

[145458-91-9]



R = CH_3

$C_{19}H_{25}NO_5$ M 347.410
Prod. by a *Streptomyces* sp. Oil. $[\alpha]_D^{22}$ +88.2° (c, 1 in $CHCl_3$).

Kanbe, K. *et al*, *J. Antibiot.*, 1992, **45**, 1700 (*isol, pmr, cmr, struct*)

Kobutimycin B K-10015

[145458-92-0]

As Kobutimycin A, K-10014 with

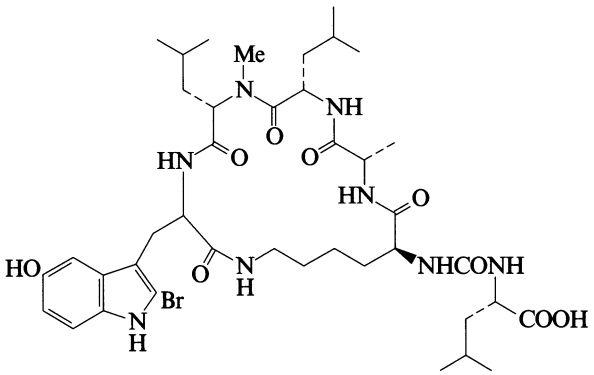
R = CH_2CH_3

$C_{20}H_{27}NO_5$ M 361.437
Prod. by a *Streptomyces* sp. Oil. $[\alpha]_D^{22}$ +107.2° (c, 1 in $CHCl_3$).

Kanbe, K. *et al*, *J. Antibiot.*, 1992, **45**, 1700 (*isol, pmr, cmr, struct*)

Konbanamide K-10016

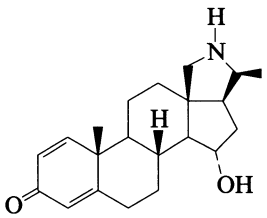
[136466-02-9]



$C_{40}H_{61}BrN_8O_9$ M 877.874
Cyclic hexapeptide. Constit. of the sponge *Theonella* sp. Calmodulin antagonist. $[\alpha]_D^{21}$ −43° (c, 0.042 in MeOH).

Kobayashi, J. *et al*, *J. Chem. Soc., Chem. Commun.*, 1991, 1050 (*isol, pmr, cmr*)

Kurchinidine K-10017



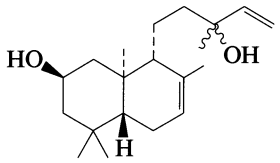
$C_{21}H_{29}NO_2$ M 327.466
Alkaloid from bark of *Holarrhena pubescens* (Apocynaceae). Plates ($CHCl_3$/MeOH). Mp 114-116°.

Siddiqui, B.S. *et al*, *Phytochemistry*, 1993, **33**, 925 (*isol, uv, ir, pmr, ms, struct*)

L

7,14-Labdadiene-2,13-diol L-10001

Updated Entry replacing L-00013



$C_{20}H_{34}O_2$ M 306.487

(ent-2α,13ξ)-form

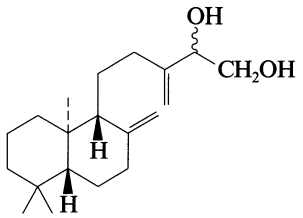
Constit. of *Ixiolaena leptolepis*. Oil.

(2ξ,13ξ)-form [73947-03-2] ***Salicifoliol***†

Constit. of *Stevia salicifolia*.

Ortega, A. *et al*, *Rev. Latinoam. Quim.*, 1980, **11**, 45 (*Salicifoliol*)
Lehmann, L. *et al*, *Phytochemistry*, 1988, **27**, 2994.

8(17),13(16)-Labdadiene-14,15-diol L-10002



$C_{20}H_{34}O_2$ M 306.487

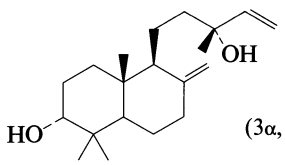
(ent-14ξ)-form [150036-53-6]

Constit. of *Erythroxylon pictum*.

Ansell, S.M. *et al*, *Phytochemistry*, 1993, **32**, 945 (*isol*, *pmr*, *cmr*)

8(17),14-Labdadiene-3,13-diol L-10003

Updated Entry replacing L-00029



(3α,13*R*)-*form*

$C_{20}H_{34}O_2$ M 306.487

(3α,13R)-form

Constit. of *Juniperus pseudosabina*. Cryst. (hexane/C_6H_6). Mp 75-76°. $[\alpha]_D^{30}$ +14.6° (c, 0.8 in $CHCl_3$).

3-Ketone: ***13R-Hydroxy-8(17),14-labdadien-3-one***

$C_{20}H_{32}O_2$ M 304.472

From *J. pseudosabina*. Cryst. (MeOH). Mp 72-73°. $[\alpha]_D^{30}$ +25.7° (c, 1.628 in $CHCl_3$).

(ent-3α,13S)-form

ent-*3α-Hydroxy-13-epimanool*

Isol. from *Croton sublyratus*. Cryst. (Me_2CO). Mp 86-87°. $[\alpha]_D^{21}$ −30.4° (c, 1 in $CHCl_3$).

3-Ac:

$C_{22}H_{36}O_3$ M 348.525

Constit. of *J. pseudosabina*. Semi-solid. $[\alpha]_D^{30}$ +37.9° ($CHCl_3$).

Di-Ac:

$C_{24}H_{38}O_4$ M 390.562

Constit. of *J. pseudosabina*. Semi-solid.

(ent-3α,13R)-form

3β-Hydroxymanool. ent-*3β-Hydroxymanool*

Constit. of *Erythroxylum pictum*. Needles (hexane). Mp 114-115°. $[\alpha]_D$ −24° (EtOH).

3-Ketone: ent-*13R-Hydroxy-8(17),14-labdadien-3-one.* ***3-Oxomanool***

$C_{20}H_{32}O_2$ M 304.472

Constit. of *E. pictum*. Gum. $[\alpha]_D$ −21° (EtOH).

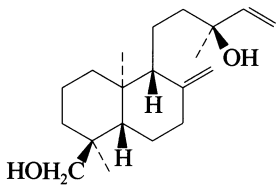
3β,13S-form

3β-Hydroxy-13-epimanool

Constit. of *Albies pinsapo*. Syrup. $[\alpha]_D$ +17.6° (c, 3.32 in $CHCl_3$).

Kitazawa, E. *et al*, *Phytochemistry*, 1981, **20**, 287 (*isol*)
Pandita, K. *et al*, *Indian J. Chem., Sect. B*, 1987, **26**, 453 (*isol*)
Dhar, K.L. *et al*, *Indian J. Chem., Sect. B*, 1990, **29**, 911 (*isol*, *pmr*, *cmr*)
Ansell, S.M. *et al*, *Phytochemistry*, 1993, **32**, 945 (*isol*, *pmr*, *cmr*)
Barrero, A.F. *et al*, *Phytochemistry*, 1993, **32**, 1261 (*isol*, *pmr*, *cmr*)
Torrenegra, R. *et al*, *Phytochemistry*, 1994, **35**, 195 (*ent-3β-Hydroxymanool*)

8(17),14-Labdadiene-13,18-diol L-10004



$C_{20}H_{34}O_2$ M 306.487

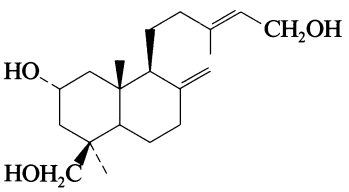
(ent-13R)-form [150134-40-0]

18-Hydroxymanool

Constit. of *Erythroxylon pictum*. Needles (hexane). Mp 133-135°. $[\alpha]_D$ −26° (CH_2Cl_2).

Ansell, S.M. *et al*, *Phytochemistry*, 1993, **32**, 945 (*isol*, *pmr*, *cmr*)

8(17),13-Labdadiene-2,15,19-triol L-10005



$C_{20}H_{34}O_3$ M 322.487

(2α,13E)-form

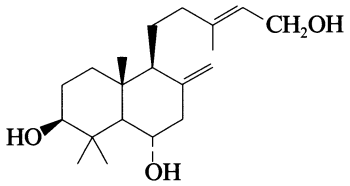
15-O-β-D-Glucopyranoside: [149182-79-6]. ***Gomojoside N***

$C_{26}H_{44}O_8$ M 484.629

Constit. of *Viburnum suspensum*. Amorph. powder. $[\alpha]_D$ −42.9° (c, 0.16 in MeOH).

Iwagawa, T. *et al*, *Phytochemistry*, 1993, **32**, 1515 (*isol*, *pmr*, *cmr*)

8(17),13-Labdadiene-3,6,15-triol L-10006



$C_{20}H_{34}O_3$ M 322.487

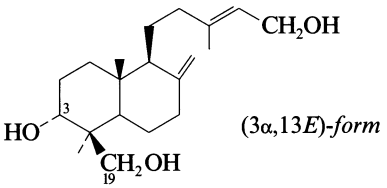
(3β,6α,13E)-form

15-O-β-D-Glucopyranoside: [149182-80-9]. ***Gomojoside O***
$C_{26}H_{44}O_8$ M 484.629
Constit. of *Viburnum suspensum*. Amorph. powder. $[\alpha]_D$ −28.1° (c, 0.21 in MeOH).

Iwagawa, T. *et al*, *Phytochemistry*, 1993, **32**, 1515 (*isol, pmr, cmr*)

8(17),13-Labdadiene-3,15,19-triol L-10007

Updated Entry replacing D-02141



(3α,13*E*)-*form*

$C_{20}H_{34}O_3$ M 322.487

(3α,13E)-form

19-Aldehyde: [117254-99-6]. *3,15-Dihydroxy-8(17),13-labdadien-19-al.* ***3α-Hydroxyisoagatholal***
$C_{20}H_{32}O_3$ M 320.471
Constit. of *Juniperus thurifera*. Cryst. (CH_2Cl_2/hexane). Mp 129°. $[\alpha]_D^{23}$ −0.7° ($CHCl_3$).

19-Carboxylic acid, 3-Ac: 3-Acetoxy-15-hydroxy-8(17),13-labdadien-19-oic acid
$C_{22}H_{34}O_5$ M 378.508
Constit. of *J. thurifera*. $[\alpha]_D$ +56° (c, 0.1 in $CHCl_3$) (Me ester).

(3β,13E)-form

15-O-β-D-Glucopyranoside: ***Gomojoside M***
$C_{26}H_{44}O_8$ M 484.629
Constit. of *Viburnum suspensum*. Amorph. powder. $[\alpha]_D$ −43.1° (c, 0.13 in MeOH).

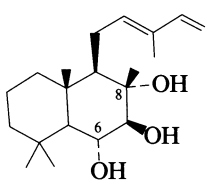
19-Aldehyde: [117255-05-7]. ***3β-Hydroxyisoagatholal***
$C_{20}H_{32}O_3$ M 320.471
Cryst. (CH_2Cl_2/hexane). Mp 134°. $[\alpha]_D^{23}$ +22.3° ($CHCl_3$).

19-Aldehyde, 3-Ac: [117232-44-7].
$C_{22}H_{34}O_4$ M 362.508
Constit. of *J. thurifera*. Oil. $[\alpha]_D^{23}$ −14.5° ($CHCl_3$).

San Feliciano, A. *et al*, *Phytochemistry*, 1988, **27**, 2241; 1993, **33**, 1165 (*isol, pmr, cmr*)
Iwagawa, T. *et al*, *Phytochemistry*, 1993, **32**, 1515.

12,14-Labdadiene-6,7,8-triol L-10008

Updated Entry replacing L-00070



(6α,7β,8α,12*E*)-*form*

$C_{20}H_{34}O_3$ M 322.487

(6α,7β,8α,12E)-form [70387-38-1] ***6α-Hydroxynidorellol***
Constit. of *Nidorella* spp. Oil.

6-Angeloyl: ***6α-Angeloyloxynidorellol***
$C_{25}H_{40}O_4$ M 404.589
Constit. of *Stevia monardaefolia*. Cryst. Mp 114-115°. $[\alpha]_D$ −34.8° ($CHCl_3$).

(6α,7β,8β,12Z)-form [62868-75-1] ***Austroinulin***
Isol. from *Austroeupatorium inulaefolium* and *S. rebaudiana*. Needles (MeOH). Mp 74-77°. $[\alpha]_D^{25}$ +33.6° (c, 0.48 in $CHCl_3$), $[\alpha]_D^{14}$ +24.0° (c, 0.50 in $CHCl_3$).

6-Ac: [75207-46-4]. *6α-Acetoxy-12,14-labdadiene-7β,8β-diol*
$C_{22}H_{36}O_4$ M 364.524
Isol. from *S. rebaudiana*. Cryst. (EtOAc). Mp 173-174°. $[\alpha]_D^{25}$ +36.8° (c, 0.46 in $CHCl_3$).

7-Ac: 7β-Acetoxy-12,14-labdadiene-6α,8β-diol
$C_{22}H_{36}O_4$ M 364.524
From *S. rebaudiana*. Needles (hexane). Mp 148-149°. $[\alpha]_D^{16}$ +14.9° (c, 0.67 in $CHCl_3$).

(6β,7β,8α,12E)-form [92694-04-7] ***6β,7β-Dihydroxy-12E-abienol.*** *Crotomachlin*
Constit. of *Koanophyllon conglobatum* and *Croton macrostachys*. Oil. $[\alpha]_D^{24}$ +10° (c, 0.25 in $CHCl_3$).

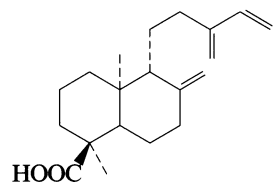
7-Ac: 7β-Acetoxy-12,14-labdadiene-6β,8α-diol
$C_{22}H_{36}O_4$ M 364.524
From *K. conglobatum*. Oil.

(ent-6α,7β,8ξ,12Z)-form

6-Ac: [73947-04-3]. ***Stevinsol***
$C_{22}H_{36}O_4$ M 364.524
Constit. of *Stevia salicifolia*.

Bohlmann, F. *et al*, *Chem. Ber.*, 1977, **110**, 1034 (*isol*)
Bohlmann, F. *et al*, *Phytochemistry*, 1978, **17**, 1769; 1984, **23**, 1190 (*isol*)
Sholichin, M. *et al*, *Phytochemistry*, 1980, **19**, 326 (*isol*)
Ortega, A. *et al*, *Rev. Latinoam. Quim.*, 1980, **11**, 45 (*Stevinsol*)
Quijano, L. *et al*, *Phytochemistry*, 1982, **21**, 1369 (*isol*)
Darise, M. *et al*, *Agric. Biol. Chem.*, 1983, **47**, 133 (*isol, struct, abs config*)
Herlem, D. *et al*, *Tetrahedron Lett.*, 1993, **34**, 5587 (*synth*)

8(17),13(16),14-Labdatrien-18-oic acid L-10009



$C_{20}H_{30}O_2$ M 302.456

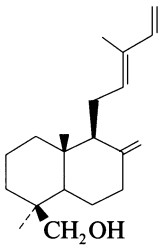
ent-form

Isol. from seed pods of *Hymenaea courbaril*.
Me ester: $[\alpha]_D^{25}$ −17.5° (c, 0.4 in $CHCl_3$).

Khoo, S.F. *et al*, *Tetrahedron*, 1973, **29**, 3379.

8(17),12,14-Labdatrien-19-ol L-10010

Updated Entry replacing L-00112



(12*E*)-*form*

$C_{20}H_{32}O$ M 288.472

(12E)-form [10178-31-1] ***Elliotinol***
Constit. of the oleoresin of slash pine (*Pinus elliottii*) and of *Agathis australis*. Cryst. by subl. Mp 14-15°. $[\alpha]_D^{25}$ +14° (c, 2 in EtOH).

p-*Nitrobenzoyl:* Cryst. (EtOH). Mp 128-130°. $[\alpha]_D^{25}$ +74° (c, 2 in EtOH).

Carboxylic acid: [2761-77-5]. *8(17),12E,14-Labdatrien-19-oic acid.* ***Communic acid***
$C_{20}H_{30}O_2$ M 302.456
Constit. of *Juniperus*, *Cupressus*, *Pinus* spp. etc., also *Hermas villosa* and *Agathis australis*. Plates (Me_2CO/pet. ether) or oil. $[\alpha]_D^{25}$ +40° (c, 1 in EtOH).

Carboxylic acid, Me ester: Cryst. ($MeOH/Et_2O$). Mp 105-106°. $[\alpha]_D$ +45° (c, 2 in $CHCl_3$).

(12Z)-form [1156-07-6] ***Communol***
Constit. of *A. australis*. Oil.

Carboxylic acid: [1231-35-2]. *8(17),12Z,14-Labdatrien-19-oic acid.* ***Elliotinoic acid***
$C_{20}H_{30}O_2$ M 302.456
Constit. of *A. australis* and *H. villosa*. Unstable oil.

Carboxylic acid, Me ester: Cryst. by subl. Mp 41-42°. $[\alpha]_D$ +45° (c, 2.3 in $CHCl_3$).

(ent-12E)-form

Ac:
$C_{22}H_{34}O_2$ M 330.509
Constit. of *Jamesoniella autumnalis*. Oil. $[\alpha]_D^{20}$ −9.5° (c, 0.005 in EtOH).

19-Carboxylic acid:
$C_{20}H_{30}O_2$ M 302.456
Constit. of *J. autumnalis*. Oil. $[\alpha]_D^{20}$ −22.5° (c, 0.008 in EtOH).

(ent-9βH,12Z)-form
Constit. of *Calceolaria densifolia*. Yellow oil (as Ac). $[\alpha]_D^{25}$ +23.8° (c, 1.85 in $CHCl_3$) (Ac).

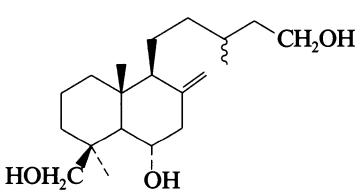
(ent-12Z)-form

Malonoyl ester:
$C_{23}H_{34}O_4$ M 374.519
Constit. of *Calceolaria corymbosa*. $[\alpha]_D^{25}$ +80.0° (c, 0.7 in $CHCl_3$) (as Me ester).

Narasimhachari, N. *et al*, *Can. J. Chem.*, 1961, **39**, 2572 (*isol*)
Arya, V.P. *et al*, *Tetrahedron*, 1961, **16**, 255 (*isol, struct*)
Carman, R.M. *et al*, *Aust. J. Chem.*, 1964, **17**, 395; 1966, **19**, 2403 (*isol, pmr*)
Norin, T., *Acta Chem. Scand.*, 1965, **19**, 1020 (*pmr, config*)
Joye, N.M. *et al*, *J. Org. Chem.*, 1965, **30**, 429.
Thomas, B.R., *Acta Chem. Scand.*, 1966, **20**, 1074 (*isol*)
Bohlmann, F. *et al*, *Chem. Ber.*, 1974, **107**, 1416 (*isol*)
Blechschmidt, M. *et al*, *J. Nat. Prod.* (*Lloydia*), 1992, **55**, 111 (*isol, pmr, cmr*)
Garbarino, J.A. *et al*, *J. Nat. Prod.* (*Lloydia*), 1992, **55**, 744 (*isol, pmr, cmr*)
Garbarino, J.A. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 624 (*Malonyl ester*)
Barrero, A.F. *et al*, *Magn. Reson. Chem.*, 1993, **31**, 299 (*cmr*)

8(17)-Labdene-6,15,19-triol L-10011

Updated Entry replacing L-00141



$C_{20}H_{36}O_3$ M 324.503

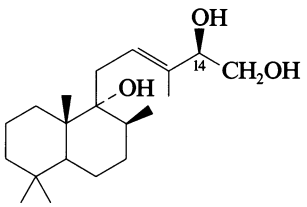
(6α,13ξ)-form

15-O-β-D-Glucopyranoside: ***Gomojoside L***
$C_{26}H_{46}O_8$ M 486.645
Constit. of *Viburnum suspensum*. Amorph. powder. $[\alpha]_D$ −56.7° (c, 0.15 in MeOH).

15,19-Di-O-β-D-Glucopyranoside: [142570-03-4]. ***Gomojoside F***
$C_{32}H_{56}O_{13}$ M 648.787
Constit. of *V. suspensum*. Amorph. powder. $[\alpha]_D$ −72.9° (c, 0.24 in MeOH).

Iwagawa, T. *et al*, *Phytochemistry*, 1992, **31**, 1311; 1993, **32**, 1515.

12-Labdene-9,14,15-triol L-10012



(9α,12*E*,14*R*)-*form*

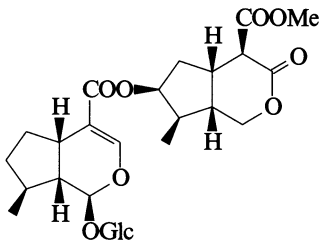
$C_{20}H_{36}O_3$ M 324.503

(9α,12E,14R)-form [72059-37-1]
Constit. of *Carterothamnus anomalochaeta*.

(9α,12E,14S)-form [72023-09-7] ***Carterothamnotriol***
Constit. of *C. anomalochaeta*.

Bohlmann, F. *et al*, *Phytochemistry*, 1979, **18**, 621 (*isol, pmr*)

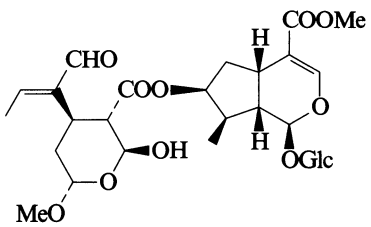
Laciniatoside III L-10013



$C_{27}H_{38}O_{13}$ M 570.589
Constit. of *Dipsacus laciniatus*.

Kocsis, .A. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 1486 (*isol, pmr, cmr*)

Laciniatoside VI L-10014

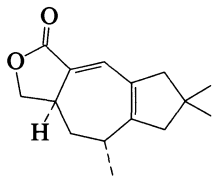


$C_{28}H_{40}O_{15}$ M 616.615
Constit. of *Dipsacus laciniatus*. $[\alpha]_D^{27}$ −11° (c, 0.2 in MeOH).

Kocsis, .A. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 1486 (*isol, pmr, cmr*)

Lactaroscrobiculide A L-10015

[59476-60-7]



$C_{15}H_{20}O_2$ M 232.322

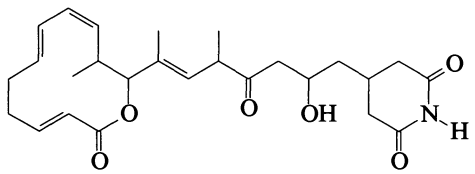
Constit. of *Lactarius scrobiculatus.*

De Bernardi, M. *et al, Chim. Ind. (Milan)*, 1976, **58**, 177 (*isol*)
Battaglia, R. *et al, J. Nat. Prod. (Lloydia)*, 1980, **43**, 319 (*isol*)
De Bernardi, M. *et al, Tetrahedron*, 1993, **49**, 1489 (*pmr, cmr*)

Lactimidomycin L-10016

BMY 28886. BU 4146T. Antibiotic BMY 28886. Antibiotic BU 4146T

[134869-15-1]



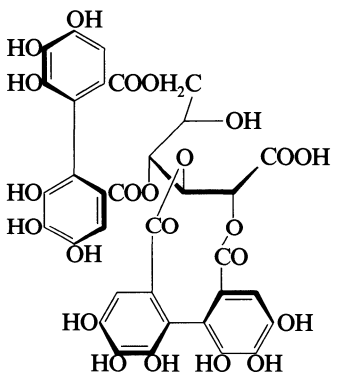
$C_{26}H_{35}NO_6$ M 457.566

Glutarimide-lactone antibiotic. Prod. by *Streptomyces amphibiosporus.* Active against fungi and tumours. Pale yellow solid + $\frac{1}{4}H_2O$. Mp 121-125°. $[\alpha]_D$ −20° (c, 0.5 in DMSO).

Sugawara, K. *et al, J. Antibiot.*, 1992, **45**, 1433 (*isol, pmr, cmr, struct, props*)

Lagerstannin A L-10017

[147666-65-7]



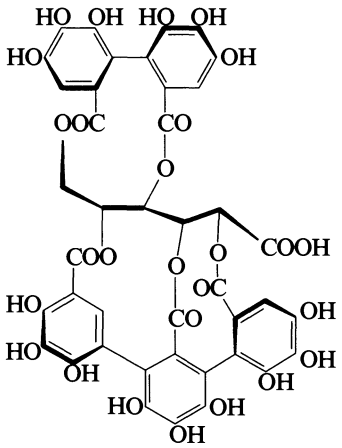
$C_{34}H_{24}O_{23}$ M 800.550

Tannin constit. of *Lagerstroemia speciosa.* Tan amorph. powder + $\frac{1}{2}H_2O$. $[\alpha]_D^{21}$ +76.3° (c, 0.5 in MeOH aq.).

Tanaka, T. *et al, Chem. Pharm. Bull.*, 1992, **40**, 2975 (*pmr, cmr*)

Lagerstannin B L-10018

[147666-67-9]



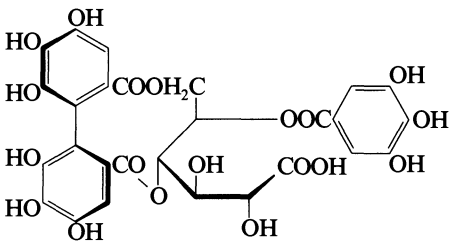
$C_{41}H_{26}O_{27}$ M 950.640

Isol. from the fruit and leaf of *Lagerstroemia speciosa.* Tan amorph. powder + H_2O. $[\alpha]_D^{21}$ +19.3° (c, 0.6 in MeOH aq.).

Tanaka, T. *et al, Chem. Pharm. Bull.*, 1992, **40**, 2975 (*pmr, cmr*)

Lagerstannin C L-10019

[133201-10-2]



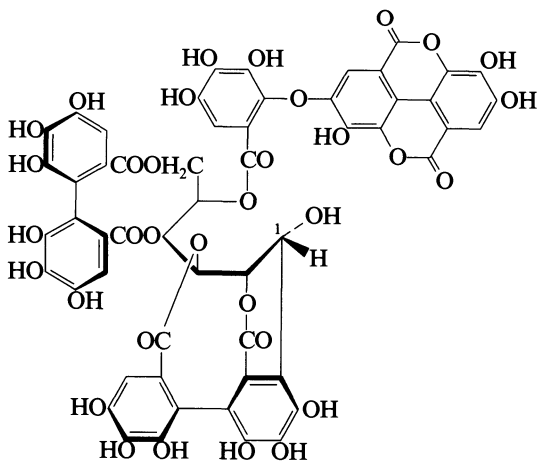
$C_{27}H_{22}O_{19}$ M 650.459

Tannin derived from *Lagerstroemia speciosa.* Amorph. powder. $[\alpha]_D^{28}$ +25.0° (c, 0.4 in MeOH).

Tanaka, T. *et al, Chem. Pharm. Bull.*, 1992, **40**, 2975 (*pmr, cmr*)

Lagerstroemin† L-10020

[135077-05-3]



$C_{55}H_{32}O_{34}$ M 1236.837

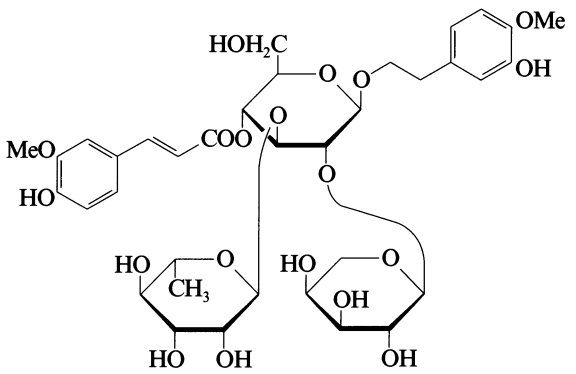
Ellagitannin from the leaves of *Lagerstroemia flos-reginae*. Needles + $7H_2O$ (H_2O). Mp 230° dec. $[\alpha]_D^{20}$ +7.3° (c, 1.0 in Me_2CO).

1-Epimer: [135545-73-2]. ***Flosin B***
$C_{55}H_{32}O_{34}$ M 1236.837
Isol. from leaves of *L. flos-reginae*. Off-white amorph. powder. $[\alpha]_D^{26}$ +65° (c, 1.4 in MeOH).

Xu, Y.-M. *et al*, *Chem. Pharm. Bull.*, 1991, **39**, 639, 647 (*struct, pmr, cmr*)

Lagotoside L-10021

[137319-48-3]

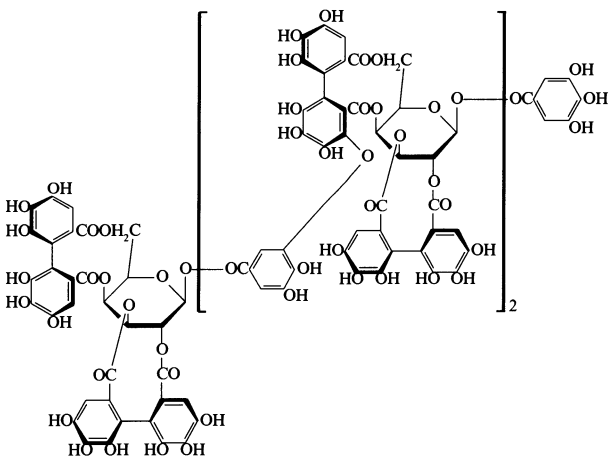


$C_{36}H_{48}O_{19}$ M 784.764
Constit. of the aerial parts of *Lagotis stolonifera*. Amorph. powder. $[\alpha]_D^{20}$ −33.8° (c, 0.334 in H_2O).

Calis, I. *et al*, *Helv. Chim. Acta*, 1991, **74**, 1273 (*isol*)

Lambertianin A L-10022

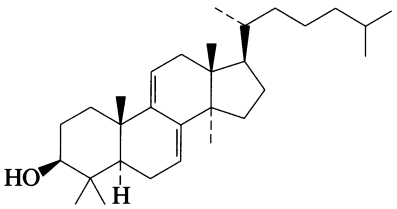
[145851-28-1]



$C_{123}H_{80}O_{78}$ M 2805.938
Ellagitannin constit. of *Rosa henryi*. Off-white amorph. powder. $[\alpha]_D^{20}$ −5° (c, 1.0 in MeOH).

Yoshida, T. *et al*, *Chem. Pharm. Bull.*, 1992, **40**, 1997 (*uv, pmr, cmr*)

Lanosta-7,9(11)-dien-3-ol L-10023



$C_{30}H_{50}O$ M 426.724

3β-form [2644-75-9] ***Dihydroagnosterol.*** *γ-Lanosterol*
Constit. of sporophores of *Fomes* spp. Cryst. (CH_2Cl_2/MeOH). Mp 157°. $[\alpha]_D$ +66.6° (c, 1.28 in $CHCl_3$).

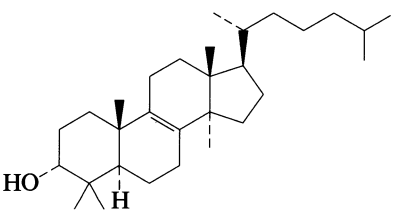
Ac: [5600-01-1].
$C_{32}H_{52}O_2$ M 468.762
Plates (EtOH). Mp 167-169°. $[\alpha]_D$ +79.6° ($CHCl_3$).

Benzoyl: [70016-51-2].
$C_{37}H_{54}O_2$ M 530.832
Needles (EtOAc). Mp 203-204°. $[\alpha]_D$ +65° (c, 1.11 in $CHCl_3$).

Ruzicka, L. *et al*, *Helv. Chim. Acta*, 1946, **29**, 204.
Cole, A.R.H. *et al*, *J. Chem. Soc.*, 1959, 1212 (*ir*)
Barton, D.H.R. *et al*, *J. Chem. Soc.*, 1963, 3675 (*benzoyl*)
Musgrave, O.C. *et al*, *J. Chem. Soc. C*, 1971, 685 (*isol*)
Govindachari, T.R. *et al*, *Tetrahedron*, 1971, **27**, 4991 (*synth*)
Pettit, G.R. *et al*, *J. Org. Chem.*, 1972, **37**, 2788 (*synth*)
Xu, S. *et al*, *J. Chromatogr.*, 1988, **452**, 377 (*tlc, hplc, glc*)
Emmons, G.T. *et al*, *Magn. Reson. Chem.*, 1989, **27**, 1012 (*pmr, cmr*)

Lanost-8-en-3-ol L-10024

4,4,14-Trimethylcholest-8-en-3-ol
[6198-06-7]



$C_{30}H_{52}O$ M 428.740

3α-form [6593-55-1]
Dihydroepilanosterol
Mp 138-139°. $[\alpha]_D$ +50° (c, 0.8 in $CHCl_3$).

Ac:
$C_{32}H_{54}O_2$ M 470.777
Cryst. (Me_2CO). Mp 169-171°. $[\alpha]_D$ +3.7° (c, 1.3 in $CHCl_3$).

3β-form [79-62-9] ***Dihydrolanosterol***
Constit. of numerous plant and fungal spp. Needles (MeOH). Mp 148° (146°). $[\alpha]_D^{19}$ +63° ($CHCl_3$).

Ac: [1724-19-2].
Cryst. (MeOH). Mp 137-138°. $[\alpha]_D$ +47° ($CHCl_3$).

Benzoyl:
$C_{37}H_{56}O_2$ M 532.848
Mp 194°. $[\alpha]_D$ +68° ($CHCl_3$).

9Z-Octadecenoyl: [122560-55-8]. *Dihydrolanosteryl oleate*
$C_{48}H_{84}O_2$ M 693.190
Prod. by *Saccharamyces cerevisiae*.

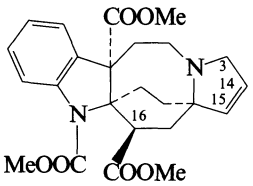
(3β,20S)-form [78821-82-6]
20-Isodihydrolanosterol
Needles (MeOH). Mp 171.5-172°. $[\alpha]_D^{19}$ +33° (c, 1 in $CHCl_3$).

[13879-09-9, 39701-94-5, 59684-64-9]

Gafner, G. *et al*, *Acta Crystallogr.*, 1957, **10**, 603 (*cryst struct*)
Bancroft, G. *et al*, *J. Chem. Soc.*, 1961, 3295 (*Dihydroepilanosterol*)
Haddad, Y.M.Y. *et al*, *J. Chem. Soc., Perkin Trans. 1*, 1974, 596 (*Dihydroepilanosterol*)
Sato, Y. *et al*, *Chem. Pharm. Bull.*, 1981, **29**, 356 (*20-Isodihydrolanosterol*)
Parish, E.J. *et al*, *J. Lipid Res.*, 1981, **22**, 859.
Xu, S. *et al*, *J. Chromatogr.*, 1988, **452**, 377 (*hplc, glc, tlc*)
Fenner, G.P. *et al*, *Lipids*, 1989, **24**, 625 (*octadecenoate*)
Emmons, G.T. *et al*, *Magn. Reson. Chem.*, 1989, **27**, 1012 (*pmr, cmr*)
Evershed, R.P. *et al*, *Steroids*, 1989, **53**, 285 (*ms*)

Lapidilectine A L-10025

[143070-42-2]



$C_{24}H_{28}N_2O_6$ M 440.495
Alkaloid from bark and leaves of *Kopsia lapidilecta* (Apocynaceae). Amorph. $[\alpha]_D$ −33° (c, 0.8 in $CHCL_3$).

16-Epimer: [151003-93-9]. ***Isolapidilectine A***
$C_{24}H_{28}N_2O_6$ M 440.495
Alkaloid from bark and leaves of *K. lapidilecta* (Apocynaceae). Amorph. $[\alpha]_D$ +54° (c, 0.72 in $CHCl_3$).

3-Oxo: [150881-25-7]. ***Lapidilectam***
$C_{24}H_{26}N_2O_7$ M 454.479
Alkaloid from bark and leaves of *K. lapidilecta* (Apocynaceae). $[\alpha]_D$ +77° (c, 0.55 in $CHCl_3$).

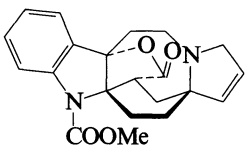
14,15-Dihydro, 15β-hydroxy: [151003-94-0]. ***Lapidilectinol***
$C_{24}H_{30}N_2O_7$ M 458.510
Alkaloid from bark and leaves of *K. lapidilecta* (Apocynaceae). Amorph. $[\alpha]_D$ −5° (c, 0.5 in $CHCl_3$).

14,15-Dihydro, 15α-hydroxy: [150881-26-8]. ***Epilapidilectinol***
$C_{24}H_{30}N_2O_7$ M 458.510
Alkaloid from bark and leaves of *K. lapidilecta* (Apocynaceae). Amorph. $[\alpha]_D$ +19° (c, 0.8 in $CHCl_3$).

Awang, K. *et al*, *Tetrahedron Lett.*, 1992, **33**, 2493 (*isol, uv, pmr, cmr, ms, struct*)
Awang, K. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 1134 (*config*)

Lapidilectine B L-10026

[143052-16-8]

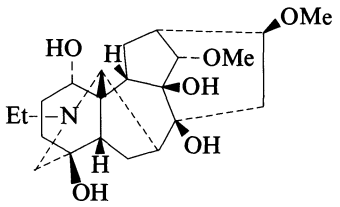


$C_{21}H_{22}N_2O_4$ M 366.416
Alkaloid from bark and leaves of *Kopsia lapidilecta* (Apocynaceae). Amorph. $[\alpha]_D$ +7.6° (c, 0.9 in $CHCl_3$).

Awang, K. *et al*, *Tetrahedron Lett.*, 1992, **33**, 2493 (*isol, uv, pmr, cmr, struct*)

Lappaconidine L-10027

Updated Entry replacing L-00290
Lapaconidine
[31000-13-2]



$C_{22}H_{35}NO_6$ M 409.522
Alkaloid from the roots of *Aconitum leucostomum* (*excelsum*) (Ranunculaceae). Mp 206-207°. $[\alpha]_D$ +12.9° ($CHCl_3$). Forms benzene solvate, Mp 118-120°.

Tetra -Ac: Mp 195-197°.

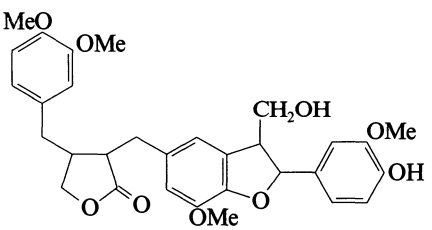
O^1-*Me:* [23943-93-3]. ***Lappaconine***
$C_{23}H_{37}NO_6$ M 423.548
Hydrol. prod. of Lappaconitine (see Puberanidine, P-02136), also detected in *A. leucostomum* (Ranunculaceae). Cryst. + $1\frac{1}{2}$ H_2O (H_2O). Mp 96°. $[\alpha]_D^{25}$ +27° (c, 3.17 in $CHCl_3$).

4-O-(2-Aminobenzoyl): ***4-Anthranoyllappaconidine***
$C_{29}H_{40}N_2O_7$ M 528.644
Alkaloid from roots of *Aconitum septentrionale* (Ranunculaceae). Amorph. $[\alpha]_D$ +48.8° (c, 0.16 in $CHCl_3$).

Khamova, M. *et al*, *Tetrahedron Lett.*, 1964, 2711 (*ir, pmr, struct*)
Marion, L. *et al*, *Can. J. Chem.*, 1967, **45**, 969 (*synth*)
Mollov, N. *et al*, *Tetrahedron Lett.*, 1969, 2189 (*pmr, struct*)
Birnbaum, G.I., *Acta Crystallogr., Sect. B*, 1970, **26**, 755 (*cryst struct, Lappaconine*)
Tel'nov, V.A. *et al*, *Khim. Prir. Soedin.*, 1971, **7**, 622; *Chem. Nat. Compd.* (*Engl. Transl.*), 601 (*pmr, ms, isol, struct*)
Pelletier, S.W. *et al*, *Can. J. Chem.*, 1979, **57**, 1652 (*cmr*)
Plugar, V.N. *et al*, *Khim. Prir. Soedin.*, 1982, **18**, 80; *Chem. Nat. Compd.* (*Engl. Transl.*), 75 (*glc, ms*)
Sayed, H.M. *et al*, *J. Nat. Prod.* (*Lloydia*), 1992, **55**, 1595 (*4-Anthranoyllappaconidine*)

Lappaol B L-10028

[62359-60-8]

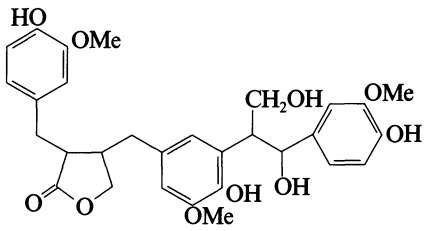


$C_{31}H_{34}O_9$ M 550.604
Isol. from seeds of *Arctium lappa*. $[\alpha]_D^{20}$ −19.4° (c, 1.0 in MeOH).

Ichihara, A. *et al*, *Tetrahedron Lett.*, 1976, 3961 (*isol, uv, pmr, ms*)

Lappaol C L-10029

[64855-00-1]



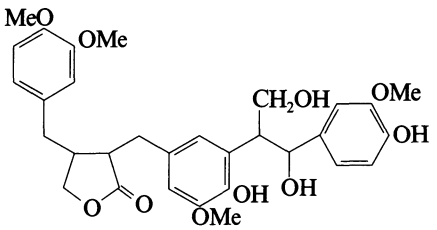
$C_{30}H_{34}O_{10}$ M 554.593

Isol. from seeds of *Arctium lappa*. Amorph. powder. $[\alpha]_D^{20}$ −55° (c, 1.0 in MeOH).

Ichihara, A. *et al*, *Agric. Biol. Chem.*, 1977, **41**, 1813 (*isol, uv, ir, pmr*)

Lappaol D L-10030

[64855-01-2]



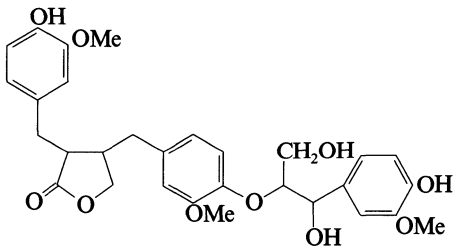
$C_{31}H_{36}O_{10}$ M 568.619

Isol. from the seeds of *Arctium lappa*. Amorph. powder.

Ichihara, A. *et al*, *Agric. Biol. Chem.*, 1977, **41**, 1813 (*isol, ir, pmr*)

Lappaol E L-10031

[64855-02-3]



$C_{30}H_{34}O_{10}$ M 554.593

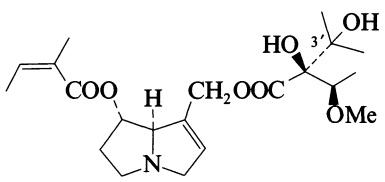
Isol. from seeds of *Arctium lappa*. $[\alpha]_D^{20}$ −26.56° (c, 1.0 in MeOH).

Ichihara, A. *et al*, *Agric. Biol. Chem.*, 1977, **41**, 1813 (*isol, uv, ir, pmr*)

Lasiocarpine L-10032

Updated Entry replacing L-00308

[303-34-4]



$C_{21}H_{33}NO_7$ M 411.494

Diester of heliotridine with angelic (see 2-Methyl-2-butenoic acid, M-00844) and lasiocarpic acids. Major alkaloid from *Heliotropium europaeum*, *H. lasiocarpum*, *H. arbainense*, *H. curassavicum*, *H. eichwaldii*, *H. indicum* and other *H.* spp. (Boraginaceae). Hepatotoxin, causes liver damage in grazing animals. Shows activity against hepatoma and sarcoma 45. Plates (pet. ether). Mp 95.5-97°. $[\alpha]_D^{16}$ −3.5° (c, 2.0 in EtOH), $[\alpha]_D^{16}$ +0.9° (c, 6.3 in $CHCl_3$).

▷ Carcinogenic. Highly toxic. OE7875000.

N-*Oxide:* [127-30-0]. ***Lasiocarpine* N-*oxide***

$C_{21}H_{33}NO_8$ M 427.494

From *H. europaeum* (Boraginaceae). Prisms or needles. Mp 134-135° dec. (variable). $[\alpha]_D^{17}$ +13.1° (c, 4.97 in EtOH).

▷ OE7900000.

$O^{3'}$-*Ac:* [57538-10-0]. ***Acetyllasiocarpine***

$C_{23}H_{35}NO_8$ M 453.531

From *H. europaeum* (Boraginaceae). Noncryst. $[\alpha]_D^{20}$ −0.9° (c, 2 in EtOH).

$O^{3'}$-*Ac*, N-*oxide:* ***3'-Acetyllasiocarpine* N-*oxide***

$C_{23}H_{35}NO_9$ M 469.531

Alkaloid from aerial parts of *H. hirsutissimum* (Boraginaceae). Gummy solid. $[\alpha]_D^{20}$ +10° (c, 0.27 in $CHCl_3$). Named 4'-Acetyllasiocarpine *N*-oxide in the lit.

3'-Deoxy: [56317-17-0]. ***7-Angelylheliotrine***

$C_{21}H_{33}NO_6$ M 395.495

Minor alkaloid from *H. eichwaldii* (Boraginaceae). $[\alpha]_D^{16}$ −13.77° (c, 0.8 in EtOH). Ester of heliotridine with angelic and heliotrinic acids.

3'-Deoxy, picrate: Mp 191-193°.

Culvenor, C.C.J. *et al*, *Aust. J. Chem.*, 1954, **7**, 277, 287; 1975, **28**, 2319 (*struct, Acetyllasiocarpine*)

Mattocks, A.R., *Nature (London)*, 1968, **217**, 723 (*tox*)

Šimánek, V. *et al*, *Collect. Czech. Chem. Commun.*, 1969, **34**, 1832 (*uv*)

Pedersen, E. *et al*, *Org. Mass Spectrom.*, 1970, **4**, 249 (*ms*)

Culvenor, C.C.J. *et al*, *J. Chem. Soc. C*, 1971, 3653 (*cd*)

Suri, O.P. *et al*, *Indian J. Chem.*, 1975, **13**, 505 (*7-Angelylheliotrine*)

Mody, N.V. *et al*, *J. Nat. Prod. (Lloydia)*, 1979, **42**, 417 (*cmr*)

Hay, D.G. *et al*, *Acta Crystallogr., Sect. B*, 1982, **38**, 155 (*cryst struct*)

Jones, A.J. *et al*, *Aust. J. Chem.*, 1982, **35**, 1173 (*cmr*)

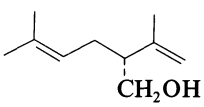
Constantinidis, T. *et al*, *Phytochemistry*, 1993, **32**, 1335 (*Acetyllasiocarpine N-oxide*)

Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th Ed., Van Nostrand-Reinhold, 1992, LBG000.

Lavandulol L-10033

Updated Entry replacing L-00380

5-Methyl-2-(1-methylethenyl)-4-hexen-1-ol, 9CI. 2-Isopropenyl-5-methyl-4-hexen-1-ol



(*R*)-*form*

$C_{10}H_{18}O$ M 154.252

Both the parent alcohol and its simple esters (esp. the acetate) are used in perfumery.

(R)-form [498-16-8]

Constit. of French lavender oil. Bp_{13} 94-95°. $[\alpha]_D^{20}$ −10.7° (c, 1.01 in MeOH) (opt. pure).

▷ MP8623000.

O-[α-L-*Arabinopyranosyl-(1→6)-β-D-glucopyranoside*]: ***Kenposide B***

$C_{21}H_{36}O_{10}$ M 448.509

Constit. of *Hovenia dulcis*. Oil. $[\alpha]_D$ −41.6° (c, 4.5 in MeOH).

(S)-form [50373-53-0]

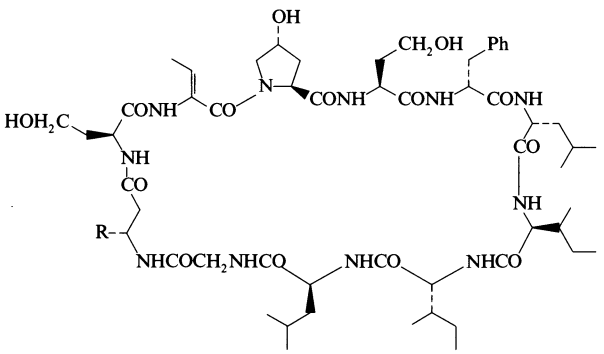
$[\alpha]_D^{20}$ +10.11° (pure substance) (opt. pure).

(±)-*form* [1845-51-8]
d_4^{17} 0.880. Bp_6 100-101°. n_D^{17} 1.4710.
Ac: [25905-14-0].
$C_{12}H_{20}O_2$ M 196.289
d_4^{20} 0.977. Bp_{12} 143-144°. n_D^{20} 1.4560.
▷ Skin irritant.
[20777-39-3]

Schinz, H. *et al*, *Helv. Chim. Acta*, 1947, **30**, 1483 (*synth*)
Soucek, M. *et al*, *Collect. Czech. Chem. Commun.*, 1959, **24**, 3802 (*abs config*)
Baba, S.N. *et al*, *Tetrahedron*, 1966, **22**, 903 (*synth, rev*)
Banthorpe, D.V. *et al*, *Phytochemistry*, 1977, **16**, 85 (*biosynth*)
Bertrand, M. *et al*, *Tetrahedron Lett.*, 1977, 1785 (*synth*)
Kramer, A. *et al*, *Helv. Chim. Acta*, 1982, **65**, 293 (*synth, ir, pmr, bibl*)
Takano, S. *et al*, *J. Org. Chem.*, 1985, **50**, 931 (*synth*)
Celebuski, J. *et al*, *Tetrahedron*, 1985, **41**, 5741 (*synth*)
Ford, R.A. *et al*, *Food Chem. Toxicol.*, 1992, **30**, 55S (*rev, tox*)
Yoshikawa, K. *et al*, *Phytochemistry*, 1993, **34**, 1431 (*Kenposide B*)
Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th Ed., Van Nostrand-Reinhold, 1992, LCA100.

Laxaphycin A L-10034

Updated Entry replacing H-01052
Hormothamnin A
[120500-21-2]



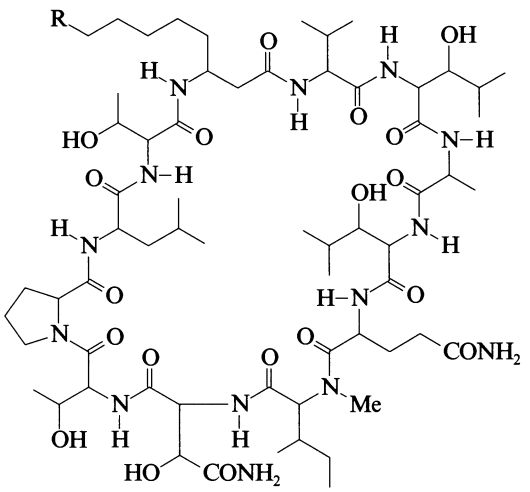
R = $(CH_2)_4CH_3$

$C_{60}H_{97}N_{11}O_{14}$ M 1196.492
Cyclic undecapeptide antibiotic. Laxaphycin A and Hormothamnin A have same gross struct. but may be the same or stereoisomers. Stereochem. shown detd. for Hormothamnin A. Prod. by the cyanobacterium *Hormothamnion enteromorphoides* and the blue-green alga *Anabaena laxa*. Cytotoxic. Powder.

Frankmoelle, W.P. *et al*, *J. Antibiot.*, 1992, **45**, 1451, 1458 (*Laxaphycin A*)
Gerwick, W.H. *et al*, *Tetrahedron*, 1992, **48**, 2313 (*Hormothamnin A*)

Laxaphycin B L-10035

[144941-08-2]



R = CH_2CH_3

$C_{65}H_{114}N_{14}O_{19}$ M 1395.698
Cyclic peptide antibiotic. Isol. from the blue-green alga *Anabaena laxa*. Antifungal agent.

Frankmoelle, W.P. *et al*, *J. Antibiot.*, 1992, **45**, 1451, 1458 (*isol, pmr, cmr, struct, props*)

Laxaphycin E L-10036

[144941-11-7]

As Laxaphycin A, L-10034 with

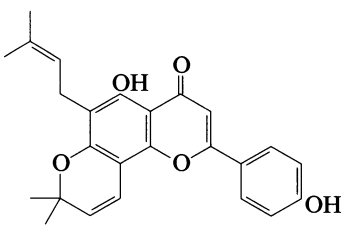
R = $(CH_2)_6CH_3$

$C_{62}H_{101}N_{11}O_{14}$ M 1224.545
Cyclic peptide antibiotic. Isol. from the blue-green alga *Anabaena laxa*. Antifungal agent.

Frankmoelle, W.P. *et al*, *J. Antibiot.*, 1992, **45**, 1451, 1458 (*isol, pmr, cmr, struct, props*)

Laxifolin L-10037

[144049-81-0]



$C_{25}H_{24}O_5$ M 404.462
Constit. of the roots of *Derris laxiflora*. Mp 259-260°.

Lin, Y.-L. *et al*, *Chem. Pharm. Bull.*, 1991, **39**, 3132 (*isol, pmr, cmr*)

Legnodulic acid L-10038

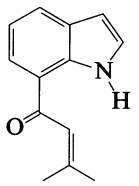
Struct. unknown. Constit. of the root nodules of *Vicia faba*. Hexagonal plates. Mp >250° dec.

Ishida, Y. *et al*, *Yakugaku Zasshi*, 1959, **79**, 790; *CA*, **53**, 19049h (*isol*)

Leiocarpone L-10039

1-(1H-Indol-7-yl)-3-methyl-2-buten-1-one, 9CI. 7-(3-Methyl-2-butenoyl)-1H-indole. 2,2-Dimethylvinyl 7-indolyl ketone

[105205-52-5]



$C_{13}H_{13}NO$ M 199.252

Isol. from the roots of *Esenbeckia leiocarpa*. Cryst. Sensitive to light and air.

Moyer, M.P. *et al*, *J. Org. Chem.*, 1986, **51**, 5106 (*synth, pmr*)

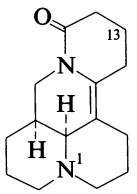
Delle Monache, F. *et al*, *Gazz. Chim. Ital.*, 1990, **120**, 387 (*isol, pmr, cmr*)

Leontalbinine L-10040

Updated Entry replacing L-00422

7,11-Didehydromatridin-15-one, 9CI. 7,11-Dehydromatrine

[46862-63-9]



Relative configuration

$C_{15}H_{22}N_2O$ M 246.352

Alkaloid from *Leontice albertii* and flowers of *Sophora flavescens* (Leonticaceae, Leguminosae). Prisms (Et_2O). Mp 107-108°. $[\alpha]_D^{24}$ −137.2° (EtOH).

N^1-*Oxide:* ***Leontalbinine* N-*oxide***

$C_{15}H_{22}N_2O_2$ M 262.351

Minor alkaloid from seeds of *S. flavescens* var. *angustifolia* (Leguminosae). $[\alpha]_D$ −161.7° (EtOH).

13-Hydroxy: [20078-85-7]. ***Albertine.*** *7,11-Didehydro-13-hydroxymatridin-15-one, 9CI. 13-Hydroxy-7,11-dehydromatrine*

$C_{15}H_{22}N_2O_2$ M 262.351

Alkaloid from *L. albertii* (Leonticaceae). Mp 161°. $[\alpha]_D$ −101°.

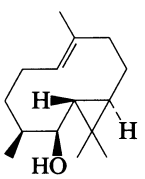
[16665-57-9]

Iskandarov, S. *et al*, *Khim. Prir. Soedin.*, 1967, **3**, 26; 1968, **4**, 137; 1972, **8**, 628; *Chem. Nat. Compd.* (*Engl. Transl.*), 21, 118, 596 (*isol, struct*)

Murakoski, I. *et al*, *Phytochemistry*, 1982, **21**, 2379 (*isol, ms, uv, pmr, cmr struct*)

Sekine, T. *et al*, *Yakugaku Zasshi*, 1993, **113**, 53; *CA*, **118**, 251444x (*oxide*)

1(10)-Lepidozen-5-ol L-10041



$C_{15}H_{26}O$ M 222.370

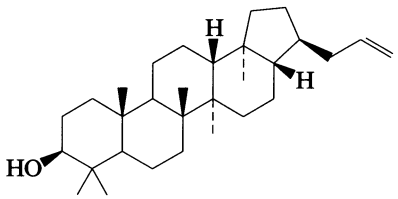
(1(10)E,4S*,5S*,6R*,7R*)-form [146564-20-7]

Constit. of *Trochelejeunea sandvicensis*. Oil. $[\alpha]_D$ −29.9° (c, 1.22 in $CHCl_3$).

Tori, M. *et al*, *Phytochemistry*, 1993, **32**, 335 (*isol, pmr, cmr*)

Leptadenol L-10042

[147526-84-9]



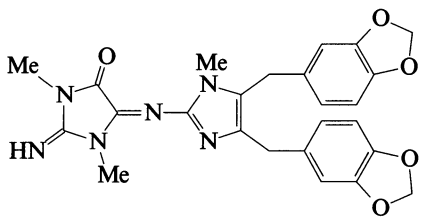
$C_{30}H_{50}O$ M 426.724

Constit. of *Lepetadenia pyrotechnica*.

Noor, F. *et al*, *Phytochemistry*, 1993, **32**, 211 (*isol, pmr*)

Leucettamidine L-10043

[147395-97-9]



$C_{25}H_{24}N_6O_5$ M 488.502

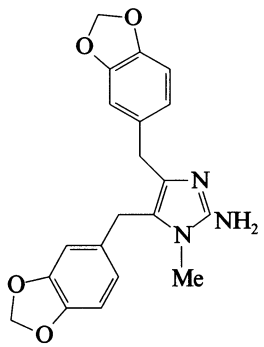
Alkaloid from the marine sponge *Leucetta microraphis*. Exhibits significant leukotriene B_4 receptor binding activity.

Chan, G.W. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 116 (*isol, pmr, struct*)

Leucettamine A L-10044

4,5-Bis(1,3-benzodioxol-5-ylmethyl)-1-methyl-1H-imidazol-2-amine, 9CI

[147395-95-7]



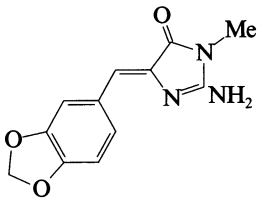
$C_{20}H_{19}N_3O_4$ M 365.388

Alkaloid from the marine sponge *Leucetta microraphis*. Exhibits potent leukotriene B_4 receptor binding activity. Yellowish amorph. solid.

Chan, G.W. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 116 (*isol, uv, ir, pmr, cmr, ms, struct*)

Leucettamine B L-10045

[147395-96-8]



$C_{12}H_{11}N_3O_3$ M 245.237

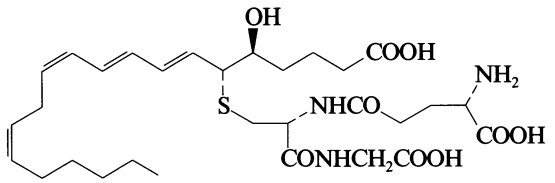
Alkaloid from the marine sponge *Leucetta microraphis*. Cream solid.

Chan, G.W. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 116 (*isol, uv, ir, pmr, cmr, ms, struct*)

Leukotriene C_4 L-10046

N-[S-[*1-(4-Carboxy-1-hydroxybutyl)-2,4,6,9-pentadecatetraenyl*]-N-L-γ-glutamyl-L-cysteinyl]glycine, *9CI*. *Leukotriene C*. *Leukotriene* C_1

[72025-60-6]



$C_{30}H_{47}N_3O_9S$ M 625.782

Constit. of the slow reacting substance of anaphylaxis. Isol. from mouse mastocytoma cells and human polymorphonuclear leukocytes. Metab. of arachidonic acid. Important agonist in asthma and various forms of hypersensitivity.

(11E)-form [74841-69-3]

11-trans-*Leukotriene* C_4. *Leukotriene* C_2

Constit. of the slow reacting substance of anaphylaxis. Isol. from human polymorphonuclear leukocytes. Slow reacting substance. Uv λ_{max} 278 (ε 40000) nm.

N-*Methyl:* [131391-65-6]. N-*Methylleukotriene* C_4

$C_{31}H_{49}N_3O_9S$ M 639.809

Metabolically stable LTC_4 mimetic. Solid.

Me-ester: [89286-84-0].

$C_{31}H_{49}N_3O_9S$ M 639.809

No phys. props. reported.

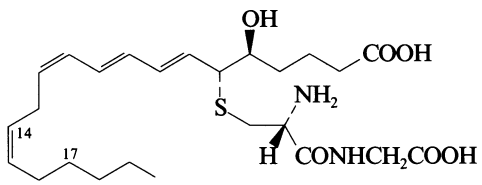
[112924-15-9]

Murphy, R.C. *et al*, *Proc. Natl. Acad. Sci. U.S.A.*, 1979, **76**, 4275 (*isol*)
Hammarstroem, S. *et al*, *Biochem. Biophys. Res. Commun.*, 1980, **92**, 946 (*struct*)
Hansson, G. *et al*, *FEBS Lett.*, 1980, **122**, 87 (*isol*)
Corey, E.J. *et al*, *J. Am. Chem. Soc.*, 1980, **102**, 1436, 4278 (*synth*)
Corey, E.J. *et al*, *Tetrahedron Lett.*, 1980, **21**, 3143; 1982, **23**, 2351 (*synth*)
Koenig, W. *et al*, *Monogr. Allergy*, 1983, **18**, 201 (*Me ester*)
Green, R.H. *et al*, *Tetrahedron*, 1983, **39**, 1687 (*rev*)
Baker, S.R. *et al*, *Prostaglandins*, 1990, **40**, 445 (*N-Me*)
Gareau, Y. *et al*, *J. Org. Chem.*, 1993, **58**, 1582 (*synth, pmr*)

Leukotriene D_4 L-10047

Leukotriene D. N-[S-[*1-(4-Carboxy-1-hydroxybutyl)-2,4,6,9-pentadecatetraenyl*]-L-cysteinyl]glycine, *9CI*

[73836-78-9]



$C_{25}H_{40}N_2O_6S$ M 496.667

Constit. of the slow reacting substance of anaphylaxis. Isol. from cat basophilic leukaemic cells and from human lung. Metab. of arachidonic acid. Agonist in various forms of hypersensitivity of the lung including asthma and allergic rhinitis.

17,18Z-Didehydro: [79695-13-9]. *Leukotriene* D_5

$C_{25}H_{38}N_2O_6S$ M 494.651

Prod. by incubation of 5,8,11,14,17-Eicosapentaenoic acid, E-00083 with rat leukaemia cells. Slow reacting substance.

14,15-Dihydro: [77165-74-3]. *Leukotriene* D_3

$C_{25}H_{42}N_2O_6S$ M 498.683

Prod. from 5,8,11,14,17-Eicosapentaenoic acid, E-00083 by incubation with rat leukaemia or mouse mastocytoma cells. Slow reacting substance.

Me ester: [89286-83-9].

$C_{26}H_{42}N_2O_6S$ M 510.694

Induces blood vessel contraction.

11-trans-form [79768-40-4]

11-trans-*Leukotriene* D_4

Biologically less active than 11-*cis*-LTD_4. No phys. props. reported.

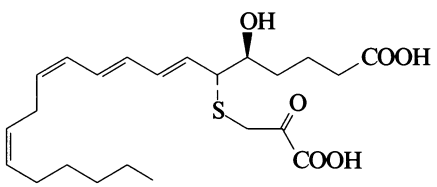
[122331-00-4]

Oerning, L. *et al*, *Proc. Natl. Acad. Sci. U.S.A.*, 1980, **77**, 2014 (*isol, struct*)
Lewis, R.A. *et al*, *Proc. Natl. Acad. Sci. U.S.A.*, 1980, **77**, 3710 (*isol*)
Corey, E.J. *et al*, *Tetrahedron Lett.*, 1980, **21**, 3143; 1982, **23**, 2351 (*synth*)
Baker, S.R. *et al*, *Biochem. Biophys. Res. Commun.*, 1981, **103**, 1258 (*synth, biochem*)
Oerning, L. *et al*, *Eur. J. Biochem.*, 1981, **120**, 41 (*derivs*)
Hammerstroem, S., *J. Biol. Chem.*, 1981, **256**, 2275.
Krell, R.D. *et al*, *Prostaglandins*, 1981, **22**, 387 (*biochem*)
Baker, S.R. *et al*, *Prostaglandins*, 1982, **23**, 569 (*biochem*)
Spur, B. *et al*, *Arch. Pharm.* (*Weinheim, Ger.*), 1983, **316**, 289; 1984, **317**, 280 (*synth, deriv*)
Green, R.H. *et al*, *Tetrahedron*, 1983, **39**, 1687 (*rev*)
Kimura, I. *et al*, *Jpn. J. Pharmacol.*, 1989, **50**, 253 (*Me ester, biochem*)

Leukotriene G_4 L-10048

6-[(2-Carboxy-2-oxoethyl)thio]-5-hydroxy-7,9,11,14-eicosatetraenoic acid

[117675-20-4]



$C_{23}H_{34}O_6S$ M 438.584

Formed by transamination of Leukotriene E_4, L-00504 by cysteine conjugate aminotransferase. Leukotriene E_4, L-00504 metab. in kidney and liver.

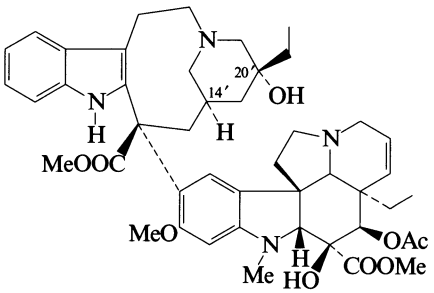
Tomisawa, H. *et al*, *Biochem. Biophys. Res. Commun.*, 1988, **155**, 1119.

Leurosidine L-10049

Updated Entry replacing L-00507

***Vinrosidine*, INN.** *Lilly 36781*

[15228-71-4]



Absolute configuration

$C_{46}H_{58}N_4O_9$ M 810.986

The stereochem. given in CA appears to be incorrect. Given in CA as (4′α)-Vincalencoblastine (i.e.(14′α)-Vinblastine) but it is also epimeric at C-20′. Alkaloid from *Vinca rosea* (*Catharanthus roseus*) (Apocynaceae). Antineoplastic agent, toxic side effects in clinical trials. Mp 210-212° dec. $[\alpha]_D^{25}$ +55.8° (c, 1 in $CHCl_3$).

▷ LD_{50} (mus, ipr) 50 mg/kg. OH6350000.

B, xH_2SO_4: [18556-44-0]. *Vinrosidine sulfate, USAN*

▷ OK6126000.

N$^{b'}$-Oxide: ***Leurosidine N$^{b'}$-oxide***

$C_{46}H_{58}N_4O_{10}$ M 826.985

Isol. from *C. roseus* (Apocynaceae). Cryst. (Me_2CO). Mp 215-218°. $[\alpha]_D^{25}$ +26° (c, 0.5 in $CHCl_3$).

20′-Deoxy, 20′-epimer: [20072-25-7]. ***Isoleurosine.*** *20′-Deoxyvinblastine. Deoxyvinblastine A. Deoxyvincaleukoblastine A*

$C_{46}H_{58}N_4O_8$ M 794.986

Isol. from *C. roseus* (Apocynaceae). Blades (MeOH). Mp 202-206° dec. $[\alpha]_D^{26}$ +61.2° (c, 1 in $CHCl_3$).

N,O,O-*Tri-Ac:* Mp 154-159° dec. $[\alpha]_D^{25}$ +12.6° ($CHCl_3$).

20′-Deoxy: ***20′-Deoxyleurosidine***

$C_{46}H_{58}N_4O_8$ M 794.986

Alkaloid from the aerial parts of *C. ovalis* (Apocynaceae).

20′-Deoxy, 20′-epimer, hydroxy: [87571-01-5]. ***Roseamine***

$C_{46}H_{58}N_4O_9$ M 810.986

Alkaloid from *Catharanthus roseus* (Apocynaceae). Shows anticancer props. Struct. not fully elucidated.

14′,20′-Diepimer: see *Vinblastine, V-00279*

Svoboda, G.H. *et al*, *J. Nat. Prod.* (*Lloydia*), 1961, **24**, 213 (*isol, uv, ir*)

Svoboda, G.H. *et al*, *J. Pharm. Sci.*, 1961, **50**, 409 (*Isoleurosine*)

Neuss, N. *et al*, *Tetrahedron Lett.*, 1967, 811; 1968, 783 (*struct, Isoleurosine*)

Wenkert, E. *et al*, *Helv. Chim. Acta*, 1975, **58**, 1560 (*cmr, struct*)

Taylor, W.I. *et al*, *The Catharanthus Alkaloids*, Marcel Dekker, 1975 (*rev*)

Langlois, N. *et al*, *Tetrahedron Lett.*, 1976, 1099 (*synth, ms, pmr*)

Langlois, N. *et al*, *Helv. Chim. Acta*, 1980, **63**, 793 (*20′-Deoxyleurosidine*)

Mukhopadhyay, S. *et al*, *J. Nat. Prod.* (*Lloydia*), 1981, **44**, 611 (*oxide*)

El-Sayed, A. *et al*, *J. Nat. Prod.* (*Lloydia*), 1983, **46**, 517 (*Roseamine*)

Kutney, J.P. *et al*, *Heterocycles*, 1988, **27**, 1845 (*synth*)

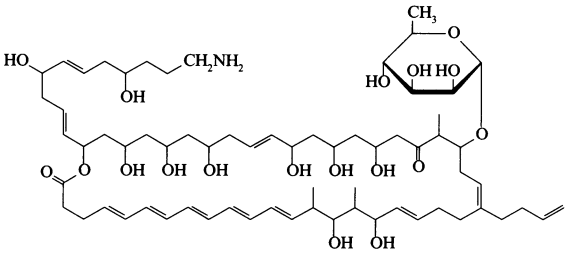
Kuehne, M.E. *et al*, *J. Org. Chem.*, 1989, **54**, 3407 (*synth, uv, ir, pmr, cmr, ms, 20′-Deoxyleurosidine, 20′-Deoxyvinblastine*)

Lienomycin L-10050

Updated Entry replacing L-00545

Antibiotic 2995

[12710-02-0]



$C_{67}H_{107}NO_{18}$ M 1214.578

Polyene-type antibiotic. From *Actinomyces diastatochromogenes* var. *lienomycini* and *A. vendargensis*. Antifungal agent with antitumour activity. Amorph. powder. $[\alpha]_D^{17}$ −27.3° (c, 1 in MeOH). Indefinite Mp.

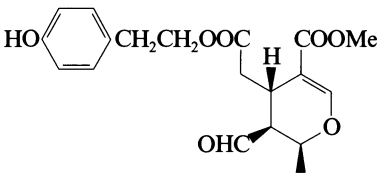
Gauze, C.F. *et al*, *Antibiotiki* (*Moscow*), 1971, **16**, 387 (*isol*)

Brazhnikova, M.G. *et al*, *Antibiotiki* (*Moscow*), 1971, **16**, 483.

Pawlak, J. *et al*, *J. Org. Chem.*, 1987, **70**, 2896 (*pms, ms, struct*)

Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th Ed., Van Nostrand-Reinhold, 1992, LFP000.

Ligstral L-10051



$C_{19}H_{22}O_7$ M 362.379

Constit. of *Fraxinus angustifolia*. Viscous liq.

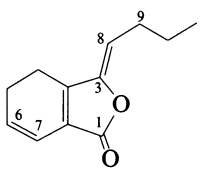
Çaliş, .I. *et al*, *Phytochemistry*, 1993, **33**, 1453 (*isol, pmr, cmr*)

Ligustilide L-10052

Updated Entry replacing L-00557

3-Butylidene-4,5-dihydro-1(3H)-isobenzofuranone, 9CI. 3-Butylidene-4,5-dihydrophthalide, 8CI

[4431-01-0]



$C_{12}H_{14}O_2$ M 190.241

Constit. of *Ligusticum* and *Angelica* spp. and other Umbelliferae (highest content found in *Cnidium officinale*). Oil. Bp_6 168-169°.

9-Hydroxy: [94530-84-4]. ***Senkyunolide F***

$C_{12}H_{14}O_3$ M 206.241

Constit. of *C. officinale*.

6,7-Dihydro, cis-*6,7-Dihydroxy:* [94596-27-7]. ***Senkyunolide H***

$C_{12}H_{16}O_4$ M 224.256

Constit. of *C. officinale* and *L. wallichii.*

6,7-Dihydro, trans-*6,7-dihydroxy:*
$C_{12}H_{16}O_4$ M 224.256
From *L. wallichii.* Light yellow oil.

6,7-Epoxide: ***(Z)-6,7-Epoxyligustilide***
$C_{12}H_{14}O_3$ M 206.241
From *L. wallichii.* Oil.

4,5-Didehydro, 7-hydroxy: ***3-Butylidene-7-hydroxyphalide***
$C_{12}H_{12}O_3$ M 204.225
Isol. from *L. wallichii.* Amorph. powder.

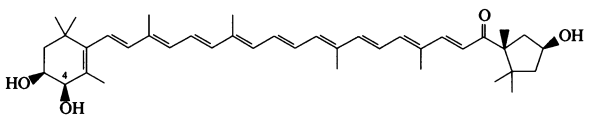
3,8-Dihydro: see *Senkyunolide A, S-00565*

9-Angeloyloxy: [112899-64-6]. ***Angeloylsenkyunolide F***
$C_{17}H_{20}O_4$ M 288.343
Constit. of *Angelica acutiloba.* Oil. $[\alpha]_D$ +26° (c, 0.7 in $CHCl_3$).

Stahl, E. *et al, Naturwissenschaften,* 1967, **54**, 118 (*isol*)
Mitsuhashi, H., *CA,* 1969, **71**, 88456 (*isol*)
Nikonov, G.K. *et al, Khim. Prir. Soedin.,* 1971, **7**, 387; *Chem. Nat. Compd.* (*Engl. Transl.*), 373 (*isol*)
Yamagishi, T. *et al, CA,* 1975, **83**, 84751; 1976, **84**, 132662 (*isol*)
Yamagishi, T. *et al, Yakugaku Zasshi,* 1977, **97**, 237 (*isol*)
Pushan, W. *et al, Phytochemistry,* 1984, **23**, 2033 (*derivs*)
Kobayashi, M. *et al, Chem. Pharm. Bull.,* 1985, **32**, 3770.
Kaouadjii, M. *et al, J. Nat. Prod.* (*Lloydia*), 1986, **49**, 872 (*deriv*)
Tsuchida, T. *et al, Chem. Pharm. Bull.,* 1987, **35**, 4460 (*Angeloylsenkyunolide F*)

Lilixanthin L-10053

Updated Entry replacing L-00570
3,3′,4-Trihydroxy-β,κ-caroten-6′-one
[99664-47-8]



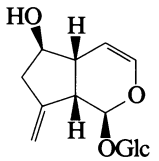
$C_{40}H_{56}O_4$ M 600.880
Constit. of *Lilium tigrinum.* λ_{max} 283, 468 nm.

4-Ketone: [50439-72-0]. *3,3′-Dihydroxy-β,κ-carotene-4,6′-dione.* ***4-Ketocapsanthin***
$C_{40}H_{54}O_4$ M 598.864
Isol. from pollen of *Aesculus rubicunda.* λ_{max} 447 nm (C_6H_6). Stereochem. not defined.

de la Mar, R.R. *et al, J. Food Sci.,* 1969, **34**, 287 (*4-Ketocapsanthin*)
Neamtu, G. *et al, Stud. Cercet. Biochim.,* 1973, **16**, 35 (*4-Ketocapsanthin*)
Maerki Fischer, E. *et al, Helv. Chim. Acta,* 1985, **68**, 1708 (*occur, pmr, uv, ms*)

Linarioloside L-10054

[150395-84-9]

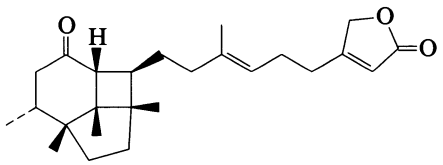


$C_{15}H_{22}O_8$ M 330.334
Constit. of *Linaria japonica.* Amorph. powder. $[\alpha]_D$ −123° (c, 0.86 in MeOH).

Otsuka, H., *Phytochemistry,* 1993, **33**, 617 (*isol, pmr, cmr*)

Lintenone L-10055

[145176-85-8]

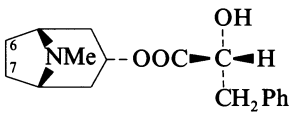


$C_{25}H_{36}O_3$ M 384.558
Constit. of *Cacospongia* cf. *linteiformis.* Oil. $[\alpha]_D^{25}$ −75.5° (c, 0.004 in $CHCl_3$).

Fattorusso, E. *et al, J. Org. Chem.,* 1992, **57**, 6921 (*isol, pmr, cmr*)

Littorine L-10056

Updated Entry replacing L-00660
α-Hydroxybenzenepropanoic acid 8-methyl-8-azabicyclo[3.2.1]oct-3-yl ester, 9CI. 3α-(2-Hydroxy-3-phenylpropionyloxy)tropane. Tropan-3α-yl phenyllactate



$C_{17}H_{23}NO_3$ M 289.374

(R)-form [21956-47-8]
Alkaloid from *Athrocercis littorea* and *Datura sanguinea* (Solanaceae). Mp 96-97°. $[\alpha]_D^{26}$ −12.7° (c, 4.42 in EtOH).
Picrate: Cryst. (EtOH). Mp 162-163°.
B,MeI: Mp 167-168°.

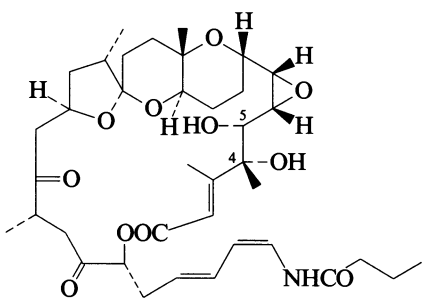
6,7-Epoxide: ***6,7-Epoxylittorine***
$C_{17}H_{21}NO_4$ M 303.357
Alkaloid from leaves of a *D. candida* cultivar (Solanaceae). Waxy semicryst. Tentative struct.

(±)-form
Synthetic. Powerful mydriatic agent. Cryst. (also descr. as an oil). Mp 89-90°.
B,HCl: Mp 173-175°.
Picrate: Short yellow needles. Mp 159-160°.
[62083-53-8]

Jowett, H.A.D. *et al, J. Chem. Soc.,* 1909, **95**, 1020 (*synth*)
Cannon, J.R. *et al, Aust. J. Chem.,* 1969, **22**, 221 (*isol, struct, uv, ir*)
Takeuchi, Y. *et al, Chem. Pharm. Bull.,* 1971, **19**, 2603 (*synth, ir, pmr*)
Griffin, W.J. *et al, Phytochemistry,* 1992, **31**, 367 (*6,7-Epoxylittorine*)

Lituarine C L-10057

[143621-77-6]



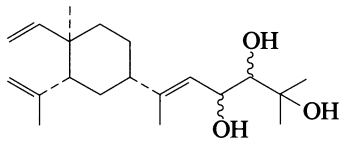
$C_{38}H_{55}NO_{11}$ M 701.853
Isol. from the sea pen *Lituaria australasiae.* Shows antifungal, cytotoxic and antineoplastic activities. Cryst. Mp 153-157°.

5-Ac: [143621-76-5]. ***Lituarine B***
$C_{40}H_{57}NO_{12}$ M 743.890
From *L. australasiae*. Cryst. Mp 126-129°.
4,5-Dideoxy: [143621-75-4]. ***Lituarine A***
$C_{38}H_{55}NO_9$ M 669.854
From *L. australasiae*. Cryst. Mp 83-85°.

Vidal, J.-P. *et al, J. Org. Chem.*, 1992, **57**, 5857 (*isol, pmr, cmr, struct*)

8,10,13(15)-Lobatriene-16,17,18-triol L-10058

[150312-95-1]



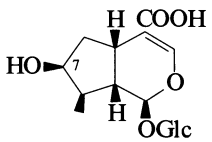
$C_{20}H_{34}O_3$ M 322.487
Constit. of a *Lobophytum* sp. Cryst. Mp 73-75°. $[\alpha]_D$ −14.1° (c, 1 in $CHCl_3$).

Raju, B.L. *et al, J. Nat. Prod.* (*Lloydia*), 1993, **56**, 961 (*isol, pmr, cmr*)

Loganic acid L-10059

Updated Entry replacing L-00690

[22255-40-9]



$C_{16}H_{24}O_{10}$ M 376.360
Constit. of *Swertia caroliniensis*.

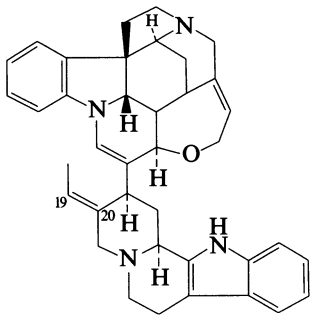
Me ester: [18524-94-2]. ***Loganin.*** *Meliatin*
$C_{17}H_{26}O_{10}$ M 390.386
Constit. of, *inter alia*, *Strychnos nux-vomica* and *Menyanthes trifoliata*. Key intermed. in biosynth. of many alkaloids. Cryst. (EtOH). Mp 223°. $[\alpha]_D$ −83° (H_2O).
Penta-Ac: Cryst. Mp 168°.
7-Ketone, Me ester: [152-91-0]. ***Dehydrologanin.*** *Ketologanin*
$C_{17}H_{24}O_{10}$ M 388.371
From *Vinca rosea* and *S. nux-vomica*. Cryst. Mp 194-195°. $[\alpha]_D^{21}$ −110° (H_2O).
Me ester, aglycone: [29748-10-5]. ***Loganetin***
$C_{11}H_{16}O_5$ M 228.244
Constit. of *Alibertia macrophylla*. Amorph. $[\alpha]_D^{20}$ −24° (EtOH).
Me ester, 7-deoxy: [26660-57-1]. ***7-Deoxyloganin***
$C_{17}H_{26}O_9$ M 374.387
Constit. of *S. nux-vomica*. *In vivo* precursor of Loganin. Cryst. (as tetra-Ac). Mp 115-116° (tetra-Ac).
7-O-(4-O-β-D-Glucopyranosyloxy-3-methoxycinnamoyl): [96681-56-0]. ***Periclymenosidic acid***
$C_{32}H_{42}O_{18}$ M 714.673
Consit. of *Lonicera coerulea*. Amorph. powder. $[\alpha]_D^{20}$ −54.7° (c, 0.56 in MeOH).
7-O-(4-O-β-D-Glucopyranosyloxy-3-methoxycinnamoyl), Me ester: [89332-48-9]. ***Periclymenoside***
$C_{33}H_{44}O_{18}$ M 728.700
Constit. of *L. periclymenum*. Amorph. powder. $[\alpha]_D^{20}$ −54.2° (c, 0.7 in MeOH).
7-O-[6-O-(2,3-Dihydroxybenzoyl)-β-D-glucopyranoside], 2,3-dihydroxyphenyl ester: [96935-16-9]. ***Depressoside***
$C_{35}H_{42}O_{20}$ M 782.705
Constit. of *Gentiana depressa*. Noncryst. $[\alpha]_D$ −31° (c, 0.175 in MeOH).
7-Epimer, 7-O-(3-hydroxybenzoyl): [96087-14-8]. ***Swertiaside A.*** *Swertiaside*
$C_{23}H_{28}O_{12}$ M 496.467
Constit. of *Swertia japonica*. Amorph. $[\alpha]_D^{23}$ −109.1° (c, 3.17 in MeOH).
7-Ketone, 3-(4-hydroxyphenyl)propanoyl ester: [29118-80-7]. ***Syringopicroside***
Constit. of leaves of *Syringa vulgaris*. Amorph., plates (EtOH)(as penta-Ac). Mp 156-156.5° (penta-Ac). $[\alpha]_D^{20.5}$ −116.5° (c, 1 in $CHCl_3$) (as penta-Ac).
7-Epimer, 7-O-3-[(3-hydroxybenzoyl)oxy]benzoyl: [109770-92-5]. ***Senburiside II***
$C_{30}H_{32}O_{14}$ M 616.574
Constit. of *Swertia japonica*. $[\alpha]_D^{22}$ −88.6° (c, 0.79 in MeOH).
7-O-(3,4-Dihydroxyphenyl-2-propenoyl)(E-), *Me ester:* [139051-14-2]. ***7-Caffeoylloganin***
$C_{26}H_{32}O_{13}$ M 552.531
Constit. of *Cassinopsis madagascariensis*. Cryst. (EtOAc). Mp 123-125°. $[\alpha]_D^{20}$ −29.3° (c, 0.1 in MeOH).
7-O-Benzoyl: 7-O-Benzoylloganic acid
$C_{23}H_{28}O_{11}$ M 480.468
Constit. of *Alangium platanifolium* var. *trilobum*. Powder. $[\alpha]_D^{30}$ −38° (c, 0.8 in MeOH).
8-Epimer, 7-(4-hydroxybenzoyl): ***7-p-Hydroxybenzoyl-8-epiloganic acid***
$C_{23}H_{28}O_{12}$ M 496.467
Constit. of *Veronica anagallis-aquatica*. Amorph. powder.

Birch, A.J. *et al, J. Chem. Soc.*, 1961, 1407 (*struct*)
Bentley, T.W. *et al, J. Chem. Soc. C*, 1967, 2234 (*ms*)
Asaka, Y. *et al, Tetrahedron*, 1970, **26**, 2365 (*Syringopicroside*)
Battersby, A.R., *Alkaloids* (*London*), 1971, **1**, 31 (*biosynth*)
Bhakuni, D.S. *et al, Indian J. Chem.*, 1972, **10**, 454 (*isol*)
Partridge, J.J. *et al, J. Am. Chem. Soc.*, 1973, **95**, 532 (*synth*)
Büchi, G. *et al, J. Am. Chem. Soc.*, 1973, **95**, 540 (*synth*)
Bisset, N.G. *et al, Phytochemistry*, 1974, **13**, 265 (*isol*)
Heckendorf, A.H. *et al, J. Org. Chem.*, 1976, **41**, 2045 (*cmr*)
Au-Yeung, B.-W. *et al, J. Chem. Soc., Chem. Commun.*, 1977, 81 (*synth*)
Kon, K. *et al, Helv. Chim. Acta*, 1983, **66**, 755 (*synth*)
Calis, I. *et al, Helv. Chim. Acta*, 1984, **67**, 160 (*Periclymenoside*)
Ikeshiro, Y. *et al, Planta Med.*, 1984, **50**, 485; 1987, 158 (*Swertiaside A, Senburiside II*)
Hewson, A.T. *et al, J. Chem. Soc., Perkin Trans. 1*, 1985, 2625 (*synth*)
Chulia, A.J. *et al, J. Nat. Prod.* (*Lloydia*), 1985, **48**, 54 (*Depressoside*)
Calis, I. *et al, J. Nat. Prod.* (*Lloydia*), 1985, **48**, 108 (*Periclymenosidic acid*)
Vandewalle, M. *et al, Tetrahedron*, 1986, **42**, 4035 (*synth*)
Rasoanaivo, P. *et al, Planta Med.*, 1991, **57**, 486 (*7-Caffeoylloganin*)
Young, M.C.M. *et al, Phytochemistry*, 1992, **31**, 3433 (*Loganetin*)
Garlaschelli, L. *et al, Tetrahedron*, 1992, **48**, 9495 (*synth*)
Hsu, L.-F. *et al, J. Org. Chem.*, 1993, **58**, 4756 (*synth*)
Itoh, A. *et al, Phytochemistry*, 1993, **33**, 161 (*7-Benzoylloganic acid*)
Lahloub, M.-F. *et al, Phytochemistry*, 1993, **33**, 401 (*7-p-Hydroxybenzoyl-8-epiloganic acid*)

Longicaudatine L-10060

Updated Entry replacing L-00711

[85335-06-4]



$C_{38}H_{40}N_4O$ M 568.760

Alkaloid from *Strychnos longicaudata* and several other *S.* spp. (Strychnaceae). Mp 350° dec. $[\alpha]_D$ +141° (c, 0.5 in $CHCl_3$).

19,20β-Dihydro: ***Dihydrolongicaudatine***

$C_{38}H_{42}N_4O$ M 570.776

Alkaloid from root bark of *S. potatorum* (Strychnaceae). $[\alpha]_D$ +83° (c, 0.25 in MeOH).

Massiot, G. *et al*, *J. Org. Chem.*, 1983, **48**, 1869.

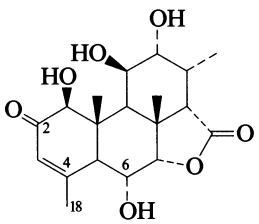
Massiot, G. *et al*, *Tetrahedron*, 1983, **39**, 3645 (*isol, uv, ir, pmr, cmr, ms, struct*)

Massiot, G. *et al*, *Phytochemistry*, 1992, **31**, 2873 (*Dihydrolongicaudatine*)

Longilactone L-10061

Updated Entry replacing L-00723

[129587-09-3]



$C_{19}H_{26}O_7$ M 366.410

Constit. of roots of *Eurycoma longifolia*. Cytotoxic. Cryst. Mp 130-132°. $[\alpha]_D$ +92.6° (c, 0.19 in MeOH).

2α-Alcohol, $\Delta^{4(18)}$-isomer:

$C_{19}H_{28}O_7$ M 368.426

Constit. of *E. longifolia*. Cryst. (EtOAc). Mp 145-147°. $[\alpha]_D$ +68.6° (c, 1.8 in MeOH).

6-Deoxy: ***Dehydroxylongilactone***

$C_{19}H_{26}O_6$ M 350.411

Constit. of *E. longifolia*. Needles. Mp 218.5-220°. $[\alpha]_D$ +26.5° (c, 0.07 in MeOH).

Morita, H. *et al*, *Chem. Lett.*, 1990, 749 (*isol, struct*)

Itakawa, H. *et al*, *Chem. Pharm. Bull.*, 1993, **41**, 403 (*deriv*)

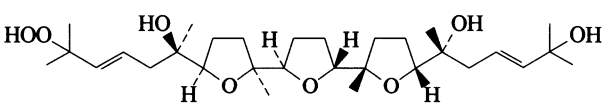
Morita, H. *et al*, *Phytochemistry*, 1993, **33**, 691 (*Dehydroxylongilactone*)

Longilene peroxide L-10062

Updated Entry replacing L-00724

Longilene epoxide

[139742-08-8]



$C_{30}H_{52}O_8$ M 540.736

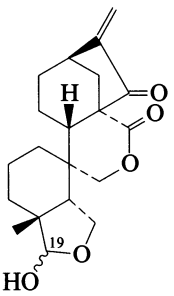
Constit. of *Eurycoma longifolia*. Needles. Mp 142-143°. $[\alpha]_D^{25}$ −23.0° (c, 0.44 in $CHCl_3$).

Itokawa, H. *et al*, *Chem. Lett.*, 1991, 2221 (*isol, pmr, cmr, cryst struct*)

Morita, H. *et al*, *Phytochemistry*, 1993, **34**, 765 (*isol, pmr, cmr, cryst struct*)

Longirabdacetal L-10063

[150527-33-6]



$C_{20}H_{26}O_5$ M 346.422

Constit. of *Rabdosia longituba*. Cryst. (MeOH). Mp 202-208°. $[\alpha]_D^{22.5}$ −160.6° (c, 1.23 in MeOH).

19-Ketone (lactone): [150527-32-5]. ***Longirabdolactone***

$C_{20}H_{24}O_5$ M 344.407

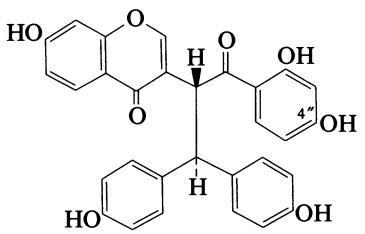
Constit. of *R. longituba*. Cryst. (EtOAc). Mp 244-246°. $[\alpha]_D^{22}$ −121.6° (c, 0.51 in MeOH).

Takeda, Y. *et al*, *Phytochemistry*, 1993, **33**, 643 (*isol, pmr, cmr*)

Lophirone A L-10064

Updated Entry replacing L-00742

[110383-39-6]



$C_{30}H_{22}O_8$ M 510.499

Constit. of *Lophira lanceolata*. Noncryst. solid. $[\alpha]_D^{23}$ +65° (c, 0.56 in MeOH).

4″-Me ether: [140670-88-8]. *4-O-Methyllophirone A.* ***Calodenone***

$C_{31}H_{24}O_8$ M 524.526

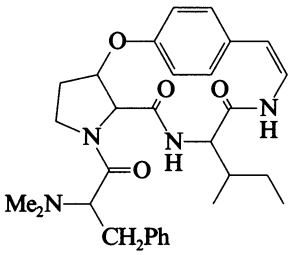
Isol. from the stem bark of *Ochna calodendron*. Brown solid.

Ghogomu, R. *et al*, *Tetrahedron Lett.*, 1987, **28**, 2967.

Messanga, B.B. *et al*, *J. Nat. Prod.* (*Lloydia*), 1992, **55**, 245 (*Calodenone*)

Lotusine A L-10065

[149377-30-0]



$C_{30}H_{38}N_4O_4$ M 518.655

Alkaloid from root bark of *Zizyphus lotus* (Rhamnaceae). $[\alpha]_D$ −215° (c, 1.0 in $CHCl_3$).

N-*De-Me:* [149355-66-8]. ***Lotusine D***

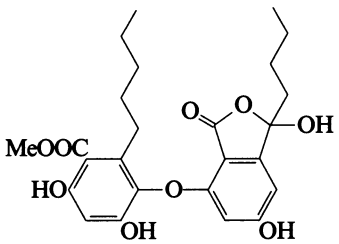
$C_{29}H_{36}N_4O_4$ M 504.628

Alkaloid from root bark of *Z. lotus* (Rhamnaceae). $[\alpha]_D$ −187° (c, 0.5 in $CHCl_3$).

Ghedira, K. *et al, Phytochemistry*, 1993, **32**, 1591 (*isol, uv, ir, pmr, cmr, ms, struct*)

Loxodinol L-10066

[73191-27-2]



$C_{25}H_{30}O_9$ M 474.507

Isol. from the lichen *Xanthoparmelia scabrosa*. Needles (Me_2CO aq.). Mp 235-237°.

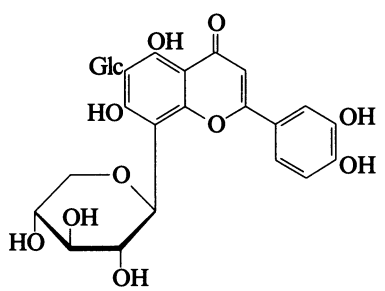
Foo, L.Y. *et al, Phytochemistry*, 1979, **18**, 1977.

Lucenin 3 L-10067

Updated Entry replacing L-00762

2-(3,4-Dihydroxyphenyl)-6-β-D-glucopyranosyl-5,7-dihydroxy-8-β-D-xylopyranosyl-4H-1-benzopyran-4-one, 9CI. 6-β-D-Glucopyranosyl-3′,4′,5,7-tetrahydroxy-8-β-D-xylopyranosylflavone. 6-Glucopyranosyl-8-xylopyranosylluteolin. 6-Glucosyl-8-xylosylluteolin

[12656-83-6]



$C_{26}H_{28}O_{15}$ M 580.498

Isol. from *Vitex lucens, Dactylis glomerata* and *Ephedra* spp.

3′-Me ether: [140366-46-7]. *6-Glucopyranosyl-8-xylopyranosylchrysoeriol*

$C_{27}H_{30}O_{15}$ M 594.525

Constit. of the stem bark of *Raputia paraensis*.

[35927-40-3]

Seikel, M.K. *et al, Phytochemistry*, 1966, **5**, 439 (*isol*)
Bouillant, M.L. *et al, C. R. Hebd. Seances Acad. Sci. Ser. C*, 1972, **274**, 193 (*synth*)
Wallace, J.W. *et al, Phytochemistry*, 1982, **21**, 482 (*isol*)
Jay, M. *et al, Biochem. Syst. Ecol.*, 1984, **12**, 193 (*isol*)
Nawwar, M.A.M. *et al, Phytochemistry*, 1984, **23**, 2937 (*isol*)
Bakhtiar, A. *et al, Phytochemistry*, 1991, **30**, 3840 (*3′-Me ether*)

Lucernic acid L-10068

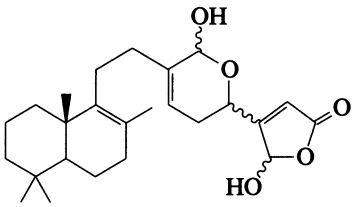
[56283-67-1]

Triterpene sapogenin of unknown struct. Constit. of *Medicago sativa*.

Berrang, B. *et al, Phytochemistry*, 1974, **13**, 2253 (*isol*)

Luffarin A L-10069

[145398-59-0]



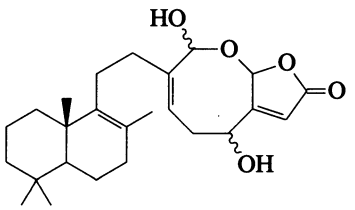
$C_{25}H_{36}O_5$ M 416.556

Constit. of *Luffariella geometrica*. Solid. $[\alpha]_D^{20}$ +101° (c, 1.7 in $CHCl_3$).

Butler, M.S. *et al, Aust. J. Chem.*, 1992, **45**, 1705 (*isol, pmr, cmr*)

Luffarin B L-10070

[145427-70-9]

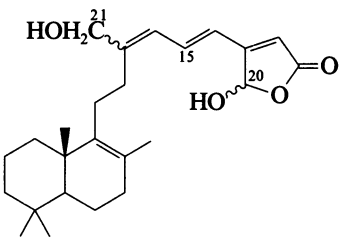


$C_{25}H_{36}O_5$ M 416.556

Constit. of *Luffariella geometrica*. Oil. $[\alpha]_D^{20}$ +85.7° (c, 0.16 in $CHCl_3$).

Butler, M.S. *et al, Aust. J. Chem.*, 1992, **45**, 1705 (*isol, pmr, cmr*)

Luffarin E L-10071



$C_{25}H_{36}O_4$ M 400.557

Constit. of *Luffariella geometrica*. Pale yellow oil. $[\alpha]_D^{20}$ +49.9° (c, 1.1 in $CHCl_3$).

21-Aldehyde: ***Luffarin C***

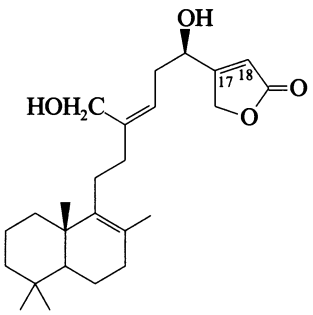
$C_{25}H_{34}O_4$ M 398.541

Constit. of *L. geometrica*. Yellow oil. $[\alpha]_D^{20}$ +47.1° (c, 1.3 in $CHCl_3$).

21-Aldehyde, di-Me acetal: [145398-60-3]. ***Luffarin D***
$C_{27}H_{40}O_5$ M 444.610
Constit. of *L. geometrica.* Yellow oil. $[\alpha]_D^{20}$ +26.4° (c, 0.3 in $CHCl_3$).
20-Deoxy: [145398-62-5]. ***Luffarin G***
$C_{25}H_{36}O_3$ M 384.558
Constit. of *L. geometrica.* Pale yellow oil. $[\alpha]_D^{20}$ +41.1° (c, 0.8 in $CHCl_3$).
15Z-Isomer: ***Luffarin F***
$C_{25}H_{36}O_4$ M 400.557
Constit. of *L. geometrica.* Pale yellow oil. $[\alpha]_D^{20}$ +43.4° (c, 0.7 in $CHCl_3$).
15Z-Isomer, 20-deoxy: [145512-19-2]. ***Luffarin H***
$C_{25}H_{36}O_3$ M 384.558
Constit. of *L. geometrica.* Pale yellow oil. $[\alpha]_D^{20}$ +48.2° (c, 0.4 in $CHCl_3$).
[145514-35-8]
Butler, M.S. *et al, Aust. J. Chem.*, 1992, **45**, 1705 (*isol, pmr, cmr*)

Luffarin I L-10072

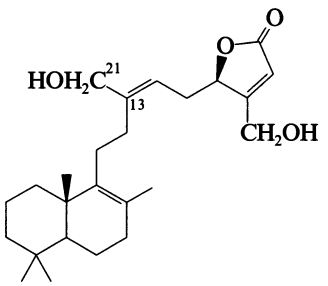
[145398-63-6]



$C_{25}H_{38}O_4$ M 402.573
Constit. of *Luffariella geometrica.* Oil. $[\alpha]_D^{20}$ +64.3° (c, 1.4 in $CHCl_3$).
17,18-Dihydro: [145398-64-7]. ***Luffarin J***
$C_{25}H_{40}O_4$ M 404.589
Constit. of *L. geometrica.* Oil. $[\alpha]_D^{20}$ +33.1° (c, 0.29 in $CHCl_3$).
Butler, M.S. *et al, Aust. J. Chem.*, 1992, **45**, 1705 (*isol, pmr, cmr*)

Luffarin K L-10073

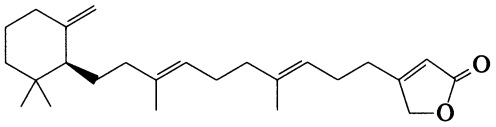
[145427-72-1]



$C_{25}H_{38}O_4$ M 402.573
Constit. of *Luffariella geometrica.* Oil. $[\alpha]_D$ +25.2° (c, 2.8 in $CHCl_3$).
21-Aldehyde: [145398-61-4]. ***Luffarin M***
$C_{25}H_{36}O_4$ M 400.557
Constit. of *L. geometrica.* Oil. $[\alpha]_D$ +23.0° (c, 1 in $CHCl_3$).
13Z-Isomer: [145514-36-9]. ***Luffarin L***
$C_{25}H_{38}O_4$ M 402.573
Constit. of *L. geometrica.* Oil. $[\alpha]_D$ +25.1° (c, 2.1 in $CHCl_3$).
[145514-35-8]
Butler, M.S. *et al, Aust. J. Chem.*, 1992, **45**, 1705 (*isol, pmr, cmr*)

Luffarin P L-10074

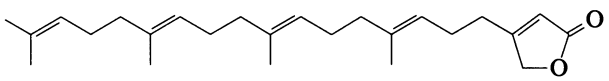
[145398-68-1]



$C_{25}H_{38}O_2$ M 370.574
Constit. of *Luffariella geometrica.* Oil. $[\alpha]_D^{20}$ +5° (c, 0.1 in $CHCl_3$).
Butler, M.S. *et al, Aust. J. Chem.*, 1992, **45**, 1705 (*isol, pmr, cmr*)

Luffarin Q L-10075

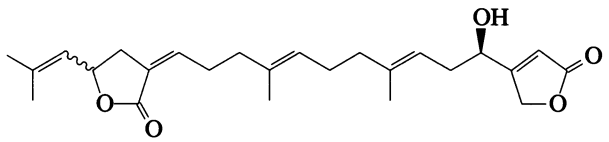
[145398-69-2]



$C_{25}H_{38}O_2$ M 370.574
Constit. of *Luffariella geometrica.* Oil.
Butler, M.S. *et al, Aust. J. Chem.*, 1992, **45**, 1705 (*isol, pmr, cmr*)

Luffarin R L-10076

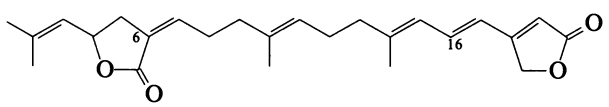
[145427-73-2]



$C_{25}H_{34}O_5$ M 414.541
Constit. of *Luffariella geometrica.* Pale yellow oil. $[\alpha]_D^{20}$ −13.7° (c, 4.41 in $CHCl_3$).
Ac: [145398-70-5]. ***Luffarin S***
$C_{27}H_{36}O_6$ M 456.578
Constit. of *L. geometrica.* Oil. $[\alpha]_D^{20}$ −12.5° (c, 0.9 in $CHCl_3$).
Butler, M.S. *et al, Aust. J. Chem.*, 1992, **45**, 1705 (*isol, pmr, cmr*)

Luffarin T L-10077

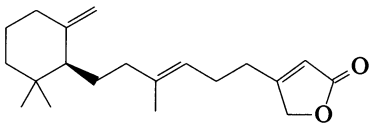
[145398-71-6]



$C_{25}H_{32}O_4$ M 396.525
Constit. of *Luffariella geometrica.* Yellow oil. $[\alpha]_D^{20}$ −30.3° (c, 1.7 in $CHCl_3$).
16Z-Isomer: [145512-20-5]. ***Luffarin U***
$C_{25}H_{32}O_4$ M 396.525
Constit. of *L. geometrica.* Yellow oil. $[\alpha]_D^{20}$ −28.0° (c, 0.3 in $CHCl_3$).
16,17-Dihydro, 6E-Isomer: [145398-72-7]. ***Luffarin V***
$C_{25}H_{34}O_4$ M 398.541
Constit. of *L. geometrica.* Oil. $[\alpha]_D^{20}$ −30° (c, 0.1 in $CHCl_3$).
Butler, M.S. *et al, Aust. J. Chem.*, 1992, **45**, 1705 (*isol, pmr, cmr*)

Luffarin W L-10078

[145398-73-8]

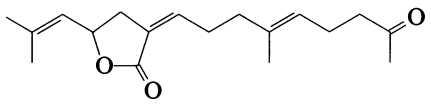


$C_{20}H_{30}O_2$ M 302.456
Constit. of *Luffariella geometrica*. Oil. $[\alpha]_D^{20}$ +13.2° (c, 0.7 in $CHCl_3$).

Butler, M.S. *et al*, *Aust. J. Chem.*, 1992, **45**, 1705 (*isol, pmr, cmr*)

Luffarin Z L-10079

[145398-76-1]

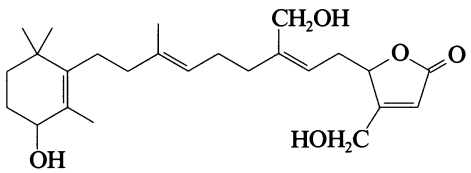


$C_{18}H_{26}O_3$ M 290.402
Constit. of *Luffariella geometrica*. Oil. $[\alpha]_D^{20}$ −30° (c, 0.05 in $CHCl_3$).

Butler, M.S. *et al*, *Aust. J. Chem.*, 1992, **45**, 1705 (*isol, pmr, cmr*)

Luffariolide F L-10080

[147663-78-3]

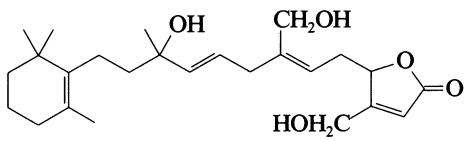


$C_{25}H_{38}O_5$ M 418.572
Constit. of a *Luffariella* sp. Oil. $[\alpha]_D^{19}$ −5.9° (c, 0.67 in MeOH).

Kobayashi, J. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 436 (*isol, pmr, cmr*)

Luffariolide G L-10081

[147663-79-4]

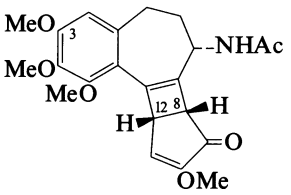


$C_{25}H_{38}O_5$ M 418.572
Constit. of a *Luffariella* sp. Oil. $[\alpha]_D^{24}$ −9.5° (c, 0.2 in MeOH).

Kobayashi, J. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 436 (*isol, pmr, cmr*)

β-Lumicolchicine L-10082

Updated Entry replacing L-00796
Lumicolchicine I. Substance I
[6901-13-9]



$C_{22}H_{25}NO_6$ M 399.443
Alkaloid from many *Colchicum* spp. (Liliaceae) and other spp. as photoisom. prod. of Colchicine, C-01632. May be a genuine alkaloid. Cryst. (EtOH/Et_2O). Mp 183°, Mp 206° (dimorph.).

N-*De-Ac*, N-*formyl:* [18172-23-1]. **N-*Deacetyl*-N-*formyl*-β-*lumicolchicine*, 8CI**
$C_{21}H_{23}NO_6$ M 385.416
Alkaloid from tubers of *Gloriosa superba* (Liliaceae). Mp 214-215°. $[\alpha]_D^{20}$ +340° (c, 1 in $CHCl_3$).

8,12-Diepimer: [6901-14-0]. ***γ*-Lumicolchicine.** *Lumicolchicine. Lumicolchicine II. Substance J*
$C_{22}H_{25}NO_6$ M 399.443
Alkaloid from *C.* spp., *Merendera* spp. and others, as artifact of illumination of Colchicine, C-01632 and poss. as genuine alkaloid (Liliaceae). Cryst. (EtOAc/Et_2O, dioxan or anisole). Mp 268°. $[\alpha]_D^{18}$ −445° (c, 1 in $CHCl_3$).

5,12-Diepimer, N-*de-Ac*, N-*formyl:* [18172-22-0]. **N-*Deacetyl*-N-*formyl*-γ-lumicolchicine**
$C_{21}H_{23}NO_6$ M 385.416
Alkaloid from tubers of *G. superba* (Liliaceae). Cryst. ($CHCl_3$/MeOH). Mp 255-257°. $[\alpha]_D^{20}$ −451° (c, 1 in $CHCl_3$).

3-O-*De-Me*, N-*de-Ac*, N-*formyl:* [18172-25-3]. **N-*Deacetyl*-N-*formyl*-3-O-*demethyl*-β-*lumicolchicine***
$C_{20}H_{21}NO_6$ M 371.389
Alkaloid from *C. decaisnei* and *Gloriosa superba* (Liliaceae). Cryst. (MeOH/EtOAc). Mp 229-230°. $[\alpha]_D$ +240° (c, 0.12 in MeOH).

O^2-*De-Me:* [18172-24-2]. ***2*-O-*Demethyl*-β-*lumicolchicine***
$C_{21}H_{23}NO_6$ M 385.416
Alkaloid from *C. autumnale*, *Gloriosa superba* and *Wurmbea* spp.

O^3-*De-Me:* [30632-52-1]. ***3*-O-*Demethyl*-β-*lumicolchicine***
$C_{21}H_{23}NO_6$ M 385.416
Alkaloid from *C.* spp., *G. superba* and *M. raddeana*. Mp 235°. $[\alpha]_D^{22}$ +316° ($CHCl_3$).

5,9-Diepimer, O^2-*De-Me:* [26194-64-9]. ***2*-O-*Demethyl*-γ-*lumicolchicine*. *Alkaloid K13***
$C_{21}H_{23}NO_6$ M 385.416
Alkaloid from *C. autumnale*, *G. superba* and *M. raddeana*. Mp 287-288°. $[\alpha]_D$ −420° (c, 0.40 in $CHCl_3$).

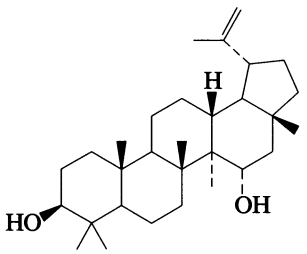
5,9-Diepimer, O^3-*de-Me:* [28101-27-1]. ***3*-O-*Demethyl*-γ-*lumicolchicine*. *Alkaloid L6***
$C_{21}H_{23}NO_6$ M 385.416
Alkaloid from *C. luteum* (Liliaceae). Mp 291-293°. $[\alpha]_D^{22}$ −410° ($CHCl_3$).

5,9-Diepimer, N-*Me*, O^3-*de-Me*, O^3-β-D-*glucopyranoside:* [29623-34-5]. **Colchicum autumnale *Alkaloid M***
$C_{28}H_{35}NO_{11}$ M 561.585
Alkaloid from *C. autumnale* (Liliaceae). Mp 310-314°. $[\alpha]_D^{22}$ −310° (c, 0.89 in MeOH aq.).

Grewe, R. *et al*, *Chem. Ber.*, 1951, **84**, 621 (*synth, uv*)
Gardner, P.D. *et al*, *J. Am. Chem. Soc.*, 1957, **79**, 6334 (*struct*)

Chapman, O.L. *et al*, *J. Am. Chem. Soc.*, 1963, **85**, 803, 807 (*struct, pmr*)
Canonica, L. *et al*, *Chim. Ind.* (*Milan*), 1967, **49**, 1304; *CA*, **68**, 87424s (*N-Deacetyl-N-formyllumicolchicines*)
Potesilova, H. *et al*, *Collect. Czech. Chem. Commun.*, 1969, **34**, 2128, 3642 (*isol, derivs*)
Severini Ricca, G. *et al*, *Gazz. Chim. Ital.*, 1969, **99**, 133 (*pmr*)
Canonica, L. *et al*, *Tetrahedron Lett.*, 1969, 607 (*struct*)
Santavy, F., *Collect. Czech. Chem. Commun.*, 1970, **35**, 2857 (*Alkaloid M*)
Chommadov, B. *et al*, *Khim. Prir. Soedin.*, 1970, **6**, 275; *Chem. Nat. Compd.* (*Engl. Transl.*), 274 (*3-O-Demethyl-γ-lumicolchicine*)
Turdikulov, K. *et al*, *Khim. Prir. Soedin.*, 1972, **8**, 502; *Chem. Nat. Compd.* (*Engl. Transl.*), 494 (*2-O-Demethyl-γ-lumicolchicine*)
Hrbek, J. *et al*, *Collect. Czech. Chem. Commun.*, 1982, **47**, 2258 (*cd*)
Al-Tel, T.H. *et al*, *Phytochemistry*, 1991, **30**, 3081 (*deriv*)

20(29)-Lupene-3,15-diol L-10083



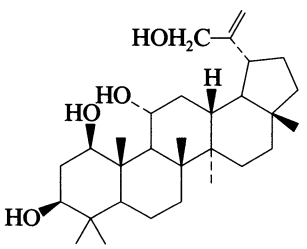
$C_{30}H_{50}O_2$ M 442.724

(3β,15α)-form [147659-01-6]
Constit. of *Phyllanthus flexuosus*. Needles ($MeOH/CHCl_3$). Mp 204.5-207°. $[\alpha]_D^{23}$ +30° (c, 0.34 in $CHCl_3$).

Tanaka, R. *et al*, *Phytochemistry*, 1993, **32**, 472 (*isol, pmr, cmr*)

20(30)-Lupene-1,3,11,29-tetrol L-10084

Updated Entry replacing L-00839
20(29)-Lupene-1,3,11,30-tetrol (*incorr.*)



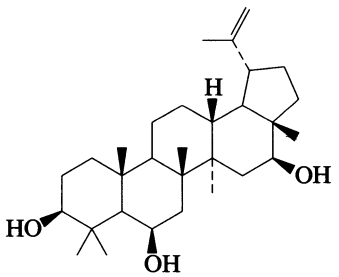
$C_{30}H_{50}O_4$ M 474.723

(1β,3β,11α)-form [104139-53-9] ***Nepedinol***
Constit. of *Nepeta hindostana*. Cryst. (MeOH). Mp 282° dec. $[\alpha]_D$ −18.67° (c, 0.75 in Py).

29-Aldehyde: 1,3,11-Trihydroxy-20(30)-lupen-29-al. ***Nepehinal***
$C_{30}H_{48}O_4$ M 472.707
Constit. of *N. hindostana*. Needles. Mp 212° dec. $[\alpha]_D^{24}$ +28° (c, 0.5 in Py).

Ahmad, V.U. *et al*, *J. Nat. Prod.* (*Lloydia*), 1986, **49**, 524 (*isol*)
Ahmad, V.U. *et al*, *Planta Med.*, 1993, **59**, 366 (*Nepehinal*)

20(29)-Lupene-3,6,16-triol L-10085



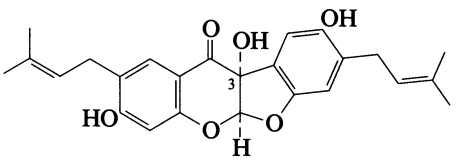
$C_{30}H_{50}O_3$ M 458.723

(3β,6β,16β)-form [147167-61-1]
Constit. of *Combretum leprosum*. Cryst. (Et_2O). Mp 270-272°.

Facundo, V.A. *et al*, *Phytochemistry*, 1993, **32**, 411 (*isol, pmr, cmr*)

Lupinol A L-10086

[135905-50-9]



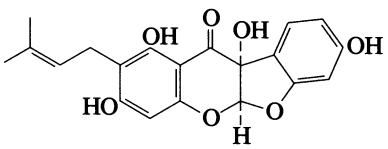
$C_{25}H_{26}O_6$ M 422.477
Constit. of the roots of *Lupinus albus*. Pale yellow gum.

3-Me ether: [135938-72-6]. ***Lupinol B***
$C_{26}H_{28}O_6$ M 436.504
Constit. of the roots of *L. albus*. Pale yellow gum.

Tahara, S. *et al*, *Z. Naturforsch., C*, 1991, **46**, 331 (*isol, pmr, cmr*)

Lupinol C L-10087

[135905-53-2]



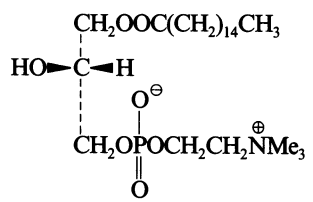
$C_{20}H_{18}O_7$ M 370.358
Constit. of the leaves of *Lupinus luteus*. Pale yellow gum.

Tahara, S. *et al*, *Z. Naturforsch., C*, 1991, **46**, 331 (*isol*)

α-Lysolecithin L-10088

4,7-Dihydroxy-N,N,N-*trimethyl-10-oxo-3,5,9-trioxa-4-phosphapentacosan-1-aminium hydroxide, inner salt, 4-oxide, 9CI. Choline hydroxide dihydrogen phosphate inner salt 3-ester with 1-monopalmitin, 8CI. 1-Palmitoylglycero-3-phosphocholine. Choline phosphate 3-ester with 1-monopalmitin*

[14863-27-5]



$C_{24}H_{50}NO_7P$ M 495.635

(R)-form [17364-16-8]
L-form

Constit. of biomembranes. $[\alpha]_{546}^{22}$ −4.3° (c, 3.5 in $CHCl_3$/MeOH).

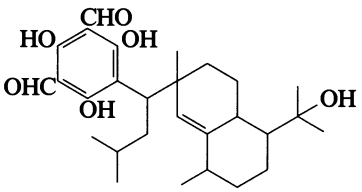
[17364-17-9, 17364-18-0]

Arnold, D. *et al*, *Justus Liebigs Ann. Chem.*, 1967, **709**, 234 (*synth*)
Eibl, H. *et al*, *Justus Liebigs Ann. Chem.*, 1970, **738**, 161 (*synth*)
Dorset, D.L., *Biochim. Biophys. Acta*, 1975, **380**, 257 (*cryst struct*)
Spiker, R.C. *et al*, *Biochim. Biophys. Acta*, 1975, **388**, 361 (*raman*)
Yabusaki, K.K. *et al*, *Chem. Phys. Lipids*, 1976, **17**, 120 (*synth*)
Smith, N.B. *et al*, *Can. J. Biochem.*, 1978, **56**, 1149 (*synth, pmr*)
Tokumura, A. *et al*, *Chem. Pharm. Bull.*, 1983, **31**, 4425 (*ms*)

M

Macrocarpal D M-10001

[142628-54-4]



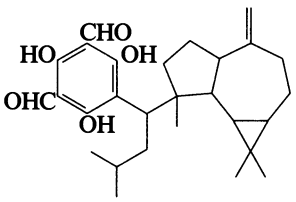
$C_{28}H_{40}O_6$ M 472.620

Constit. of *Eucalyptus macrocarpa*. Powder. Mp 132-134°. $[\alpha]_D$ −20.0° (c, 0.1 in MeOH).

Yamakoshi, Y. *et al*, *Biosci., Biotechnol., Biochem.*, 1992, **56**, 1570 (*isol, pmr, cmr*)

Macrocarpal G M-10002

[145416-92-8]



$C_{28}H_{38}O_5$ M 454.605

Constit. of *Eucalyptus macrocarpa*. Powder. Mp 84°. $[\alpha]_D$ −27.1° (c, 0.59 in MeOH).

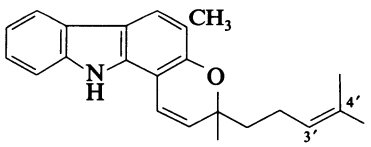
[142628-53-3]

Yamakoshi, Y. *et al*, *Biosci., Biotechnol., Biochem.*, 1992, **56**, 1570 (*isol, pmr, cmr*)

Mahanimbine M-10003

Updated Entry replacing M-00109

3,11-Dihydro-3,5-dimethyl-3-(4-methyl-3-pentenyl) pyrano[3,2-a]carbazole, 9CI



$C_{23}H_{25}NO$ M 331.457

(+)-***form*** [21104-28-9]

Alkaloid from the fruits and leaves of *Murraya koenigii* and the stem bark of *M. exotica* (Rutaceae). Cryst. (hexane). Mp 94-95°. $[\alpha]_D$ +40.6° (c, 2.1 in $CHCl_3$), $[\alpha]_D$ +52° ($CHCl_3$).

Dihydro: Mp 101°.

Tetrahydro: Cryst. (pentane). Mp 110°.

N-*Me:* Needles (EtOH). Mp 120°.

N-*Et:* Cryst. (EtOH). Mp 96°.

3',4'-Dihydro, 4'-hydroxy: [30048-24-9]. ***Mahanimbicine***

$C_{23}H_{27}NO_2$ M 349.472

Alkaloid from leaves of *M. koenigii* (Rutaceae). Mp 179°.

$\Delta^{4'}$-Isomer, 3'-hydroxy: [73385-58-7]. ***Murrayamine C*†.** *Mahanimboline*

$C_{23}H_{25}NO_2$ M 347.456

Alkaloid from root bark of *M. koenigii* (Rutaceae). Mp 170-172°. Doubtful structural assignmentfor Mahanimboline. The pmr data of the compd. isol. by Roy *et al* (1979) are different from those reported for Murrayamine C (see Mahanimbicine, M-00108), which has now been assigned this struct.

(±)-***form*** [24948-14-9]

Alkaloid from the stem bark of *M. koenigii* (Rutaceae). Cryst. (hexane). Mp 72-73°, Mp 75-76°, Mp 94-95°. Also obt. by heating (+)-mahanimbine at 150° for 1 hr. in a sealed tube.

Narasimhan, N.S. *et al*, *Tetrahedron Lett.*, 1968, 5501 (*uv, pmr, ms, struct*)

Kureel, S.P. *et al*, *Experientia*, 1970, **26**, 1055 (*Mahanimbicine*)

Joshi, B.S. *et al*, *Tetrahedron*, 1970, **26**, 1475 (*isol, uv, ir, pmr, struct*)

Bandaranyake, W.M. *et al*, *J. Chem. Soc., Perkin Trans. 1*, 1974, 998 (*synth*)

Roy, S. *et al*, *Phytochemistry*, 1974, **13**, 2893 (*isol, uv, ir, pmr*)

Narasimhan, N.S. *et al*, *Indian J. Chem.*, 1975, **13**, 993.

Narasimhan, N.S. *et al*, *Indian J. Chem., Sect. B*, 1976, **14**, 329, 430 (*isol, uv, ir, pmr, ms, struct, synth*)

Bhattacharyya, P. *et al*, *J. Indian Chem. Soc.*, 1978, **55**, 308 (*isol, uv, ir*)

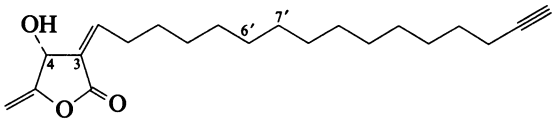
Roy, S. *et al*, *Chem. Ind. (London)*, 1979, 669 (*Mahanimboline*)

Ito, C. *et al*, *Phytochemistry*, 1992, **31**, 1083 (*Mahanimboline*)

Mahubynolide M-10004

3-(15-Hexadecynylidene)dihydro-4-hydroxy-5-methylene-2(3H)-furanone

[71339-48-5]



$C_{21}H_{32}O_3$ M 332.482

From *Clinostemon mahuba*. Oil. $[\alpha]_D^{24}$ +8.0°.

15',16'-Dihydro: [71339-46-3]. ***Mahubenolide***

$C_{21}H_{34}O_3$ M 334.498

From *C. mahuba*. Oil. $[\alpha]_D^{24}$ +6.2°.

15',15',16',16'-Tetrahydro: [71339-50-9]. ***Mahubanolide***

$C_{21}H_{36}O_3$ M 336.514

From *C. mahuba*.

3E-Isomer: [71339-49-6]. ***Isomahubynolide***

Isol. from the trunkwood of *C. mahuba*. Oil. $[\alpha]_D^{24}$ +23.1°.

3E-Isomer, 15',16'-dihydro: [71339-47-4]. ***Isomahubenolide***

$C_{21}H_{34}O_3$ M 334.498

From *C. mahuba*. Oil. $[\alpha]_D^{24}$ +22.0°.

3E-Isomer, 15',15',16',16'-tetrahydro: [71359-03-0]. ***Isomahubanolide***

$C_{21}H_{36}O_3$ M 336.514

From *C. mahuba*.

Rollinson, S.W. *et al*, *J. Am. Chem. Soc.*, 1981, **103**, 4114 (*synth*)

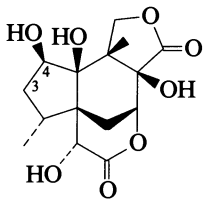
Martinez, J.C. *et al*, *Phytochemistry*, 1981, **20**, 459 (*isol*)

Ortuno, R.M. *et al*, *Tetrahedron*, 1988, **44**, 5139 (*abs config*)

Majucin M-10005

Updated Entry replacing M-00120

[114687-97-7]



$C_{15}H_{20}O_8$ M 328.318

Constit. of *Illicium majus*. Needles (MeOH). Mp 251-252°. $[\alpha]_D^{24}$ −74° (c, 0.15 in dioxan).

4-Deoxy: [114687-98-8]. ***Neomajucin***

$C_{15}H_{20}O_7$ M 312.319

Constit. of *I. majus*. Octahedra (EtOAc). Mp 220-222°. $[\alpha]_D^{24}$ −75° (c, 0.25 in dioxan).

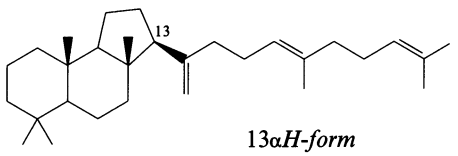
4-Deoxy, 3,4-didehydro: ***2,3-Dehydroneomajucin***

$C_{15}H_{18}O_7$ M 310.303

Constit. of *I. majus*. Amorph. solid. $[\alpha]_D$ −123.6° (c, 0.11 in dioxan). Numbering systems differ.

Kouno, I. *et al*, *Chem. Pharm. Bull.*, 1989, **37**, 2448 (*isol, pmr, cmr, cryst struct*)

14(27),17,21-Malabaricatriene M-10006



13α*H-form*

$C_{30}H_{50}$ M 410.725

13αH-form [123298-93-1]

Constit. of *Lemmaphyllum microphyllum var. obovatum*. Oil. $[\alpha]_D$ −23.3° (c, 0.1 in $CHCl_3$).

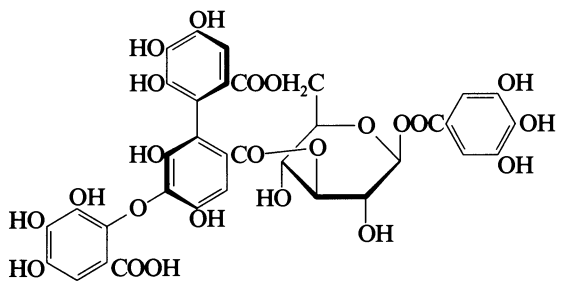
13βH-form [123357-28-8]

Constit. of *L. microphyllum* var. *obovatum*. Oil. $[\alpha]_D$ +16.3° (c, 0.6 in $CHCl_3$).

Masuda, K. *et al*, *Chem. Pharm. Bull.*, 1989, 1140 (*isol, pmr, cmr*)

Mallorepanin M-10007

[131402-70-5]



$C_{34}H_{26}O_{23}$ M 802.566

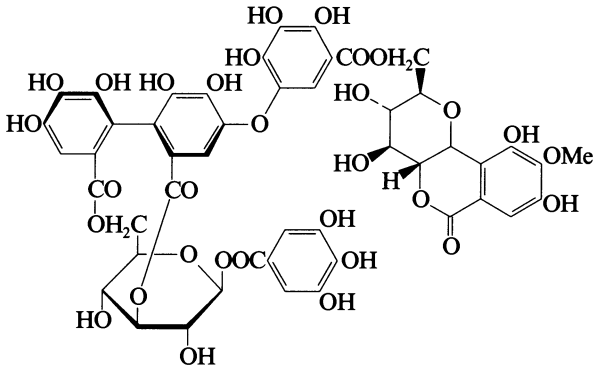
Constit. of *Macaranga sinensis*.

Lin, J.-H. *et al*, *Chem. Pharm. Bull.*, 1990, **38**, 1844 (*isol, struct*)

Mallotannin A M-10008

Updated Entry replacing M-00145

[126132-66-9]



$C_{48}H_{40}O_{31}$ M 1112.825

A dimeric tannin from the bark of *Mallotus japonicus*. Tan amorph. powder + $2H_2O$. $[\alpha]_D^{26}$ −40.6° (c, 1.0 in MeOH).

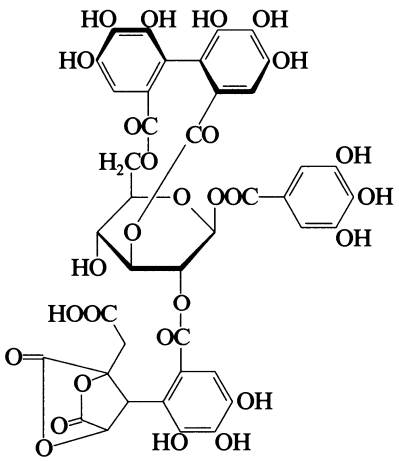
Saijo, R. *et al*, *Chem. Pharm. Bull.*, 1989, **37**, 2940 (*struct, pmr, cmr*)

Mallotinin M-10009

Updated Entry replacing M-00148

1-O-Galloyl-2-mallotoyl-3,6-(R)*-hexahydroxydiphenoyl-β-*D*-glucopyranose*

[125445-51-4]



$C_{41}H_{30}O_{28}$ M 970.671

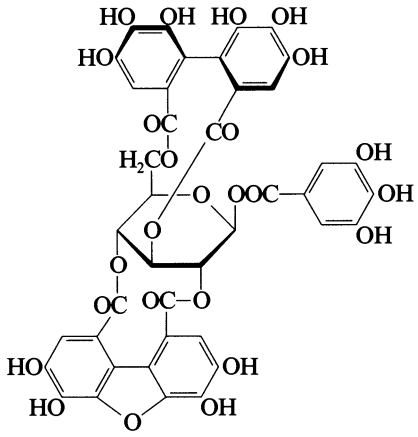
A tannin isol. from the leaf of *Mallotus repandus*. Tan amorph. powder + $5H_2O$. $[\alpha]_D^{26}$ −55.5° (c, 0.9 in MeOH).

Saijo, R. *et al*, *Chem. Pharm. Bull.*, 1989, **37**, 2624 (*struct, pmr, cmr*)

Mallotusinin M-10010

Updated Entry replacing M-00155

[124854-04-2]



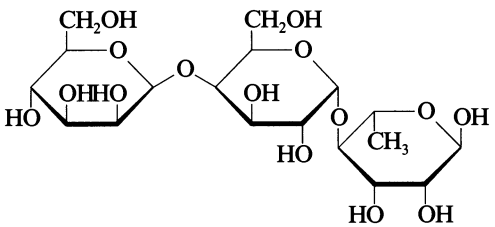
$C_{41}H_{26}O_{25}$ M 918.641

Tannin constit. from the bark of *Mallotus japonicus*. Tan amorph. powder + $3H_2O$. $[\alpha]_D^{20}$ −20.3° (c, 0.6 in Me_2CO).

Saijo, R. *et al*, *Chem. Pharm. Bull.*, 1989, **37**, 2063 (*struct*, *pmr*, *cmr*)

β-D-Mannopyranosyl-(1→4)-α-D-galactopyranosyl-(1→4)-L-rhamnose M-10011

[79522-98-8]



α-Pyranose-*form*

$C_{18}H_{32}O_{15}$ M 488.442

Constit. of the repeating unit of the *O*-antigen present in the lipopolysaccharide of the bacterium *E. coli* serotype 075.

α-Pyranose-form

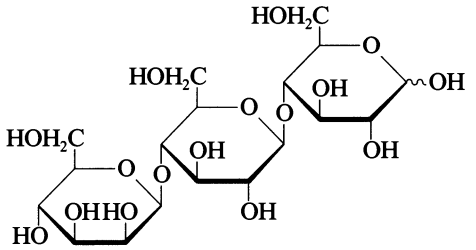
Benzyl glycoside, 2′,2″,3″,4″-tetrabenzyl, 3′,6′,6″-tri-Ac:
$C_{59}H_{68}O_{18}$ M 1065.175
$[\alpha]_D^{20}$ +11.8° (c, 1.26 in CH_2Cl_2).

Benzyl glycoside, 2,3-O-isopropylidene, 2′,2″,3″,4″-tetrabenzyl, 3′,6′,6″-tri-Ac:
$C_{62}H_{72}O_{18}$ M 1105.240
$[\alpha]_D^{20}$ +15.1° (c, 2.58 in CH_2Cl_2).

Paulsen, H. *et al*, *Chem. Ber.*, 1981, **114**, 3102 (*synth*)

β-D-Mannopyranosyl-(1→4)-β-D-glucopyranosyl-(1→4)-D-glucose, 9CI M-10012

[50692-77-8]



Pyranose-*form*

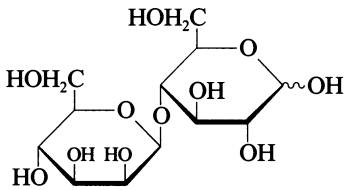
$C_{18}H_{32}O_{16}$ M 504.441

Constit. of the mucilage from the tubers of *Bletilla striata*. Isol. from the enzymatic hydrolysate of the glucomannans from lily, Jack pine (*Pinus banksiana*), *Narcissus tazetta* and from larch (*Larix decidua*) glucomannan. Amorph. $[\alpha]_D^{20}$ +5.7° (c, 0.5 in H_2O), $[\alpha]_D$ +17° (c, 1.0 in H_2O).

Perila, O. *et al*, *Can. J. Chem.*, 1961, **39**, 815.
Aspinall, G.O. *et al*, *J. Chem. Soc.*, 1962, 214.
Kato, K. *et al*, *Agric. Biol. Chem.*, 1976, **40**, 2495 (*isol*)
Tomoda, M. *et al*, *Chem. Pharm. Bull.*, 1976, **24**, 1807 (*isol*, *pmr*)

4-*O*-β-D-Mannopyranosyl-D-glucose, 9CI M-10013

[28072-80-2]



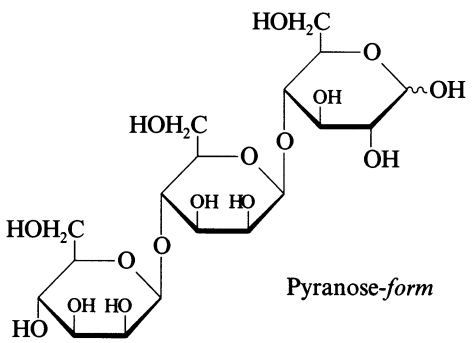
$C_{12}H_{22}O_{11}$ M 342.299

Structural unit in the glucomannan of plant hemicelluloses. Isol. from partial acid hydrol. of *Amorphophalus*, spp., *Picea glauca*, *Tsuga heterophylla*, *Acer rubrum* and others. Mp 199-201°. $[\alpha]_D$ +30° (H_2O).

Gyaw, M.O. *et al*, *Can. J. Chem.*, 1960, **38**, 1957 (*isol*)
Tyminski, A. *et al*, *J. Am. Chem. Soc.*, 1960, **82**, 2823 (*isol*)
Perila, O. *et al*, *Can. J. Chem.*, 1961, **39**, 815 (*isol*, *struct*)
Bailey, R.W., *Oligosaccharides*, Pergamon Press, 1965, **4**, 100 (*occur*)
Usui, T. *et al*, *Agric. Biol. Chem.*, 1979, **43**, 863 (*cmr*)
Koleva, M. *et al*, *CA*, 1980, **92**, 143239v (*isol*)

β-D-Mannopyranosyl-(1→4)-β-D-mannopyranosyl-(1→4)-D-glucose M-10014

[50692-76-7]



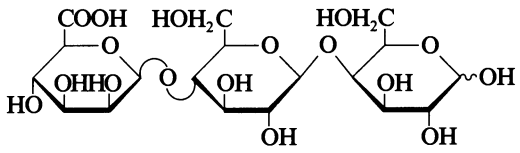
Pyranose-*form*

$C_{18}H_{32}O_{16}$ M 504.441
Constit. of mucilage, from the bulbs of Suisen (*Narcissus tazetta*); from the tubers of *Bletilla striata* and *Arum maculatum* and from the glucomannan of lily. Amorph. $[\alpha]_D$ −8° (c, 1.0 in H_2O).

Perila, O. *et al*, *Can. J. Chem.*, 1961, **39**, 815 (*isol*)
Kato, K. *et al*, *Carbohydr. Res.*, 1973, **29**, 469 (*isol*)
Kato, K. *et al*, *Agric. Biol. Chem.*, 1976, **40**, 2495.
Tomoda, M. *et al*, *Chem. Pharm. Bull.*, 1976, **24**, 1807 (*isol, pmr*)
Holeva, M., *CA*, 1981, **95**, 165582r; 1983, **100**, 20436h (*isol*)

β-D-Mannopyranuronosyl-(1→4)-β-D-glucopyranosyl-(1→4)-D-galactose, 8CI M-10015

[22412-73-3]

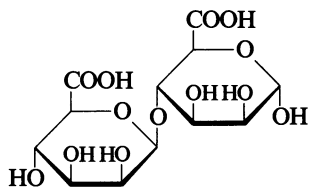


Pyranose-*form*

$C_{18}H_{30}O_{17}$ M 518.425
Constit. of the extracellular bacterial polysaccharide from *Arthrobacter viscosus* (NRRL B-1973).
K salt: $[\alpha]_D^{25}$ −7.3° (in H_2O).

Sloneker, J.H. *et al*, *Can. J. Chem.*, 1986, **46**, 3353 (*isol*)

4-*O*-β-D-Mannopyranuronosyl-D-mannuronic acid M-10016



α-Pyranose-*form*

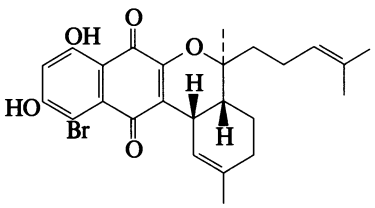
$C_{12}H_{18}O_{13}$ M 370.266
Isol. from the partial acid hydrol. of alginic acid.

α-Pyranose-form
Mp 182°. $[\alpha]_D$ −46.5° (H_2O).
[34044-53-6]

Jayme, G. *et al*, *Chem. Ber.*, 1960, **93**, 2263 (*isol*)

Marinone M-10017

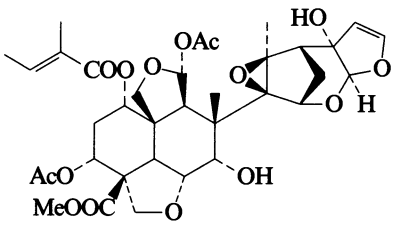
[146488-63-3]



$C_{25}H_{27}BrO_5$ M 487.389
Constit. of a marine actinomycete (CNB-632).
Debromo: [146488-64-4]. ***Debromomarinone***
$C_{25}H_{28}O_5$ M 408.493
Constit. of a marine actinomycete (CNB-632).

Pathirana, C. *et al*, *Tetrahedron Lett.*, 1992, **33**, 7663 (*isol, pmr, cmr*)

Marrangin M-10018

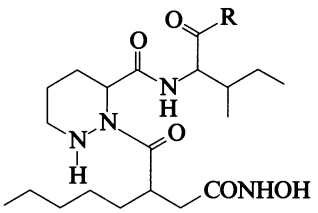


$C_{35}H_{44}O_{15}$ M 704.724
Constit. of *Azadirchta excelsa*. Cryst. Mp 143-145°. Related to Azadirachtin, A-03176.

Kalinowski, H.-O. *et al*, *Justus Liebigs Ann. Chem.*, 1993, 1033 (*isol, pmr, cmr*)

Matlystatin A M-10019

[140626-94-4]



R = $CH_2CH_2SCH_2CH(NHAc)COOH$

$C_{27}H_{47}N_5O_8S$ M 601.763
Prod. by *Actinomadura atramentaria*. Powder. Mp 113-115°. $[\alpha]_D^{20}$ −38.9° (c, 1.06 in MeOH).

Ogita, T. *et al*, *J. Antibiot.*, 1992, **45**, 1723, 1733 (*isol, struct, props*)

Matlystatin B M-10020

SF 2197. Antibiotic SF 2197
[140923-32-6]

As Matlystatin A, M-10019 with

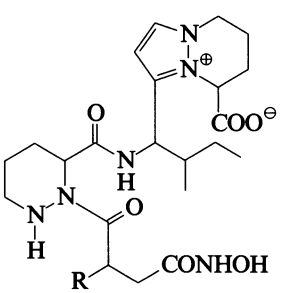
R = $-COCH_2CH_3$

$C_{22}H_{40}N_4O_5$ M 440.582
Prod. by *Actinomadura atramentaria*. Powder. Mp 69-72°. $[\alpha]_D^{20}$ −30.7° (c, 1 in EtOH).

Ogita, T. *et al*, *J. Antibiot.*, 1992, **45**, 1723, 1733 (*isol, struct, props*)

Matlystatin D M-10021

[140667-42-1]



R = $(CH_2)_4CH_3$

$C_{27}H_{44}N_6O_6$ M 548.681

Prod. by *Actinomadura atramentaria*. Powder. Mp 122-126°. $[\alpha]_D^{20}$ −20.3° (c, 1.14 in MeOH).

Ogita, T. *et al*, *J. Antibiot.*, 1992, **45**, 1723, 1733 (*isol, struct, props*)

Matlystatin E M-10022

[140638-26-2]

As Matlystatin D, M-10021 with

R = $(CH_2)_3CH_3$

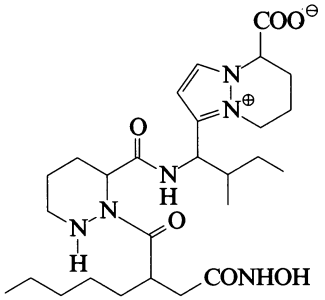
$C_{26}H_{42}N_6O_6$ M 534.654

Prod. by *Actinomadura atramentaria*. Powder. Mp 89-94°. $[\alpha]_D^{20}$ −21.95° (c, 0.41 in MeOH).

Ogita, T. *et al*, *J. Antibiot.*, 1992, **45**, 1723, 1733 (*isol, struct, props*)

Matlystatin F M-10023

[140638-25-1]



$C_{27}H_{44}N_6O_6$ M 548.681

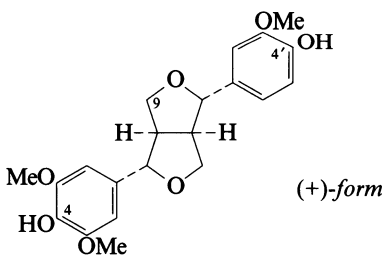
Prod. by *Actinomadura atramentaria*. Powder. Mp 69-75°. $[\alpha]_D^{20}$ +1.43° (c, 0.14 in MeOH).

Ogita, T. *et al*, *J. Antibiot.*, 1992, **45**, 1723, 1733 (*isol, struct, props*)

Medioresinol M-10024

Updated Entry replacing M-00375

2,6-Dimethoxy-4[tetrahydro-4-(4-hydroxy-3-methoxyphenyl)-1H,3H-furo[3,4-c]furan-1-yl]phenol, 9CI. 2-(4-Hydroxy-3,5-dimethoxyphenyl)-6-(4-hydroxy-3-methoxyphenyl)-3,7-dioxabicyclo[3.3.1]octane. 4,4′-Dihydroxy-3,3′,5-trimethoxy-7,9′:7′,9-diepoxylignan



(+)-*form*

$C_{21}H_{24}O_7$ M 388.416

Lignan numbering shown.

(+)-***form*** [40957-99-1]

Constit. of *Allamanda neriifolia* and *Justicia tranquebariensis*. Prisms (MeOH). Mp 170-172°. $[\alpha]_D^{28}$ +77.7° (c, 0.69 in MeOH).

4-O-β-D-Glucopyranoside: [99633-12-2]. ***Eucommin A***

$C_{27}H_{34}O_{12}$ M 550.558

Isol. from bark of *Eucommia ulmoides*. Mp 163°. $[\alpha]_D^{18}$ +20.4° (c, 2.4 in MeOH).

4′-O-β-D-Glucopyranoside: ***Isoeucommin A***

$C_{27}H_{34}O_{12}$ M 550.558

Isol. from leaves of *Osmanthus asiaticus*. Mp 110-113°. $[\alpha]_D^{23}$ 0° (c, 0.6 in MeOH).

Di-O-β-D-glucopyranoside:

$C_{33}H_{44}O_{17}$ M 712.700

Isol. from bark of *E. ulmoides*. Needles (EtOH). Mp 222°. $[\alpha]_D^{22}$ −9.1° (c, 0.1 in Py).

Di-Me ether: see *Magnolin, M-00099*

9α-Hydroxy: ***9α-Hydroxymedioresinol***

$C_{21}H_{24}O_8$ M 404.416

Constit. of *A. neriifolia*. Prisms (MeOH). Mp 210-213°. $[\alpha]_D^{18}$ +44.0° (c, 0.49 in MeOH).

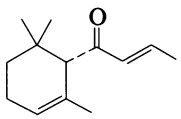
(−)-***form***

Isol. from *Dirca occidentalis*. Mp 155-160°. $[\alpha]_D^{25}$ −17.0° (c. 0.14 in $CHCl_3$).

Deyama, T., *Chem. Pharm. Bull.*, 1983, **31**, 2993; 1985, **33**, 3651 (*isol, struct, diglucoside, Eucommin A*)
Badawi, M.M. *et al*, *J. Pharm. Sci.*, 1983, **72**, 1285 (*isol*)
Abe, F. *et al*, *Phytochemistry*, 1988, **27**, 575.
Subba Raju, G.V. *et al*, *Indian J. Chem., Sect. B*, 1989, **28**, 558.
Sugiyama, M. *et al*, *Chem. Pharm. Bull.*, 1991, **39**, 483 (*Isoeucommin A*)

4,8-Megastigmadien-7-one M-10025

1-(2,6,6-Trimethyl-2-cyclohexen-1-yl)-2-buten-1-one, 9CI. 6-(2-Butenoyl)-1,5,5-trimethylcyclohexene



$C_{13}H_{20}O$ M 192.300

(***S,E*)-*form*** [24720-09-0] ***α-Damascone***

Constit. of black tea. Perfumery ingredient. Cryst. (pentane). Mp 20-21°. $Bp_{0.001}$ 77-80°. $[\alpha]_D^{24}$ −510° (c, 1.92 in $CHCl_3$).

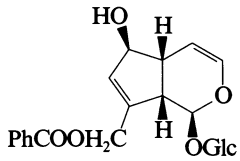
Demole, E. *et al*, *Helv. Chim. Acta*, 1970, **53**, 541 (*synth*)
Schulte-Elte, K.H. *et al*, *Helv. Chim. Acta*, 1973, **56**, 310 (*synth*)
Ohloff, G. *et al*, *Helv. Chim. Acta*, 1973, **56**, 1503 (*synth*)
Mandai, T. *et al*, *J. Org. Chem.*, 1984, **49**, 3403 (*synth*)
König, W.A. *et al*, *Tetrahedron*, 1989, **45**, 7003 (*isol, abs config*)
Azzari, E. *et al*, *J. Org. Chem.*, 1990, **55**, 1106 (*synth*)
Mori, K. *et al*, *Tetrahedron*, 1993, **49**, 1871 (*synth*)

Melampyroside M-10026

Updated Entry replacing M-00409

7-[(Benzoyloxy)methyl]-1,4a,5,7a-tetrahydro-5-hydroxycyclopenta[c]pyran-1-yl-β-D-glucopyranoside, 9CI

[55785-60-9]



$C_{22}H_{26}O_{10}$ M 450.441

Isol. from *Melampyrium silvaticum* and *Lathrea squamaria*. Mp 84-85°. $[\alpha]_D^{23}$ −50° (c, 0.3 in Me_2CO).

Penta-Ac: Mp 74-75°. $[\alpha]_D^{24}$ −94° (c, 0.33 in Me_2CO).

6′-O-Glucopyranoside:

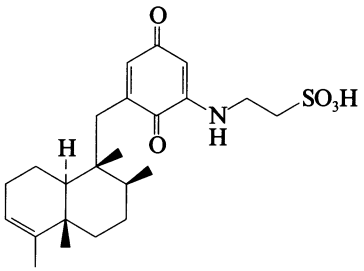
$C_{28}H_{36}O_{15}$ M 612.583

Constit. of *L. squamaria*. Amorph. solid. $[\alpha]_D^{20}$ −32.0° (c, 0.97 in MeOH).

Ahn, B.Z. *et al*, *Tetrahedron*, 1974, **30**, 4049 (*isol, pmr*)
Grabias, B. *et al*, *Phytochemistry*, 1993, **32**, 1489 (*isol, pmr, cmr, ms*)

Melemeleone A M-10027

[144587-55-3]



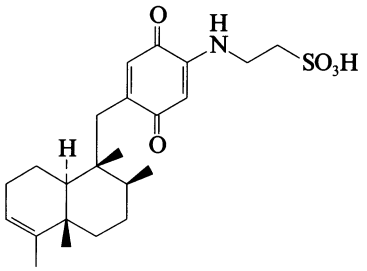
$C_{23}H_{33}NO_5S$ M 435.583

Constit. of *Dysidea avara*. Red amorph. solid. Mp 110-115°. $[\alpha]_D^{20}$ −20.1° (c, 0.006 in CH_2Cl_2).

Alvi, K.A. *et al*, *J. Org. Chem.*, 1992, **57**, 6604 (*isol, pmr, cmr*)

Melemeleone B M-10028

[144587-56-4]

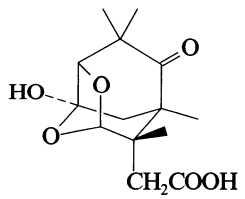


$C_{23}H_{33}NO_5S$ M 435.583

Constit. of *Dysidea avara*. Red amorph. solid. Mp 190-200°. $[\alpha]_D^{20}$ −22.0° (c, 0.01 in CH_2Cl_2).

Abvi, K.A. *et al*, *J. Org. Chem.*, 1992, **57**, 6604 (*isol, pmr, cmr*)

Meliracemoic acid M-10029

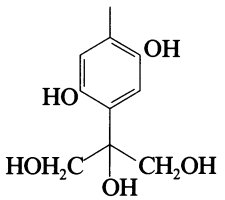


$C_{14}H_{20}O_6$ M 284.308

Constit. of *Weinmannia racemosa*. Yellow syrup.

Ede, R.M. *et al*, *Tetrahedron Lett.*, 1993, **34**, 6795 (*isol, pmr, cmr*)

p-Mentha-1,3,5-triene-2,5,8,9,10-pentol M-10030



$C_{10}H_{14}O_5$ M 214.218

9-Tigloyl, 2-Me ether: [150641-34-2].

$C_{16}H_{22}O_6$ M 310.346

Constit. of *Inula crithmoides*. Oil. $[\alpha]_D^{25}$ +8° (c, 2.6 in $CHCl_3$).

9-Tigloyl, 2-Me ether, 10-Ac: [150641-35-3].

$C_{18}H_{24}O_7$ M 352.383

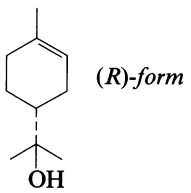
Constit. of *I. crithmoides*. $[\alpha]_D^{25}$ +3° (c, 2.4 in $CHCl_3$).

Marco, J.A. *et al*, *Phytochemistry*, 1993, **33**, 875 (*isol, pmr, cmr*)

p-Menth-1-en-8-ol M-10031

α,α,4-Trimethyl-3-cyclohexene-1-methanol, 9CI. 4-(1-Hydroxy-1-methylethyl)-1-methylcyclohexene. ***α-Terpineol.*** *Terpinol*†

[98-55-5]



$C_{10}H_{18}O$ M 154.252

All stereoisomers occur widely in essential oils (*Artemisia, Cinnamomum, Juniperus, Eucalyptus* and *Mentha* spp.). Important perfumery ingredient. Acetate and other simple esters are also used in perfumery and flavourings.

▷ Flammable, fl.p. 43°. WZ6700000.

(R)-form [7785-53-7]

Cryst. Mp 37°. Bp_{15} 104°. $[\alpha]_D^{20}$ +100.5°.

(S)-form [10482-56-1]

Cryst. Mp 37°. Bp_{15} 104°. $[\alpha]_D^{20}$ −100.5°.

(±)-form [2438-12-2]

Cryst. Mp 40-41°. Bp_{12} 99-100°.

Freudenberg, K. *et al*, *Justus Liebigs Ann. Chem.*, 1955, **594**, 76 (*abs config*)

Prelog, V. *et al*, *Justus Liebigs Ann. Chem.*, 1957, **603**, 1 (*synth*)

Mitzner, B.M. *et al*, *Am. Perfum. Cosmet.*, 1966, **81**, 25 (*ir*)

Beckey, H.D. *et al*, *Org. Mass Spectrom.*, 1968, **1**, 47 (*ms*)

Karrer, W. *et al*, *Konstitution und Vorkommen der Organischen Pflanzenstoffe*, 2nd Ed., Birkhäuser Verlag, Basel, 1972-1985, no. 299 (*occur*)

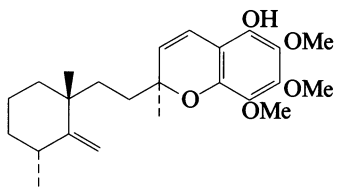
Morris, W.W., *J. Assoc. Off. Anal. Chem.*, 1973, **56**, 1037 (*ir*)

Bohlmann, F. *et al*, *Org. Magn. Reson.*, 1975, **7**, 426 (*cmr*)

Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th Ed., Van Nostrand-Reinhold, 1992, TBD750.

Metachromin D M-10032

[143592-21-6]



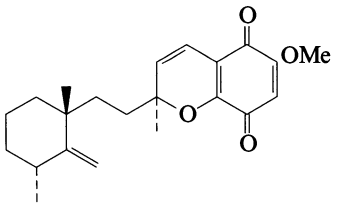
$C_{24}H_{34}O_5$ M 402.530

Constit. of *Hippospongia metachroma*. Oil. $[\alpha]_D^{22}$ +15° (c, 0.7 in $CHCl_3$).

Kobayashi, J. *et al*, *J. Org. Chem.*, 1992, **57**, 5773 (*isol, pmr, cmr*)

Metachromin E M-10033

[143592-22-7]

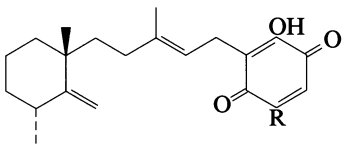


$C_{22}H_{28}O_4$ M 356.461
Constit. of *Hippospongia metachroma*. Orange oil. $[\alpha]_D^{22}$ −54° (c, 0.3 in $CHCl_3$).

Kobayashi, J. *et al*, *J. Org. Chem.*, 1992, **57**, 5773 (*isol, pmr, cmr*)

Metachromin F M-10034

[143592-23-8]



R = $OCH_2CH_2CH_2CH_3$

$C_{25}H_{36}O_4$ M 400.557
Consit. of *Hippospongia metachroma*. Yellow oil. $[\alpha]_D^{22}$ −4° (c, 0.2 in $CHCl_3$).

Kobayashi, J. *et al*, *J. Org. Chem.*, 1992, **57**, 5773 (*isol, pmr, cmr*)

Metachromin G M-10035

[143592-24-9]

As Metachromin F, M-10034 with

R = $NHCH_2CH_2Ph$

$C_{29}H_{37}NO_3$ M 447.616
Constit. of *Hippospongia metachroma*. Purple oil. $[\alpha]_D^{20}$ −18° (c, 0.2 in C_6H_6).

Kobayashi, J. *et al*, *J. Org. Chem.*, 1992, **57**, 5773 (*isol, pmr, cmr*)

Metachromin H M-10036

[143592-25-0]

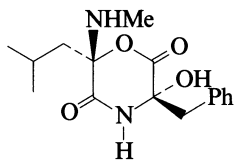
As Metachromin F, M-10034 with

R = $NHCH_2CH_2CH(CH_3)_2$

$C_{26}H_{39}NO_3$ M 413.599
Constit. of *Hippospongia metachroma*. Purple oil. $[\alpha]_D^{19}$ −9° (c, 0.2 in C_6H_6).

Kobayashi, J. *et al*, *J. Org. Chem.*, 1992, **57**, 5773 (*isol, pmr, cmr*)

Metacyclofilin M-10037



Relative configuration

$C_{16}H_{22}N_2O_4$ M 306.361
Prod. by *Metarhizium* sp. TA 2759. Immunomodulator. Prisms (MeOH aq.). Mp 201-202°. $[\alpha]_D^{27}$ +5.1° (c, 0.63 in MeOH).

Iijima, M. *et al*, *J. Antibiot.*, 1992, **45**, 1553 (*isol, struct, props*)

3-Methoxybenzoic acid, 9CI M-10038

m-*Anisic acid, 8CI*

[586-38-9]

$C_8H_8O_3$ M 152.149
Constit. of stems and leaves of *Anthyllis sericea*. Needles (H_2O). Mp 110.5°. Bp_{10} 170-172°. pK_a 4.10 (25°), pK_a 5.37 (25°, 50% EtOH aq.).

▷ BZ4375000.

Me ester: [5368-81-0].
$C_9H_{10}O_3$ M 166.176
$Bp_{0.1}$ 80-81°.

Et ester: [10259-22-0].
$C_{10}H_{12}O_3$ M 180.203
Bp_5 110°.

Chloride: [1711-05-3].
$C_8H_7ClO_2$ M 170.595
Bp_{24} 148°.

Amide: [5813-86-5].
$C_8H_9NO_2$ M 151.165
Mp 134°.

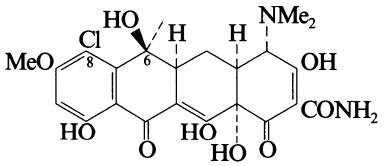
Nitrile: [1527-89-5]. *1-Cyano-3-methoxybenzene. 3-Cyanoanisole*
C_8H_7NO M 133.149
Mp 60°. Bp_{14} 113°.

Dippy, J.F.J., *J. Chem. Soc.*, 1936, 644 (*synth*)
Grammaticakis, P., *Bull. Soc. Chim. Fr.*, 1940, **7**, 527 (*synth*)
Korst, J.J. *et al*, *J. Am. Chem. Soc.*, 1968, **90**, 439 (*synth*)
v. Meurs, F. *et al*, *J. Organomet. Chem.*, 1977, **142**, 299.
Marco, J.A. *et al*, *Phytochemistry*, 1978, **17**, 1438 (*occur*)
Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th Ed., Van Nostrand-Reinhold, 1992, AOU500.

8-Methoxychlorotetracycline M-10039

Updated Entry replacing M-00664
Sch 36969. Antibiotic Sch 36969

[110298-63-0]



$C_{23}H_{25}ClN_2O_9$ M 508.911
Tetracycline antibiotic. Prod. by *Actinomadura brunnea*. Active against gram-positive and -negative bacteria. No phys. props. reported.

N-*Me:* [110298-65-2]. ***8-Methoxy-N-methylchlorotetracycline.*** *Sch 33256. Antibiotic Sch 33256*
$C_{24}H_{27}ClN_2O_9$ M 522.938
From *A. brunnea*. Primarily active against gram-positive bacteria. Yellow cryst. Mp 180-185° dec. $[\alpha]_D^{26}$ −105.5° (c, 0.5 in MeOH).

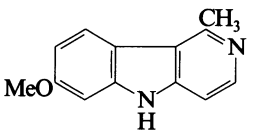
4aα-Hydroxy, 6-epimer: [110298-64-1]. ***Dactylocyclinone.*** *4a-Hydroxy-8-methoxychlorotetracycline. Sch 34164. Antibiotic Sch 34164*
$C_{23}H_{25}ClN_2O_{10}$ M 524.911
Prod. by *Dactylosporangium* sp. Active against gram-positive and -negative bacteria.

Miller, G.H. *et al*, *J. Antibiot.*, 1987, **40**, 1408, 1414, 1419, 14 (*isol, struct, props*)
Tymiak, A.A. *et al*, *J. Antibiot.*, 1992, **45**, 1892, 1899, 1907 (*Dactylocyclinone*)

7-Methoxy-4-methyl-γ-carboline M-10040

*7-Methoxy-1-methyl-5*H*-pyrido[4,3-*b*]indole, 9CI.* ***γ-Harmine***

[128508-19-0]

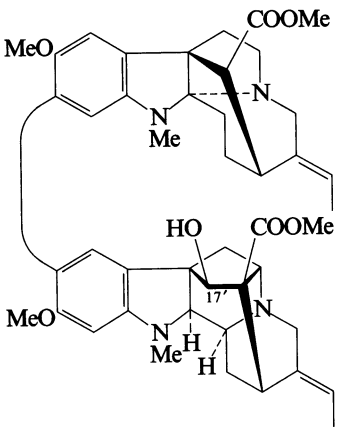


$C_{13}H_{12}N_2O$ M 212.251
Alkaloid from the seeds of *Peganum harmala* (Zygophyllaceae). First example of a naturally occurring γ-carboline alkaloid.

Li, G. *et al*, *Zhiwu Xuebao*, 1989, **31**, 393; *CA*, **113**, 74723m (*isol*)

11-[10-(11-Methoxyvincamajinyl)] vincorine M-10041

[142795-96-8]



$C_{45}H_{54}N_4O_7$ M 762.944
Alkaloid from the leaves of *Tonduzia pittieri* (*Alstonia pittieri*) (Apocynaceae).

Ac: [142750-30-9]. ***11-[10-(11-Methoxyvincamedinyl)] vincorine***
$C_{47}H_{56}N_4O_8$ M 804.981
Alkaloid from leaves of *T. pittieri* (Apocynaceae). $[\alpha]_D$ −58° (c, 1 in $CHCl_3$).

17′-Epimer: [142750-29-6]. ***11[10-(11-Methoxy-17-epi-vincamajinyl)]vincorine***
$C_{45}H_{54}N_4O_7$ M 762.944
Alkaloid from leaves of *T. pittieri* (Apocynaceae). $[\alpha]_D$ −37° (c, 1 in $CHCl_3$).

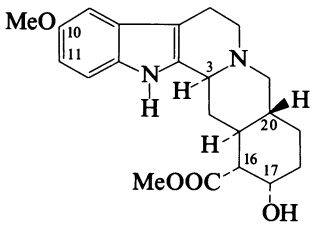
Morfaux, A.-M. *et al*, *Phytochemistry*, 1992, **31**, 1079 (*isol, uv, ir, pmr, cmr, ms, struct*)

10-Methoxyyohimbine M-10042

Updated Entry replacing M-00774

16-Epiexcelsinine

[15266-53-2]



$C_{22}H_{28}N_2O_4$ M 384.474
Alkaloid from bark of *Aspidosperma pruinosum* (Apocynaceae). Amorph. solid. $[\alpha]_D^{25}$ +56.6° (c, 1.2 in EtOH).

B,HCl: [16218-82-9].
Mp 275° dec. $[\alpha]_D$ +77° (EtOH).

16-Epimer: [15218-17-4]. ***Excelsinine.*** *10-Methoxycorynanthine*
$C_{22}H_{28}N_2O_4$ M 384.474
Alkaloid from *Aspidosperma excelsum* (Apocynaceae). Cryst. (MeOH). Mp 199-201° dec. $[\alpha]_D$ −63.4° (Py).

16-Epimer; B,HCl: [15218-18-5].
$[\alpha]_D$ −54.5°. No def. Mp.

16-Epimer, O-Ac: [16179-94-5].
Mp 225° dec. $[\alpha]_D$ −54.8° (Py).

17-Epimer: [88607-64-1]. ***10-Methoxy-β-yohimbine***
$C_{22}H_{28}N_2O_4$ M 384.474
Alkaloid from the seeds of *A. oblongum* (Apocynaceae). Amorph. $[\alpha]_D$ +29° (c, 0.31 in MeOH).

16,20-Diepimer: [88668-49-9]. ***10-Methoxy-α-yohimbine***
$C_{22}H_{28}N_2O_4$ M 384.474
Alkaloid from the seeds of *A. oblongum* (Apocynaceae). Amorph. $[\alpha]_D$ −13° (c, 0.71 in MeOH).

17,20-Diepimer: [88644-43-3]. ***10-Methoxy-17-epialloyohimbine***
$C_{22}H_{28}N_2O_4$ M 384.474
Alkaloid from the seeds of *A. oblongum* (Apocynaceae). Amorph. $[\alpha]_D$ +4° (c, 0.53 in MeOH). Rare stereochem. not yet encountered among the yohimbine stereoisomers.

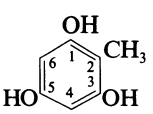
3,16,20-Triepimer: [121154-13-0]. ***10-Methoxy-3-epi-α-yohimbine***
$C_{22}H_{28}N_2O_4$ M 384.474
Alkaloid from the stem bark of *Alstonia coriacea* (Apocynaceae). $[\alpha]_D$ −66° (c, 1 in $CHCl_3$).

Benoin, P.R. *et al*, *Can. J. Chem.*, 1967, **45**, 725 (*isol, uv, pmr, ms, Excelsinine*)
Robert, G.M.T. *et al*, *J. Nat. Prod.* (*Lloydia*), 1983, **46**, 708 (*isol, uv, ir, pmr, cmr, ms, cd, struct, epimers*)
Cherif, A. *et al*, *Phytochemistry*, 1989, **28**, 667 (*10-methoxy-3-epi-α-yohimbine*)
Nunes, D.S. *et al*, *Phytochemistry*, 1992, **31**, 2507 (*10-Methoxyyohimbine*)

2-Methyl-1,3,5-benzenetriol M-10043

2,4,6-Trihydroxytoluene. 2-Methylphloroglucinol

[88-03-9]



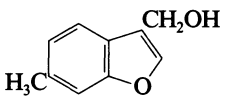
$C_7H_8O_3$ M 140.138
Needles (EtOAc). Mp 214-216°. Sublimes.

Tri-Ac:
$C_{13}H_{14}O_6$ M 266.250
Needles (petrol). Mp 52°, Mp 76°.
1-Me ether: [55382-24-6]. *5-Methoxy-4-methyl-1,3-benzenediol. 5-Methoxy-4-methylresorcinol*
$C_8H_{10}O_3$ M 154.165
Cryst. + $1H_2O$ (H_2O). Mp 91°.
5-Me ether: [6307-89-7]. *5-Methoxy-2-methyl-1,3-benzenediol. 5-Methoxy-2-methylresorcinol*
$C_8H_{10}O_3$ M 154.165
Cryst. (xylene). Mp 124°. Bp_{20} 195-198°.
1,5-Di-Me ether: [39828-36-9]. *3,5-Dimethoxy-2-methylphenol*
$C_9H_{12}O_3$ M 168.192
Cryst. (xylene/petrol). Mp 60-61°. Bp_{20} 178-180°.
Tri-Me ether: [14107-97-2]. *1,3,5-Trimethoxy-2-methylbenzene. 2,4,6-Trimethoxytoluene*
$C_{10}H_{14}O_3$ M 182.219
Isol. from leaves of *Stockwellia* spp. Mp 10-13°. Bp_{18} 140-142°.

McGookin, A. *et al, J. Chem. Soc.*, 1951, 2021 (*synth*)
Robertson, A. *et al, J. Chem. Soc.*, 1951, 3355 (*synth*)
Brophy, J.J. *et al, Phytochemistry*, 1992, **31**, 324 (*isol*)

6-Methyl-3-benzofuranmethanol M-10044

3-(Hydroxymethyl)-6-methylbenzofuran
[125132-27-6]

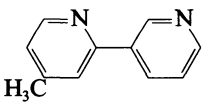


$C_{10}H_{10}O_2$ M 162.188
Isol. from *Ageratina glechonophylla*. Oil.
Ac: [125132-28-7]. *3-(Acetoxymethyl)-6-methylbenzofuran*
$C_{12}H_{12}O_3$ M 204.225
Isol. from *A. glechonophylla*. Oil.
O-(*2-Methylpropanoyl*): [125132-29-8]. *3-(Isobutyryloxymethyl)-6-methylbenzofuran*
$C_{14}H_{16}O_3$ M 232.279
Isol. from *A. glechonophylla*. Oil.

Gonzalez, A.G. *et al, Phytochemistry*, 1989, **28**, 2520 (*isol*)
Gonzalez, A.G. *et al, Heterocycles*, 1992, **34**, 1311 (*synth*)

4-Methyl-2,3′-bipyridine, 9CI M-10045

[38840-05-0]

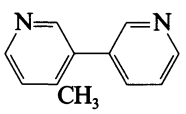


$C_{11}H_{10}N_2$ M 170.213
Present in burley tobacco (*Nicotiana tabacum*). Liq. Bp_1 166°.
Picrate: Cryst. (EtOH). Mp 202-203°.

Frank, R.L. *et al, Bull. Soc. Chim. Fr.*, 1958, 419 (*synth*)
Warfield, A.H. *et al, Phytochemistry*, 1972, **11**, 3371 (*isol, synth, ir, ms*)
Ishikura, M. *et al, Synthesis*, 1984, 936 (*synth*)

4-Methyl-3,3′-bipyridine, 9CI M-10046

[38840-06-1]



$C_{11}H_{10}N_2$ M 170.213
Isol. from burley tobacco (*Nicotiana tabacum*).

Warfield, A.H. *et al, Phytochemistry*, 1972, **11**, 3371 (*isol, synth, ir, pmr*)

2-Methyl-1,3-butadiene, 9CI M-10047

Isoprene
[78-79-5]

$H_2C{=}C(CH_3)CH{=}CH_2$

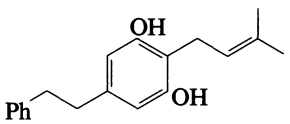
C_5H_8 M 68.118
Constit. of volatiles prod. by many trees. Formed by pyrolysis of natural rubber. Used in manuf. of synthetic and butyl rubbers, copolymer for synthetic rubbers. d_{20}^{20} 0.681. Fp −147°. Bp 34.5-35.0°. n_D^{20} 1.4216. Readily polymerises.

▷ Extremely flammable, fl.p. −53° autoignition temp. 270/395°. Forms explosive peroxide in air. Eye, skin and respiratory tract irritant. NT4037000.

Gallant, R.W., *Hydrocarbon Process.*, 1967, **46**, 155 (*props*)
Fowler, R. *et al, Chem. Eng.* (*Rugby, Engl.*), 1971, **253**, 322 (*rev*)
Tai, J.C. *et al, J. Am. Chem. Soc.*, 1976, **98**, 7928 (*conformn, struct*)
Kirk-Othmer Encycl. Chem. Technol., 3rd Ed., Wiley, N.Y., 1978-1984, **13**, 819 (*rev*)
Arnts, R.R. *et al, Atmos. Environ.*, 1981, **15**, 1643 (*occur*)
Kvariani, L.D. *et al, CA*, 1987, **106**, 116522h (*isol*)
Patty's Ind. Hyg. Toxicol. (*3rd Rev. edn.*), Vol. 2, Wiley, 1980, 3208.
Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th Ed., Van Nostrand-Reinhold, 1992, IMS000.
Bretherick, L., *Handbook of Reactive Chemical Hazards*, 4th edn., Butterworth, London and Boston, 1990, 1775.
Luxon, S.G., *Hazards in the Chemical Laboratory*, 5th edn., Royal Society of Chemistry, Cambridge, 1992, 757.

2-(3-Methyl-2-butenyl)-5-(2-phenylethyl)-1,3-benzenediol, 9CI M-10048

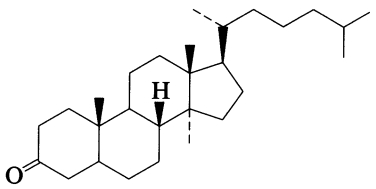
Updated Entry replacing M-00867
3,5-Dihydroxy-4-(3-methyl-2-butenyl)bibenzyl. 5-Phenethyl-2-prenylresorcinol
[70610-11-6]



$C_{19}H_{22}O_2$ M 282.382
Isol. from *Glycyrrhiza lepidota* and *Radula* spp. Needles (cyclohexane). Mp 80-81° (79-80°).
3-Me ether: [70610-10-5]. *3-Methoxy-5-(2-phenylethyl)-2-prenylphenol. 3-Hydroxy-5-methoxy-4-prenylbibenzyl*
$C_{20}H_{24}O_2$ M 296.408
Isol. from *Glycyrrhiza acanthocarpa* and *Radula* spp. Oil.

Asakawa, Y. *et al, Phytochemistry*, 1978, **17**, 2115 (*isol, struct*)
Ghisalberti, E.L. *et al, Phytochemistry*, 1981, **20**, 1959 (*isol, deriv*)
Asakawa, Y. *et al, Phytochemistry*, 1991, **30**, 235 (*isol, pmr, cmr*)
Eicher, T. *et al, Synthesis*, 1991, 98 (*synth*)

14-Methylcholestan-3-one M-10049



$C_{28}H_{48}O$ M 400.687

(5α,14α)-form

Constit. of mature straw (*Triticum aestivum*).

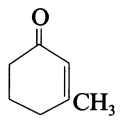
Gaspar, E.M.M. *et al*, *Phytochemistry*, 1993, **34**, 523 (*isol*)

3-Methyl-2-cyclohexen-1-one, 9CI M-10050

Updated Entry replacing M-00914

Seudenone

[1193-18-6]



$C_7H_{10}O$ M 110.155

Pheromone of mountain pine beetle *Dendroctonus ponderosae*, Douglas fir beetle *D. pseudotsugae* and several other bark beetles. Douglas fir beetle repellent. Light-sensitive liq. Mp −21°. Bp 200-202°, Bp_{12} 78-79°. Steam-volatile.

Oxime: [2607-95-6].

$C_7H_{11}NO$ M 125.170

Bp_3 93-95°.

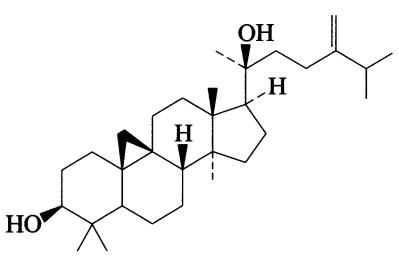
2,4-Dinitrophenylhydrazone: [3234-76-2].

Mp 177-178°.

[88693-90-7]

Rabe, P. *et al*, *Ber.*, 1912, **45**, 2926 (*isol*)
Natelson, S. *et al*, *J. Am. Chem. Soc.*, 1939, **61**, 1001 (*synth*)
Torri, J. *et al*, *Tetrahedron Lett.*, 1973, 3251 (*uv*)
Torri, J. *et al*, *Bull. Soc. Chim. Fr.*, 1974, 1633 (*cmr*)
Pitman, G.B. *et al*, *Environ. Entomol.*, 1974, **3**, 886 (*biosynth*)
Ager, D.J. *et al*, *J. Chem. Soc., Chem. Commun.*, 1978, 177 (*synth*)
Helferty, P.H. *et al*, *Org. Magn. Reson.*, 1983, **21**, 352 (*cmr*)
Bestmann, H.J. *et al*, *Chem. Ber.*, 1985, **118**, 2640 (*synth*)
Robinson, P.L. *et al*, *J. Org. Chem.*, 1985, **50**, 3860 (*synth, pmr*)
Ponaras, A.A. *et al*, *J. Org. Chem.*, 1988, **53**, 1110 (*synth*)
Cahiez, G. *et al*, *Tetrahedron Lett.*, 1989, **30**, 3541 (*synth*)
Boykin, D.W. *et al*, *Magn. Reson. Chem.*, 1990, **28**, 305 (*O-17 nmr*)
Bestmann, H.J. *et al*, *Chem. Ber.*, 1993, **126**, 725 (*synth*)

24-Methylenecycloartane-3,20-diol M-10051



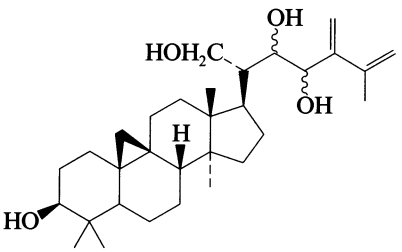
$C_{31}H_{52}O_2$ M 456.751

(3β,20S)-form [150527-27-8]

Constit. of *Neolitsea sericea*. Plates.

Sharma, M.C. *et al*, *Phytochemistry*, 1993, **33**, 721 (*isol, pmr, cmr*)

24-Methylenecycloart-25-ene-3,21,22,23-tetrol M-10052



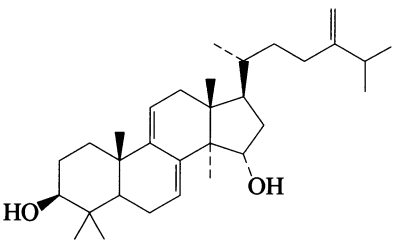
$C_{31}H_{50}O_4$ M 486.734

(3β,22ξ,23ξ)-form [148044-49-9]

Constit. of *Guarea trichilioides*. Cryst. Mp 143-145°. $[\alpha]_D^{25}$ +18.2° (c, 1.2 in MeOH).

Furlan, N. *et al*, *Phytochemistry*, 1993, **32**, 1519 (*isol, pmr, cmr*)

24-Methylenelanosta-7,9(11)-diene-3,15-diol M-10053



$C_{31}H_{50}O_2$ M 454.735

(3β,15α)-form [151368-42-2] ***Suberosol***

Constit. of *Polyalthia suberosa*. Needles (C_6H_6). Mp 179-182°. $[\alpha]_D^{20}$ +107° (c, 0.19 in $CHCl_3$).

Li, H.-Y. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 1130 (*isol, pmr, cmr*)

2-Methylene-4-oxopentanedioic acid M-10054

γ-Methylene-α-ketoglutaric acid. 2-Methylene-4-oxoglutaric acid

$H_2C{=}C(COOH)CH_2COCOOH$

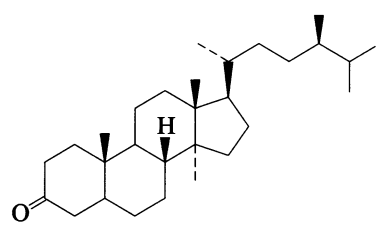
$C_6H_6O_5$ M 158.110

Isol. from leaves of *Tulipa gesneriana* and from *Arachis hypogaea*. Found as a trace in *Sophora japonica*.

Towers, G.H.N. *et al*, *J. Am. Chem. Soc.*, 1954, **76**, 1959.
Fowden, L. *et al*, *Biochem. J.*, 1955, **59**, 228.
Winter, H.C. *et al*, *Phytochemistry*, 1987, **26**, 2477 (*occur*)

14-Methylergostan-3-one M-10055

14,24-Dimethylcholestan-3-one



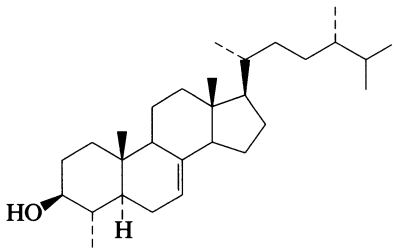
$C_{29}H_{50}O$ M 414.713

(5α,14α,24R)-form
Constit. of mature straw (*Triticum aestivum*). Cryst. (EtOH). Mp 152-155°.

Gaspar, E.M.M. *et al*, *Phytochemistry*, 1993, **34**, 523 (*isol, pmr*)

4-Methylergost-7-en-3-ol M-10056

4,24-Dimethylcholest-7-en-3-ol



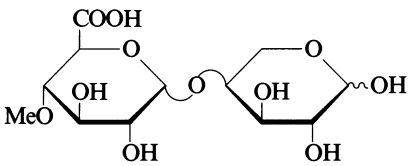
$C_{29}H_{50}O$ M 414.713

(3β,4α,5α,24R)-form [33903-17-2] ***24α-Methyllophenol***
Isol. from Douglas fir sapwood, seeds of *Phaseolus vulgaris* and other plants. Mp 140-141° (as acetate).

[1106-35-0, 81275-83-4, 81445-17-2]

Conner, A.H. *et al*, *Phytochemistry*, 1981, **20**, 2543 (*isol, pmr*)
Akihisa, T. *et al*, *Phytochemistry*, 1989, **28**, 1219 (*isol, pmr, ms*)

4-*O*-(4-*O*-Methyl-α-D-glucopyranuronosyl)-L-arabinose M-10057



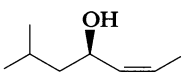
Pyranose-*form*

$C_{12}H_{20}O_{11}$ M 340.283
Isol. from the partial hydrolysates of lemon gum. Based on paper chromatographic evidence only, reported present in the hydrolysates of gums from several *Prunus* and *Citrus* spp. $[\alpha]_D$ +134° (H_2O).

Andrews, P. *et al*, *J. Chem. Soc.*, 1954, 1724 (*isol*)
Guzman, E. *et al*, *Rev. Espan. Fisiol.*, 1960, **16**, 331.

6-Methyl-2-hepten-4-ol, 9CI M-10058

Isobutylpropenylcarbinol. ***Rhynchophorol***



(*R*)-(*Z*)-*form*

$C_8H_{16}O$ M 128.214

(R)-(Z)-form [59983-76-5]
Oil. Bp_1 48-49°. $[\alpha]_D^{25}$ +21.02° (c, 5.05 in $CHCl_3$).

(S)-(E)-form [59983-79-8]
Aggregation pheromone of the male *Rhynchophorus palmarum*. Oil. $Bp_{0.6}$ 43-44°. $[\alpha]_D^{25}$ −9.88° (c, 5.1 in $CHCl_3$).

(±)-form
Bp_{21} 75-75.5°. Probably a mixt. of (*E*)- and (*Z*)-forms.

[64727-70-4, 66900-47-8, 66900-48-9, 83212-30-0, 109214-86-0]

v. Auwers, K. *et al*, *Ber.*, 1921, **54**, 2996 (*synth*)
Bartlett, P.D. *et al*, *J. Biol. Chem.*, 1937, **118**, 513 (*synth*)
Karasev, K.I. *et al*, *CA*, 1941, **35**, 3225 (*synth*)
Chan, K.-K. *et al*, *J. Org. Chem.*, 1976, **41**, 3497; 1978, **43**, 3435 (*synth*)
Rochat, D. *et al*, *J. Chem. Ecol.*, 1991, **17**, 2127 (*isol*)
Oppolzer, W. *et al*, *Tetrahedron Lett.*, 1991, **32**, 5777 (*synth*)
Oehlschlager, A.C. *et al*, *Naturwissenschaften*, 1992, **79**, 134 (*isol, synth*)

4-Methyl-4-hepten-3-one, 8CI M-10059

$H_3CCH_2CH{=}C(CH_3)COCH_2CH_3$

$C_8H_{14}O$ M 126.198
Constit. of the defence secretions of *Leiobunum* spp. Bp 170-172°, Bp_{10} 66°.

2,4-Dinitrophenylhydrazone: Mp 147° (139°).
Semicarbazone: Mp 167°.

[27771-19-3]

Dubois, J.E. *et al*, *Bull. Soc. Chim. Fr.*, 1954, 1153 (*synth*)
Conia, J.M., *Bull. Soc. Chim. Fr.*, 1956, 1392 (*synth*)
Faulk, D.D. *et al*, *J. Org. Chem.*, 1970, **35**, 364 (*synth, conformn*)
Jones, T.H. *et al*, *Proc. Natl. Acad. Sci. U.S.A.*, 1977, **74**, 419 (*isol*)

6-Methyl-5-hepten-3-yn-2-one M-10060

Taxifolione

[149183-86-8]

$(H_3C)_2C{=}CHC{\equiv}CCOCH_3$

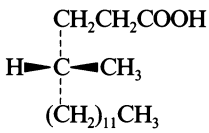
$C_8H_{10}O$ M 122.166
Constit. of *Caulerpa taxifolia*. Oil.

Guerriero, A. *et al*, *Helv. Chim. Acta*, 1993, **76**, 855 (*isol, pmr, cmr*)

4-Methylhexadecanoic acid, 9CI M-10061

4-Methylpalmitic acid

[53696-23-4]



(*R*)-*form*

$C_{17}H_{34}O_2$ M 270.454
Constit. of animal lipids.

(R)-form [89051-73-0]
No phys. props. reported.

(±)-form
Cryst. (pet. ether). Mp 44.5-45° (41°). $Bp_{0.2}$ 159-162°.

Et ester:
$C_{19}H_{38}O_2$ M 298.508
Liq. Bp_{15} 200-202°.

Amide:
$C_{17}H_{35}NO$ M 269.470
Cryst. (MeOH). Mp 74-74.5°.

Anilide:
$C_{23}H_{39}NO$ M 345.567
Cryst. or needles. Mp 60°.

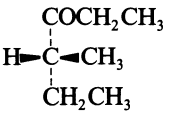
[2490-14-4]

Asano, M. *et al*, *Yakugaku Zasshi*, 1950, **70**, 202 (*synth*)
Weitzel, G. *et al*, *Hoppe Seyler's Z. Physiol. Chem.*, 1951, **287**, 65 (*ester, amide*)
Ackman, R.G. *et al*, *Lipids*, 1972, **7**, 683 (*isol*)
Kuwahara, S. *et al*, *Agric. Biol. Chem.*, 1983, **47**, 2599 (*synth*)

4-Methyl-3-hexanone, 9CI M-10062

sec-*Butyl ethyl ketone*

[17042-16-9]



(*R*)-*form*

$C_7H_{14}O$ M 114.187

(***R*)-*form*** [77858-08-3]
Liq. Bp_{100} 74-77°. $[\alpha]_D^{23}$ −30.8° (c, 4 in Et_2O)(96% e.e.).

(***S*)-*form*** [20086-34-4]
$[\alpha]_D^{25}$ +8.5°.

(±)-***form***
Constit. of the defence secretions of *Leiobunum* spp. d^{19} 0.825. Bp 134-135°.

Semicarbazone: Mp 137°.

Bartlett, P.D. *et al*, *J. Am. Chem. Soc.*, 1935, **57**, 2580 (*synth, abs config*)
Hudson, B.E. *et al*, *J. Am. Chem. Soc.*, 1941, **63**, 3163 (*synth*)
Lardicci, L. *et al*, *J. Chem. Soc., Chem. Commun.*, 1968, 381 (*ord, cd*)
Jones, T.H. *et al*, *Proc. Natl. Acad. Sci. U.S.A.*, 1977, **74**, 419 (*isol*)
Brown, H.C. *et al*, *J. Am. Chem. Soc.*, 1988, **110**, 1529 (*synth, pmr, cmr, ir*)

4-Methyl-4-hexen-3-one, 9CI M-10063

[52883-78-0]

$H_3CCH{=}C(CH_3)COCH_2CH_3$

$C_7H_{12}O$ M 112.171
Bp_{45} 75.7-76°, Bp_{13} 50.5°.

Semicarbazone: Mp 161-162°.

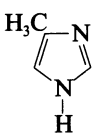
4-Nitrophenylhydrazone: Yellowish-red needles (AcOH). Mp 134°.

(***E*)-*form*** [62332-64-3]
Constit. of the defence secretions of *Leiobunum nigripalpi*. Oil. Bp_{43} 73°.

Blaise, E.E. *et al*, *C. R. Hebd. Seances Acad. Sci.*, 1908, **146**, 1326 (*synth*)
Heillmann, R. *et al*, *Bull. Soc. Chim. Fr.*, 1961, 1337 (*synth*)
Elguero, J. *et al*, *Bull. Soc. Chim. Fr.*, 1973, 3401 (*synth*)
Jones, T.H. *et al*, *Proc. Natl. Acad. Sci. U.S.A.*, 1977, **74**, 419 (*isol*)
Hong, P. *et al*, *J. Organomet. Chem.*, 1987, **334**, 129 (*synth*)

4(5)-Methylimidazole, 9CI M-10064

[822-36-6]



$C_4H_6N_2$ M 82.105
Isol. from flowers of *Sophora flavescens*. Cryst. Sol. H_2O, EtOH. Mp 56°. Bp 263°, $Bp_{0.2}$ 120-125°. Prob. an artifact.

▷ NI7350000.

Picrate: Yellow cryst. (H_2O). Mp 159-160°.

N-*Benzoyl:*
$C_{11}H_{10}N_2O$ M 186.213
Needles. V. sol. EtOH, Me_2CO, C_6H_6, sol. pet. ether. Mp 54-55°.

1-Me: [6338-45-0]. *1,4-Dimethyl-1H-imidazole*
$C_5H_8N_2$ M 96.132
Bp 198-200°.

1-Me; B,HCl: Mp 168-169°.

3-Me: [10447-93-5]. *1,5-Dimethyl-1H-imidazole*
$C_5H_8N_2$ M 96.132
Bp 220-222°.

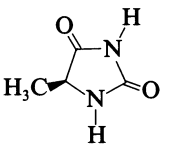
3-Me; B,HCl: Mp 194-195°.

Gabriel, S. *et al*, *Ber.*, 1893, **26**, 2205.
Pyman, F.L., *J. Chem. Soc.*, 1922, **121**, 2621 (*synth, deriv*)
Turner, R.A. *et al*, *J. Am. Chem. Soc.*, 1949, **71**, 2801.
Bowie, J.H. *et al*, *Aust. J. Chem.*, 1967, **20**, 1613 (*ms*)
Martin, P.K. *et al*, *J. Org. Chem.*, 1968, **33**, 3758 (*synth, pmr, ms, derivs*)
Matthews, H.R. *et al*, *J. Am. Chem. Soc.*, 1973, **95**, 2297 (*nmr, derivs*)
Sattler, H.J. *et al*, *Arch. Pharm. (Weinheim, Ger.)*, 1975, **308**, 795 (*cmr, tautom*)
Murakoshi, I. *et al*, *Phytochemistry*, 1982, **21**, 2379 (*isol*)
Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th Ed., Van Nostrand-Reinhold, 1992, MKU000.

5-Methyl-2,4-imidazolidinedione, 9CI M-10065

5-Methylhydantoin

[616-03-5]



(*S*)-*form*

$C_4H_6N_2O_2$ M 114.104
Constit. of *Pueraria lobata* roots.

(***S*)-*form*** [40856-73-3]
Cryst. (H_2O). $[\alpha]_D^{28}$ −48° (EtOH), $[\alpha]_D$ −58° (H_2O).

3-N-Hydroxy: [30293-99-3].
$C_4H_6N_2O_3$ M 130.103
Chiral activating reagent used in peptide synth. Mp 163-164°. $[\alpha]_D$ −36.0°.

(±)-***form*** [67337-69-3]
Prisms + H_2O. Sol. H_2O, EtOH, spar. sol. Et_2O. Mp 150-152° (anhyd.).

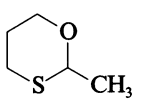
1-N-Me: [17374-27-5]. *1,5-Dimethylhydantoin*
$C_5H_8N_2O_2$ M 128.130
Needles (EtOH). Mp 120-121°.

[55747-68-7]

Gabriel, S., *Justus Liebigs Ann. Chem.*, 1906, **348**, 75 (*deriv*)
Bucherer, H.T. *et al*, *J. Prakt. Chem.*, 1934, **140**, 316 (*synth*)
Finkbeiner, H., *J. Org. Chem.*, 1965, **30**, 3414 (*synth*)
Suzuki, T. *et al*, *Agric. Biol. Chem.*, 1973, **37**, 411 (*synth, ord, cd*)
Poupaert, J.H. *et al*, *Bull. Soc. Chim. Belg.*, 1977, **86**, 465 (*uv, cd, pmr, cmr*)
Teramoto, T. *et al*, *Tetrahedron Lett.*, 1977, 1523 (*synth, use, ir, deriv*)
Ger. Pat., 2 744 428, (1979); *CA*, **91**, 20509 (*manuf*)
Chen, M. *et al*, *Zhongyao Tongbao*, 1985, **10**, 274; *CA*, **103**, 165997p (*occur*)

2-Methyl-1,3-oxathiane, 9CI M-10066

[19134-37-3]



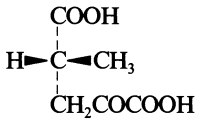
$C_5H_{10}OS$ M 118.199

(***ξ*)-*form***
Constit. of the buds of *Allium tuberosum*.

(±)-*form*
Bp_{24} 66-70°, Bp_{16} 55-56°.
[59324-11-7, 107697-90-5, 107697-95-0, 109577-10-8]
Pagani, G. *et al*, *Gazz. Chim. Ital.*, 1967, **97**, 1770 (*synth*)
Pihlaja, K., *Acta Chem. Scand.*, 1970, **24**, 2257 (*synth*)
Pihlaja, K. *et al*, *Org. Mass Spectrom.*, 1971, **5**, 763 (*ms*)
Pihlaja, K. *et al*, *Org. Magn. Reson.*, 1979, **12**, 331 (*pmr, conformn*)
Fuji, K. *et al*, *J. Org. Chem.*, 1985, **50**, 657 (*synth, pmr*)
Yi, Y. *et al*, *CA*, 1992, **117**, 86672 (*isol*)
Turyanskaya, A.M. *et al*, *Zh. Org. Khim.*, 1992, **28**, 79; *J. Org. Chem. USSR* (*Engl. Transl.*), 65 (*pmr, cmr, conformn*)

2-Methyl-4-oxopentanedioic acid M-10067

2-Methyl-4-oxoglutaric acid
[55601-64-4]

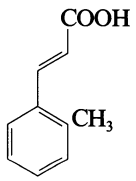


(*R*)-*form*

$C_6H_8O_5$ M 160.126
Constit. of *Lilium regale*, *Phyllitis scolopendrium* and *Tamarindus indica*. Config. not determined.
Di-Et ester: [107987-03-1].
Oil.
Di-Et ester, 2,4-dinitrophenylhydrazone: [14200-24-9].
Mp 75.5°.
(*R*)-*form* [111768-22-0]
Constit. of the seedlings of *Sophora japonica*.
[42998-61-8, 97474-86-7]
Virtanen, A.I. *et al*, *Acta Chem. Scand.*, 1955, **9**, 553 (*isol*)
Mukherjee, D. *et al*, *Biochem. Physiol. Pflanz.*, 1974, **166**, 429 (*isol*)
Righini-Tapie, A. *et al*, *J. Appl. Chem.*, 1984, **6**, 361 (*synth*)
Winter, H.C. *et al*, *Phytochemistry*, 1987, **26**, 2477 (*isol*)
Dowd, P. *et al*, *Tetrahedron*, 1988, **44**, 2137 (*synth, ester*)
Shono, T. *et al*, *J. Org. Chem.*, 1990, **55**, 5037 (*synth, ester*)

3-(2-Methylphenyl)-2-propenoic acid, 9CI M-10068

o-*Methylcinnamic acid, 8CI. 3-o-Tolylacrylic acid*
[2373-76-4]

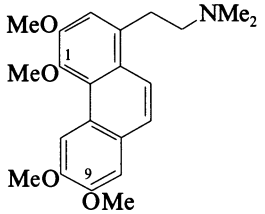


(*E*)-*form*

$C_{10}H_{10}O_2$ M 162.188
pK_a 4.50.
(*E*)-*form* [939-57-1]
Cryst. (EtOH or C_6H_6). Mp 175-176°.
Et ester: [24393-48-4].
$C_{12}H_{14}O_2$ M 190.241
Oil. $Bp_{2.2}$ 114-117°, $Bp_{1.2}$ 148°.
Amide: 3-(2-Methylphenyl)-2-propenamide. U 77863. Antibiotic U 77863
$C_{10}H_{11}NO$ M 161.203
Prod. by *Streptomyces griseoluteus*. Exhibits antitumour props. Cryst. (MeOH). Mp 151-153°.
(*Z*)-*form* [41397-71-1]
Mp 91-92° (89-90°).
[16366-23-7, 83716-65-8]
Cope, A.C. *et al*, *J. Am. Chem. Soc.*, 1957, **79**, 240 (*synth*)
Craig, J. *et al*, *Aust. J. Chem.*, 1959, **12**, 447 (*synth*)
Norcross, B.E. *et al*, *J. Org. Chem.*, 1977, **42**, 369 (*synth*)
Schaldach, B. *et al*, *Org. Mass Spectrom.*, 1980, **15**, 182 (*ms*)
Galamb, V. *et al*, *Tetrahedron Lett.*, 1983, **24**, 2965 (*synth*)
Suzuki, H. *et al*, *Chem. Lett.*, 1986, 403 (*ester*)
Liu, J.-M. *et al*, *J. Org. Chem.*, 1986, **51**, 1120 (*synth, pmr*)
Robinson, C.N. *et al*, *J. Org. Chem.*, 1986, **51**, 3535 (*cmr, ester*)
Harper, D.E. *et al*, *J. Antibiot.*, 1992, **45**, 1827 (*U 77863*)

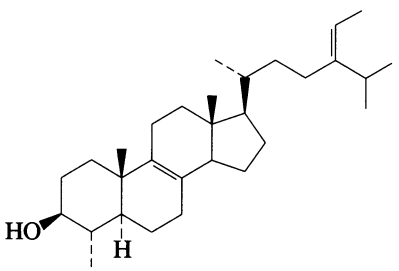
N-Methylsecoglaucine M-10069

Updated Entry replacing M-01343
*3,4,6,7-Tetramethoxy-*N,N*-dimethyl-1-phenanthreneethanamine, 9CI. 1-(2-Dimethylaminoethyl)-3,4,6,7-tetramethoxyphenanthrene. Glaucine methyl methine*
[66396-10-9]



$C_{22}H_{27}NO_4$ M 369.460
Alkaloid from *Platycapnos spicata* and *Sarcocapnos enneaphylla* (Fumariaceae). Amorph.
B,HCl: Cryst. (MeOH/Et_2O). Mp 249-251°.
B,MeI: [10313-69-6].
Mp 278° (273-274°).
N-*De-Me:* [66190-61-2]. ***Coryphenanthrine.*** *3,4,6,7-Tetramethoxy-*N*-methyl-1-phenanthreneethanamine, 9CI. 1-(2-Methylaminoethyl)-3,4,6,7-tetramethoxyphenanthrene*
$C_{21}H_{25}NO_4$ M 355.433
Alkaloid from the aerial parts of *Corydalis yanhusuo* (Fumariaceae).
O^1-*De-Me:* ***Thaliporphinemethine***
$C_{21}H_{25}NO_4$ M 355.433
Alkaloid from *Illigera pentaphylla* (Hernandiaceae). Amorph.
O^9,N-*Di-de-Me*, N-*Ac:* ***1-(N-Acetyl-N-methylamino)ethyl-7-hydroxy-3,4,6-trimethoxyphenanthrene***
$C_{22}H_{25}NO_5$ M 383.443
Alkaloid from heartwood of *Aromadendron elegans* (Magnoliaceae). Needles (EtOAc/hexane). Mp 210-211°.
Bremner, J.B. *et al*, *Aust. J. Chem.*, 1978, **31**, 313 (*synth*)
Ross, S.A. *et al*, *J. Nat. Prod.* (*Lloydia*), 1985, **48**, 835 (*Thaliporphinemethine*)
Hu, T. *et al*, *Nanjing Yaoxueyuan Xuebao*, 1985, **16**, 7; *CA*, **103**, 175443u.
Blanco, O. *et al*, *Heterocycles*, 1990, **31**, 1077 (*isol, struct, synth*)
Tojo, E. *et al*, *Phytochemistry*, 1991, **30**, 1005 (*isol*)
Goh, S.H. *et al*, *Phytochemistry*, 1992, **31**, 2495 (*deriv*)
Blanco, O.M. *et al*, *Phytochemistry*, 1993, **32**, 1055 (*isol, pmr, cmr, ms*)

4-Methylstigmasta-8,24(28)-dien-3-ol M-10070



$C_{30}H_{50}O$ M 426.724

(*3β,4α,5α,24Z*)-*form* [71418-13-8]
Constit. of *Phaseolus vulgaris* and *Rubus fructicosus*. Mp 130-132° (as acetate).
[71418-14-9]
Schmitt, P. *et al*, *Phytochemistry*, 1987, **26**, 2709 (*isol*)
Akihisa, T. *et al*, *Phytochemistry*, 1989, **28**, 1219 (*isol*)

S-[[[[(Methylsulfinyl)methyl]thio]methoxy] methyl] thiomethanesulfonate, 8CI M-10071

SE-3
[17135-23-8]

$MeSO_2—S—CH_2OCH_2—S—CH_2SOMe$

$C_5H_{12}O_4S_4$ M 264.411
Tentative struct. Isol. from the mushroom *Lentinus edodes*. Precursor to 1,2,3,5,6-Pentathiepane, P-00766. Needles (Me_2CO). Mp 80-82°.
Morita, K. *et al*, *Chem. Pharm. Bull.*, 1967, **15**, 988.

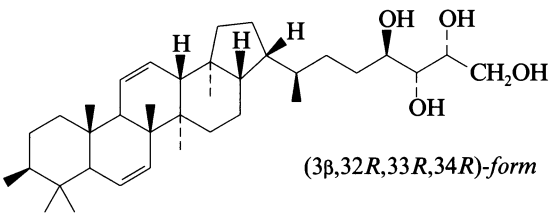
23-Methyl-5,9-tetracosadienoic acid M-10072

$(H_3C)_2CH(CH_2)_{12}CH=CHCH_2CH_2CH=CH(CH_2)_3COOH$

$C_{25}H_{46}O_2$ M 378.637
(*Z,Z*)-*form* [140245-76-7]
Constit. of the sponge *Ircinia* spp.
Carballeira, N.M. *et al*, *Comp. Biochem. Physiol., B: Comp. Biochem.*, 1991, **100**, 489 (*isol*)

3-Methyl-29-(2,3,4,5-tetrahydroxypentyl)-6,11-hopadiene M-10073

3-Methyl-6,11-bacteriohopadiene

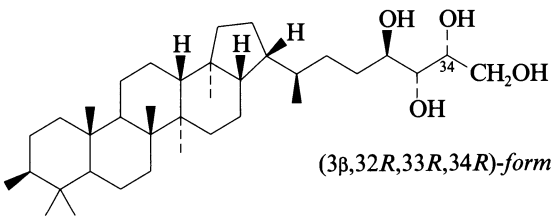


(3β,32*R*,33*R*,34*R*)-*form*

$C_{36}H_{60}O_4$ M 556.868
(*3β,32R,33R,34R*)-*form* [144179-10-2]
Constit. of *Acetobacter aceti*.
(*3β,32R,33R,34S*)-*form* [144154-71-2]
Constit. of *A. aceti* and *A. pasteurianus*.
Peiseler, B. *et al*, *J. Chem. Res., Synop.*, 1992, 298; *J. Chem. Res., Miniprint*, 1992, 2353 (*isol, pmr, cmr*)

3-Methyl-29-(2,3,4,5-tetrahydroxypentyl) hopane M-10074

3-Methyl-32,33,34,35-bacteriohopanetetrol

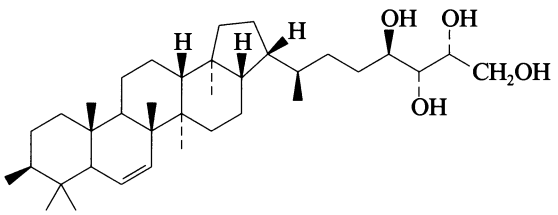


(3β,32*R*,33*R*,34*R*)-*form*

$C_{36}H_{64}O_4$ M 560.899
(*3β,32R,33R,34R*)-*form* [144179-05-5]
Constit. of *Acetobacter aceti* and *A. pasteurianus*.
(*3β,32R,33R,34S*)-*form* [144179-04-4]
Constit. of *A. aceti* and *A. pasteurianus*.
Peiseler, B. *et al*, *J. Chem. Res., Synop.*, 1992, 298; *J. Chem. Res., Miniprint*, 1992, 2353 (*isol, pmr, cmr*)

3-Methyl-29-(2,3,4,5-tetrahydroxypentyl)-6-hopene M-10075

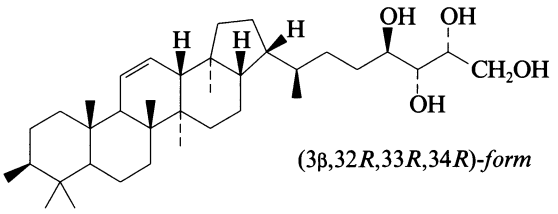
3-Methyl-6-bacteriohopene-32,33,34,35-tetrol



$C_{36}H_{62}O_4$ M 558.883
(*3β,32R,33R,34S*)-*form* [144179-07-7]
Constit. of *Acetobacter aceti* and *A. pasteurianus*. Cryst. (CH_2Cl_2/MeOH) (as tetra-Ac). Mp 143-144° (tetra-Ac).
Peiseler, B. *et al*, *J. Chem. Res., Synop.*, 1992, 298; *J. Chem. Res., Miniprint*, 1992, 2353 (*isol, pmr, cmr*)

3-Methyl-29-(2,3,4,5-tetrahydroxypentyl)-11-hopene M-10076

3-Methyl-11-bacteriohopene-32,33,34,35-tetrol

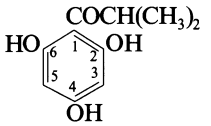


(3β,32*R*,33*R*,34*R*)-*form*

$C_{36}H_{62}O_4$ M 558.883
(*3β,32R,33R,34R*)-*form* [144179-08-8]
Constit. of *Acetobacter aceti* and *A. pasteurianus*.
(*3β,32R,33R,34S*)-*form* [144154-70-1]
Constit. of *A. aceti*.
Peiseler, B. *et al*, *J. Chem. Res., Synop.*, 1992, 298; *J. Chem. Res., Miniprint*, 1992, 2353 (*isol, pmr, cmr*)

2-Methyl-1-(2,4,6-trihydroxyphenyl)-1-propanone, 9CI M-10077

Updated Entry replacing M-01444
2′,4′,6′-Trihydroxy-2-methylpropiophenone, 8CI. 2,4,6-Trihydroxyisobutyrophenone. Phlorisobutyrophenone
[35458-21-0]



$C_{10}H_{12}O_4$ M 196.202
Constit. of *Helichrysum* spp. Pale yellow cryst. Mp 197° (177-178°). Lower Mp's including hydrate formation have been reported.
2-O-β-Glucopyranoside: [17004-75-0].
$C_{16}H_{22}O_9$ M 358.344
Constit. of hops (*Humulus lupulus*) and from *Helichrysum* sp. Mp 118°. $[\alpha]_D$ −59.8°.

2-Me ether: [102092-19-3]. *1-(2,4-Dihydroxy-6-methoxyphenyl)-2-methyl-1-propanone, 9CI. 2',4'-Dihydroxy-6'-methoxy-2-methylpropiophenone.* ***Robustaol B***
$C_{11}H_{14}O_4$ M 210.229
Isol. from *Eucalyptus robusta* and *Kunzea* spp. Oil.

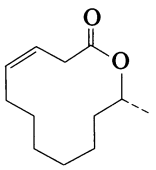
4-Me ether: [42541-62-8]. *2',6'-Dihydroxy-4'-methoxy-2-methylpropiophenone*
$C_{11}H_{14}O_4$ M 210.229
Isol. from *K.* spp. Oil.

Tri-Me ether: [480-25-1]. *2-Methyl-1-(2,4,6-trimethoxyphenyl)-1-propanone. 2,4,6-Trimethoxyisobutyrophenone.* ***Conglomerone***
$C_{13}H_{18}O_4$ M 238.283
Constit. of oil of *E. conglomerata* and from *Acreugenia pungens.* Mp 62-62.5°.

Riedl, W., *Justus Liebigs Ann. Chem.*, 1954, **585**, 38 (*synth*)
Lounasmaa, M. *et al*, *Acta Chem. Scand., Ser. B*, 1974, **28**, 1209.
Amer, M.I. *et al*, *J. Chem. Soc., Perkin Trans. 1*, 1983, 1075 (*synth*)
Bohlmann, F. *et al*, *Planta Med.*, 1984, **50**, 174 (*isol*)
Mizobuchi, S. *et al*, *Agric. Biol. Chem.*, 1985, **49**, 719 (*synth*)
Qin, G. *et al*, *Huaxue Xuebao*, 1986, **44**, 151; *CA*, **104**, 203867 (*Robustaol B*)
Jakupovic, J. *et al*, *Phytochemistry*, 1986, **25**, 1133 (*isol*)
Crombie, L. *et al*, *J. Chem. Soc., Perkin Trans. 1*, 1987, 317 (*synth*)
Bloor, S.J., *J. Nat. Prod.* (*Lloydia*), 1992, **55**, 43 (*derivs*)

11-Methyl-3-undecenolide M-10078

Updated Entry replacing M-01462
12-Methyloxacyclododec-4-en-2-one, 9CI



(R,Z)-form

$C_{12}H_{20}O_2$ M 196.289

(R,Z)-form [87583-38-8] ***Cucujolide II***
Aggregation pheromone of the grain beetle. Attractant for *Oryzaephilus mercator.*

(S,Z)-form [86578-99-6] ***Ferrulactone II***
Pheromone of the rusty grain beetle *Cryptolestes ferrugineus.* Aggregating pheromone for *O. mercator.* $[\alpha]_D^{22.5}$ +70.5° (c, 0.96 in $CHCl_3$).

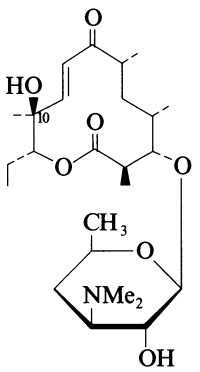
(±)-(Z)-form [87583-37-7]
Liq. $Bp_{0.1}$ 60-70°. Contains *ca.* 5% of the *E*-isomer.

[86631-33-6, 87583-37-7, 97372-89-9, 126415-33-6, 126415-34-7, 126841-00-7, 126841-01-8, 127888-78-2]

Oehlschlager, A.C. *et al*, *J. Org. Chem.*, 1983, **48**, 5009 (*synth*)
U.S. Pat., 4 560 551, (1985); *CA*, **104**, 125076b (*synth*)
Pierce, A.M. *et al*, *Environ. Entomol.*, 1989, **18**, 747; *CA*, **112**, 195479z (*struct*)
Keinan, E. *et al*, *Tetrahedron*, 1991, **47**, 4631 (*synth*)

Methymycin, 8CI M-10079

Updated Entry replacing M-01469
[497-72-3]



$C_{25}H_{43}NO_7$ M 469.617
Macrolide antibiotic. Prod. by a *Streptomyces* sp. Active against gram-positive organisms. Prisms or needles (EtOH). Mp 195-197°. $[\alpha]_D^{25}$ +74° (c, 1.1 in $CHCl_3$), $[\alpha]_D$ +61° (c, 0.7 in MeOH).

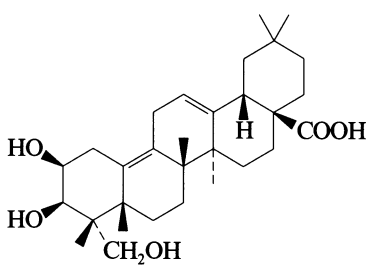
Aglycone: [534-32-7]. *12-Ethyl-4,11-dihydroxy-3,5,7,11-tetramethyloxacyclodec-9-ene-2,8-dione, 9CI.* ***Methynolide***
$C_{17}H_{28}O_5$ M 312.405
Isol. from *S. venezuelae.* Mp 168-169°. $[\alpha]_D$ +67° (MeOH).

10-Deoxy: [36826-66-1]. ***10-Deoxymethymycin.*** *YC 17. Antibiotic YC 17*
$C_{25}H_{43}NO_6$ M 453.618
From *S. venezuelae.* Active against gram-positive and some gram-negative bacteria. Cryst. Mp 68-70°. $[\alpha]_D^{27}$ +84° (c, 1 in $CHCl_3$).

Aglycone, 10-deoxy: ***10-Deoxymethynolide***
$C_{17}H_{28}O_4$ M 296.406
Prod. by *S. venezuelae.* $[\alpha]_D$ +67.75° ($CHCl_3$).

Djerassi, C. *et al*, *J. Am. Chem. Soc.*, 1956, **78**, 2907 (*isol*)
Celmer, W.D. *et al*, *J. Am. Chem. Soc.*, 1965, **87**, 1799, 1801 (*struct, nmr, stereochem*)
Manwaring, D.G. *et al*, *Tetrahedron Lett.*, 1970, 1029 (*pmr, abs config*)
Kinumaki, A. *et al*, *J. Chem. Soc., Chem. Commun.*, 1972, 744 (*deriv*)
Masamune, S. *et al*, *J. Am. Chem. Soc.*, 1975, **97**, 3512, 3513 (*synth*)
Grieco, P.A. *et al*, *J. Am. Chem. Soc.*, 1979, **101**, 4749 (*synth*)
Vedejs, E. *et al*, *J. Org. Chem.*, 1979, **44**, 2947 (*synth*)
Ireland, R.E. *et al*, *J. Org. Chem.*, 1983, **48**, 1312 (*synth*)
Paterson, I. *et al*, *Tetrahedron*, 1985, **41**, 3569 (*synth, rev*)
Vedejs, E. *et al*, *J. Am. Chem. Soc.*, 1989, **111**, 8421, 8430 (*synth*)
Ditrich, K. *et al*, *Justus Liebigs Ann. Chem.*, 1990, 789 (*synth, aglycone*)
Lambalot, R.H. *et al*, *J. Antibiot.*, 1992, **45**, 1981 (*10-Deoxymethynolide*)

Mimusopic acid M-10080

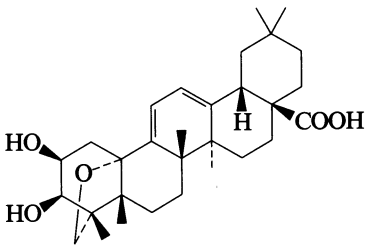


$C_{30}H_{46}O_5$ M 486.690

Constit. of *Mimusops elengi*. Cryst. (MeOH). Mp 292-294°. $[\alpha]_D$ +48.57° (c, 0.21 in Py).

Sen, S. *et al*, *Tetrahedron*, 1993, **49**, 9031 (*isol, pmr, cmr*)

Mimusopsic acid M-10081



$C_{30}H_{44}O_5$ M 484.675

Constit. of *Mimusops elengi*. Cryst. (MeOH). Mp 234-236°. $[\alpha]_D$ +20° (c, 0.12 in MeOH).

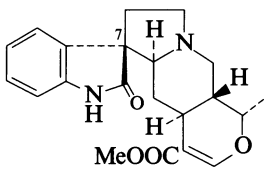
Sen, S. *et al*, *Tetrahedron*, 1993, **49**, 9031 (*isol, pmr, cmr*)

Mitraphylline M-10082

Updated Entry replacing M-01594

Ajmalicine oxindole B. Rubradinine

[509-80-8]



Absolute configuration

$C_{21}H_{24}N_2O_4$ M 368.432

For other stereoisomers see Uncarine, U-10005. Alkaloid from *Mitragyna hirsuta*, some other *M.* spp. and some *Uncaria* spp.(Naucleaceae). Hypotensive agent, general depressant. Mp 265-266°. $[\alpha]_D$ −7° ($CHCl_3$), $[\alpha]_D$ −10° (EtOH), $[\alpha]_D$ +11° (Py).

B,HClO$_4$: Mp 240°.

Picrate: Mp 207-209°.

N-*Oxide:* ***Mitraphylline* N-*oxide***

$C_{21}H_{24}N_2O_5$ M 384.431

Alkaloid from *U. orientalis* and *U. longiflora* (Naucleaceae).

7-Epimer: [4963-01-3]. ***Isomitraphylline.*** *Ajmalicine oxindole A*

$C_{21}H_{24}N_2O_4$ M 368.432

Alkaloid from *M.* and *U.* spp. (Naucleaceae). Amorph. $[\alpha]_D$ +18° ($CHCl_3$). pK_a 4.6.

7-Epimer, picrate: Yellow prisms (MeOH). Mp 223° dec.

7-Epimer, N-*oxide:* ***Isomitraphylline* N-*oxide***

$C_{21}H_{24}N_2O_5$ M 384.431

Alkaloid from *U. longiflora* and *U. orientalis* (Naucleaceae). Identified by TLC only.

7-Epimer, 10,11-Dimethoxy: [53796-85-3]. ***10,11-Dimethoxyisomitraphylline***

$C_{23}H_{28}N_2O_6$ M 428.484

Alkaloid from the aerial parts of *Cabucala madagascariensis* var. *amygdalifolia* and the leaves of *C. fasciculata* (Apocynaceae). Mp 142°. $[\alpha]_D$ +15°.

Stereoisomer (1): [19775-85-0]. ***Gambirdine***

$C_{21}H_{24}N_2O_4$ M 368.432

Alkaloid from *U. gambir* (Naucleaceae). Mp 199-201°. $[\alpha]_D^{21}$ +84.8° (c, 0.02 in $CHCl_3$). Stereochem. unknown.

Stereoisomer (2): [19775-86-1]. ***Isogambirdine***

$C_{21}H_{24}N_2O_4$ M 368.432

Alkaloid from *U. gambir* (Naucleaceae). Oil. Mp 179-181° dec. (as hydrochloride). $[\alpha]_D^{21}$ +115.5° (c, 0.02 in $CHCl_3$). Stereochem. unknown.

Parent acid: ***Mitraphyllic acid***

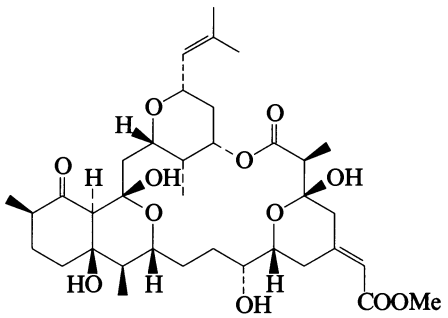
$C_{20}H_{22}N_2O_4$ M 354.405

Alkaloid from stems of *U. sinensis* (Naucleaceae). Mp 234-236° dec. $[\alpha]_D$ −32.8° (c, 0.07 in MeOH).

Seaton, J.C. *et al*, *Can. J. Chem.*, 1958, **36**, 1031 (*isol, uv, ir*)
Finch, N. *et al*, *J. Am. Chem. Soc.*, 1962, **84**, 3871 (*struct, Isomitraphylline*)
Gilbert, B. *et al*, *J. Am. Chem. Soc.*, 1963, **85**, 1523 (*ms*)
Pousset, J.-L. *et al*, *Bull. Soc. Chim. Fr.*, 1966, 2766 (*pmr, config*)
Johns, S.R. *et al*, *Tetrahedron Lett.*, 1966, 4883 (*pmr, config*)
Chan, K.C., *Tetrahedron Lett.*, 1968, 3403 (*Gambirdine, Isogambirdine*)
Kan-Fan, C. *et al*, *Phytochemistry*, 1972, **11**, 435 (*Dimethoxyisomitrophylline*)
Phillipson, J.D. *et al*, *Phytochemistry*, 1973, **12**, 2791; 1975, **14**, 1855 (*oxides*)
Phillipson, J.D. *et al*, *J. Chromatogr.*, 1975, **105**, 163 (*tlc, glc, ms*)
Ban, Y. *et al*, *Chem. Pharm. Bull.*, 1976, **24**, 736 (*synth*)
Liu, H.-M. *et al*, *Phytochemistry*, 1993, **33**, 707 (*Mitraphyllic acid*)

Miyakolide M-10083

[143346-97-8]

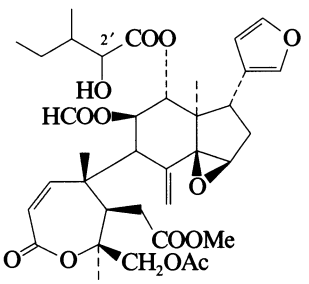


$C_{36}H_{54}O_{12}$ M 678.815

Constit. of a *Polyfibrospongia* sponge. Cryst. (CH_2Cl_2/MeOH). Mp 197-199°. $[\alpha]_D^{24}$ −24° (c, 1.05 in $CHCl_3$).

Higa, T. *et al*, *J. Am. Chem. Soc.*, 1992, **114**, 7587 (*isol, pmr, cmr, cryst struct*)

Mombasol M-10084



$C_{36}H_{46}O_{13}$ M 686.752

Constit. of *Turraea mombasana*. Cryst. Mp 116-118°.

2'-Ketone: ***Mombasone***

$C_{36}H_{44}O_{13}$ M 684.736

Constit. of *T. mombasana*. Cryst. Mp 112-114°.

Adul, G.O. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 1414 (*isol, pmr, cmr*)

Monellin M-10085

[9062-83-3]

Protein consisting of two non-covalently associated polypeptide chains. The A-chain contains 44 amino acid residues and the B-chain of 50 residues. Their structs. have been determined. Isol. from the fruit of *Dioscoreophyllum cumminsii*. Intensely sweet compd.

[130453-08-6, 131571-28-3]

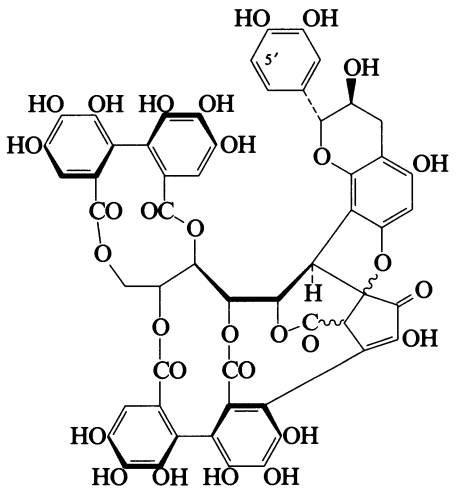
Wlodawer, A. *et al*, *Proc. Natl. Acad. Sci. U.S.A.*, 1975, **72**, 398 (*cryst struct*)

Kohmura, M. *et al*, *Agric. Biol. Chem.*, 1990, **54**, 1521, 2219 (*synth, struct, bibl*)

Mongolicain A M-10086

Updated Entry replacing M-01650

[115518-27-9]



$C_{55}H_{36}O_{30}$ M 1176.871

A major tannin of *Quercus* sp. and *Castanopsis* sp. Pale brown amorph. powder + $3H_2O$. $[\alpha]_D^{18}$ −148.4° (c, 0.86 in MeOH).

5′-Hydroxy: [145826-26-2]. ***Psidinin A***

$C_{55}H_{36}O_{31}$ M 1192.871

Constit. of the bark of *Psidium guajava*. Pale brown powder + $5H_2O$. $[\alpha]_D^{26}$ −146.6° (c, 1 in MeOH).

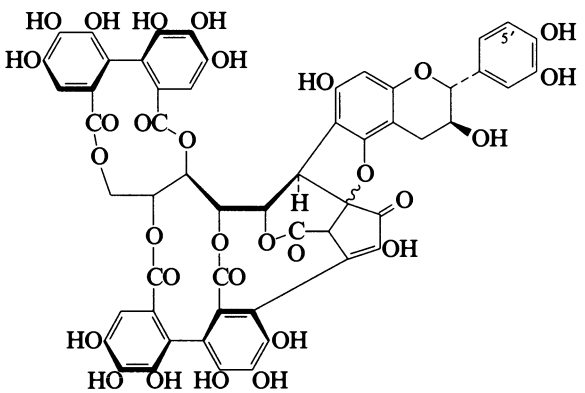
Nonaka, G.-I. *et al*, *Chem. Pharm. Bull.*, 1988, **36**, 857; 1990, **38**, 2151 (*struct, cd, pmr, cmr, abs config*)

Tanaka, T. *et al*, *Chem. Pharm. Bull.*, 1992, **40**, 2092 (*Psidinin A*)

Mongolicain B M-10087

Updated Entry replacing M-01651

[115518-28-0]



$C_{55}H_{36}O_{30}$ M 1176.871

A major tannin of *Quercus* sp. and *Castanopsis* sp. Pale brown amorph. powder + $5H_2O$. $[\alpha]_D^{18}$ −64.7° (c, 0.9 in MeOH).

5′-Hydroxy: [145826-27-3]. ***Psidinin B***

$C_{55}H_{36}O_{31}$ M 1192.871

Constit. of the bark of *Psidium guajava*. Pale brown powder + $6H_2O$. $[\alpha]_D^{21}$ −27.2° (c, 1 in MeOH).

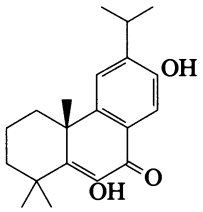
Nonaka, G.-I. *et al*, *Chem. Pharm. Bull.*, 1988, **36**, 857; 1990, **38**, 2151 (*struct, cd, pmr, cmr, abs config*)

Tanaka, T. *et al*, *Chem. Pharm. Bull.*, 1992, **40**, 2092 (*Psidinin B*)

Montbretol M-10088

Updated Entry replacing D-01472

[140923-35-9]



$C_{20}H_{26}O_3$ M 314.424

Formerly thought to be 6,12-Dihydroxy-5,8,11,13-abietatetraen-7-one. Constit. of *Salvia montbretii* and *Juniperus rigida*. Yellow amorph. powder.

12-Me ether: [140670-85-5]. ***Montbretyl 12-methyl ether***

$C_{21}H_{28}O_3$ M 328.450

Constit. of *S. montbretii*. Yellow amorph. powder. Formerly thought to be 6-Hydroxy-12-methoxy-5,8,11,13-abietatetraen-7-one.

[34327-29-2]

Yanagawa, T. *et al*, *CA*, 1971, **75**, 148545a.

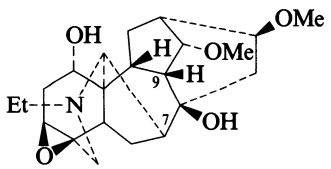
Ulubelen, A. *et al*, *J. Nat. Prod.* (*Lloydia*), 1992, **55**, 441 (*isol, pmr, cmr*)

Burnell, R.H., *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 627 (*struct*)

Monticamine M-10089

Updated Entry replacing M-01679

[81047-05-4]



$C_{22}H_{33}NO_5$ M 391.506

Alkaloid from *Aconitum monticola* (Ranunculaceae). Cryst. (Et_2O/Me_2CO). Mp 163-164°.

7-Hydroxy: [81037-22-1]. ***Monticoline***

$C_{22}H_{33}NO_6$ M 407.506

Alkaloid from *A. monticola* and from the aerial parts of budding *A. karakolicum* (Ranunculaceae). Cryst. (Me_2CO). Mp 166-167°.

9β-Hydroxy: [41645-62-9]. ***Excelsine***†

$C_{22}H_{33}NO_6$ M 407.506

Alkaloid from the roots of *A. excelsum* (Ranunculaceae). Mp 103-105°.

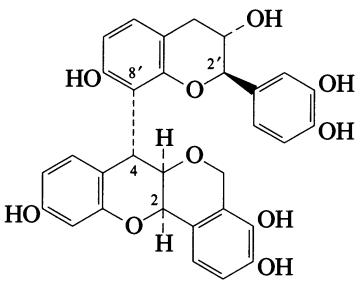
9β-Hydroxy, O^8-*Ac:* ***8-Acetylexcelsine***

$C_{24}H_{35}NO_7$ M 449.543

Alkaloid from epigeal parts of *A. kirinense* (Ranunculaceae). Amorph.

Nasirov, S.M. *et al*, *Khim. Prir. Soedin.*, 1976, **12**, 206; *Chem. Nat. Compd.* (*Engl. Transl.*), 184 (*cryst struct, Excelsine*)
Ametova, E.F. *et al*, *Khim. Prir. Soedin.*, 1981, 446; *Chem. Nat. Compd.* (*Engl. Transl.*), 345 (*Monticamine, Monticoline*)
Nishanov, A.A. *et al*, *Khim. Prir. Soedin.*, 1991, 258; *Chem. Nat. Compd.* (*Engl. Transl.*), 222 (*8-Acetylexcelsine*)

Mopanane(4→8)-3,3′,4,7-tetrahydroxyflavan M-10090



$C_{31}H_{26}O_{10}$ M 558.540

(2R,2′R,3R,3′S,4S)-form

Constit. of the heartwood of *Colophospermum mopane*. Incorrect stereochem. for natural isomer shown on diag. in paper.

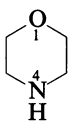
[127612-76-4]

Malan, J.C.S. *et al*, *J. Chem. Soc., Perkin Trans. 1*, 1990, 219 (*isol*)

Morpholine, 9CI M-10091

Tetrahydro-1,4-oxazine. 1-Oxa-4-azacyclohexane

[110-91-8]



C_4H_9NO M 87.121

Solvent for resins, waxes and dyes. Synthetic reagent. Anal. reagent for α, β-unsatd. compds. and for anhydrides. Hygroscopic oil with ammoniacal odour and caustic props. Misc. H_2O. d_4^{20} 0.999. Mp −4.9°. Bp 128.9°, Bp_6 20°. pK_a 8.49 (25°). n_D^{20} 1.4545. Steam-volatile.

▷ Flammable, fl.p. 37°(oc)/38°(oc), autoignition temp. 310°. Corrosive and irritating to skin, eyes and mucous membranes. LD_{50} (rbt, orl) 1050 mg/kg. LD_{50} (rbt, skn) 500 mg/kg. Exp. nephtotoxic. QD6475000.

B,HCl: [10024-89-2].
Cryst. (HCl aq.). Mp 175-176°.
▷ QE5075000.

Picrate: Mp 225°.

N-*Formyl:* [4394-85-8]. *4-Morpholinecarboxaldehyde*
$C_5H_9NO_2$ M 115.132
Formylating reagent. Liq. Mp 17.5°. Bp 234°.
▷ QD9694000.

N-*Ac:* [1696-20-4].
$C_6H_{11}NO_2$ M 129.158
Sol. H_2O. d_{20}^{20} 1.12. Mp 14.5°. Bp_{50} 152°, Bp_{12} 118°. n_D^{20} 1.4827.
▷ Eye irritant. QD7000000.

N-*Benzoyl:* [1468-28-6].
$C_{11}H_{13}NO_2$ M 191.229
Cryst. (Et_2O). Mp 74-75°.
▷ QD8050000.

N-*Me:* [109-02-4]. **N-*Methylmorpholine***
$C_5H_{11}NO$ M 101.148
Isol. from seeds of *Cassia occidentalis*. Base used in mixed anhydride peptide synth. which minimises racemisation. Bp 116-117°.
▷ Corrosive and irritating to skin, eyes and mucous membranes. LD_{50} (rat, orl) 1970 mg/kg. QE5775000.

N-*Me, N-Oxide:* [7529-22-8].
$C_5H_{11}NO_2$ M 117.147
Catalyst for oxidn. of alcohols. Dipolar aprotic solvent used in the manuf. of Tencel from celluloase (Courtaulds). Monohydrate. Mp 73-76°.

N-*Et:* [100-74-3].
$C_6H_{13}NO$ M 115.175
Solvent. Dissolves $LiAlH_4$. Bp 138-139°.
▷ Skin and severe eye irritant. LD_{50} (rat, orl) 1780 mg/kg. QE4025000.

N-*Ph:* [92-53-5].
$C_{10}H_{13}NO$ M 163.219
Dehydrohalogenating reagent. Mp 57°. Bp 270°.
▷ Toxic by skin absorption. Eye irritant. LD_{50} (rat, orl) 930 mg/kg. LD_{50} (rbt, skn) 360 mg/kg. QE8575000.

4-Methylbenzenesulfonyl: Mp 147°.

N-*Nitroso:* [59-89-2].
$C_4H_8N_2O_2$ M 116.119
▷ Possible human carcinogen. LD_{50} (rat, orl) 282 mg/kg. Exp. carcinogen. QE7525000.

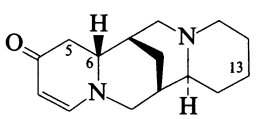
Jones, L.W. *et al*, *J. Am. Chem. Soc.*, 1925, **47**, 2966 (*synth*)
Medard, M.L., *Bull. Soc. Chim. Fr.*, 1936, 1343 (*deriv, synth*)
Hampton, B.L. *et al*, *J. Am. Chem. Soc.*, 1936, **58**, 2338 (*synth*)
Johnson, J.B. *et al*, *Anal. Chem.*, 1955, **27**, 1464 (*use*)
Critchfield, F.E. *et al*, *Anal. Chem.*, 1956, **28**, 76 (*use*)
Fieser and Fieser's Reagents for Organic Synthesis, Wiley, 1967, **1**, 383, 705; **2**, 278; **7**, 244.
Potnis, S.P. *et al*, *Chem. Process. Eng.* (*Bombay*), 1969, **3**, 27 (*rev*)
Kim, H.L. *et al*, *J. Agric. Food Chem.*, 1971, **19**, 198 (*isol*)
Bark, L.S. *et al*, *Analyst* (*London*), 1972, **97**, 783 (*use*)
Takeuchi, Y., *J. Chem. Soc., Perkin Trans. 2*, 1974, 1927 (*cmr*)
Org. Synth., 1978, **58**, 43 (*deriv*)
Kirk-Othmer Encycl. Chem. Technol., 3rd Ed., Wiley, N.Y., 1978-1984, **2**, 295 (*rev*)
Olah, G.A. *et al*, *J. Org. Chem.*, 1984, **49**, 3856 (*deriv, use*)
Patty's Ind. Hyg. Toxicol. (*3rd Rev. edn.*), Vol. 2, Wiley, 1980, 2693.
Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th Ed., Van Nostrand-Reinhold, 1992, NKZ000, PFS750, ENL000, MMA250, MRP750, ACR750, MRQ600.
Ethel Browning's Toxicity and Metabolism of Industrial Solvents, 2nd edn., (Snyder, R., ed.), Elsevier, Volume 2, 1990, 244.
Bretherick, L., *Handbook of Reactive Chemical Hazards*, 4th edn., Butterworth, London and Boston, 1990, 1555.
Luxon, S.G., *Hazards in the Chemical Laboratory*, 5th edn., Royal Society of Chemistry, Cambridge, 1992, 879.

Multiflorine M-10092

Updated Entry replacing M-01759

4-Oxo-2,3-didehydrosparteine. Base LV1

[529-80-6]



Absolute configuration

$C_{15}H_{22}N_2O$ M 246.352

Alkaloid from *Lupinus multiflorus, L. varius, L. albus, L. mutabilis* and *Cadia ellisiana* (Leguminosae). Mp 108-109°. $[\alpha]_D^{22}$ −317° (c, 0.4 in MeOH).

B,$HClO_4$: Mp 160-162° dec.

Picrolonate: Mp 204°.

16-N-*Oxide:* [137453-21-5]. ***Multiflorine* N-*oxide***
$C_{15}H_{22}N_2O_2$ M 262.351

Constit. of *L. hirsutus*. Oil. $[\alpha]_D^{23}$ −145.8° (c, 0.07 in EtOH).

5,6-Didehydro: [66216-62-4]. ***5-Dehydromultiflorine***
$C_{15}H_{20}N_2O$ M 244.336
Constit. of *L. hirsutus* and *L. termis*. Oil. $[\alpha]_D^{25}$ −94.4° (c, 0.015 in CH_2Cl_2).

13α-Hydroxy: ***13-Hydroxymultiflorine.*** *Alkaloid* X_1
$C_{15}H_{22}N_2O_2$ M 262.351
Minor alkaloid from *L. albus* and *L. cosentinii* seeds (as esters) (Leguminosae). Highly hygroscopic gum. $[\alpha]_D^{25}$ −335° (c, 1 in MeOH). Obt. from *L. cosentinii* as an ester mixt.(Alkaloid LC3) of which the benzoate was the only positively identified component.

5,6-Didehydro, 13α-hydroxy: ***Δ⁵-Dehydro-13-hydroxymultiflorine.*** *Alkaloid* X_2
$C_{15}H_{20}N_2O_2$ M 260.335
Alkaloid from *L. albus* (Leguminosae). Highly hygroscopic, obt. only in small amt.

13α-Tigloyloxy: [136396-56-0]. ***13α-Tigloyloxymultiflorine***
$C_{20}H_{28}N_2O_3$ M 344.453
Alkaloid from *L. hirsutus* (Leguminosae). Oil. $[\alpha]_D^{23}$ −292° (c, 0.1 in EtOH).

13-Methoxy: ***13-Methoxymultiflorine***
$C_{16}H_{24}N_2O_2$ M 276.378
Trace alkaloid in seeds and leaves of *L. albescens* (Leguminosae). Provisional identification.

Didehydro: ***Dehydromultiflorine***
$C_{15}H_{20}N_2O$ M 244.336
Alkaloid present in seeds and leaves of *L. albescens* (Leguminosae). Provisional identification. Posn. of double bond unknown (ms spectrum differs significantly from that of 5-dehydromultiflorine above).

[74867-85-9, 74902-86-6]

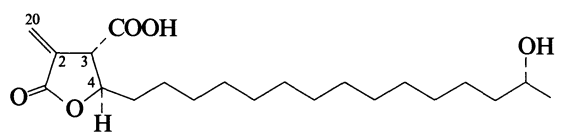
Crow, W.D., *Aust. J. Chem.*, 1955, **8**, 136; 1959, **12**, 474 (*isol, uv, ir, struct, pmr*)
Comin, J. *et al, Aust. J. Chem.*, 1959, **12**, 468 (*isol, uv, ir, struct*)
Wiewiorowski, M. *et al, Bull. Acad. Pol. Sci., Ser. Sci. Chim.*, 1961, **9**, 715 (*isol, ir, struct, derivs*)
Goldberg, S.I. *et al, J. Org. Chem.*, 1976, **32**, 1832 (*cd, abs config*)
Beck, A.B. *et al, J. Nat. Prod. (Lloydia)*, 1979, **42**, 385 (*13-Hydroxymultiflorine*)
Pyzalska, D. *et al, Acta Crystallogr., Sect. B*, 1980, **36**, 1602, 1685 (*cryst struct, Dehydromultiflorine*)
Wink, M. *et al, Planta Med.*, 1981, **43**, 342 (*isol, ms*)
Hatzold, T. *et al, J. Agric. Food Chem.*, 1983, **31**, 934 (*isol*)
Wysocka, W. *et al, Croat. Chem. Acta*, 1989, **62**, 109 (*cd*)
Wyrzykiewicz, E. *et al, Org. Mass Spectrom.*, 1990, **25**, 453 (*ms*)
Takamatsu, S. *et al, Heterocycles*, 1991, **32**, 1167 (*N-oxide*)
Takamatsu, S. *et al, J. Nat. Prod. (Lloydia)*, 1991, **54**, 477 (*13-Tigloyloxymultiflorine*)
Planchuelo-Ravelo, A.M. *et al, Z. Naturforsch., C*, 1993, **48**, 414 (*13-Methoxymultiflorine, Dehydromultiflorine*)

Murolic acid M-10093

Updated Entry replacing M-01783

Tetrahydro-2-(14-hydroxypentadecyl)-4-methylene-5-oxo-3-furancarboxylic acid, 9CI

[70579-58-7]



Absolute configuration

$C_{21}H_{36}O_5$ M 368.512

Isol. from the lichen *Lecanora muralis*, also in *L. melanophthalma* and *L. rubina*. Platelets (MeOH). Mp 110-111°. $[\alpha]_D^{24}$ +5.13° (c, 1.11 in MeOH).

2S,20-Dihydro: [70579-57-6]. ***Neodihydromurolic acid***
$C_{21}H_{38}O_5$ M 370.528
Isol. from *L. muralis*, also in *L. melanophthalma* and *L. rubina*. Platelets (MeOH). Mp 122-123°. $[\alpha]_D^{24}$ +17.14° (c, 1.59 in MeOH).

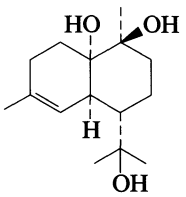
14'-Ketone: [70579-63-4]. ***Muronic acid***
$C_{21}H_{34}O_5$ M 366.497
Isol. from *Neuropogon trachycarpus*. Cryst. (Me_2CO aq.). Mp 93-94°. $[\alpha]_D^{20}$ +8.7° (c, 0.085 in $CHCl_3$).

14'-Ketone, 4-epimer: [101899-62-1]. ***Allopertusaric acid***
$C_{21}H_{34}O_5$ M 366.497
Isol. from *Pertusaria albescens*. Seedling growth inhibitor. Plates. Mp 76-78°. $[\alpha]_D^{24}$ −95.5° (c, 1.525 in MeOH). Pertusaric acid appears to be unknown.
▷ Pertussive agent, nasal irritant.

2S,20-Dihydro, 14'-ketone, 3,4-diepimer: [101899-68-7]. ***Dihydropertusaric acid***
$C_{21}H_{36}O_5$ M 368.512
Isol. from *P. albescens*. Small needles. Mp 105-107°. $[\alpha]_D^{24}$ −74.9° (c, 2.15 in MeOH).

Huneck, S. *et al, J. Hattori Bot. Lab.*, 1979, **45**, 1 (*isol, pmr, cd, struct, abs config*)
Ghogomu, R.T. *et al, Phytochemistry*, 1982, **21**, 2355 (*Muronic acid*)
Huneck, S. *et al, Phytochemistry*, 1986, **25**, 453 (*Allopertusaric acid, Dihydropertusaric acid*)

4-Muurolene-1,10,11-triol M-10094



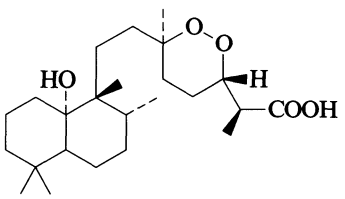
$C_{15}H_{26}O_3$ M 254.369

(1α,10β)-form [149203-85-0] ***Eleganthol***
Constit. of *Clitocybe elegans*. Cryst. (MeOH). Mp 182-184°. $[\alpha]_D$ −8.6° (c, 0.2 in $CHCl_3$).

Arnone, A. *et al, Phytochemistry*, 1993, **32**, 1493 (*isol, pmr, cmr, cryst struct*)

Mycaperoxide A M-10095

[149260-79-7]

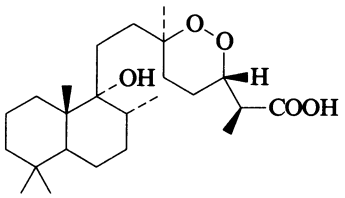


$C_{24}H_{42}O_5$ M 410.593
Constit. of a *Mycale* sp. Cryst. (Me_2CO). Mp 158-159.5°. $[\alpha]_D^{30}$ −41.0° (c, 1.28 in Me_2CO).

Tanaka, J. *et al, J. Org. Chem.*, 1993, **58**, 2999 (*isol, pmr, cmr, cryst struct*)

Mycaperoxide B M-10096

[149260-80-0]



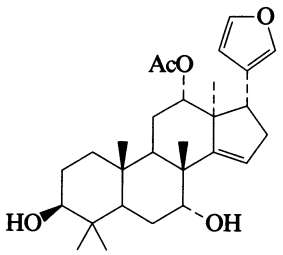
$C_{24}H_{42}O_5$ M 410.593

Constit. of a *Mycale* sp. Gum. $[\alpha]_D^{30}$ −41.3° (c, 1.27 in Me_2CO).

Tanaka, J. *et al*, *J. Org. Chem.*, 1993, **58**, 2999 (*isol*, *pmr*, *cmr*)

Mzikonol M-10097

[139026-32-7]



$C_{28}H_{40}O_5$ M 456.621

Constit. of *Turraea robusta*. Cryst. Mp 195-197°.

3-Ketone: [117278-48-5]. ***Mzikonone***

$C_{28}H_{38}O_5$ M 454.605

Constit. of *T. robusta*. Cryst. Mp 99-101°.

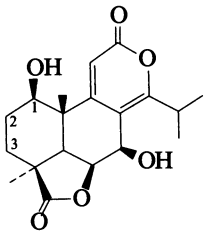
Bentley, M.D. *et al*, *J. Nat. Prod.* (*Lloydia*), 1992, **31**, 84.

N

Nagilactone A N-10001

Updated Entry replacing N-00007

[19891-50-0]



$C_{19}H_{24}O_6$ M 348.395

Constit. of *Podocarpus nagi*. Plant growth regulator, larvicide. Cryst. Mp 305° subl. $[\alpha]_D$ +88.8°.

β-Hydroxy: [65648-12-6]. ***3β-Hydroxynagilactone A***

$C_{19}H_{24}O_7$ M 364.394

From *P. nagi*. Mp 247-249°.

2β-Hydroxy: [19891-51-1]. ***Nagilactone B***

$C_{19}H_{24}O_7$ M 364.394

Constit. of *P. nagi*. Plant growth regulator. Cryst. Mp 258-261° dec. $[\alpha]_D$ +92.3°.

1-Deoxy, 2α-hydroxy: ***1-Deoxy-2α-hydroxynagilactone A***

$C_{19}H_{24}O_6$ M 348.395

Constit. of *P. nagi*. Mp 243-245° dec.

1-Deoxy, 3β-hydroxy: [34294-04-7]. ***Sellowin C***

$C_{19}H_{24}O_6$ M 348.395

Isol. from *P. sellowii*. Cryst. Mp 310° dec.

1-Deoxy, 2β,3β-dihydroxy: [78095-11-1]. ***Urbalactone***

$C_{19}H_{24}O_7$ M 364.394

Isol. from *P. urbanii*. Cryst. (MeOH). Mp 270-272° dec. $[\alpha]_D^{25}$ +90° (Py).

1-Deoxy: ***1-Deoxynagilactone A***

$C_{19}H_{24}O_5$ M 332.396

Constit. of *P. nagi*. Cryst. Mp 274-276°.

1-Deoxy, 2,3-didehydro: ***1-Deoxy-2,3-dehydronagilactone A***

$C_{19}H_{22}O_5$ M 330.380

Constit. of *P. nagi*. Cryst. Mp 290-293° dec.

2,3-Didehydro: ***2,3-Didehydronagilactone A***

$C_{19}H_{22}O_6$ M 346.379

Constit. of *P. nagi*. Cryst. Mp 295-300° dec.

Hayashi, Y. *et al*, *Tetrahedron Lett.*, 1968, 2071; 1977, 2953 (*isol, struct, derivs*)

Hayashi, Y. *et al*, *Chem. Lett.*, 1972, 349 (*stereochem*)

Brown, K.S. *et al*, *Tetrahedron Lett.*, 1974, 675 (*Sellowin C*)

Hirotsu, K. *et al*, *Bull. Chem. Soc. Jpn.*, 1975, **48**, 1157 (*cryst struct*)

Dasgupta, B. *et al*, *Phytochemistry*, 1981, **20**, 153 (*Urbalactone*)

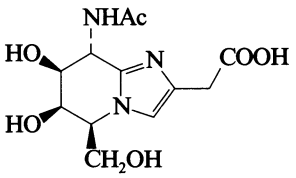
Ying, B.-P. *et al*, *Phytochemistry*, 1993, **34**, 1107 (*derivs*)

Nagstatin N-10002

Updated Entry replacing N-00013

8-(Acetylamino)-5,6,7,8-tetrahydro-6,7-dihydroxy-5-(hydroxymethyl)imidazo[1,2-a]pyridine-2-acetic acid

[126844-81-3]



Relative configuration

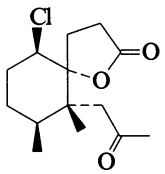
$C_{12}H_{17}N_3O_6$ M 299.283

Prod. by *Streptomyces amakusaensis*. Inhibitor of *N*-acetyl-β-D-glucosaminidase. Powder. Mp 190-195°. $[\alpha]_D^{25}$ +46.2° (c, 0.5 in H_2O).

Aoyagi, T. *et al*, *J. Antibiot.*, 1992, **45**, 1404, 1557 (*isol, pmr, cmr, struct, props*)

Napalilactone N-10003

[145458-38-4]



$C_{14}H_{21}ClO_3$ M 272.771

Constit. of *Lemnalia africana*. Oil. $[\alpha]_D$ +7.2° (c, 0.63 in MeOH).

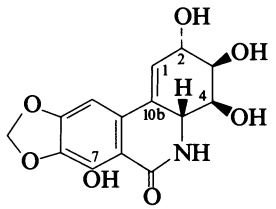
Carney, J.R. *et al*, *Tetrahedron Lett.*, 1992, **33**, 7115 (*isol, pmr, cmr*)

Narciclasine N-10004

Updated Entry replacing N-00070

Lycoricidinol

[29477-83-6]



Absolute configuration

$C_{14}H_{13}NO_7$ M 307.259

Alkaloid from *Narcissus incomparabilis* and all *N.* spp. examined, also present in many other Amaryllidaceae spp. Antimitotic agent. Strong tumour inhibitor. Inhibitor of protein synthesis. Most active antitumour agent of the Amaryllidaceae alkaloids. Light-yellowish needles with yellow-green fluor. Mp 232-234° dec. $[\alpha]_D$ +145° (c, 1.5 in EtOH). Easily dehydrates in acid.

▷ LD_{50} (mus, scu) 5 mg/kg. JI5000000.

2-O-β-D-Glucopyranoside: [98900-01-7]. ***Kalbreclasine***

$C_{20}H_{23}NO_{12}$ M 469.401

Alkaloid from roots of *Haemanthus kalbreyeri* (Amaryllidaceae). Hygroscopic solvated straw-coloured solid. $[\alpha]_D^{22}$ +78.14° (c, 0.7 in MeOH).

2-O-β-D-Glucopyranoside, hexa-O-Ac: Microcryst. (Me_2CO). Mp 198-201°.

4-O-β-D-Glucopyranoside: [141544-37-8]. ***Narciclasine 4-O-glucoside***

$C_{20}H_{23}NO_{12}$ M 469.401

Alkaloid from the bulbs of *Pancratium maritimum* (Amaryllidaceae). Needles (MeOH). Mp 210-211°.

1,10bα-Dihydro: [40042-05-5]. **trans-*Dihydronarciclasine***

$C_{14}H_{15}NO_7$ M 309.275

Alkaloid from *Zephyranthes candida* (Amaryllidaceae). Cytotoxic. Cryst. (MeOH). Mp 290-291°. $[\alpha]_D^{20}$ +4.7° (c, 0.27 in THF). Data given is for synthetic compd.

1,10bβ-Dihydro: [40042-04-4]. cis-*Dihydronarciclasine*

$C_{14}H_{15}NO_7$ M 309.275

Synthetic. Cryst. (MeOH). Mp 293-294°. $[\alpha]_D^{20}$ +56° (c, 0.18 in THF).

*1,10bα-Dihydro, 7-deoxy: 7-Deoxy-*trans-*dihydronarciclasine*

$C_{14}H_{15}NO_6$ M 293.276

Alkaloid from bulbs of *Hymenocallis littoralis, H. caribaea, H. latifolia* and an unidentified *H.* sp. (Amaryllidaceae). Exhibits cytotoxicity. Also shows activity against a series of RNA viruses. Sharp needles. Mp 303-304° (320-322°, synthetic). $[\alpha]_D^{25}$ +138° (c, 0.96 in DMSO).

*1,10bβ-Dihydro, 7-deoxy: 7-Deoxy-*cis-*dihydronarciclasine*

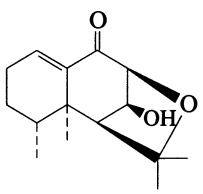
$C_{14}H_{15}NO_6$ M 293.276

Synthetic. Shows activity against a series of RNA viruses. Amorph. powder ($MeOH/Me_2CO$). Mp >300°.

Piozzi, F. *et al, Tetrahedron*, 1968, **24**, 1119 (*uv, ir, pmr, ms, struct*)
Piozzi, F. *et al, Phytochemistry*, 1969, **8**, 1745 (*isol*)
Fuganti, C. *et al, J. Chem. Soc., Chem. Commun.*, 1972, 239 (*biosynth*)
Immirzi, A. *et al, J. Chem. Soc., Chem. Commun.*, 1972, 240 (*cryst struct*)
Mondon, A. *et al, Tetrahedron Lett.*, 1972, 2085 (*pmr, config*)
Mondon, A. *et al, Chem. Ber.*, 1975, **108**, 445.
Suffness, M. *et al, Alkaloids (N.Y.)*, 1985, **25**, 205 (*antitumour props*)
Ghosal, S. *et al, Phytochemistry*, 1985, **24**, 1825 (*Kalbreclasine*)
Pettit, G.R. *et al, J. Nat. Prod. (Lloydia)*, 1990, **53**, 176; 1993, **56**, 1682 (*Dihydronarciclasine, 7-Deoxydihydronarciclasine*)
Abou-Donia, A.H. *et al, Phytochemistry*, 1991, **30**, 3445 (*4-Glucoside*)
Gabrielson, B. *et al, J. Nat. Prod. (Lloydia)*, 1992, **55**, 1569 (*props, 7-Deoxydihydronarciclasine*)
Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th Ed., Van Nostrand-Reinhold, 1992, LJC000.

Nardofuran N-10005

[42438-76-6]



$C_{15}H_{22}O_3$ M 250.337

Constit. of *Nardostachys chinensis*. Oil.

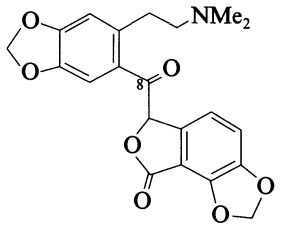
Friemann, J. *et al, Justus Liebigs Ann. Chem.*, 1981, 2057 (*synth*)
Hikino, H. *et al, Phytochemistry*, 1988, **27**, 3667 (*isol, cmr*)

Narlumidine N-10006

Updated Entry replacing N-00089

6-[[6-[2-(Dimethylamino)ethyl]-1,3-benzodioxol-5-yl]carbonyl] furo[3,4-e]-1,3-benzodioxol-8(6H)-one, 9CI

[73710-86-8]



$C_{21}H_{19}NO_7$ M 397.384

Alkaloid from *Fumaria indica* (Fumariaceae). Mp 248-250°.

8-Alcohol: ***Narlumicine***

$C_{21}H_{21}NO_7$ M 399.399

Alkaloid from stems of *F. indica* (Fumariaceae). Also obt. by $NaBH_4$ redn. of Narlumidine. Granules (MeOH). Mp 163-165°.

Seth, K.K. *et al, Chem. Ind. (London)*, 1979, 744 (*uv, ir, ms, pmr, struct*)
Tripathi, V.K. *et al, Phytochemistry*, 1992, **31**, 2188 (*Narlumicine*)

Natriuretic factor 26 N-10007

Natriuretic peptide 26

[114400-89-4]

H-[1]Asp-Ser-Gly-Cys-Phe-Gly-Arg-Arg-Leu-Asp-Arg-Ile-Gly-Ser-Leu-Ser-Gly-Leu-Gly-Cys-Asn-Val-Leu-Arg-Arg-[26]Tyr-OH

Reduced form shown. Isol. from pig brain. Natriuretic agent.

N'-(*Serylprolyllysylthreonylmethionylarginyl*): [119320-26-2]. *Natriuretic factor 32 (pig brain reduced). Natriuretic peptide 32 (pig brain reduced)*

Isol. from pig brain. Natriuretic agent.

Maekawa, K. *et al, Biochem. Biophys. Res. Commun.*, 1988, **157**, 410 (*factor 32*)
Minamino, N. *et al, Pept. Chem.*, 1988, **26**, 183 (*isol, struct*)
Kiso, Y. *et al, Chem. Pharm. Bull.*, 1990, **38**, 1192 (*synth*)
Inooka, H. *et al, Eur. J. Biochem.*, 1990, **193**, 127 (*synth, conformn*)
Craik, D. *et al, Eur. J. Biochem.*, 1991, **201**, 183 (*pmr, conformn*)

Natriuretic factor 45 N-10008

[123337-90-6]

H-Ser-Gln-Asp-Ser-Ala-Phe-Arg-Ile-Gln-Glu-Arg-Leu-Arg-Asn-Ser-Lys-Met-Ala-His-Ser-Ser-Ser-Cys-Phe-Gly-Gln-Lys-Ile-Asp-Arg-Ile-Gly-Ala-Val-Ser-Arg-Leu-Gly-Cys-Asp-Gly-Leu-Arg-Leu-Phe-OH

Isol. from rat brain and heart. Natriuretic agent.

Aburaya, M. *et al, Biochem. Biophys. Res. Commun.*, 1989, **163**, 226, 233 (*isol, struct*)
Kambayashi, Y. *et al, Pept. Chem.*, 1989, **27**, 245 (*isol, struct*)

Anguilla japonica Natriuretic factor N-10009

[135493-52-6]

H-Lys-Ser-Phe-Asn-Ser-Cys-Phe-Gly-Thr-Arg-Met-Asp-Arg-Ile-Gly-Ser-Trp-Ser-Gly-Leu-Gly-Cys-Asn-Ser-Leu-Lys-Asn-Gly-Thr-Lys-Lys-Lys-Ile-Phe-Gly-Asn-OH

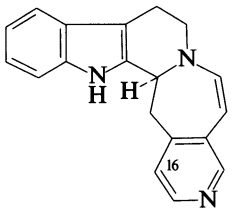
Isol. from the cardiac ventricles of *Anguilla japonica*. Natriuretic agent.

Takei, Y. *et al*, *FEBS Lett.*, 1991, **282**, 317.

Naufoline N-10010

Updated Entry replacing N-00117

[59785-75-0]



$C_{19}H_{17}N_3$ M 287.363

Alkaloid from the root bark of *Nauclea latifolia* (Naucleaceae). Cryst. (MeOH). Mp 252°.

16-Methoxycarbonyl: ***16-Carbomethoxynaufoline***

$C_{21}H_{19}N_3O_2$ M 345.400

Alkaloid from leaves of *N. diderrichii* (Naucleaceae).

16-Methoxycarbonyl, 18,19-dihydro: ***16-Carbomethoxy 18,19-dihydronaufoline***

$C_{21}H_{21}N_3O_2$ M 347.416

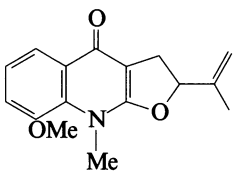
Alkaloid from leaves of *N. diderrichii* (Naucleaceae).

Hotellier, F. *et al*, *C. R. Hebd. Seances Acad. Sci. Ser. C*, 1976, **282**, 595 (*ir, pmr, ms, struct*)

Richard, B. *et al*, *Bull. Soc. R. Sci. Liege*, 1992, **61**, 423; *CA*, **119**, 91770v (*derivs*)

Neoacutifolin N-10011

[145237-09-8]



$C_{16}H_{17}NO_3$ M 271.315

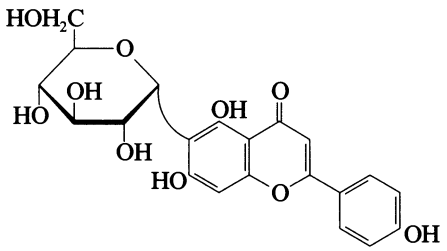
Alkaloid from leaves of *Zanthoxylum acutifolium* (Rutaceae). Viscous oil. $[\alpha]_D$ +124° (c, 0.0004 in $CHCl_3$).

Arruda, M.S.P. *et al*, *Phytochemistry*, 1992, **31**, 3617 (*isol, uv, ir, pmr, cmr, ms, struct*)

Neoavroside N-10012

6-α-D-Glucopyranosyl-5,7-dihydroxy-2-(4-hydroxyphenyl)-4H-1-benzopyran-4-one, 9CI. 6-α-D-Glucopyranosylapigenin. 6-α-D-Glucopyranosyl-4′,5,7-trihydroxyflavone

[29774-68-3]



$C_{21}H_{20}O_{10}$ M 432.383

Constit. of *Dianthus* spp. and *Gratiola officinalis*.

Isomer: [53152-14-0]. ***Isoneoavroside***

$C_{21}H_{20}O_{10}$ M 432.383

Constit. of *D.* spp. and *G. officinalis*. Mp 244-246°. $[\alpha]_D^{20}$ +40.3° (c, 0.14 in DMF). Claimed to be possibly a tautomer of Neoavroside. Struct. doubtful.

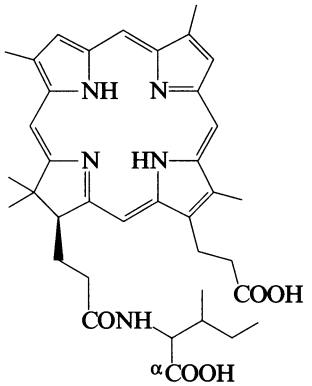
Litvinenko, V.I. *et al*, *Farm. Zh.* (*Kiev*), 1970, **25**, 84 (*config*)

Borodin, L.I. *et al*, *Khim. Prir. Soedin.*, 1970, **6**, 19; *Chem. Nat. Compd.* (*Engl. Transl.*), 16 (*isol, uv, ir*)

Boguslavskaya, L.I. *et al*, *Khim. Prir. Soedin.*, 1983, **19**, 386; *Chem. Nat. Compd.* (*Engl. Transl.*), 366 (*isol*)

Neobonellin N-10013

[69257-05-2]



$C_{37}H_{45}N_5O_5$ M 639.793

Pigment of the skin of *Bonellia viridis*. Embryotoxic.

α-Me ester: [75074-84-9].

$C_{38}H_{47}N_5O_5$ M 653.820

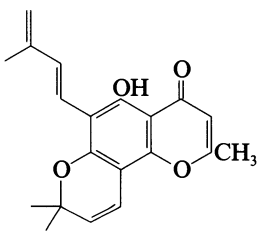
Constit. of *B. viridis*.

Cariello, L. *et al*, *Experientia*, 1978, **34**, 1427 (*isol*)

Ballantine, J.A. *et al*, *J. Chem. Soc., Perkin Trans. 1*, 1980, 1080 (*deriv*)

Neochamelin N-10014

[70897-79-9]



$C_{20}H_{20}O_4$ M 324.376

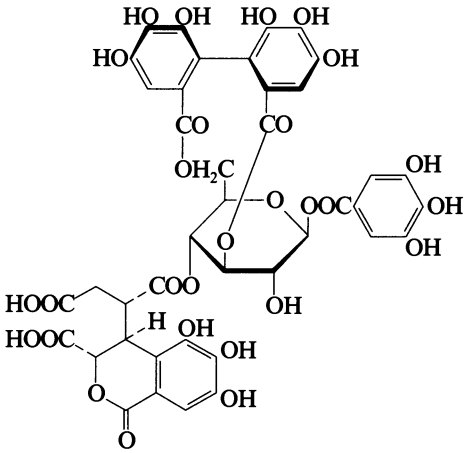
Struct. revised in 1977. Constit. of *Neochamelae pulverulenta*. Cryst. Mp 168-174°.

González, A.G. *et al*, *An. Quim.*, 1972, **68**, 447; 1977, **73**, 557 (*isol, struct*)

Epe, B. *et al*, *Chem. Ber.*, 1981, **114**, 757 (*synth*)

Neochebulagic acid N-10015

[28196-46-5]



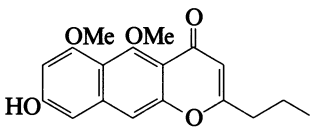
$C_{41}H_{32}O_{28}$ M 972.687

Constit. of *Excoecaria kawakamii*. Also obt. by hydrolysis of Chebulagic acid, C-00861. Tan powder + $5H_2O$. $[\alpha]_D^{13}$ −72.6° (c, 0.5 in MeOH).

Saijo, R. *et al*, *Chem. Pharm. Bull.*, 1989, **37**, 2624.
Lin, J.-H. *et al*, *Chem. Pharm. Bull.*, 1990, **38**, 2162 (*isol*)

Neocomantherin N-10016

[31665-32-4]



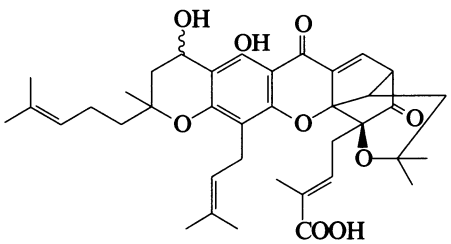
$C_{18}H_{18}O_5$ M 314.337

Constit. of *Comantheria perplexa* and *C. briareus*. Yellow cryst. (EtOAc). Mp 237° dec.

Kent, R.A. *et al*, *Aust. J. Chem.*, 1970, **23**, 2325 (*isol, pmr*)
Francesconi, K.A. *et al*, *Aust. J. Chem.*, 1980, **33**, 2781 (*isol, pmr, ms*)

Neogambogic acid N-10017

[93772-31-7]



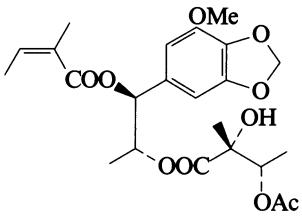
$C_{38}H_{46}O_9$ M 646.776

Constit. of Gamboge (*Garcinia hanburryi*). Yellow.

Lu, G. *et al*, *Yaoxue Xuebao*, 1984, **19**, 636; *CA*, **102**, 21181 (*isol, pmr, struct*)

Neohelmanticin N-10018

[99257-54-2]



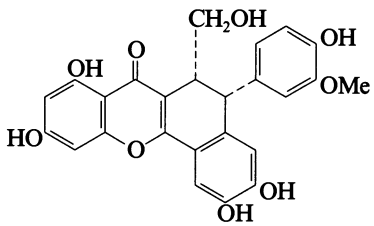
$C_{23}H_{30}O_{10}$ M 466.484

Constit. of the roots of *Thapsia villosa*. Gum. $[\alpha]_D^{25}$ +20.8° (c, 3.6 in $CHCl_3$).

De Pascual Teresa, J. *et al*, *Phytochemistry*, 1985, **24**, 2071 (*isol, struct*)

Neohydnocarpin N-10019

[71417-57-7]



Relative configuration

$C_{25}H_{20}O_9$ M 464.428

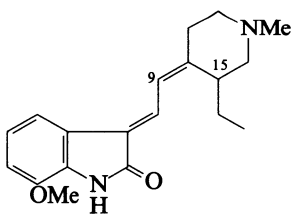
Flavolignan. Isol. from the seeds of *Hydnocarpus wightiana*. Shows hypolipidemic and cytotoxic props. Yellow cryst. (C_6H_6/Me_2CO). Mp 235-237°. $[\alpha]_D$ −20.3° (c, 0.59 in MeOH).

Hexa-Ac: Needles (C_6H_6/petrol). Mp 236-238°.

Parthasarathy, M.R. *et al*, *Phytochemistry*, 1979, **18**, 506 (*cmr*)
Sharma, D.K. *et al*, *Planta Med.*, 1979, **37**, 79 (*isol*)
Sharma, D.K. *et al*, *J. Nat. Prod.* (*Lloydia*), 1991, **54**, 1298 (*props*)

Neolaugerine N-10020

[149405-98-1]



$C_{19}H_{24}N_2O_2$ M 312.411

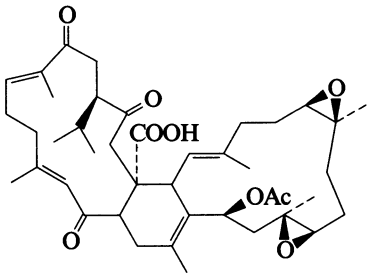
Alkaloid from root bark of *Neolaugeria resinosa* (Rubiaceae). Amorph. orange-red powder. $[\alpha]_D^{25}$ +89° (c, 0.60 in MeOH).

9E-Isomer: [149355-67-9]. ***Isoneolaugerine***
$C_{19}H_{24}N_2O_2$ M 312.411
Alkaloid from root bark of *N. resinosa* (Rubiaceae). Amorph. orange-red powder. $[\alpha]_D^{25}$ +34° (c, 0.80 in MeOH).

9E-Isomer, 15-hydroxy: [149355-68-0]. ***15-Hydroxyisoneolaugerine***
$C_{19}H_{24}N_2O_3$ M 328.410
Alkaloid from root bark of *N. resinosa* (Rubiaceae). Amorph. orange-red powder. $[\alpha]_D^{25}$ +3° (c, 0.20 in MeOH).

Weniger, B. *et al*, *Phytochemistry*, 1993, **32**, 1587 (*isol, uv, ir, pmr, cmr, ms, struct*)

Neosartortuic acid N-10021



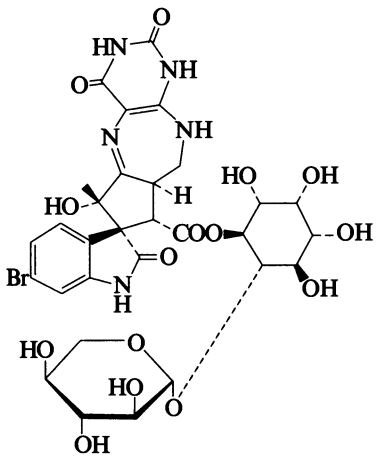
$C_{42}H_{58}O_9$ M 706.915

Me ester: [149182-64-9]. *Methyl neosartortuate*
$C_{43}H_{60}O_9$ M 720.942
Constit. of *Sarcophyton tortuosum*. Oil. $[\alpha]_D$ +142° (c, 1 in CCl_4).

Leone, P.A. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 521 (*isol, pmr, cmr*)

Neosurugatoxin N-10022

Updated Entry replacing N-00273
[80680-43-9]



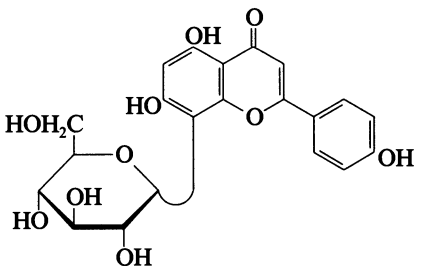
$C_{30}H_{34}BrN_5O_{15}$ M 784.527
Toxin from the mid-gut gland of *Babylonia japonica* (Japanese ivory shell) of dietary origin. Shows powerful antimydriatic activity. Prisms + $1H_2O$ (H_2O). Mp 331-335° dec. Extremely unstable in alkaline medium and fairly heat-labile.

5'-O-Dexylosyl: [99102-40-6]. ***Prosurgatoxin***
$C_{25}H_{26}BrN_5O_{11}$ M 652.411
Isol. from *B. japonica*. Ganglion blocking agent.

Kosuge, T. *et al*, *Tetrahedron Lett.*, 1981, 3417 (*cryst struct*)
Kosuge, T. *et al*, *Chem. Pharm. Bull.*, 1982, **30**, 3255; 1985, **33**, 2890, 3059 (*isol, Prosurgatoxin*)
Inoue, S. *et al*, *CA*, 1983, **100**, 191639 (*synth*)
Hayashi, E. *et al*, *J. Neurochem.*, 1984, **42**, 1491 (*props*)
Inoue, S. *et al*, *Tetrahedron Lett.*, 1986, **27**, 5225 (*synth*)
Inoue, S., *Yakugaku Zasshi*, 1987, **107**, 645 (*rev, synth*)
Wada, A. *et al*, *Methods Neurosci.*, 1992, **8**, 311 (*rev, props*)

Neovitexin N-10023

8-α-D-Glucopyranosyl-4',5,7-trihydroxyflavone
[29774-67-2]



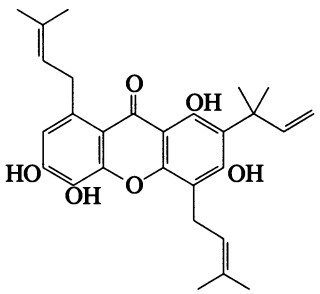
$C_{21}H_{20}O_{10}$ M 432.383
Constit. of *Malachium aquatum*, *Ranunculus repens*, *Otites* sp. and *Silene* sp.

Isomer: [53152-15-1]. *Isoneovitexin*
$C_{21}H_{20}O_{10}$ M 432.383
Constit. of *M. aquatum*, *O.* sp. and *S.* sp. Claimed to be 'possibly a tautomer'. Struct clearly not well founded.

Litvinenko, V.I. *et al*, *Farm. Zh.* (*Kiev*), 1969, **24**, 77; 1970, **25**, 84 (*isol, struct*)
Darmograi, V.N., *Khim. Prir. Soedin.*, 1977, **13**, 114; 1980, **16**, 838; *Chem. Nat. Compd.* (*Engl. Transl.*), 102 (*isol*)
Kudryavtsev, G.P. *et al*, *CA*, 1986, **105**, 133572 (*Isoneovitexin*)

Nervosaxanthone N-10024

[105742-86-7]

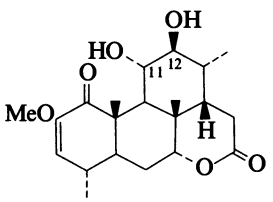


$C_{28}H_{32}O_6$ M 464.557
Constit. of *Garcinia pyrifera*. Amorph.

Ampofo, S.A. *et al*, *Phytochemistry*, 1986, **25**, 2351 (*isol, pmr*)

Nigakilactone A N-10025

Updated Entry replacing N-00400
[24148-76-3]



$C_{21}H_{30}O_6$ M 378.464
Constit. of *Picrasma ailanthoides*. Cryst. (MeOH aq.). Mp 237.5-238°. $[\alpha]_D$ +35° (c, 0.26 in EtOH).

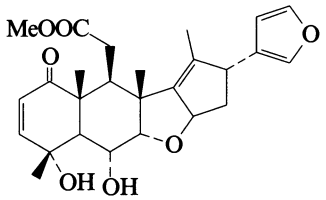
12-Me ether: [24148-77-4]. ***Nigakilactone B.*** *Simalikalactone A*
$C_{22}H_{32}O_6$ M 392.491
Constit. of *P. ailanthoides*, *P. quassioides* and *Quassia africana*. Cryst. (C_6H_6/pet. ether). Mp 278.5°. $[\alpha]_D$ +17° (c, 0.19 in EtOH).

12-Me ether, 11-Ac: [24148-78-5]. ***Nigakilactone C***
$C_{24}H_{34}O_7$ M 434.528
Constit. of *P. ailanthoides*. Cryst. (C_6H_6/pet. ether). Mp 252.5-253°. $[\alpha]_D$ +9° (c, 0.28 in EtOH).
11,12-Methylene ether: [33204-37-4]. ***Picrasin D***
$C_{22}H_{30}O_6$ M 390.475
Isol. from *P. ailanthoides* and *P. quassioides*. Cryst. (MeOH). Mp 283.5-285°.
11-Ketone: [24148-81-0]. ***Isoparaine***
$C_{21}H_{28}O_6$ M 376.449
Isol. from bark of *Aeschrion crenata*. Cryst. (MeOH). Mp 258-261°. $[\alpha]_D^{20}$ −35.1° (c, 1.2 in $CHCl_3$).
12-Ketone: [35321-79-0]. ***Paraine.*** *Simalikalactone*
Isol. from *A. crenata* and *Q. africana*. Cryst. (MeOH). Mp 245-246°. $[\alpha]_D^{21}$ +28.6° (c, 0.69 in $CHCl_3$).
12-Epimer, 13,18-didehydro: ***12α-Hydroxy-13,18-dehyroparain***
$C_{21}H_{28}O_6$ M 376.449
Constit. of *Q. amara*. Powder (MeOH). Mp 238-241°.

Tresca, J.P. *et al*, *C. R. Hebd. Seances Acad. Sci. Ser. C*, 1971, **273**, 601 (*Paraine*)
Murae, T. *et al*, *Tetrahedron*, 1971, **27**, 1545 (*isol*)
Murae, T. *et al*, *Tetrahedron Lett.*, 1971, 3897 (*struct*)
Vitagliano, J.C. *et al*, *Phytochemistry*, 1972, **11**, 807 (*Paraine, Isoparaine*)
Hikino, H. *et al*, *Phytochemistry*, 1975, **14**, 2473 (*Picrasin D*)
Barbetti, P. *et al*, *Phytochemistry*, 1993, **32**, 1007 (*12α-Hydroxy-13,18-dehydroparain*)

Nimbandiol N-10026

[78916-53-7]

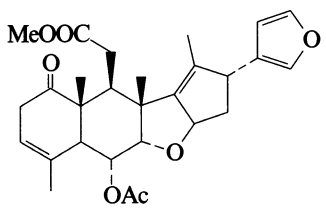


$C_{26}H_{32}O_7$ M 456.535
Constit. of *Azadirachta indica*. Cryst. (EtOAc). Mp 121°. $[\alpha]_D^{20}$ +187.9° (c, 1 in $CHCl_3$).
6-Ac: [78916-57-1]. ***6-Acetylnimbandiol***
$C_{28}H_{34}O_8$ M 498.572
Constit. of *A. indica*. Cryst. (MeOH). Mp 178°. $[\alpha]_D^{20}$ +245° (c, 1 in $CHCl_3$).

Kraus, W. *et al*, *Chem. Ber.*, 1981, **114**, 2375 (*isol, pmr, cmr*)

Nimbinene N-10027

[78916-54-8]

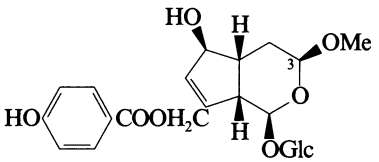


$C_{28}H_{34}O_7$ M 482.572
Constit. of *Azadirachta indica*. Cryst. (MeOH). Mp 134°. $[\alpha]_D^{20}$ +168° (c, 1 in $CHCl_3$).
O-*De-Ac:* [78916-55-9]. ***Deacetylnimbinene***
$C_{26}H_{32}O_6$ M 440.535
Constit. of *A. indica*. Cryst. (MeOH). Mp 141°. $[\alpha]_D^{20}$ +132° (c, 1 in $CHCl_3$).

Kraus, W. *et al*, *Chem. Ber.*, 1981, **114**, 2375 (*isol, pmr, cmr*)

Nishindaside N-10028

Updated Entry replacing N-00474
[88204-92-6]



$C_{23}H_{30}O_{12}$ M 498.483
Revised stereochem. (1993). Constit. of *Vitex negundo* and *V. cannabifolia*. Amorph. powder. $[\alpha]_D$ −49.0° (c, 0.16 in MeOH), $[\alpha]_D^{25}$ −83.5° (c, 1 in MeOH).
3-Epimer: ***Isonishindaside***
$C_{23}H_{30}O_{12}$ M 498.483
Constit. of *V. cannabifolia*. Amorph. powder. $[\alpha]_D$ −120° (c, 0.083 in MeOH).

Dutta, P.K. *et al*, *Tetrahedron*, 1983, **39**, 3067 (*isol, pmr, cmr*)
Iwagawa, T. *et al*, *Phytochemistry*, 1993, **32**, 453 (*isol, pmr, struct, deriv*)

Nitrogen oxide (NO), 11CI N-10029

Updated Entry replacing N-00492
Nitric oxide. Mononitrogen monoxide. Nitrogen monoxide. Endothelium derived relaxing factor. EDRF
[10102-43-9]

NO M 30.006
$15e^{\ominus}$ molecule with $1e^{\ominus}$ in antibonding orbital. Interatomic distance: N—O 115 pm. Synth. from $NaNO_2$ + $FeSO_4$ + H_2SO_4. Found in exhaust gas, emission from power plants. Vasodilator, neurotransmitter substance functioning by release of cyclic GMP in tissues. Chemical defence substance biosynthesised from arginine by macrophages. Forms numerous complexes with transition metals. Commercially available. Used in manuf. of nitric acid. Colourless non-flammable gas or deep blue liq. With O_2 gives brown NO_2. ($t_{\frac{1}{2}}$ 3-5 sec, in normal atmosphere). Partially dimerises to *cis,trans*- N_2O_2 as liq. Sl. sol. H_2O. d (liq. at bp) 1.269. Mp −163.6°. Bp −151.7°. T_{crit} −94°; P_{crit} 65 atm. Paramagnetic.

▷ Highly toxic. Explosion-sensitive as liq. Implicated as a cause of acid rain. QX0525000.

Dimer: [16824-89-8]. *Nitrogen oxide* (N_2O_2). *Dinitrogen dioxide*
N_2O_2 M 60.012
Formed by dimerisation of NO in an N_2 matrix at 15K or hν + N_2O at 77K. Colourless liq. and solid. In gaseous form, dissociates to NO. Weak N---N interaction. Interatomic distances: O—N 112, N—N 218 pm. Exists as mixt. of *cis*, *trans*, isomers at low temps., *cis* being the more stable.

Mellor Compr. Treat. Inorg. Theor. Chem., Longman, London, 1928, **8**; 1967, **8**, 417; **8/II**, *Part* 2, 216 (*bibl*)
Fateley, W. *et al*, *J. Chem. Phys.*, 1959, **31**, 204 (*ir, dimer*)
Inorg. Synth., 1964, **2**, 126; 1976, **16**, 1 (*synth, metal complexes*)
Guillory, W.A. *et al*, *J. Chem. Phys.*, 1969, **50**, 3516 (*synth, ir, struct, dimer*)
Brauer, G., *Handbuch Präp. Anorg. Chem.*, 3rd Ed., Ferdinand Enke Verlag, 1975-1981, **1**, 470 (*synth*)
McCleverty, J.A., *Chem. Rev.*, 1979, **79**, 53 (*metal complexes*)
Palmer, R.M.J. *et al*, *Nature* (*London*), 1987, **327**, 524 (*pharmacol*)
Marletta, M.A. *et al*, *Biochemistry*, 1988, **27**, 8706 (*pharmacol*)
Garthuraite, J. *et al*, *Nature* (*London*), 1988, **336**, 385 (*pharmacol*)

Kikuchi, K. *et al*, *Chem. Pharm. Bull.*, 1992, **40**, 2233 (*bibl, detn*)
Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th Ed., Van Nostrand-Reinhold, 1992, NEG100.

Nitrosoxacin A N-10030

N-(*14-Methylpentadecyl*)-N-*nitrosohydroxylamine*. N-*Hydroxy-14-methyl*-N-*nitrosopentadecanamine*, *9CI*

[147317-96-2]

$(H_3C)_2CH(CH_2)_{13}N(OH)NO$

$C_{16}H_{34}N_2O_2$ M 286.457
Prod. by *Streptomyces* sp. 5-Lipoxygenase inhibitor. Powder. Mp 44-44.5°.

Nishio, M. *et al*, *J. Antibiot.*, 1993, **46**, 193 (*isol, struct*)

Nitrosoxacin B N-10031

N-*Hexadecyl*-N-*nitrosohydroxylamine*. N-*Hydroxy*-N-*nitrosohexadecanamine*, *9CI*

[147317-97-3]

$H_3C(CH_2)_{15}N(OH)NO$

$C_{16}H_{34}N_2O_2$ M 286.457
Prod. by *Streptomyces* sp. 5-Lipoxygenase inhibitor. Powder. Mp 38.5-39.5°.

Nishio, M. *et al*, *J. Antibiot.*, 1993, **46**, 193 (*isol, struct*)

Nitrosoxacin C N-10032

N-(*12-Methyltridecyl*)-N-*nitrosohydroxylamine*. N-*Hydroxy-12-methyl*-N-*nitrosotridecanamine*, *9CI*

[147317-95-1]

$(H_3C)_2CH(CH_2)_{11}N(OH)NO$

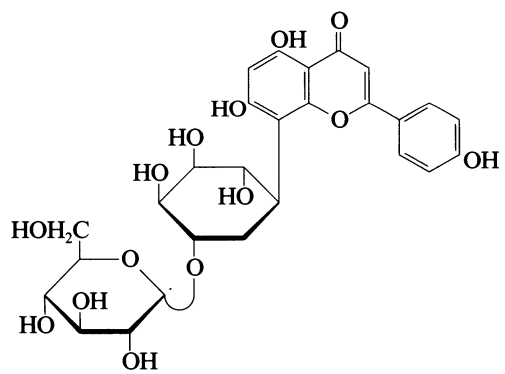
$C_{14}H_{30}N_2O_2$ M 258.403
Prod. by *Streptomyces* sp. 5-Lipoxygenase inhibitor. Powder. Mp 35.5-36°.

Nishio, M. *et al*, *J. Antibiot.*, 1993, **46**, 193 (*isol, struct*)

Nivyaside N-10033

8-(*1*-O-α-D-*Glucopyranosyl*-L-chiro-*inosit-3-yl*)-*4′,5,7-trihydroxyflavone*

[84563-91-7]

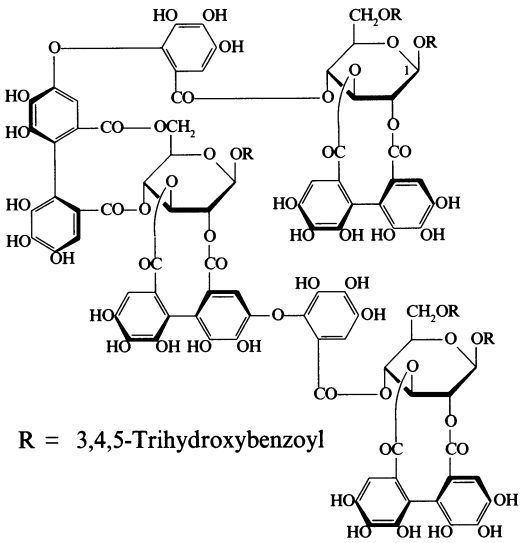


$C_{27}H_{30}O_{14}$ M 578.526
Constit. of *Leucanthemum vulgare*. Mp 238-240° dec. $[\alpha]_D^{20}$ −59.0° (c, 1.0 in EtOH aq.).

Sagareishvili, T.G. *et al*, *Khim. Prir. Soedin.*, 1982, **18**, 442; *Chem. Nat. Compd.* (*Engl. Transl.*), 408 (*isol, struct*)

Nobotanin E N-10034

[113866-94-7]



R = 3,4,5-Trihydroxybenzoyl

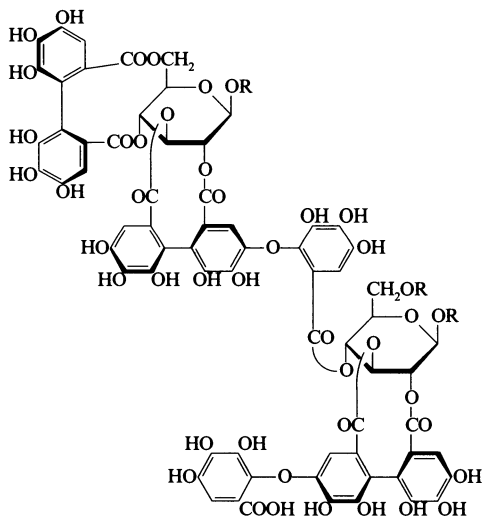
$C_{123}H_{84}O_{78}$ M 2809.970
A trimeric tannin isol. from the leaf of *Tibouchina semidecandra*. Off-white amorph. powder + $20H_2O$. $[\alpha]_D^{20}$ +49° (c, 1.0 in MeOH).

1-O-*Degalloyl:* [111692-75-2]. ***Nobotanin C***
$C_{116}H_{80}O_{74}$ M 2657.864
Isol. from leaves of *T. semidecandra*. Off-white amorph. powder +$22H_2O$. $[\alpha]_D^{20}$ +38° (c, 1.0 in MeOH). Exists as mixt. of α- and β-anomers.

Yoshida, T. *et al*, *Chem. Pharm. Bull.*, 1991, **39**, 2264 (*struct, uv, pmr, cmr*)

Nobotanin H N-10035

[113900-93-9]



R = 3,4,5-Trihydroxybenzoyl

$C_{89}H_{60}O_{57}$ M 2041.419
A dimeric tannin isol. from the leaf of *Heterocentron roseum* and *Melastoma malabathricum*. Off-white amorph. powder + $12H_2O$. $[\alpha]_D^{20}$ +80° (c, 0.5 in MeOH).

Me ester: [145274-77-7]. ***Malabathrin D***
$C_{90}H_{62}O_{57}$ M 2055.446

Isol. from leaves of *M. malabathricum*. Off-white amorph. powder + $5H_2O$. $[\alpha]_D^{20}$ +54° (c, 1.0 in MeOH).

Yoshida, T. *et al*, *Chem. Pharm. Bull.*, 1989, **37**, 3174; 1992, **40**, 66.

Yoshida, T. *et al*, *Phytochemistry*, 1992, **31**, 2829.

Nobotanin J N-10036

[113900-95-1]

$C_{123}H_{82}O_{78}$ M 2807.954

Complex tannin contg. hexahydroxydiphenoyl and galloyl residues. Ellagitannin from *Heterocentron roseum* and *Melastoma malabathricum*.

Okuda, T. *et al*, *Heterocycles*, 1990, **30**, 1195 (*struct*)

Yoshida, T. *et al*, *Phytochemistry*, 1992, **31**, 2829 (*isol*)

Nobotanin K N-10037

[119683-39-5]

$C_{164}H_{108}O_{104}$ M 3742.595

Large elagitannin contg. valoneoyl, hexahydroxydiphenoyl and galloyl residues. Ellagitannin constit. of *Heterocentron roseum*.

Yoshida, T. *et al*, *J. Chromatogr.*, 1989, **467**, 139 (*isol, struct*)

3,6,9,12,15-Nonadecapentaene, 9CI N-10038

$H_3CCH_2(CH{=}CHCH_2)_5CH_2CH_3$

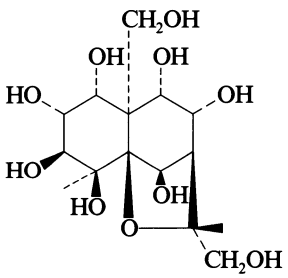
$C_{19}H_{30}$ M 258.446

All-(Z)-form [33426-21-0]

Found in marine benthic algae.

Youngblood, W.W. *et al*, *Mar. Biol. (Berlin)*, 1971, **8**, 190 (*isol, struct, ir, ms*)

1,2,3,4,6,8,9,13,14-Nonahydroxydihydro-β-agarofuran N-10039



$C_{15}H_{26}O_{10}$ M 366.364

(1α,2α,3β,4β,6β,8α,9α)-form [33376-82-8]

Euonyminol

Formed by hydrol. of alkaloids from *Trypterygium wilfordii*. Cryst. ($MeOH/Me_2CO$). Mp 250°.

Yamada, K. *et al*, *Tetrahedron*, 1973, **29**, 1773 (*synth*)

Spiteller, G. *et al*, *Tetrahedron*, 1974, **30**, 2577 (*synth*)

Taylor, I.F. *et al*, *Acta Crystallogr., Sect. B*, 1977, **33**, 3176 (*cryst struct*)

Nonanedioic acid, 9CI N-10040

1,7-Heptanedicarboxylic acid. ***Azelaic acid,*** **INN.** *Anchoic acid. Lepargylic acid. Emerox 1144. Skinoren. ZK 62498*

[123-99-9]

$HOOC(CH_2)_7COOH$

$C_9H_{16}O_4$ M 188.223

Occurs in rancid fats. Isol. from *Lycopodium* spp. and a few higher plants. Used to treat acne. Antineoplastic agent. Needles or leaflets. Spar. sol. H_2O. Mp 106.5°. Bp >360° part. dec., Bp_{10} 226°. pK_{a1} 4.56; pK_{a2} 5.53 (25°, 0.1*M* KNO_3). Not steam-volatile.

▷ CM1980000.

Di-Me ester: [1732-10-1].

$C_{11}H_{20}O_4$ M 216.277

Bp_8 140°.

Dichloride:

$C_9H_{14}Cl_2O_2$ M 225.114

Bp_{18} 166°.

Anhydride: [4196-95-6]. *2,10-Oxecanedione, 9CI. Azelaic anhydride*

$C_{18}H_{30}O_7$ M 358.431

Mp 53-55°.

Diamide:

$C_9H_{18}N_2O_2$ M 186.253

Prisms. Mp 175°.

Dinitrile: [1675-69-0]. *1,7-Dicyanoheptane*

$C_9H_{14}N_2$ M 150.223

Liq. Bp_{20} 195°. n_D^{25} 1.4426.

Ger. Pat., 565 158, (1933); *CA*, **27**, 1008 (*synth*)

Org. Synth., 1933, **13**, 4 (*synth*)

Mowry, D.T. *et al*, *J. Am. Chem. Soc.*, 1950, **72**, 4439 (*synth*)

Org. Synth., Coll. Vol., 4, 1963, 62 (*nitrile*)

Housty, J. *et al*, *Acta Crystallogr.*, 1967, **22**, 288 (*cryst struct*)

Martindale, The Extra Pharmacopoeia, 28th/29th Ed., Pharmaceutical Press, London, 1982/1989, 14036.

Mingrone, G. *et al*, *Drugs Exp. Clin. Res.*, 1983, **9**, 447 (*tox*)

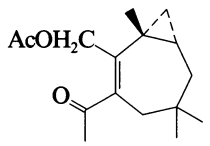
Breathnach, A.S. *et al*, *Br. J. Dermatol.*, 1984, **111**, 115 (*rev, pharmacol*)

Thesen, R., *Pharm. Ztg.*, 1992, **137**, 30, 34 (*rev*)

Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th Ed., Van Nostrand-Reinhold, 1992, ASB750.

Norafricanone N-10041

[148225-34-7]

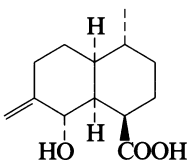


$C_{16}H_{24}O_3$ M 264.364

Constit. of *Porella caespitans*. Oil. $[\alpha]_D$ −204° (c, 1.05 in $CHCl_3$).

Toyota, M. *et al*, *Phytochemistry*, 1993, **32**, 137 (*isol, pmr, cmr*)

Norannuic acid N-10042

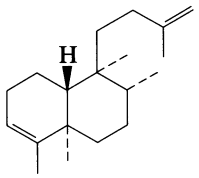


$C_{13}H_{20}O_3$ M 224.299

Constit. of *Artemisia annua*. Cryst. Mp 180-182°. $[\alpha]_D$ −104° (c, 1 in MeOH).

Misra, L.N. *et al*, *Phytochemistry*, 1993, **33**, 1461 (*isol, pmr, cmr*)

15-Nor-3,13-clerodadiene N-10043



$C_{19}H_{32}$ M 260.462

ent-form [72184-00-0]

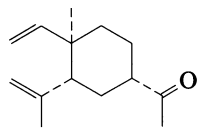
Isol. from the oleoresin of *Hardwickia pinnata*. $Bp_{0.5}$ 120-125° (bath). $[\alpha]_D^{29}$ −51.4° (c, 3.2 in $CHCl_3$). Poss. artifact.

Misra, R. *et al*, *Tetrahedron*, 1979, **35**, 985 (*isol*)

13-Nor-1,3-elemadien-11-one N-10044

Lobocalone

[147731-93-9]



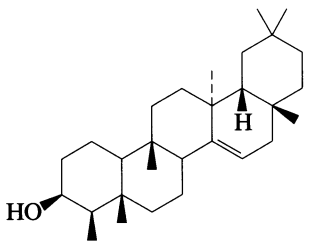
$C_{14}H_{22}O$ M 206.327

Constit. of *Lobophytum* spp. Oil. $[\alpha]_D$ +16° (c, 0.5 in $CHCl_3$).

Su, J.-Y. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 279 (*isol, pmr, cmr*)

Raju, B.L. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 961 (*isol, pmr, cmr*)

26-Nor-14-friedelen-3-ol N-10045



$C_{29}H_{48}O$ M 412.698

3β-form [146356-88-9]

Constit. of *Phyllanthus watsonii*. Needles (MeOH/$CHCl_3$). Mp 190-191°. $[\alpha]_D^{23}$ −64° (c, 0.32 in $CHCl_3$).

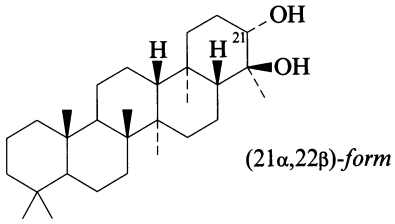
3-Ketone: [146356-87-8]. ***26-Nor-14-friedelen-3-one***

$C_{29}H_{46}O$ M 410.682

Constit. of *P. watsonii*. Needles (MeOH/$CHCl_3$). $[\alpha]_D^{23}$ −135° (c, 0.26 in $CHCl_3$).

Matsunaga, S. *et al*, *Phytochemistry*, 1993, **32**, 165 (*isol, pmr, cmr, cryst struct*)

30-Norgammacerane-21,22-diol N-10046



(21α,22β)-*form*

$C_{29}H_{50}O_2$ M 430.713

(21α,22β)-form [149260-87-7] ***Hakonanediol***

Constit. of *Adiantum monochlamys*. Cryst. ($CHCl_3$/MeOH). Mp 270-272°. $[\alpha]_D$ +21° ($CHCl_3$).

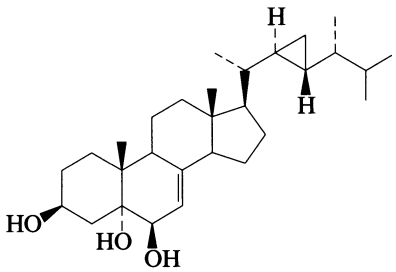
(21β,22β)-form [149260-88-8] ***Epihakonanediol***

Constit. of *A. monochlamys*. Cryst. ($CHCl_3$/MeOH). Mp 299-301°. $[\alpha]_D$ +5° ($CHCl_3$).

Shiojima, K. *et al*, *Chem. Pharm. Bull.*, 1993, **41**, 262 (*isol, pmr, cmr*)

23-Norgorgost-7-ene-3,5,6-triol N-10047

23-Demethylgorgost-7-ene-3,5,6-triol



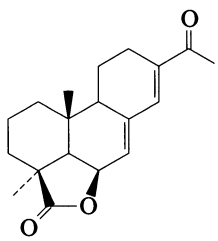
$C_{29}H_{48}O_3$ M 444.696

(3β,5α,6β,22R,23R,24R)-form [147170-08-9]

Constit. of *Sinularia* sp. Needles. Mp 229-232°. $[\alpha]_D$ −45° (c, 2.18 in Py).

Kobayashi, M. *et al*, *Chem. Pharm. Bull.*, 1993, **41**, 87 (*isol, pmr, cmr*)

16-Nor-15-oxo-7,13-abietadien-19,6-olide N-10048



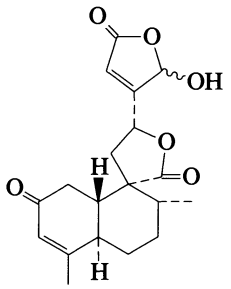
$C_{19}H_{24}O_3$ M 300.397

6β-form [151484-88-7] ***Norjuniperolide***

Constit. of *Juniperus chinensis*. Cryst. (MeOH). Mp 176.5-178°. $[\alpha]_D^{25}$ −114.7° (c, 0.34 in MeOH).

Fang, J.-M. *et al*, *Phytochemistry*, 1993, **33**, 1169 (*isol, pmr, cmr*)

19-Nor-2-oxo-3,13-clerodadiene-15,16:20,12-diolide N-10049

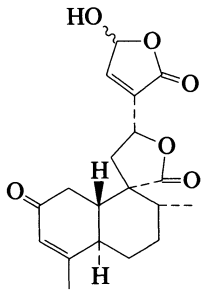


$C_{19}H_{22}O_6$ M 346.379

(ent-12βH,16ξ)-form [147742-03-8] ***Isocajucarinolide***
Constit. of *Croton cajucara*. Plates. Mp 205-206° dec. $[\alpha]_D^{20}$ −13.9° (c, 0.57 in $CHCl_3$/MeOH).

Ichihara, Y. *et al*, *Planta Med.*, 1992, **58**, 549 (*isol*, *pmr*, *cmr*)

19-Nor-2-oxo-3,13-clerodadiene-16,15:20,12-diolide N-10050



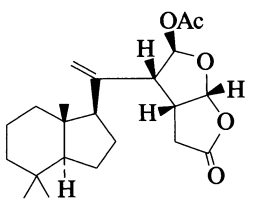
$C_{19}H_{22}O_6$ M 346.379

(ent-12βH,15ξ)-form [147741-98-8] ***Cajucarinolide***
Constit. of *Croton cajucara*. Plates. Mp 202-203° dec. $[\alpha]_D^{20}$ −38.1° (c, 0.52 in $CHCl_3$/MeOH).

Ichihara, Y. *et al*, *Planta Med.*, 1992, **58**, 549 (*isol*, *pmr*, *cmr*)

Norrisolide N-10051

Updated Entry replacing N-00792
[85066-78-0]



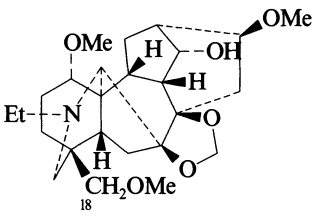
Relative configuration

$C_{22}H_{32}O_5$ M 376.492
Constit. of *Chromodoris norrisi* and *Dysidea* spp. and *Chelonaphysilla violacea*. Cryst. Mp 144.5-146°. $[\alpha]_D$ +1.0° (c, 1 in $CHCl_3$).

Hochlowski, J.E. *et al*, *J. Org. Chem.*, 1983, **48**, 1141 (*isol*)
Rudi, A. *et al*, *Tetrahedron*, 1990, **46**, 4019 (*isol*)
Bergquist, P.R. *et al*, *Aust. J. Chem.*, 1993, **46**, 623 (*isol*, *pmr*, *cmr*)

Nudicaulamine N-10052

Updated Entry replacing N-00847
[99815-84-6]



$C_{25}H_{39}NO_6$ M 449.586
Alkaloid from *Delphinium nudicaule* (whole plant) (Ranunculaceae). Noncryst. $[\alpha]_D$ −27° (c, 0.36 in $CHCl_3$).

B,HClO₄: Mp 212-214°.

14-Me ether: [54387-74-5]. ***Deoxydelcorine***
$C_{26}H_{41}NO_6$ M 463.613
Alkaloid from *D. corumbosum* (Ranunculaceae).

O^{14}-*Me*, O^{16}-*de-Me:* [98752-03-5]. ***Corumdefine***
$C_{25}H_{39}NO_6$ M 449.586
Alkaloid from *D. corumbosum* (Ranunculaceae). Powder.

O^1-*De-Me:* [128700-86-7]. ***Winkleriline***
$C_{24}H_{37}NO_6$ M 435.559
Alkaloid from the whole plant of *D. winklerianum* (Ranunculaceae). Rhombic cryst. (Me_2CO/pet. ether). $[\alpha]_D^{21}$ +89.7° (c, 0.39 in $CHCl_3$).

O^1-*De-Me, di-Ac:* Needles (EtOH). Mp 131-134°.

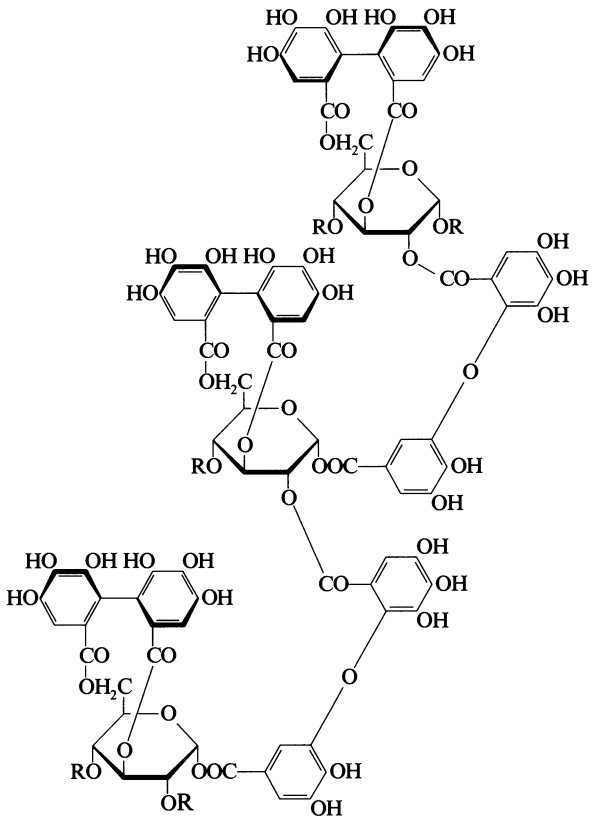
O^{18}-*De-Me*, O^{14}-*Me:* [126223-69-6]. ***Hohenackerine***
$C_{25}H_{39}NO_6$ M 449.586
Alkaloid from the aerial parts of *Consolida hohenackeri* (Ranunculaceae).

O^1,O^{18}-*Di-de-Me:* ***Ajadelphinine***
$C_{23}H_{35}NO_6$ M 421.533
Alkaloid from roots of *Delphinium ajacis* (Ranunculaceae). Amorph. $[\alpha]_D$ −22.6° (c, 0.32 in $CHCl_3$).

Narzullaev, A.S. *et al*, *Khim. Prir. Soedin.*, 1974, 412.
Kulanthaivel, P. *et al*, *Heterocycles*, 1985, **23**, 2515 (*ir*, *pmr*, *cmr*, *ms*, *struct*)
Salimov, B.T. *et al*, *Khim. Prir. Soedin.*, 1985, **21**, 95; *Chem. Nat. Compd.* (*Engl. Transl.*), 91 (*Corumdefine*)
Sener, B. *et al*, *CA*, 1990, **112**, 175528 (*Hohenackerine*)
Chen, Y.Z. *et al*, *Phytochemistry*, 1990, **29**, 1016 (*Winkleriline*)
Pelletier, S.W. *et al*, *J. Nat. Prod.* (*Lloydia*), 1992, **55**, 736 (*Ajadelphinine*)

Nupharin F N-10053

[124166-21-8]



R = 3,4,5-Trihydroxybenzoyl

$C_{123}H_{86}O_{78}$ M 2811.986

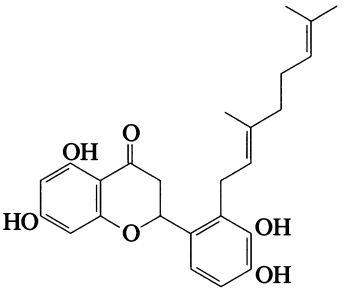
Ellagitannin constit. of *Nuphar japonicum*. Off-white amorph. powder + $9H_2O$. $[\alpha]_D^{24}$ +40.3° (c, 0.9 in Me_2CO).

Ishimatsu, M. *et al*, *Chem. Pharm. Bull.*, 1989, **37**, 1735 (*struct, pmr, cmr*)

Nymphaeol B N-10054

2'-Geranyl-3',4',5,7-tetrahydroxyflavanone. 2'-Geranyleriodictyol

[73676-37-6]



$C_{25}H_{28}O_6$ M 424.493

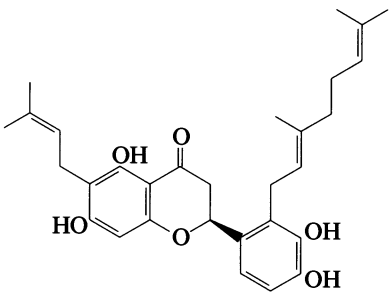
Isol. from the leaves of *Hernandia nymphaefolia*. Cryst. Mp 48-52°.

Yakushijin, K. *et al*, *Heterocycles*, 1980, **14**, 397 (*isol*)

Nymphaeol C N-10055

2'-Geranyl-3',4',5,7-tetrahydroxy-6-prenylflavanone. 2'-Geranyl-6-prenyleriodictyol

[73676-36-5]



$C_{30}H_{36}O_6$ M 492.611

Isol. from the leaves of *Hernandia nymphaefolia*. Cryst. Mp 77-81°. $[\alpha]_D$ −14°.

Yakushijin, K. *et al*, *Heterocycles*, 1980, **14**, 397 (*isol*)

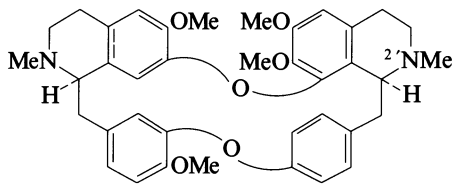
O

Obaberine O-10001

Updated Entry replacing O-00001

6,6′,7,12′-Tetramethoxy-2,2′-dimethyloxyacanthan, 9CI. O-*Methyloxyacanthine*

[1263-80-5]



$C_{38}H_{42}N_2O_6$ M 622.760

Alkaloid from *Thalictrum lucidum*, *T. minus* Race B, *T. minus* var. *microphyllum*, *T. rugosum*, *Pycnarrhena longifolia*, *Berberis tschonoskyana*, *B. laurina*, *Dehaasia triandra*, *Mahonia repens* and *Albertisia papuana* (Ranuncula). Mp 139-140°, Mp 199-200°. $[\alpha]_D^{26}$ +169° (c, 0.147 in MeOH).

B,2HCl: Needles + $3H_2O$. Mp 260-261°.

Dipicrate: Cryst. + $1H_2O$. Mp 178-180° dec.

B,2MeI: Needles + $2H_2O$. Mp 256-258° dec.

2′-N-*De-Me:* ***2′-Norobaberine***

$C_{37}H_{40}N_2O_6$ M 608.733

Alkaloid from the tubers of *Stephania pierrii* (Menispermaceae).

N^2-*De-Me*, $N^{2'}$-*oxide* (*β*-)*:* ***2-Norobaberine 2′-β-N-oxide***

$C_{37}H_{40}N_2O_7$ M 624.732

Alkaloid from seeds of *Anisocycla cymosa* (Menispermaceae). Amorph. powder. $[\alpha]_D^{20}$ +158° (c, 0.31 in $CHCl_3$).

Fujita, E. *et al*, *Yakugaku Zasshi*, 1952, **72**, 213; *CA*, **47**, 6429a (*struct, synth*)

Tomita, M. *et al*, *Yakugaku Zasshi*, 1959, **79**, 317; *CA*, **53**, 17161e (*isol*)

Kugo, T. *et al*, *Yakugaku Zasshi*, 1960, **80**, 1425; *CA*, **55**, 5557a (*isol, struct*)

Battersby, A.R. *et al*, *J. Chem. Soc.*, 1965, 2239 (*ord*)

Falco, M.R. *et al*, *Tetrahedron Lett.*, 1968, 1953 (*pmr*)

Baldas, J. *et al*, *J. Chem. Soc., Perkin Trans. 1*, 1972, 592 (*ms*)

Wu, W.-N. *et al*, *J. Nat. Prod.* (*Lloydia*), 1976, **39**, 378; 1978, **41**, 257; 1980, **43**, 143 (*isol, synth*)

Inubushi, Y. *et al*, *Chem. Pharm. Bull.*, 1977, **25**, 1636 (*synth, pmr, ms*)

Suess, T.R. *et al*, *J. Nat. Prod.* (*Lloydia*), 1981, **44**, 680 (*isol*)

Siwon, J. *et al*, *Phytochemistry*, 1981, **20**, 323 (*isol, uv, pmr, ms*)

Leboeuf, M. *et al*, *Plant. Med. Phytother.*, 1982, **16**, 280 (*isol*)

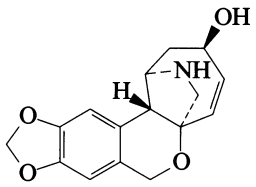
Nakova, E. *et al*, *Khim. Prir. Soedin.*, 1985, **21**, 86, 91; *Chem. Nat. Compd.* (*Engl. Transl.*), 83, 88 (*synth*)

Tantisewie, B. *et al*, *J. Nat. Prod.* (*Lloydia*), 1989, **52**, 846 (*2′-Norobaberine*)

Kanyinda, B. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 618 (*2-Norbaberine-2′-β-N-oxide*)

Obesine O-10002

[143114-83-4]



$C_{16}H_{17}NO_4$ M 287.315

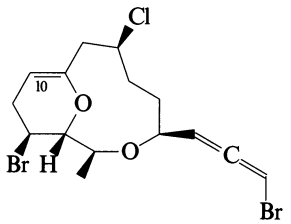
Alkaloid from aerial parts and bulbs of *Narcissus obesus* (Amaryllidaceae). $[\alpha]_D^{20}$ −5.6° (c, 0.69 in MeOH).

Viladomat, F. *et al*, *J. Nat. Prod.* (*Lloydia*), 1992, **55**, 804 (*isol, pmr, cmr, ms, struct*)

Obtusallene I O-10003

Updated Entry replacing O-00027

[81920-18-5]



Relative configuration

$C_{15}H_{17}Br_2ClO_2$ M 424.559

Constit. of *Laurencia obtusa*. Cryst. (Et_2O/pet. ether). Mp 165-167°. $[\alpha]_D^{17}$ −257.6° (c, 0.53 in $CHCl_3$).

10-Bromo: [133883-63-3]. ***10-Bromoobtusallene***

$C_{15}H_{16}Br_3ClO_2$ M 503.455

Constit. of *L. obtusa*. Oil. $[\alpha]_D^{25}$ −240° (c, 0.19 in $CHCl_3$).

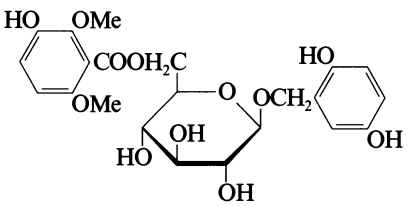
Cox, P.J. *et al*, *Acta Crystallogr., Sect. B*, 1982, **38**, 1386 (*abs config*)

Cox, P.J. *et al*, *Tetrahedron Lett.*, 1982, **23**, 579 (*cryst struct*)

Oztunc, A. *et al*, *Tetrahedron*, 1991, **47**, 2273 (*10-Bromoobtusallene*)

Obtusaside O-10004

[131889-65-1]



$C_{22}H_{26}O_{12}$ M 482.440

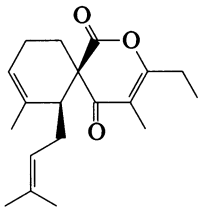
Isol. from the aerial parts of *Hypoxis obtusa*. Off-white powder.

Msonthi, J.D. *et al*, *Phytochemistry*, 1990, **29**, 3977 (*isol*)

Ocimepyrone O-10005

3-Ethyl-4,8-dimethyl-7-(3-methyl-2-butenyl)-2-oxaspiro[5.5] undeca-3,8-diene-1,5-dione, 9CI

[122585-72-2]



$C_{19}H_{26}O_3$ M 302.413

Constit. of *Helichrysum petiolare*. Gum.

Jakupovic, J. *et al*, *Phytochemistry*, 1989, **28**, 1119 (*isol, pmr*)

21-Octacosenoic acid O-10006

$H_3C(CH_2)_5CH{=}CH(CH_2)_{19}COOH$

$C_{28}H_{54}O_2$ M 422.733

(Z)-form [140163-41-3]

Constit. of the sponge *Amphimedon compressa*.

Carballeira, N.M. *et al*, *J. Nat. Prod.* (*Lloydia*), 1992, **55**, 333.

23-Octacosenoic acid O-10007

$H_3C(CH_2)_3CH{=}CH(CH_2)_{21}COOH$

$C_{28}H_{54}O_2$ M 422.733

(Z)-form [97761-97-2]

Constit. of the seed oil of *Grevillea decora*.

Kleiman, R. *et al*, *Lipids*, 1985, **20**, 373 (*isol*)

7,9-Octadecadiynoic acid O-10008

[33128-25-5]

$H_3C(CH_2)_7C{\equiv}CC{\equiv}C(CH_2)_5COOH$

$C_{18}H_{28}O_2$ M 276.418

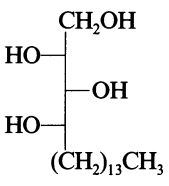
Isol. from root bark of *Paramacrolobium caeruleum*. Cryst. (Me_2CO/pet. ether). Mp 51.5-52° (41-43°).

Me ester: [35042-74-1].

Oil.

Morris, S.G., *J. Am. Oil Chem. Soc.*, 1971, **48**, 376 (*synth*)
Morris, S.G., *J. Am. Oil Chem. Soc.*, 1972, **49**, 92, 505.
Patil, A.D. *et al*, *J. Nat. Prod.* (*Lloydia*), 1989, **52**, 153 (*isol, struct, ir, pmr, cmr, ms*)

1,2,3,4-Octadecanetetrol O-10009



(2R,3R,4S)-form

$C_{18}H_{38}O_4$ M 318.496

(2R,3R,4S)-form [116002-57-4]

L-xylo-*form*

Cryst. (EtOH). Mp 81-83°. $[\alpha]_D$ −5.7° (c, 0.42 in EtOH).

(2R,3S,4R)-form [116002-56-3]

D-lyxo-*form*

Cryst. (EtOH). Mp 138-140°. $[\alpha]_D$ +5.1° (c, 0.1 in EtOH).

(2R,3S,4S)-form [116002-55-2]

L-ribo-*form*

Needles (EtOH). Mp 101-103°. $[\alpha]_D$ −8.9° (c, 0.44 in EtOH).

(2S,3S,4R)-form [105368-62-5]

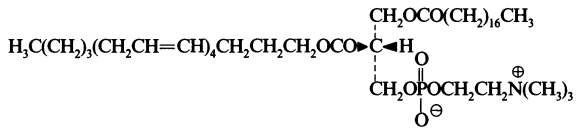
D-xylo-*form*. ***Guggultetrol 18***

Constit. of the saponified resin of *Commiphora mukul*. Mp 80-82°. $[\alpha]_D^{25}$ +11.4° (c, 0.34 in EtOH).

Kumar, V. *et al*, *Tetrahedron*, 1987, **43**, 5933 (*isol, synth, struct*)

1-*O*-Octadecanoyl-2-*O*-arachidonoyl-*sn*-glycero-3-phosphocholine O-10010

1-Acyl-2-arachidonyl-GPC. 1-Stearoyl-2-arachidonoyl-sn-glycero-3-phosphorylcholine. 4-Hydroxy-N,N,N-trimethyl-9-oxo-7-[[(1-oxooctadecyl)oxy]methyl]-3,5,8-trioxa-4-phosphaoctacosa-13,16,19,22-tetraen-1-aminiumhydroxide, inner salt, 4-oxide



$C_{46}H_{84}NO_8P$ M 810.145

(R)-(all-Z)-form [35418-59-8]

Stearoylarachidonylphosphatidylcholine

Main source of arachidonic acid from human platelets and endothelial cells.

[18892-74-5, 128114-96-5]

Ghosh, D. *et al*, *Biochim. Biophys. Acta*, 1972, **266**, 41.
Cronholm, T. *et al*, *Eur. J. Biochem.*, 1977, **77**, 337 (*biosynth*)
Porter, N.A. *et al*, *Lipids*, 1979, **14**, 20 (*hplc*)
Santaren, J.F. *et al*, *Org. Magn. Reson.*, 1982, **18**, 98 (*synth, cmr*)
Chilton, F.H. *et al*, *J. Biol. Chem.*, 1986, **261**, 7771 (*metab*)
Chilton, F.H. *et al*, *Methods Enzymol.*, 1990, **187**, 157 (*biochem*)
Cubre, F. *et al*, *Biochim. Biophys. Acta*, 1992, **1124**, 297 (*biochem*)

2,4,14-Octadecatrienoic acid O-10011

$H_3CCH_2CH_2CH{=}CH(CH_2)_8CH{=}CHCH{=}CHCOOH$

$C_{18}H_{30}O_2$ M 278.434

(2E,4E,14Z)-form

Piperidide: [144525-15-5]. ***Piperoctadecalidine***

$C_{23}H_{39}NO$ M 345.567

Alkaloid from fruits of *Piper retofractum* (Piperaceae). Oil.

Ahn, J.W. *et al*, *Phytochemistry*, 1992, **31**, 3609.

10-Octadecen-8-ynoic acid O-10012

$H_3C(CH_2)_6CH{=}CHC{\equiv}C(CH_2)_6COOH$

$C_{18}H_{30}O_2$ M 278.434

(Z)-form [135329-81-6] ***Xionenynic acid***

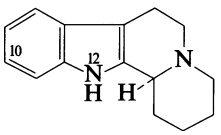
Constit. of the seed oil of *Vernonia galamensis*.

Afolabi, O.A. *et al*, *J. Chem. Technol. Biotechnol.*, 1991, **51**, 41 (*isol*)

1,2,3,4,6,7,12,12*b*-Octahydroindolo[2,3-*a*]quinolizine, 9CI O-10013

Updated Entry replacing O-00192

[4802-79-3]



(*S*)-*form*

$C_{15}H_{18}N_2$ M 226.321

(R)-form

Mp 149-151°. $[\alpha]_D$ +84.8° (MeOH).

(S)-form [10252-12-7]

Main alkaloid from leaves of *Dracontomelon mangiferum* (Anacardiaceae). Mp 149-151°. $[\alpha]_D$ −86.5° (MeOH). The alkaloid is partly racemic.

10-Bromo: ***Arborescidine A***

$C_{15}H_{17}BrN_2$ M 305.217

Alkaloid from the marine tunicate *Pseudodistoma arborescens*. Cryst. (MeOH). Mp 202°. $[\alpha]_D$ −85° (c, 1 in $CHCl_3$).

(±)-form [46798-86-1]

Alkaloid from *D. mangiferum* (Anacardiaceae). Inhibitor of spontaneous motor activity, antiphlogistic agent. Mp 153-155° (148-151.5°). Many syntheses reported.

B,HCl: Mp 311-312°.

Johns, S.R. *et al*, *Aust. J. Chem.*, 1966, **19**, 1951 (*isol, uv, ir, pmr, ms, struct*)
Pospišek, J. *et al*, *Chem. Ind. (London)*, 1969, 25 (*resoln, ord, config*)
Gribble, G.W. *et al*, *J. Org. Chem.*, 1974, **39**, 1845; 1975, **40**, 3720 (*ms, cmr*)
Nakagawa, M. *et al*, *Chem. Pharm. Bull.*, 1975, **23**, 304 (*synth, bibl*)
Rosenmund, P. *et al*, *Justus Liebigs Ann. Chem.*, 1979, 1643 (*synth, uv*)
Chbani, M. *et al*, *J. Nat. Prod. (Lloydia)*, 1993, **56**, 99 (*Arborescidine A*)

Octanedioic acid, 9CI O-10014

Suberic acid, 8CI

[505-48-6]

$HOOC(CH_2)_6COOH$

$C_8H_{14}O_4$ M 174.196

Isol. from stems and leaves of *Anthyllis sericea* and roots of *Phaseolus vulgaris*. Used in plastics industry. Cryst. (H_2O or C_6H_6/EtOH). Mp 144°. pK_{a1} 4.53; pK_{a2} 5.52 (25°, 0.1*M* KNO_3). Subl. >300°.

Mono-Me ester: [3946-32-5].

$C_9H_{16}O_4$ M 188.223

Mp 14-15°. Bp_{18} 185-186°.

Di-Me ester: [1732-09-8].

$C_{10}H_{18}O_4$ M 202.250

Fp −3.1°. Bp 268°, Bp_9 130-131°.

Di-Et ester: [2050-23-9].

$C_{12}H_{22}O_4$ M 230.303

d 0.98. Mp 5°. Bp 282°.

▷ n_D^{20} 1.43.

Dichloride: [10027-07-3].

$C_8H_{12}Cl_2O_2$ M 211.087

Bp_{12} 149-150°.

Anhydride: Suberic anhydride

$C_8H_{12}O_3$ M 156.181

Needles (C_6H_6). Mp 65-66°.

Monoamide: [73427-53-9]. *8-Amino-8-oxooctanoic acid, 9CI. Suberamic acid*

$C_8H_{15}NO_3$ M 173.211

Cryst. (H_2O). Mp 125-127°.

Diamide: [3891-73-4].

$C_8H_{16}N_2O_2$ M 172.227

Cryst. (H_2O). Mp 216-217°.

Dinitrile: [629-40-3]. *Suberonitrile. 1,6-Dicyanohexane*

$C_8H_{12}N_2$ M 136.196

Mp −3.5°. Bp_{11} 176-178°.

Green, T.G. *et al*, *J. Chem. Soc.*, 1937, 766 (*synth*)
Cason, J. *et al*, *J. Org. Chem.*, 1949, **14**, 37 (*synth*)
Hopff, H. *et al*, *Justus Liebigs Ann. Chem.*, 1966, **691**, 61 (*synth*)
Angelo, B., *C. R. Hebd. Seances Acad. Sci.*, 1971, **273**, 1767 (*synth*)
Takasugi, M. *et al*, *Chem. Lett.*, 1973, 445 (*isol*)
Chern, C.-I. *et al*, *J. Org. Chem.*, 1976, **41**, 1077 (*synth*)
Marco, J.A. *et al*, *Phytochemistry*, 1978, **17**, 1438 (*isol*)
Ansell, M.F. *et al*, *J. Chem. Soc., Perkin Trans. 1*, 1984, 1061 (*synth, pmr*)

1-Octatriacontanol O-10015

$H_3C(CH_2)_{36}CH_2OH$

$C_{38}H_{78}O$ M 551.034

Constit. of *Erythrina stricta* bark.

[128305-32-8]

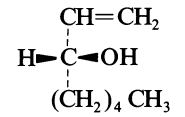
Singh, H. *et al*, *J. Nat. Prod. (Lloydia)*, 1981, **44**, 526 (*isol*)

1-Octen-3-ol, 9CI O-10016

Updated Entry replacing O-00241

Amyl vinyl carbinol. Matsutake alcohol. Matsutakeol

[3391-86-4]



(*R*)-*form*

$C_8H_{16}O$ M 128.214

Constit. of the defense secretions of *Leiobunum nigripalpi*. Oil. Bp_{43} 73°.

▷ LD_{50} (rat, orl) 340 mg/kg. RH3300000.

(R)-form [22658-80-6]

Isol. from a number of essential oils, e.g. lavender, leek, mint and mushrooms. $[\alpha]_D^{17}$ −13.1° (EtOH).

Ac:

$C_{10}H_{18}O_2$ M 170.251

Found in lavender oil. Used in perfumery. Bp 190°. $[\alpha]_D^{20}$ +3.5°.

Hydrogen phthalate: Mp 57°.

(S)-form [62247-46-5]

$[\alpha]_D^{17}$ +10.7° (EtOH).

(±)-form [74072-82-5]

Used in lavender and mushroom like perfume compositions. Liq. with intense earthy odour. Bp 173.5°. n_D^{20} 1.4378.

Hydrogen phthalate: Mp 79°.

[3687-48-7, 24587-53-9, 50999-79-6]

Honkanen, E. *et al*, *Acta Chem. Scand.*, 1963, **17**, 858 (*isol*)
Tsuji, J. *et al*, *Bull. Chem. Soc. Jpn.*, 1976, **49**, 1701 (*synth, spectra*)
Roumestant, M.L. *et al*, *Synthesis*, 1976, 755 (*synth*)
McGahren, W.J. *et al*, *J. Org. Chem.*, 1977, **42**, 1659 (*abs config*)
Nakai, T. *et al*, *Tetrahedron Lett.*, 1977, 2425 (*synth*)
Takabe, K. *et al*, *Synth. Commun.*, 1980, **10**, 89 (*synth*)
Whitfield, F.B. *et al*, *Aust. J. Chem.*, 1982, **35**, 373 (*isol*)

Shimazaki, M. *et al*, *Chem. Pharm. Bull.*, 1992, **40**, 3073 (*synth*)
Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th Ed., Van Nostrand-Reinhold, 1992, ODW000.

Odontoside† O-10017

4-[[(3,4-Dihydroxybenzoyl)oxy]methyl]-2-hydroxyphenyl β-D-glucopyranoside, 9CI. Calleryanin monoprotocatechuate, 8CI

[20300-50-9]

$C_{20}H_{22}O_{11}$ M 438.387

Constit. of *Achrocycline satureioides, Odontosoria gymnogrammoides* and *Podocarpus andina*. Pale yellow powder. Mp 98-102°. $[\alpha]_D$ −65°.

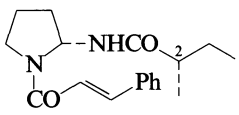
Challice, J.S. *et al*, *Phytochemistry*, 1968, **7**, 119 (*isol*)
Poyser, J.P. *et al*, *Rev. Latinoam. Quim.*, 1973, **4**, 157 (*isol*)
Ferraro, G.E. *et al*, *Phytochemistry*, 1981, **20**, 2053 (*isol*)
Hori, K. *et al*, *Yakugaku Zasshi*, 1987, **107**, 774 (*isol*)

Odorine O-10018

Updated Entry replacing O-00262

2-Methyl-N-[1-(1-oxo-3-phenyl-2-propenyl)-2-pyrrolidinyl] butanamide, 9CI. N-Cinnamoyl-2-(2-methylbutanoylamino) pyrrolidine. Roxburghilin

[72755-20-5]



(+)-*form*

$C_{18}H_{24}N_2O_2$ M 300.400

(+)-*form*

Alkaloid from the leaves of *Aglaia odorata*. Also isol. from *A. roxburghiana* (Meliaceae). Needles (C_6H_6). Mp 218-219°. $[\alpha]_D^{25}$ +72.4° (c, 0.03 in $CHCl_3$).

2-Hydroxy: [72755-22-7]. **(+)-*Odorinol.*** *Hydroxyroxburghilin*

$C_{18}H_{24}N_2O_3$ M 316.399

Alkaloid from *A. odorata* and *A. roxburghiana* (Meliaceae). Inhibitor of P-388 lymphocytic leukaemia in mice. Needles (pet. ether). Mp 166-168°. $[\alpha]_D^{25}$ +40.5° (c, 0.01 in $CHCl_3$).

2,3-Didehydro: ***Dehydroodorine***

$C_{18}H_{22}N_2O_2$ M 298.384

Alkaloid from leaves of *A. formosana* (Meliaceae). Exhibits cytotoxicity against P-388 lymphocytic leukaemia system in cell culture. Needles (MeOH). Mp 167-168°. $[\alpha]_D^{18}$ +42.5° (c, 0.01 in $CHCl_3$).

(−)-*form*

2-Hydroxy: **(−)-*Odorinol***

$C_{18}H_{24}N_2O_3$ M 316.399

Alkaloid from *A. odorata* (Meliaceae). Mp 209-211°. $[\alpha]_D$ −20° (EtOH), $[\alpha]_D$ −35° ($CHCl_3$).

(±)-*form*

Synthetic. Needles (C_6H_6). Mp 187-190°.

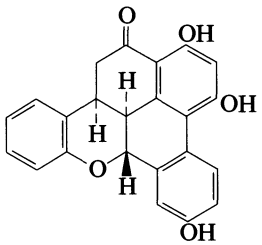
2-Epimer: Synthetic. Needles (C_6H_6). Mp 174-177°.

Purushothaman, K.K. *et al*, *J. Chem. Soc., Perkin Trans. 1*, 1979, 3171.
Shiengthong, D. *et al*, *Tetrahedron Lett.*, 1979, 2247 (*uv, ir, pmr, ms, struct*)
Babidge, P.J. *et al*, *Aust. J. Chem.*, 1980, **33**, 1841 (*isol, synth*)
Hayashi, N. *et al*, *Phytochemistry*, 1982, **21**, 2371 (*uv, ir, pmr, cmr, ms, cryst struct, synth*)
Nagasaka, T. *et al*, *Heterocycles*, 1988, **27**, 2219 (*synth, ir, pmr*)
Duh, C.-Y. *et al*, *Phytochemistry*, 1993, **34**, 857 (*Dehydroodorine*)

Ohioensin A O-10019

7b,12b,13,14c-Tetrahydro-1,3,6-trihydroxy-14H-benzo[c] naphtho[2,1,8-mna]xanthen-14-one, 9CI

[121353-47-7]



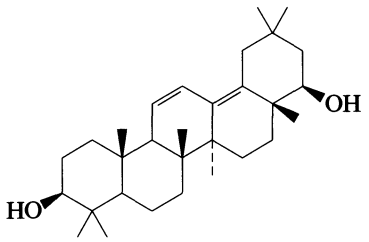
Relative configuration

$C_{23}H_{16}O_5$ M 372.376

Isol. from the moss *Polytrichum ohioense*. Yellow needles ($CHCl_3$/MeOH). Mp 274-275° dec. $[\alpha]_D^{27}$ +37° (c, 0.1 in MeOH).

Zheng, G.Q. *et al*, *J. Am. Chem. Soc.*, 1989, **111**, 5500 (*isol, struct*)

11,13(18)-Oleanadiene-3,22-diol O-10020



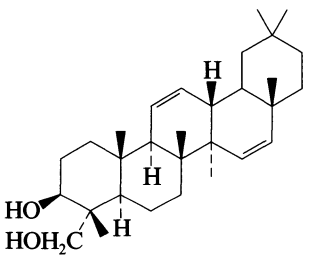
$C_{30}H_{48}O_2$ M 440.708

(3β,22β)-form [149183-66-4] ***Squasapogenol***

Constit. of *Glycyrrhiza squamalosa*. Cryst. (as di-Ac). Mp >300° (di-Ac).

Liang, H. *et al*, *Acta Pharm. Sin.*, 1993, **28**, 116 (*isol, pmr, cmr*)

12,15-Oleanadiene-3,23-diol O-10021



$C_{30}H_{48}O_2$ M 440.708

3β-form

3-O-[α-L-Rhamnopyranosyl-(1→6)[α-D-galactopyranosyl-(1→2)]-β-D-glucopyranosyl-(1→4)-α-D-galactopyranosyl-(1→2)-α-L-arabinopyranosyl-(1→3)-β-D-glucuronoside]: [30937-16-7]. ***Phaseoloside D***

$C_{65}H_{104}O_{31}$ M 1381.518

Isol. from *Phaseolus vulgaris*.

3-O-[β-D-Glucopyranosyl-(1→4)-β-D-glucopyranosyl-(1→4)-α-D-galactopyranosyl-(1→2)[α-L-rhamnopyranosyl-(1→6)]-β-D-glucopyranosyl-(1→4)-α-D-galactopyranosyl-(1→2)-α-L-arabinopyranosyl-(1→3)-β-D-glucuronoside]: [30915-09-4]. ***Phaseoloside E***

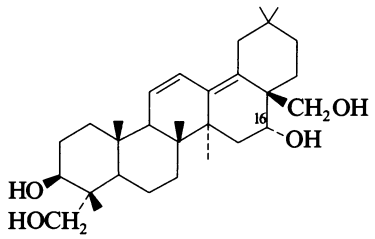
$C_{77}H_{124}O_{41}$ M 1705.802

Isol. from *P. vulgaris*.

Chirva, V.Y. *et al*, *Khim. Prir. Soedin.*, 1970, **6**, 377, 559 (*isol, struct*)
Lazur'evskii, G.V. *et al*, *Dokl. Akad. Nauk SSSR, Ser. Khim.*, 1971, **199**, 226; *CA*, **75**, 115903 (*struct*)

11,13(18)-Oleanadiene-3,16,23,28-tetrol O-10022

Updated Entry replacing O-00303



(3β,16α)-*form*

$C_{30}H_{48}O_4$ M 472.707

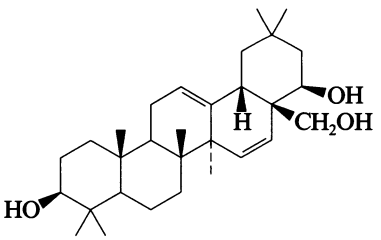
(3β,16α)-form [5573-16-0] ***Saikogenin D***
Constit. of *Bupleurum falcatum* root and *Polycarpone loeflingiae*. Mp 256-261°. $[\alpha]_D$ +236.8° (c, 0.5 in $CHCl_3$). Artifact.

3-O-[α-L-*Arabinofuranosyl-(1→4)-[β-D-glucopyranosyl-(1→2)]-α-L-arabinopyranosyl-(1→4)-β-D-glucopyranoside*]: [132396-81-7]. ***Polycarponoside A***
$C_{52}H_{84}O_{22}$ M 1061.222
Constit. of the aerial parts of *Polycarpone loeflingiae*. Cryst. (MeOH). Mp 172-174°. $[\alpha]_D$ −28.6° (c, 1.6 in MeOH).

(3β,16β)-form [5092-09-1] ***Saikogenin A***
Sapogenin obtained from Saikosides Ia and Ib from *B. falcatum* root and from *P. loeflingiae* and *Verbascum thapsus*. Shows antiinflammatory props. Cryst. (MeOH). Mp 287-290°. $[\alpha]_D$ −43.3° (c, 0.6 in MeOH). Artifact.

Kubota, T. *et al*, *Tetrahedron*, 1967, **23**, 3333 (*isol, struct*)
De Pascual Teresa, J. *et al*, *An. Quim.*, 1978, **74**, 311 (*isol*)
Bhandari, S.P.S. *et al*, *J. Indian Chem. Soc.*, 1987, **64**, 258 (*isol*)
Bhandari, S.P.S. *et al*, *Phytochemistry*, 1990, **29**, 3889 (*Polycarponoside A*)

12,15-Oleanadiene-3,22,28-triol O-10023



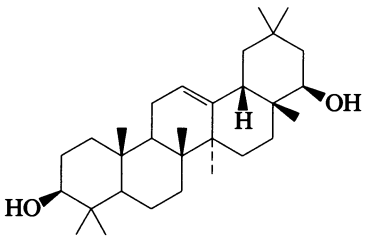
$C_{30}H_{48}O_3$ M 456.707
Struct. incorrectly drawn in ref.

(3β,22β)-form [147348-08-1] ***Salvitriol***
Constit. of *Salvia leucantha*. Cryst. Mp 240-241°.

Mukherjee, K.S. *et al*, *J. Indian Chem. Soc.*, 1992, **69**, 410 (*isol, pmr*)

12-Oleanene-3,22-diol O-10024

Updated Entry replacing O-00330



$C_{30}H_{50}O_2$ M 442.724

(3β,22β)-form [6822-47-5] ***Sophoradiol***
Constit. of *Abrus cantoniensis* and *Sophora japonica*. Needles. Mp 219-220°. $[\alpha]_D^6$ +113°.

Di-Ac: [24427-91-6].
Cryst. Mp 220-221°.

3-O-[β-D-*Glucopyranosyl-(1→2)-β-D-glucopyranosuronate*]: [82793-02-0]. ***Azukisaponin I***
$C_{42}H_{68}O_{13}$ M 780.991
Isol. from seeds of *Vigna angularis*. Cryst. (EtOH). Mp 215-217°. $[\alpha]_D^{28}$ +16.0° (c, 0.3 in MeOH).

22-Ketone: [121994-08-9]. *3-Hydroxy-12-oleanen-22-one*. ***Abrisapogenol F***
$C_{30}H_{48}O_2$ M 440.708
Constit. of *A. cantoniensis*. Needles. Mp 66-67°. $[\alpha]_D$ +15.4° ($CHCl_3$).

3-O-[β-D-*Xylopyranosyl-(1→2)-β-D-galactopyranosyl-(1→2)-β-D-glucuronopyranoside*]: [134859-87-3].
$C_{47}H_{76}O_{17}$ M 913.107
Isol. from the aerial parts of *Crotalaria albida*.

3-O-[β-D-*Galactopyranosyl-(1→2)-β-D-glucuronopyranoside*]: [117210-04-5]. ***Kaikasaponin I***
$C_{42}H_{68}O_{13}$ M 780.991
Constit. of *S. japonica*.

3-O-[α-L-*Rhamnopyranosyl-(1→2)-β-D-glucopyranosyl-(1→2)-β-D-glucuronopyranoside*]: [117210-05-6]. ***Kaikasaponin II***
$C_{48}H_{78}O_{17}$ M 927.134
Constit. of the buds of *S. japonica*.

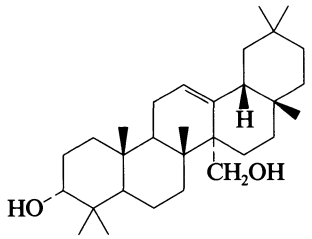
3-O-[α-L-*Rhamnopyranosyl-(1→2)-β-D-galactopyranosyl-(1→2)-β-D-glucuronopyranoside*]: [115330-90-0]. ***Kaikasaponin III***
$C_{48}H_{78}O_{17}$ M 927.134
Constit. of *C. albida, Dalbergia hupeana, Pueraria lobata* and *S. japonica*. Mp 170-172°. $[\alpha]_D^{22}$ −8.1° (c, 1 in Py).

3-O-[α-L-*Rhamnopyranosyl-(1→2)-α-L-arabinopyranosyl-(1→2)-β-D-glucuronopyranoside*]: [115330-93-3].
$C_{47}H_{76}O_{16}$ M 897.108
Constit. of *P. lobata*.

[86500-79-0, 86500-80-3]

Ishimasa, S. *et al*, *Yakugaku Zasshi*, 1956, **76**, 1210; 1960, **80**, 304 (*isol, struct, synth*)
Kitagawa, I. *et al*, *Chem. Pharm. Bull.*, 1982, **30**, 2294; 1983, **31**, 674 (*isol, struct*)
Mak, T.C.W. *et al*, *J. Chem. Soc., Chem. Commun.*, 1982, 785 (*isol, cryst struct*)
Kitagawa, I. *et al*, *Yakugaku Zasshi*, 1988, **108**, 538; *CA*, **109**, 196978 (*Kaikasaponins*)
Takeshita, T. *et al*, *Chem. Pharm. Bull.*, 1989, **37**, 846 (*Abrisapogenol F*)
Takechita, T. *et al*, *Chem. Pharm. Bull.*, 1989, **37**, 846 (*Abrisapogenol F*)
Ding, Y. *et al*, *Chem. Pharm. Bull.*, 1991, **39**, 496 (*Kaikasaponin III*)

12-Oleanene-3,27-diol O-10025



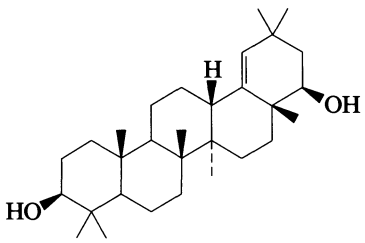
$C_{30}H_{50}O_2$ M 442.724

3α-form [147974-64-9]

Constit. of *Plumeria rubra*. Needles (MeOH). Mp 183-184°. $[\alpha]_D^{20}$ +32° (c, 0.094 in $CHCl_3$).

Akhtar, N. *et al*, *Phytochemistry*, 1993, **32**, 1523 (*isol, pmr, cmr*)

18-Oleanene-3,22-diol O-10026



$C_{30}H_{50}O_2$ M 442.724

(3β,22β)-form

Kalamadiol

Cryst. ($CHCl_3$/MeOH). Mp 190°.

3-Ac:

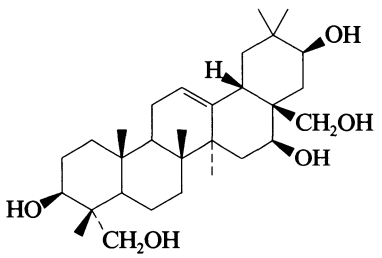
$C_{32}H_{52}O_3$ M 484.761

Constit. of *Mallotus philippinensis*.

Nair, S.P. *et al*, *Phytochemistry*, 1993, **32**, 407 (*isol, pmr, cmr*)

12-Oleanene-3,16,21,23,28-pentol O-10027

Updated Entry replacing O-00351



$C_{30}H_{50}O_5$ M 490.722

(3β,16β,21β)-form [19942-02-0] ***Gymnestrogenin***

Constit. of *Gymnema sylvestre*. Cryst. Mp 288-289°. $[\alpha]_D^{24}$ +53.5° (c, 0.71 in MeOH).

16-Benzoyl: Cryst. ($CHCl_3$/MeOH). Mp 282-284°. $[\alpha]_D$ +59° (c, 1 in EtOH).

3-O-β-D-Glucuronopyranoside: [121903-97-7]. ***Gymnemic acid VII***

$C_{36}H_{58}O_{11}$ M 666.848

Constit. of *G. sylvestre*. Cryst. Mp 222-223°. $[\alpha]_D$ +9.6° (c, 5.7 in MeOH).

3-O-β-D-Glucopyranoside, 16-benzoyl: [119513-72-3]. ***Glochidioside N***

$C_{43}H_{64}O_{11}$ M 756.972

Constit. of *Glochidion heyneanum*. Amorph. powder.

3-O-[β-D-Glycopyranosyl-(1→2)-β-D-glucopyranoside], 16-benzoyl: [119539-76-3]. ***Glochidioside Q***

$C_{49}H_{74}O_{16}$ M 919.114

Constit. of *G. heyneanum*. Amorph. powder.

3-O-[β-D-Glucopyranosyl-(1→3)-α-L-arabinopyranoside], 16-benzoyl: [107110-06-5]. ***Glochidioside***

$C_{48}H_{72}O_{15}$ M 889.088

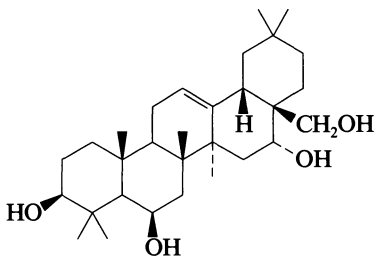
Constit. of *G. heyneanum*. Amorph. powder. $[\alpha]_D$ +42° (c, 1 in EtOH).

Stocklin, W., *Helv. Chim. Acta*, 1968, **51**, 1235 (*isol*)

Srivastava, R. *et al*, *Phytochemistry*, 1986, **25**, 2672; 1988, **27**, 3575 (*derivs*)

Yoshikawa, K. *et al*, *Chem. Pharm. Bull.*, 1989, **37**, 852 (*Gymnemic acid VII*)

12-Oleanene-3,6,16,28-tetrol O-10028



$C_{30}H_{50}O_4$ M 474.723

(3β,6β,16α)-form [149471-15-8]

Macrophyllogenin

Sapogenin from *Primula macrophylla*.

16-Ac: Macrophyllogenin acetate

$C_{32}H_{52}O_5$ M 516.760

Sapogenin from *P. macrophylla*.

3-O-[α-L-Rhamnopyranosyl-(1→2)-β-D-glucopyranosyl-(1→2)-β-D-galactopyranosyl-(1→2)-β-D-glucuronopyranoside]: [149474-93-1]. ***Macrophyllicin***

$C_{54}H_{88}O_{24}$ M 1121.275

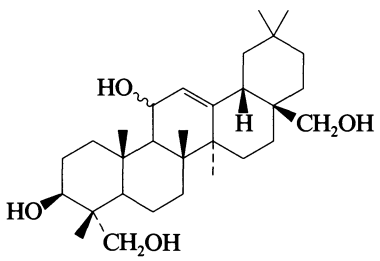
Constit. of *P. macrophylla*. Needles (MeOH). Mp 313-314°. $[\alpha]_D^{25}$ −22° (c, 0.366 in MeOH).

3-O-[α-L-Rhamnopyranosyl-(1→2)-β-D-glucopyranosyl-(1→2)-β-D-galactopyranosyl-(1→2)-β-D-glucuronopyranoside], 16-Ac: ***Macrophyllicinin I***

Constit. of *P. macrophylla*. Cryst. Mp 314-315°. $[\alpha]_D^{27}$ −9° (c, 0.4 in MeOH).

Ahmad, V.U. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 1543, 1580 (*isol, pmr, cmr*)

12-Oleanene-3,11,23,28-tetrol O-10029



$C_{30}H_{50}O_4$ M 474.723

(3β,11ξ)-form

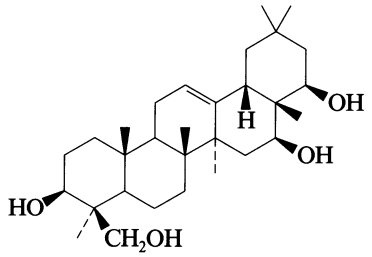
11-Me ether, 3-O-[α-L-rhamnopyranosyl-(1→4)-β-D-glucopyranosyl-(1→3)-[β-D-glucopyranosyl-(1→2)]-β-D-fucopyranoside]: [151283-37-3]. ***Verbascosaponin A***

$C_{55}H_{92}O_{22}$ M 1105.319

Constit. of *Verbascum phlomoides*. Possible artifact.

Schröder, H. *et al*, *Justus Liebigs Ann. Chem.*, 1993, 413 (*isol, pmr, cmr*)

12-Oleanene-3,16,22,24-tetrol O-10030



$C_{30}H_{50}O_4$ M 474.723

(3β,16β,22β)-form

Junceogenol

Sapogenin from *Spartium junceum*.

3-O-[β-D-Glucopyranosyl-(1→2)-α-L-rhamnopyranoside]: ***Junceoside***

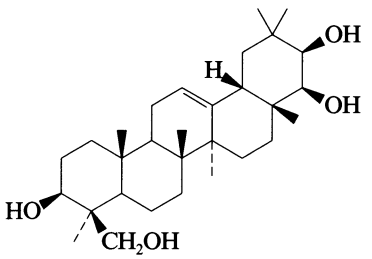
$C_{42}H_{70}O_{13}$ M 783.007

Constit. of *S. junceum*. $[\alpha]_D^{20}$ −14.2° (c, 0.57 in $CHCl_3$).

Bilia, A.R. *et al*, *Phytochemistry*, 1993, **34**, 847 (*isol, pmr, cmr*)

12-Oleanene-3,21,22,24-tetrol O-10031

Updated Entry replacing O-00362



$C_{30}H_{50}O_4$ M 474.723

(3β,21β,22β)-form [508-01-0] ***Soyasapogenol A.*** *Soyasapogenol M_4*

Constit. of soya bean saponin and from *Abrus cantoniensis*. Cryst. (MeOH). Mp 308-312°. $[\alpha]_D^{21}$ +102.3° ($CHCl_3$).

3-O-[β-D-Glucopyranosyl-(1→2)-β-D-galactopyranosyl-(1→2)-β-D-glucopyranosiduronide], 22-O-[β-D-glucopyranosyl-(1→3)-α-L-arabinopyranoside]: [78693-94-4]. ***Soyasaponin A_1***

$C_{59}H_{96}O_{29}$ M 1269.390

Isol. from soybean (*Glycine max*). Fine cryst. + $4H_2O$ (MeOH aq.). Mp 240-242°. $[\alpha]_D^{26}$ +23.2° (c, 0.91 in MeOH).

3-O-[β-D-Galactopyranosyl-(1→2)-β-D-glucopyranosiduronide], 22-O-[β-D-glucopyranosyl-(1→3)-α-L-arabinopyranoside]: [78693-93-3]. ***Soyasaponin A_2***

$C_{53}H_{86}O_{24}$ M 1107.248

Isol. from soybean (*G. max*). Fine cryst. + $3H_2O$ (MeOH aq.). Mp 231-232°. $[\alpha]_D^{26}$ +25.3° (c, 1 in MeOH).

3-O-[α-L-Rhamnopyranosyl-(1→2)-β-D-galactopyranosyl-(1→2)-β-glucopyranosiduronide]: [114077-04-2]. ***Soyasaponin A_3***

$C_{48}H_{78}O_{19}$ M 959.133

Isol. from soybean (*G. max*). Glass.

3-O-[β-D-Glucopyranosyl-(1→2)-β-D-galactopyranosyl-(1→2)-β-D-glucuronopyranoside], 22-O-[2,3,4,6-tetra-O-acetyl-β-D-glucopyranosyl-(1→3)-α-L-arabinopyranoside]: [118194-13-1]. ***Acetylsoyasaponin A_1***

$C_{67}H_{104}O_{33}$ M 1437.539

Constit. of *G. max*. Fine cryst. + $4H_2O$ (EtOH). Mp 263-265°. $[\alpha]_D^{16}$ +17.0° (c, 0.6 in MeOH).

3-O-[β-D-Galactopyranosyl-(1→2)-β-D-glucuronopyranoside], 22-O-[2,3,4,6-tetra-O-acetyl-β-D-glucopyranosyl-(1→3)-α-L-arabinopyranoside]: [117230-32-7]. ***Acetylsoyasaponin A_2***

$C_{61}H_{94}O_{28}$ M 1275.397

Constit. of *G. max*. Fine cryst. + $3H_2O$ (EtOH). Mp 276-278°. $[\alpha]_D^{18}$ +18.8° (c, 0.3 in MeOH).

3-O-[α-L-Arabinopyranosyl-(1→2)-β-D-glucuronopyranoside], 22-O-[2,3,4,6-tetra-O-acetyl-β-D-glucopyranosyl-(1→3)-α-L-arabinopyranoside]: [117210-16-9]. ***Acetylsoyasaponin A_3***

$C_{60}H_{92}O_{27}$ M 1245.371

Constit. of *G. max*. Fine cryst. + $5H_2O$ (EtOH). Mp 257-260°. $[\alpha]_D^{20}$ +23.6° (c, 0.5 in MeOH).

3-O-[β-D-Glucopyranosyl-(1→2)-β-D-galactopyranosyl-(1→2)-β-D-glucuronopyranoside], 22-O-[2,3,4-tri-O-acetyl-β-D-xylopyranosyl-(1→3)-α-L-arabinopyranoside]: [117230-33-8]. ***Acetylsoyasaponin A_4***

$C_{64}H_{100}O_{31}$ M 1365.475

Constit. of *G. max*. Fine cryst. + $2H_2O$ (EtOH). Mp 255-258°. $[\alpha]_D^{16}$ +13.5° (c, 0.1 in MeOH).

3-O-[β-D-Galactopyranosyl-(1→2)-β-D-glucuronopyranoside], 22-O-[2,3,4-tri-O-acetyl-β-D-xylopyranosyl-(1→3)-α-L-arabinopyranoside]: [117230-34-9]. ***Acetylsoyasaponin A_5***

$C_{58}H_{90}O_{26}$ M 1203.333

Constit. of *G. max*. Fine cryst. + $4H_2O$ (EtOH). Mp 260-264°. $[\alpha]_D^{16}$ +9.7° (c, 0.7 in MeOH).

3-O-[α-L-Arabinopyranosyl-(1→2)-β-D-glucuronopyranoside], 22-O-[2,3,4-tri-O-acetyl-β-D-xylopyranosyl-(1→3)-α-L-arabinopyranoside]: [117230-35-0]. ***Acetylsoyasaponin A_6***

$C_{57}H_{88}O_{25}$ M 1173.307

Constit. of *G. max*. Fine cryst. + $3H_2O$ (EtOH). Mp 240-244°. $[\alpha]_D^{16}$ +14.2° (c, 0.2 in MeOH).

Smith, H.M. *et al*, *Tetrahedron*, 1958, **4**, 111 (*isol*)

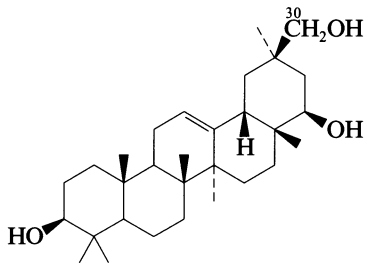
Kitagawa, I. *et al*, *Chem. Pharm. Bull.*, 1982, **30**, 2294 (*struct*)

Kitagawa, I. *et al*, *Chem. Pharm. Bull.*, 1985, **33**, 589, 1069; 1988, **36**, 2819, 2829 (*Soyasaponins*)

Curl, C.L. *et al*, *J. Nat. Prod.* (*Lloydia*), 1988, **51**, 122 (*Soyasaponin A_3*)

12-Oleanene-3,22,30-triol O-10032

Updated Entry replacing D-02455



$C_{30}H_{50}O_3$ M 458.723

(3β,22β)-form [10379-65-4] ***Abrisapogenol D***

Constit. of *Abrus cantoniensis*. Needles. Mp 290-291°. $[\alpha]_D$ +76.9° (Py).

30-Carboxylic acid: 3,22-Dihydroxy-12-oleanen-30-oic acid

$C_{30}H_{48}O_4$ M 472.707

Powder (as 22-Ac). $[\alpha]_D^{23}$ +72° ($CHCl_3$) (22-Ac).

30-Carboxylic acid, 22-Ac, 3-O-[α-L-rhamnopyranosyl(1→2)-β-D-glucuronopyranosyl(1→2)-glucuronate]: [118536-87-1]. ***Licoricesaponin D3***
$C_{50}H_{76}O_{21}$ M 1013.138
Isol. from roots of *Glycyrrhiza uralensis*. Powder. $[\alpha]_D^{20}$ −5° (MeOH).

30-Carboxylic acid, 30→22 lactone: [10379-62-1]. *3β-Hydroxy-12-oleanen-30,22β-olide.* ***Desoxoglabrolide***
$C_{30}H_{46}O_3$ M 454.692
Saponin from *G. glabra*. Cryst. (2-propanol). Mp 274-278°. $[\alpha]_D^{25}$ +59.6° (c, 0.52 in $CHCl_3$).

30-Carboxylic acid, 30→22-lactone, 3-O-[α-L-rhamnopyranosyl-(1→2)-β-D-glucuronopyranosyl-(1→2)-β-D-glucuronopyranoside]: ***Licoricesaponin F3***
$C_{48}H_{72}O_{19}$ M 953.085
Constit. of *G. uralensis*. Mp 215-217°. $[\alpha]_D$ −20° (MeOH).

30-Carboxylic acid, 22-ketone: 3-Hydroxy-22-oxo-12-oleanen-30-oic acid. ***Subprogenin C***
$C_{30}H_{46}O_4$ M 470.691
Constit. of *Sophora subprostrata*. Cryst. (as Me ester). Mp 150-152° (Me ester). $[\alpha]_D$ +38.2° (c, 0.2 in $MeOH/CHCl_3$) (Me ester).

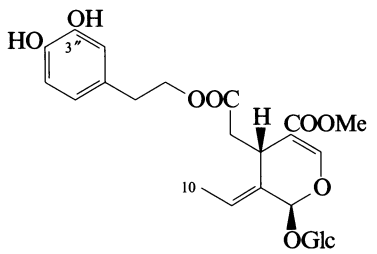
[118525-50-1]

Russo, G., *Corsi. Semin. Chim.*, 1968, **11**, 20 (*Desoxoglabrolide*)
Kitagawa, I. *et al*, *Chem. Pharm. Bull.*, 1988, **36**, 3710; 1991, **39**, 244 (*Licoricesaponin D3, Licoricesaponin F3*)
Takeshita, T. *et al*, *Chem. Pharm. Bull.*, 1989, **37**, 846; 1991, **39**, 1908 (*Abrisapogenol D, Subprogenin C*)

Oleuropein O-10033

Updated Entry replacing O-00393

[32619-42-4]



Absolute configuration

$C_{25}H_{32}O_{13}$ M 540.520
Bitter principle of olives, *Olea europaea*, isol. also from *Fraxina japonicus*. Cryst. (EtOAc). Mp 89-91°. $[\alpha]_D^{26}$ −168° (c, 0.67 in MeOH). Artifact.

Tetra-Ac: Cryst. (EtOH). Mp 58-59°. $[\alpha]_D$ −62° (c, 1 in AcOH).

3″-Deoxy: [35897-92-8]. ***Ligustroside.*** *Ligstroside*
$C_{25}H_{32}O_{12}$ M 524.521
Found in *Ligustrum obtusifolium, F. griffithi* and *F. excelsior*. Noncryst. $[\alpha]_D$ −110.7° (c, 1 in EtOH), $[\alpha]_D^{20}$ −181.1° (c, 0.6 in MeOH).

10-Hydroxy: [84638-44-8]. ***10-Hydroxyoleuropein***
$C_{25}H_{32}O_{14}$ M 556.519
Constit. of *L. japonicum*. Powder. $[\alpha]_D^{20}$ −153.7° (c, 0.38 in MeOH).

10-Hydroxy, 3″-deoxy: [35897-94-0]. ***10-Hydroxyligustroside***
$C_{25}H_{32}O_{13}$ M 540.520
Constit. of *L. obtusifolium*. Noncryst. $[\alpha]_D$ −156.8° (c, 1.02 in EtOH).

10-Acetoxy: ***10-Acetoxyoleuropein***
$C_{27}H_{34}O_{15}$ M 598.557
Constit. of *Osmanthus fragrans*. Powder. $[\alpha]_D^{21}$ −191° (c, 1.1 in MeOH).

10-Acetoxy, 3″-deoxy: [57799-95-8]. ***10-Acetoxyligustroside***
$C_{27}H_{34}O_{14}$ M 582.557
Constit. of *O. fragrans*. Powder. $[\alpha]_D^{18}$ −143.9° (c, 1 in MeOH).

10-Hydroxy, 4′-β-D-glucopyranoside: ***Multiroside***
$C_{31}H_{42}O_{19}$ M 718.661
Isol. from *Jasminum multiflorum*. Amorph. powder. $[\alpha]_D$ −108.6° (c 1 in MeOH).

10-Hydroxy, 3″-deoxy, 2′-β-D-glucopyranosyl: [97695-01-7]. ***Hiiragilide***
$C_{31}H_{42}O_{18}$ M 702.662
Constit. of *Osmanthus ilicifolius*. Cryst. (as nona-Ac). Mp 70-75° (nona-Ac). $[\alpha]_D$ −153.8° ($CHCl_3$) (nona-Ac). Conts. 2-glucosylglucosyl residue.

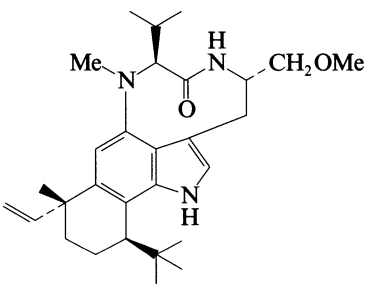
6′-O-β-D-Glucopyranosyl: ***Angustifolioside A***
$C_{31}H_{42}O_{18}$ M 702.662
Constit. of *Fraxinus angustifolia*. Amorph. powder.

6′-O-β-D-Glucopyranosyl, 3″-deoxy: ***Angustifolioside B***
$C_{31}H_{42}O_{17}$ M 686.663
Constit. of *F. angustifolia*. Amorph. powder.

Shasha, B. *et al*, *J. Org. Chem.*, 1961, **26**, 1948 (*isol*)
Panizzi, L. *et al*, *Gazz. Chim. Ital.*, 1965, **95**, 1279 (*isol*)
Asaka, Y. *et al*, *Chem. Lett.*, 1972, 141 (*isol, struct*)
Inouye, H. *et al*, *Chem. Pharm. Bull.*, 1974, **22**, 676 (*biosynth*)
Inouye, H. *et al*, *Tetrahedron*, 1974, **30**, 201 (*abs config*)
Inouye, H. *et al*, *Phytochemistry*, 1975, **14**, 304, 2029 (*isol, 10-Acetoxyoleuropein, 10-Acetoxyligustroside*)
Inouye, H. *et al*, *J. Chromatogr.*, 1976, **118**, 201 (*ms*)
Sutarjadi, M.T.M. *et al*, *Phytochemistry*, 1978, **17**, 564 (*Ligustroside*)
Inoue, K. *et al*, *Phytochemistry*, 1982, **21**, 2305 (*deriv*)
Kikuchi, M. *et al*, *CA*, 1985, **103**, 147026 (*isol, pmr, cmr*)
Shen, Y.-C. *et al*, *Phytochemistry*, 1990, **29**, 2903, 2905 (*Multiroside, Ligustroside*)
Bianco, A. *et al*, *J. Nat. Prod.* (*Lloydia*), 1992, **55**, 760 (*synth*)
Damtoft, S. *et al*, *Phytochemistry*, 1992, **31**, 4197 (*Oleuropein, Ligustroside, pmr*)
Çaliş, .I. *et al*, *Phytochemistry*, 1993, **33**, 1453 (*Angustifoliosides*)
Damtoft, S. *et al*, *Phytochemistry*, 1993, **34**, 1291 (*biosynth*)

Olivoretin E O-10034

[110187-21-8]



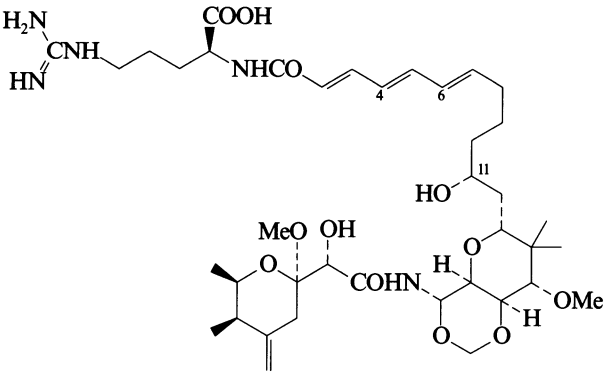
$C_{29}H_{43}N_3O_2$ M 465.678
Prod. by *Streptoverticillium olivoreticuli*. Tumour promotor. Prisms. Mp 266-269° dec. Similar to Teleocidin B1, T-00180.

Sakai, S. *et al*, *Chem. Pharm. Bull.*, 1986, **34**, 4883 (*isol, struct*)
Irie, K. *et al*, *Tetrahedron*, 1990, **46**, 2773 (*biosynth*)

Onnamide A O-10035

Updated Entry replacing O-00432

[115204-07-4]



$C_{39}H_{63}N_5O_{12}$ M 793.953

Constit. of the sponge *Theonella* sp. Antitumour and antiviral agent. Pale yellow solid. $[\alpha]_D^{20}$ +99.1° (c, 5.5 in MeOH). Related to Mycalamides.

6,7-Dihydro: ***6,7-Dihydroonnamide A***

$C_{39}H_{65}N_5O_{12}$ M 795.969

Constit. of the Okinawan marine sponge *Theonella* sp.

▷ Exhibits cytotoxicity.

6,7-Dihydro, 11-oxo: ***6,7-Dihydro-11-oxoonamide A***

$C_{39}H_{63}N_5O_{12}$ M 793.953

Isol. from *T.* sp. Solid. $[\alpha]_D^{24}$ +39° (c, 0.42 in MeOH).

▷ Exhibits cytotoxicity.

11-Oxo: ***11-Oxoonnamide A***

$C_{39}H_{61}N_5O_{12}$ M 791.937

Isol. from *T.* sp. Solid. $[\alpha]_D^{23}$ +90° (c, 0.24 in MeOH).

▷ Exhibits cytotoxicity.

(4Z)-Isomer: ***4Z-Onnamide A***

$C_{39}H_{63}N_5O_{12}$ M 793.953

Isol. from *T.* sp. Solid. $[\alpha]_D^{23}$ +81° (c, 0.59 in MeOH).

▷ Exhibits cytotoxicity.

Sakemi, S. *et al*, *J. Am. Chem. Soc.*, 1988, **110**, 4851 (*isol, uv, pmr, cmr*)

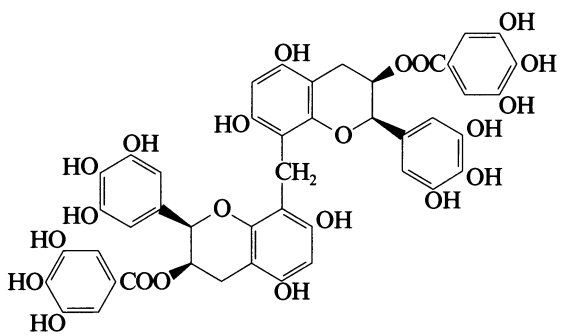
Hong, C.Y. *et al*, *J. Am. Chem. Soc.*, 1991, **113**, 9693 (*synth*)

Matsunaga, S. *et al*, *Tetrahedron*, 1992, **48**, 8369 (*6,7-Dihydroonnamide A*)

Kobayashi, J. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 976 (*6,7-Dihydro-11-oxoonnamide A, 11-Oxoonnamide A, 4Z-Onnamide A*)

Oolonghomobisflavan A O-10036

[126737-60-8]



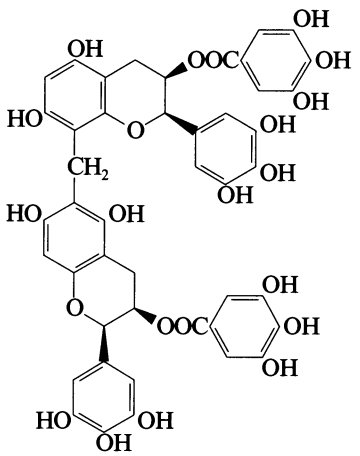
$C_{45}H_{36}O_{22}$ M 928.766

Constit. of oolong tea. Tan powder + $4H_2O$. $[\alpha]_D^{26}$ −271.0° (c, 1 in Me_2CO).

Hashimoto, F. *et al*, *Chem. Pharm. Bull.*, 1989, **37**, 3255 (*isol, struct*)

Oolonghomobisflavan B O-10037

[126715-88-6]



$C_{45}H_{36}O_{22}$ M 928.766

Isol. from oolong tea. Tan powder + $3H_2O$. $[\alpha]_D^{26}$ −205.0° (c, 1 in Me_2CO).

Hashimoto, F. *et al*, *Chem. Pharm. Bull.*, 1989, **37**, 3255 (*isol, struct*)

Aedes aegypti Oostatic hormone A O-10038

[128439-50-9]

H-Tyr-Asp-Pro-Ala-Pro-Pro-Pro-Pro-Pro-Pro-OH

$C_{51}H_{70}N_{10}O_{14}$ M 1047.173

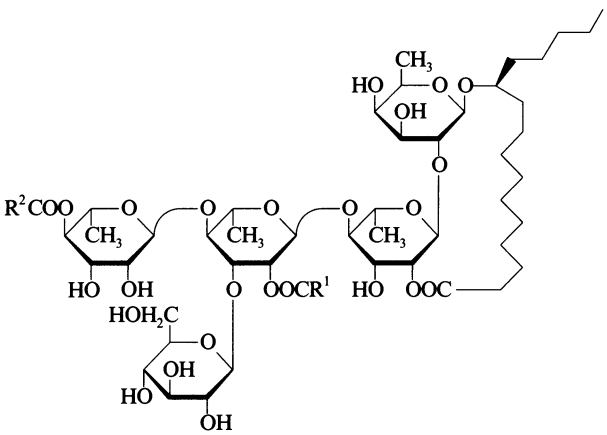
Isol. from the ovaries of the mosquito *Aedes aegypti*. Trypsin-modulating oostatic factor.

Borovsky, D. *et al*, *ACS Symp. Ser.*, 1991, **453**, 133 (*isol, props*)

Kochansky, J., *CA*, 1992, **117**, 172060 (*synth*)

Operculin I O-10039

[120552-53-6]



$R^1 = R^2 = -(CH_2)_{10}CH_3$

$C_{70}H_{124}O_{25}$ M 1365.735

Isol. from the roots of *Ipomoea operculata*. Needles (MeOH aq.). Mp 103-111° dec. $[\alpha]_D^{18}$ −24.0° (c, 1 in MeOH).

Ono, M. *et al*, *Chem. Pharm. Bull.*, 1990, **38**, 2986 (*isol, pmr, ms*)

Operculin II O-10040

[120583-61-1]

As Operculin I, O-10039 with

$R^1 = R^2 = -(CH_2)_8CH_3$

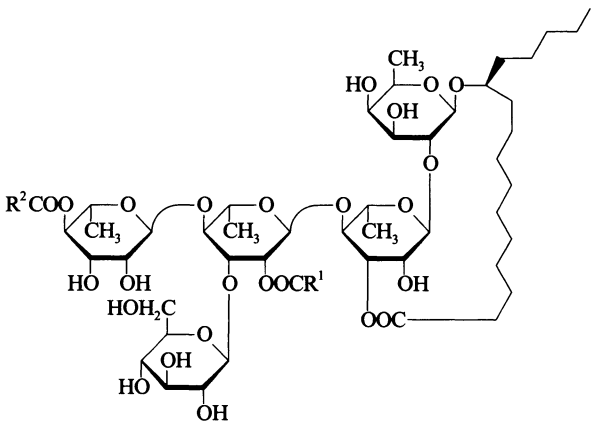
$C_{66}H_{116}O_{25}$ M 1309.627

Isol. from the roots of *Ipomoea operculata*. Needles (MeOH aq.). Mp 120-128° dec. $[\alpha]_D^{21}$ −23.5° (c, 2.8 in MeOH). The structs. of Operculins III and IV have not yet been detd.

Ono, M. *et al*, *Chem. Pharm. Bull.*, 1990, **38**, 2986 (*isol, pmr, ms*)

Operculin V O-10041

[132625-00-4]



$R^1 = R^2 = -(CH_2)_{10}CH_3$

$C_{70}H_{124}O_{25}$ M 1365.735

Isol. from the roots of *Ipomoea operculata*. Powder (MeOH aq.). Mp 108-111° dec. $[\alpha]_D^{18}$ −53.8° (c, 2.6 in MeOH).

Ono, M. *et al*, *Chem. Pharm. Bull.*, 1990, **38**, 2986 (*isol, pmr, ms*)

Operculin VII O-10042

[133019-98-4]

As Operculin I, O-10039 with

$R^1 = -(CH_2)_{10}CH_3$, $R^2 = -(CH_2)_8CH_3$

$C_{68}H_{120}O_{25}$ M 1337.681

Isol. from the roots of *Ipomoea operculata*. Powder (MeOH aq.). Mp 104-111°. $[\alpha]_D^{23}$ −24.3° (c, 1.3 in MeOH).

Ono, M. *et al*, *Chem. Pharm. Bull.*, 1990, **38**, 2986 (*isol, pmr, ms*)

Operculin VIII O-10043

[132625-01-5]

As Operculin I, O-10039 with

$R^1 = -(CH_2)_8CH_3$, $R^2 = -(CH_2)_{10}CH_3$

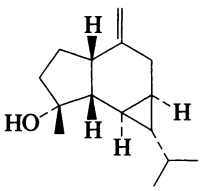
$C_{68}H_{120}O_{25}$ M 1337.681

Isol. from the roots of *Ipomoea operculata*. Powder (MeOH aq.). Mp 105-112°. $[\alpha]_D^{23}$ −27.0° (c, 1 in MeOH).

Ono, M. *et al*, *Chem. Pharm. Bull.*, 1990, **38**, 2986 (*isol, pmr, ms*)

Oreodaphnenol O-10044

[118891-87-5]



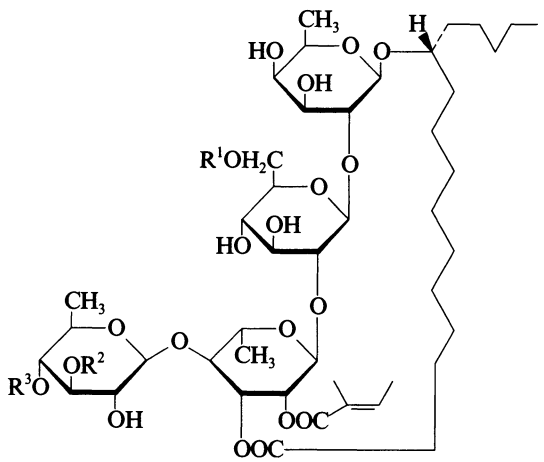
$C_{15}H_{24}O$ M 220.354

Constit. of *Oreodaphne porosa*. Oil. $[\alpha]_D$ −43° (c, 0.5 in C_6H_6).

Weyerstahl, P. *et al*, *Justus Liebigs Ann. Chem.*, 1989, 307 (*isol, pmr*)

Orizabin I O-10045

[101394-99-4]



$R^1 = -COCH(CH_3)CH(OH)CH_3$ (*S,S*-),

$R^2 = H$, $R^3 = -COCH(CH_3)CH_2CH_3$ (*S*-)

$C_{55}H_{92}O_{23}$ M 1121.318

Isol. from the root of *Ipomoea orizabensis*. Needles + $2H_2O$ (hexane/Me_2CO). Mp 115-121° dec. $[\alpha]_D$ −5.5° (c, 1.3 in MeOH).

Noda, N. *et al*, *Tetrahedron*, 1987, **43**, 3889 (*isol, pmr, ms*)

Orizabin II O-10046

[101395-00-0]

As Orizabin I, O-10045 with

$R^1 = -COCH(CH_3)CH(OH)CH_3$(*S,S*-), $R^2 = H$, $R^3 = -COCH(CH_3)_2$

$C_{54}H_{90}O_{23}$ M 1107.291

Isol. from the roots of *Ipomoea orizabensis*. Needles + $1H_2O$ (hexane/Me_2CO). Mp 114-119° dec. $[\alpha]_D$ −9.7° (c, 1 in MeOH).

Noda, N. *et al*, *Tetrahedron*, 1987, **43**, 3889 (*isol, pmr, ms*)

Orizabin III O-10047

[101395-01-1]

As Orizabin I, O-10045 with

$R^1 = R^3 = -COCH(CH_3)CH(OH)CH_3(S,S-)$, $R^2 = H$

$C_{55}H_{92}O_{24}$ M 1137.317

Isol. from the roots of *Ipomoea orizabensis*. Needles + $1H_2O$ (hexane/Me_2CO). Mp 118-123° dec. $[\alpha]_D$ −13.3° (c, 1.1 in MeOH).

Noda, N. *et al*, *Tetrahedron*, 1987, **43**, 3889 (*isol, pmr, ms*)

Orizabin IV O-10048

[101394-98-3]

As Orizabin I, O-10045 with

$R^1 = -COCH(CH_3)CH(OH)CH_3$, $R^2 = -COCH(CH_3)_2$, $R^3 = H$

$C_{54}H_{90}O_{23}$ M 1107.291

Isol. from the roots of *Ipomoea orizabensis*. Needles + $1H_2O$ (hexane/Me_2CO). Mp 114-119° dec. $[\alpha]_D$ −5.2° (c, 0.9 in MeOH).

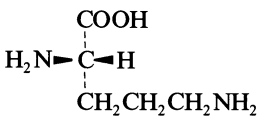
Noda, N. *et al*, *Tetrahedron*, 1987, **43**, 3889 (*isol, pmr, ms*)

Ornithine O-10049

Updated Entry replacing O-00509

2,5-Diaminopentanoic acid, 9CI. 5-Aminonorvaline

[7006-33-9]



(*S*)-*form*

$C_5H_{12}N_2O_2$ M 132.162

Other *N*-protected derivs. useful in peptide synth. are listed elsewhere.

(*R*)-*form*

D-form

Residue present in Gramicidins.

(*S*)-*form* [70-26-8]

L-form

Component of proteins, esp. of fungi; found in small amts. in plants in free state. Used in treatment of hyperammonaemia. Sol. H_2O, EtOH, spar. sol. Et_2O. Mp 140°. $[\alpha]_D^{25}$ +11.5°.

B,2HCl: Mp 230-232° dec. $[\alpha]_D^{25}$ +17° (H_2O).

N^{α}-*Benzyloxycarbonyl:*

$C_{13}H_{18}N_2O_4$ M 266.296

Mp 209-210°. $[\alpha]_D$ −8.4° (5*M* HCl).

N^{δ}-*Benzyloxycarbonyl:*

$C_{13}H_{18}N_2O_4$ M 266.296

Mp 254-255°.

N^{α},N^{δ}-*Bis(benzyloxycarbonyl):*

$C_{21}H_{24}N_2O_6$ M 400.430

Mp 112-114°. $[\alpha]_D^{20}$ −4.0° (c, 3 in MeOH).

N^{α},N^{δ}-*Bis(benzyloxycarbonyl), Me ester:*

$C_{22}H_{26}N_2O_6$ M 414.457

Cryst. ($CHCl_3$/pet. ether). Mp 71-72°.

N^{α}-*Ac:*

$C_7H_{14}N_2O_3$ M 174.199

Intermed. in biosynth. of ornithine from Glutamic acid, G-00504 in bacteria. Mp 226-227°. $[\alpha]_D^{25}$ +6.5° (c, 5 in H_2O).

N^{δ}-*Ac: Acetylornithine*

$C_7H_{14}N_2O_3$ M 174.199

Isol. from various plants, e.g. *Asplenium* spp. and grasses. Plates (MeOH). Mp 266° (229°) dec. $[\alpha]_D^{24}$ +13.1° (H_2O).

N^{α},N^{δ}-*Di-Ac:* [39825-23-5]. N^2,N^5-*Diacetylornithine, 9CI.* ***Bisorcic*, INN**

$C_9H_{16}N_2O_4$ M 216.236

Hepatoprotective agent, psychostimulant.

N^{δ}-*Benzoyl:* [15647-43-5]. N^5-***Benzoylornithine***

$C_{12}H_{16}N_2O_3$ M 236.270

Constit. of the seeds of *Vicia pseudo-orobus*. Cryst. (H_2O). Mp 205-213° dec. $[\alpha]_D^{20}$ +22.1° (c, 1 in 3*M* HCl).

N^{α},N^{δ}-*Dibenzoyl:* [495-46-5]. *Ornithuric acid*

$C_{19}H_{20}N_2O_4$ M 340.378

Needles or plates (EtOH). Spar. sol. H_2O, EtOAc, hot EtOH, insol. Et_2O. Mp 188-189°. $[\alpha]_D^{20}$ +8.5° (EtOH aq.).

N^{α},N^{δ}-*Dibenzoyl, Me ether:*

$C_{20}H_{22}N_2O_4$ M 354.405

Mp 145.6°.

N^{α},N^{δ}-*Dibenzoyl, Et ester:*

$C_{21}H_{24}N_2O_4$ M 368.432

Mp 155°.

N^{δ}-*Me:*

$C_6H_{14}N_2O_2$ M 146.189

Present in *Atropa belladonna*. Alkaloid precursor.

N-*Hexa-Me:* ***Miokinine***

$C_{11}H_{25}N_2O_2^{\oplus}$ M 217.331 (ion)

Isol. from mammalian muscle.

N^{δ}-*Tri-Me:* [66101-16-4]. *4-Amino-4-carboxy*-N,N,N-*trimethyl-1-butanaminium.* N^5-***Trimethylornithine***

$C_8H_{18}N_2O_2$ M 174.242

Constit. of the red alga *Vidalia volubilis*. Zwitterionic. Config. of nat. prod. not confirmed.

(±)-*form*

pK_{a2} 8.98; pK_{a3} 10.73 (25°, 0.1*M* KNO_3), pK_{a1} 1.71; pK_{a2} 8.69; pK_{a3} 10.76 (25°).

B,HCl: Mp 225°.

B,2HCl: Mp 230-232° dec.

N^{δ}-*Benzoyl:*

$C_{12}H_{16}N_2O_3$ M 236.270

Mp 285-288°.

N^{δ}-*Benzoyl,* N^{α}-*(4-methylbenzenesulfonyl):* Needles (EtOH aq.). Mp 185°.

N^{α},N^{δ}-*Dibenzoyl:* Needles (EtOH). Mp 187-188°.

N^{δ}-*Me; B,HCl:* Cryst. (EtOH aq.). Mp 242-243°.

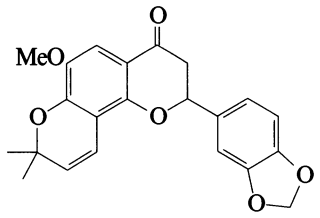
[15647-44-6]

Karrer, P. *et al*, *Helv. Chim. Acta*, 1926, **9**, 301.
Hunter, A., *Biochem. J.*, 1939, **33**, 29.
Albertson, N.F. *et al*, *J. Am. Chem. Soc.*, 1945, **67**, 2043.
Synge, R.C.M., *Biochem. J.*, 1948, **42**, 99.
Biochem. Prep., 1953, **3**, 96.
Gaudry, R., *Can. J. Chem.*, 1953, **31**, 1060.
Fowden, L., *Nature (London)*, 1958, **182**, 406 (*occur, acetylornithine*)
Thompson, J.F. *et al*, *Arch. Biochem. Biophys.*, 1962, **99**, 326.
Katzin, L.I. *et al*, *J. Am. Chem. Soc.*, 1964, **86**, 1655 (*ord*)
Lipson, M.A. *et al*, *J. Org. Chem.*, 1964, **29**, 2392.
Schröder, E. *et al*, *Justus Liebigs Ann. Chem.*, 1964, **679**, 221.
Nakamura, A., *Nippon Kagaku Zasshi*, 1965, **86**, 780 (*pmr*)
Gilbertson, T.J. *et al*, *J. Am. Chem. Soc.*, 1967, **89**, 7085 (*synth, deriv*)
Ger. Pat., 2 219 874, (1973); *CA*, **78**, 98010t (*Bisorcic*)
Paik, W.K. *et al*, *Biochem. Med.*, 1978, **19**, 39 (N^5-*Trimethylornithine*)
Hedges, S.H. *et al*, *Phytochemistry*, 1981, **20**, 2064 (*isol, deriv*)
Hatanaka, S. *et al*, *Phytochemistry*, 1981, **20**, 2291 (N^5-*Benzoylornithine*)
Martindale, The Extra Pharmacopoeia, 28th/29th Ed., Pharmaceutical Press, London, 1982/1989, 608.

Amino, Y. *et al*, *Bull. Chem. Soc. Jpn.*, 1991, **64**, 613 (*synth*)
Patti, A. *et al*, *J. Nat. Prod.* (*Lloydia*), 1992, **55**, 53 (N^5-*Trimethylornithine*)

Ovalichromene A† O-10050

[62868-04-6]



$C_{22}H_{20}O_6$ M 380.396
Easily confused with Ovalichromene†, O-00572. Isol. from seeds of *Milletia ovalifolia*. Needles. Mp 165°. $[\alpha]_D^{25}$ −66.3°.

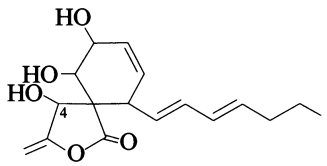
Demethoxy: [62868-06-8]. ***Ovalichromene B***
$C_{21}H_{18}O_5$ M 350.370
From *M. ovalifolia*. Mp 182°. $[\alpha]_D^{25}$ −91.6°.

Gupta, R.K. *et al*, *Phytochemistry*, 1976, **15**, 2011.

Oxaspirol A O-10051

Updated Entry replacing O-00592
6-(1,3-Heptadienyl)-4,9,10-trihydroxy-3-methylene-2-oxaspiro[4,5]dec-7-en-1-one, *9CI*

[98873-84-8]



$C_{17}H_{22}O_5$ M 306.358
Isol. from *Rhodotorula glutinis*. Shows weak antibacterial activity. Powder. Mp 105-107°. $[\alpha]_D^{15}$ −275° (c, 0.4 in MeOH). Configurations of these compds. is not known.

Stereoisomer(?): [114029-71-9]. ***Oxaspirol C***
$C_{17}H_{22}O_5$ M 306.358
Isol. from *R. glutinis*. $[\alpha]_D^{20}$ −430° (c, 0.8 in MeOH).

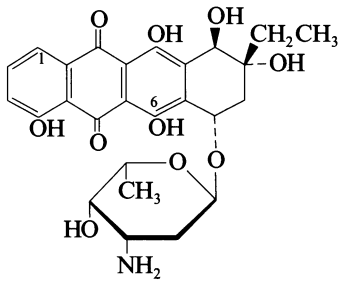
4-Ketone, stereoisomer(?): [113982-29-9]. ***Oxaspirol B***
$C_{17}H_{20}O_5$ M 304.342
Isol. from *R. glutinis*. $[\alpha]_D^{20}$ −273° (c, 0.8 in MeOH).

Doi, J. *et al*, *Agric. Biol. Chem.*, 1985, **49**, 2247 (*isol, struct*)
Japan. Pat., 87 135 469, (1987); *CA*, **108**, 166103 (*Oxaspirol B*)
Japan. Pat., 87 164 679, (1987); *CA*, **108**, 185264 (*Oxaspirol C*)

Oxaunomycin O-10052

Updated Entry replacing O-00594
7-O-(α-L-Daunosaminyl)-β-rhodomycinone. Anthracycline R 20X2. Antibiotic R 20X2. R 20X2. D 788-7. Antibiotic D 788-7

[105615-58-5]



$C_{26}H_{29}NO_{10}$ M 515.516
Anthracycline antibiotic. Prod. by *Streptomyces* mutant strain and *Actinomadura roseoviolacea*. Potent antileukaemic agent. Deep-red powder ($CHCl_2$/hexane). Mp 185-187° dec. $[\alpha]_D^{23}$ +192° (c, 0.0198 in $CHCl_3$).

B,HCl: [128240-71-1].
Mp 209-211°. $[\alpha]_D^{25}$ +100° (c, 0.013 in EtOH).

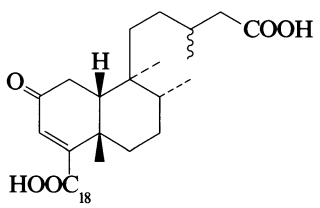
1-Hydroxy: ***1-Hydroxyoxaunomycin***
$C_{26}H_{29}NO_{11}$ M 531.515
Prod. by a *S.* sp. blocked mutant strain. Red-violet powder. Mp 249-253°. $[\alpha]_D^{23}$ +398° (c, 0.004 in $CHCl_3$).

6-Deoxy: ***6-Deoxyoxaunomycin***
$C_{26}H_{29}NO_9$ M 499.516
Prod. by a *S.* sp. blocked mutant strain. Yellow powder. Mp 144-147°. $[\alpha]_D^{23}$ +137° (c, 0.02 in $CHCl_3$).

[103782-06-5]

Yoshimoto, A. *et al*, *J. Antibiot.*, 1986, **39**, 902; 1992, **45**, 1609 (*isol, struct, props, derivs*)
Nakajima, S. *et al*, *Tetrahedron Lett.*, 1989, **30**, 4857 (*synth*)
Kita, Y. *et al*, *Tetrahedron Lett.*, 1990, **31**, 7173 (*synth*)
Kita, Y. *et al*, *Chem. Pharm. Bull.*, 1992, **40**, 61 (*synth*)

2-Oxo-3-clerodene-15,18-dioic acid O-10053



$C_{20}H_{30}O_5$ M 350.454
(ent-5α,13ξ)-form

18-Me ester: [151200-95-2]. ***Schistochilic acid C***
$C_{21}H_{32}O_5$ M 364.481
Constit. of *Schistochila nobilis*. Oil. $[\alpha]_D^{22}$ −62° (c, 0.55 in CCl_4).

Tori, M. *et al*, *Phytochemistry*, 1993, **32**, 1229 (*isol, pmr, cmr*)

12-Oxo-10-dodecenoic acid O-10054

11-Formyl-10-undecenoic acid

$OHCCH{=}CH(CH_2)_8COOH$

$C_{12}H_{20}O_3$ M 212.288
(E)-form [65410-38-0]
Traumatin. Traumatic half aldehyde

Arises in plants by cleavage of unsatd. C_{18} fatty acids. Found for example in *Thea sinensis* chloroplasts. Wound hormone. Solid (cyclohexane/Et_2O). Mp 65-66°.

Me ester: [63024-87-3].
Amber liq. Mp 0.7°. $Bp_{0.05}$ 109-111°.

(Z)-form

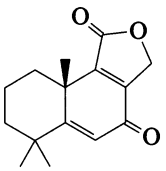
Me ester:
$C_{13}H_{22}O_3$ M 226.315
$Bp_{0.23}$ 126-131°.

Kajiwara, T. *et al*, *Agric. Biol. Chem.*, 1977, **41**, 8 (*synth, bibl*)
Hatanaka, A. *et al*, *Phytochemistry*, 1977, **16**, 1828 (*isol*)
Bestmann, H.J. *et al*, *Tetrahedron Lett.*, 1977, 121 (*synth, pmr*)
Rakoff, H. *et al*, *Synth. Commun.*, 1979, **9**, 185 (*synth, pmr, ir*)
Bestmann, H.J. *et al*, *Justus Liebigs Ann. Chem.*, 1981, 1705 (*synth, ir, pmr*)
Gaede, B.J., *Org. Prep. Proced. Int.*, 1987, **19**, 461 (*synth, pmr, cmr, bibl*)

7-Oxo-5,8-drimadien-11,12-olide O-10055

7-Ketoisodrimenin-3-ene

[151140-12-4]



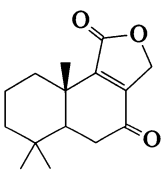
$C_{15}H_{18}O_3$ M 246.305
Constit. of *Porella cordeana*. Amorph. powder. $[\alpha]_D$ +1.5° (c, 0.84 in $CHCl_3$).

Harrigan, G.G. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 921 (*isol, pmr, cmr*)

7-Oxo-8-drimen-11,12-olide O-10056

7-Ketoisodrimenin

[73036-54-1]



$C_{15}H_{20}O_3$ M 248.321
Constit. of *Porella cordeana*. Amorph. powder. $[\alpha]_D$ +40.8° (c, 0.6 in $CHCl_3$).

Harrigan, G.G. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 921 (*isol, pmr, cmr*)

5-Oxoheneicosanoic acid O-10057

[95007-77-5]

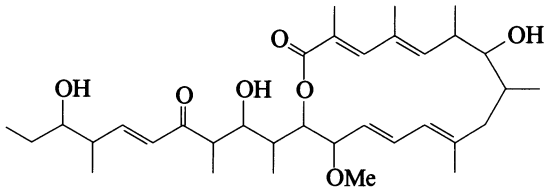
$H_3C(CH_2)_{15}COCH_2CH_2CH_2COOH$

$C_{21}H_{40}O_3$ M 340.545
Constit. of the lichen *Usnea hirta*.

Solberg, Y., *J. Hattori Bot. Lab.*, 1987, **63**, 357; *CA*, **108**, 218962.

Oxohygrolidin O-10058

[98813-11-7]



$C_{34}H_{54}O_7$ M 574.796
Prod. by *Streptomyces griseus* and *S. hygroscopicus*. Active against gram-positive bacteria, fungi and insects. Microcryst. powder. Mp 93-95°. $[\alpha]_D^{25}$ −90° (c, 0.2 in $CHCl_3$).

Kretchsmer, A. *et al*, *Agric. Biol. Chem.*, 1985, **49**, 2509.

2-Oxo-4-methylenepentanedioic acid O-10059

α-Keto-γ-methyleneglutamic acid

[55601-65-5]

$H_2C{=}C(COOH)CH_2COCOOH$

$C_6H_6O_5$ M 158.110
Found in tulip *Tulipa gesneriana*, *Lilium* spp. and ground nut (*Arachis hypogaea*).

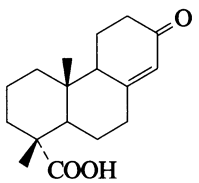
2,4-Dinitrophenylhydrazone: Mp 228° dec.

5-Amide:
$C_6H_7NO_4$ M 157.126
Found in *T. gesneriana*.

Towers, G.H.N. *et al*, *J. Am. Chem. Soc.*, 1954, **76**, 1959.
Fowden, L. *et al*, *Biochem. J.*, 1955, **59**, 228.

13-Oxo-8(14)-podocarpen-18-oic acid O-10060

[63976-69-2]



$C_{17}H_{24}O_3$ M 276.375
Constit. of *Pinus banksiana* and *P. massoniana*.

Ikeda, T. *et al*, *Science* (*Washington, D.C.*), 1977, **197**, 497.
Abad, A. *et al*, *Tetrahedron*, 1985, **41**, 4937 (*synth*)
Cheung, H.T.A. *et al*, *Tetrahedron*, 1993, **49**, 7903 (*isol, pmr, cmr*)

3-Oxopropanoic acid, 9CI O-10061

Malonaldehydic acid, 8CI. Formylacetic acid. Aldehydoacetic acid. Formylethanoic acid

[926-61-4]

$OHCCH_2COOH \rightleftharpoons HOCH{=}CHCOOH$

$C_3H_4O_3$ M 88.063

Oxo-form
Pale-yellow oil. Dec. above 50°.

(E)-*oxime: 3-(Hydroxyimino)propanoic acid. Isonitrosopropanoic acid*
$C_3H_5NO_3$ M 103.077
Mp 117-118° (114°).

Semicarbazone: Cryst. Mp 116° dec.

2,4-Dinitrophenylhydrazone: [23130-58-7].
Cryst. (EtOH). Mp 160° dec.

Me ester: [63857-17-0].

$C_4H_6O_3$ M 102.090
Unstable, appears to be known only as derivs.
Me ester, semicarbazone: Cryst. (MeOH). Mp 163°.
Me ester, 2,4-dinitrophenylhydrazone: [1928-98-9]. Cryst. (EtOH). Mp 117°.
Me ester, di-Et acetal: Methyl 3,3-diethoxypropionate
$C_8H_{16}O_4$ M 176.212
Oily liq. Spar. sol. H_2O. Bp 193°, Bp_{24} 95°.
Et ester, di-Et acetal: [10601-80-6]. *Ethyl 3,3-diethoxypropionate*
$C_9H_{18}O_4$ M 190.239
Liq. Bp_{15} 91-98°.
Et ester, semicarbazone: Cryst. Mp 147-148°.
Et ester, 2,4-dinitrophenylhydrazone: Cryst. (ligroin/EtOH). Mp 158°.
Isopropyl ester:
$C_6H_{10}O_3$ M 130.143
Bp_8 30-50°.
Isopropyl ester, semicarbazone: Cryst. (EtOAc). Mp 138-141°.
tert-*Butyl ester:*
$C_7H_{12}O_3$ M 144.170
Bp_{11} 35-60°.
tert-*Butyl ester, semicarbazone:* Cryst. (hexane/Me_2CO). Mp 183-184°.
Benzyl ester:
$C_{10}H_{10}O_3$ M 178.187
$Bp_{0.05}$ 75-85°.
Benzyl ester, semicarbazone: Cryst. (hexane/Me_2CO). Mp 147-149°.
(Z)-*Acetyloxime:*
$C_5H_7NO_4$ M 145.115
Mp 145°.

Enol-form

3-Hydroxy-2-propenoic acid. 3-Hydroxyacrylic acid
Constit. of seeds of *Vicia angustifolia.*
Me ester, O-benzoyl: Methyl 3-benzoyloxyacrylate
$C_{11}H_{10}O_4$ M 206.198
Cryst. Mp 38-40°.
Et ester, O-Ac: Ethyl 3-acetoxyacrylate
$C_7H_{10}O_4$ M 158.154
Oil. Bp_{18} 94-97°.

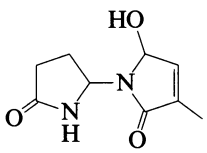
[16506-98-2, 16544-46-0]

Wohl, A. *et al, Ber.*, 1900, **33**, 2760 (*synth*)
Straus, F. *et al, Ber.*, 1926, **59**, 1681 (*synth*)
Rinkes, J., *Recl. Trav. Chim. Pays-Bas (J. R. Neth. Chem. Soc.)*, 1927, **46**, 268 (*synth*)
Thompson, J.E. *et al, Can. J. Biochem.*, 1967, **45**, 563 (*isol*)
Lovett, E.G. *et al, J. Org. Chem.*, 1977, **42**, 2574 (*synth, oximes*)
Syatkovskii, A.I. *et al, Zh. Org. Khim.*, 1977, **13**, 1569 (*struct*)
Kameoka, H. *et al, CA*, 1986, **104**, 17659k (*occur, enol-form*)
Sato, M. *et al, Synthesis*, 1986, 672 (*derivs*)

1-(2-Oxo-5-pyrrolidinyl)-5-hydroxy-3-methyl-3-pyrrolin-2-one O-10062

1,5-Dihydro-5-hydroxy-3-methyl-1-(5-oxo-2-pyrrolidinyl)-2H-pyrrol-2-one, 9CI

[142750-27-4]



$C_9H_{12}N_2O_3$ M 196.205

Alkaloid from bulbs of *Lillium candidum* (Liliaceae). Mp 176-178°.

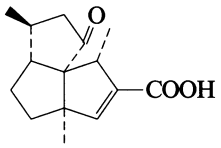
Eisenreichová, E. *et al, Phytochemistry*, 1992, **31**, 1084 (*isol, pmr, ms, struct*)

11-Oxo-5-silphiperfolen-13-oic acid O-10063

Updated Entry replacing O-00816

Subergorgic acid

[97718-45-1]



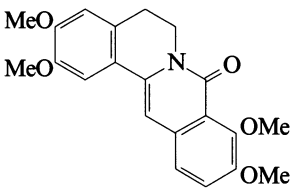
$C_{15}H_{20}O_3$ M 248.321
Constit. of coral *Subergorgia suberosa.* Shows cardiotoxic props. Cryst. Mp 179-180°, Mp 200-202°.

[84607-62-5]

Wu, Z. *et al, CA*, 1983, **98**, 68827d (*isol*)
Groweiss, A. *et al, Tetrahedron Lett.*, 1985, **26**, 2379 (*cryst struct*)
Iwata, C. *et al, J. Org. Chem.*, 1988, **53**, 1623 (*synth*)
Wender, P.A. *et al, Tetrahedron Lett.*, 1990, **31**, 5429 (*synth*)
Paquette, L.A. *et al, J. Am. Chem. Soc.*, 1993, **115**, 49 (*synth*)

Oxypalmatine O-10064

[19716-59-7]



$C_{21}H_{21}NO_5$ M 367.401
Alkaloid from stems of *Coscinium fenestratum* (Menispermaceae). Noncryst.

Pinho, P.M.M. *et al, Phytochemistry*, 1992, **31**, 1403 (*isol, ir, pmr, cmr, ms, struct*)

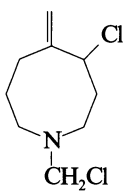
Oxypanamine O-10065

Struct. unknown. Isol. from the seeds of *Ormosia panamensis.* Amorph. solid. Artifact of air-oxidn. of Panamine, P-00096. No def. Mp.

Lloyd, H.A. *et al, J. Am. Chem. Soc.*, 1958, **80**, 1506 (*isol*)
Moran, N.C. *et al, J. Pharmacol. Exp. Ther.*, 1959, **125**, 73 (*pharmacol*)

Oxypterine O-10066

[143114-89-0]

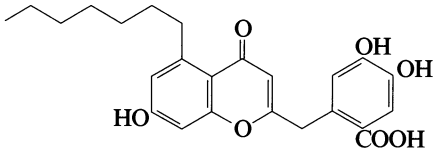


$C_9H_{15}Cl_2N$ M 208.130
Alkaloid from the leaves and twigs of *Lotononis oxyptera* (Leguminosae). Off-white cryst. solid. Mp 127-129°. $[\alpha]_D^{22}$ +19.6° (c, 2.6 in $CHCl_3$).

Verdoorn, G.H. *et al, Phytochemistry*, 1992, **31**, 1029 (*isol, ir, pmr, cmr, ms, struct*)

Oxysiphulin O-10067

[74484-86-9]



$C_{24}H_{26}O_7$ M 426.465

Constit. of lichen *Siphula ceratites*. Needles (Me_2CO aq.). Mp 176-178° dec.

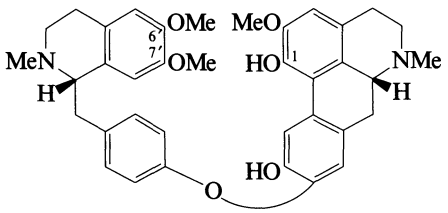
Shimada, S. *et al*, *Phytochemistry*, 1980, **19**, 467 (*isol*)

P

Pakistanine P-10001

Updated Entry replacing P-00048

[36506-69-1]



$C_{37}H_{40}N_2O_6$ M 608.733

Alkaloid from the roots of *Berberis baluchistanica*, *B. calliobotrys* and *B. orthobotrys*, and from the stems and above-ground wood of *B. empetrifolia*, and from *B. valdiviana* (Berberidaceae). Needles (EtOH). Mp 154-156°. $[\alpha]_D^{25}$ +106° (c, 0.57 in MeOH).

O^1-*Me:* [36418-13-0]. ***1-O-Methylpakistanine***

$C_{38}H_{42}N_2O_6$ M 622.760

Alkaloid from the roots of *B. calliobotrys* and *B. orthobotrys*, also obt. by rearr. of Pakistanamine, P-00047 (Berberidaceae). Cryst. (Et_2O). Mp 117°. $[\alpha]_D^{25}$ +85° (c, 0.40 in MeOH).

Di-Me ether: Formed together with an almost equal amount of 1-*O*-methylpakistanine by heating Pakistanamine (Pakistanamine, P-00047) at 70° in MeOH containing 3*M* HCl. Fine needles (Et_2O). Mp 139-141°. $[\alpha]_D^{25}$ +66° (c, 0.40 in MeOH).

$O^{7'}$-*De-Me:* [77754-91-7]. ***Chitraline***

$C_{36}H_{38}N_2O_6$ M 594.706

Alkaloid from *B. empetrifolia* and roots of *B. calliobotrys* and *B. orthobotrys*. Also obt. by dienone-phenol rearr. of Valdiberine (see Pakistanamine, P-00047) (Berberidaceae). Amorph. $[\alpha]_D^{25}$ +136° (c, 0.172 in MeOH).

$O^{6'}$-*De-Me:* [84423-08-5]. ***Porveniramine***

$C_{36}H_{38}N_2O_6$ M 594.706

Alkaloid from *B. empetrifolia*, also obt. by acid-cat. rearr. of Berbivaldine (see Pakistanamine, P-00047) (Berberidaceae). $[\alpha]_D^{25}$ +40° (c, 0.1 in MeOH).

$O^{7'}$-*De-Me*, O^1-*Me:* [84423-09-6]. ***1-O-Methylchitraline***

$C_{37}H_{40}N_2O_6$ M 608.733

Alkaloid from the stems of *B. darwinii* (Berberidaceae). Also obt. by acid rearr. of Patagonine (see under Pakistanamine, P-00047). Amorph. $[\alpha]_D^{25}$ +29° (c, 0.4 in MeOH).

$N^{2'}$-*De-Me:* [98618-06-5]. ***2'-Norpakistanine***

$C_{36}H_{38}N_2O_6$ M 594.706

Alkaloid from the stems of *B. valdiviana* (Berberidaceae). Cryst. (MeOH). Mp 148°.

$O^{6'}$-*De-Me*, O^1-*Me:* ***Waziristanine.*** *1-O-Methylporveniramine*

$C_{37}H_{40}N_2O_6$ M 608.733

Alkaloid from root bark of *B. waziristanica* (Berberidaceae). $[\alpha]_D^{25}$ +38° (c, 0.06 in MeOH).

Shamma, M. *et al, J. Am. Chem. Soc.*, 1972, **94**, 1381; 1973, **95**, 5742 (*isol, uv, ord, pmr, ms, struct, abs config*)

Hussain, S.F. *et al, Tetrahedron Lett.*, 1980, **21**, 4573 (*isol, uv, pmr*)

Hussain, S.F. *et al, Heterocycles*, 1981, **15**, 191 (*isol, uv, cd, pmr, ms, struct, Chitraline*)

Hussain, S.F. *et al, J. Nat. Prod.* (*Lloydia*), 1981, **44**, 274 (*isol, uv, pmr*)

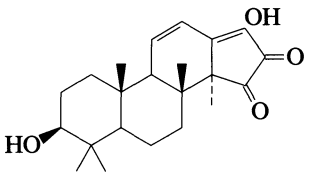
Guinaudeau, H. *et al, J. Chem. Soc., Chem. Commun.*, 1982, 1122 (*occur, cd, pmr, synth*)

Fajardo, V. *et al, Tetrahedron Lett.*, 1982, **23**, 39 (*occur*)

Firdous, S. *et al, J. Nat. Prod.* (*Lloydia*), 1985, **48**, 664 (*O-Methylchitraline, 2'-Norpakistanine*)

Atta-ur-Rahman, *Phytochemistry*, 1992, **31**, 1835 (*Waziristanine*)

Palbinone P-10002



$C_{22}H_{30}O_4$ M 358.477

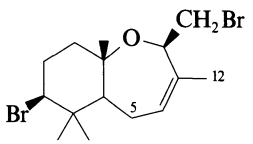
Constit. of *Paeonia albiflora*. Red needles. Mp 254-255°. $[\alpha]_D$ −223.8° ($CHCl_3$).

Kadota, S. *et al, Chem. Pharm. Bull.*, 1993, **41**, 487 (*isol, pmr, cmr*)

Palisadin B P-10003

Updated Entry replacing P-00057

[77249-85-5]



$C_{15}H_{24}Br_2O$ M 380.162

Constit. of *Laurencia palisada*. Oil. $[\alpha]_D$ +8.8° (c, 1.3 in $CHCl_3$).

12-Bromo: ***12-Bromopalisadin B***

$C_{15}H_{23}Br_3O$ M 459.058

Constit. of *L. flexilis*. Oil. $[\alpha]_D^{25}$ −16° (c, 0.1 in $CHCl_3$).

12-Hydroxy: [77250-03-4]. ***12-Hydroxypalisadin B***

$C_{15}H_{24}Br_2O_2$ M 396.161

Constit. of *L. palisada*. Oil. $[\alpha]_D$ +19.7° (c, 0.4 in $CHCl_3$).

5β-Hydroxy: ***5β-Hydroxypalisadin B***

$C_{15}H_{24}Br_2O_2$ M 396.161

Constit. of *L. flexilis*. Oil. $[\alpha]_D^{25}$ −12° (c, 0.1 in $CHCl_3$).

5β-Acetoxy: [77250-04-5]. ***5β-Acetoxypalisadin B***

$C_{17}H_{26}Br_2O_3$ M 438.199

Constit. of *L. palisada*. Oil. $[\alpha]_D$ −131.7° (c, 0.6 in $CHCl_3$).

Paul, V.J. *et al, Tetrahedron Lett.*, 1980, 2787.

Tanaka, A. *et al, Agric. Biol. Chem.*, 1986, **50**, 1069 (*synth*)

De Nys, R. *et al, J. Nat. Prod.* (*Lloydia*), 1993, **56**, 877 (*5β-Hydroxypalisadin B, 12-Bromopalisadin B*)

Palmidin D P-10004

Struct. unknown. Possible Chrysophanol-Physcion dianthrone. Constit. of the callus cultures from cotyledons of *Cassia angustifolia* and the roots of *Rheum palmatum*.

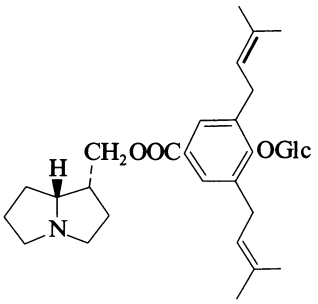
Lemli, J. *et al, Planta Med.*, 1964, **12**, 107 (*isol*)

Friedrich, H. *et al, Phytochemistry*, 1973, **12**, 1459 (*isol*)

Paludosine P-10005

Updated Entry replacing P-00084

[34137-24-1]



Absolute configuration

$C_{31}H_{45}NO_8$ M 559.698

Alkaloid from *Hammarbya paludosa* (Orchidaceae). Amorph. $[\alpha]_D^{23}$ +9° (c, 0.58 in EtOH). Hydrol. → Lindelofine, L-00598.

N-*Me:* [21284-20-8]. ***Kumokirine***
$C_{32}H_{48}NO_8^{\oplus}$ M 574.733 (ion)
Quaternary alkaloid from *Liparis kurameri* and *L. kumokiri* (Orchidaceae).

N-*Me, chloride:*
$C_{32}H_{48}ClNO_8$ M 610.186
$[\alpha]_D^{20}$ −23.4° (MeOH).

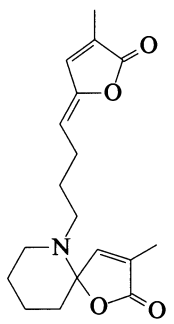
N-*Me, picrate:* Cryst. + $1H_2O$. Mp 100-102°.

2′-O-(*L-Arabinofuranosyl*)*:* [23179-26-2]. ***Nervosine***
$C_{36}H_{53}NO_{12}$ M 691.814
Alkaloid from *Liparis nervosa*. Cryst. + $1H_2O$ (as picrate). Mp 130-131° (picrate). Conts. an arabinofuranosyl(1→2)glucosyl residue of undetd. anomeric config.

1-Epimer: [22595-00-2]. ***Auriculine***†
$C_{31}H_{45}NO_8$ M 559.698
Alkaloid from *L. auriculata* and *L. loeselii* (Orchidaceae). Amorph. $[\alpha]_D^{20}$ −19.9° (MeOH), $[\alpha]_D^{20}$ −14° (c, 0.56 in EtOH). Hydrol. → Laburnine (see 1-Hydroxymethylpyrrolizidine, H-02456).

Leander, K. *et al, Tetrahedron Lett.*, 1967, 3477 (*isol*)
Nishikawa, K. *et al, Tetrahedron*, 1969, **25**, 2723 (*isol, struct*)
Lindström, B. *et al, Acta Chem. Scand.*, 1971, **25**, 895 (*isol, struct*)

Pandamarilactone 1 P-10006

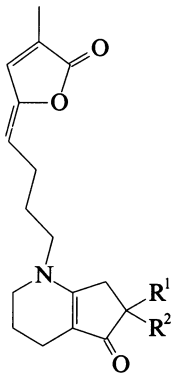


$C_{18}H_{23}NO_4$ M 317.384

Alkaloid from leaves of *Pandanus amaryllifolius* (Pandanaceae). Yellow amorph. solid. $[\alpha]_D$ −33.0° (c, 0.1 in MeOH).

Nonato, M.G. *et al, Phytochemistry*, 1993, **34**, 1159 (*isol, uv, ir, pmr, cmr, struct*)

Pandamarilactone 31 P-10007



R^1 = OMe, R^2 = CH_3

$C_{19}H_{25}NO_4$ M 331.411

Alkaloid from leaves of *Pandanus amaryllifolius* (Pandanaceae). Amorph. solid. $[\alpha]_D$ −2.0° (c, 0.1 in MeOH).

Nonato, M.G. *et al, Phytochemistry*, 1993, **34**, 1159 (*isol, uv, ir, pmr, cmr, struct*)

Pandamarilactone 32 P-10008

As Pandamarilactone 31, P-10007 with

R^1R^2 = CH_2

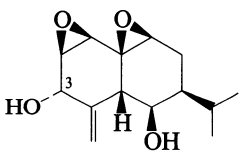
$C_{18}H_{21}NO_3$ M 299.369

Major alkaloid from leaves of *Pandanus amaryllifolius* (Pandanaceae). Amorph. solid.

Nonato, M.G. *et al, Phytochemistry*, 1993, **34**, 1159 (*isol, uv, ir, pmr, cmr, struct*)

Panellol P-10009

[151341-09-2]



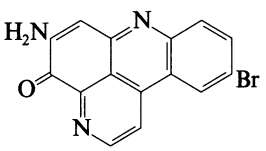
$C_{14}H_{20}O_4$ M 252.310

Constit. of *Resupinatus leightonii*. Cryst. Mp 154-156°. $[\alpha]_D$ +44° (c, 0.5 in $CHCl_3$).

3-Ketone: [151271-52-2]. ***Panellone***
$C_{14}H_{18}O_4$ M 250.294
Constit. of *R. leightonii*.

Sundin, A. *et al, Tetrahedron*, 1993, **49**, 7519 (*isol, pmr, cmr, cryst struct*)

Pantherinine P-10010



$C_{15}H_8BrN_3O$ M 326.152

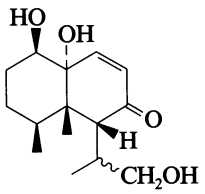
Alkaloid from the ascidian *Aplidium pantherinum*. Exhibits mild cytotoxicity against P388 murine leukemia cells. Purple powder.

Ac: Red glass.

Kim, J. *et al, J. Nat. Prod.* (*Lloydia*), 1993, **56**, 1813 (*isol, uv, ir, pmr, cmr, ms, struct*)

Parathylone P-10011

[147658-99-9]



$C_{15}H_{24}O_4$ M 268.352

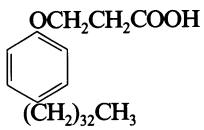
Constit. of *Paralemnalia thyrsoides*. Needles. Mp 108.5-109.5°. $[\alpha]_D$ −16.0° (c, 0.05 in MeOH).

Su, J.-Y. *et al, J. Nat. Prod.* (*Lloydia*), 1993, **56**, 288 (*isol, pmr, cmr*)

Parvifolinic acid P-10012

3-(4-Tritriacontylphenoxy)propanoic acid, 9CI

[133336-95-5]



$C_{42}H_{76}O_3$ M 629.061

Isol. from the leaves of *Isodon parifolia*. Shows antitumor activity.

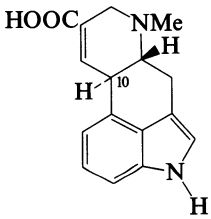
Guo, Y. *et al, Zhiwu Xuebao*, 1990, **32**, 707; *CA*, **114**, 182057 (*isol*)

Paspalic acid P-10013

Updated Entry replacing P-00208

6-Methyl-8-ergolene-8-carboxylic acid

[5516-88-1]



$C_{16}H_{16}N_2O_2$ M 268.315

Metab. from a strain of *Claviceps paspali* and *C. purpurea*. Mp 245-247° dec. $[\alpha]_D$ −208° (c, 0.4 in 0.1*M* NaOH).

B,HCl: Mp 257-258° dec. $[\alpha]_D$ −176° (c, 0.4 in 0.1*M* HCl).

10-Hydroxy, amide: ***10-Hydroxy-trans-paspalic acid amide***

$C_{16}H_{17}N_3O_2$ M 283.329

Alkaloid from *C. paspali*.

10-Hydroxy, 10-epimer, amide: ***10-Hydroxy-cis-paspalic acid amide***

$C_{16}H_{17}N_3O_2$ M 283.329

Alkaloid from *C. paspali*.

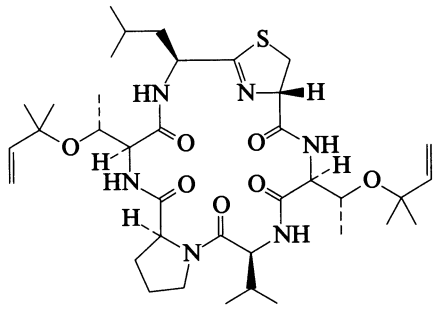
Kobel, H. *et al, Helv. Chim. Acta*, 1964, **47**, 1052 (*isol, uv, ir, pmr, struct*)

Castagnoli, N. *et al, Nature* (*London*), 1966, **211**, 859 (*occur*)

Flieger, M. *et al, J. Nat. Prod.* (*Lloydia*), 1993, **56**, 810 (*10-Hydroxypaspalic acid amide*)

Patellin 2 P-10014

[129216-76-8]



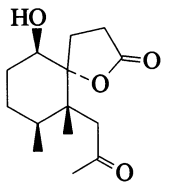
$C_{37}H_{60}N_6O_7S$ M 732.983

Modified cyclic peptide. Constit. of *Lissoclinum patella*. Cryst. Mp 128-130°. $[\alpha]_D^{25}$ −110° (c, 1.48 in MeOH).

Zabriskie, T.M. *et al, J. Am. Chem. Soc.*, 1990, **112**, 8080 (*isol*)

Pathylactone A P-10015

[140165-43-1]



$C_{14}H_{22}O_4$ M 254.325

A seconardosinane terpenoid. Constit. of *Paralemnalia thyrsoides*. Needles. Mp 44.5-47.0°. $[\alpha]_D$ −7.8° (c, 0.041 in MeOH).

Su, J.Y. *et al, Chin. Chem. Lett.*, 1991, **2**, 785 (*isol, pmr, cmr*)

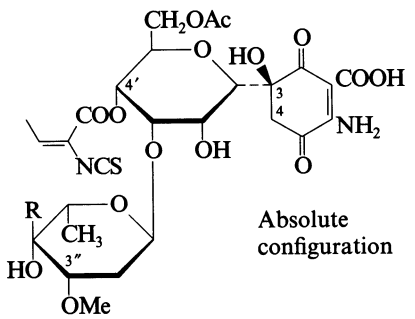
Su, J.-Y. *et al, J. Nat. Prod.* (*Lloydia*), 1993, **56**, 288 (*isol, pmr, cmr*)

Paulomycin A P-10016

Updated Entry replacing P-00234

Volonomycin A. NSC 163500. U 43120. Antibiotic U 43120

[81988-77-4]



Absolute configuration

R = $H_3CCH_2CH(CH_3)COOCH(CH_3)$–

$C_{34}H_{46}N_2O_{17}S$ M 786.807

Prod. by *Streptomyces paulus*. Active against gram-positive bacteria. Needles ($CHCl_3/Et_2O$). Mp 95-105° dec. $[\alpha]_D^{25}$ +27° (c, 0.95 in $CHCl_3$), $[\alpha]_D$ −22° (c, 0.95 in MeOH). Also used as undifferentiated complex.

5-Deoxy-4,5-didehydro: [94767-59-6]. *Paulomycinone A*

$C_{34}H_{44}N_2O_{16}S$ M 768.791

Yellow solid. Mp 57-73°. $[\alpha]_D^8$ +2° (c, 0.694 in MeOH).

3″-O-De-Me: ***O-Demethylpaulomycin A***

$C_{33}H_{44}N_2O_{17}S$ M 772.780
From *S. paulus*. Cryst. (EtOAc). $[\alpha]_D^{25}$ +4° (c, 0.42 in $CHCl_3$), $[\alpha]_D$ −28° (c, 0.41 in MeOH). Melts over broad range with dec.

4′-De-O-(2-isothiocyano-2-butenoyl): [94739-81-8]. ***Paulomenol A***
$C_{29}H_{43}NO_{16}$ M 661.656
From *S. paulus*. Amorph. $[\alpha]_D^{25}$ +2° (c, 0.67 in $CHCl_3$), $[\alpha]_D$ −29° (c, 0.59 in MeOH). Melts over broad range with dec.

6′-De-O-Ac, 6′-O-propanoyl: [116475-35-5]. ***Paulomycin U***
$C_{35}H_{48}N_2O_{17}S$ M 800.833
Prod. by *S. paulus*.

[61332-05-6]

Hanka, L.J. *et al, J. Antibiot.*, 1976, **29**, 611 (*isol*)
Eur. Pat., 46 641, (1982); *CA*, **97**, 4673 (*isol*)
Argoudelis, A.D. *et al, J. Antibiot.*, 1982, **35**, 285; 1988, **41**, 1316 (*isol, uv, ir, pmr, cmr, derivs*)
Marshall, V.P. *et al, J. Antibiot.*, 1984, **37**, 923 (*biosynth*)
Wiley, P.F. *et al, J. Antibiot.*, 1984, **37**, 1273 (*struct, nmr*)
Wiley, P.F. *et al, J. Org. Chem.*, 1986, **51**, 2493 (*cryst struct, abs config*)
Pat. Coop. Treaty (*WIPO*), 88 00 949, (1988); *CA*, **109**, 127330g (*Paulomycin U*)

Paulomycin E P-10017

Updated Entry replacing P-00239

[101411-69-2]

As Paulomycin A, P-10016 with

R = H_3CCO—

$C_{29}H_{36}N_2O_{16}S$ M 700.673
Isol. from *Streptomyces paulus*. Active against gram-positive bacteria. Amorph. Mp 120-160°. $[\alpha]_D^{25}$ +24° (c, 0.25 in $CHCl_3$), $[\alpha]_D^{25}$ −27° (c, 0.68 in MeOH).

3″-Epimer: [11017-36-0]. ***Senfolomycin A. LL-RA 6950BA. Antibiotic LL-RA 6950BA***
$C_{29}H_{36}N_2O_{16}S$ M 700.673
Isol. from *S. ochrosporus*.

Argoudelis, A.D. *et al, J. Antibiot.*, 1988, **41**, 157, 1212 (*isol, struct*)

Paulomycin F P-10018

Updated Entry replacing P-00240

[114413-27-3]

As Paulomycin A, P-10016 with

R = $H_3CCH(OH)$—

$C_{29}H_{38}N_2O_{16}S$ M 702.689
Isol. from *Streptomyces paulus*. Active against gram-positive bacteria. Amorph. Mp 114-130° dec. $[\alpha]_D^{25}$ +21° (c, 0.23 in $CHCl_3$), $[\alpha]_D^{25}$ −28° (c, 0.51 in MeOH).

3″-Epimer: [11031-56-4]. ***Senfolomycin B. LL-RA 6950BB. Antibiotic LL-RA 6950BB***
From *S. ochrosporus*. Cryst. (Et_2O). $[\alpha]_D^{25}$ −60° (c, 0.92 in MeOH).

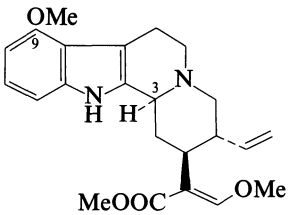
Argoudelis, A.D. *et al, J. Antibiot.*, 1988, **41**, 157, 1212 (*isol, struct*)

Paynantheine P-10019

Updated Entry replacing P-00249

9-Methoxycorynantheine

[4697-66-9]



$C_{23}H_{28}N_2O_4$ M 396.485
Alkaloid from the leaves of *Mitragyna speciosa* (Naucleaceae). Yellow solid. Mp 98° (softens). $[\alpha]_D^{23}$ −28.9° (c, 0.27 in $CHCl_3$).

Picrate: Orange needles (EtOH). Mp 202°.

3-Epimer: [22032-51-5]. ***3-Isopaynantheine***
$C_{23}H_{28}N_2O_4$ M 396.485
Alkaloid from *M. speciosa* (Naucleaceae). No phys. props. recorded.

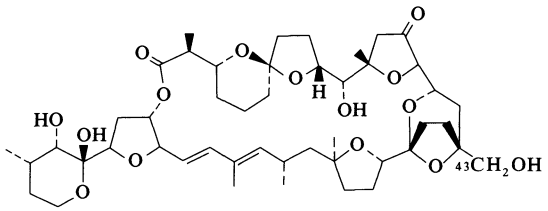
O^9*-De-Me:* ***Gambireine***
$C_{22}H_{26}N_2O_4$ M 382.458
Alkaloid from leaves of *Uncaria callophylla* (Rubiaceae).

Beckett, A.H. *et al, J. Pharm. Pharmacol.*, 1965, **17**, 753 (*uv, ir, pmr, struct*)
Trager, W.F. *et al, Tetrahedron*, 1967, **23**, 1043 (*uv, ord, cd, abs config*)
Shellard, E.J. *et al, Planta Med.*, 1978, **34**, 253 (*epimer*)
Kam, T.S. *et al, Phytochemistry*, 1992, **31**, 2031 (*Gambireine*)

Pectenotoxin 1 P-10020

Updated Entry replacing P-00255

[97564-90-4]



$C_{47}H_{70}O_{15}$ M 875.061
Polyether antibiotic. Found in scallops. Metab. of *Dinophysis acuminata*. Component toxin of shellfish poisoning. Cryst. (MeCN aq.). Mp 208-209°. $[\alpha]_D^{20}$ +17.1° (c, 0.41 in MeOH). λ_{max} 235 nm (MeOH).

43-Deoxy: [97564-91-5]. ***Pectenotoxin 2***
$C_{47}H_{70}O_{14}$ M 859.062
From *D. acuminata*. Shellfish toxin. Amorph. $[\alpha]_D^{20}$ +16.2° (c, 0.105 in MeOH).

43-Ketone: [97560-25-3]. ***Pectenotoxin 3***
$C_{47}H_{68}O_{15}$ M 873.045
Metab. of *D. acuminata*. Shellfish toxin. Amorph. Mp 159-160°. $[\alpha]_D^{20}$ +2.22° (c, 0.135 in MeOH).

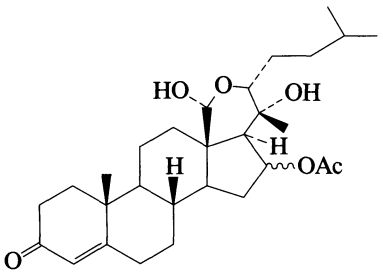
Stereoisomer (?): ***Pectenotoxin 4***
$C_{47}H_{70}O_{15}$ M 875.061
From *D. acuminata*. Shellfish toxin. Solid. $[\alpha]_D^{20}$ +2.07° (c, 0.193 in MeOH).

Dihydro (?): ***Pectenotoxin 5***
$C_{47}H_{72}O_{15}$ M 877.077
Metab. of *D. acuminata*. Shellfish toxin. Amorph.

43-Carboxylic acid: [124843-18-1]. ***Pectenotoxin 6***
$C_{47}H_{68}O_{16}$ M 889.045
Constit. of *D.* sp. Shellfish toxin.

Yasumoto, T. *et al*, *Tetrahedron*, 1985, **41**, 1019 (*isol, cryst struct, spectra*)
Murata, M. *et al*, *Agric. Biol. Chem.*, 1986, **50**, 2693 (*deriv*)
Lee, J.S. *et al*, *Bioact. Mol.*, 1989, **10**, 327 (*Pectenotoxin 6*)

Pectinoacetal A P-10021

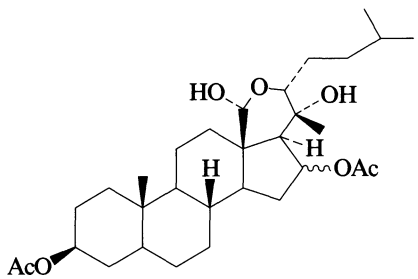


$C_{29}H_{44}O_6$ M 488.663
Constit. of *Ctenocella pectinata.*

18-Epimer: ***Pectinoacetal B***
$C_{29}H_{44}O_6$ M 488.663
Constit. of *C. pectinata.*

Roussis, V. *et al*, *Experientia*, 1993, **49**, 265 (*isol, pmr, cmr*)

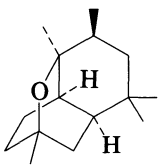
Pectinoacetal C P-10022



$C_{31}H_{50}O_7$ M 534.732
Constit. of *Ctenocella pectinata.*

Roussis, V. *et al*, *Experientia*, 1993, **49**, 265 (*isol, pmr, cmr*)

Peculiaroxide P-10023

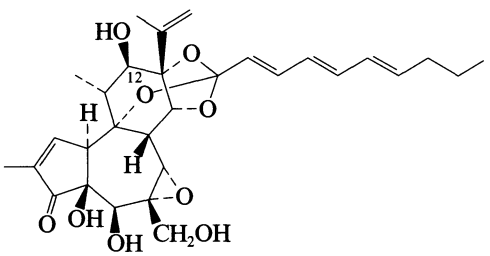


$C_{15}H_{26}O$ M 222.370
Constit. of *Plagiochila peculiaris.*

Wu, C.-L. *et al*, *Tetrahedron Lett.*, 1993, **34**, 4855 (*isol, pmr, cmr*)

Peddiea factor A_1 P-10024

[99313-78-7]



$C_{30}H_{38}O_9$ M 542.625
Constit. of *Peddiea africana.*

12-Ac: [99313-79-8]. ***Peddiea factor V_2***
Constit. of *P. volkensii.*

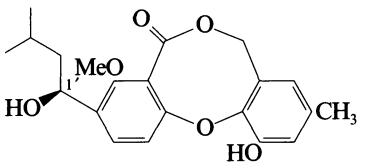
Adolf, W. *et al*, *Phytochemistry*, 1985, **24**, 2047 (*isol, pmr*)

Penicillide P-10025

Updated Entry replacing P-00304

*11-Hydroxy-3-(1-hydroxy-3-methylbutyl)-4-methoxy-9-methyl-5*H,*7*H-*dibenzo*[b,g][*1,5*]*dioxocin-5-one, 9CI*

[55303-92-9]



$C_{21}H_{24}O_6$ M 372.417

(S)-form
Metab. of *Penicillium* spp. and *Talaromyces derxii.* Plant growth inhibitor. Amorph. powder. $[\alpha]_D^{24}$ +4.9° (c, 0.82 in MeOH).

11-Me ether: Mp 128-129.5° (124°). $[\alpha]_D^{24}$ +3.8° (c, 0.82 in MeOH), $[\alpha]_D^{7}$ +14.4° (MeOH).

1'-Ac: [133806-59-4]. ***Purpactin A.*** *1'-Acetoxypenicillide. Antibiotic FO 608A. FO 608A. Vermixocin B*
$C_{23}H_{26}O_7$ M 414.454
Prod. by *P. purpurogenum* and *P. vermiculatum.* Acyl CoA: cholesterol acyltransferase inhibitor, cytotoxic agent. Powder. $[\alpha]_D^{18}$ −57.6° (c, 1 in $CHCl_3$). No abs. config. assigned to Vermixocin B but props. and opt. rotn. agree with Purpactin A.

Sassa, T. *et al*, *Tetrahedron Lett.*, 1974, 3941 (*isol, struct, uv, ms*)
Nishida, H. *et al*, *J. Antibiot.*, 1991, **44**, 136, 144, 152 (*Purpactin A*)
Suzuki, K. *et al*, *Phytochemistry*, 1991, **30**, 2096 (*isol, pmr, cmr, abs config*)
Protska, B. *et al*, *J. Antibiot.*, 1992, **45**, 1268 (*Vermixocin B*)
Nishida, H. *et al*, *J. Org. Chem.*, 1992, **57**, 1271 (*biosynth*)

16-Pentacosenoic acid P-10026

$H_3C(CH_2)_7CH{=}CH(CH_2)_{14}COOH$

$C_{25}H_{48}O_2$ M 380.653

(Z)-form [140163-39-9]
Constit. of the sponge *Mycale laevis.*

Carballeira, N.M. *et al*, *J. Nat. Prod.* (*Lloydia*), 1992, **55**, 333.

17-Pentacosenoic acid P-10027

$H_3C(CH_2)_6CH{=}CH(CH_2)_{15}COOH$

$C_{25}H_{48}O_2$ M 380.653

(Z)-form [134394-72-2]
Constit. of the lichens *Cladonia* sp. and *Parmelia* sp. and from the sponge *Geodia gibberosa.*

Carballeira, N.M. *et al*, *Lipids*, 1991, **26**, 324.
Dembitskii, V.M. *et al*, *Phytochemistry*, 1991, **30**, 4015; 1992, **31**, 841 (*isol*)

18-Pentacosenoic acid P-10028

$H_3C(CH_2)_5CH{=}CH(CH_2)_{16}COOH$

$C_{25}H_{48}O_2$ M 380.653

(Z)-form [138282-15-2]
Constit. of the sponges *Euspongilla lacustris* and *Mycale laevis*.

Dembitskii, V.M. *et al*, *Comp. Biochem. Physiol., B: Comp. Biochem.*, 1991, **100**, 185 (*isol*)
Carballeira, N.M. *et al*, *J. Nat. Prod.* (*Lloydia*), 1992, **55**, 333.

19-Pentacosenoic acid P-10029

$H_3C(CH_2)_4CH{=}CH(CH_2)_{17}COOH$

$C_{25}H_{48}O_2$ M 380.653

(Z)-form [140163-40-2]
Constit. of the sponge *Amphimedon compressa*.

Aldehyde: [140163-48-0]. ***19-Pentacosenal***
$C_{25}H_{48}O$ M 364.654
Constit. of *A. compressa*.

Carballeira, N.M. *et al*, *J. Nat. Prod.* (*Lloydia*), 1992, **55**, 333.

6,9-Pentadecadien-2-one P-10030

$H_3C(CH_2)_4CH{=}CHCH_2CH{=}CH(CH_2)_3COCH_3$

$C_{15}H_{26}O$ M 222.370

(6Z,9Z)-form [78405-86-4]
Constit. of *Chimonanthus praecox*, *Lindera benzoin* and *Neolitsea sericea*. Oil.

Ueyama, Y. *et al*, *Flavour Fragrance J.*, 1990, **5**, 85 (*occur*)
Anderson, J.E. *et al*, *J. Nat. Prod.* (*Lloydia*), 1992, **55**, 71 (*isol, pmr, cmr*)

8,11-Pentadecadien-2-one P-10031

[115006-48-9]

$H_3CCH_2CH_2CH{=}CHCH_2CH{=}CH(CH_2)_5COCH_3$

$C_{15}H_{26}O$ M 222.370

(8Z,11Z)-form [116752-10-4]
Isol. from the roots of *Echinacea* spp.
Immunostimulant.

Bauer, R. *et al*, *Planta Med.*, 1988, **54**, 426; 1991, **57**, 447.

8,13-Pentadecadien-2-one P-10032

[115006-47-8]

$H_3CCH{=}CH(CH_2)_3CH{=}CH(CH_2)_5COCH_3$

$C_{15}H_{26}O$ M 222.370

(8Z,13Z)-form [126948-20-7]
Isol. from the roots of *Echinacea* spp.
Immunostimulant.

Bauer, R. *et al*, *Arzneim.-Forsch.*, 1988, **38**, 276.

6,9,12-Pentadecatrien-2-one P-10033

$H_3CCH_2CH{=}CHCH_2CH{=}CHCH_2CH{=}CH(CH_2)_3COCH_3$

$C_{15}H_{24}O$ M 220.354

(6Z,9Z,12Z)-form [139328-79-3]
Constit. of the ripe berries of *Lindera benzoin*. Oil.

Anderson, J.E. *et al*, *J. Nat. Prod.* (*Lloydia*), 1992, **55**, 71 (*isol, pmr*)

8,11,13-Pentadecatrien-2-one P-10034

$H_3CCH{=}CHCH{=}CHCH_2CH{=}CH(CH_2)_5COCH_3$

$C_{15}H_{24}O$ M 220.354

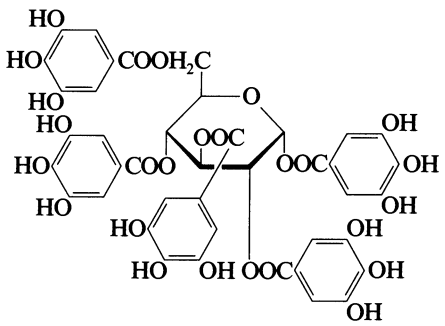
(8E,11Z,13Z)-form [118853-86-4]
Isol. from the roots of *Echinacea* spp.

(8Z,11E,13Z)-form [118853-87-5]
Isol. from the roots of *E.* spp.

Bauer, R. *et al*, *Planta Med.*, 1988, **54**, 426; 1989, **55**, 367; 1991, **57**, 447 (*isol*)

1,2,3,4,6-Pentagalloylglucose P-10035

Updated Entry replacing P-00415



α-D-Pyranose-*form*

$C_{41}H_{32}O_{26}$ M 940.688

α-D-Pyranose-form [70470-10-9]
A gallotannin from the rhizome of *Nuphar japonicum*. Off-white amorph. powder + $5H_2O$. $[\alpha]_D^{29}$ +134.5° (c, 0.5 in Me_2CO).

β-D-Pyranose-form [14937-32-7]
Isol. from several *Acer* spp., *Quercus* spp. *Rhus* spp. and *Rubus* spp. Off-white amorph. powder. $[\alpha]_D^{20}$ +20.5° (c, 1.0 in Me_2CO).

O-(*3,4,5-Trihydroxybenzoyl*)(*1*): [85249-26-9]. *2*-O-*Digalloyl-1,3,4,6-tetra*-O-*galloyl-β-D-glucopyranose*
$C_{48}H_{36}O_{30}$ M 1092.794
Isol. from the twig galls of *Rhus semialata* and *Q. infectoria*. Light brown amorph. powder. $[\alpha]_D^{20}$ +11.2° (c, 0.25 in Me_2CO). Contains a digalloyl (galloylgalloyl) residue at C-2.

O-(*3,4,5-Trihydroxybenzoyl*)(*2*): [85199-90-2]. ***3-O-Digalloyl-1,2,4,6-tetra-O-galloyl-β-D-glucopyranose***
$C_{48}H_{36}O_{30}$ M 1092.794
Constit. of Chinese gallotannins from twig galls of *R. semialata*. Light brown amorph. powder. $[\alpha]_D^{20}$ +45.0° (c, 0.32 in Me_2CO). Contains a digalloyl residue at C-3.

O-*3,4,5-Trihydroxybenzoyl*(*3*): ***4-O-Digalloyl-1,2,3,6-tetra-O-galloyl-β-D-glucopyranose***
$C_{48}H_{36}O_{30}$ M 1092.794
Constit. of twig galls of *R. semialata* and *Q. infectoria*. Light brown amorph. powder. $[\alpha]_D^{20}$ +14.1° (c, 0.17, in Me_2CO). Contains a digalloyl residue at C-4.

O-*3,4,5-Trihydroxybenzoyl*(*4*): [60768-30-1]. ***6-O-Digalloyl-1,2,3,4-tetra-O-galloyl-β-D-glucopyranose***
$C_{48}H_{36}O_{30}$ M 1092.794
Gallotannin constit.of twig galls (*Q. infectoria*) and of *Paeonia lactiflora*. Light brown amorph. powder. $[\alpha]_D^{20}$ +43.4° (c, 0.53 in Me_2CO). Contains a digalloyl residue at C-6.

Bis(*3,4,5-trihydroxybenzoyl*)(*1*): [85199-91-3]. ***2,3-Di-O-digalloyl-1,4,6-tri-O-galloyl-β-D-glucopyranose***
$C_{55}H_{40}O_{34}$ M 1244.901

Constit. of twig galls from *R. semialata* and of green alga (*Spyrogyra* sp.). $[\alpha]_D^{20}$ +24.4° (c, 1.35 in Me_2CO). Contains digalloyl residue at C-2 and C-3.

Bis(3,4,5-trihydroxybenzoyl)(2): [85249-29-2]. ***2,4-Di-O-digalloyl-1,3,6-tri-O-galloyl-β-D-glucopyranose***
$C_{55}H_{40}O_{34}$ M 1244.901
Gallotannin from *R. semialata* and from green alga *S.* sp. Light brown amorph. powder. $[\alpha]_D^{20}$ +12.0° (c, 1.27 in Me_2CO). Contains digalloyl residues at C-2 and C-4.

Bis(3,4,5-trihydroxybenzoyl)(3): [87861-32-3]. ***2,6-Di-O-digalloyl-1,3,4-tri-O-galloyl-β-D-glucopyranose***
$C_{55}H_{40}O_{34}$ M 1244.901
Gallotannin from *P. lactiflora.* Light brown amorph. powder + $2H_2O$. $[\alpha]_D^{20}$ +48.6° (c, 0.40 in Me_2CO). Contains digalloyl residues at C-2 and C-6.

Bis(3,4,5-trihydroxybenzoyl)(4): [85249-28-1]. ***3,4-Di-O-digalloyl-1,2,6-tri-O-galloyl-β-D-glucopyranose***
$C_{55}H_{40}O_{34}$ M 1244.901
Gallotannin from *R. semialata* and from green alga *S.* sp. Light brown amorph. powder. $[\alpha]_D^{20}$ +36.4° (c, 1.62 in Me_2CO). Contains digalloyl residues at C-3 and C-4.

Bis(3,4,5-trihydroxybenzoyl)(5): [87860-74-0]. ***3,6-Di-O-digalloyl-1,2,4-tri-O-galloyl-β-D-glucopyranose***
$C_{55}H_{40}O_{34}$ M 1244.901
Isol. from the root of *P. lactiflora.* Light brown amorph. powder + $2H_2O$. $[\alpha]_D^{20}$ +33.6° (c, 0.54 in Me_2CO). Contains digalloyl residues at C-3 and C-6.

Bis(3,4,5-trihydroxybenzoyl)(6): [87861-31-2]. ***4,6-Di-O-digalloyl-1,2,3-tri-O-galloyl-β-D-glucopyranose***
$C_{55}H_{40}O_{34}$ M 1244.901
Gallotannin of *P. lactiflora.* Light brown amorph. powder. Contains digalloyl residues at C-4 and C-6.

Tris(3,4,5-trihydroxybenzoyl): [87823-32-3]. ***2,3,6-Tri-O-digalloyl-1,4-di-O-galloyl-β-D-glucopyranose***
$C_{62}H_{44}O_{38}$ M 1397.007
Gallotannin constit. of *P. lactiflora.* Light brown amorph. powder + $1H_2O$. $[\alpha]_D^{20}$ +39.3° (c, 0.82 in Me_2CO). Contains digalloyl residues at C-2, C-3 and C-6.

O-(*Galloylgalloyl*)*(1):* [85249-60-1]. ***3-O-Trigalloyl-1,2,4,6-tetra-O-galloyl-β-D-glucopyranose***
$C_{55}H_{40}O_{34}$ M 1244.901
Constit. of *P. lactiflora* and Chinese gallotannin (twig galls of *R. semialata*). Light brown amorph. powder. $[\alpha]_D^{20}$ +13.4° (c, 1.35 in Me_2CO). Contains a trigalloyl (galloylgalloylgalloyl) residue at C-3.

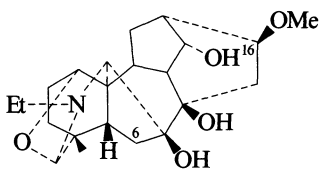
O-(*Galloylgalloyl*)*(2):* [86747-20-8]. ***6-O-Trigalloyl-1,2,3,4-tetra-O-galloyl-β-D-glucopyranose***
$C_{55}H_{40}O_{34}$ M 1244.901
Gallotannin constit. of Turkish galls (*Q. infectoria*). Light brown amorph. powder. Contains a trigalloyl residue at C-6.

[52238-31-0, 86747-19-5, 99877-82-4, 99877-84-6, 99877-86-8, 99877-87-9]

Haddock, E.A. *et al, J. Chem. Soc., Perkin Trans. 1,* 1982, 2515 (*isol, struct, pmr, cmr*)
Nishizawa, M. *et al, J. Chem. Soc., Perkin Trans. 1,* 1982, 2963; 1983, 961 (*derivs*)
Nishizawa, M. *et al, Chem. Pharm. Bull.,* 1983, **31**, 2593 (*derivs*)
Nishizawa, M. *et al, Phytochemistry,* 1985, **24**, 2411 (*derivs*)
Nonaka, G. *et al, Chem. Pharm. Bull.,* 1987, **35**, 3127 (*struct, pmr, cmr*)

Pentagydine P-10036

Updated Entry replacing P-00416
[86630-38-8]



$C_{22}H_{33}NO_5$ M 391.506
Minor alkaloid from *Delphinium pentagynum* (Ranunculaceae). Mp 130-131°.

16-Demethoxy: [90475-66-4]. ***Graciline***
$C_{21}H_{31}NO_4$ M 361.480
Alkaloid from *D. gracile* (Ranunculaceae). Mp 98-100°.

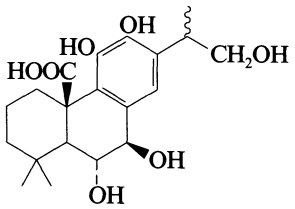
6β-Methoxy: see *Gadesine, G-00002*

7-Deoxy,6α-methoxy: [84306-91-2]. ***Pentagynine***
$C_{23}H_{35}NO_5$ M 405.533
Alkaloid from *D. pentagynum* (Ranunculaceae). Mp 198-201°. $[\alpha]_D$ +72° (c, 0.12 in EtOH).

16-Demethoxy, 8-cinnamoyl: ***8-O-Cinnamoylgraciline***
$C_{30}H_{37}NO_5$ M 491.626
Alkaloid from above-ground parts of *D. cossonianum* (Ranunculaceae). Amorph. $[\alpha]_D$ +10.4° (c, 0.41 in $CHCl_3$).

González, A.G. *et al, Phytochemistry,* 1982, **21**, 1781 (*Pentagynine*)
González, A.G. *et al, Tetrahedron Lett.,* 1983, **24**, 959 (*ir, pmr, ms, cryst struct*)
González, A.G. *et al, Heterocycles,* 1984, **22**, 667 (*Graciline*)
de la Fuente, G. *et al, Phytochemistry,* 1993, **34**, 553 (*8-O-Cinnamoylgraciline*)

6,7,11,12,16-Pentahydroxy-8,11,13-abietatrien-20-oic acid P-10037



$C_{20}H_{28}O_7$ M 380.437

(6α,7β,15ξ)-form

20→7 Lactone: 6,11,12,16-Tetrahydroxy-8,11,13-abietatrien-20,7-olide
$C_{20}H_{26}O_6$ M 362.422
Constit. of *Salvia mellifera.* Amorph. solid.

(6β,7α,16ξ)-form

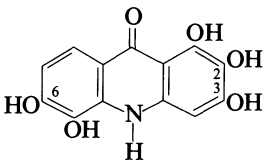
20→6 Lactone, 7-Me ether: 11,12,16-Trihydroxy-7-methoxy-8,11,13-abietatrien-20,6-olide. ***16-Hydroxy-17-methoxyrosmanol***
$C_{21}H_{28}O_6$ M 376.449
Constit. of *S. munzii.* Oil.

Luis, J.G. *et al, Phytochemistry,* 1993, **33**, 635, 863 (*isol, pmr, cmr*)

1,2,3,5,6-Pentahydroxyacridone P-10038

Updated Entry replacing P-00418

1,2,3,5,6-Pentahydroxy-9H-acridin-9-one



$C_{13}H_9NO_6$ M 275.217

2,3,10-Tri-Me: [126622-17-1]. ***2,3-Dimethoxy-1,5,6-trihydroxy-10-methylacridone***
$C_{16}H_{15}NO_6$ M 317.298
Alkaloid from the root bark of *Pleiospermium alatum* (Rutaceae). Yellow cryst. Mp 118-119°.

2,5,10-Tri-Me: [119459-67-5]. *1,3,6-Trihydroxy-2,5-dimethoxy-10-methylacridone.* ***Citramine***
$C_{16}H_{15}NO_6$ M 317.298
Alkaloid from *Citrus natsudaidai* and roots of Ogonkan (a *C.* hybrid) (Rutaceae). Light-yellow prisms. Mp 277-279°.

2,3,5,6-Tetra-Me ether: 1-Hydroxy-2,3,5,6-tetramethoxyacridone. ***Cuspanine***
$C_{17}H_{17}NO_6$ M 331.324
Alkaloid from leaves of *Angostura paniculata* (Rutaceae). Yellow cryst. (MeOH). Mp 164-166°.
▷ Exhibits moderate molluscicidal activity and moderate cytotoxicity against several carcinoma cell lines.

2,3,5,10-Tetra-Me: [101330-64-7]. ***1,6-Dihydroxy-2,3,5-trimethoxy-10-methylacridone***
$C_{17}H_{17}NO_6$ M 331.324
Alkaloid from the stems of *P. alatum* (Rutaceae). Yellow needles ($CHCl_3$/pet. ether). Mp 181-182°.

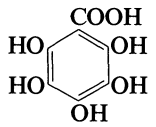
2,5,6,10-Tetra-Me: [107259-49-4]. *1,3-Dihydroxy-2,5,6-trimethoxy-10-methylacridone.* ***Atalafoline***
$C_{17}H_{17}NO_6$ M 331.324
Alkaloid from the chinese drug Tung-Feng-Jie (roots of *Atalantia buxifolia* (Rutaceae)).

1,2,3,5,6-Penta-Me ether: 1,2,3,5,6-Pentamethoxyacridone. ***Cusculine***
$C_{18}H_{19}NO_6$ M 345.351
Alkaloid from leaves of *A. paniculata* (Rutaceae). Yellow cryst. (MeOH). Mp 223-224°.
▷ Exhibits moderate molluscicidal activity and moderate cytotoxicity against several carcinoma cell lines.

2,3,5,6,10-Penta-Me: [101330-63-6]. ***1-Hydroxy-2,3,5,6-tetramethoxy-10-methylacridone***
$C_{18}H_{19}NO_6$ M 345.351
Alkaloid from the root bark of *P. alatum* (Rutaceae). Yellow needles ($CHCl_3$/pet. ether); cryst. (hexane/EtOAc). Mp 198-200° (170°).

Bowen, I.H. *et al, Phytochemistry*, 1986, **25**, 429 (*isol, uv, ir, pmr, ms, struct*)
Qin, D., *Yaoxue Xuebao*, 1986, **21**, 683; *CA*, **106**, 135228h (*Atalafoline*)
Ju-Ichi, M. *et al, Heterocycles*, 1988, **27**, 2197 (*Citramine*)
Bandara, B.M.R. *et al, Phytochemistry*, 1990, **29**, 297 (*isol, uv, ir, pmr, ms, struct*)
Vieira, P.C. *et al, J. Nat. Prod.* (*Lloydia*), 1992, **55**, 1112 (*Cuspanine, Cusculine*)

Pentahydroxybenzoic acid P-10039



$C_7H_6O_7$ M 202.120

Penta-Me ether: Pentamethoxybenzoic acid
$C_{12}H_{16}O_7$ M 272.254
Cryst. (EtOAc). Mp 95.5°.

Penta-Me ether, Me ester:
$C_{13}H_{18}O_7$ M 286.281
Leaflets (MeOH aq.). Mp 48.5°. Bp_2 150-153°.

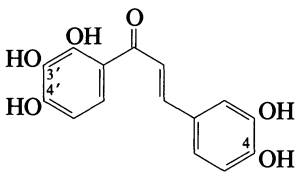
3,4-Methylene ether, Me ester: [139934-62-6]. *Methyl 2,3,6-trihydroxy-3,4-methylenedioxybenzoate. Methyl trihydroxypiperonylate*
$C_9H_8O_7$ M 228.158
Constit. of *Delphinium venulosum*. Needles. Mp 253-255°.

Dallacker, F., *Justus Liebigs Ann. Chem.*, 1963, **665**, 78 (*synth, deriv, ir*)
Parker, K.A. *et al, J. Org. Chem.*, 1987, **52**, 674 (*synth, deriv, ir, pmr*)
Mericli, A.H. *et al, Phytochemistry*, 1991, **30**, 4195 (*isol, deriv*)

2′,3,3′,4,4′-Pentahydroxychalcone P-10040

Updated Entry replacing P-00435

3-(3,4-Dihydroxyphenyl)-1-(2,3,4-trihydroxyphenyl)-2-propen-1-one, 9CI. ***Okanin***
[484-76-4]



$C_{15}H_{12}O_6$ M 288.256
From heartwood of *Cylicodiscus gabunensis* and from *Coreopsis maritima, C. tinctoria, Acacia salicina, Albizzia* spp., the sedge *Kyllinga* sp. and others. Flat orange leaflets (EtOH aq.). Mp 235-240° dec. Uv data contradictory; highly sensitive to solvent and pH.

2,4-Dinitrophenylhydrazone: Scarlet powder. Mp 253° dec.

Penta-Ac: Needles (EtOH). Mp 138-141°.

3′-O-β-D-Glucopyranoside: [115070-76-3].
$C_{21}H_{22}O_{11}$ M 450.398
Constit. of *Bidens pilosa*. Mp 131-135°.

4′-O-β-D-Glucopyranoside: [535-96-6]. ***Marein***
$C_{21}H_{22}O_{11}$ M 450.398
From *Coreopsis maritima, C. tinctoria, Baeria chrysostoma, Viguiera dentata, Thelesperma megapotamicum* and many *Bidens* spp. Orange needles (EtOH aq.). Mp 130-132°.

4′-O-[α-L-Arabinofuranosyl(1→4)-β-D-glucopyranoside]: [77587-43-0].
$C_{26}H_{30}O_{15}$ M 582.514
Isol. from *Abies pindrow*. Pale yellow needles (EtOH). Mp 178-179°. Rare isoln. of a chalcone from a gymnosperm.

3-Me ether: 2′,3′,4,4′-Tetrahydroxy-3-methoxychalcone. ***3-O-Methylokanin***
$C_{16}H_{14}O_6$ M 302.283
Isol. from *Bidens pilosa*.

4-Me ether: 2′,3,3′,4′-Tetrahydroxy-4-methoxychalcone. ***4-O-Methylokanin***
$C_{16}H_{14}O_6$ M 302.283

Isol. from *B.* spp.

4-Me ether, 3'-O-β-D-glucopyranoside: [119227-96-2].
$C_{22}H_{24}O_{11}$ M 464.425
Constit. of *B. pilosa.* Cryst. Mp 196°.

4-Me ether, 4'-O-β-D-glucopyranoside: [94285-20-8].
$C_{22}H_{24}O_{11}$ M 464.425
Isol. from *B. torta* and *B. campylotheca.* Yellow powder. Mp 142°. Also isol. as its monoacetate.

4-Me ether, 4'-O-(6-O-acetyl-β-D-glucopyranoside): [142628-33-9].
$C_{24}H_{26}O_{12}$ M 506.462
Constit. of *B. campylotheca.* Yellow powder. Mp 217-222° dec.

4-Me ether, 4'-O-primveroside: [146257-94-5].
$C_{27}H_{32}O_{15}$ M 596.541
Constit. of *B. campylotheca.* Yellow powder. Mp 158°.

4'-O-(6-O-Acetyl-2-O-caffeoyl-β-D-glucopyranoside): [142628-30-6].
$C_{32}H_{30}O_{15}$ M 654.580
Isol. from *B. frondosa.* Orange powder. $[\alpha]_D^{30}$ +78° (c, 0.2 in MeOH).

4'-O-(2-O-Caffeoyl-6-O-p-coumaroyl-β-D-glucopyranoside): [142628-31-7].
$C_{39}H_{34}O_{16}$ M 758.688
Isol. from *B. frondosa.* Orange powder. $[\alpha]_D^{26}$ −66° (c, 0.2 in MeOH).

4'-Me ether, 4-O-(6-O-acetyl-β-D-glucopyranoside):
$C_{24}H_{16}O_{12}$ M 496.383
Isol. from *B. frondosa.* Orange powder. $[\alpha]_D^{26}$ +119° (c, 0.2 in MeOH).

4'-Me ether, 4-O-(6-O-coumaroyl-β-D-glucopyranoside): [142628-32-8].
$C_{31}H_{30}O_{13}$ M 610.570
Isol. from *B. frondosa.* Orange powder. $[\alpha]_D^{26}$ −219° (c, 0.16 in MeOH).

4'-Me ether, 4-O-(6-O-acetyl-2-O-caffeoyl-β-D-glucopyranoside): [142628-34-0].
$C_{33}H_{32}O_{15}$ M 668.607
Isol. from *B. frondosa.* Orange powder. $[\alpha]_D^{26}$ +26° (c, 0.2 in MeOH).

3'-Me ether: [6542-59-2]. *2',3,4,4'-Tetrahydroxy-3'-methoxychalcone.* ***Lanceoletin***
Rare chalcone present in some Compositae. Pale-yellow prisms (MeOH) (as tetra-Ac). Mp 162-166° (tetra-Ac).

3'-Me ether, 4'-O-β-D-glucopyranoside: [64181-95-9].
Lanceolin†
$C_{22}H_{24}O_{11}$ M 464.425
Isol. from *Coreopsis lanceolata* and other *C.* spp.

3,4-Di-Me ether, 4'-O-β-D-glucopyranoside: [94285-17-3].
$C_{23}H_{26}O_{11}$ M 478.452
Isol. from *B. torta.* No phys. props. reported.

3,3',4-Tri-Me ether, 4'-O-β-D-glucopyranoside: [94285-18-4].
$C_{24}H_{28}O_{11}$ M 492.479
Isol. from *B. torta.* No phys. props. reported.

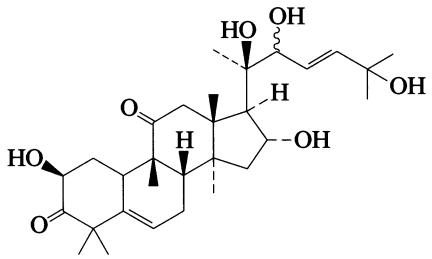
3,3',4,4'-Tetra-Me ether: [94285-19-5]. *2'-Hydroxy-3,3',4,4'-tetramethoxychalcone*
$C_{19}H_{20}O_6$ M 344.363
Isol. from *B. torta.* No. phys. props. reported.

(Z)-*Isomer: Isokanin*
$C_{15}H_{12}O_6$ M 288.256
Isol. from heartwood of *Cylicodiscus gabunensis.* Lemon-yellow needles + H_2O (H_2O). Mp 140°. Presumably an artifact.

[57062-90-5]

Russel, A. *et al, J. Chem. Soc.*, 1934, 1506, 1940 (*isol, uv*)
Kurth, E.F., *J. Am. Chem. Soc.*, 1939, **61**, 861 (*synth*)
King, F.E. *et al, J. Chem. Soc.*, 1951, 569 (*Isokanin*)
Shimokoriyama, M., *J. Am. Chem. Soc.*, 1953, **75**, 1900; 1957, **79**, 214 (*isol, uv*)
Harborne, J.B. *et al, J. Am. Chem. Soc.*, 1956, **78**, 829 (*isol, uv*)
Clark-Lewis, J.W. *et al, Aust. J. Chem.*, 1972, **25**, 1943 (*isol, uv*)
Ballard, R.E., *Diss. Abstr. B*, 1975, **36**, 1564 (*derivs*)
Nicholls, K.W. *et al, Phytochemistry*, 1979, **18**, 1076 (*isol*)
Tiwari, K.P. *et al, Phytochemistry*, 1980, **19**, 2501 (*arabinosylglucoside*)
Pinkey, J.P.K. *et al, Curr. Sci.*, 1983, **52**, 1185 (*synth*)
McCormick, S.P. *et al, Phytochemistry*, 1984, **23**, 2400 (*isol, derivs*)
Crawford, D.J. *et al, Biochem. Syst. Ecol.*, 1985, **13**, 115 (*Lanceolin*)
Hoffmann, B. *et al, Phytochemistry*, 1988, **27**, 3700 (*3'-glycosides*)
Hoffmann, B. *et al, Planta Med.*, 1988, **54**, 52 (*3'-glycoside*)
Karikome, H. *et al, Chem. Pharm. Bull.*, 1992, **40**, 689 (*derivs*)
Redl, K. *et al, Phytochemistry*, 1993, **32**, 218 (*derivs*)

2,16,20,22,25-Pentahydroxycucurbita-5,23-diene-3,11-dione P-10041

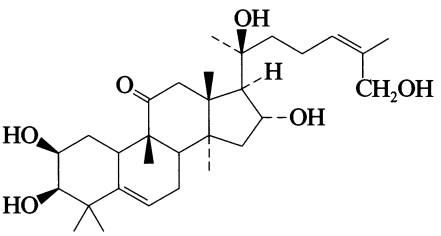


$C_{30}H_{46}O_7$ M 518.689

(2β,16α,20R,22ξ,23E)-form
Constit. of *Wilbrandia ebracteata.* Amorph. Mp 132-136°.

Farias, M.R. *et al, Planta Med.*, 1993, **59**, 272 (*isol, pmr, cmr*)

2,3,16,20,26-Pentahydroxycucurbita-5,24-dien-11-one P-10042



$C_{30}H_{48}O_6$ M 504.706

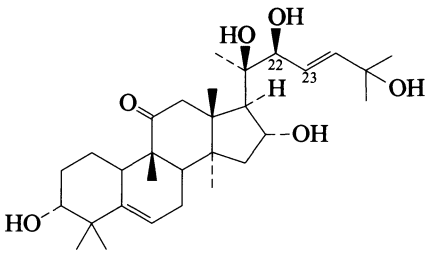
(2β,3β,16α,20S,24Z)-form

2-O-β-D-Glucopyranoside: [151162-89-9].
$C_{36}H_{58}O_{11}$ M 666.848
Constit. of *Picrorhiza kurroa.* Amorph. powder. Mp 169-171°.

3-Ketone, 2-O-β-D-glucopyranoside: [151162-88-8]. *2-Glucosyloxy-16,20,26-trihydroxycucurbita-5,24-diene-3,11-dione*
$C_{36}H_{56}O_{11}$ M 664.832
Constit. of *P. kurroa.* Amorph. powder. Mp 151-153°.

Stuppner, H. *et al, Phytochemistry*, 1993, **33**, 1139 (*isol, pmr, cmr*)

3,16,20,22,25-Pentahydroxycucurbita-5,23-dien-11-one P-10043



$C_{30}H_{48}O_6$ M 504.706

(3α,16α,20R,22S)-form [149725-29-1] ***Kinoin A***
Constit. of *Ibervillea sonorae*. Cryst. ($CHCl_3$). Mp 138-140°. $[\alpha]_D^{21}$ +61° (c, 0.3 in $CHCl_3$).

3-O-β-D-Glucopyranoside: [149172-54-3].
$C_{36}H_{58}O_{11}$ M 666.848
Constit. of *I. sonorae*. Cryst. (EtOAc/EtOH aq.). Mp 174-176°. $[\alpha]_D^{21}$ +39° (c, 1.8 in MeOH).

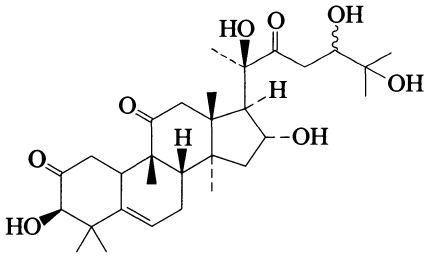
3-O-[α-L-Rhamnopyranosyl-(1→2)-β-D-glucopyranoside]: [149172-52-1].
$C_{42}H_{68}O_{15}$ M 812.990
Constit. of *I. sonorae*. Powder. $[\alpha]_D^{21}$ +5° (c, 1.6 in MeOH).

23,24-Dihydro, 22-ketone: [149725-30-4]. *3,16,20,25-Tetrahydroxycucurbit-5-ene-11,25-dione.* ***Kinoin B***
$C_{30}H_{48}O_6$ M 504.706
Constit. of *I. sonorae*. Cryst. (MeOH). Mp 185-187°. $[\alpha]_D^{21}$ +24° (c, 0.1 in $CHCl_3$).

23,24-Dihydro, 22-ketone, 3-O-[α-L-rhamnopyranosyl-(1→2)-β-D-glucopyranoside]: [149172-53-2].
$C_{42}H_{68}O_{15}$ M 812.990
Constit. of *I. sonorae*. Amorph. powder. $[\alpha]_D^{21}$ −9° (c, 1.2 in MeOH).

Achenbach, H. *et al*, *Phytochemistry*, 1993, **33**, 437 (*isol, pmr, cmr*)

3,16,20,24,25-Pentahydroxycucurbit-5-ene-2,11,22-trione P-10044



$C_{30}H_{46}O_8$ M 534.689

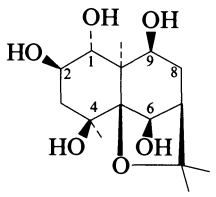
(3β,16α,20R,24ξ)-form [150337-38-5] ***3-Epiisocucurbitacin G***
Constit. of *Wilbrandia ebracteata*. Amorph. Mp 96-103°.

Farias, M.R. *et al*, *Planta Med.*, 1993, **59**, 272 (*isol, pmr, cmr*)

1,2,4,6,9-Pentahydroxydihydro-β-agarofuran P-10045

Updated Entry replacing P-00470

2,4-Dihydroxycelorbicol



$C_{15}H_{26}O_6$ M 302.367

(1α,2β,4β,6β,9β)-form

1-Cinnamoyl, 6-(3-pyridinecarbonyl), 9-Ac: [117677-26-6]. ***Rzedowskin D***
$C_{32}H_{37}NO_9$ M 579.646
Alkaloid from the aerial parts of *Orthosphenia mexicana* (Celastraceae) and *Rzedowskia tolantonguensis*. Amorph. solid. Mp 143-145°.

6,9-Di-Ac, 1-cinnamoyl: [114226-36-7]. *6β,9β-Diacetoxy-1α-cinnamoyloxy-2β,4β-dihydroxydihydro-β-agarofuran*
$C_{28}H_{36}O_9$ M 516.587
Constit. of *O. mexicana*.

1-(2,3-Epoxycinnamoyl), 2,9-di-Ac: [117610-40-9]. ***Rzedowskin A***
$C_{28}H_{36}O_{10}$ M 532.586
Constit. of *R. tolantonguensis*. Cryst. (Me_2CO/hexane). Mp 210°. Rzedowskin B and Rzedowskin C are mixts. of related esters isol. from the same source.

1,6,9-Tribenzoyl, 2-Ac:
$C_{38}H_{40}O_{10}$ M 656.728
Constit. of *Maytenus magellanica*. Oil. $[\alpha]_D^{20}$ +64.5° (c, 0.2 in $CHCl_3$).

1,9-Dibenzoyl, 2,6-di-Ac:
$C_{33}H_{38}O_{10}$ M 594.657
Constit. of *Maytenus magellanica* and *Schaefferia cuneifolia*.

(1α,2α,4β,6β,9β)-form

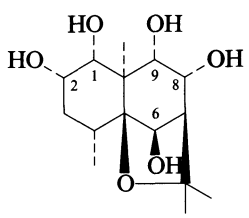
1-Cinnamoyl, 9-benzoyl, 2,6-di-Ac: ***Batakanine***
$C_{35}H_{40}O_{10}$ M 620.695
Constit. of *Euonymus tanakae*. Needles (EtOH aq.). Mp 237.5-238.5°. $[\alpha]_D^{23}$ +229° (c, 0.142 in $CHCl_3$).

6-Ketone, 1,9-dibenzoyl, 2-Ac: [83790-33-4]. ***Mortonol B***
$C_{31}H_{34}O_9$ M 550.604
Constit. of *Mortonia greggii*. Cryst. (Me_2CO/diisopropyl ether). Mp 216-218°. $[\alpha]_D$ +23.45° ($CHCl_3$).

Martinez, M. *et al*, *Phytochemistry*, 1982, **21**, 1335 (*Mortonol B*)
González, A.G. *et al*, *Phytochemistry*, 1987, **26**, 2133; 1988, **27**, 473 (*isol, ir, pmr, ms, struct*)
Jiménez, M. *et al*, *Phytochemistry*, 1988, **27**, 2213 (*Rzedowskins*)
González, A.G. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 2114 (*derivs*)
Ueda, K. *et al*, *Phytochemistry*, 1993, **33**, 230 (*Batakanine*)

1,2,6,8,9-Pentahydroxydihydro-β-agarofuran P-10046

Updated Entry replacing P-00471



$C_{15}H_{26}O_6$ M 302.367

(1α,2α,6β,8α,9α)-form

1-(3-Pyridinecarbonyl), 8-(2-methylbutanoyl), 2,9-dibenzoyl, 6-Ac: [135118-41-1]. ***Triptogelin A5***
$C_{42}H_{47}NO_{11}$ M 741.833
Constit. of *Tripterygium wilfordii*. Amorph. powder. $[\alpha]_D^{25}$ +200.1° (c, 0.17 in $CHCl_3$).

8-(3-Pyridinecarbonyl), 1,2,9-tribenzoyl, 6-Ac: [135118-42-2]. ***Triptogelin A6***
$C_{44}H_{43}NO_{11}$ M 761.824
Constit. of *T. wilfordii*. Amorph. powder. $[\alpha]_D^{25}$ +31.5° (c, 0.21 in $CHCl_3$).

8-(3-Pyridinecarbonyl), 9-benzoyl, 6-Ac: [135118-43-3]. ***Triptogelin A7***
$C_{30}H_{35}NO_9$ M 553.608
Constit. of *T. wilfordii*. Amorph. powder. $[\alpha]_D^{23}$ +63.1° (c, 0.5 in MeOH).

9-Benzoyl, 6-Ac: [135118-44-4]. ***Triptogelin A8***
$C_{24}H_{32}O_8$ M 448.512
Constit. of *T. wilfordii* and *C. angulatus*. Amorph. powder. $[\alpha]_D^{23}$ +70.1° (c, 0.52 in $CHCl_3$).

8-(3-Pyridinecarbonyl), 2-hexanoyl, 1,9-dibenzoyl, 6-Ac: [135118-45-5]. ***Triptogelin A9***
$C_{43}H_{49}NO_{11}$ M 755.860
Constit. of *T. wilfordii*. Amorph. powder. $[\alpha]_D^{23}$ +12.1° (c, 1 in MeOH).

1-(3-Pyridinecarbonyl), 2,8,9-tribenzoyl, 6-Ac: [135118-33-1]. ***Triptogelin A10***
$C_{44}H_{43}NO_{11}$ M 761.824
Constit. of *T. wilfordii* var. *regelii*. Amorph. powder. $[\alpha]_D^{23}$ +77.6° (c, 0.52 in MeOH).

1,2,9-Tribenzoyl, 6,8-di-Ac: [135118-34-2]. ***Triptogelin A11***
$C_{40}H_{42}O_{11}$ M 698.765
Constit. of *T. wilfordii*. Amorph. powder. $[\alpha]_D^{23}$ +137.8° (c, 0.32 in MeOH).

8,9-Dibenzoyl, 6-Ac: [132536-80-2]. ***Angulatueoid G***
$C_{31}H_{36}O_9$ M 552.620
Isol. from *Celastrus angulatus*.

1,2,8,9-Tetrabenzoyl, 6-Ac: [132536-78-8].
$C_{45}H_{44}O_{11}$ M 760.836
Constit. of *C. angulatus*. Amorph. $[\alpha]_D$ +8.5° (c, 0.5 in $CHCl_3$).

(1α,2α,6β,8α,9β)-form

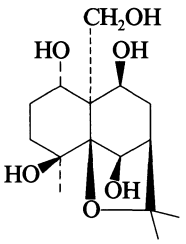
8,9-Dibenzoyl, 2-(2-methylbutanoyl), 1-Ac:
$C_{36}H_{44}O_{10}$ M 636.738
Constit. of *Celastrus rosthornianus*. Cryst. (EtOAc/pet. ether). Mp 225-226°.

9-Benzoyl, 8-(2-furancarbonyl), 2-(2-methylbutanoyl), 1-Ac:
$C_{34}H_{42}O_{11}$ M 626.699
Constit. of *C. rosthornianus*. Amorph. powder.

2,8,9-Tribenzoyl, 1-Ac: ***Sincassiol***†
$C_{38}H_{40}O_{10}$ M 656.728
Isol. from *C. rosthornianus*. Amorph. powder. $[\alpha]_D^{25}$ +33° (c, 0.49 in $CHCl_3$).

Takaishi, Y. *et al*, *Phytochemistry*, 1991, **30**, 1561, 1567 (*Triptogelins*)
Yongqiang, T. *et al*, *Phytochemistry*, 1991, **30**, 4169 (*isol, pmr, cmr*)
Tu, Y.Q. *et al*, *Chin. Chem. Lett.*, 1992, **3**, 625 (*isol, pmr, cmr*)
Yongqiang, T. *et al*, *J. Nat. Prod.* (*Lloydia*), 1992, **55**, 126 (*isol, pmr, cmr*)
Tu, Y.Q. *et al*, *Phytochemistry*, 1992, **31**, 1415 (*Sincassiol*)
Dagang, N. *et al*, *Phytochemistry*, 1992, **31**, 4219 (*Angulatueoid G*)

1,4,6,8,14-Pentahydroxydihydro-β-agarofuran P-10047



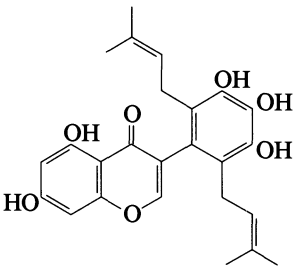
$C_{15}H_{26}O_6$ M 302.367

(1α,4β,6β,9β)-form

9-Benzoyl, 1,6,14-tri-Ac: [150900-68-8].
$C_{28}H_{36}O_{10}$ M 532.586
Constit. of *Maytenus canariensis*. Cryst. (Et_2O/hexane). Mp 188-190°. $[\alpha]_D^{25}$ −19.6° (c, 0.25 in $CHCl_3$).

González, A.G. *et al*, *Tetrahedron*, 1993, **49**, 6637 (*isol, pmr, cmr*)

3′,4′,5,5′,7-Pentahydroxy-2′,6′-diprenylisoflavone P-10048



$C_{25}H_{26}O_7$ M 438.476

3′-Me ether: [137217-88-0]. *3′,4′,5,7-Tetrahydroxy-5′-methoxy-2′,6′-diprenylisoflavone.* ***Erythbigenin***
$C_{26}H_{28}O_7$ M 452.503
Constit. of the root bark *Piscidia erythrina*. Powder. Mp 219-221° (214-217°). Struct. revised in 1991. Formerly given the name 6′-Prenylpiscerythrone.

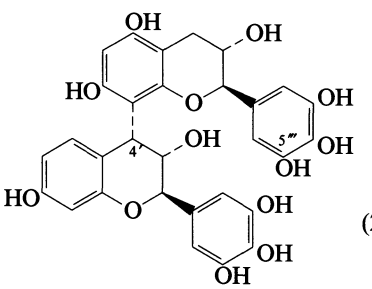
[95261-31-7]

Tahara, S. *et al*, *Phytochemistry*, 1991, **30**, 1683, 2769 (*isol, pmr, struct*)

3,3′,4′,5′,7-Pentahydroxyflavan(4→8)-3,3′,4′,5,5′,7-hexahydroxyflavan P-10049

Updated Entry replacing P-00507

2,2′-Bis(3,4,5-trihydroxyphenyl)-3,3′,4,4′-tetrahydro-[4,8′-bi-2H-1-benzopyran]-3,3′,5′,7,7′-pentol, 9CI



(2R,2′R,3′S,4′S)-form

$C_{30}H_{26}O_{13}$ M 594.528

(2R,2′R,3′S,4S)-form [69127-10-2]
Robinetinidol(4α→8)gallocatechin
Isol. from bark of *Acacia mearnsii*.

5‴-Deoxy: [69127-09-9]. *3,3′,4′,5′,7-Pentahydroxyflavan(4→8)-3,3′,4′,5,7-pentahydroxyflavan. Robinetinidol(4α→8)catechin*
$C_{30}H_{26}O_{12}$ M 578.528
Isol. from *A. mearnsii.*

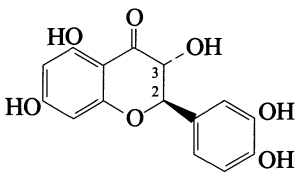
(2R,2′R,3′S,4R)-form

5‴-Deoxy: [78185-18-9]. *Robinetinidol(4β→8)catechin*
$C_{30}H_{26}O_{12}$ M 578.528
Isol. from *A. mearnsii.*

Botha, J.J. *et al, J. Chem. Soc., Perkin Trans. 1*, 1981, 1235; 1983, 17 (*isol, synth*)
Shen, Z. *et al, CA*, 1992, **116**, 211109 (*isol*)

3,3′,4′,5,7-Pentahydroxyflavanone P-10050

Updated Entry replacing P-00517
3′,4′,5,7-Tetrahydroxydihydroflavonol. Dihydroquercetin. ***Taxifolin.*** *Distylin*
[480-18-2]



(2R,3R)-form

$C_{15}H_{12}O_7$ M 304.256
▷ LD_{50} (rat, ipr) 1200 mg/kg. LK6920000.

(2R,3R)-form [17654-26-1]
Appears to be the most widespread of the dihydroflavonols, present in the free state in the Leguminosae, Labiateae, Cactaceae, Erythroxylaceae, Illiciaceae, Polygonaceae, Salicaceae, Winteraceae, Ericaceae, Moraceae, Dilleniaceae, Eucryphiaceae, Coniferae, Hamamelidaceae, Myrtaceae, Balanophoraceae, Lauraceae, Sapotaceae, Anacardiaceae, Fagaceae, Rosaceae and Ericaceae. Antifungal agent. Cryst. (EtOH or H_2O). Mp 240-242° (221-222°). $[\alpha]_D^{24}$ +44° (c, 1.03 in 50% Me_2CO aq.).

Penta-Ac: [6685-67-2].
Cryst. Mp 88-89°. $[\alpha]_D^{24}$ +11.6° (c, 1.2 in Me_2CO).

3-O-α-L-Rhamnopyranoside: [29838-67-3]. ***Astilbin***
$C_{21}H_{22}O_{11}$ M 450.398
Constit. of *Taxillus kaempferi, Vitis vinifera, Encryphia cordifolia, Astilbe, Quintinia, Litsea* spp. and others. Needles (EtOH). Mp 179-180°. $[\alpha]_D^{25}$ +4° (50% Me_2CO aq.).

3-O-β-D-Glucopyranoside: [27297-45-6]. ***Glucodistylin***
$C_{21}H_{22}O_{12}$ M 466.398
Constit. of *Chamaecyparis obtusa, Pinus massoniana, Podocarpus* spp., *Aerides fieldingii, Zizyphus nummularia.* Mp 325° dec.

3-O-(6-O-Galloyl-β-D-glucopyranoside): [66656-93-7]. ***Taxillusin***
$C_{28}H_{26}O_{16}$ M 618.504
Constit. of *T. kaempferi.*

3-O-β-D-Xylopyranoside: [75714-88-4].
$C_{20}H_{20}O_{11}$ M 436.371
Constit. of leaves of *Thujopsis dolabrata.* Amorph. powder. $[\alpha]_D$ −8.4° (c, 1.00 in Me_2CO).

4′-O-β-D-Glucopyranoside: [38690-65-2]. ***Taxifolin 4′-glucoside***
$C_{21}H_{22}O_{12}$ M 466.398
Isol. from *Petunia hybrida* and *Urginea* sp. Fine needles (MeOH aq. or H_2O). Mp 218°. $[\alpha]_D^{21}$ −40.1° (MeOH).

7-O-β-D-Glucopyranoside: [14292-40-1].
$C_{21}H_{22}O_{12}$ M 466.398
Isol. from *Podocarpus* spp., *Robinsonia gracilis, Sorghum* spp.

5-O-β-D-Galactopyranoside: [81074-97-7].
$C_{21}H_{22}O_{12}$ M 466.398
Isol. from *Dillenia pentagyna.* Cryst. (EtOAc/pet. ether). Mp 79-82° dec.

7-O-β-D-Galactopyranoside: [72442-45-6].
$C_{21}H_{22}O_{12}$ M 466.398
Isol. from *Rhododendron* spp.

3,5-Di-O-α-L-Rhamnopyranoside: [74545-40-7].
$C_{27}H_{32}O_{15}$ M 596.541
Isol. from *Cordia obliqua.* Yellow needles (EtOH). Mp 148° dec.

3′-O-(6-O-Phenylacetyl-β-D-glucopyranoside): [95519-27-0].
$C_{29}H_{28}O_{13}$ M 584.532
Isol. from *Pinus massoniana.* Amorph. $[\alpha]_D^{22}$ −21.6° (c, 0.9 in MeOH).

3-O-[β-D-Glucopyranosyl(1→4)-α-L-rhamnopyranoside]: [81645-92-3].
$C_{27}H_{32}O_{16}$ M 612.540
Isol. from *Diospyros peregrina.* Yellow-brown cryst. ($MeOH/Me_2CO$). Mp 106-107°.

3′-O-β-D-Glucopyranoside: [31106-05-5].
$C_{21}H_{22}O_{12}$ M 466.398
Isol. from *Cedrus deodara, Pinus silvestris* and *Pseudotsuga menziesii.* Powder (H_2O). Mp 203-209°. $[\alpha]_D^{25}$ −23° (H_2O).

3-O-β-D-Galactopyranoside: [77122-69-1]. ***Dihydrohyperin.*** *Taxifolin 3-galactoside*
$C_{21}H_{22}O_{12}$ M 466.398
Isol. from *Rhododendron* sp., *Betula lutea* and *Euphorbia* spp.

3-O-[β-D-Glucopyranosyl-(1→3)-α-L-rhamnopyranoside]: [138822-69-2]. ***Huangquioside E***
$C_{27}H_{32}O_{16}$ M 612.540
Isol. from the leaves of *Engelhardtia chrysolepis.* Needles + $2H_2O$ (MeOH aq.). Mp 229-231°. $[\alpha]_D^{25}$ −20° (c, 0.2 in EtOH).

3-O-[β-D-Galactopyranosyl-(1→6)-β-D-glucopyranoside]: [141736-93-8].
$C_{27}H_{30}O_{18}$ M 642.523
Constit. of *Crotalaria prostrata.*

7-O-α-D-Glucopyranoside: [106400-39-9].
$C_{21}H_{22}O_{12}$ M 466.398
Constit. of the flowers of *Acacia latifolia.*

3-Ac: [78834-97-6]. ***3-O-Acetyltaxifolin***
$C_{17}H_{14}O_8$ M 346.293
Isol. from *Baccharis varians, Inula viscosa* and *Tessaria dodoneifolia.* Cryst. ($CHCl_3$/EtOH). Mp 186-190°. $[\alpha]_D$ +31.6° (c, 0.75 in MeOH).

3-Me ether: 3′,4′,5,7-Tetrahydroxy-3-methoxyflavanone. ***Hultenin***
$C_{16}H_{14}O_7$ M 318.282
Isol. from heartwood of *Salix hultenii* var. *angustifolia.* Mp 208-209°. $[\alpha]_D^{19}$ +6.69°.

4′-Me ether: [70411-27-7]. *3,3′,5,7-Tetrahydroxy-4′-methoxyflavanone. 3′,5,7-Trihydroxy-4′-methoxydihydroflavonol*
$C_{16}H_{14}O_7$ M 318.282
Isol. from *Blumea balsamifera.* Light yellow powder. Mp 173-174°. $[\alpha]_D^{24}$ +14.9° (MeOH).

4′-Me ether, 3-rutinoside: [102904-44-9]. ***Anacheiloside***
$C_{28}H_{34}O_{16}$ M 626.567
Isol. from *Anacheilium* sp.

3′-Me ether: [55812-91-4]. *3,4′,5,7-Tetrahydroxy-3′-methoxyflavanone. 4′,5,7-Trihydroxy-3′-methoxydihydroflavonol.* ***Dihydroisorhamnetin***
$C_{16}H_{14}O_7$ M 318.282
Isol. from *Dillenia indica.* Pale yellow cryst. (EtOH aq.). Mp 230°. $[\alpha]_D^{27}$ +25° (EtOH).

7-Me ether: [80453-44-7]. *3,3′,4′,5-Tetrahydroxy-7-methoxyflavanone. 3′,4′,5-Trihydroxy-7-methoxydihydroflavanol.* ***Padmatin.*** *Dihydrorhamnetin*
$C_{16}H_{14}O_7$ M 318.282
Isol. from *Artemisia* spp., *Inula viscosa*, *Prunus puddum* and *Trixis vautheri*. Cryst. (EtOH/$CHCl_3$). Mp 184-186°. $[\alpha]_D$ +17.3° (c, 1.1 in MeOH).

7-Me ether, 5-O-β-D-glucopyranoside: [93078-94-5].
$C_{22}H_{24}O_{12}$ M 480.424
Isol. from *Podocarpus nivalis*. $[\alpha]_D^{21}$ −84.3° (MeOH).

7-Me ether, 3-Ac: [100595-93-5]. ***3-O-Acetylpadmatin***
$C_{18}H_{16}O_8$ M 360.320
Isol. from *Inula viscosa*. Cryst. ($CHCl_3$/EtOH). Mp 162-163°. $[\alpha]_D$ +41° (c, 0.84 in MeOH).

7-Me ether, 3-O-β-D-glucopyranoside: [34425-46-2].
$C_{22}H_{24}O_{12}$ M 480.424
Isol. from *Cassia javanica*. Cryst. (Me_2CO/MeOH). Mp 170°.

3′,7-Di-Me ether: [37971-67-8]. *3,4′,5-Trihydroxy-3′,7-dimethoxyflavanone. 4′,5-Dihydroxy-3′,7-dimethoxydihydroflavonol*
$C_{17}H_{16}O_7$ M 332.309
Isol. from *Artemisia* spp., *Blumea balsamifera*, *Grindelia discoidea*, *Eupatorium* sp. and *Trixis vautheri*. Cryst. (Me_2CO/pet. ether). Mp 184-186°.

4′,7-Di-Me ether: [79995-67-8]. *3,3′,5-Trihydroxy-4′,7-dimethoxyflavanone. 3′,5-Dihydroxy-4′,7-dimethoxydihydroflavonol*
$C_{17}H_{16}O_7$ M 332.309
Isol. from *Blumea balsamifera*. Light yellow powder. Mp 164-167°. $[\alpha]_D^{24}$ +14.8° (MeOH).

7-O-(3-Methyl-2-butenyl): [78876-51-4]. *3,3′,4′,5-Tetrahydroxy-7-prenyloxyflavanone. 3′,4′,5-Trihydroxy-7-prenyloxydihydroflavonol*
$C_{20}H_{20}O_7$ M 372.374
Isol. from *Pterocaulon virgatum*.

(2S,3R)-form

Epitaxifolin
Amorph. $[\alpha]_D^{20}$ +58.8° (c, 0.26 in Me_2CO).

3-O-β-D-Xylopyranoside: Constit. of *Thujopsis dolabrata*. Amorph. $[\alpha]_D^{24}$ +2.3° (c, 0.25 in Me_2CO).

3-O-α-L-Rhamnopyranoside: [54141-72-9]. ***Isoastilbin***
$C_{21}H_{22}O_{11}$ M 450.398
Constit. of *Engelhardtia chrysolepis*.

(2R,3S)-form

Amorph. $[\alpha]_D^{20}$ −59.5° (c, 0.13 in Me_2CO).

3-O-β-D-Glucopyranoside: [83648-98-0]. ***Isoglucodistylin***
$C_{21}H_{22}O_{12}$ M 466.398
Constit. of *T. kaempferi*. Amorph. powder. Mp 169-171°. $[\alpha]_D^{27}$ +25° (c, 0.3 in EtOH).

3-O-β-D-Xylopyranoside: Constit. of *T. dolabrata*. Amorph. $[\alpha]_D^{21}$ −93.3° (c, 0.89 in Me_2CO aq.).

3-O-α-L-Rhamnopyranoside: [54081-48-0]. ***Neoisoastilbin***
$C_{21}H_{22}O_{11}$ M 450.398
Constit. of *E. chrysolepis*.

(2S,3S)-form

Needles. Mp 219-220°. $[\alpha]_D^2$ −20.6° (c, 0.32 in Me_2CO).

3-O-β-D-Xylopyranoside: Constit. of *T. dolabrata*. Amorph. powder. $[\alpha]_D^{21}$ −122.2° (c, 1.00 in Me_2CO).

3-O-α-L-Rhamnopyranoside: [54081-47-9]. ***Neoastilbin***
$C_{21}H_{22}O_{11}$ M 450.398
Constit. of *E. chrysolepis*.

3-O-[β-D-Glucopyranosyl-(1→3)-α-L-rhamnopyranoside]: [138876-25-2]. *Neohuangquioside E*
Synthetic. Powder. $[\alpha]_D^{18}$ −103° (c, 0.21 in EtOH).

(2RS,3RS)-form

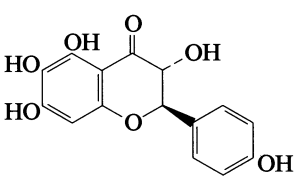
Mp 234-236°.

[5117-01-1, 63393-40-8, 64191-31-7, 64191-33-9, 82517-11-1, 83680-48-2, 117894-18-5]

Clark-Lewis, J.W. *et al*, *J. Chem. Soc.*, 1958, 2367 (*struct, abs config*)
Hergert, H.L. *et al*, *J. Org. Chem.*, 1958, **23**, 700 (*3′-glucoside*)
Chan, F.L. *et al*, *Talanta*, 1960, **3**, 272 (*detn, Mo*)
Aft, H. *et al*, *J. Org. Chem.*, 1961, **26**, 1958 (*isol, deriv*)
Birkofer, L. *et al*, *Z. Naturforsch., B*, 1962, **17**, 359 (*4′-glucoside*)
Batterham, T.J. *et al*, *Aust. J. Chem.*, 1964, **17**, 428 (*pmr*)
Grisebach, H. *et al*, *Z. Naturforsch., B*, 1965, **20**, 446 (*biosynth*)
Sasaya, T. *et al*, *CA*, 1966, **65**, 5435e (*Hultenin*)
Karrer, W. *et al*, *Konstitution und Vorkommen der Organischen Pflanzenstoffe*, 2nd Ed., Birkhäuser Verlag, Basel, 1972-1985, 1637 (*occur*)
Pavanasasivam, G. *et al*, *J. Chem. Soc., Perkin Trans. 1*, 1975, 612 (*Dihydroisorhamnetin*)
Gaffield, W. *et al*, *J. Org. Chem.*, 1975, **40**, 1057 (*Astilbins*)
The Flavonoids, (Eds. Harborne, J.B. *et al*), Chapman and Hall, London, 1975, 585 (*occur*)
King, B.L., *Am. J. Bot.*, 1977, **64**, 250 (*Dihydrohyperin*)
Srivastava, S.K. *et al*, *Phytochemistry*, 1979, **18**, 2058 (*dirhamnoside*)
Agrawal, P.K. *et al*, *Phytochemistry*, 1980, **19**, 1260 (*3′-glucoside*)
Ruangrungsi, N. *et al*, *J. Nat. Prod.* (*Lloydia*), 1981, **44**, 541 (*4′-Me and 4′,7-Di-Me ethers*)
Srivastava, S.D., *Phytochemistry*, 1981, **20**, 2445 (*5-galactoside*)
Sukurai, A. *et al*, *Bull. Chem. Soc. Jpn.*, 1982, **55**, 3051 (*Isoglucodistylin*)
Chauhan, J.S. *et al*, *Indian J. Chem., Sect. B*, 1982, **21**, 169 (*deriv*)
The Flavonoids: Advances in Research, (Eds. Harborne, J.B. *et al*), Chapman and Hall, London, 1982, 375 (*occur*)
Markham, K.R. *et al*, *Phytochemistry*, 1984, **23**, 2049 (*7-glucosides*)
Balza, F. *et al*, *Phytochemistry*, 1984, **23**, 2333 (*3,4′,5-Trihydroxy-3′,7-dimethoxyflavanone*)
Shen, Z. *et al*, *Phytochemistry*, 1985, **24**, 155.
Grande, M. *et al*, *Planta Med.*, 1985, 414 (*3-acetyl derivs*)
Ferreira, V.F. *et al*, *Biochem. Syst. Ecol.*, 1986, **14**, 199 (*Acheiloside*)
De Pascual Teresa, J. *et al*, *J. Nat. Prod.* (*Lloydia*), 1986, **49**, 177 (*7-Me ether*)
Voirin, B. *et al*, *J. Nat. Prod.* (*Lloydia*), 1986, **49**, 943 (*7-α-D-glucoside*)
Timmermann, B.N. *et al*, *Phytochemistry*, 1986, **25**, 723 (*3′,7-di-Me ether*)
Nonaka, G. *et al*, *Chem. Pharm. Bull.*, 1987, **35**, 1105 (*derivs*)
Kasai, R. *et al*, *Chem. Pharm. Bull.*, 1988, **36**, 4167; 1991, **39**, 1871 (*glucosylrhamnoside, 3-rhamnosides*)
Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th Ed., Van Nostrand-Reinhold, 1992, DMD000.

3,4′,5,6,7-Pentahydroxyflavanone P-10051

2,3-Dihydro-3,5,6,7-tetrahydroxy-2-(4-hydroxyphenyl)-4H-1-benzopyran-4-one. 4′,5,6,7-Tetrahydroxydihydroflavanol. 6-Hydroxydihydrokaempferol



$C_{15}H_{12}O_7$ M 304.256

(2R,3R)-form

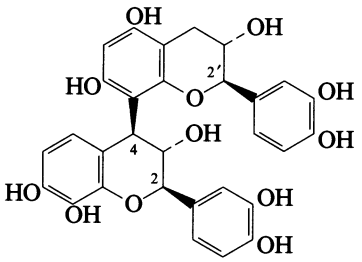
6-Me ether: [130926-73-7]. *3,4′,5,7-Tetrahydroxy-6-methoxyflavanone*
$C_{16}H_{14}O_7$ M 318.282
Constit. of *Hymenoxys turneri*. $[\alpha]_D$ +46° (c, 1.2 in MeOH).

6-Me ether, 3-Ac: [130926-71-5]. *3-Acetoxy-4′,5,7-trihydroxy-6-methoxyflavanone*
$C_{18}H_{16}O_8$ M 360.320

Constit. of *Hymenoxys turneri*. $[\alpha]_D$ +66° (c, 0.98 in MeOH).

Gao, F. *et al*, *Phytochemistry*, 1990, **29**, 2865.

3,3′,4′,7,8-Pentahydroxyflavan(4→8)-3,3′,4′,5,7-pentahydroxyflavan P-10052



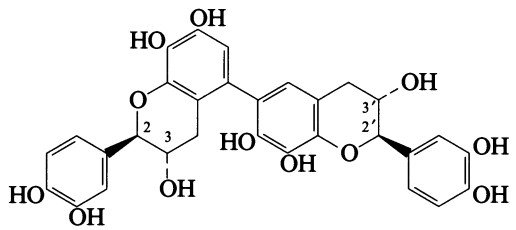
$C_{30}H_{26}O_{12}$ M 578.528

(2R,2′R,3S,3′S,4S)-form [109671-56-9] ***Mesquitol(4α→8)catechin***

Constit. of the heartwood of *Prosopis glandulosa*.

Young, E. *et al*, *J. Chem. Soc., Perkin Trans. 1*, 1986, 1737 (*isol*)

3,3′,4′,7,8-Pentahydroxyflavan(5→6′)-3,3′,4′,7,8-pentahydroxyflavan P-10053



$C_{30}H_{26}O_{12}$ M 578.528

(2R,2′R,3S,3′S)-form [89613-25-2] ***(5,6′)-Bismesquitol***

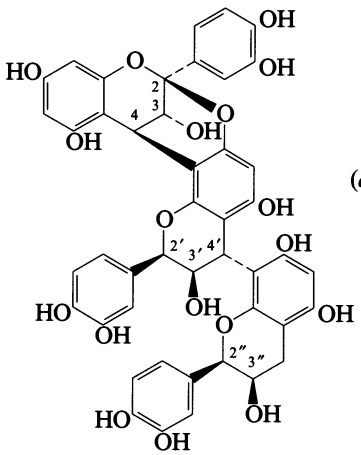
Constit. of the heartwood of *Prosopis glandulosa*.

Young, E. *et al*, *J. Chem. Soc., Perkin Trans. 1*, 1986, 1737 (*isol*)

3,3′,4′,5,7-Pentahydroxyflavan(2→7,4→8)-3,3′,4′,5,7-pentahydroxyflavan(4→8)-3,3′,4′,5,7-pentahydroxyflavan P-10054

Updated Entry replacing P-00539

2,8-Bis(3,4-dihydroxyphenyl)-4-[2-(3,4-dihydroxyphenyl)-3,4-dihydro-3,5,7-trihydroxy-2H-1-benzopyran-8-yl]-3,4-dihydro-8,14-methano-2H,14H-1-benzopyrano[7,8-d][1,3]benzodioxocin-3,5,11,13,15-pentol, 9CI



(all-R)-form

$C_{45}H_{36}O_{18}$ M 864.769

(all-R)-form [88082-60-4]

Epicatechin(2β→7,4β→8)epicatechin(4β→8)epicatechin. ***Cinnamtannin B$_1$***

Isol. from *Aesculus hippocastanum, Cinnamomum sieboldii, C. zeylanicum, Kandelia candel, Lindera umbellata* and *Vaccinium vitis-idaea*. Off-white amorph. powder + $2H_2O$. $[\alpha]_D^{25}$ +70.3° (c, 1.1 in Me_2CO).

(2R,2′R,2″R,3R,3′R,3″S,4R,4′R)-form [97233-06-2]

Epicatechin(2β→7,4β→8)epicatechin(4β→8)catechin. ***Cinnamtannin D$_1$***. *Pavetannin B$_5$*

Isol. from *C. sieboldii, L. umbellata, V. vitis-idaea* and *Pavetta owariensis*. Needles +$2H_2O$ (H_2O). Mp >300°. $[\alpha]_D^{22}$ +102.3° (c, 0.9 in Me_2CO).

(2R,2′S,2″R,3R,3′R,3″R,4R,4′R)-form [114612-77-0]

*Epicatechin(2β→7,4β→8)*ent-*catechin(4β→8)epicatechin.* ***Aesculitannin B***

Isol. from *A. hippocastanum*. Off-white amorph. powder + $2H_2O$. $[\alpha]_D^{21}$ +52.8° (c, 1.2 in Me_2CO).

(2R,2′S,2″R,3R,3′S,3″S,4R,4′S)-form [86631-43-8]

Catechin(2β→7,4β→8)-ent-*epicatechin(4β→8)catechin*

Isol. from *C.* sp.

(2R,2′R,2″R,3R,3′R,3″R,4R,4′S)-form

Epicatechin(2β→7,4β→8)-epicatechin(4α→8)-epicatechin. ***Pavetannin B$_2$***

Isol. from *P. owariensis*. Brown amorph. solid.

(2R,2′R,2″S,3R,3′R,3″S,4R,4′S)-form

Epicatechin(2β→7,4β→8)epicatechin(4α→8)-ent-*epicatechin.* ***Pavetannin B$_1$***

Isol. from the stem bark of *P. owariensis*. Light brown powder.

Nonaka, G. *et al*, *J. Chem. Soc., Perkin Trans. 1*, 1983, 2139 (*isol*)

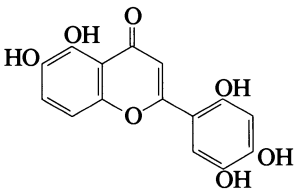
Hsu, F.L. *et al*, *Chem. Pharm. Bull.*, 1985, **33**, 3142 (*isol*)

Morimoto, S. *et al*, *Chem. Pharm. Bull.*, 1985, **33**, 4338; 1987, **35**, 4717; 1988, **36**, 33 (*isol*)

Ezaki, N. *et al*, *Planta Med.*, 1985, 34 (*isol*)

Baldé, A.M. *et al*, *Phytochemistry*, 1991, **30**, 4129 (*Pavetannins*)

2′,4′,5,5′,6-Pentahydroxyflavone P-10055



$C_{15}H_{10}O_7$ M 302.240

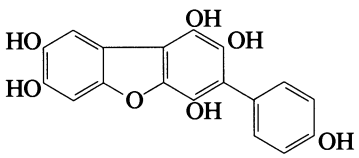
2′,6-Di-Me ether: [133538-68-8]. *4′,5,5′-Trihydroxy-2′,6-dimethoxyflavone*
$C_{17}H_{14}O_7$ M 330.293
Constit. of *Teucrium quadrifarium.*

Xie, N. *et al*, *CA*, 1990, **114**, 203515s.

1,2,4,7,8-Pentahydroxy-3-(4-hydroxyphenyl)dibenzofuran P-10056

Updated Entry replacing P-00595

3-(4-Hydroxyphenyl)-1,2,4,7,8-dibenzofuranpentol, 9CI



$C_{18}H_{12}O_7$ M 340.289

1,2-Di-Ac: BL V
$C_{22}H_{16}O_9$ M 424.363
Constit. of the mushroom *Boletopsis leucomelas.* 5-Lipoxygenase inhibitor. Amorph. brown powder.

1,2,4-Tri-Ac: [112209-53-7]. *BL IV*
$C_{24}H_{18}O_{10}$ M 466.400
Present in *B. leucomelaena* fruiting bodies. 5-Lipoxygenase inhibitor. Pale brown needles. Mp 242-245° dec.

1,2,4,7-Tetra-Ac: [112209-52-6].
$C_{26}H_{20}O_{11}$ M 508.437
Present in *B. leucomelaena.*

1,2,4,8-Tetra-Ac: [112209-54-8].
$C_{26}H_{20}O_{11}$ M 508.437
Present in *B. leucomelaena.*

1,2,4,4′-Tetra-Ac: BL III
$C_{26}H_{20}O_{11}$ M 508.437
Constit. of *B. leucomelas.* 5-Lipoxygenase inhibitor. Pale purple needles. Mp 194-196°.

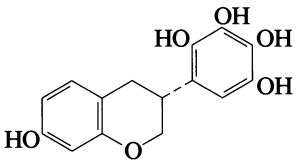
1,2,4,7,8-Penta-Ac: BL II
$C_{28}H_{22}O_{12}$ M 550.475
Constit. of *B. leucomelas.* 5-Lipoxygenase inhibitor. Needles. Mp 130-131°.

Hexa-Ac: [112209-51-5]. ***Protoleucomelone.*** *BL I*
$C_{30}H_{24}O_{13}$ M 592.512
Isol. from *B. leucomelaena* fruiting bodies. 5-Lipoxygenase inhibitor. Needles. Mp 203-204°. Originally descr. as a benzoquinone.

Jägers, E. *et al*, *Z. Naturforsch., B*, 1987, **42**, 1349.
Takahashi, A. *et al*, *Chem. Pharm. Bull.*, 1992, **40**, 3194 (*isol, struct*)

2′,3′,4′,5′,7-Pentahydroxyisoflavan P-10057

Updated Entry replacing P-00596



$C_{15}H_{14}O_6$ M 290.272

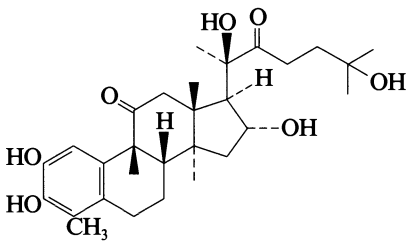
(R)-form

3′,4′-Di-Me ether, 2′,5′-di-O-β-D-glucopyranoside: [137217-85-7]. *2′,5′,7-Trihydroxy-3′,4′-dimethoxyisoflavan 2′,5-di-O-β-D-glucopyranoside*
$C_{29}H_{38}O_{16}$ M 642.610
Constit. of the roots of *Astragalus mongholicus.* Needles. Mp 160-162°. $[\alpha]_D$ −17.7° (c, 0.3 in MeOH).

2′,3′,4′-Tri-Me ether: [139906-02-8]. *5′,7-Dihydroxy-2′,3′,4′-trimethoxyisoflavan.* ***5′-Hydroxy-3′-methoxysativan***
$C_{18}H_{20}O_6$ M 332.352
Constit. of *Medicago sativa.* Mp 137-138°. $[\alpha]_D^{27}$ +7.5° (c, 0.48 in $CHCl_3$).

Subarnas, A. *et al*, *Phytochemistry*, 1991, **30**, 2777.
Spencer, G.F. *et al*, *Phytochemistry*, 1991, **30**, 4147 (*5′-Hydroxy-3′-methoxysativan*)

2,3,16,20,25-Pentahydroxy-29-norcucurbita-1,3,5(10)-triene-11,22-dione P-10058



$C_{29}H_{42}O_7$ M 502.647

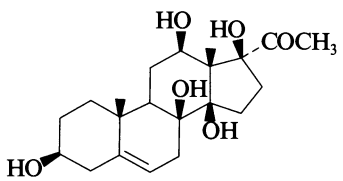
(16α,20R)-form

2-O-β-D-Glucopyranoside, 25-Ac: [147742-04-9].
$C_{37}H_{54}O_{13}$ M 706.826
Constit. of *Wilbrandia ebracteata.* Amorph. Mp 136-138°.

Farias, M.R. *et al*, *Planta Med.*, 1993, **59**, 272 (*isol, pmr, cmr*)

3,8,12,14,17-Pentahydroxypregn-5-en-20-one P-10059

Updated Entry replacing P-00684



$C_{21}H_{32}O_6$ M 380.480

(3β,12β,14β,17βOH)-form

Deacetylmetaplexigenin
Cryst. (Me_2CO). Mp 220-224°.

12-Ac: [3513-02-8]. ***Metaplexigenin.*** *Genin F*
$C_{23}H_{34}O_7$ M 422.517

Isol. from *Marsdenia rostrata* and *Sarcostemma viminale*. Mp 264°. $[\alpha]_D$ −22.5° (MeOH).

12-Benzoyl: ***12-O-Benzoyldesacetylmetaplexigenin.*** *Genin G*
$C_{28}H_{36}O_7$ M 484.588
From *S. viminale*. Mp 268-275°. $[\alpha]_D$ −39.5° (MeOH).

12-(3,4-Dimethyl-2E-pentenoyl): [38395-02-7]. ***Caudatin***
$C_{28}H_{42}O_7$ M 490.636
Constit. of *Cynanchum caudatum*. Cryst. Mp 158-160°, Mp 190-195°. $[\alpha]_D^{20}$ +20.8° (c, 0.5 in $CHCl_3$).

12-(3,4-Dimethyl-2E-pentenoyl), 5α,6α-epoxide: [61252-37-7]. ***5α,6α-Epoxycaudatin***
$C_{28}H_{42}O_8$ M 506.635
Constit. of *C. caudatum*. Cryst. (EtOAc/hexane). Mp 215-219.5°. $[\alpha]_D$ −30° (c, 0.23 in MeOH).

12-(3-Pyridinecarboxyl): see *Rostratamine, R-00391*

12-Benzoyl, 3-O-[β-D-cymaropyranosyl-(1→4)-β-D-oleandropyranosyl-(1→4)-oleandropyranosyl-(1→4)-β-D-cymaropyranosyl-(1→4)-β-D-cymaropyranoside]: ***Calotroposide B***
$C_{63}H_{96}O_{22}$ M 1205.438
Constit. of the roots of *Calotropis gigantea*. Amorph. solid. $[\alpha]_D^{22}$ +12.2° (c, 0.9 in $CHCl_3$).

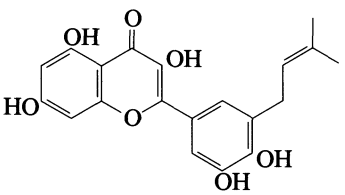
12-Benzoyl, 3-O-[β-D-oleandropyranosyl-(1→4)-β-D-oleandropyranosyl-(1→4)-β-D-oleandropyranosyl-(1→4)-β-D-cymaropyranosyl-(1→4)-β-D-cymaropyranoside]: ***Calotroposide C***
$C_{63}H_{96}O_{22}$ M 1205.438
Constit. of the roots of *C. gigantea*. Amorph. solid. $[\alpha]_D^{23}$ −1.9° (c, 1.2 in $CHCl_3$).

12-Benzoyl, 3-O-[β-D-oleandropyranosyl-(1→4)-β-D-oleandropyranosyl-(1→4)-β-D-cymaropyranosyl-(1→4)-β-D-cymaropyranoside]: ***Calotroposide E***
$C_{56}H_{84}O_{19}$ M 1061.268
Constit. of the roots of *C. gigantea*. Amorph. solid. $[\alpha]_D^{23}$ −1.6° (c, 1.4 in $CHCl_3$).

Mitsuhashi, H. *et al, Chem. Pharm. Bull.*, 1966, **14**, 712 (*struct*)
Schaub, F. *et al, Helv. Chim. Acta*, 1968, **51**, 738 (*isol, bibl*)
Yamagishi, T. *et al, Chem. Pharm. Bull.*, 1972, **20**, 625 (*isol*)
Summons, R.E. *et al, Phytochemistry*, 1972, **11**, 3335 (*isol*)
Bando, H. *et al, Chem. Pharm. Bull.*, 1980, **28**, 2258 (*isol*)
Kitagawa, I. *et al, Chem. Pharm. Bull.*, 1992, **40**, 2007, 2647 (*Calotroposides*)

3,3′,4′,5,7-Pentahydroxy-5′-prenylflavone P-10060

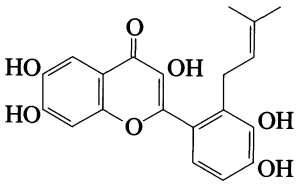
3′,4′,5,7-Tetrahydroxy-5′-prenylflavonol. ***Uralenol***
[139163-15-8]



$C_{20}H_{18}O_7$ M 370.358
Constit. of the leaves of *Glycyrrhiza uralensis*.
Jia, S.S. *et al, Yaoxue Xuebao*, 1991, **25**, 758; *CA*, **117**, 86658 (*isol*)

3,3′,4′,6,7-Pentahydroxy-2′-prenylflavone P-10061

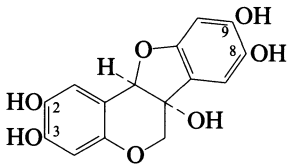
3′,4′,6,7-Tetrahydroxy-2′-prenylflavonol. ***Neouralenol***
[139163-16-9]



$C_{20}H_{18}O_7$ M 370.358
Constit. of the leaves of *Glycyrrhiza uralensis*.
Jia, S.S. *et al, Yaoxue Xuebao*, 1991, **25**, 758; *CA*, **117**, 86658 (*isol*)

2,3,6*a*,8,9-Pentahydroxypterocarpan P-10062

Updated Entry replacing P-00710



$C_{15}H_{12}O_7$ M 304.256

2-Me, 8,9-methylene ether: [99624-64-3]. *3,6a-Dihydroxy-2-methoxy-8,9-methylenedioxypterocarpan.* ***Hildecarpin***
$C_{17}H_{14}O_7$ M 330.293
Isol. from roots of *Tephrosia hildebrandtii*. Shows insect antifeedant and antifungal props.

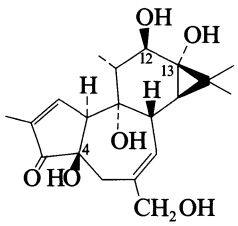
3-Me, 8,9-methylene ether: 2,6a-Dihydroxy-3-methoxy-8,9-methylenedioxypterocarpan. ***2-Hydroxypisatin***
$C_{17}H_{14}O_7$ M 330.293
Isol. from $CuCl_2$-treated seedlings of *Pisum sativum*. Phytotoxin. $[\alpha]_D^{28}$ +216° (c, 0.3 in EtOH).

2,3-Di-Me, 8,9-methylene ether: [83159-18-6]. *6a-Hydroxy-2,3-dimethoxy-8,9-methylenedioxypterocarpan.* ***Lathycarpin***
$C_{18}H_{16}O_7$ M 344.320
Phytoalexin from leaves of *Lathyrus sativus*. $[\alpha]_D^{21}$ +232° (c, 0.012 in MeOH).

Ingham, J.L. *et al, Z. Naturforsch., C*, 1982, **37**, 724 (*isol, uv, pmr, struct, abs config, Lathycarpin*)
Lwande, W. *et al, Insect Sci. Its Appl.*, 1985, **6**, 537; 1986, **7**, 501; *CA*, **104**, 31710; **106**, 15746 (*Hildecarpin*)
Kobayashi, A. *et al, Phytochemistry*, 1993, **22**, 77 (*2-Hydroxypisatin*)

4,9,12,13,20-Pentahydroxy-1,6-tigliadien-3-one P-10063

Updated Entry replacing P-00718



$C_{20}H_{28}O_6$ M 364.438

(4β,9α,12β,13α)-form [17673-25-5] ***Phorbol***
Produced by hydrolysis of cocarcinogens from croton oil (*Croton tiglium*) and from *Sapium* and *Euphorbia* spp. Cryst. + MeOH (MeOH). Mp 240-250°, Mp 250-251° dec. (solvent free). $[\alpha]_D^{20}$ +118° (c, 0.4 in dioxan).

▷ Skin irritant. Esters are potent tumour-promoting agents. GZ0600000.

12-Tetradecanoyl, 13-Ac: [16561-29-8]. ***Cocarcinogen A1.*** *Cocarcinogen C3. PMA. TPA*
$C_{36}H_{56}O_8$ M 616.834
Constit. of croton oil. Oil. $[\alpha]_D^{24}$ +49° (c, 1 in dioxan).
▷ Skin irritant. Tumour promoter. LD_{50} (mus, ivn) 0.3 mg/kg. Exp. teratogen. GZ0630000.

12-Decanoyl, 13-Ac: [16561-27-6]. ***Cocarcinogen A2***
$C_{32}H_{48}O_8$ M 560.726
Constit. of croton oil. Oil.
▷ Tumour promoter.

12-Dodecanoyl, 13-Ac: ***Cocarcinogen A3***
$C_{34}H_{52}O_8$ M 588.780
Constit. of croton oil. Oil.
▷ Tumour promoter.

12-Hexadecanoyl, 13-Ac: [20839-12-7]. ***Cocarcinogen A4***
$C_{38}H_{60}O_8$ M 644.887
Constit. of croton oil. Oil.
▷ Tumour promoter.

13-Dodecanoyl, 12-(2S-methylbutanoyl): [63040-44-8]. ***Cocarcinogen B1***
$C_{37}H_{58}O_8$ M 630.860
Constit. of croton oil. Oil. $[\alpha]_D^{26}$ +54° (c, 1.8 in $CHCl_3$).
▷ Tumour promoter.

13-Decanoyl, 12-(2S-methylbutanoyl): [63040-43-7]. ***Cocarcinogen B2***
$C_{35}H_{54}O_8$ M 602.807
Constit. of croton oil. Oil. $[\alpha]_D^{26}$ +50° (c, 1.3 in $CHCl_3$).
▷ Tumour promoter.

13-Decanoyl, 12-tigloyl: ***Cocarcinogen B3***
$C_{35}H_{52}O_8$ M 600.791
Constit. of croton oil. Oil.
▷ Tumour promoter.

13-Dodecanoyl, 12-Ac: ***Cocarcinogen B4***
$C_{34}H_{52}O_8$ M 588.780
Constit. of croton oil. Oil.
▷ Tumour promoter.

12-(2S-Methylbutanoyl), 13-octanoyl: ***Cocarcinogen B5***
$C_{33}H_{50}O_8$ M 574.753
Constit. of croton oil. Oil.
▷ Tumour promoter.

13-Octanoyl, 12-tigloyl: ***Cocarcinogen B6***
$C_{33}H_{48}O_8$ M 572.737
Constit. of croton oil. Oil.
▷ Tumour promoter.

13-Decanoyl, 12-Ac: [16561-28-7]. ***Cocarcinogen B7***
$C_{32}H_{48}O_8$ M 560.726
Constit. of croton oil. Oil.
▷ Tumour promoter. GZ0617000.

12-(2Z,4E-Octadienoyl), 13-Ac: [64604-11-1]. ***Euphorbia factor Ti_5***
$C_{30}H_{40}O_8$ M 528.641
Constit. of *E. tirucalli.*

12-(2Z,4E,6-Decatrienoyl), 13-Ac: [64626-48-8]. ***Euphorbia factor Ti_6***
$C_{32}H_{42}O_8$ M 554.679
Constit. of *E. tirucalli.*

12-(2,4,6,8,10-tetradecapentaenoyl), 13-Ac: [64604-10-0]. ***Euphorbia factor Ti_7***
$C_{36}H_{46}O_8$ M 606.755
Constit. of *E. tirucalli.*

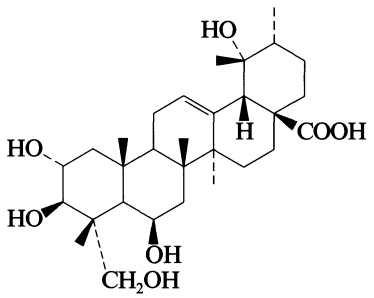
12-(2,4,6,8-Tetradecatetraenoyl), 13-Ac: [64604-09-7]. ***Euphorbia factor Ti_8***
$C_{36}H_{48}O_8$ M 608.770
Constit. of *E. tirucalli.*

13-(2,4,6,8,10-Tetradecapentaenoyl), 12-Ac: [64633-54-1]. ***Euphorbia factor Ti_9***
$C_{36}H_{46}O_8$ M 606.755
Constit. of *E. tirucalli.*

(4α,9α,12β,13α)-form [26241-63-4] ***Isophorbol.*** *4α-Phorbol*
$C_{20}H_{28}O_6$ M 364.438
Constit. of croton oil. Hygroscopic cryst. (EtOAc). Mp 135-150°.

Hecker, E., *Cancer Res.*, 1968, **28**, 2338 (*isol*)
Jacobi, P. *et al*, *Justus Liebigs Ann. Chem.*, 1970, **741**, 13 (*Isophorbol*)
Brandl, F. *et al*, *Acta Crystallogr., Sect. B*, 1971, **27**, 1718 (*cryst struct*)
Hecker, E. *et al*, *Prog. Chem. Org. Nat. Prod.*, 1974, **31**, 377 (*rev*)
Upadhyay, R.R. *et al*, *Phytochemistry*, 1976, **15**, 1070 (*isol*)
Kupchan, S.M. *et al*, *Science* (*Washington, D.C.*), 1976, **191**, 571 (*isol*)
Tseng, S.-S. *et al*, *J. Org. Chem.*, 1977, **42**, 3645 (*Isophorbol*)
Taylor, S.E. *et al*, *Phytochemistry*, 1983, **22**, 1231 (*isol*)
Evans, F.J. *et al*, *Prog. Chem. Org. Nat. Prod.*, 1983, **44**, 1 (*rev*)
Marshall, G.T. *et al*, *J. Nat. Prod.* (*Lloydia*), 1985, **48**, 823 (*pmr*)
Fürstenberger, G. *et al*, *J. Nat. Prod.* (*Lloydia*), 1986, **49**, 386 (*isol*)
Naturally Occurring Phorbol Esters, (ed., Evans, F.J.), CRC Press, 1986 (*book*)
Wender, P.A. *et al*, *J. Am. Chem. Soc.*, 1990, **112**, 4956 (*synth*)
Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th Ed., Van Nostrand-Reinhold, 1992, PGS250, PGS500, PGU250, PGU500, PGU000, PGV000.

2,3,6,19,23-Pentahydroxy-12-ursen-28-oic acid P-10064



$C_{30}H_{48}O_7$ M 520.705

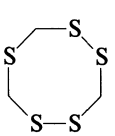
(2α,3β,6β,19α)-form
6,23-Dihydroxytormentic acid
Constit. of *Aphloia madagascariensis.* Powder. Mp 254-258°. $[\alpha]_D^{25}$ +8° (c, 0.1 in MeOH).

β-D-Glucopyranosyl ester:
$C_{36}H_{58}O_{12}$ M 682.847
Constit. of *A. madagascariensis.* Powder. Mp 205-208°. $[\alpha]_D^{25}$ −8° (c, 0.1 in MeOH).

Dijoux, M.-G. *et al*, *Phytochemistry*, 1993, **34**, 497 (*isol, pmr, cmr*)

1,2,4,5,7-Pentathiocane, 9CI P-10065

1,2,4,5,7-Pentathiacyclooctane
[81531-39-7]



$C_3H_6S_5$ M 202.410
Constit. of the seeds of *Parkia speciosa* and the mushroom *Lentinus edodes.* Prisms ($CHCl_3$/hexane). Mp 102-104°. Prod. from *Parkia* sp. may be the 1,2,3,5,7-Pentathiocane isomeric compd. Data given above.
[81531-40-0]

Gmelin, R. *et al*, *Phytochemistry*, 1981, **20**, 2521 (*isol*)
Holzmann, G. *et al*, *Org. Mass Spectrom.*, 1982, **17**, 165 (*ms*)
Chen, C.C. *et al*, *J. Agric. Food Chem.*, 1986, **34**, 830 (*occur*)

6,26-Pentatriacontadien-2-one, 9CI P-10066

$H_3C(CH_2)_7CH{=}CH(CH_2)_{18}CH{=}CH(CH_2)_3COCH_3$

$C_{35}H_{66}O$ M 502.906

(Z,Z)-form [133530-17-3]
Isol. from the snake *Boiga irregularis*.

Murata, Y. *et al*, *J. Nat. Prod.* (*Lloydia*), 1991, **54**, 233 (*isol, pmr, cmr*)

8,26-Pentatriacontadien-2-one, 9CI P-10067

$H_3C(CH_2)_7CH{=}CH(CH_2)_{16}CH{=}CH(CH_2)_5COCH_3$

$C_{35}H_{66}O$ M 502.906

(Z,Z)-form [133530-18-4]
Isol. from the snake *Boiga irregularis*.

Murata, Y. *et al*, *J. Nat. Prod.* (*Lloydia*), 1991, **54**, 233 (*isol*)

1-Pentatriacontanol, 9CI P-10068

[55517-90-3]

$H_3C(CH_2)_{33}CH_2OH$

$C_{35}H_{72}O$ M 508.953
Constit. of *Erythrina stricta* bark and *Strobilanthes callosus* flowers. Cryst. (C_6H_6). Mp 91.5°.

[103215-65-2]

Jones, R.G., *J. Am. Chem. Soc.*, 1947, **69**, 2350 (*synth*)
Tasumi, M. *et al*, *Spectrochim. Acta*, 1964, **20**, 629 (*synth, ir*)
Ilyas, M. *et al*, *J. Indian Chem. Soc.*, 1979, **56**, 315 (*isol*)
Singh, H. *et al*, *J. Nat. Prod.* (*Lloydia*), 1981, **44**, 526 (*isol*)
Rao, S.J. *et al*, *Indian J. Chem., Sect. B*, 1987, **26**, 208 (*synth*)

3-Pentatriacontanone P-10069

[79097-22-6]

$H_3C(CH_2)_{31}COCH_2CH_3$

$C_{35}H_{70}O$ M 506.937
Constit. of the leaves and stems of *Hyoscamus muticus*. Cryst. (Me_2CO). Mp 86-87°.

Goswami, A. *et al*, *Phytochemistry*, 1981, **20**, 1315 (*isol*)

4-Pentatriacontanone, 9CI P-10070

[92122-81-1]

$H_3C(CH_2)_{30}COCH_2CH_2CH_3$

$C_{35}H_{70}O$ M 506.937
Constit. of the leaves and stems of *Duboisia myoporoides*. Cryst. (Me_2CO). Mp 74°.

Shukla, Y.N. *et al*, *Phytochemistry*, 1984, **23**, 799 (*isol, ir, pmr, ms*)

5-Pentatriacontanone P-10071

[70342-19-7]

$H_3C(CH_2)_{29}CO(CH_2)_3CH_3$

$C_{35}H_{70}O$ M 506.937
Constit. of the stem bark of *Ficus bengalensis*.

Subramanian, P.M. *et al*, *Pol. J. Pharmacol. Pharm.*, 1978, **30**, 559 (*isol*)

1-Pentatriaconten-17-ol, 9CI P-10072

[133956-30-6]

$H_3C(CH_2)_{17}CH(OH)(CH_2)_{14}CH{=}CH_2$

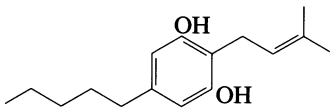
$C_{35}H_{70}O$ M 506.937
Constit. of the leaves of *Adenocalymma alliaceum*. Cryst. (Me_2CO). Mp 87-88°.

[133956-32-8]

Misra, T.N. *et al*, *Phytochemistry*, 1991, **30**, 541 (*isol*)

5-Pentyl-2-prenyl-1,3-benzenediol P-10073

2-(3-Methyl-2-butenyl)-5-pentyl-1,3-benzenediol

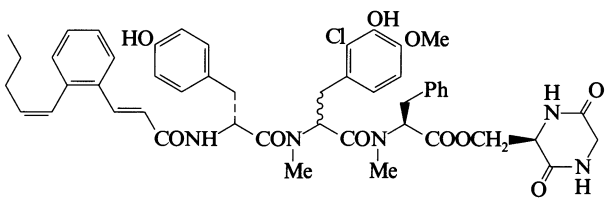


$C_{16}H_{24}O_2$ M 248.364

3-Me ether: [80489-92-5]. *3-Methoxy-5-pentyl-2-prenylphenol*
$C_{17}H_{26}O_2$ M 262.391
Isol. from the aerial parts of *Glycyrrhiza acanthocarpa*. Oil. $Bp_{0.1}$ 150° (bath).

Ghisalberti, E.L. *et al*, *Phytochemistry*, 1981, **20**, 1959.

Pepticinnamin P-10074



Pepticinnamin E

Oligopeptide antibiotic complex. Only the struct. of the major component (E) has been elucidated. Prod. by *Streptomyces* sp. OH-4652. Farnesyl-protein transferase inhibitor.

Pepticinnamin A [147171-73-1]
$C_{49}H_{56}ClN_5O_{11}$ M 926.461
Powder. Mp 136-138°. $[\alpha]_D^{26}$ −98.9° (c, 0.3 in MeOH).

Pepticinnamin B [147171-74-2]
$C_{49}H_{56}ClN_5O_{11}$ M 926.461
Powder. Mp 134-137°. $[\alpha]_D^{26}$ −124.2° (c, 0.35 in MeOH).

Pepticinnamin C [147171-71-9]
$C_{49}H_{54}ClN_5O_{11}$ M 924.445
Powder. Mp 125-127°. $[\alpha]_D^{26}$ −151.9° (c, 0.8 in MeOH).

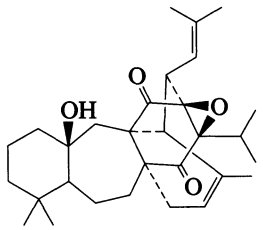
Pepticinnamin D [147171-72-0]
$C_{49}H_{55}N_5O_{10}$ M 874.001
Powder. Mp 137-139°. $[\alpha]_D^{26}$ −212.3° (c, 0.3 in MeOH).

Pepticinnamin E [147317-36-0]
$C_{49}H_{54}ClN_5O_{10}$ M 908.446
Powder. Mp 143-146°. $[\alpha]_D^{26}$ −207° (c, 0.8 in MeOH).

Pepticinnamin F [147171-70-8]
$C_{49}H_{53}Cl_2N_5O_{10}$ M 942.891
Powder. Mp 143-146°. $[\alpha]_D^{26}$ −193.5° (c, 0.7 in MeOH).

Omura, S. *et al*, *J. Antibiot.*, 1993, **46**, 222 (*isol, props*)
Shiomi, K. *et al*, *J. Antibiot.*, 1993, **46**, 229 (*struct, Pepticinnamin E*)

Peradione P-10075

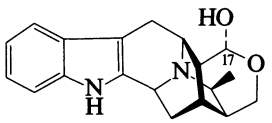


$C_{30}H_{42}O_4$ M 466.659
Constit. of *Perovskia abrotanoides*. Needles (MeOH). Mp 210°.

Ahmad, V.U. *et al*, *Tetrahedron Lett.*, 1993, **34**, 5337 (*isol, pmr, cmr*)

Peraksine P-10076

Updated Entry replacing P-00807
17,19-Epoxy-19,20-dihydro-21-methyl-18-norsarpagan-17-ol, 9CI. Vomifoline. Alkaloid RP5
[15527-80-7]



Relative configuration

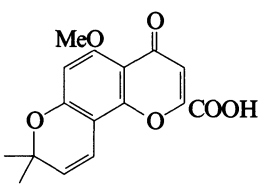
$C_{19}H_{22}N_2O_2$ M 310.395
Alkaloid from *Rauwolfia perakensis* and several other *R.* spp. (Apocynaceae). Cryst. (MeOH). Mp 186°, Mp 196-198°. $[\alpha]_D^{25}$ +44° (c, 0.86 in EtOH). The 17-config. is not clear from the crystallographic paper.

O-*Ac:* Mp 142°.
O-*Benzoyl:* Cryst. + $\frac{1}{2}$ H_2O (EtOH aq.). Mp 205-206°.
B,MeI: Needles (MeOH). Mp 310°.
17-Epimer: [20911-77-7]. ***Alkaloid RB20***
$C_{19}H_{22}N_2O_2$ M 310.395
Alkaloid from *R. verticillata* (Apocynaceae). Prisms ($CHCl_3$/MeOH trace). Mp 196-197°. $[\alpha]_D$ +19° (c, 0.48 in MeOH).

Kiang, A.K. *et al*, *Tetrahedron*, 1966, **22**, 3293 (*uv, ms, pmr, cryst struct*)
Arthur, H.R. *et al*, *Aust. J. Chem.*, 1968, **21**, 1399 (*ms, pmr, struct*)
Habib, M.S. *et al*, *Phytochemistry*, 1974, **13**, 661 (*isol, uv, ir, ms*)
Pousset, J.-L. *et al*, *Phytochemistry*, 1977, **16**, 153 (*uv, ir, pmr, ms, struct*)

Perforatic acid P-10077

5-Methoxy-8,8-dimethyl-4-oxo-4H,8H-benzo[1,2-b:3,4-b']dipyran-2-carboxylic acid, 9CI. Niu-Jing V
[94736-67-1]



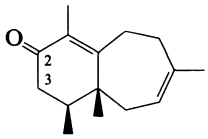
$C_{16}H_{14}O_6$ M 302.283
Isol. from the roots of *Harrisonia perforata*. Exhibits antitumour activity.

[94736-66-0]

Wang, M. *et al*, *Yaoxue Xuebao*, 1984, **19**, 760; *CA*, **102**, 84297 (*isol*)
Wei, X. *et al*, *Jiegou Huaxue*, 1985, **4**, 281; *CA*, **106**, 18191 (*cryst struct*)

Perforenone P-10078

Updated Entry replacing P-00817
[66113-28-8]

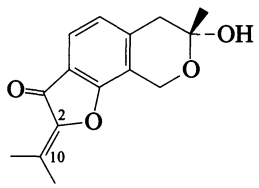


$C_{15}H_{22}O$ M 218.338
Constit. of *Laurencia perforata*. Oil. $[\alpha]_D$ −120°.
2α-Alcohol: [66113-20-0]. ***Guadalupol***
$C_{15}H_{24}O$ M 220.354
Constit. of *L. snyderae*. Oil.
2β-Alcohol: [66113-19-7]. ***Epiguadalupol***
$C_{15}H_{24}O$ M 220.354
Constit. of *L. snyderae*. Oil.
3α-Chloro: [57567-00-7]. ***Perforenone B***
$C_{15}H_{21}ClO$ M 252.783
Constit. of *L. perforata*. Cryst. Mp 190°. $[\alpha]_D$ −117°.
3α-Hydroxy: [57566-99-1]. ***Perforenone A***
$C_{15}H_{22}O_2$ M 234.338
Constit. of *L. perforata*. Mp 120-121°. $[\alpha]_D$ −116°.
3β-Hydroxy: [66141-71-7]. ***Perforenone C***
$C_{15}H_{22}O_2$ M 234.338
Constit. of *L. perforata*. Cryst. Mp 67-68°. $[\alpha]_D$ −29°.

Gonzalez, A.G. *et al*, *Tetrahedron Lett.*, 1975, 2499; 1977, 3375; 1978, 481 (*isol, struct, synth*)
Howard, B.M. *et al*, *Phytochemistry*, 1979, **18**, 1229 (*Guadalupol, Epiguadalupol*)
Majetich, G. *et al*, *Heterocycles*, 1987, **25**, 271 (*synth*)

Pergillin P-10079

6,9-Dihydro-7-hydroxy-7-methyl-2-(1-methylethylidene)-7H-furo[3,2-h][2]benzopyran-3(2H)-one, 9CI
[74798-20-2]

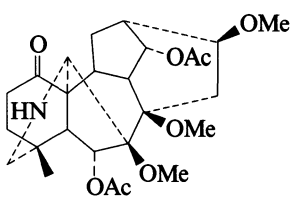


$C_{15}H_{16}O_4$ M 260.289
Prod. by *Aspergillus ustus* growing on seeds of *Pisum sativum*. Plant growth inhibitor.
2,10-Dihydro: [81118-18-5]. ***Dihydropergillin***
$C_{15}H_{18}O_4$ M 262.305
Prod. by *A. ustus*. Plant growth inhibitor. C-2 config. not determined.

Cutler, H.G. *et al*, *J. Agric. Food Chem.*, 1980, **28**, 989 (*isol*)

Pergilone P-10080

[142609-20-9]



$C_{26}H_{37}NO_8$ M 491.580

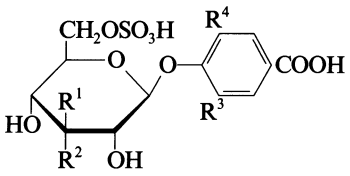
Alkaloid from aerial parts of *Delphinium peregrinum* (Ranunculaceae). $[\alpha]_D^{25}$ +4.2° (c, 0.1 in MeOH).

Ulubelen, A. *et al*, *Phytochemistry*, 1992, **31**, 1019 (*isol, ir, pmr, cmr, struct*)

Periodic leaf movement factors P-10081

Updated Entry replacing K-00313

PLMF



PLMF 1 R^1 = R^3 = R^4 = OH, R^2 = H
PLMF 2 R^1 = OSO_3H, R^2 = H, R^3 = R^4 = OH
PLMF 3 R^1 = R^4 = OH, R^2 = R^3 = H
PLMF 4 R^1 = OH, R^2 = R^3 = R^4 = H
PLMF 5 R^1 = OH, R^2 = R^3 = H, R^4 = OMe
PLMF 6 R^1 = H, R^2 = R^3 = R^4 = OH

Isol. from *Acacia karroo, Gleditsia triacanthos* and other plants. Substances controlling thigmonastic and nyctinastic leaf movements.

PLMF 1 [80220-30-0]
3,5-Dihydroxy-4-[(6-O-sulfo-β-D-glucopyranosyl)oxy] benzoic acid, 9CI
$C_{13}H_{16}O_{13}S$ M 412.328
Isol. from *A. karroo, Mimosa pudica* and *G. triacanthos.*

PLMF 2 [84607-63-6]
4-[(3,6-Di-O-sulfo-β-D-glucopyranosyl)oxy]-3,5-dihydroxybenzoic acid, 9CI
$C_{13}H_{16}O_{16}S_2$ M 492.392
Isol. from *A. karroo.*

PLMF 3 [87687-74-9]
3-Hydroxy-4-[(6-O-sulfo-β-D-glucopyranosyl)oxy]benzoic acid, 9CI
$C_{13}H_{16}O_{12}S$ M 396.328
Isol. from *Oxalis stricta* and *G. triacanthos.*

PLMF 4 [87700-13-8]
4-[(6-O-Sulfo-β-D-glucopyranosyl)oxy]benzoic acid, 9CI
$C_{13}H_{16}O_{11}S$ M 380.329
Isol. from *G. triacanthos.*

PLMF 5 [94851-01-1]
3-Methoxy-4-[(6-O-sulfo-β-D-glucopyranosyl)oxy]benzoic acid, 9CI
$C_{14}H_{18}O_{12}S$ M 410.355
Isol. from *G. triacanthos.*

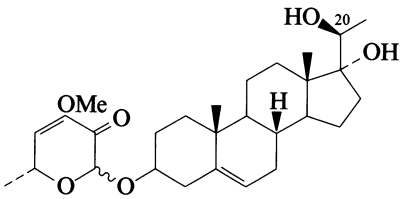
PLMF 6 [104075-62-9]
3,5-Dihydroxy-4-[(6-O-sulfo-β-D-allopyranosyl)oxy]benzoic acid, 9CI
$C_{13}H_{16}O_{13}S$ M 412.328
Isol. from *G. triacanthos.*

Schildknecht, H. *et al*, *Chem.-Ztg.*, 1981, **105**, 287; 1982, **106**, 421; 1983, **107**, 111, 233; 1984, **108**, 399 (*isol, pmr, cmr, ms*)
Schildknecht, A., *Angew. Chem., Int. Ed. Engl.*, 1983, **22**, 695.
Schildknecht, H. *et al*, *Z. Naturforsch., C*, 1986, **41**, 547 (*isol, struct, synth*)
Schildknecht, H. *et al*, *Carbohydr. Res.*, 1987, **164**, 23 (*synth, PLMF 1*)

Periplocagenin P-10082

2-[(17,20-Dihydroxypregn-5-en-3-yl)oxy]-4-methoxy-6-methyl-2H-pyran-3(6H)-one, 9CI

[112899-63-5]



$C_{28}H_{42}O_6$ M 474.636
Aglycone isol. from *Periploca sepium.* Needles ($C_6H_6/CHCl_3$). Mp 203-206°. $[\alpha]_D^{20}$ −51.2° (c, 0.3 in MeOH).

*20-O-(2,6-Dideoxy-*arabino*-hexopyranoside):* [116782-73-1].
Periplocoside M
$C_{34}H_{52}O_9$ M 604.779
Constit. of *P. sepium.* Needles. Mp 195-197°. $[\alpha]_D$ −89.91° (c, 0.23 in MeOH).

*20-O-(2,6-Dideoxy-3-O-methoxymethyl-*arabino*-hexapyranoside):* [116709-67-2]. ***Periplocoside O***
$C_{36}H_{56}O_{10}$ M 648.832
Constit. of *P. sepium.* Powder. Mp 103-106°. $[\alpha]_D^{20}$ −84.0° (c, 0.05 in MeOH).

*20-O-[β-D-Cymaropyranosyl-(1→5)-3,7-dideoxy-O-methyl-α-D-*gluco*-2-heptulopyranosyl-(2→4)-dioxy-(1→3)-β-D-canaropyranoside]:* [114828-47-6]. ***Periplocoside C***
$C_{49}H_{76}O_{16}$ M 921.130
Constit. of *P. sepium.* Powder. Mp 180-182°. $[\alpha]_D^{20}$ −8.4° (c, 0.3 in $CHCl_3$).

*20-O-[β-D-Cymaropyranosyl-(1→4)-β-D-cymaropyranosyl-(1→5)-3,7-dideoxy-4-O-methyl-α-D-*gluco*-2-heptulopyranosyl-(2→4)-dioxy-β-D-canaropyranoside]:* [115743-49-2]. ***Periplocoside B***
$C_{56}H_{88}O_{19}$ M 1065.300
Constit. of *P. sepium.* Powder. Mp 136-138°. $[\alpha]_D^{20}$ +1.9° (c, 0.2 in $CHCl_3$).

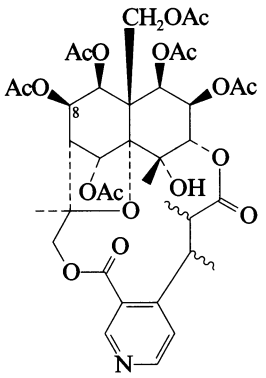
*20-O-[2-O-Acetyl-β-D-digitalopyranosyl-(1→4)-β-D-cymaropyranosyl-(1→4)-β-D-cymaropyranosyl-(1→4)-β-D-cymaropyranosyl-(1→5)-3,7-dideoxy-4-O-methyl-α-D-*gluco*-2-heptulopyranosyl-(2→4)-dioxy-(1→3)-β-D-canaropyranoside]:* [114828-46-5]. ***Periplocoside A***
$C_{72}H_{114}O_{27}$ M 1411.676
Constit. of *P. sepium.* Powder. Mp 174-176°. $[\alpha]_D^{20}$ −1.2° (c, 1.4 in $CHCl_3$).

*20-O-[β-D-Digitalopyranosyl-(1→4)-β-D-cymaropyranosyl-(1→4)-β-D-cymaropyranosyl-(1→4)-β-D-cymaropyranosyl-(1→5)-3,7-dideoxy-4-O-methyl-α-D-*gluco*-2-heptulopyranosyl-(2→4)-dioxy-(1→3)-β-D-canaropyranoside]:* [116709-64-9]. ***Periplocoside D***
$C_{70}H_{112}O_{26}$ M 1369.639
Constit. of *P. sepium.* Powder. Mp 191-193°. $[\alpha]_D$ −3.08° (c, 0.26 in $CHCl_3$).

Hokawa, H. *et al*, *Chem. Pharm. Bull.*, 1987, **35**, 4524; 1988, **36**, 982, 2084, 4441.

Peritassine A P-10083

[150881-01-9]



$C_{38}H_{47}NO_{18}$ M 805.785

Alkaloid from stems and bark of *Peritassa compta* (Celastraceae). Cryst. Mp 116-117°. $[\alpha]_D$ +24.6° (c, 0.07 in $CHCl_3$).

O^8-*De-Ac*, O^8-*benzoyl:* [150881-29-1]. ***Peritassine B***

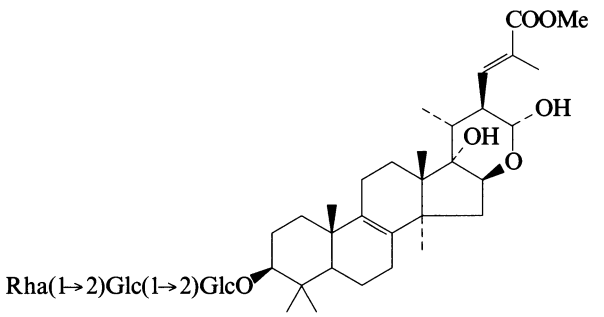
$C_{43}H_{49}NO_{18}$ M 867.856

Alkaloid from stems and bark of *P. compta* (Celastraceae). Amorph. powder. Mp 148-150°. $[\alpha]_D$ −39.2° (c, 0.13 in $CHCl_3$).

Klass, J. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 946 (*isol, uv, ir, pmr, cmr, ms, struct*)

Peruvianoside A P-10084

[148530-00-1]

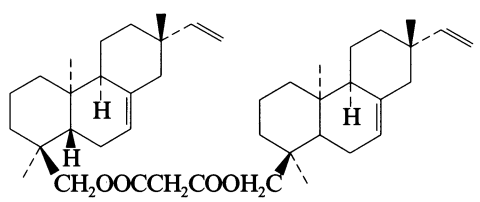


$C_{49}H_{78}O_{20}$ M 987.143

Constit. of *Scilla peruviana*. Amorph. powder. $[\alpha]_D$ −23.2° (MeOH).

Mimaki, Y. *et al*, *Chem. Lett.*, 1992, 1999 (*isol, pmr, cmr*)

Petiolate P-10085



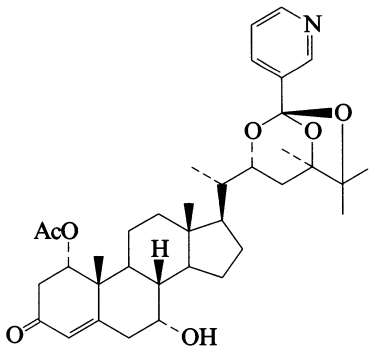
$C_{43}H_{64}O_4$ M 644.976

Constit. of *Calceolaria petioalaris*. Oil. $[\alpha]_D^{25}$ −66° (c, 0.676 in $CHCl_3$).

Silva, P. *et al*, *Phytochemistry*, 1993, **34**, 449 (*isol, pmr, cmr*)

Petunianine C P-10086

[149725-28-0]



$C_{36}H_{49}NO_7$ M 607.786

Constit. of *Petunia inflata*. Cryst. (EtOAc/heptane). Mp 182-184°. $[\alpha]_D$ +80° (c, 1 in $CHCl_3$).

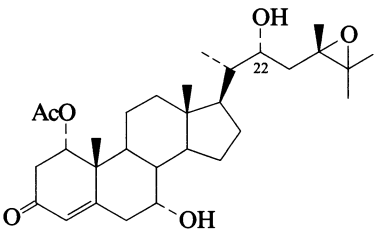
Elliger, C.A. *et al*, *Phytochemistry*, 1993, **33**, 471 (*isol, pmr, cmr*)

Petuniasterone B P-10087

Updated Entry replacing P-00873

1α-Acetoxy-24,25-epoxy-7α,22-dihydroxyergost-4-en-3-one

[114176-00-0]



$C_{30}H_{46}O_6$ M 502.690

Constit. of *Petunia hybrida*. Cryst. (EtOAc/heptane). Mp 191-192°. $[\alpha]_D^{21}$ +88.8° ($CHCl_3$).

*22-Ac: Petuniasterone B 22-*O*-acetate*

$C_{32}H_{48}O_7$ M 544.727

Constit. of *P. hybrida*. Cryst. (EtOAc/heptane). Mp 195-196°. $[\alpha]_D^{21}$ +39.5° ($CHCl_3$).

*22-*O*-[(Methylthio)carbonyl]acetyl: Petuniasterone-B 22-*O*-[(Methylthio)carbonyl]acetate*

$C_{34}H_{50}O_8S$ M 618.830

Constit. of *P. hybrida*. Cryst. (MeOH). Mp 182-183°. $[\alpha]_D^{21}$ +65.7° ($CHCl_3$).

22-(3-Pyridinecarbonyl): Petuniasterone B 22-nicotinate

$C_{36}H_{49}NO_7$ M 607.786

Constit. of *P. inflata*. $[\alpha]_D$ +68° (c, 1 in $CHCl_3$).

7,22-Bis-(3-pyridinecarbonyl): Petuniasterone B 7,22-dinicotinate

$C_{42}H_{52}N_2O_8$ M 712.881

Constit. of *P. inflata*. $[\alpha]_D$ +21° (c, 0.45 in $CHCl_3$).

Elliger, C.A. *et al*, *J. Chem. Soc., Perkin Trans. 1*, 1988, 711.

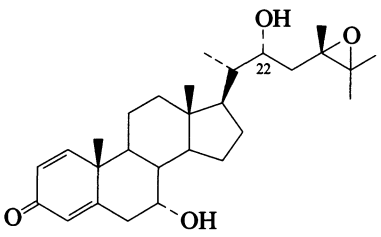
Elliger, C.A. *et al*, *Phytochemistry*, 1993, **33**, 471 (*derivs*)

Petuniasterone C **P-10088**

Updated Entry replacing P-00874

24,25-Epoxy-7,22-dihydroxyergosta-1,4-dien-3-one, 9CI

[114176-01-1]



$C_{28}H_{42}O_4$ M 442.637

Constit. of *Petunia hybrida*. Cryst. (EtOAc/heptane). Mp 183-185°. $[\alpha]_D^{21}$ +31.7° ($CHCl_3$).

22-Ac: [114176-06-6]. *Petuniasterone C 22-O-acetate*

$C_{30}H_{44}O_5$ M 484.675

Constit. of *P. hybrida*. Oil. $[\alpha]_D^{21}$ +40.3° ($CHCl_3$).

7,22-Di-Ac: Petuniasterone C 7,22-di-O-acetate

$C_{32}H_{46}O_6$ M 526.712

Constit. of *P. inflata*. $[\alpha]_D$ −27° (c, 0.13 in $CHCl_3$).

22-O-[(Methylthio)carbonyl]acetyl: [114176-05-5]. *Petuniasterone C 22-O-[(methylthio)carbonyl]acetate*

$C_{32}H_{46}O_6S$ M 558.778

Constit. of *P. hybrida*. Cryst. (EtOAc/heptane). Mp 141-142°. $[\alpha]_D^{21}$ +17.4° ($CHCl_3$).

22-(3-Pyridinecarbonyl): Petuniasterone C 22-nicotinate

$C_{34}H_{45}NO_5$ M 547.733

Constit. of *P. inflata*. $[\alpha]_D^{20}$ +25° (c, 0.2 in $CHCl_3$).

22-(3-Pyridinecarbonyl), 7-Ac: Petunaisterone C 22-nicotinate-7-acetate

$C_{36}H_{47}NO_6$ M 589.770

Constit. of *P. inflata*. $[\alpha]_D$ −15° (c, 0.5 in $CHCl_3$).

7,22-Bis-(3-pyridinecarbonyl): Petuniasterone C 7,22-dinicotinate

$C_{40}H_{48}N_2O_6$ M 652.829

Constit. of *P. inflata*. $[\alpha]_D$ +24° (c, 0.25 in $CHCl_3$).

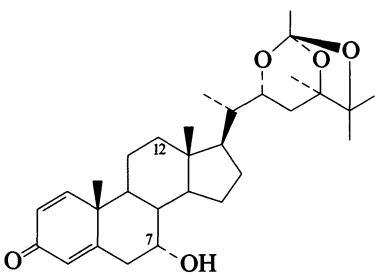
Elliger, C.A. *et al, J. Chem. Soc., Perkin Trans. 1*, 1988, 711.
Elliger, C.A. *et al, Phytochemistry*, 1993, **33**, 471 (*derivs*)

Petuniasterone D **P-10089**

Updated Entry replacing P-00875

22,24,25-[Ethylidynetris(oxy)]-7-hydroxyergosta-1,4-dien-3-one, 9CI

[119259-63-1]



$C_{30}H_{44}O_5$ M 484.675

Constit. of *Petunia hybrida*. Cryst. (EtOAc/heptane). Mp 209-212°. $[\alpha]_D^{21}$ +47.7° ($CHCl_3$).

12α-Acetoxy, 7-Ac: [119259-67-5]. *12α-Acetoxypetuniasterone D 7-acetate*

$C_{34}H_{48}O_8$ M 584.748

Constit. of *P. hybrida*. Cryst. (EtOAc/heptane). Mp 241-243°. $[\alpha]_D^{21}$ +62.6° ($CHCl_3$).

11β-Hydroxy, 12ξ-acetoxy, 7-Ac: [126240-17-3]. ***12-Acetoxy-7-O-acetyl-11-hydroxypetuniasterone D***

$C_{34}H_{48}O_9$ M 600.748

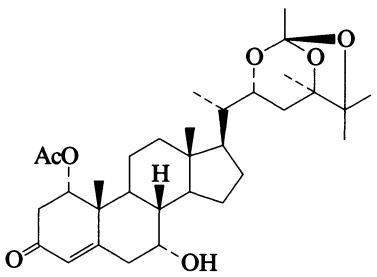
Isol. from the leaves of *P. integrifolia*. $[\alpha]_D$ +40° (c, 1 in $CHCl_3$).

[119259-66-4, 119259-69-7]

Elliger, C.A. *et al, J. Chem. Soc., Perkin Trans. 1*, 1989, 143.
Elliger, C.A. *et al, Phytochemistry*, 1989, **28**, 3443 (*deriv*)

Petuniasterone S **P-10090**

[149725-27-9]



$C_{32}H_{48}O_7$ M 544.727

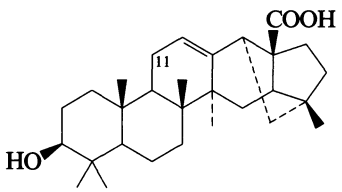
Constit. of *Petunia inflata*.

Elliger, C.A. *et al, Phytochemistry*, 1993, **33**, 471 (*isol, pmr, cmr*)

Pfaffic acid **P-10091**

Updated Entry replacing P-00897

[86432-14-6]



$C_{29}H_{44}O_3$ M 440.665

Constit. of roots of *Pfaffia paniculata*. Antitumour agent. Needles (MeOH). Mp 285-286°. $[\alpha]_D^{22}$ +109.2° (c, 0.72 in $CHCl_3$).

3-O-β-D-Glucuronopyranoside: [94662-71-2]. ***Pfaffoside F***

$C_{35}H_{52}O_9$ M 616.790

Isol. from *P. paniculata*. Cryst. (MeOH/EtOAc). Mp 243-244°. $[\alpha]_D^{22}$ +32.4° (c, 0.32 in MeOH).

3-O-[β-D-Xylopyranosyl-(1→2)-β-D-glucuronopyranoside]: [90745-17-8]. ***Pfaffoside A***

$C_{40}H_{60}O_{13}$ M 748.906

Isol. from *P. paniculata*. Cryst. (MeOH/EtOAc). Mp 268°. $[\alpha]_D^{22}$ +14.8° (c, 1.85 in MeOH).

3-O-β-Glucuronopyranoside, 28-β-D-glucopyranosyl ester: [90745-19-0]. ***Pfaffoside C***

$C_{41}H_{62}O_{14}$ M 778.932

Isol. from *P. paniculata*. Cryst. (MeOH/EtOAc). Mp 225-226°. $[\alpha]_D^{22}$ +19.7° (c, 0.6 in MeOH).

3-O-[β-D-Xylopyranosyl-(1→2)-β-D-(6-O-butylglucuronopyranoside)], 28-β-D-glucopyranosyl ester: [94662-72-3]. ***Pfaffoside D***

$C_{50}H_{78}O_{18}$ M 967.155

Isol. from *P. paniculata*. Amorph. (MeOH/EtOAc/Et_2O). Mp 185°. $[\alpha]_D^{22}$ −1.3° (c, 0.42 in MeOH). Prob. artifact.

3-O-[β-D-Xylopyranosyl-(1→2)-β-D-(6-O-methylglucuronopyranoside)], 28-β-D-glucopyranosyl ester: [94662-73-4]. ***Pfaffoside E***

$C_{47}H_{72}O_{18}$ M 925.075

Isol. from *P. paniculata*. Amorph. (MeOH/EtOAc/Et_2O). Mp 197-199°. $[\alpha]_D^{22}$ −1.5° (c, 0.48 in MeOH). Prob. artifact.

3-O-[β-D-Xylopyranosyl-(1→2)-β-D-glucuronopyranoside], 28-β-D-glucopyranosyl ester: [90745-18-9]. ***Pfaffoside B***
$C_{46}H_{70}O_{18}$ M 911.048
Isol. from *P. paniculata*. Cryst. (MeOH/EtOAc). Mp 255-260°. $[\alpha]_D^{22}$ −1.8° (c, 1.05 in MeOH).

28-O-β-D-Glucuronopyranosyl ester: [121324-63-8]. ***Pfaffoside G***
$C_{35}H_{52}O_9$ M 616.790
Constit. of *P. pulverulenta*. Needles. Mp 187-190°. $[\alpha]_D$ +30° (c, 1 in MeOH).

3-Ketone: [121340-69-0]. ***11-Deoxopulveric acid***
$C_{29}H_{42}O_3$ M 438.649
Constit. of *P. pulverulenta*. Needles. Mp 232-234°. $[\alpha]_D$ +78° (c, 0.3 in $CHCl_3$).

11-Oxo: [121324-61-6]. ***11-Oxopfaffic acid***
$C_{29}H_{42}O_4$ M 454.648
Isol. from *P. pulverulenta*. Needles. Mp 251-253°. $[\alpha]_D$ +56° (c, 1 in $CHCl_3$).

11-Oxo, 3-ketone: [121324-57-0]. ***Pulveric acid***
$C_{29}H_{40}O_4$ M 452.633
Constit. of *P. pulverulenta*. Needles. Mp 279-281°. $[\alpha]_D$ +94° (c, 1 in MeOH).

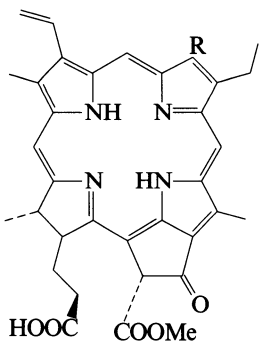
11-Oxo, 3-ketone, 7α-hydroxy: 7α-Hydroxypulveric acid
$C_{29}H_{40}O_5$ M 468.632
Constit. of *P. pulverulenta*. Cryst. ($CHCl_3/C_6H_6$). Mp 234-236°. $[\alpha]_D$ +57° (c, 0.8 in MeOH).

7,11-Dioxo, 3-ketone: 7-Oxopulveric acid
$C_{29}H_{38}O_5$ M 466.616
Constit. of *P. pulverulenta*. Cryst. ($CHCl_3/C_6H_6$). Mp 300-302°. $[\alpha]_D$ +25° (c, 0.5 in $CHCl_3$).

Takemoto, T. *et al*, *Tetrahedron Lett.*, 1983, **24**, 1057 (*isol, cryst struct*)
Nishimoto, N. *et al*, *Phytochemistry*, 1984, **23**, 139 (*derivs*)
Nakai, S. *et al*, *Phytochemistry*, 1984, **23**, 1703 (*derivs*)
Shiobara, Y. *et al*, *Phytochemistry*, 1992, **31**, 1737; 1993, **33**, 897 (*cmr, Pfaffoside G, 11-Oxopfaffic acid, Pulveric acid derivs*)

Phaeophorbide a P-10092

Updated Entry replacing P-00900
Pheophorbide a_5. Pheophorbide a
[15664-29-6]



R = CH_3

$C_{35}H_{36}N_4O_5$ M 592.693
Chlorophyll degradation prod. Formed by enzymic hydrol. of Phaeophytin a, P-00902 by chlorophyllase, or by mild acid or alkaline hydrol. Blue-black cryst. ($CHCl_3$). $[\alpha]_{20}$ −342° (Me_2CO).

Me ester: [5594-30-9]. *Methyl phaeophorbide a*
$C_{36}H_{38}N_4O_5$ M 606.720
Isol. from *Cupressus funebris*. Deep-blue-black microcryst. (CH_2Cl_2/MeOH). Mp 228°.

Strell, M. *et al*, *Angew. Chem.*, 1960, **72**, 169 (*synth*)
Kenner, G.W. *et al*, *J. Chem. Soc., Perkin Trans. 1*, 1973, 2517.
Smith, K.M. *et al*, *Tetrahedron*, 1975, **31**, 367 (*cmr*)
Smith, K.M. *et al*, *Tetrahedron Lett.*, 1981, **22**, 4873 (*pmr*)
Smith, K.M. *et al*, *J. Am. Chem. Soc.*, 1985, **107**, 4946 (*synth*)
Okazaki, T. *et al*, *Chem. Pharm. Bull.*, 1990, **38**, 3303 (*synth, cmr*)
Kobayashi, M. *et al*, *Chem. Pharm. Bull.*, 1991, **39**, 3348 (*isol, ester*)

Phaseoloside A P-10093

Triterpene glycoside of unknown struct. Constit. of *Phaseolus vulgaris*. No phys. props. given.

Chirva, V.Y. *et al*, *Khim. Prir. Soedin.*, 1970, **6**, 377; *Chem. Nat. Compd.* (*Engl. Transl.*), 386.

Phaseoloside B P-10094

Triperpene glycoside of unknown struct. Constit. of *Phaseolus vulgaris*. No phys. props. given.

Chirva, V.Y. *et al*, *Khim. Prir. Soedin.*, 1970, **6**, 377; *Chem. Nat. Compd.* (*Engl. Transl.*), 386.

Phaseoloside C P-10095

Triterpene glycoside of unknown struct. Constit. of *Phaseolus vulgaris*. No phys. props. given.

Chirva, V.Y. *et al*, *Khim. Prir. Soedin.*, 1970, **6**, 377; *Chem. Nat. Compd.* (*Engl. Transl.*), 386.

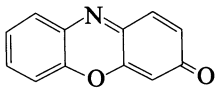
Phaseothione P-10096

Mercaptopeptide of unknown struct. Constit. of *Glycine max, Phaseolus limensis, P. vulgaris* and *Trifolium repens*.

Price, C.A., *Nature* (*London*), 1957, **180**, 148 (*isol*)

3*H*-Phenoxazin-3-one, 9CI P-10097

3-Phenoxazone
[1916-63-8]



$C_{12}H_7NO_2$ M 197.193
Isol. from *Pycnoporus sanguineus*. Orange cryst. Mp 217-219° dec.

Kehrmann, F. *et al*, *Ber.*, 1902, **35**, 341 (*synth*)
Musso, H. *et al*, *Chem. Ber.*, 1957, **90**, 1814 (*uv*)
Corbett, J.F., *Spectrochim. Acta*, 1965, **21**, 1411 (*synth, ir*)
Musso, H., *Chem. Ber.*, 1978, **111**, 3012 (*synth*)
Bolognese, A. *et al*, *J. Heterocycl. Chem.*, 1986, **23**, 1003 (*synth, uv, pmr*)
Barret, R. *et al*, *Synth. Commun.*, 1990, **20**, 1543 (*synth*)
Achenbach, H. *et al*, *Arch. Pharm.* (*Weinheim, Ger.*), 1991, **324**, 3 (*isol*)

N-2-Phenylethylcinnamamide P-10098

Updated Entry replacing P-00986
3-Phenyl-N-(2-phenylethyl)-2-propenamide, 9CI
[55030-23-4]

PhCH=CHCONHCH$_2$CH$_2$Ph

$C_{17}H_{17}NO$ M 251.327
2,3-Dihydro: [10264-31-0]. *3-Phenyl-N-(2-phenylethyl) propanamide*
$C_{17}H_{19}NO$ M 253.343

Isol. from *Simsia cronquistii*. Cryst. Mp 94-96°.

(E)-form [103188-43-8]

Alkaloid from the leaves of *Spilanthes ocymifolia* (Compositae) and from *Oxytropis pseudoglandulosa* (Leguminosae). Also isol. from aerial parts of *Simsia cronquistii* (Compositae). Needles (cyclohexane). Mp 125-126°.

N-*Me:* [121817-38-7]. ***Lansiumamide C.*** N-*Methyl*-N-*phenylethylcinnamamide*

$C_{18}H_{19}NO$ M 265.354

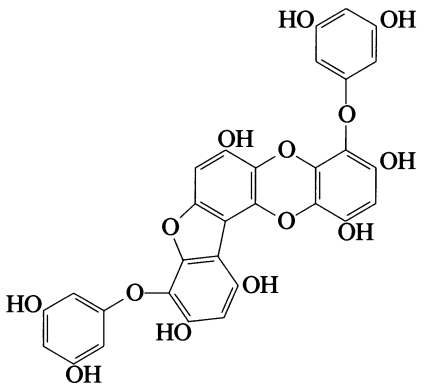
Alkaloid from seeds of *Clausena lansium* (Rutaceae). Yellowish plates (Et_2O). Mp 58-59°.

Borges-del-Castillo, J. *et al*, *Phytochemistry*, 1984, **23**, 2671 (*isol, ir, pmr, cmr, ms, struct*)
Huneck, S. *et al*, *Fitoterapia*, 1986, **57**, 523 (*isol*)
Lin, J.H. *et al*, *Phytochemistry*, 1989, **28**, 621 (*Lansiumamide C*)
Maldonado, E. *et al*, *Phytochemistry*, 1992, **31**, 1413 (*3-Phenyl-N-(2-phenylethyl)propanamide*)

Phlorofucofuroeckol A P-10099

4,9-Bis(3,5-dihydroxyphenoxy)benzo[b]*benzofuro*[3,2-f][*1,4*]*benzodioxin-1,3,6,10,12-pentol, 9CI*

[128129-56-6]



$C_{30}H_{18}O_{14}$ M 602.464

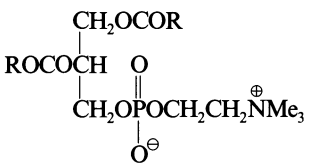
Phlorotannin. Isol. from the brown alga *Ecklonia kurome*. Potent anti-plasmin inhibitor. Amorph. solid.

Fukuyama, Y. *et al*, *Chem. Pharm. Bull.*, 1990, **38**, 133 (*isol, pmr, cmr*)

Phosphatidylcholine P-10100

Lecithin. Lecithol. Vitellin. Kelecin. Granulestin. 1,2-Diacylglycero-3-phosphorylcholine

[8002-43-5]



R = saturated or unsaturated fatty acids

First identified in egg yolk. Present in microorganisms and throughout the animal and vegetable kingdoms. Constit. of biol. membranes, involved in permeability, oxidative phosphorylation, phagocytosis and chemical and electrical excitation. Identified in animal tissues and organs especially the brain, nervous system, liver, heart, lungs, kidneys, blood and sperm. The degree of unsaturation, chain length and position of the fatty acid results in distinct biol. props.

Kirk-Othmer Encycl. Chem. Technol., 3rd Ed., Wiley, N.Y., 1978-1984, **14**, 250 (*rev, props, use, isol, activity*)

Phosphine, 9CI, 8CI P-10101

Hydrogen phosphide. Phosphorus trihydride. Phosphorus hydride (PH_3). Phosphane

[7803-51-2]

PH_3

H_3P M 33.997

Interatomic distances: P—H 141.5, 143.7 pm, angle: 93.3-93.8° (gas). At −140°, has f.c.c. struct. Synth. from Ca, Mg, Al, Zn, or Sn phosphides + H_2O or from yellow P + $OH^{\ominus}$(aq.); or from P_4O_{10} + $LiAlH_4$. Obt. by incubation of human faeces with a mixed bacterial culture under anaerobic conditions. Proposed as fumigant for cereals, flour, packaged foods. Detected in atm. of Saturn, Jupiter and Uranus. Colourless gas with garlic-like odour. Extremely weak base. V. sol. H_2O (giving neutral soln.). d_4^{-135} 0.896, d_4^{-90} 0.746. Mp −132.5°. Bp −87°. Dec. noticeably only at >550°. Forms complexes with boron hydrides and halides. Solid form exhibits transitions at −263°, −243°, −224°, −185°.

▷ Extremely poisonous. Ignites in dry air at *ca.* 150° or spont. at r.t. if P_2H_4 present. SY7525000.

$BHCl_2$ adduct (1:1):

BCl_2H_4P M 116.722

Cryst. Mp ~68°.

BCl_3 adduct (1:1):

BCl_3H_3P M 151.167

Colourless, well-defined cryst.

BBr_3 adduct (1:1):

BBr_3H_3P M 284.520

Synth. from components at r.t. Solid.

Gmelin Handbook Inorg. Chem., Syst. No. 16, 1965, **C**, 7 (*rev, bibl*)
Fluck, E., *Fortschr. Chem. Forsch.*, 1969, **13**, 125; 1973, **35**, 1 (*rev, bibl*)
Mellor Compr. Treat. Inorg. Theor. Chem., Longman, London, 1971, **8/III**, 272 (*rev*)
Francia, M.D. *et al*, *J. Chem. Phys.*, 1973, **58**, 1061 (*ir*)
Brauer, G., *Handbuch Präp. Anorg. Chem.*, 3rd Ed., Ferdinand Enke Verlag, 1975-1981, **1**, 510 (*synth*)
Huang, T.H. *et al*, *J. Phys. Chem. Solids*, 1977, **38**, 897 (*ir, raman*)
Jameson, A.K. *et al*, *J. Magn. Reson.*, 1978, **32**, 455 (*P-31 nmr*)
Friedrich, H. *et al*, *Chem. Phys. Lett.*, 1979, **64**, 360 (*pe*)
Dolenko, G.N. *et al*, *Zh. Strukt. Khim.*, 1979, **20**, 334; *J. Struct. Chem.* (*Engl. Transl.*), 1979, **20**, 279 (*x-ray fluorescence*)
Baldacca, A. *et al*, *J. Mol. Spectrosc.*, 1980, **81**, 179 (*ir*)
Tarrago, G. *et al*, *J. Mol. Spectrosc.*, 1981, **88**, 311 (*ir*)
Ishiguro, E. *et al*, *J. Phys. B: At., Mol. Opt. Phys.*, 1987, **20**, 4725 (*photoabs spectrum*)
Gassmann, G. *et al*, *Angew. Chem., Int. Ed. Engl.*, 1993, **32**, 761 (*synth*)
Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th Ed., Van Nostrand-Reinhold, 1992, PGY000.

Phosphoenolpyruvic acid P-10102

2-(Phosphonooxy)-2-propenoic acid, 9CI. 2-Hydroxyacrylic acid dihydrogen phosphate, 8CI. PEP

[138-08-9]

$H_2C{=}C(COOH)OPO_3H_2$

$C_3H_5O_6P$ M 168.043

Isol. from floral buds of *Bauhinia variegata* and leaves of *B. purpurea*. Metab. intermed.

Monocyclohexylammonium salt: [10526-80-4].
Cryst. ($MeOH/Et_2O$). Mp 143-146° dec.

Tris(cyclohexylammonium) salt: [35556-70-8].
Solid. Mp 197-198° dec.

Et ester: [22065-56-1]. *Ethyl 2-(phosphonoxy)-2-propenoate*
$C_5H_9O_6P$ M 196.096
Cryst. ($MeOH/Et_2O$) as biscyclohexylammonium salt. Mp 184-185°.

Amide, P,P-dibenzyl ester: 2-[(Dibenzyloxyphosphinyl)oxy]-2-propenoamide
$C_{17}H_{18}NO_5P$ M 347.307
Solid. Mp 48-50°.

Tris(trimethylsilyl) ester: Trimethylsilyl 2-[bis(trimethylsilyloxy)phosphinyl]oxy-2-propenoate
$C_{12}H_{29}O_6PSi_3$ M 384.588
Liq. $Bp_{2.2}$ 112-116°.

Ferdman, D.L. *et al, Science (Washington, D.C.)*, 1940, **91**, 365 (*synth*)
Lardy, H.A. *et al, J. Biol. Chem.*, 1945, **159**, 343 (*biosynth*)
Biochem. Prep., 1966, **11**, 101 (*synth*)
Benkovic, S.J. *et al, Biochemistry*, 1968, **7**, 4090, 4097 (*props*)
Cohn, M. *et al, J. Am. Chem. Soc.*, 1970, **92**, 4095 (*pmr*)
Stubbs, J.A. *et al, Biochemistry*, 1972, **11**, 338 (*derivs*)
Watson, D.G. *et al, Acta Crystallogr., Sect. B*, 1973, **29**, 2358 (*cryst struct*)
Harvey, D.J. *et al, J. Chromatogr.*, 1973, **76**, 51 (*gc*)
Mukherjee, D. *et al, J. Indian Bot. Soc.*, 1975, **54**, 207; *CA*, **86**, 13941h (*isol*)
Vogeli, U. *et al, Org. Magn. Reson.*, 1975, **7**, 617 (*ester, pmr, cmr*)
Mukherjee, D. *et al, Experientia*, 1977, **33**, 304 (*isol*)
Davies, D.D., *Annu. Rev. Plant Physiol.*, 1979, **30**, 131 (*rev*)
Katti, S.K. *et al, Acta Crystallogr., Sect. B*, 1981, **37**, 834 (*cryst struct*)
Sekine, M. *et al, J. Chem. Soc., Perkin Trans. 1*, 1982, 2509 (*synth, pmr, derivs*)
Bartlett, P.A. *et al, J. Org. Chem.*, 1983, **48**, 3854 (*synth*)
Kluger, R. *et al, J. Am. Chem. Soc.*, 1984, **106**, 4017 (*derivs*)

Phospholipase A_2 P-10103

Human pancreatic juice activation peptide

[81317-15-9]

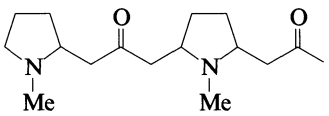
H-Asp-Ser-Gly-Ile-Ser-Pro-Arg-OH

$C_{29}H_{50}N_{10}O_{12}$ M 730.774
Constit. of the protein yielding active phospholipase A_2.

Grataroli, R. *et al, Eur. J. Biochem.*, 1982, **122**, 111 (*struct*)

Phygrine P-10104

[148139-97-3]



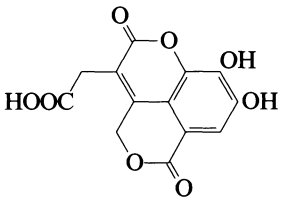
$C_{16}H_{28}N_2O_2$ M 280.409
Alkaloid from roots and aerial parts of *Physalis alkekengi, P. angulata, P. philadelphica, P. ixocarpa, P. edulis, P. peruviana, P. minima, P. pubescens, P. viscosa* and *P. pruinosa* (Solanacceae). Gum.

Dipicrate: [148218-52-4].
Mp 189° dec.

Basey, K. *et al, Phytochemistry*, 1992, **31**, 4173 (*isol, ir, pmr, cmr, ms, struct*)

Phyllanthusiin E P-10105

[142674-53-1]



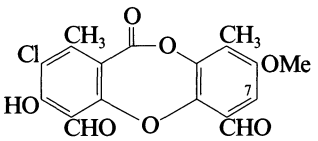
$C_{13}H_8O_8$ M 292.201
Isol. from the leaf of *Phyllanthus flexuosus*. Brown amorph. powder + $1H_2O$.

Yoshida, T. *et al, Chem. Pharm. Bull.*, 1992, **40**, 53 (*uv, pmr, cmr*)

Phyllopsorin P-10106

2-Chloro-3-hydroxy-8-methoxy-1,9-dimethyl-11-oxo-11H-dibenzo[b,e][1,4]dioxepin-4,6-dicarboxaldehyde, 9CI

[131840-46-5]



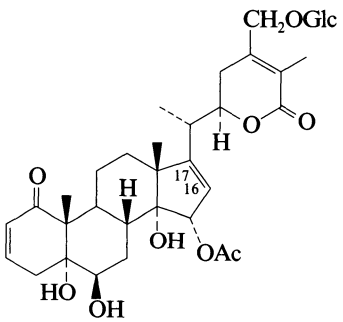
$C_{18}H_{13}ClO_7$ M 376.749
Depsidone. Constit. of *Phyllopsora corallina*. Cryst. (EtOAc). Mp 233.5°.

7-Chloro: [131877-33-3]. ***Chlorophyllopsorin***
$C_{18}H_{12}Cl_2O_7$ M 411.194
Constit. of *P. corallina*. Cream cryst. (CH_2Cl_2/cyclohexane). Mp 228-229°.

Elix, J.A. *et al, Aust. J. Chem.*, 1990, **43**, 1953 (*isol, pmr*)

Physagulin E P-10107

[148054-13-1]

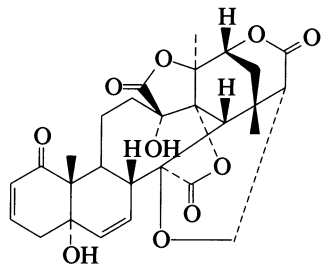


$C_{36}H_{50}O_{14}$ M 706.783
Constit. of *Physalis angulata*. Powder. $[\alpha]_D$ +56.7° (c, 0.66 in MeOH).

16β,17β-Epoxide: [148076-22-6]. ***Physagulin G***
$C_{36}H_{50}O_{15}$ M 722.782
Constit. of *P. angulata*. Powder. $[\alpha]_D$ +31.3° (c, 0.76 in MeOH).

Shinga, K. *et al, Chem. Pharm. Bull.*, 1992, **40**, 2448 (*isol, pmr, cmr*)

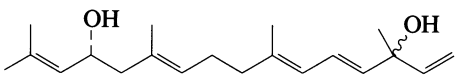
Physalin P P-10108



$C_{28}H_{30}O_{10}$ M 526.539
Constit of *Physalis alkekengi*. Needles ($EtOAc/C_6H_6$). Mp 272-273°. $[\alpha]_D^{24}$ +54° (c, 0.25 in Me_2CO).

Kawai, M. *et al*, *Bull. Chem. Soc. Jpn.*, 1993, **66**, 1299 (*isol, pmr, cmr*)

1,4,6,10,14-Phytapentaene-3,13-diol P-10109

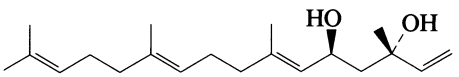


$C_{20}H_{32}O_2$ M 304.472
(3ξ,4E,6E,10E,13R)-form [149415-82-7]
Constit. of *Myrmekioderma styx*. Oil. $[\alpha]_D$ +4.6° (c, 0.002 in hexane).

Albrizio, S. *et al*, *Z. Naturforsch., B*, 1993, **48**, 488 (*isol, pmr, cmr*)

1,6,10,14-Phytatetraene-3,5-diol P-10110

Updated Entry replacing P-01182
3,7,11,15-Tetramethyl-1,6,10,14-hexadecatetraene-3,5-diol, 9CI

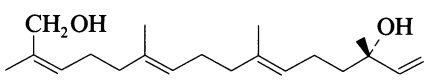


$C_{20}H_{34}O_2$ M 306.487
(3S,5S,6E,10E)-form [84093-63-0] ***5-Hydroxygeranyllinalol***
Constit. of *Geigeria burkei* and *Myrmekioderma styx*. Gum. $[\alpha]_D$ +17.65° (c, 0.005 in hexane).
9-Acetoxy: ***9-Acetoxy-5-hydroxygeranyllinalol***
$C_{22}H_{36}O_4$ M 364.524
Constit. of *G. burkei*. Gum.
9-Acetoxy, 5-Ac: [84093-65-2]. ***5,9-Diacetoxygeranyllinalol***
$C_{24}H_{38}O_5$ M 406.561
Constit. of *G. burkei*. Gum.
13-Acetoxy: [84093-66-3]. ***13-Acetoxy-5-hydroxygeranyllinalol***
$C_{22}H_{36}O_4$ M 364.524
Constit. of *G. burkei*. Gum.

Bohlmann, F. *et al*, *Phytochemistry*, 1982, **21**, 1679.
Albrizio, S. *et al*, *Z. Naturforsch., B*, 1993, **48**, 488 (*struct*)

1,6,10,14-Phytatetraene-3,17-diol P-10111

Updated Entry replacing P-01185
2,6,10,14-Tetramethyl-2,6,10,15-hexadecatetraene-1,14-diol



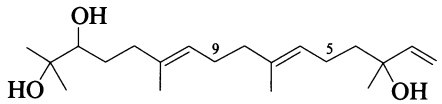
$C_{20}H_{34}O_2$ M 306.487
(3S,6E,10E,14Z)-form
20-Hydroxygeranyllinalool
Constit. of *Nicotiana sylvestris*. Oil. $[\alpha]_D$ +9° (c, 1 in $CHCl_3$).

3,17-Di-O-β-D-glucopyranoside: ***Lyciumoside I***
$C_{32}H_{54}O_{12}$ M 630.771
Constit. of *Lycium chinense*. Powder. $[\alpha]_D^{27}$ −21.0° (c, 0.5 in MeOH).
3-O-β-D-Glucopyranoside, 17-O-[β-D-glucopyranosyl(1→2)-β-D-glucopyranoside]: ***Lyciumoside II***
$C_{38}H_{64}O_{17}$ M 792.913
Constit. of *L. chinense*. Powder. $[\alpha]_D^{26}$ −19.6° (c, 0.49 in MeOH).

Wallin, I. *et al*, *Acta Chem. Scand., Ser. B*, 1980, **34**, 391.
Yahara, S. *et al*, *Chem. Pharm. Bull.*, 1993, **41**, 703 (*Lyciumosides*)

1,6,10-Phytatriene-3,14,15-triol P-10112

Updated Entry replacing P-01206
2,6,10,14-Tetramethyl-6,10,15-hexadecatriene-2,3,14-triol, 9CI

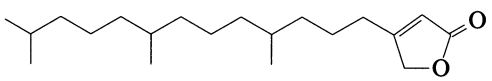


$C_{20}H_{36}O_3$ M 324.503
(3ξ,6E,10E,14ξ)-form [84093-67-4] ***14,15-Dihydro-14,15-dihydroxygeranyllinalol***
Constit. of *Geigeria burkei*. Gum.
5-Hydroxy: [84093-68-5]. ***1,6,10-Phytatriene-3,5,14,15-tetral.*** *2,6,10,14-Tetramethyl-6,10,15-hexadecatriene-2,3,12,14-tetrol*
$C_{20}H_{36}O_4$ M 340.502
Constit. of *G. burkei*. Gum.
9-Acetoxy: [84093-69-6].
$C_{22}H_{38}O_5$ M 382.539
Constit. of *G. burkei*. Gum.
(3S,6E,10E,14ξ)-form
3,14-Di-O-β-D-glucopyranoside: ***Lyciumoside III***
$C_{32}H_{56}O_{13}$ M 648.787
Constit. of *Lycium chinense*. Powder. $[\alpha]_D^{26}$ −31.1° (c, 0.48 in MeOH).

Bohlmann, F. *et al*, *Phytochemistry*, 1982, **21**, 1739.
Yahara, S. *et al*, *Chem. Pharm. Bull.*, 1993, **41**, 703 (*Lyciumoside III*)

2-Phyten-1,20-olide P-10113

4-(4,8,12-Trimethyltridecyl)-2-(5H)-furanone. ***Luffarin X***
[145398-74-9]



$C_{20}H_{36}O_2$ M 308.503
Constit. of *Luffariella geometrica*. Oil. $[\alpha]_D^{20}$ +13.2° (c, 0.7 in $CHCl_3$).

Butler, M.S. *et al*, *Aust. J. Chem.*, 1992, **45**, 1705 (*isol, pmr, cmr*)

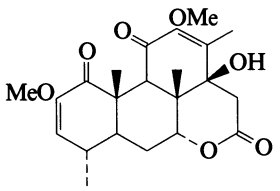
Phytochrome P-10114

Consists of an open-chain tetrapyrrole chromophore and a protein moiety. Visual pigment and photoreceptor of plants.

Ruediger, W. *et al*, *Angew. Chem., Int. Ed. Engl.*, 1991, **30**, 1216 (*rev*)

Picrasinol C P-10115

[35598-72-2]



$C_{22}H_{28}O_7$ M 404.459

Constit. of *Picrasma ailanthoides*. Amorph. solid. Mp 137-139°. $[\alpha]_D^{23}$ +8° (c, 0.2 in $CHCl_3$).

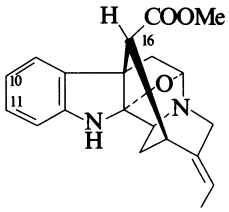
Daido, M. *et al*, *J. Nat. Prod.* (*Lloydia*), 1992, **55**, 1643 (*isol, pmr, cmr*)

Picrinine P-10116

Updated Entry replacing P-01238

Methyl 2,5-epoxy-1,2-dihydroakuammilan-17-oate, 9CI. Deacetyldeformylpicraline. Vincaridine

[4684-32-6]



$C_{20}H_{22}N_2O_3$ M 338.405

Alkaloid from *Alstonia scholaris, A. macrophylla, Vinca minor, V. erecta, V. libanotica, Rauwolfia vomitoria, R. cumminsii* and *R. oreogiton* (Apocynaceae). Needles (Me_2CO). Mp 223-225° dec. $[\alpha]_D^{25}$ −44° ($CHCl_3$). pK_a 5.72 (EtOH aq.).

Picrate: Mp 172-174° dec.

B,MeI: Mp 235-237° dec.

16-Epimer: [38801-86-4]. ***Picralstonine***

$C_{20}H_{22}N_2O_3$ M 338.405

Alkaloid from the leaves of *A. macrophylla* (Apocynaceae). Granules (Me_2CO). Mp 200°. $[\alpha]_D^{25}$ −90° ($CHCl_3$).

N^a-*Me:* [18223-72-8]. ***Ervincine***

$C_{21}H_{24}N_2O_3$ M 352.432

Alkaloid from *V. erecta* (Apocynaceae). Mp 156-157°. $[\alpha]_D$ +93° (c, 0.2 in $CHCl_3$).

10,11-Dimethoxy: [74991-69-8]. ***Volkensine***†. N^a-*Demethylquaternine. Norquaternine*

$C_{22}H_{26}N_2O_5$ M 398.458

Alkaloid from the leaves of *R. oreogiton* and *R. volkensii* and the trunk bark of *A. legouixiae* (Apocynaceae). Needles. Mp 280°. $[\alpha]_D^{20}$ −63.4° (c, 0.1 in $CHCl_3$).

10,11-Dimethoxy, N^a-*Me:* [57499-02-2]. ***Quaternine. Alstopicralamine***

$C_{23}H_{28}N_2O_5$ M 412.485

Alkaloid from *A. quaternata*, the leaves of *R. oreogiton, R. volkensii*, the trunk bark of *A. legouixiae* and from leaves of *A. macrophylla* (Apocynaceae). Cryst. (MeOH). Mp 153°. $[\alpha]_D^{20}$ −27° (c, 0.4 in $CHCl_3$), $[\alpha]_D^{20}$ +3.33°. Samples not compared. The +ve opt. rotn. refers to Alstopicralamine.

ar-*Methoxy*, N^a-*Me:* [57515-71-6]. ***Quaternidine.*** *Methyl 2,5-epoxy-1,2-dihydro*-ar-*methoxy-1-methylakuammilan-17-oate, 9CI*

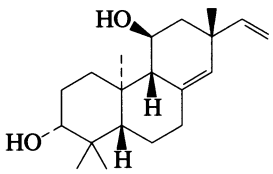
$C_{22}H_{26}N_2O_4$ M 382.458

Alkaloid from *A. quaternata* (Apocynaceae). Oil. $[\alpha]_D^{20}$ −85° (c, 0.4 in $CHCl_3$). Exact posn. of OMe subn. not detd.

[27501-23-1]

Britten, A.Z. *et al*, *J. Chem. Soc.*, 1963, 3850 (*synth, uv, ir*)
Chatterjee, A. *et al*, *Tetrahedron Lett.*, 1965, 3633 (*uv, pmr, ms*)
Rakhimov, D.A. *et al*, *Khim. Prir. Soedin.*, 1967, **3**, 354; 1969, **5**, 521; *Chem. Nat. Compd.* (*Engl. Transl.*), 300, 440 (*Ervincine, Vincaridine*)
Banerji, A. *et al*, *Phytochemistry*, 1972, **11**, 2605 (*isol, uv, ir, ms, Picralstonine*)
Grossmann, E. *et al*, *Phytochemistry*, 1973, **12**, 2058 (*uv, ms, pmr*)
Aynilian, G.H. *et al*, *J. Nat. Prod.* (*Lloydia*), 1974, **37**, 299 (*isol, uv, ir, ms*)
Mamatas-Kalamaras, S. *et al*, *Phytochemistry*, 1975, **14**, 1849 (*isol, uv, ir, ms, pmr, struct, Quaternidine, Quaternine*)
Akinloye, B.A. *et al*, *Phytochemistry*, 1980, **19**, 307 (*uv, ir, ms, pmr, struct, Volkensine, Quaternine*)
Lewin, G. *et al*, *Ann. Pharm. Fr.*, 1981, **39**, 273 (*Volkensine*)
Cherif, A. *et al*, *Heterocycles*, 1987, **26**, 3055 (*cmr, deriv*)
Ghosh, R. *et al*, *Acta Crystallogr., Sect. C*, 1988, **44**, 2151 (*cryst struct*)
Atta-ur-Rahman, *et al*, *Heterocycles*, 1988, **27**, 961 (*Alstopicralamine*)

8(14),15-Pimaradiene-3,11-diol P-10117



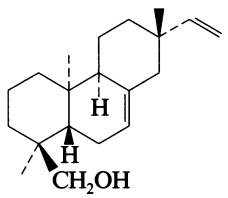
$C_{20}H_{32}O_2$ M 304.472

(ent-3β,11α)-form [150036-41-2]

Constit. of *Erythroxylon cuneatum*. Cryst. (hexane). Mp 125-130°. $[\alpha]_D$ −163° (CH_2Cl_2).

Ansell, S.M. *et al*, *Phytochemistry*, 1993, **32**, 453 (*isol, pmr, cmr*)

7,15-Pimaradien-18-ol P-10118



$C_{20}H_{32}O$ M 288.472

(ent-9β)-form

Constit. of *Calceolaria petioalaris*. Cryst. Mp 106-107°. $[\alpha]_D^{25}$ −126° (c, 1.1 in $CHCl_3$).

Ac:

$C_{22}H_{34}O_2$ M 330.509

Constit. of *C. petioalaris*. Oil. $[\alpha]_D^{25}$ −108° (c, 2 in $CHCl_3$).

Malonoyl:

$C_{23}H_{34}O_4$ M 388.546

Constit. of *C. petioalaris*. Oil. $[\alpha]_D^{22}$ −116° (c, 3.8 in $CHCl_3$).

Silva, P. *et al*, *Phytochemistry*, 1993, **34**, 449 (*isol, pmr, cmr*)

4-Piperidinone, 9CI P-10119

γ-Piperidone. 4-Oxopiperidine

[41661-47-6]

C_5H_9NO M 99.132

Alkaloid from leaves and twigs of *Dichilus strictus, D. reflexus, D. lebeckioides, D. pilosus* and *D. gracilis* (Leguminosae). Yellow oil which cannot be distilled.

B,HCl: [41979-39-9].
Cryst. + 1½ EtOH (EtOH/Et_2O) or cryst. + $1H_2O$. Mp 139-141° (EtOH solvate), Mp 94-96° (hydrate), Mp 147-149° (anhyd.).

N-*Me:* [1445-73-4].
$C_6H_{11}NO$ M 113.159
Oil with strong odour. Bp_{11} 56-58°.

N-*Me; B,HCl:* Cryst. (EtOH). Mp 94.7-95.2°.

N-*Me; B,MeI:* Cryst. + 1MeOH (MeOH). Mp 189-190° (anhyd. 202-204° dec.).

Oxime:
$C_5H_{10}N_2O$ M 114.147
Hygroscopic needles (dry C_6H_6). Mp 117-118°.

N-*Benzyl:*
$C_{12}H_{15}NO$ M 189.257
$Bp_{0.3}$ 114-116°.

N-*Benzyl; B,HCl:* Cryst. (EtOH/Et_2O). Mp 159-161°.

N-*Ac:* [32161-06-1].
$C_7H_{11}NO_2$ M 141.169
$Bp_{0.2}$ 124-128°.

N-*Benzoyl:*
$C_{12}H_{13}NO_2$ M 203.240
Cryst. Mp 49-52°. $Bp_{0.2}$ 158-160°.

N-*Nitroso:*
$C_5H_8N_2O_2$ M 128.130
Pale-yellow needles (C_6H_6/ligroin). Mp 61-62°.

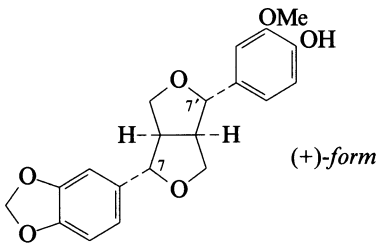
1-Ph: [19125-34-9].
$C_{11}H_{13}NO$ M 175.230
Solid. Mp 36-37°. $Bp_{0.1\text{-}0.2}$ 110-120°.

Bolyard, N.W. *et al, J. Am. Chem. Soc.*, 1930, **52**, 1032.
Howton, D.R., *J. Org. Chem.*, 1945, **10**, 277 (*deriv*)
McElvain, S.M. *et al, J. Am. Chem. Soc.*, 1949, **71**, 901; 1960, **82**, 3966.
Dickerman, S.C. *et al, J. Org. Chem.*, 1949, **14**, 530.
Becker, H.G.O. *et al, Z. Chem.*, 1961, **1**, 157.
Yamamoto, H. *et al, Bull. Chem. Soc. Jpn.*, 1971, **44**, 153.
Hirsch, J.A. *et al, J. Org. Chem.*, 1978, **43**, 4106 (*ir, uv, deriv*)
Van Wyk, B.-E. *et al, Biochem. Syst. Ecol.*, 1988, **16**, 471 (*occur*)
Hermant, R.M. *et al, J. Am. Chem. Soc.*, 1990, **112**, 1214 (*1-Ph, synth, ir, pmr*)

Piperitol† P-10120

Updated Entry replacing P-01374

4-[4-(1,3-Benzodioxol-5-yl)tetrahydro-1H,3H-furo[3,4-c]furan-1-yl]-2-methoxyphenol, 9CI. 2-(4-Hydroxy-3-methoxyphenyl)-6-(3,4-methylenedioxyphenyl)-3,7-dioxabicyclo[3.3.0]octane. 4'-Hydroxy-3'-methoxy-3,4-methylenedioxy-7,9':7',9-diepoxylignan. Regiomontanin



(+)-*form*

$C_{20}H_{20}O_6$ M 356.374

(+)-***form*** [52151-92-5]
Isol. from *Aptosimum spinescens* and trunk wood of *Nectandra turbacensis*. Mp 79°. $[\alpha]_D^{20}$ +76.2° (c, 2 in $CHCl_3$).

O-β-D-*Glucopyranoside:* [74061-78-2]. ***Simplexoside***
$C_{26}H_{30}O_{11}$ M 518.516
Isol. from whole plant of *Justicia simplex*. CNS depressant. Mp 205-210°. $[\alpha]_D$ −12.5° (c, 0.34 in MeOH).

Me ether: see *Spinescin, S-01024*

(−)-***form*** [54983-96-9]
Obt. from *Xanthoxylum piperitum*. Syrup. $[\alpha]_D$ −66.3° ($CHCl_3$).

7'-Epimer: [28115-67-5]. ***Pluviatilol***
$C_{20}H_{20}O_6$ M 356.374
Isol. from *X. pluviatile*. Cryst. (C_6H_6/pet. ether). Mp 161.5-162.5°. $[\alpha]_D$ −136° ($CHCl_3$).

7'-Epimer, O-*(3-methyl-2-butenyl):* [85994-79-2]. **O-*Prenylpluviatilol***
Isol. from *X. silanthoides* and *X. podocarpum*. Cryst. Mp 105-107°.

7-Epimer: [54983-95-8]. ***Xanthoxylol***
$C_{20}H_{20}O_6$ M 356.374
Isol. from *X. piperitum* and *X. aeanthapodium*. Cryst. Mp 140-142°. $[\alpha]_D$ −117° ($CHCl_3$).

[92620-81-0]

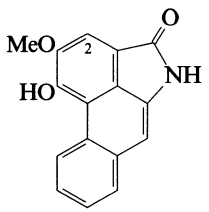
Corrie, J.E.T. *et al, Aust. J. Chem.*, 1970, **23**, 133 (*Pluviatilol*)
Abe, F. *et al, Chem. Pharm. Bull.*, 1973, **21**, 1617; 1974, **22**, 2650 (*Piperitol, Xanthoxylol*)
Dominguez, X. *et al, Rev. Latinoam. Quim.*, 1973, **4**, 155 (*isol*)
Pelter, A. *et al, Tetrahedron*, 1976, **32**, 2783 (*configs*)
Brieskorn, C.H. *et al, Tetrahedron Lett.*, 1976, 2221 (*isol*)
Vaquette, J. *et al, Planta Med.*, 1979, **35**, 42 (*isol*)
Ghosal, S. *et al, Phytochemistry*, 1980, **19**, 332 (*Simplexoside*)
Carvalho, M.G. *et al, Phytochemistry*, 1980, **19**, 332; 1987, **26**, 265 (*isol, pmr, pharmacol*)
Ishii, H. *et al, Yakugaku Zasshi*, 1983, **106**, 279 (*O-Prenylpluviatilol*)
Pelter, A. *et al, J. Chem. Soc., Perkin Trans. 1*, 1985, 587 (*synth, nmr*)
Stevens, D.R. *et al, J. Chem. Soc., Perkin Trans. 1*, 1992, 185 (*synth*)

Piperolactam A P-10121

Updated Entry replacing P-01379

1-Hydroxy-2-methoxydibenz[cd,f]indol-4(5H)one, 9CI. 10-Amino-4-hydroxy-3-methoxyphenanthrene-1-carboxylic acid lactam. Aristolactam FI

[112501-42-5]



$C_{16}H_{11}NO_3$ M 265.268
Alkaloid from the roots of *Piper longum*. Also isol. from the whole plants of *P. attenuatum, P. boehmerifolium, P. hamiltonii* (Piperaceae) and *Pararistolochia flos-avis* (Aristolochiaceae). Cryst. (C_6H_6/MeOH). Mp 303-306° dec., Mp 271-273° (EtOAc).

N-*Me:* **N-*Methylpiperolactam A***
$C_{17}H_{13}NO_3$ M 279.295
Alkaloid from stems of *Piper ribesioides* (Piperaceae). Amorph. solid. Mp 205-207°. The first natural *N*-methylated aristolactam.

2-Methoxy: [116084-93-6]. *1-Hydroxy-2,3-dimethoxydibenz[cd,f]indol-4(5H)one, 9CI. 10-Amino-2,3-dimethoxy-4-hydroxyphenanthrene-1-carboxylic acid lactam.* ***Piperolactam D***
$C_{17}H_{13}NO_4$ M 295.294

Alkaloid from the roots of *P. longum*, stems of *P. acutisleginum* and whole plants of *P. boehmerifolium* (Piperaceae). Greenish-yellow cryst. (MeOH). Mp 222-224°. This struct. was originally assigned to Piperolactam B by Desai *et al* (1988).

2-Methoxy, N,O-*di-Ac:* Cryst. (C_6H_6). Mp 260-262° (194-195°).

2-Methoxy, Me ether: [116064-76-7]. *1,2,3-Trimethoxydibenz*[cd,f]*indol-4*(5H)*-one, 9CI.* ***Piperolactam C***

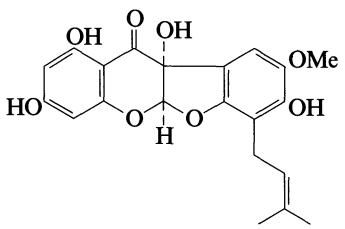
$C_{18}H_{15}NO_4$ M 309.321

Alkaloid from whole plants of *P. longum* and *P. boehimerifolium* (Piperaceae). Cryst. (C_6H_6/MeOH). Mp 187-188°.

Sun, N.-J. *et al, J. Nat. Prod.* (*Lloydia*), 1987, **50**, 843 (*isol, uv, ir, pmr, ms, struct*)
Desai, S.J. *et al, Phytochemistry*, 1988, **27**, 1511 (*isol, uv, ir, pmr, ms, struct*)
Desai, S.J. *et al, Indian J. Chem., Sect. B*, 1989, **28**, 775 (*Piperolactam C*)
Ruangrungsi, N. *et al, Phytochemistry*, 1992, **31**, 2397 (*N-Methylpiperolactam A*)
Olsen, C.E. *et al, Phytochemistry*, 1993, **33**, 518 (*Piperolactam D*)

Piscerythrol P-10122

[135905-48-5]



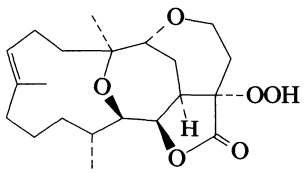
$C_{21}H_{20}O_8$ M 400.384

Constit. of *Piscidia erythrina*. Pale yellow powder. Mp 85-92°.

Tahara, S. *et al, Z. Naturforsch., C*, 1991, **46**, 331 (*isol, pmr, cmr*)

Planaxool P-10123

[149204-43-3]



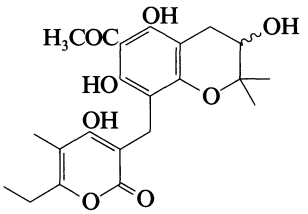
$C_{21}H_{32}O_6$ M 380.480

Constit. of *Planaxis sulcatus*. Solid. Mp 58°. $[\alpha]_D$ +219° (c, 0.621 in $CHCl_3$). Related to 4,13-Epoxy-3-hydroxy-7,15(17)-cembradien-16,14-olide, E-00769.

Alam, M. *et al, J. Nat. Prod.* (*Lloydia*), 1993, **56**, 774 (*isol, pmr, cmr*)

Plicatipyrone P-10124

[75680-20-5]



$C_{22}H_{26}O_8$ M 418.443

Isol. from *Helichrysum plicatum* and *H. stoechas*. Cryst. ($CHCl_3$/pet. ether). Mp 180-182°.

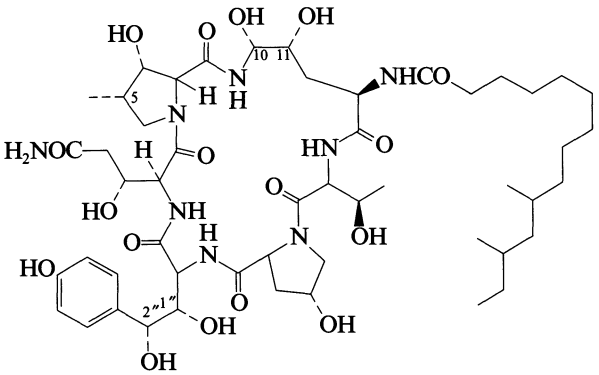
Haensel, R. *et al, Phytochemistry*, 1980, **19**, 639 (*isol, pmr, ir*)
Rios, J.L. *et al, J. Ethnopharmacol.*, 1991, **33**, 51 (*isol, props*)

Pneumocandin A_0 P-10125

Updated Entry replacing A-02162

L 671329. Antibiotic L 671329

[120692-19-5]



$C_{51}H_{82}N_8O_{17}$ M 1079.252

Lipopeptide antibiotic. Isol. from *Zalerion arboricola, Cryptosporiopsis* sp. and *Pezicula* sp. Antifungal agent. Powder. Dec. between 206-214°. Related to Antibiotic A 30912, A-01919.

1″-Deoxy: ***Pneumocandin A_1***
$C_{51}H_{82}N_8O_{16}$ M 1063.253
Prod. by *Z. arboricola*. Antifungal agent.

10,11-Dideoxy: [135867-75-3]. ***Pneumocandin A_2***
$C_{51}H_{82}N_8O_{15}$ M 1047.253
Prod. by *Z. arboricola*. Antifungal agent.

1″,2″,11-Trideoxy: ***Pneumocandin A_3***
$C_{51}H_{82}N_8O_{14}$ M 1031.254
Prod. by *Z. arboricola*. Antifungal agent.

1″,2″,10,11-Tetradeoxy: ***Pneumocandin A_4***
$C_{51}H_{82}N_8O_{13}$ M 1015.255
Prod. by *Z. arboricola*. Antifungal agent.

5-Demethyl: ***Pneumocandin B_0***
$C_{50}H_{80}N_8O_{17}$ M 1065.225
Prod. by *Z. arboricola*.

5-Demethyl, 10,11-dideoxy: ***Pneumocandin B_2***
$C_{50}H_{80}N_8O_{15}$ M 1033.227
Prod. by *Z. arboricola*. Antifungal agent.

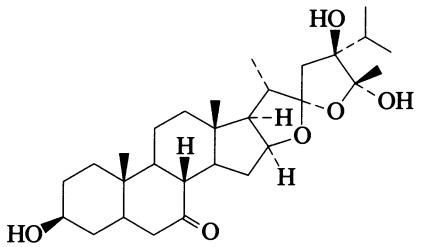
5-Demethyl, 5-hydroxy, 6-deoxy: ***Pneumocandin C_0***
$C_{50}H_{80}N_8O_{17}$ M 1065.225
Prod. by *Z. arboricola*. Antifungal agent.

Schwartz, R.E. *et al, J. Antibiot.*, 1989, **42**, 163, 168, 174; 1992, **45**, 1853, 1867, 1875, 1886, 1953 (*isol, pmr, cmr, struct, props*)

Adefarati, A.A. *et al, J. Am. Chem. Soc.*, 1991, **113**, 3542 (*biosynth*)
Noble, H.M. *et al, Mycol. Res.*, 1991, **95**, 1439 (*isol*)
U.S. Pat., 5 021 403, (1991); *CA*, **115**, 112824 (*deriv*)

Pogosterol P-10126

[149155-26-0]



$C_{29}H_{46}O_6$ M 490.679
Constit. of *Vernonia pogosperma*. Cryst. (MeOH). Mp 154-157°. $[\alpha]_D^{23}$ −91.6° (c, 0.43 in $CHCl_3$).

Mungarulire, J. *et al, Chem. Pharm. Bull.*, 1993, **41**, 411 (*isol, pmr, cmr*)

Polyphemusin I P-10127

[125139-67-5]

H-Arg-Arg-Trp-Cys-Phe-Arg-Val-Cys-Tyr-X-Gly-Phe-Cys-Tyr-Arg-Lys-Cys-Arg-NH_2, X = Arg

Isol. from the hemocytes of the horseshoe crab *Limulus polyphemus*. Antimicrobial agent.

Akaji, K. *et al, Chem. Pharm. Bull.*, 1989, **37**, 2661 (*synth*)
Miyata, T. *et al, J. Biochem. (Tokyo)*, 1989, **106**, 663 (*isol, props*)
Ohta, M. *et al, Antimicrob. Agents Chemother.*, 1992, **36**, 1460 (*props*)

Polyphemusin II P-10128

[125139-68-6]

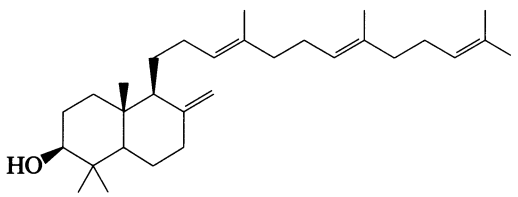
As Polyphemusin I, P-10127 with

X = Lys

Isol. from the hemocytes of the horseshoe crab *Limulus polyphemus*. Antimicrobial agent.

Miyata, T. *et al, J. Biochem. (Tokyo)*, 1989, **106**, 663 (*isol, props*)
Ohta, M. *et al, Antimicrob. Agents Chemother.*, 1992, **36**, 1460 (*props*)

8(26),13,17,21-Polypodatetraen-3-ol P-10129

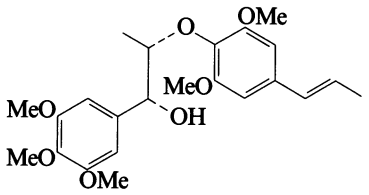


$C_{30}H_{50}O$ M 426.724
3β-form [147852-61-7]
Constit. of *Cratoxylum cochinchinense*. Oil. $[\alpha]_D$ +18.3° (c, 1.2 in $CHCl_3$).

Bennett, G.J. *et al, Phytochemistry*, 1993, **32**, 1245 (*isol, pmr, cmr*)

Polysyphorin P-10130

[137196-25-9]



$C_{23}H_{30}O_7$ M 418.486
Neolignan. Isol. from *Piper polysyphorum*. Racemic.

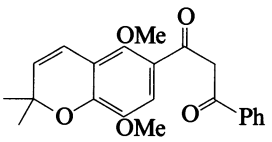
[137196-27-1]

Ma, Y. *et al, Yaoxue Xuebao*, 1991, **26**, 345; *CA*, **115**, 247446v (*isol, struct*)

Ponganone I P-10131

1-(5,8-Dimethoxy-2,2-dimethyl-2H-1-benzopyran-6-yl)-3-hydroxy-3-phenyl-2-propen-1-one, 9CI

[137031-54-0]



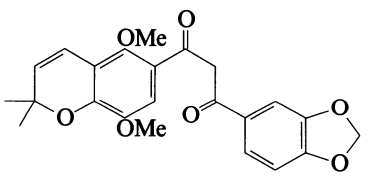
$C_{22}H_{22}O_5$ M 366.413
Enolised β-diketone (CAS name refers to enol tautomer). Constit. of the root bark of *Pongamia pinnata*. Yellow plates (MeOH). Mp 127-128°.

Tanaka, T. *et al, Chem. Pharm. Bull.*, 1991, **39**, 1473 (*isol, pmr, cmr*)

Ponganone II P-10132

3-(1,3-Benzodioxol-5-yl)-1-(5,8-dimethoxy-2,2-dimethyl-2H-1-benzopyran-6-yl)-3-hydroxy-2-propen-1-one, 9CI

[137031-55-1]



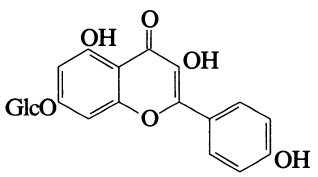
$C_{23}H_{22}O_7$ M 410.423
Enolised β-diketone (CAS name refers to enol tautomer). Constit. of the root bark of *Pongamia pinnata*. Yellow needles (MeOH). Mp 138-139°.

Tanaka, T. *et al, Chem. Pharm. Bull.*, 1991, **39**, 1473 (*isol, pmr, cmr*)

Populnin P-10133

Updated Entry replacing P-01652
7-O-β-D-Glucopyranosyloxy-3,4',5-trihydroxyflavone. Kaempferol 7-β-D-glucoside

[16290-07-6]



$C_{21}H_{20}O_{11}$ M 448.382

Isol. from *Thespesia populnea* and many other plant spp. Cryst. (H_2O). Mp 250°.

3-O-β-D-Glucopyranoside: see *3-O-β-D-Glucopyranosyloxy-4',5,7-trihydroxyflavone, G-00470*

3-O-β-D-Glucuronoside: [96400-38-3].
$C_{27}H_{28}O_{17}$ M 624.508
Isol. from *Euphorbia sanctae-catherinae.*

3-O-α-L-Rhamnopyranoside: [64323-49-5].
$C_{27}H_{30}O_{15}$ M 594.525
Isol. from *Betula* spp. and other plant spp.

3-O-D-Xyloside: [96751-10-9].
$C_{26}H_{28}O_{15}$ M 580.498
Isol. from *Zinnia elegans.*

3-O-(Rhamnopyranosylxyloside): [64078-90-6].
$C_{32}H_{38}O_{19}$ M 726.641
Isol. from *Euonymus ciliatus.*

3-O-Robinobioside: [114924-89-9].
$C_{33}H_{40}O_{20}$ M 756.667
Isol. from *Atropa belladonna.*

3-O-Rutinoside: [34336-18-0].
$C_{33}H_{40}O_{20}$ M 756.667
Isol. from *Equisetum palustre* and other plant spp. Yellow needles (MeOH aq.). Mp 193-196°.

3-O-Neohesperidoside:
$C_{33}H_{40}O_{20}$ M 756.667
Isol. from *Paris verticillata.* Pale yellow needles. Mp 202-207°. $[\alpha]_D^{23}$ −103.6° (c, 1.1 in MeOH).

3-O-Sophoroside: [55136-76-0].
$C_{33}H_{40}O_{21}$ M 772.666
Isol. from *Equisetum* spp., *Petunia hybrida* and other plant spp.

3-O-Gentiobioside: [84543-10-2].
$C_{33}H_{40}O_{21}$ M 772.666
Isol. from *Tribulus pentandrus.* Mp 220°.

3-O-Sambubioside: [58699-70-0]. ***Leucovernide***
$C_{32}H_{38}O_{20}$ M 742.640
Isol. from *Helleborus niger* and *Leucojum vernum.* Mp 206-207°.

3-O-Sophorotrioside:
$C_{39}H_{50}O_{26}$ M 934.808
Isol. from *Asplenium septentrionale.*

6''-O-(3,4,5-Trihydroxybenzoyl): [85933-23-9].
$C_{28}H_{24}O_{15}$ M 600.489
Isol. from *Acacia farnesiana.*

6''-O-Succinoyl: [72947-91-2]. ***Pteroflavonoloside***
$C_{25}H_{24}O_{14}$ M 548.456
Isol. from *Cyathea contaminans.* Yellow needles (EtOH aq.). Mp 239-242°.

3-(O-Caffeoyl-β-D-glucopyranoside): [80699-43-0].
$C_{36}H_{36}O_{19}$ M 772.669
Isol. from *Aconitum noveboracence.*

3-(O-Feruloyl-β-D-glucopyranoside): [83299-91-6].
$C_{37}H_{38}O_{19}$ M 786.696
Isol. from *Crambe fruticosa.*

3-(O-Benzoyl-β-D-glucopyranoside): [27436-81-3].
$C_{34}H_{34}O_{17}$ M 714.632
Isol. from *Narcissus poeticus.*

3-O-(4-Hydroxybenzoyl-β-D-glucopyranoside): [27321-63-7].
$C_{34}H_{34}O_{18}$ M 730.632
Isol. from *N. poeticus.*

3-O-(6-O-Acetyl-β-D-glucopyranoside): [66465-23-4].
$C_{29}H_{32}O_{17}$ M 652.562
Isol. from *Equisetum telmateja.* Yellow needles. Mp 243-244°.

3-O-(p-Coumaroylrutinoside): [80736-02-3].
$C_{42}H_{46}O_{22}$ M 902.812
Isol. from *Aconitum columbianum.*

3-O-(2''-O-Sinapoylsophoroside): [61042-11-3].
$C_{44}H_{50}O_{25}$ M 978.864
Isol. from *Brassica napus.* Yellow cryst. (MeOH aq.). Mp 220-225°.

3-O-(p-Coumaroyl-β-D-glucopyranoside), 4'-O-β-D-glucopyranoside:
$C_{42}H_{46}O_{23}$ M 918.812
Isol. from *Crambe cordifolia.*

3-O-[α-L-Rhamnopyranosyl-(1→2)-β-D-galactopyranoside]: [128988-58-9].
$C_{33}H_{40}O_{20}$ M 756.667
Constit. of *Blackstonia perfoliata.* Yellow powder.

3-O-(4-O-p-E-Coumaroylrobinobioside): [113270-94-3]. ***Variabiloside C***
$C_{42}H_{46}O_{22}$ M 902.812
Constit. of the leaves of *Strychnos variabilis.*

3-O-(4-O-p-Z-Coumaroylrobinobioside): [113349-37-4]. ***Variabiloside D***
$C_{42}H_{46}O_{22}$ M 902.812
Constit. of the leaves of *S. variabilis.*

[27661-49-0]

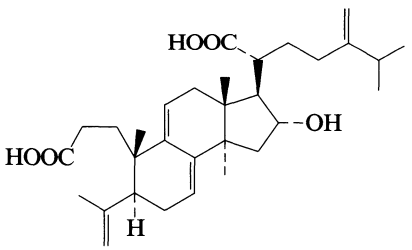
Birkofer, L. *et al, Z. Naturforsch., B,* 1962, **17**, 359 (*3-sophoroside*)
Steinegger, E. *et al, Pharm. Acta Helv.*, 1963, **38**, 119 (*3-robinobioside*)
Schoensiegel, I. *et al, Z. Naturforsch., B,* 1969, **24**, 1213 (*3-benzoylglucoside*)
Chari, V.M. *et al, Chem. Ber.*, 1976, **109**, 426 (*Leucovernide*)
Stengel, B. *et al, Z. Naturforsch., C,* 1976, **31**, 622 (*3-sinapoylsophoroside*)
Geiger, H. *et al, Phytochemistry,* 1978, **17**, 336 (*3-acetylglucoside*)
Hiraoka, A. *et al, Chem. Pharm. Bull.*, 1979, **27**, 3130 (*6''-succinate*)
Nakano, K. *et al, Chem. Pharm. Bull.*, 1981, **29**, 1445 (*3-neohesperidoside*)
El-Negoumy, S.L. *et al, Egypt. J. Chem.*, 1981, **24**, 471 (*6''-gallate*)
Young, D.A. *et al, Phytochemistry,* 1981, **20**, 2055 (*3-caffeoylglucoside*)
Saleh, N.A.M. *et al, Phytochemistry,* 1982, **21**, 1995; 1985, **24**, 371 (*3-gentiobioside, 3-glucuronoside*)
Aguinagalde, I. *et al, Phytochemistry,* 1982, **21**, 2875 (*3-feruloylglucoside*)
Brasseur, T. *et al, Phytochemistry,* 1988, **27**, 1487 (*Variabilosides*)
Kaouadji, M. *et al, Phytochemistry,* 1990, **29**, 1283 (*3-rhamnosylgalactoside*)

Poricoic acid A P-10134

Updated Entry replacing P-01665

16-Hydroxy-24-methylene-3,4-secolanosta-4(28),7,9(11)-triene-3,21-dioic acid

[137551-38-3]



$C_{31}H_{46}O_5$ M 498.701
Constit. of *Poria cocos.* Cryst. (MeCN aq.). Mp 248-249°. $[\alpha]_D^{26}$ +22° (c, 1 in MeOH).

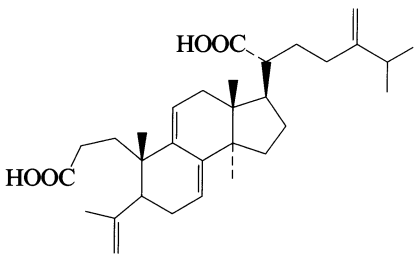
3-Me ester: ***Poricoic acid AM***
$C_{32}H_{48}O_5$ M 512.728
Constit. of *P. cocos.* Cryst. ($MeOH/CHCl_3$). Mp 220-222°. $[\alpha]_D^{26}$ +21° (c, 0.1 in MeOH).

Tai, T. *et al, Phytochemistry,* 1991, **30**, 2796; 1993, **32**, 1239 (*isol, pmr, cmr*)

Poricoic acid C P-10135

24-Methylene-3,4-secolanosta-4(28),7,9(11)-triene-3,21-dioic acid

[151200-89-4]



$C_{31}H_{46}O_4$ M 482.702

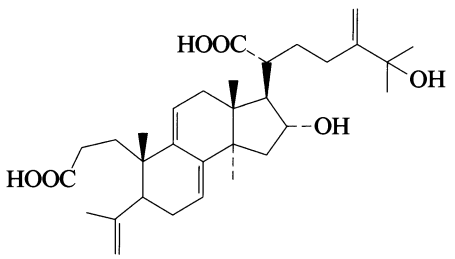
Constit. of *Poria cocos*. Amorph. powder. $[\alpha]_D^{26}$ +40° (c, 0.5 in MeOH).

Tai, T. *et al*, *Phytochemistry*, 1993, **32**, 1239 (*isol, pmr, cmr*)

Poricoic acid D P-10136

16,25-Dihydroxy-24-methylene-3,4-secolanosta-4(28),7,9(11)-triene-3,21-dioic acid

[151200-90-7]



$C_{31}H_{46}O_6$ M 514.701

Constit. of *Poria cocos*. Amorph. powder. $[\alpha]_D^{26}$ +11° (c, 1 in MeOH).

3-Me ester: [151200-91-8]. ***Poricoic acid DM***

$C_{32}H_{48}O_6$ M 528.728

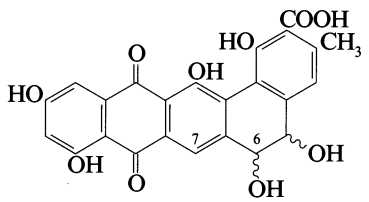
Constit. of *P. cocos*. Amorph. powder. $[\alpha]_D^{26}$ +25° (c, 0.5 in MeOH).

Tai, T. *et al*, *Phytochemistry*, 1993, **32**, 1239 (*isol, pmr, cmr*)

Pradimicin M P-10137

Updated Entry replacing P-01702

[132971-63-2]



$C_{24}H_{16}O_{10}$ M 464.384

Anthraquinone antibiotic. Isol. from *Actinomadura hibisca*.

6-Deoxy, 7-hydroxy: [141869-53-6]. ***Pradimicin Q***

$C_{24}H_{16}O_{10}$ M 464.384

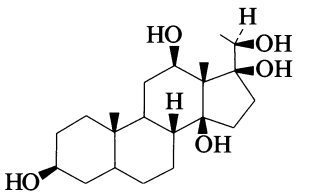
Isol. from *A. verrucospora neohibisca*. α-Glucosidase inhibitor. Mp >200° (dec.).

Sawada, Y. *et al*, *J. Antibiot.*, 1990, **43**, 1367 (*isol*)

U.S. Pat., 5 091 418, (1992); *CA*, **117**, 46702 (*Pradimicin Q*)

Pregnane-3,12,14,17,20-pentol P-10138

Updated Entry replacing P-01756



$C_{21}H_{36}O_5$ M 368.512

(3β,5α,12β,14β,17βOH,20S)-form [3513-00-6] ***Tomentogenin***

Constit. of *Marsdenia tomentosa*. Cryst. (Me_2CO). Mp 264-267°. $[\alpha]_D^{16}$ +36° (c, 0.95 in MeOH).

12-Ac: [63320-63-8].

$C_{23}H_{38}O_6$ M 410.550

Constit. of *M. tomentosa*. Needles (Me_2CO/hexane). Mp 165-168°. $[\alpha]_D^{19}$ +25° (c, 0.4 in $CHCl_3$).

20-Ac, 12-(2-methylbutanoyl): [59613-30-8]. ***Tomentonin***

$C_{28}H_{46}O_7$ M 494.667

Constit. of *M. tomentosa*. Plates (Me_2CO/hexane). Mp 158-161°. $[\alpha]_D^{18}$ +38° (c, 0.3 in $CHCl_3$).

20-Ac, 12-Tigloyl: [56691-94-2]. ***Tomentosin***

$C_{28}H_{44}O_7$ M 492.651

Constit. of *M. tomentosa*. Cryst. (Me_2CO/hexane). Mp 148-150°. $[\alpha]_D^{19}$ +43.5° (c, 0.23 in $CHCl_3$).

20-Ac, 12-Cinnamoyl: [59613-31-9]. ***Tomentodin***

$C_{32}H_{44}O_7$ M 540.695

Constit. of *M. tomentosa*. Needles (Me_2CO/hexane). Mp 140-144°. $[\alpha]_D^{20}$ +45° (c, 0.3 in $CHCl_3$).

12,20-Di-Ac: [57943-41-6]. ***Tomentin***†

$C_{25}H_{40}O_7$ M 452.587

Constit. of *M. tomentosa*. Cryst. (Me_2CO/hexane). Mp 137-141°. $[\alpha]_D^{11}$ +30° (c, 0.6 in $CHCl_3$).

12-Tigloyl: [56691-96-4]. ***Deacetyltomentosin***

$C_{26}H_{42}O_6$ M 450.614

Constit. of *M. tomentosa*. Prisms (Me_2CO/hexane). Mp 218-222°. $[\alpha]_D^{20}$ +41° (c, 0.5 in $CHCl_3$).

12-Ac, 20-Cinnamoyl: [61618-93-7]. ***Tomentidin***

$C_{32}H_{44}O_7$ M 540.695

Constit. of *M. tomentosa*. Needles (Me_2CO/hexane). Mp 148-150°. $[\alpha]_D^{20}$ +49° (c, 0.2 in $CHCl_3$).

20-Benzoyl, 12-Ac: [125472-06-2]. ***Drevogenin II***

$C_{30}H_{42}O_7$ M 514.658

Isol. from *Dregea sinensis corrugata*. Mp 235-238°. $[\alpha]_D$ +36.5° (c, 0.52 in MeOH).

12-Ac, 20-benzoyl, 3-O-[β-D-oleandropyranosyl-(1→4)-β-D-cymaropyranosyl-(1→4)-β-D-cymaropyranosyl]: [126005-92-3]. ***Dregeoside C***

$C_{51}H_{78}O_{16}$ M 947.168

Isol. from *D. sinensis corrugata*. Amorph. Mp 143-146°. $[\alpha]_D^{20}$ +37.5° (c, 0.92 in MeOH).

12-Cinnamoyl, 20-(3-pyridinecarbonyl): [63524-08-3]. ***Tomentomin***

$C_{36}H_{45}NO_7$ M 603.754

Alkaloid from *M. tomentosa* (Asclepiadaceae). Plates (EtOAc/hexane). Mp 155-157°. $[\alpha]_D^{20}$ +137° (c, 0.4 in $CHCl_3$).

Mitsuhashi, H. *et al*, *Chem. Pharm. Bull.*, 1965, **13**, 267 (*isol*)

Fukuoka, M. *et al*, *Chem. Pharm. Bull.*, 1968, **16**, 1634 (*struct*)

Seto, H. *et al*, *Chem. Pharm. Bull.*, 1975, **23**, 1552, 2397; 1976, **24**, 443, 1552, 2457; 1977, **25**, 611, 876 (*isol, Tomentomin*)

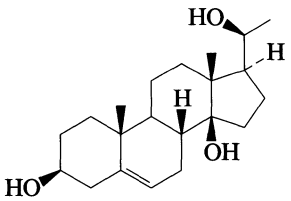
Japan. Pat., 74 46 956, (1978); *CA*, **89**, 104093 (*isol, Tomentonin*)

Jin, Q.D. *et al*, *J. Nat. Prod.* (*Lloydia*), 1989, **52**, 1214 (*Dregeoside C, Drevogenin II*)

Jin, Q.D. *et al*, *Yaoxue Xuebao*, 1989, **24**, 587 (*Drevogenin II*)

Pregn-5-ene-3,14,20-triol P-10139

Updated Entry replacing P-01774



(3β,14β,20*S*)-*form*

$C_{21}H_{34}O_3$ M 334.498

(3β,14β,20S)-form

3-O-[*β-D-Oleandropyranosyl-(1→4)-β-D-thevetopyranosyl-(1→4)-β-D-cymaropyranosyl-(1→4)-β-D-digitoxopyranoside*]: [122537-19-3]. ***Oxysin***
$C_{48}H_{80}O_{16}$ M 913.150
Isol. from the roots of *Oxystelma esculentum*. Mp 120-122°. $[\alpha]_D^{25}$ −17.5° (c, 0.1 in MeOH).

(3β,14β,20ξ)-form [83108-12-7]
Calogenin
Cryst. Mp 202-204°. $[\alpha]_D$ −50° (c, 0.12 in MeOH).

20-O-*β-D-Arabinopyranoside*: [83108-09-2]. ***Calocin***
$C_{26}H_{42}O_7$ M 466.614
Isol. from *Periploca calophylla*. Needles (Me_2CO/pet. ether). Mp 243-247°. $[\alpha]_D$ −60.7° (c, 0.3 in MeOH).

3-O-*β-L-2,6-Dideoxyfucopyranoside*: [116965-72-1]. ***Calocinin***
$C_{27}H_{44}O_6$ M 464.641
From *P. calophylla*. Cryst. (MeOH/Et_2O). Mp 250-255°. $[\alpha]_D^{25}$ +16° (c, 0.13 in MeOH).

3-O-*β-D-Digitoxopyranoside*: [122566-58-9]. ***Indicine***†
$C_{27}H_{44}O_6$ M 464.641
Constit. of *Hemidesmus indicus*. Cryst. (MeOH/Et_2O). Mp 230-233°. $[\alpha]_D^{25}$ −39° (c, 0.3 in MeOH).

3-O-*β-D-Boivinopyranoside*: [132831-02-8]. ***Hemidine***
$C_{27}H_{44}O_6$ M 464.641
Constit. of *H. indicus*. Cryst. (MeOH/Et_2O). Mp 133-140°. $[\alpha]_D^{25}$ −24° (c, 0.17 in MeOH).

Srivasteva, O.P. *et al*, *J. Nat. Prod.* (*Lloydia*), 1982, **45**, 211 (*Calocin*)
Sethi, A. *et al*, *J. Nat. Prod.* (*Lloydia*), 1988, **51**, 787 (*Calocinin*)
Trivedi, R. *et al*, *Phytochemistry*, 1989, **28**, 1211 (*Oxysin*)
Prakash, K. *et al*, *Phytochemistry*, 1991, **30**, 297 (*Indicine, Hemidine*)

Pregn-5-ene-3,17,20-triol P-10140

Updated Entry replacing P-01775

$C_{21}H_{34}O_3$ M 334.498

(3β,17αOH,20S)-form

3-Sulfate: Mp 179-181° (as NH_4 salt).

20-O-(*2,6-Dideoxy*-arabino-*hexopyranoside*): [39946-41-3]. ***Periplocoside N***
$C_{27}H_{44}O_6$ M 464.641
Constit. of Bei-wujiapi (the cortex of *Periploca sepium*). Needles (EtOH). Mp 239-240°. $[\alpha]_D^{22}$ −69.9° (c, 0.92 in EtOH).

3-O-*β-D-Digitalopyranoside*: [116709-66-1]. ***Periplocoside L***
$C_{28}H_{46}O_7$ M 494.667
Constit. of *P. sepium*. Needles. Mp 238-240°. $[\alpha]_D$ −53.3° (c, 0.06 in MeOH).

20-O-[*β-D-Digitalopyranosyl-(1→4)-β-D-cymaropyranosyl-(1→4)-β-D-canaropyranosyl-(1→4)-β-D-digitoxopyranosyl-(1→5)-3,7-dideoxy-4*-O-*methyl-α-D*-gluco-*2-heptulopyranosyl-(2→4)-dioxy-(1→3)-β-D-canaropyranoside*]: [119902-15-7]. ***Periplocoside J***
$C_{61}H_{100}O_{23}$ M 1201.447
Constit. of *P. sepium*. Powder. Mp 178-181°. $[\alpha]_D^{20}$ +24.13° (c, 0.12 in MeOH).

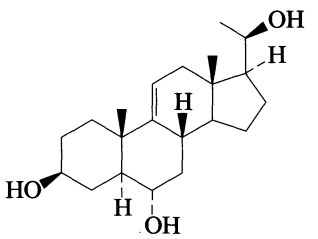
20-O-[*β-D-Digitalopyranosyl-(1→4)-β-D-cymaropyranosyl-(1→4)-β-D-cymaropyranosyl-(1→4)-β-D-cymaropyranosyl-(1→5)-3,7-dideoxy-4*-O-*methyl-α-D*-gluco-*2-heptulopyranosyl-(2→4)-dioxy-(1→3)-β-D-canaropyranoside*]: [119902-17-9]. ***Periplocoside F***
$C_{63}H_{104}O_{23}$ M 1229.501
Constit. of *P. sepium*. Powder. Mp 195-198°. $[\alpha]_D$ +8.1° (c, 0.07 in MeOH).

20-O-[*2*-O-*Acetyl-β-D-digitalopyranosyl-(1→4)-β-D-cymaropyranosyl-(1→4)-β-D-cymaropyranosyl-(1→4)-β-D-cymaropyranosyl-(1→5)-3,7-dideoxy-4*-O-*methyl-α-D*-gluco-*2-heptulopyranosyl-(2→4)-dioxy-(1→3)-β-D-canaropyranoside*]: [116709-65-0]. ***Periplocoside E***
$C_{65}H_{106}O_{24}$ M 1271.538
Constit. of *P. sepium*. Powder. Mp 183-189°. $[\alpha]_D$ −7.5° (c, 0.08 in $CHCl_3$).

Calvin, H.I. *et al*, *J. Clin. Endocrinol. Metab.*, 1966, **24**, 402 (*sulfate*)
Ishijone, H. *et al*, *Chem. Pharm. Bull.*, 1972, **20**, 2402.
Itokawa, H. *et al*, *Chem. Pharm. Bull.*, 1988, **36**, 2084, 4441 (*Periplocosides*)

Pregn-9(11)-ene-3,6,20-triol P-10141

Updated Entry replacing P-01777



$C_{21}H_{34}O_3$ M 334.498

(3β,5α,6α,20R)-form [75921-90-3] ***Asterogenol***
Constit. of the starfish *Asterias forbesi*. Cryst. (MeOH). Mp 263-266°. $[\alpha]_D^{20}$ +8° (c, 0.124 in EtOH).

6-O-(*6-Deoxy-β-D-glucopyranoside*), *3*-O-*sulfate*: [129602-17-1]. ***Forbeside E1***
$C_{27}H_{44}O_{10}S$ M 560.705
Isol. from *A. forbesi*. Powder (as Na salt). Mp 218° (Na salt). $[\alpha]_D^{28}$ +4.2° (c, 0.005 in H_2O).

6-O-(*6-Deoxy-β-D-glucopyranoside*), *4'*-O-*sulfate*: [129602-18-2]. ***Forbeside E2***
$C_{27}H_{44}O_{10}S$ M 560.705
Isol. from *A. forbesi*. Powder (as Na salt). Mp 204° (Na salt). $[\alpha]_D^{28}$ +8° (c, 0.002 in H_2O).

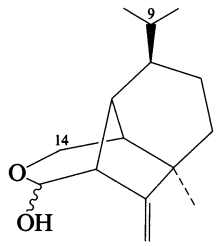
6-O-(*6-Deoxy-β-D-glucopyranoside*), *3,4'-di*-O-*sulfate*: [125127-57-3]. ***Forbeside E***
$C_{27}H_{44}O_{13}S_2$ M 640.769
Isol. from *A. forbesi*. Powder (as di-Na salt). Mp 238° dec. (di-Na salt). $[\alpha]_D$ +9.5° (c, 0.004 in H_2O).

ApSimon, J.W. *et al*, *Can. J. Chem.*, 1980, **58**, 2703.
Findlay, J.A. *et al*, *Can. J. Chem.*, 1989, **67**, 2078 (*Forbesides*)
Findlay, J.A. *et al*, *J. Nat. Prod.* (*Lloydia*), 1990, **53**, 710 (*Forbesides*)

Prehelminthosporol P-10142

Updated Entry replacing P-01779

[1619-13-2]



$C_{15}H_{24}O_2$ M 236.353

Metab. of *Cochliobolus sativus* and *C. setariae*. Shows antiviral activity *in vitro*. Phytotoxin and plant growth regulator. Gum. Mixt. of epimers.

Ac: [81509-30-0].
Mp 65-67°. $[\alpha]_D^{27}$ −1.6° (c, 0.92 in $CHCl_3$).

Ketone (lactone): [118101-72-7]. ***Prehelminthosporolactone***
$C_{15}H_{22}O_2$ M 234.338
From a *Bipolaris* sp. Phytotoxin. Needles (MeOH aq.). Mp 78.5-79°. $[\alpha]_D^{27}$ −119.8° (c, 0.96 in $CHCl_3$).

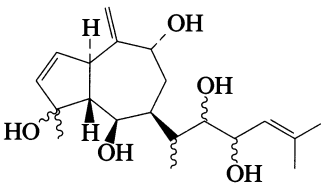
9-Hydroxy: [26770-82-1]. ***9-Hydroxyprehelminthosporol***
$C_{15}H_{24}O_3$ M 252.353
Metab. of *C. sativus*. Shows antiviral props. *in vitro*. Gum.

9-Acetoxy: Cryst. (Et_2O/pet. ether). Mp 135-137°. $[\alpha]_D^{27}$ +9.3° (c, 1.1 in $CHCl_3$).

14-Hydroxy: [61391-22-8]. ***Prehelminthosporal***
$C_{15}H_{24}O_3$ M 252.353
Constit. of *B. sorokiniana* and *Helminthiosporium sativum*. In equilibrium with the dialdehyde of which it is the hydrated form.

Aldridge, D.C. *et al*, *J. Chem. Soc. C*, 1970, 686.
Nukina, M. *et al*, *J. Am. Chem. Soc.*, 1975, **97**, 2542 (*props*)
Nukina, M. *et al*, *Agric. Biol. Chem.*, 1976, **40**, 2121 (*props*)
Piers, E. *et al*, *Can. J. Chem.*, 1977, **55**, 1039 (*Prehelminthosporal*)
Cutler, H.G. *et al*, *J. Agric. Food Chem.*, 1982, **30**, 658 (*props*)
Pena-Rodriguez, L.M. *et al*, *J. Nat. Prod.* (*Lloydia*), 1989, **52**, 899 (*Prehelminthosporolactone*)

2,10(18),14-Prenylguaiatriene-4,6,9,12,13-pentol P-10143



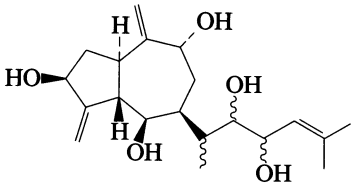
$C_{20}H_{32}O_5$ M 352.470

(4ξ,6β,9α,12ξ,13ξ)-form

12,13-Di-Ac: [146523-00-4].
$C_{24}H_{36}O_7$ M 436.544
Constit. of *Dictyota volubilis*. Oil. $[\alpha]_D^{25}$ −15.3° (c, 0.6 in $CHCl_3$).

Wright, A.D. *et al*, *Tetrahedron*, 1993, **49**, 571 (*isol, pmr, cmr*)

4(17),10(18),14-Prenylguaiatriene-3,6,9,12,13-pentol P-10144



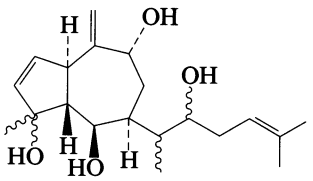
$C_{20}H_{32}O_5$ M 352.470

(3β,6β,9α,12ξ,13ξ)-form

12,13-Di-Ac: [146522-99-8].
$C_{24}H_{36}O_7$ M 436.544
Constit. of *Dictyota volubilis*. Oil. $[\alpha]_D^{25}$ −8.5° (c, 0.2 in $CHCl_3$).

Wright, A.D. *et al*, *Tetrahedron*, 1993, **49**, 571 (*isol, pmr, cmr*)

2,10(18),14-Prenylguaiatriene-4,6,9,12-tetrol P-10145



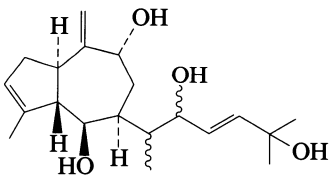
$C_{20}H_{32}O_4$ M 336.470

(1α,4ξ,5β,6β,9α,12ξ)-form

12-Ac: [149195-81-3].
$C_{22}H_{34}O_5$ M 378.508
Constit. of *Dictyota volubilis*. Oil. $[\alpha]_D$ −16.6° (c, 0.74 in $CHCl_3$).

König, G.M. *et al*, *Planta Med.*, 1993, **59**, 174 (*isol, pmr, cmr*)

3,10(18),13-Prenylguaiatriene-6,9,12,15-tetrol P-10146



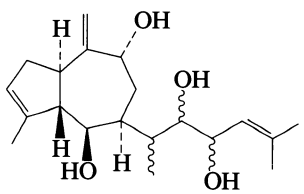
$C_{20}H_{32}O_4$ M 336.470

(1α,5β,6β,9α,12ξ)-form

12-Ac: [149195-80-2].
$C_{22}H_{34}O_5$ M 378.508
Constit. of *Dictyota volubilis*. Yellow oil. $[\alpha]_D$ +2.1° (c, 0.51 in $CHCl_3$).

König, G.M. *et al*, *Planta Med.*, 1993, **59**, 174 (*isol, pmr, cmr*)

3,10(18),14-Prenylguaiatriene-6,9,12,13-tetrol P-10147



$C_{20}H_{32}O_4$ M 336.470

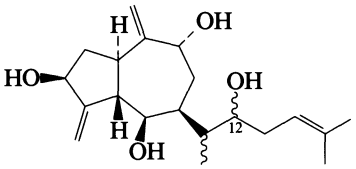
(1α,5β,6β,9α,12ξ,13ξ)-form

12,13-Di-Ac: [149195-79-9].
$C_{24}H_{36}O_6$ M 420.545
Constit. of *Dictyota volubilis*. Yellow oil. $[\alpha]_D$ +4.4° (c, 1.2 in $CHCl_3$).

6,12,13-Tri-Ac: [149195-78-8].
$C_{26}H_{38}O_7$ M 462.582
Constit. of *D. volubilis*. Cryst. Mp 142.4°. $[\alpha]_D$ +21.3° (c, 0.16 in $CHCl_3$).

König, G.M. *et al*, *Planta Med.*, 1993, **59**, 174 (*isol, pmr, cmr*)

4(17),10(18),14-Prenylguaiatriene-3,6,9,12-tetrol P-10148



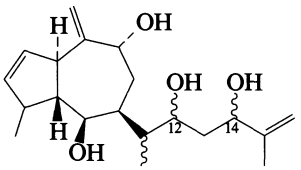
$C_{20}H_{32}O_4$ M 336.470

(3β,6β,9α,12ξ)-form

12-Ac: [146506-41-4].
$C_{22}H_{34}O_5$ M 378.508
Constit. of *Dictyota volubilis*. Oil. $[\alpha]_D^{25}$ −16.4° (c, 0.25 in $CHCl_3$).

Wright, A.D. *et al*, *Tetrahedron*, 1993, **49**, 571 (*isol, pmr, cmr*)

4(17),10(18),15-Prenylguaiatriene-6,9,12,14-tetrol P-10149



$C_{20}H_{32}O_4$ M 336.470

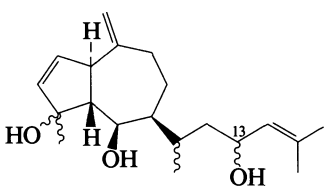
(6β,9α,12ξ,14ξ)-form

12-Ac: [146506-42-5].
$C_{22}H_{34}O_5$ M 378.508
Constit. of *Dictyota volubilis*. Oil. $[\alpha]_D^{25}$ +30.5° (c, 0.2 in $CHCl_3$).

12-Ac, 14-epimer:
$C_{22}H_{34}O_5$ M 378.508
Constit. of *D. volubilis*. Oil. $[\alpha]_D^{25}$ −16.8° (c, 0.22 in $CHCl_3$).

Wright, A.D. *et al*, *Tetrahedron*, 1993, **49**, 571 (*isol, pmr, cmr*)

2,10(18),14-Prenylguaiatriene-4,6,13-triol P-10150



$C_{20}H_{32}O_3$ M 320.471

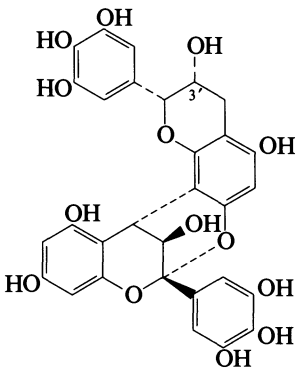
(4ξ,6β,13ξ)-form

13-Ac: [146506-43-6].
$C_{22}H_{34}O_4$ M 362.508
Constit. of *Dictyota volubilis*. Oil. $[\alpha]_D^{25}$ +13.0° (c, 0.43 in $CHCl_3$).

Wright, A.D. *et al*, *Tetrahedron*, 1993, **49**, 571 (*isol, pmr, cmr*)

Prodelphinidin A_2 P-10151

3,3′,4′,5,5′,7-Hexahydroxyflavan-(2→7,4→8)-3,3′,4′,5,5′,7-hexahydroxyflavan

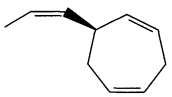


$C_{30}H_{24}O_{14}$ M 608.511
Off-white powder. $[\alpha]_D^{19}$ +54.3° (c, 0.3 in Me_2CO).

3′-O-(3,4,5-Trihydroxybenzoyl): [126715-94-4].
Prodelphinidin A_2 3′-gallate
$C_{37}H_{28}O_{18}$ M 760.617
Constit. of oolong tea (*Camellia sinensis* var. *viridis*).
Tan powder. $[\alpha]_D^{20}$ −60° (c, 0.5 in Me_2CO).

Hashimoto, F. *et al*, *Chem. Pharm. Bull.*, 1989, **37**, 3255.

6-(1-Propenyl)-1,4-cycloheptadiene P-10152



(*S*)-(*Z*)-*form*

$C_{10}H_{14}$ M 134.221

(S)-(Z)-form [142864-29-7]
Constit. of the brown alga *Ectocarpus siliculosus*.

(±)-***(E)-form*** [50265-65-1]
Bp_{17} 54-55°.

[92340-52-8]

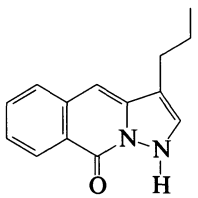
Jaenicke, L. *et al*, *Justus Liebigs Ann. Chem.*, 1973, 1252 (*synth, pmr*)

Stratmann, K. *et al*, *Angew. Chem., Int. Ed. Engl.*, 1992, **31**, 1246 (*isol*)

3-Propyl-1*H*-pyrazolo[1,5-*b*]isoquinolin-9-one P-10153

APHE 2

[146426-36-0]



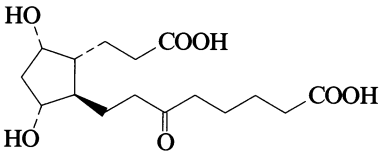
$C_{14}H_{14}N_2O$ M 226.277
Prod. by *Streptoverticillium griseocarneum*. Shows antimicrobial and cytotoxic activities. Yellow powder. Mp 130-132°.

Fidalgo, M.L. *et al*, *J. Antibiot.*, 1992, **45**, 1759 (*isol, pmr, cmr, struct, props*)

Prostaglandin F-M **P-10154**

2-(2-Carboxyethyl)-3,5-dihydroxy-ε-oxocyclopentaneoctanoic acid. 5,7-Dihydroxy-11-oxotetranorprostane-1,16-dioic acid

[69779-96-0]



$C_{16}H_{26}O_7$ M 330.377

Urinary metab. of $PGF_{2\alpha}$ (see 9,11,15-Trihydroxyprosta-5,13-dienoic acid, T-02631).

5-Ketone: [24769-56-0]. *Prostaglandin E-M. 2-(2-Carboxyethyl)-5-hydroxy-ε,3-dioxo-cyclopentaneoctanoic acid*

$C_{16}H_{24}O_7$ M 328.361

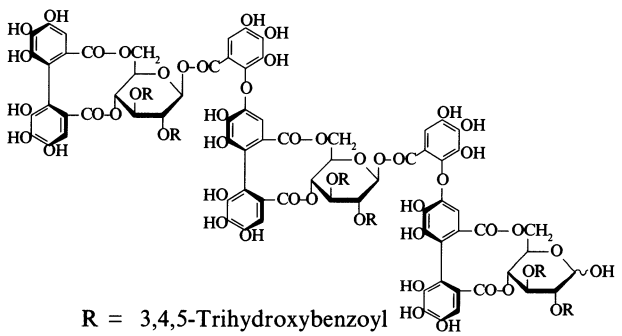
PGE_2 (see 11,15-Dihydroxy-9-oxo-5,13-prostadienoic acid, D-10223) human urinary metab.

[23109-94-6, 31935-05-4, 55029-37-3]

Granstroem, E. *et al*, *J. Am. Chem. Soc.*, 1969, **91**, 3398 (*isol*)
Boot, J.R. *et al*, *Prostaglandins*, 1974, **8**, 439 (*synth*)
Brash, A.R. *et al*, *Biochim. Biophys. Acta*, 1979, **572**, 371 (*biosynth*)
Granstroem, E. *et al*, *Biochim. Biophys. Acta*, 1982, **713**, 46 (*biosynth*)
Rosenkranz, B. *et al*, *Biochim. Biophys. Acta*, 1983, **750**, 231 (*biosynth*)

Prostratin B **P-10155**

[134176-73-1]



R = 3,4,5-Trihydroxybenzoyl

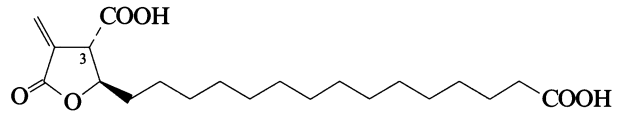
$C_{116}H_{82}O_{74}$ M 2659.879

Exists as an equilibrated mixt. of α- and β-anomers. Ellagitannin const. of *Euphorbia prostrata*. Pale brown amorph. powder + $21H_2O$. $[\alpha]_D^{20}$ +125° (c, 1.0 in MeOH).

Yoshida, T. *et al*, *Chem. Pharm. Bull.*, 1990, **38**, 3296 (*struct, uv, pmr, cmr*)

Protopraesorediosic acid **P-10156**

3-Carboxytetrahydro-4-methylene-5-oxo-2-furanpentadecanoic acid, 9CI



$C_{21}H_{34}O_6$ M 382.496

(2R,3S)-form [130342-69-7]

Isol. from the lichen *Parmotrema praesorediosum*. Cryst. ($CHCl_3$/pet. ether). Mp 123-124°. $[\alpha]_D^{25}$ +9.1° (MeOH).

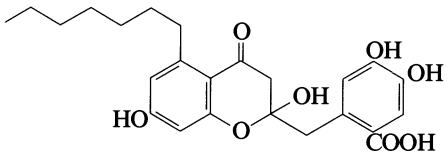
Δ^3-Isomer: [130342-70-0]. ***Praesorediosic acid.*** *3-Carboxy-2,5-dihydro-4-methyl-5-oxo-2-furanpentadecanoic acid, 9CI*

Isol. from *P. praesorediosum*. Cryst. ($CHCl_3$/pet. ether). Mp 139-140.5°. $[\alpha]_D^{25}$ +22.7° (MeOH).

Feeya, D. *et al*, *Aust. J. Chem.*, 1990, **43**, 1297 (*isol, pmr, cd, struct*)

Protosiphulin **P-10157**

[74474-69-4]



$C_{24}H_{28}O_8$ M 444.480

Constit. of lichen *Siphula ceratites*. Needles (Me_2CO/hexane). Mp 179-182° dec. Racemic.

Shimada, S. *et al*, *Phytochemistry*, 1980, **19**, 467 (*isol*)

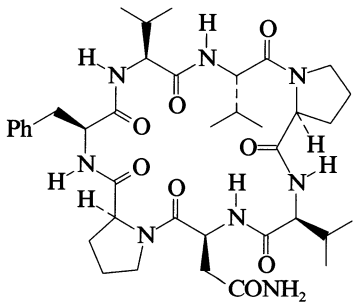
Protosterol B **P-10158**

Struct. unknown. Constit. of the stem bark of *Wistaria sinensis*.

Tiwari, K.P. *et al*, *Proc. Natl. Acad. Sci., India, Sect. A*, 1981, **51**, 263.

Pseudoaxinellin **P-10159**

[137647-92-8]

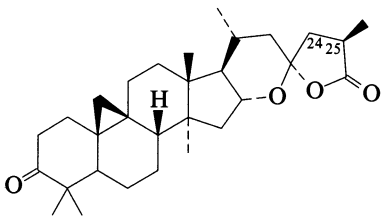


$C_{38}H_{56}N_8O_8$ M 752.909

Cyclic peptide. Constit. of the sponge *Pseudoaxinella massa*. Glass. $[\alpha]_D$ −100.1° (c, 0.34 in $CHCl_3$).

Kong, F. *et al*, *Tetrahedron Lett.*, 1992, **33**, 3269 (*isol, pmr, cmr, struct*)

Pseudolarolide A **P-10160**



$C_{30}H_{44}O_4$ M 468.675

Constit. of *Pseudolarix kaempferi*. Plates (MeOH). Mp 257-259°.

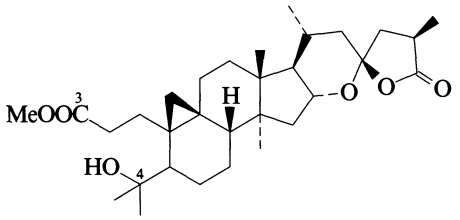
24,25-Didehydro: ***Pseudolarolide B***

$C_{30}H_{42}O_4$ M 466.659

Constit. of *P. kaempferi*. Needles (Me_2CO). Mp 229-231°.

Chen, G.-F. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 1114 (*isol, pmr, cmr*)

Pseudolarolide C P-10161



$C_{31}H_{48}O_6$ M 516.717

Constit. of *Pseudolarix kaempferi*. Prisms (Me_2CO). Mp 205.5-207.5°.

Parent acid, 3→4 lactone: ***Pseudolarolide D***

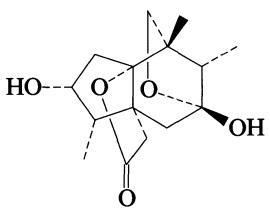
$C_{30}H_{44}O_5$ M 484.675

Constit. of *P. kaempferi*. Needles (Me_2CO). Mp 222-223°.

Chen, G.-F. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 1114 (*isol, pmr, cmr*)

Pseudomajucin P-10162

[125028-61-7]



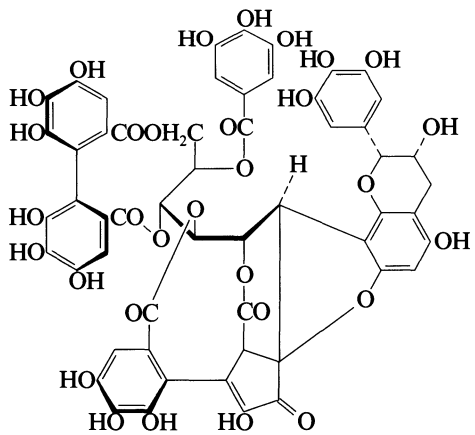
$C_{15}H_{22}O_5$ M 282.336

Constit. of *Illicium majus*. Prisms (EtOAc). Mp 199-201°. $[\alpha]_D^{15}$ −89.6° (c, 0.26 in dioxan).

Kouno, I. *et al*, *Chem. Pharm. Bull.*, 1989, **37**, 2427 (*isol, pmr, cmr, cryst struct*)

Psidinin C P-10163

[145826-28-4]



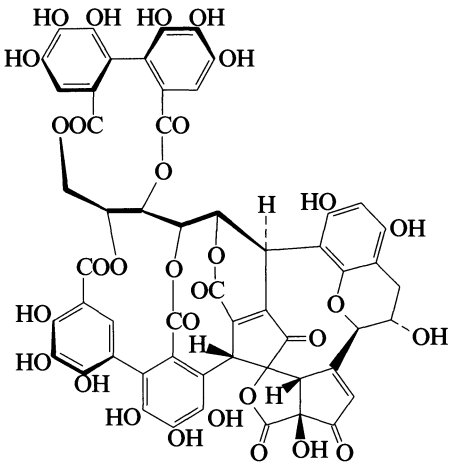
$C_{55}H_{38}O_{31}$ M 1194.887

Isol. from the bark of *Psidium guajava*. Pale brown amorph. powder + $6H_2O$. $[\alpha]_D^{31}$ −47.4° (c, 1.0 in MeOH).

Tanaka, T. *et al*, *Chem. Pharm. Bull.*, 1992, **40**, 2092 (*cd, pmr, cmr*)

Psiguavin P-10164

[145826-29-5]



$C_{55}H_{34}O_{31}$ M 1190.855

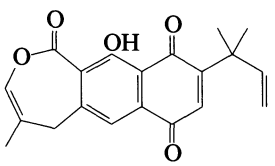
Tannin derived from the bark of *Psidium guajava*. Pale brown amorph. powder + $9\frac{1}{2}H_2O$. $[\alpha]_D^{27}$ −62.9° (c, 0.5 in MeOH).

Tanaka, T. *et al*, *Chem. Pharm. Bull.*, 1992, **40**, 2092 (*pmr, cmr*)

Psorolactone B P-10165

9-(1,1-Dimethyl-2-propenyl)-11-hydroxy-4-methylnaphth[2,3-c]oxepin-1,7,10(5H)-trione, 9CI

[120090-78-0]



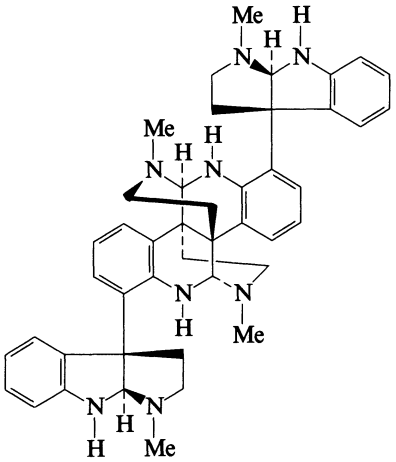
$C_{20}H_{18}O_5$ M 338.359

Isol. from *Psorospermum glaberrimum*. Cryst. Mp 217-218°.

Botta, B. *et al*, *Tetrahedron*, 1988, **44**, 7193 (*isol, pmr, cmr*)

Psycholeine P-10166

[144424-79-3]



$C_{44}H_{50}N_8$ M 690.933

Alkaloid from *Psychotria oleoides* (Rubiaceae). $[\alpha]_D^{20}$ −150° (c, 0.4 in EtOH).

Guéritte-Voegelein, F. *et al*, *J. Nat. Prod.* (*Lloydia*), 1992, **55**, 923 (*isol, uv, ir, pmr, cmr, ms, cd, struct*)

Psyllostearyl alcohol P-10167

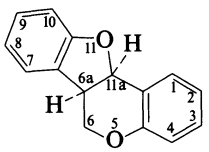
Constit. of the roots of *Gueldenstaedtia multiflora*.

Zhu, R. *et al*, *Zhongcaoyao*, 1984, **15**, 337; *CA*, **101**, 226841r.

Pterocarpan P-10168

6a,11a-Dihydro-6H-benzofurano[3,2-c][1]benzopyran, 9CI

[61080-21-5]



$C_{15}H_{12}O_2$ M 224.259

Parent nucleus of a group of natural prods. The generally agreed numbering scheme was amended in 1965.

(6aRS,11aRS)-form

(±)-cis-*form*

Cryst. Mp 125-127°.

Harper, S.H. *et al*, *J. Chem. Soc., Chem. Commun.*, 1965, 310.

Horino, H. *et al*, *J. Chem. Soc., Chem. Commun.*, 1976, 500 (*synth*)

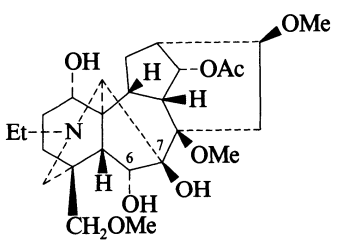
Jain, A.C. *et al*, *J. Sci. Ind. Res.*, 1978, **37**, 287 (*rev*)

Gopalsany, A. *et al*, *J. Chem. Soc., Chem. Commun.*, 1988, 28 (*synth*)

Pubescenine† P-10169

Updated Entry replacing P-02140

[116339-93-6]



$C_{26}H_{41}NO_8$ M 495.612

Alkaloid from *Consolida pubescens* (Ranunculaceae). Cryst. (EtOAc). Mp 227-229°. $[\alpha]_D$ −1.3° (c, 0.15 in EtOH).

6-Epimer: [125263-90-3]. ***6-Epipubescenine.*** *6-epi-Pubescenine*

$C_{26}H_{41}NO_8$ M 495.612

Minor alkaloid from *Delphinium nuttallianum* (Ranunculaceae). Amorph. solid. $[\alpha]_D^{23}$ +23° ($CHCl_3$).

O^{18}*-De-Me, 6-deoxy:* ***Ajadelphine***

$C_{25}H_{39}NO_7$ M 465.586

Alkaloid from roots of *Delphinium ajacis* (Ranunculaceae). Amorph. $[\alpha]_D$ +2.0° (c, 0.13 in $CHCl_3$).

de la Fuente, G. *et al*, *Tetrahedron Lett.*, 1988, **29**, 2723 (*isol, ir, pmr, cmr, ms, cryst struct*)

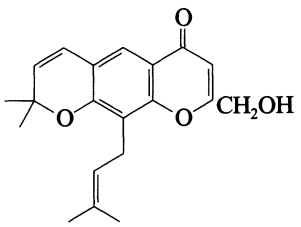
Bai, Y. *et al*, *Heterocycles*, 1989, **29**, 1017 (*isol, ir, pmr, cmr, ms, struct, epimer*)

Pelletier, S.W. *et al*, *J. Nat. Prod.* (*Lloydia*), 1992, **55**, 736 (*Ajadelphine*)

Pulverochromenol P-10170

8-(Hydroxymethyl)-2,2-dimethyl-10-(3-methyl-2-butenyl)-2H,6H-benzo[1,2-b:5,4-b']dipyran-6-one, 9CI

[85394-12-3]



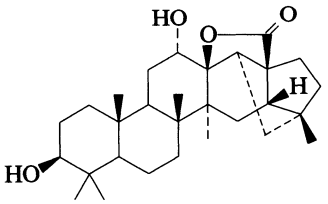
$C_{20}H_{22}O_4$ M 326.391

Constit. of *Cneorum pulverulentum* and *C. tricoccum*. Shows cytostatic props.

Gonzalez, A.G. *et al*, *Planta Med.*, 1983, **47**, 56.

Pulverulactone P-10171

[151200-62-3]



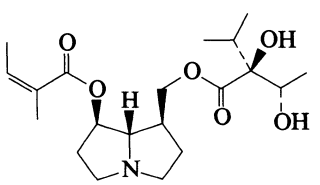
$C_{29}H_{44}O_4$ M 456.664

Constit. of *Pfaffia pulverulenta*. Cryst. ($CHCl_3$/MeOH). Mp 280-282°. $[\alpha]_D$ +62° (c, 1 in $CHCl_3$).

Shiobara, Y. *et al*, *Phytochemistry*, 1993, **33**, 897 (*isol, pmr, cmr*)

Punctanecine P-10172

[145204-91-7]



$C_{20}H_{33}NO_6$ M 383.484

Abs. stereochem. is tentative. Alkaloid from *Liatris punctata* (Compositae). Yellow oil. $[\alpha]_D^{23}$ −2.5° (c, 0.4 in $CHCl_3$).

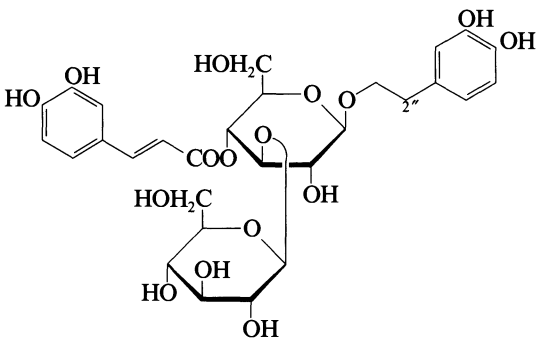
[145307-23-9]

Mead, E.W. *et al*, *Phytochemistry*, 1992, **31**, 3255 (*isol, pmr, cmr, ms, struct*)

Purpureaside A P-10173

Plantamoside. Plantamajoside

[104777-68-6]



$C_{29}H_{36}O_{16}$ M 640.594

Isol. from the leaves of *Digitalis purpurea, Lagotis stolonifera* and *Plantago major*. Exhibits antibacterial activity against *E. coli, Staphylococcus aureus* and several plant pathogenic bacteria. Decreases some human leukocyte functions. Amorph. powder. $[\alpha]_D^{19}$ −54.3° (c, 0.8 in MeOH).

2″-Hydroxy: [132278-04-7]. ***Helicoside***

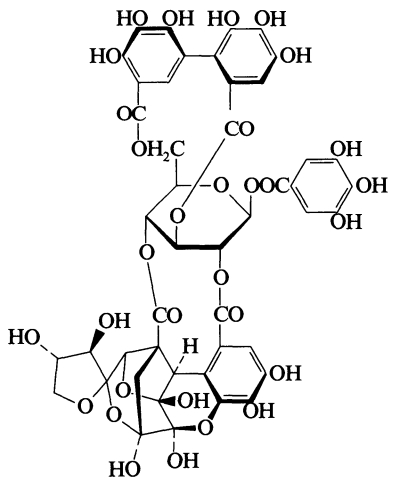
$C_{29}H_{36}O_{17}$ M 656.593

Isol. from aerial parts of *Plantago asiatica*. Amorph. yellow powder. Mp 182.6-190.3°. $[\alpha]_D^{23}$ −27° (c, 1.0 in MeOH).

Matsumoto, M. *et al*, *Phytochemistry*, 1987, **26**, 3225 (*isol, pmr, cmr*)

Ravn, H. *et al*, *Phytochemistry*, 1988, **27**, 3433; 1990, **29**, 3627 (*isol, pmr, cmr, pharmacol*)

Putranjivain A P-10174



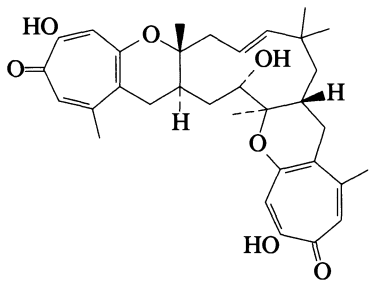
$C_{46}H_{34}O_{31}$ M 1082.756

Isol. from the leaf of *Macaranga sinensis*.

Lin, J.-H. *et al*, *Chem. Pharm. Bull.*, 1990, **38**, 1844 (*struct*)

Pycnidione P-10175

[149064-34-6]

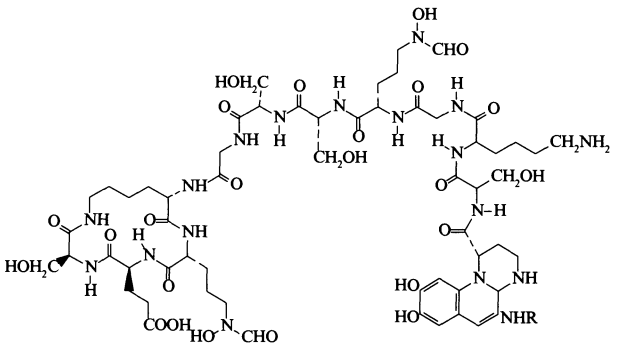


$C_{33}H_{40}O_7$ M 548.675

Metab. of a *Phoma* sp. Cryst. (EtOH). Mp 216-219° dec. $[\alpha]_D^{25}$ +278° (c, 0.23 in CH_2Cl_2).

Harris, G.H. *et al*, *Tetrahedron*, 1993, **49**, 2139 (*isol, pmr, cmr, cryst struct*)

Pyoverdin Pf12 P-10176



Pyoverdin Pf12-IA R = $COCH_2CH_2COOH$
Pyoverdin Pf12-IIA R = $COCH_2CH_2CONH_2$
Pyoverdin Pf12-IB R = $COCH_2CH_2COCOOH$
Pyoverdin Pf12-IIB R = $COCH_2CH_2CH(NH_2)COOH$ (L)

Isol. from cultures of *Pseudomonas fluorescens*. Siderophore.

Pyoverdin Pf12-IA [141073-88-3]
$C_{62}H_{92}N_{18}O_{27}$ M 1521.513

Pyoverdin Pf12-IB [141073-89-4]
$C_{63}H_{92}N_{18}O_{28}$ M 1549.524

Pyoverdin Pf12-IIA [141095-99-0]
$C_{62}H_{93}N_{19}O_{26}$ M 1520.528

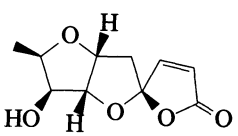
Pyoverdin Pf12-IIB [141073-90-7]
$C_{63}H_{95}N_{19}O_{27}$ M 1550.555

Geisen, K. *et al*, *Monatsh. Chem.*, 1992, **123**, 151.

Pyrenolide D P-10177

Pyrenolide I. 3′a,5′,6′,6′a-Tetrahydro-6′-hydroxy-5′-methylspiro[furan-2(5H),2′(3′H)furo[3,2-b]furan]-5-one, 9CI

[120593-80-8]



$C_{10}H_{12}O_5$ M 212.202

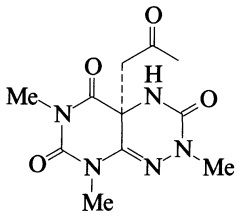
Metab. of *Pyrenophora teres*. Cytotoxic. Needles (EtOAc/hexane). Mp 158°. $[\alpha]_D^{23}$ +79.5° (c, 0.9 in $CHCl_3$).

Nukina, M. *et al*, *Biosci., Biotechnol., Biochem.*, 1992, **56**, 1158 (*isol, struct*)

Pyrizinostatin P-10178

2,4,4a,8-Tetrahydro-2,6,8-trimethyl-4a-(2-oxo propyl) pyrimido[5,4-e]-1,2,4-triazine-3,5,7(6H)-trione, 9CI

[146406-84-0]



Relative configuration

$C_{11}H_{15}N_5O_4$ M 281.271

Prod. by *Streptomyces* sp. Pyroglutamyl peptidase inhibitor. Cryst (MeOH). Mp 188-190°. $[\alpha]_D^{24}$ −15.6° (c, 1 on MeOH).

Aoyagi, T. *et al*, *J. Antibiot.*, 1992, **45**, 1795, 1961 (*isol, struct, props*)

1*H*-Pyrrole-2,5-dicarboxylic acid, 9CI P-10179

[937-27-9]

$C_6H_5NO_4$ M 155.110

Alkaloid from leaves of *Berberis koreana* (Berberidaceae). Needles (EtOH aq.). Sol. Et_2O, Me_2CO; insol. $CHCl_3$, EtOAc, C_6H_6, pet. ether. Mp 260° dec. (245°).

Mono-Me ester: [1199-64-0].
$C_7H_7NO_4$ M 169.137
Alkaloid from leaves of *B. koreana* (Berberidaceae). Mp 241-242° (204-206°).

Di-Me ester: [1757-29-5].
$C_8H_9NO_4$ M 183.163
Needles (H_2O). Sol. EtOH, Et_2O, C_6H_6. Mp 132° (126-127°).

Di-Et ester:
$C_{10}H_{13}NO_4$ M 211.217
Needles. Mp 82°.

Nicolaus, R.A. *et al*, *Gazz. Chim. Ital.*, 1956, **86**, 358 (*synth*)
U.S. Pat., 2 900 386, (1959); *CA*, **54**, 1557h (*synth*)
Barker, P. *et al*, *J. Org. Chem.*, 1978, **43**, 4849 (*derivs*)
Košťálová, D. *et al*, *Phytochemistry*, 1992, **31**, 3669 (*isol, uv, ir, pmr, cmr, ms, struct*)

Pyruvic acid P-10180

2-Oxopropanoic acid, 9CI. Pyroracemic acid. Acetylformic acid

[127-17-3]

$H_3CCOCOOH$

$C_3H_4O_3$ M 88.063

Intermed. in primary metab. incl. fermentation processes. Present in muscle in redox equilib. with Lactic acid. Constit. of *Bauhinia purpurea, Cicer arietinum, Delonix regia, Pisum sativum* and *Trigonella caerulea*. Reagent for regeneration of carbonyl compds. from semicarbazones, phenylhydrazones and oximes. Cryst. or liq. with odour resembling acetic acid. Misc. H_2O, EtOH, Et_2O. Mp *ca.* 13.6°. Bp 165° part. dec., Bp_{10} 65°. pK_{a1} 2.39 (25°). Impure samples dec. on standing.

Me ester: [600-22-6].
$C_4H_6O_3$ M 102.090
Bp 134-137°.

Me ester, oxime:
$C_4H_7NO_3$ M 117.104
Needles (Et_2O). Mp 69°. Bp_{14} 122-123°.

Me ester, 2,4-dinitrophenylhydrazone: Mp 186.5-187.5°.

Et ester: [617-35-6].
$C_5H_8O_3$ M 116.116
Bp 155°, Bp_{17} 55°.

Et ester, oxime: [20591-87-1].
$C_5H_9NO_3$ M 131.131
Prisms or needles. Mp 97°. Bp 213° sl. dec.

Et ester, semicarbazone: Mp 206° dec.

Et ester, 2,4-dinitrophenylhydrazone: Yellow cryst. (dioxan/EtOH). Mp 154.5-155°.

Amide: [631-66-3].
$C_3H_5NO_2$ M 87.078
Prisms or plates (EtOH). Mp 124-125°.

Amide, oxime:
$C_3H_6N_2O_2$ M 102.093
Plates or prisms (H_2O). Mp 178.5° dec.

Amide, semicarbazone: Mp 230° dec.

Nitrile: [631-57-2]. *Acetyl cyanide*
C_3H_3NO M 69.063
Liq. with characteristic odour. Bp 93°.

Nitrile, phenylhydrazone: Leaflets (C_6H_6). Mp 150-151°.

Nitrile, semicarbazone: Mp 215° dec.

2,4-Dinitrophenylhydrazone: Used as a 0.05% soln. in EtOH as acid-base indicator (pH range; 11.9→12.9; colour change: light yellow → pink red). Yellow cryst. (AcOH). Mp 218°.

Oxime: [2211-14-5]. *2-Isonitrosopropanoic acid*
$C_3H_5NO_3$ M 103.077
Dec. at 180-1°.

Semicarbazone: Needles (H_2O). Mp *ca.* 200° dec.

Thiosemicarbazone: [10418-09-4]. *Pyroracemic acid thiosemicarbazone. 2-[(Aminothioxomethyl)hydrazono] propanoic acid, 9CI*
$C_4H_7N_3O_2S$ M 161.184
Used as 5m*M* aq. soln. for catalytic detn. of Rh(*III*) (10^{-6}–10^{-5}*M*, pH ~ 4). Cryst. Sol. H_2O, EtOH.

Di-Et ketal: [25741-02-0]. *2,2-Diethoxypropanoic acid*
$C_7H_{14}O_4$ M 162.185
Oil. Unstable to dist.

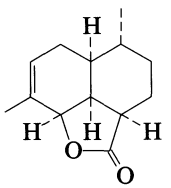
Di-Et ketal, amide: [92845-55-1]. *2,2-Diethoxypropanamide*
$C_7H_{15}NO_3$ M 161.200
Cryst. solid (pet. ether). Mp 70-71° (65-66°).

Tschelinzeff, W. *et al*, *Ber.*, 1929, **62**, 2211 (*synth*)
Org. Synth., Coll. Vol., 1, 1932, 475 (*synth*)
Virtanen, A.I. *et al*, *Nature (London)*, 1939, **144**, 597 (*isol*)
Allen, E.H., *J. Am. Chem. Soc.*, 1950, **52**, 2955 (*synth*)
Chugreeva, N.V. *et al*, *Zh. Anal. Khim.*, 1960, **15**, 391 (*use*)
Org. Synth., Coll. Vol., 4, 1963, 467 (*synth*)
Fieser and Fieser's Reagents for Organic Synthesis, Wiley, 1967, **1**, 774; **7**, 310.
Mukherjee, D. *et al*, *Curr. Sci.*, 1974, **43**, 118 (*isol*)
Mukherjee, D. *et al*, *Phytochemistry*, 1975, **14**, 1915 (*isol*)
Harata, K. *et al*, *Acta Crystallogr., Sect. B*, 1977, **33**, 210 (*cryst struct*)
Mukherjee, D. *et al*, *Experientia*, 1977, **33**, 304 (*isol*)
Neh, K.H., *Gordian*, 1986, **86**, 9; *CA*, **105**, 5347q (*isol*)
LaMattina, J.L. *et al*, *J. Org. Chem.*, 1987, **52**, 3479 (*acetals*)
Ezerskaya, N.A. *et al*, *Zh. Anal. Khim.*, 1988, **43**, 846 (*synth, detn, Rh, thiosemicarbazone*)
Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th Ed., Van Nostrand-Reinhold, 1992, PQC100.

Q

Qinghaosu I

Q-10001



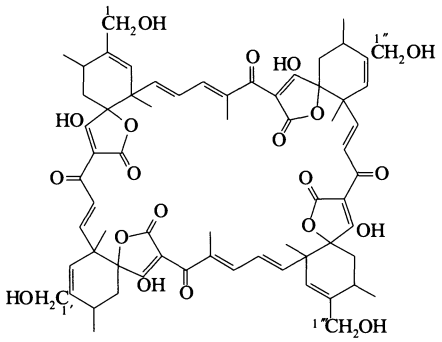
$C_{13}H_{18}O_2$ M 206.284
Constit. of *Artemisia annua*. Cryst. Mp 152-153°. $[\alpha]_D$ −36.1° (c, 19 in MeOH).

Misra, L.-N. *et al*, *Phytochemistry*, 1993, **33**, 1461 (*isol, pmr, cmr*)

Quartromicin D_3

Q-10002

Updated Entry replacing Q-00005



$C_{66}H_{72}O_{20}$ M 1185.283
Macrocyclic antibiotic. The Quartromicin complex was originally called Antibiotic BU 3889V. Isol. from *Amycolatopsis orientalis*. Antiviral agent. Mp >250°. $[\alpha]_D^{25}$ −17° (c, 0.4 in Py).

1,1‴-Di-O-α-D-*galactopyranoside:* [136765-21-4].
Quartromicin A_3
$C_{78}H_{92}O_{30}$ M 1509.567
From *A. orientalis*. Antiviral agent. Mp >250°. $[\alpha]_D^{25}$ +36° (c, 0.5 in H_2O).

1″-Aldehyde: ***Quartromicin D_2***
$C_{66}H_{70}O_{20}$ M 1183.267
Prod. by *A. orientalis*. Antiviral agent. Mp >250°. $[\alpha]_D^{25}$ −13° (c, 0.4 in Py).

1″-Aldehyde, 1,1‴-di-O-α-D-*galactopyranoside:* [136765-20-3]. ***Quartromicin A_2***
$C_{78}H_{90}O_{30}$ M 1507.551
From *A. orientalis*. Antiviral agent. Mp >250°. $[\alpha]_D^{25}$ +108° (c, 0.5 in H_2O).

1′,1″-Dialdehyde: ***Quartromicin D_1***
$C_{66}H_{68}O_{20}$ M 1181.251
Prod. by *A. orientalis*. Antiviral agent. Mp >250°. $[\alpha]_D^{25}$ +34° (c, 0.4 in Py).

1′,1″-Dialdehyde, 1,1‴-di-α-D-*galactopyranoside:*
Quartromicin A_1
$C_{78}H_{88}O_{30}$ M 1505.535
Prod. by *A. orientalis*. Antiviral agent. Mp >250°. $[\alpha]_D^{25}$ +180° (c, 0.5 in H_2O).

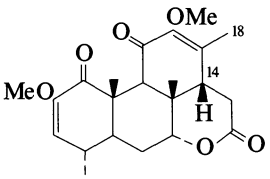
[136765-16-7, 136765-17-8, 136765-18-9]

Kusumi, T. *et al*, *J. Am. Chem. Soc.*, 1991, **113**, 8947 (*struct*)
Tsunakawa, M. *et al*, *J. Antibiot.*, 1992, **45**, 180 (*isol, props, ir, uv, pmr, cmr*)

Quassin

Q-10003

Updated Entry replacing Q-00006
Nigakilactone D
[76-78-8]



$C_{22}H_{28}O_6$ M 388.460
Bitter constit. of *Quassia amara, Picrasma excelsa* and *Ailanthus glandulosa*. Shows insecticidal activity. Cryst. (MeOH aq.). Mp 221-222°. $[\alpha]_D^{20}$ +34.5° (c, 5.09 in $CHCl_3$).

18-Hydroxy: ***18-Hydroxyquassin***
$C_{22}H_{28}O_7$ M 404.459
Isol. from coml. Quassin. Cryst. (EtOAc). Mp 232-233°. $[\alpha]_D^{20}$ +24° (c, 1 in $CHCl_3$).

14-Epimer: ***Isoquassin.*** *Picrasmin*
$C_{22}H_{28}O_6$ M 388.460
Isol. from *Aeschrion excelsa*. Shows insecticidal activity. Plates and rods (MeOH aq.). Mp 222-225°. $[\alpha]_D^{20}$ +46.6° ($CHCl_3$).

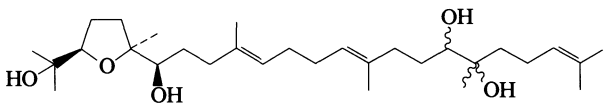
1α-Alcohol, Me ether: ***1α-O-Methylquassin***
$C_{23}H_{32}O_6$ M 404.502
Constit. of *Q. amara*. Powder (MeOH). Mp 168-172°.

Clark, E.P., *J. Am. Chem. Soc.*, 1938, **60**, 1146 (*isol, deriv*)
Adams, W., *J. Am. Chem. Soc.*, 1950, **72**, 375 (*synth*)
Valente, A. *et al*, *Tetrahedron*, 1961, **15**, 100; 1962, **18**, 1433 (*isol, struct, uv, ir, pmr*)
Casinovi, C. *et al*, *CA*, 1966, **66**, 75879 (*18-Hydroxyquassin*)
Vitagliano, J.C. *et al*, *Phytochemistry*, 1972, **11**, 807 (*synth*)
Stojanac, N. *et al*, *Can. J. Chem.*, 1975, **53**, 619 (*synth*)
Vidari, G. *et al*, *J. Am. Chem. Soc.*, 1984, **106**, 3539 (*synth*)
Kim, M. *et al*, *J. Org. Chem.*, 1990, **55**, 504 (*synth*)
Barbetti, P. *et al*, *Phytochemistry*, 1993, **32**, 1007 (*1-α-O-Methylquassin*)

Quassiol

Q-10004

[149297-96-1]



$C_{30}H_{54}O_5$ M 494.754
Constit. of *Quassia multiflora*. Gum.

Tinto, W.F. *et al*, *Tetrahedron Lett.*, 1993, **34**, 1705 (*isol, pmr, cmr*)

Quercetin 3-arabinoside Q-10005

[30370-87-7]

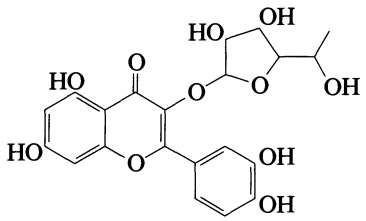
$C_{20}H_{18}O_{11}$ M 434.356

Isol. from numerous plant spp.

Saleh, N.A.M. *et al*, *Phytochemistry*, 1976, **15**, 835 (*isol*)
Marston, A. *et al*, *Phytochemistry*, 1984, **23**, 1824 (*isol*)

Quercetin 3-*O*-α-L-rhamnofuranoside Q-10006

[5088-73-3]



$C_{21}H_{20}O_{11}$ M 448.382

Constit. of *Caragana jubata*, *C. pygmaea*, *Juniperus sabina* and *Betula folium*. Light yellow needles. Mp 183-185°. $[\alpha]_D^{20}$ −187° (c, 0.1 in MeOH).

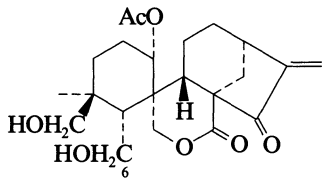
Umarov, A. *et al*, *Khim. Prir. Soedin.*, 1971, **7**, 522; *Chem. Nat. Compd.* (*Engl. Transl.*), 499 (*isol*)
Abil'kaeva, S.A. *et al*, *Khim. Prir. Soedin.*, 1981, **17**, 799; *Chem. Nat. Compd.* (*Engl. Transl.*), 590 (*isol*)

R

Rabdokaurin D R-10001

Updated Entry replacing R-00003

[150172-60-4]



$C_{22}H_{30}O_7$ M 406.475

Constit. of *Rabdosia longituba*. Needles (MeOH). Mp 227-230°. $[\alpha]_D$ +34.1° (c, 0.62 in MeOH).

6-Ac: [142465-71-2]. *Rabdokaurin B*

$C_{24}H_{32}O_8$ M 448.512

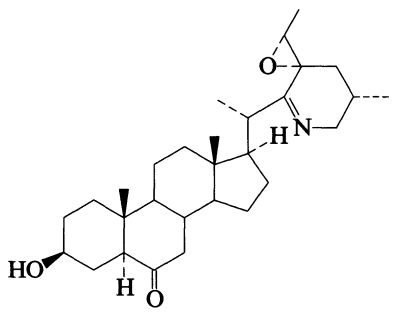
Constit. of *R. longituba*. Amorph. powder. $[\alpha]_D^{26}$ +57.6° (c, 0.81 in MeOH).

Takeda, Y. *et al*, *Phytochemistry*, 1992, **31**, 1687 (*Rabdokaurin B*)

Takeda, Y. *et al*, *Chem. Pharm. Bull.*, 1993, **41**, 685 (*isol, pmr, cmr*)

Radpetine R-10002

[139751-06-7]



$C_{29}H_{45}NO_3$ M 455.679

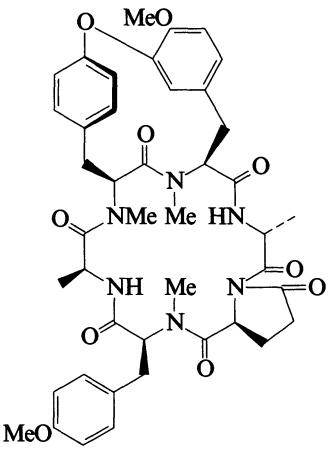
Alkaloid from epigeal parts of *Petilium raddeana* (Liliaceae). Cryst. (Me_2CO/pet. ether). Mp 229-231°.

Ac: Cryst. Mp 100-103°.

Tashkhodzhaev, B. *et al*, *Khim. Prir. Soedin.*, 1991, 384; *Chem. Nat. Compd. (Engl. Transl.)*, 332 (*isol, ir, pmr, ms, cryst struct*)

RA-IX R-10003

[140679-93-2]



$C_{43}H_{50}N_6O_{10}$ M 810.902

Cyclic hexapeptide antibiotic. Isol. from *Rubia cordifolia*. Needles (MeOH). Mp 242-243°. $[\alpha]_D^{20}$ −158.1° (c, 0.94 in $CHCl_3$). Exhibits virtually no antitumour activity.

Itokawa, H. *et al*, *J. Chem. Soc., Perkin Trans. 1*, 1992, 455 (*isol, struct*)

Ranakinin R-10004

9-Glycine-10-L-leucineranatachykinin D, 9CI

[139446-71-2]

H-Lys-Pro-Asn-Pro-Glu-Arg-Phe-Tyr-Gly-Leu-Met-NH_2

Isol. from the brain of *Rana ridibunda*. NK1 tachykinin receptor agonist.

O'Harte, F. *et al*, *J. Neurochem.*, 1991, **57**, 2086 (*isol*)

Ranatensin R R-10005

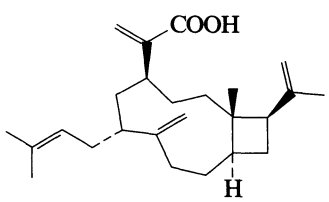
[70572-93-9]

H-Ser-Asn-Thr-Ala-Leu-Arg-Arg-Tyr-Asn-Gln-Trp-Ala-Thr-Gly-His-Phe-Met-NH_2

Constit. of the skin of *Rana rugosa*.

Yasuhara, T. *et al*, *Chem. Pharm. Bull.*, 1979, **27**, 492 (*isol, struct*)

Raoulic acid R-10006



$C_{25}H_{38}O_2$ M 370.574

Constit. of *Raoulia australis*. Oil. $[\alpha]_D^{20}$ −3.7° (c, 2.2 in $CHCl_3$).

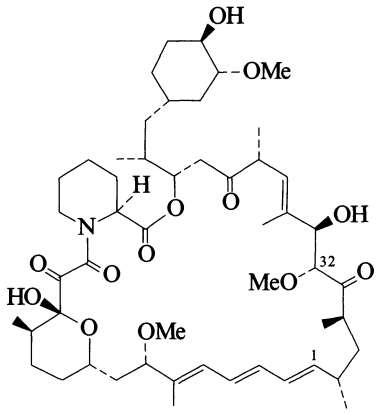
Bloor, S.J., *Tetrahedron Lett.*, 1993, **34**, 5617.

Rapamycin R-10007

Updated Entry replacing R-00046

AY 22989. Antibiotic AY 22989

[53123-88-9]



$C_{51}H_{79}NO_{13}$ M 914.184

Polyene-type antibiotic. Prod. by *Streptomyces hygroscopicus*. Antifungal agent. Antineoplastic and immunosuppressant properties. Cryst. (Et_2O). Mp 183-185°. $[\alpha]_D^{25}$ −58.2° (MeOH).

▷ LD_{50} (mus, orl) 2500 mg/kg. VE6250000.

32-Demethoxy: [83482-58-0]. ***Demethoxyrapamycin.*** *AY 24668. Antibiotic AY 24668*

$C_{50}H_{77}NO_{12}$ M 884.158

From *S. hygroscopicus*. Antifungal agent with v. slight antitumour activity. Cryst. (Et_2O). Mp 122-124°. $[\alpha]_D^{25}$ −124.4° (MeOH).

32-O-De-Me: ***De-O-methylrapamycin***

$C_{50}H_{77}NO_{13}$ M 900.157

Isol. from *S. hygroscopicus*. Immunosuppressant.

7,32-O-Di-de-Me: ***Dide-O-methylrapamycin***

$C_{49}H_{75}NO_{13}$ M 886.130

Isol. from *S. hygroscopicus*. Immunosuppressant.

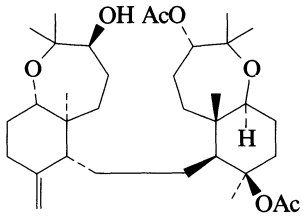
[85537-35-5]

U.S. Pat., 3 993 749, (1972); *CA*, **86**, 41806 (*synth, ir, pmr*)
Vézina, C. *et al, J. Antibiot.*, 1975, **28**, 721; 1983, **36**, 351 (*isol*)
Swindells, D.C.N. *et al, Can. J. Chem.*, 1978, **56**, 2491 (*cryst struct*)
Baker, H. *et al, J. Antibiot.*, 1978, **31**, 539; 1979, **32**, 630 (*pharmacol*)
Findlay, J.A. *et al, Can. J. Chem.*, 1982, **60**, 2046 (*uv, ir, pmr, cmr, ms, cd*)
U.S. Pat., 4 375 464, (1983); *CA*, **98**, 177506 (*isol*)
McAlpine, J.B. *et al, J. Antibiot.*, 1991, **44**, 688 (*pmr, cmr*)
Paiva, N.L. *et al, J. Nat. Prod.* (*Lloydia*), 1991, **54**, 167 (*cmr, biosynth*)
Curran, D.P. *et al, Tetrahedron Lett.*, 1992, **33**, 2295 (*synth*)
U.S. Pat., 5 091 389, 5 093 338, (1992); *CA*, **116**, 233900, 233901 (*Demethyl derivs*)
Martindale, The Extra Pharmacopoeia, 30th edn., Pharmaceutical Press, London, 1993, 499-1.
Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th Ed., Van Nostrand-Reinhold, 1992, RBK000.

Raspacionin R-10008

Updated Entry replacing R-00050

[132210-64-1]



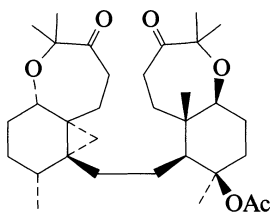
$C_{34}H_{56}O_7$ M 576.812

Constit. of sponge *Raspaciona aculeata*. Prisms (heptane). Mp 188-189°. $[\alpha]_D$ +31.4° (c, 1.5 in $CHCl_3$).

Cimino, G. *et al, J. Nat. Prod.* (*Lloydia*), 1993, **56**, 1622 (*abs config, cryst struct*)

Raspacionin B R-10009

[148371-08-8]



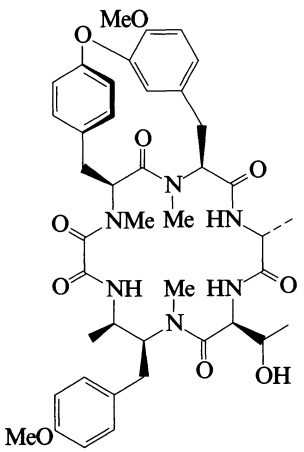
$C_{32}H_{50}O_6$ M 530.743

Constit. of *Raspaciona aculeata*. Amorph. powder. $[\alpha]_D^{25}$ +10.8° (c, 0.21 in $CHCl_3$).

Cimino, G. *et al, J. Nat. Prod.* (*Lloydia*), 1993, **56**, 534 (*isol, pmr, cmr*)

RA-VIII R-10010

[138994-83-9]



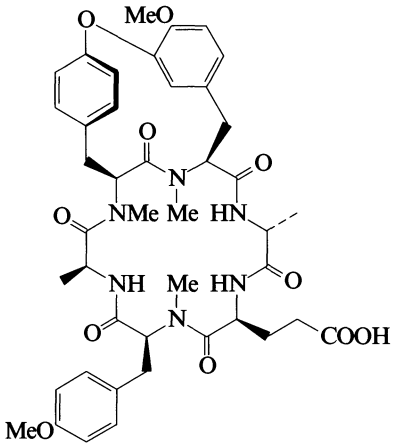
$C_{42}H_{52}N_6O_{10}$ M 800.907

Cyclic hexapeptide antibiotic. Isol. from *Rubia cordifolia*. Antitumour agent. Needles (MeOH). Mp 267-269°. $[\alpha]_D$ −159.5° (c, 0.39 in $CHCl_3$).

Itokawa, H. *et al, Tetrahedron*, 1991, **47**, 7007 (*isol, pmr, cmr, struct*)

RA-X R-10011

[140679-94-3]



$C_{43}H_{52}N_6O_{11}$ M 828.917

Cyclic hexapeptide antibiotic. Isol. from *Rubia cordifolia*. Antitumour agent. Needles (MeOH). Mp 254.5-255.5°. $[\alpha]_D^{20}$ −205.4° (c, 1.43 in $CHCl_3$/MeOH).

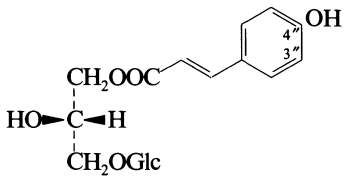
[140850-99-3]

Itokawa, H. *et al*, *J. Chem. Soc., Perkin Trans. 1*, 1992, 455 (*isol, struct*)

Regaloside A R-10012

3-O-Glucosyl-1-O-p-hydroxycinnamoyl-sn-glycerol

[114420-66-5]



$C_{18}H_{24}O_{10}$ M 400.382

Acylated glycerol glycoside. Isol. from the bulbs of *Lilium henryi, L. lancifolium, L. regale, L. pardarinum, L. auratum* and *Fritillaria camtschatcensis*. Pale yellow amorph. powder. $[\alpha]_D^{25}$ −17° (c, 1.0 in MeOH) (−14.1°). Bitter taste.

Hexa-Ac: Needles (EtOH). Mp 138-141° (137-139°).

4″-Me ether: [117591-86-3]. ***Methylregaloside A***

$C_{19}H_{26}O_{10}$ M 414.408

Constit. of *L. henryi*. Cryst. (Et_2O/MeOH). Mp 146-148°. $[\alpha]_D^{22}$ −13° (c, 0.20 in MeOH).

3″-Hydroxy: [117591-85-2]. ***Regaloside C***

$C_{18}H_{24}O_{11}$ M 416.381

Isol. from bulbs of *L. henryi* and *L. pardarinum*. Pale yellow amorph. powder. $[\alpha]_D^{27}$ −11.3° (c, 0.62 in MeOH).

Shimomura, H. *et al*, *Chem. Pharm. Bull.*, 1988, **36**, 2430, 4841 (*isol, pmr, cmr, occur*)

Shimomura, H. *et al*, *Phytochemistry*, 1988, **27**, 451 (*isol*)

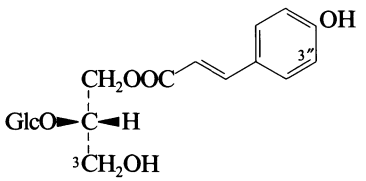
Mimaki, Y. *et al*, *Chem. Pharm. Bull.*, 1990, **38**, 1090, 3055 (*isol*)

Mimaki, Y. *et al*, *Phytochemistry*, 1991, **30**, 937.

Regaloside D R-10013

2-Hydroxy-1-[[[3-(4-hydroxyphenyl)-1-oxo-2-propenyl]oxy] methyl]ethyl β-D-glucopyranoside, 9CI. 2-O-Glucosyl-1-O-p-hydroxycinnamoyl-sn-glycerol

[120601-66-3]



$C_{18}H_{24}O_{10}$ M 400.382

Isol. from various lily species; *Lilium longiflorum, L. pardarinum, L. auratum* and *L. brownii*. Pale yellow amorph. powder. $[\alpha]_D^{27}$ −24.6° (c, 0.39 in MeOH).

3-Ac: [114420-67-6]. ***Regaloside B***

$C_{20}H_{26}O_{11}$ M 442.419

Isol. from bulbs of *L. longiflorum, L. regale* and *L. brownii*. Pale yellow amorph. powder. $[\alpha]_D^{15}$ −21.2° (c, 1.0 in MeOH). Bitter taste.

Hexa-Ac: Needles (EtOH). Mp 118-120°.

3″-Methoxy: [120601-64-1]. ***Regaloside G.*** *3-O-Feruloyl-2-O-glucosyl-sn-glycerol*

$C_{19}H_{26}O_{11}$ M 430.408

Isol. from *L. auratum*. Pale yellow amorph. powder. $[\alpha]_D^{23}$ −19.3° (c, 0.14 in MeOH).

Shimomura, H. *et al*, *Chem. Pharm. Bull.*, 1988, **36**, 4841.

Shimomura, H. *et al*, *Phytochemistry*, 1988, **27**, 451.

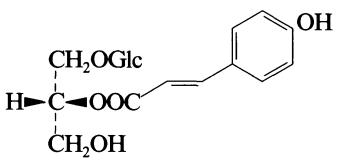
Mimaki, Y. *et al*, *Phytochemistry*, 1989, **28**, 3453; 1990, **29**, 2267.

Mimaki, Y. *et al*, *Chem. Pharm. Bull.*, 1990, **38**, 3055.

Regaloside H R-10014

2-O-p-Hydroxycinnamoyl-1-O-glucosyl-sn-glycerol. 3-Hydroxy-2-[[3-(4-hydroxyphenyl)-1-oxo-2-propenyl]oxy] propyl β-D-glucopyranoside, 9CI

[126239-77-8]



$C_{18}H_{24}O_{10}$ M 400.382

Constit. of *Lilium auratum* var. *platyphyllum*. Amorph. powder. $[\alpha]_D^{28}$ −32° (c, 0.58 in MeOH).

3-Ac: [126239-78-9]. ***Regaloside I***

$C_{20}H_{26}O_{11}$ M 442.419

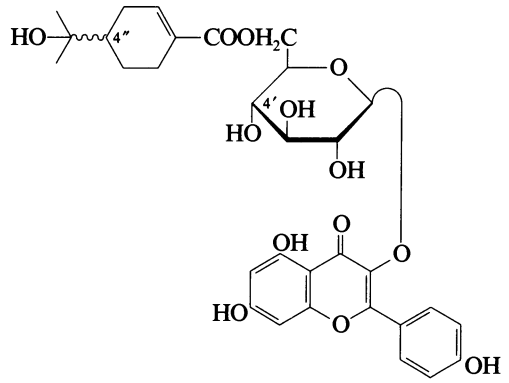
Constit. of *L. auratum* var. *platyphyllum*. Amorph. powder. $[\alpha]_D$ −11.1° (c, 0.51 in MeOH).

Hexa-Ac: Amorph. powder. $[\alpha]_D^{28}$ −7.1° (c, 0.3 in $CHCl_3$).

Mimaki, Y. *et al*, *Phytochemistry*, 1989, **28**, 3453 (*isol, pmr, cmr*)

Resinoside A R-10015

[144027-79-2]



$C_{31}H_{34}O_{13}$ M 614.602

Anomeric mixture at the C-4″ posn. Isol. from the leaves of *Eucalyptus resinfera*. Repellant against *Mytilus edulis*. $[\alpha]_D^{28}$ −12.7° (c, 1 in MeOH).

4′-Epimer: [144027-78-1]. ***Resinoside B***

$C_{31}H_{34}O_{13}$ M 614.602

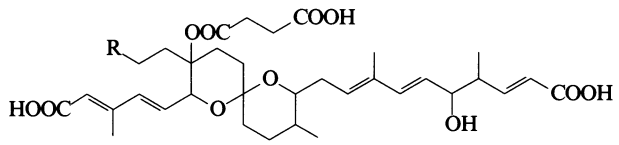
From *E. resinfera*. Repellant against *M. edulis*. $[\alpha]_D^{28}$ +7.6° (c, 0.4 in MeOH).

Hyodo, S. *et al*, *Biosci., Biotechnol., Biochem.*, 1992, **56**, 138 (*isol, struct*)

Reveromycin A R-10016

Updated Entry replacing R-00157

[134615-37-5]



R = CH_2CH_3

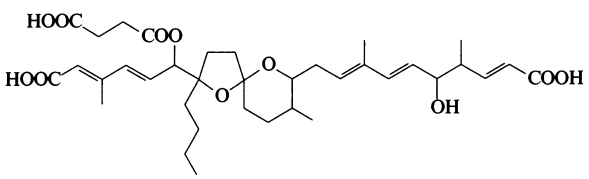
$C_{36}H_{52}O_{11}$ M 660.800

Prod. by a *Streptomyces* sp. Inhibitor of mitogenic activity. Shows moderate antifungal activity. Eukaryotic cell growth inhibitor. Powder + $\frac{1}{2}H_2O$. Mp 95°. $[\alpha]_D^{20}$ −115° (c, 0.1 in MeOH).

Takahashi, H. *et al*, *J. Antibiot.*, 1992, **45**, 1409, 1414, 1420 (*isol, pmr, cmr, struct, props*)

Reveromycin B R-10017

[144860-68-4]



$C_{36}H_{52}O_{11}$ M 660.800

Prod. by a *Streptomyces* sp. Eukaryotic cell growth inhibitor. Powder. Mp 78-79°. $[\alpha]_D^{20}$ −66° (c, 0.1 in MeOH).

Takahashi, H. *et al*, *J. Antibiot.*, 1992, **45**, 1409, 1414, 1420 (*isol, pmr, cmr, struct, props*)

Reveromycin C R-10018

[144860-69-5]

As Reveromycin A, R-10016 with

R = $-CH(CH_3)_2$

$C_{37}H_{54}O_{11}$ M 674.827

Prod. by a *Streptomyces* sp. Eukaryotic cell growth inhibitor. Powder. Mp 78-79°. $[\alpha]_D^{20}$ −90° (c, 0.1 in MeOH).

Takahashi, H. *et al*, *J. Antibiot.*, 1992, **45**, 1409, 1414, 1420 (*isol, pmr, cmr, struct, props*)

Reveromycin D R-10019

[144860-70-8]

As Reveromycin A, R-10016 with

R = $-CH_2CH_2CH_3$

$C_{37}H_{54}O_{11}$ M 674.827

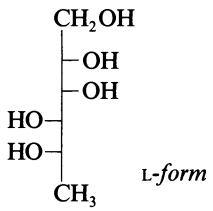
Prod. by a *Streptomyces* sp. Eukaryotic cell growth inhibitor. Powder. Mp 78-80°. $[\alpha]_D^{20}$ −112° (c, 0.1 in MeOH).

Takahashi, H. *et al*, *J. Antibiot.*, 1992, **45**, 1409, 1414, 1420 (*isol, pmr, cmr, struct, props*)

Rhamnitol R-10020

1-Deoxymannitol, 9CI, 8CI. 6-Deoxymannitol

[1114-16-5]



L-*form*

$C_6H_{14}O_5$ M 166.174

Constit. of bark of *Bauhinia thonningii*.

D-form

Mp 123-124°. $[\alpha]_D^{20}$ −12.0° (c, 1.0 in H_2O).

L-form [488-28-8]

Mp 123-124°. $[\alpha]_D^{20}$ +12.0° (H_2O).

3,4-O-Isopropylidene: 3,4-O-Isopropylidene-L-rhamnitol

$C_9H_{18}O_5$ M 206.238

Mp 79-80°. $[\alpha]_D$ −24° (c, 2.2 in H_2O).

1,2:3,4-Di-O-isopropylidene: 1,2:3,4-Di-O-isopropylidene-L-rhamnitol

$C_{12}H_{22}O_5$ M 246.303

Mp 64-66°. $[\alpha]_D$ −16° (c, 1.5 in MeOH).

1,2:3,4-Di-O-isopropylidene, 5-tosyl: 1,2:3,4-Di-O-isopropylidene-5-O-tosyl-L-rhamnitol

Mp 83-84°. $[\alpha]_D$ −13° (c, 2.0 in $CHCl_3$).

1,3:2,5-Di-O-methylene, 4-tosyl: Mp 117-118°. $[\alpha]_D$ +49.3° (c, 1.2 in $CHCl_3$).

2,5-Di-Me:

$C_8H_{18}O_5$ M 194.227

Mp 71-73°. $[\alpha]_D$ +27° (c, 2.0 in H_2O).

DL-form

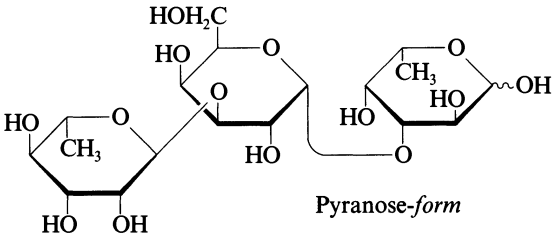
Mp 112-113°.

Haskins, W.T. *et al*, *J. Am. Chem. Soc.*, 1946, **68**, 628.
Gunner, S.W. *et al*, *Chem. Ind. (London)*, 1961, 255 (*glc*)
Foster, A.B. *et al*, *J. Chem. Soc.*, 1961, 4649.
Ferreira, M.A. *et al*, *Garcia de Orta*, 1963, **11**, 97; *CA*, **62**, 9458b.
Bukhari, M.A. *et al*, *J. Chem. Soc.*, 1963, 2287.
Grindley, T.B. *et al*, *Can. J. Chem.*, 1974, **52**, 4062.

α-L-Rhamnopyranosyl-(1→3)-α-D-galactopyranosyl-(1→3)-L-fucose R-10021

6-Deoxy-α-L-mannopyranosyl-(1→3)-α-D-galactopyranosyl-(1→3)-6-deoxy-L-galactose, 9CI

[71144-75-7]



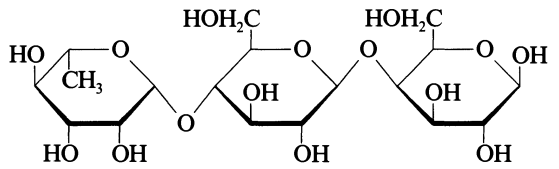
Pyranose-*form*

$C_{18}H_{32}O_{14}$ M 472.442

Isol. from the partial acid hydrolysate of mucilage from the edible water plant junsai (*Brasenia schreberi*). $[\alpha]_D^{25}$ +21.6° (c, 2.0 in H_2O).

Kakuta, M. *et al*, *Agric. Biol. Chem.*, 1979, **43**, 1269 (*isol*)

β-L-Rhamnopyranosyl-(1→4)-β-D-glucopyranosyl-(1→4)-D-galactose R-10022



β-Pyranose-*form*

$C_{18}H_{32}O_{15}$ M 488.442

Constit. of the capsular polysaccharide of *Streptococcus pneumoniae* type 23F.

β-Pyranose-form

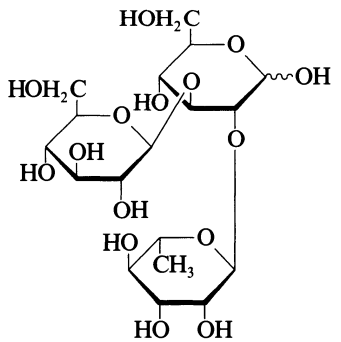
3-Aminopropyl glycoside: $[\alpha]_D$ +15° (c, 0.2 in H_2O).

Van Steijn, A.M.P. *et al*, *J. Carbohydr. Chem.*, 1992, **11**, 665 (*synth, cmr, pmr*)

α-L-Rhamnopyranosyl-(1→2)-[β-D-glucopyranosyl-(1→3)]-D-glucose R-10023

2-O-α-L-Rhamnopyranosyllaminaribiose

[28140-20-7]



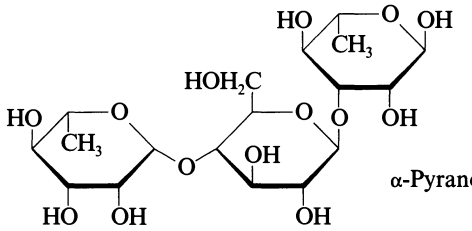
Pyranose-*form*

$C_{18}H_{32}O_{15}$ M 488.442

Isol. from a polysaccharide of Poplar and from Dode pollen (*Populus yunnanensis*). Mp 169-170° dec. (softens at 125°). $[\alpha]_D^{20}$ −13.7° (15 min.) → 8.2° (24h) (c, 2.08 in H_2O).

Sosa, F. *et al*, *Bull. Soc. Chim. Belg.*, 1969, **51**, 625.
Sosa, F. *et al*, *Phytochemistry*, 1970, **9**, 441 (*isol*)

β-L-Rhamnopyranosyl-(1→4)-β-D-glucopyranosyl-(1→3)-L-rhamnose R-10024



α-Pyranose-*form*

$C_{18}H_{32}O_{14}$ M 472.442

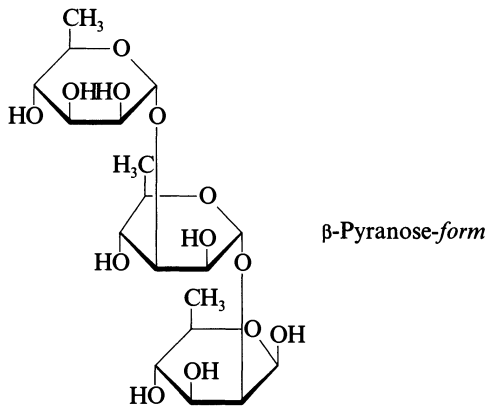
α-Pyranose-form

Constit. of the capsular polysaccharide of *Streptococcus pneumoniae* type 2.

3-Aminopropyl glycoside: Powder. $[\alpha]_D$ −12° (c, 0.6 in H_2O).

Van Steijn, A.M.P. *et al*, *J. Carbohydr. Chem.*, 1992, **11**, 665 (*synth, cmr, pmr*)

α-D-Rhamnopyranosyl-(1→3)-α-D-rhamnopyranosyl-(1→2)-D-rhamnose R-10025



β-Pyranose-*form*

$C_{18}H_{32}O_{13}$ M 456.443

Constit. of the repeating unit of the *O*-specific polysaccharide from *Pseudomonas cepacia*, *P. aeruginosa* and *P. syringae*.

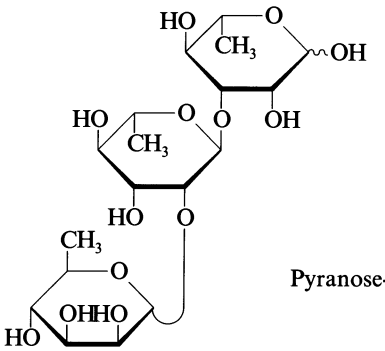
β-Pyranose-form [76440-68-1]

$[\alpha]_D$ +22° (H_2O).

Knirel, Y.A. *et al*, *Bioorg. Khim.*, 1980, **6**, 1851.
Shashkov, A.S. *et al*, *Carbohydr. Res.*, 1986, **146**, 346.
Yokota, S. *et al*, *Eur. J. Biochem.*, 1987, **167**, 203.

α-D-Rhamnopyranosyl-(1→2)-α-L-rhamnopyranosyl-(1→3)-L-rhamnose R-10026

[89748-04-9]



Pyranose-*form*

$C_{18}H_{32}O_{13}$ M 456.443

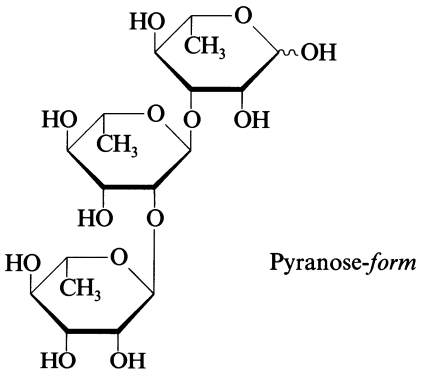
Used to generate monoclonal antibodies toward the antigenic determinates of the *Shigella flexneri* variants X and Y. Mp 110-112°. $[\alpha]_D^{18}$ +2.8° (c, 0.85 in MeOH).

Jaworska, A. *et al*, *Carbohydr. Res.*, 1984, **126**, 205 (*synth*, *pmr*, *cmr*)

Carlin, N.I.A. *et al*, *J. Immunol.*, 1986, **137**, 2361.

α-L-Rhamnopyranosyl-(1→2)-α-L-rhamnopyranosyl-(1→3)-L-rhamnose R-10027

[89734-07-6]



Pyranose-*form*

$C_{18}H_{32}O_{13}$ M 456.443

Constit. of the repeating unit of the *O*-antigen in *Shigella flexneri* and in the surface layer glycoprotein of *Bacillus stearothermophilus*. Amorph. solid. $[\alpha]_D^{18}$ −40.9° (c, 0.5 in MeOH).

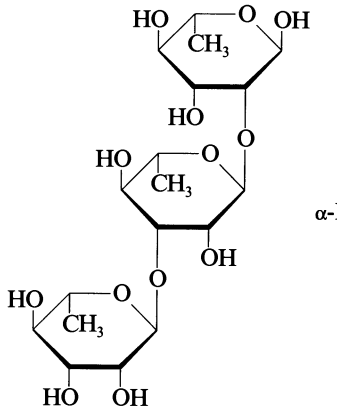
[103951-26-4, 105239-66-5]

Kenne, L. *et al*, *Eur. J. Biochem.*, 1976, **64**, 491 (*occur*)

Jaworska, A. *et al*, *Carbohydr. Res.*, 1984, **126**, 205 (*synth*, *pmr*, *cmr*)

Christian, R. *et al*, *Carbohydr. Res.*, 1986, **126**, 265 (*occur*)

α-L-Rhamnopyranosyl-(1→3)-α-L-rhamnopyranosyl-(1→2)-L-rhamnose R-10028



α-Pyranose-*form*

$C_{18}H_{32}O_{13}$ M 456.443

Constit. of the repeating unit of the capsular antigen of *Klebsiella* serotype K9. Amorph. $[\alpha]_D$ −52° (c, 0.5 in H_2O).

α-Pyranose-form [73223-31-1]

Benzyl glycoside, 3,4-dibenzyl:

$C_{39}H_{50}O_{13}$ M 726.816

Foam. $[\alpha]_D$ −66° (c, 1.0 in MeOH).

Benzyl glycoside, 3,4-dibenzyl, penta-Ac:

$C_{49}H_{60}O_{18}$ M 937.002

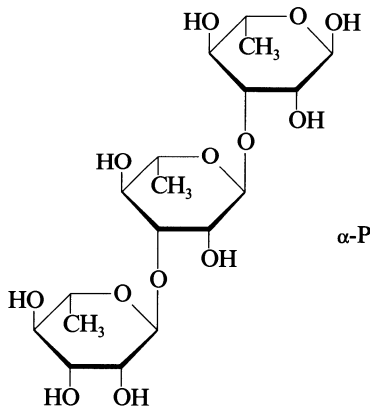
$[\alpha]_D$ −42° (c, 0.9 in $CHCl_3$).

Lindberg, B. *et al*, *Carbohydr. Res.*, 1972, **25**, 49.

Pozsgay, V. *et al*, *J. Chem. Soc., Chem. Commun.*, 1979, 828 (*cmr*)

Pozsgay, V. *et al*, *Carbohydr. Res.*, 1981, **90**, 215 (*synth*, *pmr*, *cmr*)

α-L-Rhamnopyranosyl-(1→3)-α-L-rhamnopyranosyl-(1→3)-L-rhamnose R-10029



α-Pyranose-*form*

$C_{18}H_{32}O_{13}$ M 456.443

Constit. of the repeating unit of the type specific antigen of *Streptococcus pneumoniae* type 2 and the repeating unit of the capsular antigen of *Klebsiella* serotype K36. Amorph. $[\alpha]_D$ −48° (c, 0.4 in H_2O).

α-Pyranose-form [78161-41-8]

Benzyl glycoside, 2,4-dibenzyl, penta-Ac:

$C_{49}H_{60}O_{18}$ M 937.002

Syrup. $[\alpha]_D$ −37° (c, 0.8 in $CHCl_3$).

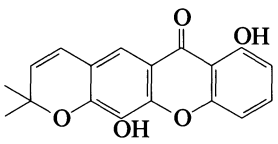
Kenne, L. *et al*, *Carbohydr. Res.*, 1975, **40**, 69 (*occur*)

Pozsgay, V. *et al*, *Carbohydr. Res.*, 1981, **90**, 215 (*synth*, *pmr*, *cmr*, *occur*)

Arsenault, T.L. *et al*, *Can. J. Chem.*, 1991, **69**, 1273.

Rheediachromenoxanthone R-10030

[82667-93-4]



$C_{18}H_{14}O_5$ M 310.306

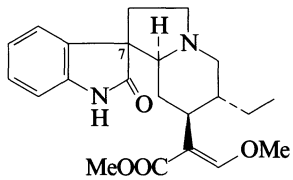
Constit. of *Rheedia gardneriana*. Cryst. (Et_2O/hexane). Mp 223-224°.

Delle Monache, G. *et al*, *J. Nat. Prod.* (*Lloydia*), 1983, **46**, 655 (*isol, pmr*)

Rhyncophylline R-10031

Updated Entry replacing R-00244

Mitrinermine



Absolute configuration

$C_{22}H_{28}N_2O_4$ M 384.474

(−)-***form*** [76-66-4]

Alkaloid from *Uncaria rhyncophylla*, some other *U.* spp., several *Mitragyna* spp. and *Cephalanthus occidentalis* (Naucleaceae). Antipyretic, hypotensive agent. Mp 214° (208-209°). $[\alpha]_D$ −24° (−15°) ($CHCl_3$).

N-*Oxide:* ***Rhyncophylline* N-*oxide***

$C_{22}H_{28}N_2O_5$ M 400.474

Alkaloid from *M. inermis* and *C. occidentalis* (Naucleaceae). Noncryst.

7-Epimer: [6859-01-4]. ***Isorhyncophylline***

$C_{22}H_{28}N_2O_4$ M 384.474

Alkaloid from *U.* and *M.* spp. (Naucleaceae). Mp 144°. $[\alpha]_D$ +13° (+8.3°) ($CHCl_3$).

7-Epimer, N-*oxide:* ***Isorhyncophylline* N-*oxide***

$C_{22}H_{28}N_2O_5$ M 400.474

Alkaloid from *M. inermis*, *M. rotundifolia* and *C. occidentalis* (Naucleaceae). Mp 242-243°. *N*-oxide config. *anti-*.

7,20-Diepimer: see *Corynoxine, C-01907*

7-Epimer, demethoxy: ***17-Demethoxyisorhyncophylline***

$C_{21}H_{26}N_2O_3$ M 354.448

Alkaloid from the whole plant of *Amsonia brevifolia* (Apocynaceae). Cytotoxic. Amorph. gum. $[\alpha]_D$ 0° (c, 0.2 in MeOH).

Parent acid: ***Rhynchophyllic acid***

$C_{21}H_{26}N_2O_4$ M 370.447

Alkaloid from stems of *U. sinensis* (Naucleaceae). Amorph. powder.

Parent acid, 7-epimer: ***Isorhynchophyllic acid***

$C_{21}H_{26}N_2O_4$ M 370.447

Alkaloid from stems of *U. sinensis* (Naucleaceae). Mp 175-176.5°. $[\alpha]_D$ +5.2° (c, 0.08 in MeOH).

(±)-***form***

Synthetic. Mp 197-199°.

7-Epimer: Mp 225-227°.

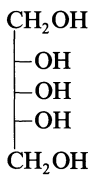
Seaton, J.C. *et al*, *Can. J. Chem.*, 1957, **35**, 1102; 1960, **38**, 1035 (*isol, ir, uv, struct*)
Finch, N. *et al*, *J. Am. Chem. Soc.*, 1962, **84**, 3871 (*config*)
Gilbert, B. *et al*, *J. Am. Chem. Soc.*, 1963, **85**, 1523 (*ms*)
Pousset, J.-L. *et al*, *Bull. Soc. Chim. Fr.*, 1967, 2766 (*pmr, config*)
Shellard, E.J. *et al*, *Phytochemistry*, 1971, **10**, 2505 (*oxides*)
Phillipson, J.D. *et al*, *Phytochemistry*, 1974, **13**, 2621 (*oxides*)
Ban, Y. *et al*, *Chem. Pharm. Bull.*, 1975, **23**, 2605 (*synth, ir, ms*)
Brown, R.T. *et al*, *Tetrahedron Lett.*, 1976, 1401 (*synth*)
Sharma, P. *et al*, *Phytochemistry*, 1988, **27**, 3649 (*17-Demethoxyisorhyncophylline*)
Liu, H.-M. *et al*, *Phytochemistry*, 1993, **33**, 707 (*Rhynchophyllic acid, Isorhynchophyllic acid*)

Ribitol, 9CI, 8CI R-10032

Updated Entry replacing R-00251

Adonitol

[488-81-3]



$C_5H_{12}O_5$ M 152.147

Occurs free in the plants *Adonis vernalis* and *Bupleurum falcatum* and in bound form in bacterial cell wall teichoic acids and in Riboflavin (vitamin B_2). Mp 102°. Opt. inactive (*meso-*).

▷ VJ0800000.

2,4-O-Benzylidene: [20638-70-4].

$C_{12}H_{16}O_5$ M 240.255

Mp 133-135°.

2,4-O-Benzylidene, 1,5-dibenzoyl: [31569-21-8].

$C_{26}H_{24}O_7$ M 448.471

Mp 137-138°.

2,4-O-Benzylidene, 1,5-dibenzoyl, 3-mesyl: [31569-30-9].

Mp 135-137°.

2,3:4,5-Di-O-benzylidene:

$C_{19}H_{20}O_5$ M 328.364

Mp 174-175°. $[\alpha]_D^{27}$ −35.7° (c, 4.0 in $CHCl_3$).

2,3:4,5-Di-O-benzylidene, 1-Ac:

$C_{21}H_{22}O_6$ M 370.401

Mp 143-144°. $[\alpha]_D^{20}$ −57° (c, 1.1 in $CHCl_3$).

2,3-O-Isopropylidene, 1,5-dibenzoyl, 4-diphenylphosphate:

Mp 83°. $[\alpha]_D^{18}$ −19.5° (c, 4.0 in $CHCl_3$).

2,4-O-Methylene, 1,5-dibenzoyl: [31569-33-2].

$C_{20}H_{20}O_7$ M 372.374

Mp 164-166°.

2,4-O-Methylene, 1,5-dibenzoyl, 3-mesyl: [31569-37-6].

Mp 180-182°.

2,3,4-Tribenzoyl:

$C_{26}H_{24}O_8$ M 464.471

Mp 102°.

2,3,4-Tribenzoyl, 1,5-ditrityl: Mp 161°.

2,3,4-Tribenzoyl, 1,5-diphosphate:

$C_{26}H_{26}O_{14}P_2$ M 624.430

Mp 166-168°.

2,3,4-Tribenzoyl, 1,5-ditosyl: Mp 161-162°.

2,3,4-Tribenzyl, 1,5-ditrityl: Mp 106°.

3,4-Di-O-α-D-glucopyranoside:

$C_{17}H_{32}O_{15}$ M 476.431

Isol. from hydrolyate of *Lactobacillus arabinosaceous* techoic acid. Mp 118-121°. $[\alpha]_D$ +137° (H_2O).

Pentakis(4-hydroxybenzoyl): [112727-22-7]. ***Buccinulin. Kelletinin A***

$C_{40}H_{32}O_{15}$ M 752.684

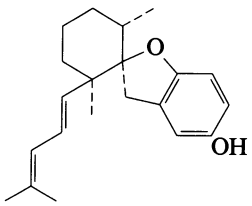
Metab. of the marine mollusc *Buccinulum corneum*. Exhibits antibacterial props.

Raphael, R.A., *J. Chem. Soc.*, 1949, 844 (*synth*)
Archibald, A.R. *et al*, *Biochem. J.*, 1961, **81**, 124 (*diglucoside*)
Potgieter, D.J.J. *et al*, *J. Org. Chem.*, 1961, **26**, 3934.
Applegath, D.A. *et al*, *J. Chem. Soc.*, 1965, 1213.

Kim, H.S. *et al*, *Acta Crystallogr., Sect. B*, 1969, **25**, 2223 (*cryst struct*)
Sugihara, J.M. *et al*, *J. Org. Chem.*, 1971, **36**, 3407.
Angyal, S.J. *et al*, *Carbohydr. Res.*, 1972, **23**, 121 (*pmr*)
Harness, J. *et al*, *J. Chem. Soc., Perkin Trans. 1*, 1972, 38.
Brimacombe, J.S. *et al*, *The Carbohydrates*, 1972, **1A**, 479 (*rev*)
Colson, P. *et al*, *Can. J. Chem.*, 1975, **53**, 1030 (*cmr*)
Minami, N. *et al*, *J. Am. Chem. Soc.*, 1982, **104**, 1109 (*total synth*)
Holland, D. *et al*, *J. Chem. Soc., Perkin Trans. 1*, 1983, 1553 (*synth*)
Cimino, G. *et al*, *J. Nat. Prod.* (*Lloydia*), 1987, **50**, 1171 (*Buccinulin*)
Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th Ed., Van Nostrand-Reinhold, 1992, RIF000.

Riccardiphenol A R-10033

[148225-32-5]

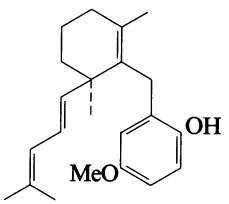


$C_{21}H_{28}O_2$ M 312.451
Constit. of *Riccardia crassa*. Oil. $[\alpha]_D$ +143° (c, 0.51 in $CHCl_3$).

Toyota, M. *et al*, *Phytochemistry*, 1993, **32**, 137 (*isol, pmr, cmr*)

Riccardiphenol B R-10034

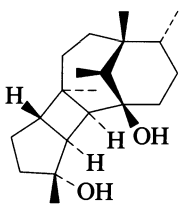
[148225-33-6]



$C_{22}H_{30}O_2$ M 326.478
Constit. of *Riccardia crassa*. Oil. $[\alpha]_D$ −72° (c, 0.73 in $CHCl_3$).

Toyota, M. *et al*, *Phytochemistry*, 1993, **32**, 137 (*isol, pmr, cmr*)

Rigidol R-10035



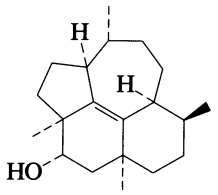
$C_{20}H_{34}O_2$ M 306.487
Constit. of *Sapium rigidifolium*.

Siems, K. *et al*, *Phytochemistry*, 1993, **33**, 1465 (*isol, pmr, cmr*)

15-Ripperten-3-ol R-10036

Rippertenol

[76649-58-6]

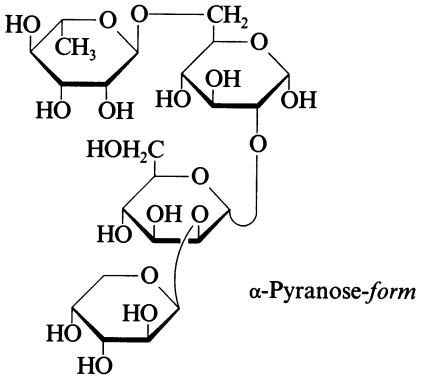


$C_{20}H_{32}O$ M 288.472
Constit. of defence secretion of *Nasutitermes rippertii* and *N. ephratae*. Oily solid.

Prestwich, G.D. *et al*, *J. Am. Chem. Soc.*, 1980, **102**, 6825 (*isol, pmr, cmr, cryst struct*)

Ristotetrose R-10037

β-D-Arabinopyranosyl-(1→2)-α-D-mannopyranosyl-(1→2)-[α-L-rhamnopyranosyl-(1→6)]-D-glucose



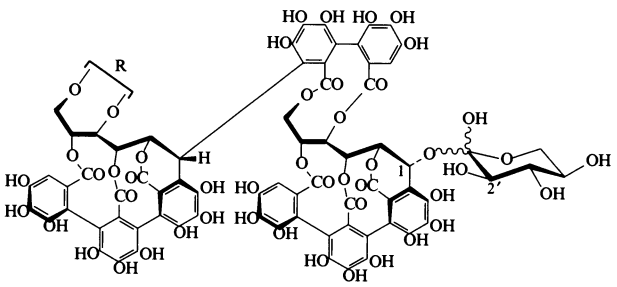
α-Pyranose-*form*

$C_{23}H_{40}O_{19}$ M 620.558
Obt. from the acid catalysed acetolysis of Ristomycin A, R-00299.

Neszmelyi, A. *et al*, *J. Antibiot.*, 1978, **31**, 974 (*cmr*)
Sztaricskai, F. *et al*, *J. Am. Chem. Soc.*, 1980, **102**, 7093 (*isol, pmr*)

Roburin B R-10038

[137370-65-1]



R = Hexahydroxydiphenoyl, $C_{14}H_8O_8$

$C_{87}H_{58}O_{55}$ M 1983.382
Tautomeric with the furanoid sugar form. Isol. from *Quercus robor*.

2'-Epimer: [137490-45-0]. ***Roburin C***
$C_{87}H_{58}O_{55}$ M 1983.382
Ellagitannin from *Q. robor*.

O-*Deglycosyl:* [132864-75-6]. ***Roburin A***

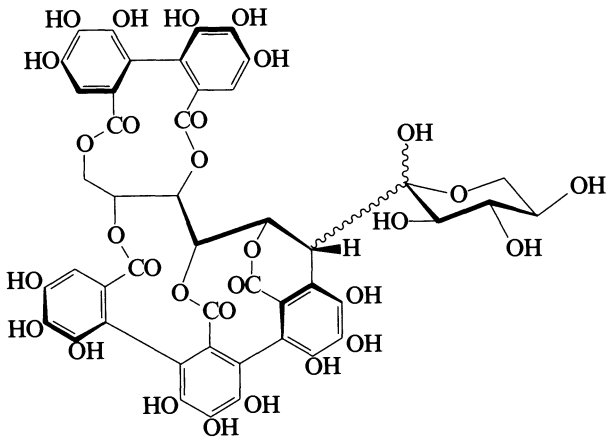
$C_{82}H_{50}O_{51}$ M 1851.266
Ellagitannin from *Q. robor.*

O-*Deglycosyl, 1-epimer:* [136199-93-4]. ***Roburin D***
$C_{82}H_{50}O_{51}$ M 1851.266
Ellagitannin from *Q. robor.*

Herve du Penhoat, C.L.M. *et al, J. Chem. Soc., Perkin Trans. 1,* 1991, 1653 (*struct, pmr, cmr*)
Herve du Penhoat, C.L.M. *et al, Phytochemistry,* 1991, **30**, 329 (*struct, cmr, pmr*)

Roburin E R-10039

[137343-79-4]

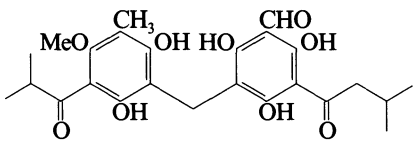


$C_{46}H_{34}O_{30}$ M 1066.757
Sugar residue in equilib. with the furanose form. Isol. from *Quercus robur.*

Herve du Penhoat, C.L.M. *et al, J. Chem. Soc., Perkin Trans. 1,* 1991, 1653 (*struct, pmr, cmr*)

Robustaol A R-10040

[78411-76-4]

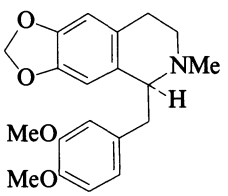


$C_{25}H_{30}O_9$ M 474.507
Constit. of *Eucalyptus robusta.*

Qin, G.-W. *et al, CA,* 1981, **95**, 61678 (*isol, struct, synth*)

Romneine R-10041

Updated Entry replacing R-00338
5-[(3,4-Dimethoxyphenyl)methyl]-5,6,7,8-tetrahydro-6-methyl-1,3-dioxolo[4,5-g]isoquinoline, 9CI. 1-(3,4-Dimethoxybenzyl)-1,2,3,4-tetrahydro-6,7-methylenedioxy-2-methylisoquinoline



(*S*)-*form*

$C_{20}H_{23}NO_4$ M 341.406

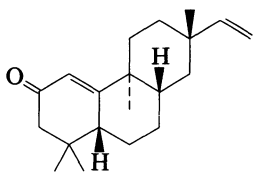
(*R*)-*form*
Alkaloid from the bark of *Laurelia novae-zelandiae* (Atherospermataceae). Amorph. Has the same registry number as the (*S*)-form.
B,HBr: Mp 223-225°. $[\alpha]_D^{15}$ −75° (c, 0.2 in EtOH).

(*S*)-*form* [5544-49-0]
Alkaloid from the roots of *Romneya coulteri* var. *trichocalyx* (Papaveraceae). Oil. $[\alpha]_D^{27}$ +37° (c, 0.11 in EtOH).
B,HBr: Mp 226-227°. $[\alpha]_D^{28}$ +40° (c, 0.26 in EtOH). The stereochemical purity of this sample has been questioned.
N-*Me:* [51550-01-7]. ***Escholinine***
$C_{21}H_{26}NO_4^{\oplus}$ M 356.441 (ion)
Quaternary alkaloid from *Eschscholtzia californica* (Papaveraceae).
N-*Me, iodide:*
$C_{21}H_{26}INO_4$ M 483.345
Cryst. (MeOH). Mp 197-198°.
N-*Me, perchlorate:*
$C_{21}H_{26}ClNO_8$ M 455.891
Prisms (MeOH). Mp 209-210°. $[\alpha]_D^{25}$ +74° (c, 0.31 in MeOH).

(±)-*form* [5544-50-3]
Alkaloid from leaves of *Cryptocarya chinensis* (Lauraceae). Pale yellow oil or amorph. solid.
B,HBr: Mp 194-196°.

Stermitz, F.R. *et al, Tetrahedron,* 1966, **22**, 1095 (*isol, uv, ir, pmr, ms, struct, synth*)
Stermitz, F.R. *et al, Tetrahedron Lett.,* 1967, 1601 (*abs config*)
Slavík, J. *et al, Collect. Czech. Chem. Commun.,* 1970, **35**, 2597; 1973, **38**, 3514 (*Escholinine*)
Kametani, T. *et al, Chem. Pharm. Bull.,* 1974, **22**, 966 (*synth, pmr*)
Urzúa, A. *et al, Phytochemistry,* 1982, **21**, 773 (*isol, pmr*)
Lee, S.-S. *et al, J. Nat. Prod.* (*Lloydia*), 1993, **56**, 227 (*isol, uv, ir, pmr, cmr, ms*)

1(10),15-Rosadien-2-one R-10042

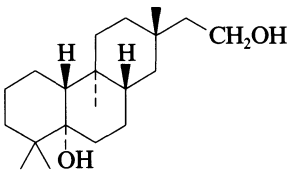


$C_{20}H_{30}O$ M 286.456

(*ent-5α*)-*form*
Constit. of *Erythroxylon zambesiacum.* Gum. $[\alpha]_D$ +23° (CH_2Cl_2). Error in struct. diag. in ref.

Ansell, S.M. *et al, Phytochemistry,* 1993, **32**, 953 (*isol, pmr, cmr*)

5,16-Rosanediol R-10043

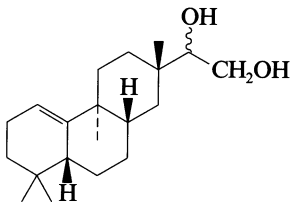


$C_{20}H_{36}O_2$ M 308.503

(*ent-5β*)-*form* [150036-55-8]
Constit. of *Erythroxylum pictum.* Needles (hexane). Mp 160-161°. $[\alpha]_D$ +25° (CH_2Cl_2).

Ansell, S.M. *et al, Phytochemistry,* 1993, **32**, 945 (*isol, pmr, cmr*)

1(10)-Rosene-15,16-diol R-10044



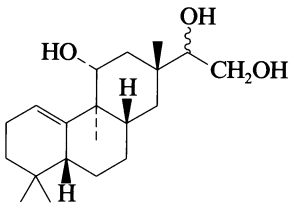
$C_{20}H_{34}O_2$ M 306.487

(ent-5α,15ξ)-form [150036-38-7]

Constit. of *Erythroxylon zambesiacum*. Needles (hexane). Mp 123-135°. $[\alpha]_D$ −2° (CH_2Cl_2).

Ansell, S.M. *et al*, *Phytochemistry*, 1993, **32**, 953 (*isol, pmr*)

1(10)-Rosene-11,15,16-triol R-10045



$C_{20}H_{34}O_3$ M 322.487

(ent-5α,11β,15ξ)-form

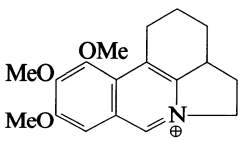
11-Ac: [150036-39-8]. *11-Acetoxy-1(10)-rosene-15,16-diol* Constit. of *Erythroxylon zambesiacum*. Gum. $[\alpha]_D$ +10° (CH_2Cl_2).

Ansell, S.M. *et al*, *Phytochemistry*, 1993, **32**, 953 (*isol, pmr, cmr*)

Roserine R-10046

1,2,3,3a,4,5-Hexahydro-9,10,11-trimethoxypyrrolo[3,2,1-de] phenanthridinium, 9CI

[139955-89-8]



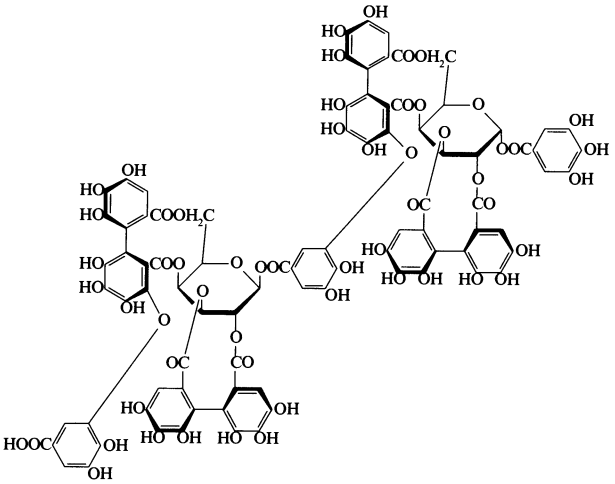
$C_{18}H_{22}NO_3^{\oplus}$ M 300.377 (ion)

Alkaloid from aerial parts and bulbs of *Narcissus pallidulus* (Amaryllidaceae). Counterion not specified.

Bastida, J. *et al*, *J. Nat. Prod.* (*Lloydia*), 1992, **55**, 134 (*isol, pmr, cmr, ms, struct*)

Roshenin A R-10047

[145851-29-2]



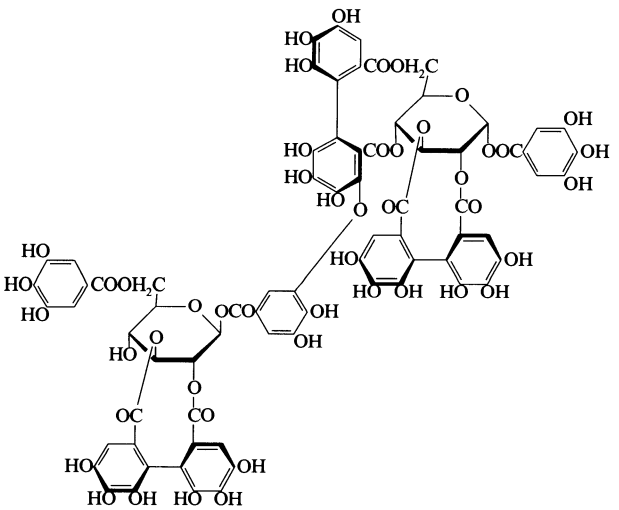
$C_{89}H_{58}O_{57}$ M 2039.403

Ellagitannin from the root of *Rosa henryi*. Off-white amorph. powder + $14H_2O$. $[\alpha]_D^{20}$ −39° (c, 1.0 in MeOH).

Yoshida, T. *et al*, *Chem. Pharm. Bull.*, 1992, **40**, 1997 (*uv, pmr, cmr*)

Roshenin D R-10048

[145274-73-3]



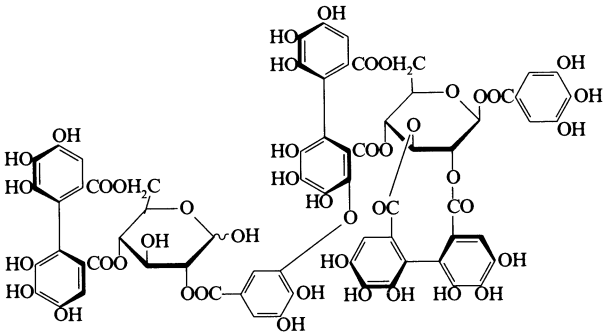
$C_{75}H_{52}O_{48}$ M 1569.101

Constit. of *Rosa henryi*. Off-white amorph. powder + $10H_2O$. $[\alpha]_D^{20}$ +12° (c, 1.0 in MeOH).

Yoshida, T. *et al*, *Chem. Pharm. Bull.*, 1992, **40**, 1997 (*uv, pmr, cmr*)

Roshenin E R-10049

[145274-72-2]



$C_{68}H_{48}O_{44}$ M 1569.101

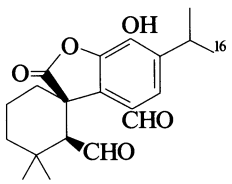
Exists as an equilibrated mixt. of α- and β-anomers. Isol. from the root of *Rosa henryi*. Off-white amorph. powder + $10H_2O$. $[\alpha]_D^{20}$ −30° (c, 1.0 in MeOH).

Yoshida, T. *et al*, *Chem. Pharm. Bull.*, 1992, **40**, 1997 (*uv*, *pmr*, *cmr*)

Rosmadial R-10050

Updated Entry replacing R-00382

[85514-31-4]



$C_{20}H_{24}O_5$ M 344.407

Constit. of *Rosmarinus officinalis*. Cryst. (C_6H_6). Mp 225°. $[\alpha]_D^{24}$ −216.8° (c, 0.54 in EtOH).

16-Hydroxy: ***16-Hydroxyrosmadial***

$C_{20}H_{24}O_6$ M 360.406

Constit. of *Salvia mellifera*. Amorph. solid.

Nakatani, N. *et al*, *Agric. Biol. Chem.*, 1983, **47**, 353.

Luis, J.G. *et al*, *Phytochemistry*, 1993, **33**, 635 (*isol*, *pmr*, *cmr*)

Rotenolone B R-10051

Struct. unknown. Constit. of the leaves and flowers of *Tephrosia leiocarpa*.

Gomez-Garibay, F. *et al*, *Phytochemistry*, 1991, **30**, 3832.

Rotenonenol R-10052

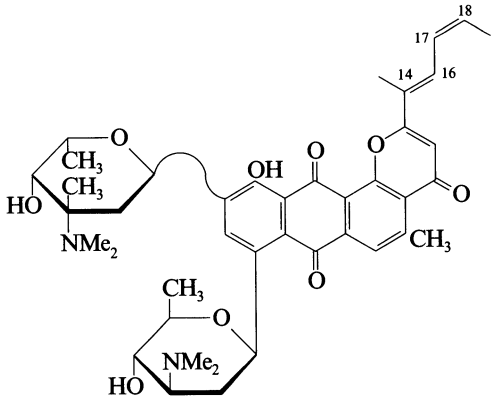
Struct. unknown. Constit. of *Lonchocarpus nicou* roots. No details or MF.

Kaouadji, M. *et al*, *J. Nat. Prod.* (*Lloydia*), 1986, **49**, 281.

Rubiflavin C1 R-10053

Updated Entry replacing R-00428

[111058-14-1]



$C_{41}H_{50}N_2O_9$ M 714.854

Anthraquinone-type antibiotic. Prod. by *Streptomyces griseus*. Orange solid. Similar to Pluramycin A, P-01529.

17E-Isomer: [110954-32-0]. ***Rubiflavin C2***

$C_{41}H_{50}N_2O_9$ M 714.854

From *S. griseus*. Orange solid.

17,18-Dihydro: [110954-33-1]. ***Rubiflavin D***

$C_{41}H_{52}N_2O_9$ M 716.870

Prod. by *S. griseus*. Orange solid.

14,16-Dihydro, 14-hydroxy: [104855-82-5]. ***Rubiflavin E. SS 21020B. Antibiotic SS 21020B***

$C_{41}H_{52}N_2O_{10}$ M 732.869

Prod. by *S. griseus* and *S.* sp. 21020. Orange solid. Identity of SS 21020B and Rubiflavin E not definitely establ.

Bisdeglycosyl: [110954-31-9]. ***Rubiflavinone C1***

$C_{24}H_{18}O_5$ M 386.403

From *S.* sp. Yellow solid. Possible artifact.

Bisdeglycosyl, 17E-isomer: [110954-30-8]. ***Rubiflavinone C2***

$C_{24}H_{18}O_5$ M 386.403

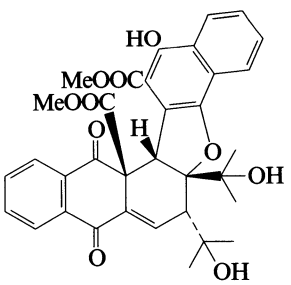
From *S.* sp. Yellow solid. Possible artifact.

Japan. Pat., 86 78 395, (1986); *CA*, **106**, 17024 (*deriv*)

Nadig, H. *et al*, *Helv. Chim. Acta*, 1987, **70**, 1217 (*struct*, *bibl*)

Rubioncolin A R-10054

[132242-51-4]



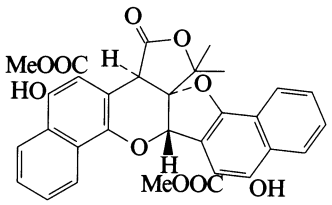
$C_{34}H_{32}O_{10}$ M 600.621

Constit. of the roots of *Rubia oncotricha*. Yellowish needles. Mp 235-236°.

Qiao, Y.-F. *et al*, *Chem. Pharm. Bull.*, 1990, **38**, 2896 (*isol*, *pmr*, *cmr*, *cryst struct*)

Rubioncolin B R-10055

[132268-06-5]



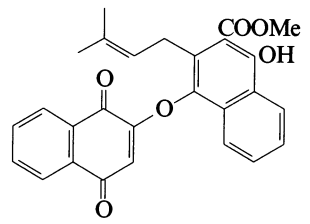
$C_{31}H_{24}O_{10}$ M 556.525

Constit. of the roots of *Rubia oncotricha*. Red-yellowish prisms. Mp 235-236°.

Qiao, Y.-F. *et al*, *Chem. Pharm. Bull.*, 1990, **38**, 2896 (*isol, pmr, cmr, cryst struct*)

Rubioncolin C R-10056

[132242-52-5]



$C_{27}H_{22}O_6$ M 442.467

Constit. of the roots of *Rubia oncotricha*. Pale yellowish prisms. Mp 171-172°.

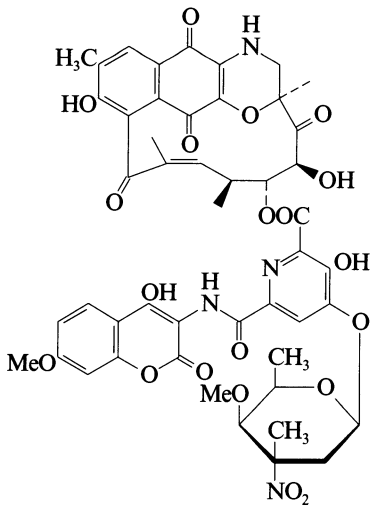
Qiao, Y.-F. *et al*, *Chem. Pharm. Bull.*, 1990, **38**, 2896 (*isol, pmr, cmr*)

Rubradirin R-10057

Updated Entry replacing R-00436

Antibiotic 42405

[11031-38-2]



$C_{48}H_{46}N_4O_{20}$ M 998.906

Isol. from *Streptomyces achromogenes rubradiris* and *Micromonospora saitamica*. Inhibits protein synthesis in gram-positive bacteria. Highly active against gram-positive bacteria and *H. influenzae*. Amorph. solid. $[\alpha]_D$ +571° (c, 0.0205 in Me_2CO). Artifact. Photoxidiation prod. of Protorubradirin which is now regarded as the true secondary metab.

Deoxy: ***Protorubradirin***

$C_{48}H_{46}N_4O_{19}$ M 982.907

Prod. by *S. achromogenes* var. *rubidus*. Amorph. red solid. $[\alpha]_D^{25}$ +921° (c, 0.027 in Me_2CO). Conts. an NO group in place of NO_2. Now regarded as the true metab.

Bhuyan, B.K. *et al*, *Antimicrob. Agents Chemother.*, 1964, 91, 97 (*isol*)

U.S. Pat., 4 032 631, (1977); *CA*, **87**, 165998 (*isol*)

Reusser, F., *J. Antibiot.*, 1979, **32**, 1186 (*props*)

Hoeksema, H. *et al*, *J. Am. Chem. Soc.*, 1982, **104**, 5173 (*struct, pmr, cmr*)

Reusser, F., *Antibiotics (N.Y.)*, 1983, **6**, 187 (*rev*)

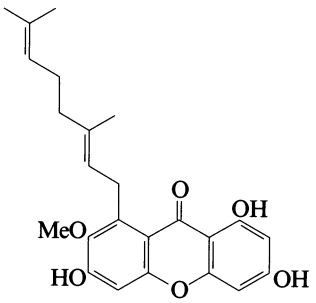
Brimacombe, J.S. *et al*, *J. Chem. Soc., Perkin Trans. 1*, 1985, 1067, 1073 (*synth, struct*)

Bannister, B. *et al*, *J. Antibiot.*, 1992, **45**, 1313 (*Protorubradirin*)

Rubraxanthone R-10058

1-Geranyl-3,6,8-trihydroxy-2-methoxyxanthone

[65411-01-0]



$C_{24}H_{26}O_6$ M 410.466

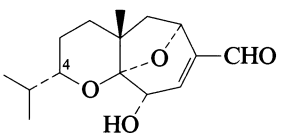
Constit. of *Garcinia parvifolia*, *G. pyrifera* and *G. cowa*. Yellow prisms (EtOAc/pet. ether). Mp 210°.

Lee, H.-H. *et al*, *Phytochemistry*, 1977, **16**, 2038 (*isol*)

Ampofo, S.A. *et al*, *Phytochemistry*, 1986, **25**, 2351 (*isol, pmr, cmr*)

Rugosal D R-10059

[147029-00-3]



$C_{15}H_{22}O_4$ M 266.336

Constit. of *Rosa rugosa*. Syrup.

4-Epimer: [147126-85-0]. ***Epirugosal D***

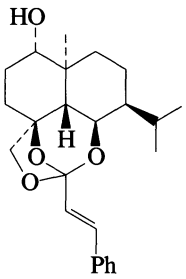
$C_{15}H_{22}O_4$ M 266.336

Constit. of *R. rugosa*. Syrup.

Hashidoko, Y. *et al*, *Phytochemistry*, 1993, **32**, 387 (*isol, pmr, cmr*)

Rupestrinol orthocinnamate R-10060

[64306-03-2]

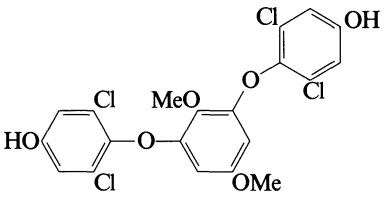


$C_{24}H_{32}O_4$ M 384.514
Constit. of *Verbesina rupestris*. Gum.

Box, V.G.S. *et al*, *Phytochemistry*, 1977, **16**, 987 (*isol*, *pmr*)

Russuphelin A R-10061

[141794-49-2]



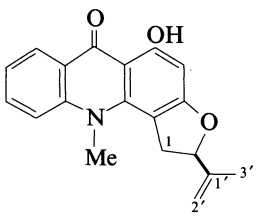
$C_{20}H_{14}Cl_4O_6$ M 492.138
Constit. of the mushroom *Russula subnigricans*. Cytotoxic. Needles ($CHCl_3$/MeOH). Mp 293-294°.

Di-Ac: Needles ($CHCl_3$/hexane). Mp 172-174°.

Takahashi, A. *et al*, *Chem. Pharm. Bull.*, 1992, **40**, 3185 (*isol*, *pmr*, *cmr*, *synth*, *struct*)

Rutacridone R-10062

Updated Entry replacing R-00485
1,11-Dihydro-5-hydroxy-11-methyl-2-(1-methylethenyl) furo[2,3-c]acridin-6(2H)-one
[17948-33-3]



$C_{19}H_{17}NO_3$ M 307.348
Alkaloid from *Ruta graveolens* and *R. chalepensis* (Rutaceae). Mp 161-162°. $[\alpha]_D^{21}$ −43°.

1',2'-Epoxide: [77996-03-3]. ***Rutacridone epoxide***
$C_{19}H_{17}NO_4$ M 323.348
Alkaloid from roots and callus tissue cultures of *R. graveolens* (Rutaceae).

3'-Hydroxy: [81545-69-9]. ***Gravacridonol***
$C_{19}H_{17}NO_4$ M 323.348
Alkaloid from *R. graveolens* (Rutaceae). Mp 155-156° (153°). C-2 config. not detd.

1',2'-Epoxide, 1-hydroxy: [101330-59-0]. ***1-Hydroxyrutacridone epoxide***
$C_{19}H_{17}NO_5$ M 339.347
Alkaloid from the callus tissue of *R. graveolens* (Rutaceae).

1',2'-Epoxide, 3'-hydroxy: [80565-10-2]. ***20-Hydroxyrutacridone epoxide***
$C_{19}H_{17}NO_5$ M 339.347
Alkaloid from the roots and callus tissue cultures of *R. graveolens* (Rutaceae). 20-Posn. in the authors' numbering scheme called here 3'.

Reisch, J. *et al*, *Acta Pharm. Suec.*, 1967, **4**, 265; *CA*, **68**, 39861 (*isol*, *ir*, *pmr*)
Reisch, J. *et al*, *Z. Naturforsch., B*, 1978, **33**, 957 (*rev*, *pmr*, *struct*)
Bergenthal, D., *Phytochemistry*, 1979, **18**, 161 (*cmr*)
Nahrstedt, A. *et al*, *Z. Naturforsch., C*, 1981, **36**, 200 (*Rutacridone epoxide*)
Zschunke, A. *et al*, *J. Chem. Soc., Chem. Commun.*, 1982, 1263 (*biosynth*)
Eilert, U. *et al*, *Z. Naturforsch., C*, 1982, **37**, 132 (*20-Hydroxyrutacridone epoxide*)
Nahrstedt, A. *et al*, *Planta Med.*, 1985, 517 (*1-Hydroxyrutacridone epoxide*)
Reisch, J. *et al*, *Justus Liebigs Ann. Chem.*, 1991, 299 (*Gravacridonol*)

Ruzorine R-10063

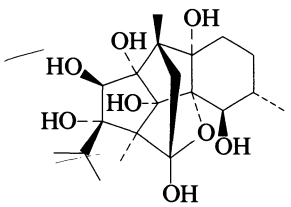
Updated Entry replacing R-00497
$C_{18}H_{27}NO_8$ M 385.413
Pyrrolizidine alkaloid. Possibly identical with Bisline, B-00564. Struct. unknown. Alkaloid from *Senecio ruwenzoriensis* (= *S. othonniformis*)(Compositae). Prisms or needles. V. sol. H_2O. Mp 161-163° (dec. from 134°).

B,HCl: V. unstable cryst. Mp 148° dec. approx.
Picrate: Mp 133-137° (dec. from 125°).

Sapiro, M.L., *J. Chem. Soc.*, 1953, 1942.
Benn, M. *et al*, *Phytochemistry*, 1992, **31**, 3295.

Ryanodol R-10064

[6688-49-9]



$C_{20}H_{32}O_8$ M 384.469
Constit. of *Peresa indica*. Insecticide.

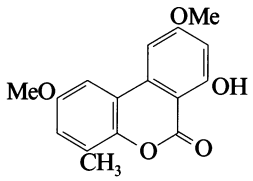
González-Coloma, A. *et al*, *J. Chem. Ecol.*, 1990, **16**, 2723.
González-Coloma, A. *et al*, *Phytochemistry*, 1993, **34**, 397.

S

Sabilactone **S-10001**

7-Hydroxy-2,9-dimethoxy-4-methyl-6H-dibenzo[b,d]*pyran-6-one, 9CI*

[126026-42-4]



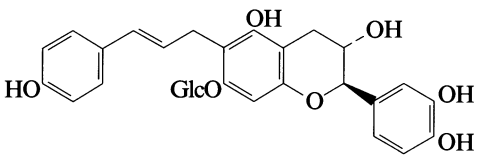
$C_{16}H_{14}O_5$ M 286.284

Constit. of *Sabina vulgaris.*

Fang, S. *et al, Zhiwu Xuebao*, 1989, **31**, 382; *CA*, **112**, 151342 (*isol*)

Sachaliside 2 **S-10002**

[132185-21-8]



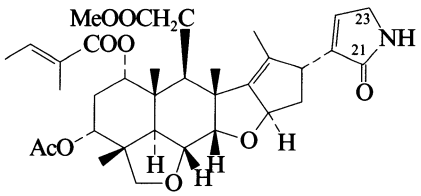
$C_{30}H_{32}O_{12}$ M 584.576

Constit. of the bark of *Salix sachalinensis.* Needles (MeOH). Mp 202-203°.

Mizuno, M. *et al, Heterocycles*, 1990, **31**, 1409 (*isol*)

Salannolactam 21 **S-10003**

[106500-23-6]



$C_{34}H_{45}NO_9$ M 611.731

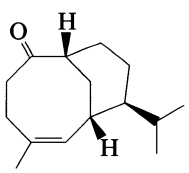
Constit. of the seed kernels of *Azadirachta indica.* Insect antifeedant. Needles (Et_2O). Mp 213° dec. $[\alpha]_D^{20}$ +121.8° (c, 0.1 in CH_2Cl_2).

21-Deoxo, 23-oxo: [106500-24-7]. ***Salannolactam 23*** Isol. from Neem oil (*A. indica*). Insect antifeedant. $[\alpha]_D^{20}$ +126.3° (c, 0.1 in CH_2Cl_2).

Kraus, W. *et al, Justus Liebigs Ann. Chem.*, 1987, 337 (*isol, pmr, cmr, struct*)

Salsolene ketone **S-10004**

[149090-97-1]



$C_{15}H_{24}O$ M 220.354

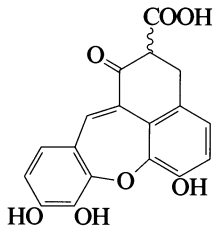
Constit. of *Artemisia sieberi.*

Weyerstahl, P. *et al, Justus Liebigs Ann. Chem.*, 1993, 111 (*isol, pmr, cmr*)

Salvianolic acid G **S-10005**

2,3-Dihydro-6,8,9-trihydroxy-1-oxo-1H-benzo[f]*naphth*[*1,8-*bc]*oxepin-2-carboxylic acid, 9CI*

[136112-79-3]



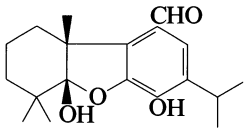
$C_{18}H_{12}O_7$ M 340.289

Constit. of the roots of *Salvia miltiorrhiza.*

Ai, C. *et al, Chin. Chem. Lett.*, 1991, **2**, 17 (*isol, pmr*)

Salvicanaraldehyde **S-10006**

[151368-46-6]



$C_{19}H_{26}O_4$ M 318.412

Constit. of *Salvia munzii.* Oil.

Luis, J.G. *et al, Tetrahedron*, 1993, **49**, 6277 (*isol, pmr, cmr*)

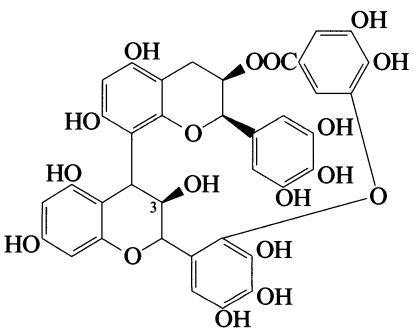
Samanin E **S-10007**

Triterpene saponin. Glycoside of Acacic acid (see 3,16,21-Trihydroxy-12-oleanen-28-oic acid, T-02475). Struct. unknown. Constit. of the bark of *Pithecolobium saman.*

Varshney, I.P. *et al, Fitoterapia*, 1985, **56**, 281 (*isol*)

Samarangenin A **S-10008**

[147103-18-2]



$C_{37}H_{28}O_{18}$ M 760.617

Isol. from the leaf of *Syzygium samarangens* and *S. aqueum*. Brown amorph. powder + $2H_2O$. $[\alpha]_D^{27}$ −218.4° (c, 0.6 in Me_2CO).

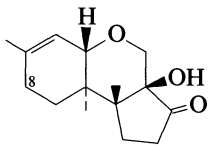
3-O-(3,4,5-Trihydroxybenzoyl): [147103-19-3].
Samarangenin B
$C_{44}H_{32}O_{22}$ M 912.724
Tannin constit. of *S. samarangens* and *S. aqueum*. Brown amorph. powder + $3H_2O$. $[\alpha]_D^{27}$ −246.9° (c, 0.7 in Me_2CO).

Nonaka, G. *et al*, *Chem. Pharm. Bull.*, 1992, **40**, 2671 (*isol, struct, pmr, cmr*)

Sambucoin S-10009

Updated Entry replacing S-00097

[90044-34-1]



$C_{15}H_{22}O_3$ M 250.337
Trichothecene antibiotic. Metab. of *Fusarium sambucinum*. Shows possible cystatic activity. Cryst. (Me_2CO/pet. ether). Mp 205-210°. Related to Trichothecenes.

8α-Hydroxy: [112468-60-7]. ***8α-Hydroxysambucoin***
$C_{15}H_{22}O_4$ M 266.336
Metab. of *F. sporotrichioides*. Glass.

8β-Hydroxy: [112531-13-2]. ***8β-Hydroxysambucoin***
$C_{15}H_{22}O_4$ M 266.336
Metab. of *F. sporotrichioides*. Glass.

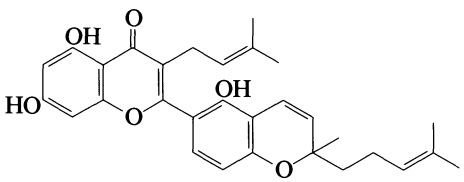
2-Deoxy, 11-epimer, 3α-hydroxy: ***2-Deoxy-11-epi-3α-hydroxysambucoin***
$C_{15}H_{24}O_3$ M 252.353
Metab. of *F. sporotrichioides*. Cryst. (MeOH aq.). Mp 177-178°.

2-Deoxy, 11-epimer, 3α-hydroxy, 12-Ac:
$C_{17}H_{26}O_4$ M 294.390
Metab. of *F. sporotrichioides*. Oil.

Mohr, P. *et al*, *Helv. Chim. Acta*, 1984, **67**, 406 (*isol, struct*)
Corley, D.G. *et al*, *J. Nat. Prod.* (*Lloydia*), 1987, **50**, 897 (*derivs*)
Fort, D.M. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 1890 (*isol, pmr, cmr, cryst struct*)
Hesketh, A.R. *et al*, *Phytochemistry*, 1993, **32**, 105 (*biosynth*)

Sanggenon J S-10010

[86450-78-4]

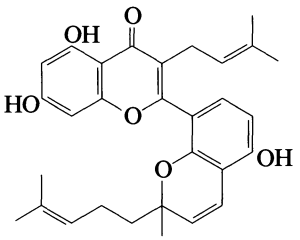


$C_{30}H_{32}O_6$ M 488.579
Constit. of the root bark of *Morus* sp.

Hano, Y. *et al*, *Heterocycles*, 1983, **20**, 1071 (*isol*)

Sanggenon K S-10011

[86450-77-3]

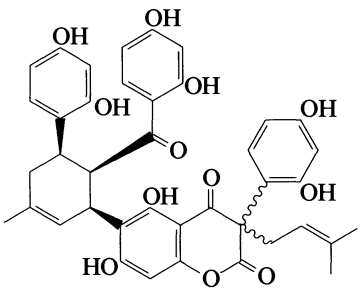


$C_{30}H_{32}O_6$ M 488.579
Constit. of the root bark of *Morus* sp.

Hano, Y. *et al*, *Heterocycles*, 1983, **20**, 1071 (*isol*)

Sanggenon Q S-10012

[120217-42-7]

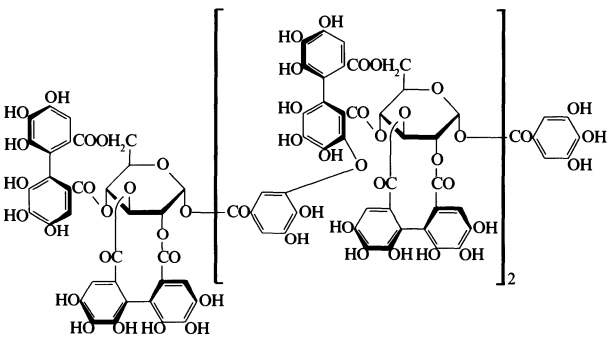


$C_{40}H_{36}O_{12}$ M 708.717
Constit. of the root bark of *Morus mongolica*. Pale yellow powder. $[\alpha]_D^{22}$ +111° (c, 0.158 in MeOH).

Sun, J.Y. *et al*, *Heterocycles*, 1989, **29**, 195 (*isol*)

Sanguiin H11 S-10013

[96292-46-5]

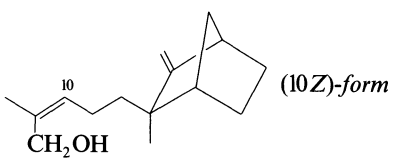


$C_{164}H_{106}O_{104}$ M 3740.579
Tetrameric ellagitannin from *Sanguisorba officinalis*. Amorph. powder.

Tanaka, T. *et al*, *J. Chem. Res., Synop.*, 1985, 176 (*struct*)

β-Santala-3(15),10-dien-12-ol S-10014

Updated Entry replacing S-00142



(10*Z*)-*form*

$C_{15}H_{24}O$ M 220.354

(*10Z*)-*form* [77-42-9] ***β-Santalol***
Constit. of sandalwood oil (*Santalum album*). Perfumery ingredient. Oil. Bp_{17} 177-178°. $[\alpha]_{546}$ −87.1°.

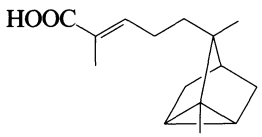
12-Carboxylic acid: [73590-17-7]. *β-Santala-3(15),10-dien-12-oic acid.* ***β-Santalic acid***
$C_{15}H_{22}O_2$ M 234.338
Constit. of *S. album* oil. Oil.

(*10E*)-*form*
Aldehyde: [59331-82-7]. *β-Santal-3(15),10-dien-12-al.* ***β-Santalal***
$C_{15}H_{22}O$ M 218.338
Isol. from *S. album* oil.

Demole, E. *et al*, *Helv. Chim. Acta*, 1976, **59**, 737 (*aldehyde*)
Baumann, M. *et al*, *Justus Liebigs Ann. Chem.*, 1979, 743 (*synth*)
Brunke, E.-J. *et al*, *Justus Liebigs Ann. Chem.*, 1982, 1105 (*abs config*)
Monti, H. *et al*, *Tetrahedron Lett.*, 1982, **23**, 5539 (*synth*)
Solas, D. *et al*, *J. Org. Chem.*, 1983, **48**, 1988 (*synth, bibl*)
Buchbauer, G. *et al*, *Justus Liebigs Ann. Chem.*, 1990, 119 (*β-Santalic acid*)
Krotz, A. *et al*, *Tetrahedron: Asymmetry*, 1990, **1**, 537 (*synth*)

α-Santal-10-en-12-oic acid S-10015

Updated Entry replacing S-00148



$C_{15}H_{22}O_2$ M 234.338

(*10E*)-*form* [74642-79-8] ***α-Santalen-12-oic acid***
Constit. of *Ayapana amygdalina*. Oil.

10,11-Dihydro: α-*Santalan-12-oic acid.* ***Dihydro-α-santalic acid***
$C_{15}H_{24}O_2$ M 236.353
Constit. of East Indian sandalwood oil. Oil.

Bohlmann, F. *et al*, *Phytochemistry*, 1979, **18**, 1997.
Nikiforov, A. *et al*, *Justus Liebigs Ann. Chem.*, 1990, 119 (*isol, pmr*)

Stryphnodendron Sapogenin M S-10016

Triterpene of unknown struct. Constit. of *Stryphnodendron coriaceum*.

Tursch, B. *et al*, *Bull. Soc. Chim. Belg.*, 1966, **75**, 26.

Astralagus alexandrinus Saponin S-10017

$C_{35}H_{56}O_{10}$ M 636.821
Steroidal saponin of the $\Delta^{20(22)}$-furostene type. Carbohydrate moiety is glucose. Complete struct. unknown. Isol. from *Astralagus alexandrinus*. Mp 289-292°.

Khafagy, S.M. *et al*, *Egypt. J. Pharm. Sci.*, 1979, **20**, 7; *CA*, **97**, 195829k (*isol, ir, uv, pmr*)

Oxytropis lanata Saponin S-10018

Struct. unknown. Constit. of the epigeal parts of *Oxytropis lanata*. Cryst. Mp 224-226°. $[\alpha]_D^{20}$ +3.3°. Hydrol. prod. Soyasapogenol B (see 12-Oleanene-3,22,24-triol, O-00376) and various sugars.

Iriste, V. *et al*, *CA*, 1977, **86**, 86103 (*isol*)

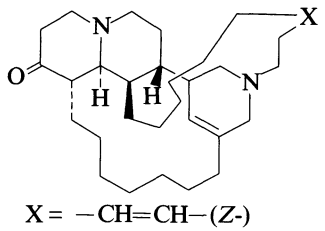
Stryphnodendron Saponin K S-10019

$C_{30}H_{46}O_4$ M 470.691
Triterpene of unknown struct. Constit. of *Stryphnodendron coriaceum*. Mp 236-239°.

Tursch, B. *et al*, *Bull. Soc. Chim. Belg.*, 1966, **75**, 127.

Sarain 1 S-10020

Updated Entry replacing S-00588
[105418-77-7]



X = −CH=CH−(*Z*-)

$C_{31}H_{50}N_2O$ M 466.749
Alkaloid from the marine sponge *Reniera sarai*. Amorph. powder. $[\alpha]_D$ −47.8° (c, 1.2 in $CHCl_3$).

Cimino, G. *et al*, *Bull. Soc. Chim. Belg.*, 1986, **95**, 783 (*isol, pmr, cmr, struct, biosynth*)

Sarain 2 S-10021

Updated Entry replacing S-00589
[105418-80-2]

As Sarain 1, S-10020 with

X = $-CH_2-$

$C_{30}H_{50}N_2O$ M 454.738
Alkaloid from the marine sponge *Reniera sarai*. Amorph. powder. $[\alpha]_D$ −117° (c, 1.1 in $CHCl_3$).

Cimino, G. *et al*, *Bull. Soc. Chim. Belg.*, 1986, 783 (*isol, pmr, cmr, struct, biosynth*)

Sarain 3 S-10022

Updated Entry replacing S-00590
[105305-54-2]

As Sarain 1, S-10020 with

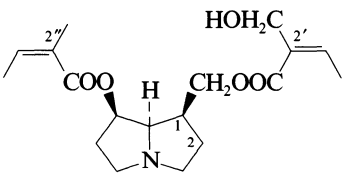
X = $-CH=CH-CH_2-$ (posn. of double bond not certain)

$C_{32}H_{52}N_2O$ M 480.776
Alkaloid from the marine sponge *Reniera sarai*. Amorph. powder. $[\alpha]_D$ −27.4° (c, 0.8 in $CHCl_3$).

Cimino, G. *et al*, *Bull. Soc. Chim. Belg.*, 1986, **95**, 783 (*isol, pmr, cmr, struct, biosynth*)

Sarracine S-10023

Updated Entry replacing S-00228
Mikanoidine
[2492-09-3]



$C_{18}H_{27}NO_5$ M 337.415
Double ester of platynecine with angelic (see 2-Methyl-2-butenoic acid, M-00844) and sarracinic acids (see 2-

Hydroxymethyl-2-butenoic acid, H-02327). Alkaloid from *Senecio sarracenius, S. mikanoides, S. sylvaticus, S. rhombifolius, S. franchetii* and *Adenostyles alliariae* (Compositae). Has been used in the USSR for treatment of gastrointestinal hypermotility and peptic ulceration. Cryst. (EtOH). Mp 51-52° (45-46°). $[\alpha]_D$ −129.7° (EtOH).

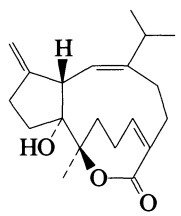
▷ EM9251400.

Tartrate: Mp 177-179°. $[\alpha]_D$ −70.05° (H_2O).
Monopicrate: Cryst. (EtOH). Mp 140-141°.
N-*Oxide:* [19038-27-8]. ***Sarracine* N-*oxide***
$C_{18}H_{27}NO_6$ M 353.414
Alkaloid from *S. sarracenius, S. franchetii* and *S. mikanoides* (Compositae). Cryst. + $1H_2O$ (Me_2CO). Mp 123-124°. $[\alpha]_D$ −81.65° (H_2O), $[\alpha]_D$ −94° (EtOH). Becomes anhydr. at 100°, rehydrates on standing in air.
N-*Oxide, picrate:* Cryst. (EtOH). Mp 107.5-108.5°.
1,2-Didehydro: ***7-Angeloyl-9-sarracinoylretronecine***
$C_{18}H_{25}NO_5$ M 335.399
Alkaloid from *S. triangularis* (Compositae). Gum. $[\alpha]_D^{25}$ +6.1° (c, 1.7 in MeOH).
1,2-Didehydro, picrate: Mp 139-140°.
(2′E,2″E)-*isomer:* [136173-27-8]. ***Neosarranicine***
$C_{18}H_{27}NO_5$ M 337.415
Alkaloid from *S. serra, S. hydrophyllus* and *S. mikanoides* (Compositae).
(2′E,2″Z)-*isomer:* [136173-25-6]. ***Sarranicine***
$C_{18}H_{27}NO_5$ M 337.415
Alkaloid from *S. serra, S. hydrophyllus* and *S. mikanoides* (Compositae).
(2′Z,2″E)-*Isomer:* [136173-26-7]. ***Neosarracine***
$C_{18}H_{27}NO_5$ M 337.415
Alkaloid from *S. hydrophyllus* and *S. mikanoides* (Compositae).

Danilova, A.V. *et al, Zh. Obshch. Khim.*, 1953, **23**, 1417, 1597; *CA*, **47**, 12759 (*isol, Sarracine, oxide*)
Culvenor, C.C.J. *et al, J. Org. Chem.*, 1961, **26**, 3045 (*isol, pmr, struct*)
Akramov, S.T. *et al, Khim. Prir. Soedin.*, 1967, 351; *Chem. Nat. Compd.* (*Engl. Transl.*), 296 (*isol*)
White, E.P. *et al, An. Quim.*, 1972, **68**, 723 (*isol*)
Dauksha, V.E., *Khim. Prir. Soedin.*, 1976, 831; *Chem. Nat. Compd.* (*Engl. Transl.*), 753 (*isol*)
Rüeger, H. *et al, Can. J. Chem.*, 1983, **61**, 2526 (*deriv*)
Stelljes, M.E. *et al, J. Nat. Prod.* (*Lloydia*), 1991, **54**, 759 (*Neosarracine, Neosarranicine, Sarranicine*)

Sarsolide A S-10024

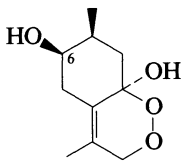
[145757-44-4]



$C_{20}H_{28}O_3$ M 316.439
Constit. of *Sarcophyton solidun*. Cryst. Mp 240.2-242.2°. $[\alpha]_D^{25}$ +142.2° (c, 0.03 in EtOH).

Zhang, M. *et al, J. Nat. Prod.* (*Lloydia*), 1992, **55**, 1672 (*isol, pmr, cmr, cryst struct*)

Saturejol S-10025

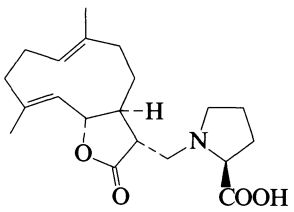


$C_{10}H_{16}O_4$ M 200.234
6-Ac: [128736-01-6]. ***Acetylsaturejol***
$C_{12}H_{18}O_5$ M 242.271
Constit. of *Satureja gilliesii*. Cryst. (CH_2Cl_2/pet. ether). Mp 93-94°.

Mariquez, V. *et al, Acta Crystallogr., Sect. C*, 1990, **46**, 802 (*cryst struct*)
Labbé, C. *et al, Phytochemistry*, 1993, **34**, 441 (*isol, pmr, cmr*)

Saussureamine A S-10026

[148245-82-3]

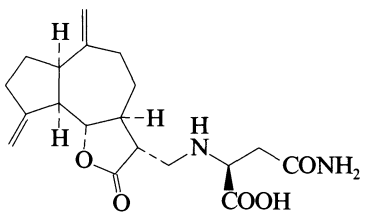


$C_{20}H_{29}NO_4$ M 347.453
Constit. of *Saussurea lappa* root. Prisms. Mp 115-117°. $[\alpha]_D$ +36.7° (MeOH).

Yoshikawa, M. *et al, Chem. Pharm. Bull.*, 1993, **41**, 214 (*isol, pmr, cmr*)

Saussureamine C S-10027

[148245-83-4]

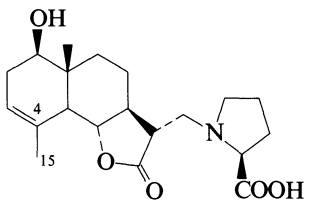


$C_{19}H_{26}N_2O_5$ M 362.425
Constit. of *Saussurea lappa* root. Powder. $[\alpha]_D$ −17.2° (MeOH).

Yoshikawa, M. *et al, Chem. Pharm. Bull.*, 1993, **41**, 214 (*isol, pmr, cmr*)

Saussureamine D S-10028

[148225-51-8]



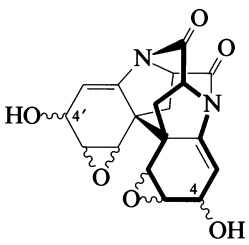
$C_{20}H_{29}NO_5$ M 363.453
Constit. of *Saussurea lappa* root. Needles (MeOH aq.). Mp 235-237°. $[\alpha]_D$ +13.3° (MeOH).
$\Delta^{4(15)}$-*Isomer:* [148225-52-9]. ***Saussureamine E***
$C_{20}H_{29}NO_5$ M 363.453

Constit. of *S. lappa* root. Needles (MeOH aq.). Mp 150-153°. $[\alpha]_D$ +33.7° (MeOH).

Yoshikawa, M. *et al*, *Chem. Pharm. Bull.*, 1993, **41**, 214 (*isol, pmr, cmr*)

Scabrosine S-10029

[67866-98-2]



$C_{18}H_{16}N_2O_6$ M 356.334

Di-Ac: [67705-18-4].
$C_{22}H_{20}N_2O_8$ M 440.409
Isol. from lichen *Xanthoparmelia scabrosa*. Mp 262°.

4-Ac, 4'-butanoyl: [67705-19-5].
$C_{24}H_{24}N_2O_8$ M 468.462
Isol. from *X. scabrosa*. Mp 216.5-217.5°.

Dibutanoyl: [67705-20-8].
$C_{26}H_{28}N_2O_8$ M 496.516
Isol. from *X. scabrosa*. Mp 197-199°.

4-Ac, 4'-hexanoyl: [67705-21-9].
$C_{26}H_{28}N_2O_8$ M 496.516
Isol. from *X. scabrosa*. Mp 213°.

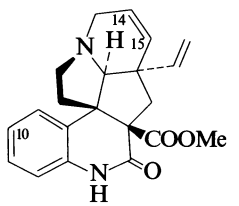
Begg, W.R. *et al*, *Tetrahedron Lett.*, 1978, 1047.

Scandine S-10030

Updated Entry replacing S-00270

3-(Methoxycarbonyl)meloscine, 9CI

[24314-59-8]



Absolute configuration

$C_{21}H_{22}N_2O_3$ M 350.416

Alkaloid from *Melodinus scandens* (Apocynaceae). Prisms (MeOH/EtOH). Mp 188-192°. $[\alpha]_D^{25}$ +254° (c, 0.2 in EtOH).

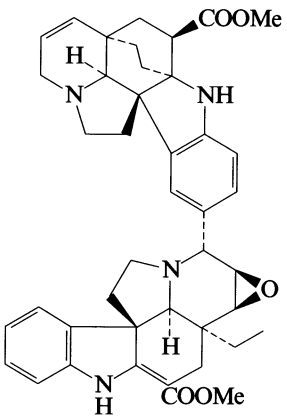
10-Hydroxy: [119188-47-5]. *15-Hydroxy-3-(methoxycarbonyl)meloscine, 9CI.* ***10-Hydroxyscandine***
$C_{21}H_{22}N_2O_4$ M 366.416
Alkaloid from the stem bark of *M. tenuicaudatus* (Apocynaceae). Mp 180°. $[\alpha]_D$ +228° ($CHCl_3$).

14,15-Epoxide: ***14,15-Epoxyscandine***
$C_{21}H_{22}N_2O_4$ M 366.416
Alkaloid from aerial parts of *M. hemsleyanus* (Apocynaceae). Prisms (Me_2CO). Mp 116-118°.

Bernauer, B.K. *et al*, *Helv. Chim. Acta*, 1969, **52**, 1886 (*uv, ms, pmr*)
Daudon, M. *et al*, *J. Org. Chem.*, 1975, **40**, 2838 (*cmr*)
Cannon, J.R. *et al*, *Aust. J. Chem.*, 1982, **35**, 1655 (*cryst struct, abs config*)
Zhou, Y.L. *et al*, *Planta Med.*, 1988, **54**, 315 (*10-Hydroxyscandine*)
Guo, L.-W. *et al*, *Phytochemistry*, 1993, **34**, 563 (*14,15-Epoxyscandine*)

Scandomelidine S-10031

[139682-13-6]



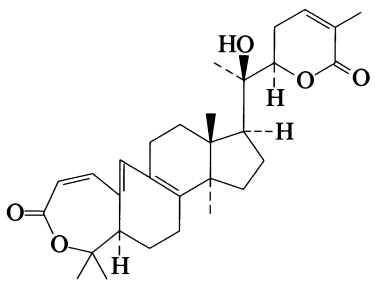
$C_{42}H_{46}N_4O_5$ M 686.849

Alkaloid from stems and leaves of *Melodinus scandens* (Apocynaceae). Amorph. powder. $[\alpha]_D^{20}$ −160° (c, 1 in $CHCl_3$).

Mehri, H. *et al*, *J. Nat. Prod.* (*Lloydia*), 1992, **55**, 241 (*isol, uv, ir, pmr, cmr, ms, struct*)

Schisanlactone C S-10032

[92051-27-9]



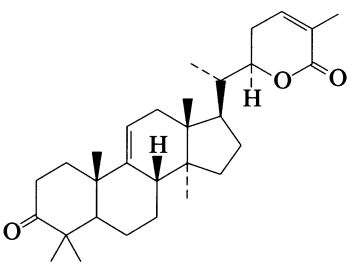
$C_{30}H_{40}O_5$ M 480.643

Constit. of *Schisandra* sp.

Liu, J. *et al*, *Huaxue Xuebao*, 1984, **42**, 464; *CA*, 1984, **101**, 147788a.

Schisanlactone D S-10033

[92051-26-8]



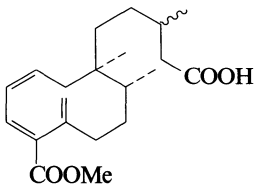
$C_{30}H_{44}O_3$ M 452.676

Constit. of *Schisandra* sp.

Liu, J. *et al*, *Huaxue Xuebao*, 1984, **42**, 464; *CA*, **101**, 147788a.

Schistochilic acid A S-10034

[151200-93-0]



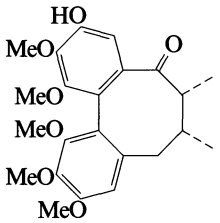
$C_{21}H_{32}O_4$ M 348.481
Constit. of *Schistochila nobilis*. Oil. $[\alpha]_D^{22}$ +117° (c, 0.89 in CCl_4).

Tori, M. *et al*, *Phytochemistry*, 1993, **32**, 1229 (*isol, pmr, cmr*)

Schizanlignone B S-10035

7,8-Dihydro-3-hydroxy-1,2,10,11,12-pentamethoxy-6,7-dimethyldibenzo[a,c]*cycloocten-5*(6H)*-one, 9CI.*
Schisanlignone B

[135459-86-8]



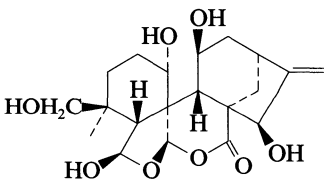
$C_{23}H_{28}O_7$ M 416.470
Constit. of the seeds of a *Kadsura* sp. Slows antileukaemic activity.

Me ether: [135557-67-4]. ***Schizanlignone A.*** *Schisanlignone A*
$C_{24}H_{30}O_7$ M 430.497
Constit. of the seeds of a *K.* sp. Shows antileukaemic activity.

Liu, J. *et al*, *Huaxue Xuebao*, 1991, **49**, 412; *CA*, **115**, 89135 (*isol*)

Sculponeatin D S-10036

[137293-41-5]

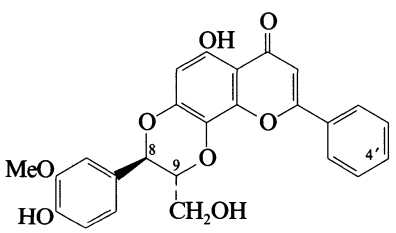


$C_{20}H_{28}O_8$ M 396.436
Constit. of *Rabdosia sculponeata*. Cryst. (Me_2CO). Mp 288-290.5°. $[\alpha]_D^{19}$ −100° (MeOH).

Zhang, R.P. *et al*, *Chin. Chem. Lett.*, 1991, **2**, 293 (*isol, pmr, cmr*)

Scutellaprostin A S-10037

[137166-36-0]



$C_{25}H_{20}O_8$ M 448.428
Constit. of the roots of *Scutellaria prostrata*. Yellow needles (MeOH). Mp 221-222°. Racemic.

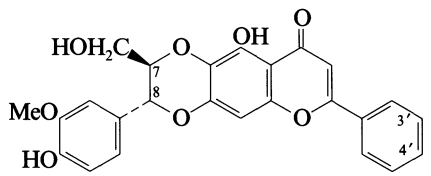
4'-Hydroxy: [137231-84-6]. ***Scutellaprostin B***
$C_{25}H_{20}O_9$ M 464.428
Constit. of the roots of *S. prostrata*. Yellow needles (MeOH). Mp 255-256° dec.

3',4'-Dihydroxy: [137231-85-7]. ***Scutellaprostin C***
$C_{25}H_{20}O_{10}$ M 480.427
Constit. of the roots of *S. prostrata*. Yellow needles (MeOH). Mp 250-251° dec.

Kikuchi, Y. *et al*, *Chem. Pharm. Bull.*, 1991, **39**, 1466 (*isol, pmr, cmr*)

Scutellaprostin D S-10038

[137231-86-8]



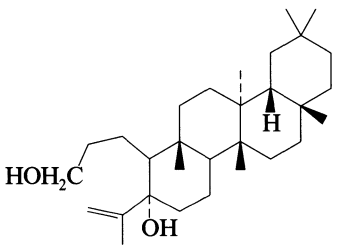
$C_{25}H_{20}O_8$ M 448.428
Constit. of the roots of *Scutellaria prostrata*. Yellow needles (MeOH). Mp 234-235° dec. Racemic.

4'-Hydroxy: [137231-87-9]. ***Scutellaprostin E***
$C_{25}H_{20}O_9$ M 464.428
Constit. of the roots of *S. prostrata*. Yellow needles (MeOH). Mp 240-241° dec.

3',4'-Dihydroxy: [137231-88-0]. ***Scutellaprostin F***
$C_{25}H_{20}O_{10}$ M 480.427
Constit. of the roots of *S. prostrata*. Yellow needles (MeOH). Mp 204-205° dec.

Kikuchi, Y. *et al*, *Chem. Pharm. Bull.*, 1991, **39**, 1466 (*isol, pmr, cmr*)

3,4-Seco-4(23)-friedelene-3,5-diol S-10039



$C_{30}H_{52}O_2$ M 444.740

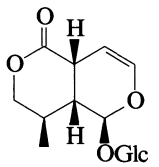
5α-form

Dischidiol
Constit. of *Dischidia formosana*. Cryst. ($CHCl_3$/MeOH). Mp 193-195°. $[\alpha]_D^{20}$ +116.5° (c, 0.4 in $CHCl_3$).

Chen, Z.-S. *et al*, *Phytochemistry*, 1993, **34**, 783 (*isol, pmr, cryst struct*)

Secolinarioside S-10040

[150395-85-0]

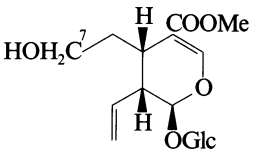


$C_{15}H_{22}O_9$ M 346.333
Constit. of *Linaria japonica*. Amorph. powder. $[\alpha]_D$ −125° (c, 0.96 in MeOH).

Otsuka, H. *et al*, *Phytochemistry*, 1993, **33**, 617 (*isol, pmr, cmr*)

Secologanol S-10041

Updated Entry replacing S-00456
[72463-81-1]



$C_{17}H_{26}O_{10}$ M 390.386
Constit. of *Gentiana verna*.

7-Ac: 7-Acetylsecologanol
$C_{19}H_{28}O_{11}$ M 432.424
Constit. of *G. verna*.

7-O-(2,5-Dihydroxybenzoyl): [111116-40-6]. ***Syringalactone B.*** *Lilacoside*
$C_{24}H_{30}O_{13}$ M 526.493
Constit. of *Syringa vulgaris* and *G. verna*. Cryst. (as hexa-Ac). Mp 58° (hexa-Ac). $[\alpha]_D$ −35.6° ($CHCl_3$) (hexa-Ac).

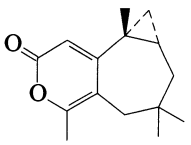
7-O-(3,4,5-Trihydroxybenzoyl): [131189-57-6]. ***Cornuside.*** *7-Galloylsecologanol*
$C_{24}H_{30}O_{14}$ M 542.493
Isol. from fruits of *Cornus officinalis*. Off-white powder. $[\alpha]_D^{21}$ −91° (c, 1.0 in MeOH).

7-Carboxylic acid, Me ester: ***Secologanoside 7-methyl ester***
$C_{18}H_{26}O_{11}$ M 418.397
Constit. of *Osmanthus asiaticus*. Amorph. powder. $[\alpha]_D$ −115.0° (MeOH).

Kikuchi, M. *et al*, *CA*, 1988, **109**, 89748 (*Syringalactone B*)
Mpondo, E.M. *et al*, *J. Nat. Prod.* (*Lloydia*), 1989, **52**, 1146 (*isol, pmr, cmr*)
Hatano, T. *et al*, *Phytochemistry*, 1990, **29**, 2925 (*Cornuside*)
Sugiyama, M. *et al*, *Phytochemistry*, 1993, **34**, 1169 (*Secologanoside methyl ester*)

Secoswartzianin A S-10042

[150375-22-7]

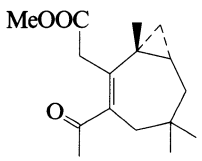


$C_{15}H_{20}O_2$ M 232.322
Constit. of *Porella swartziana*. Cryst. (hexane). Mp 127-128.5°. $[\alpha]_D^{20}$ −39° (c, 1.45 in $CHCl_3$).

Tori, M. *et al*, *Tetrahedron Lett.*, 1993, **34**, 3753 (*isol, pmr, cmr*)

Secoswartzianin B S-10043

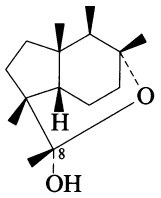
[150375-23-8]



$C_{16}H_{24}O_3$ M 264.364
Constit. of *Porella swartziana*. Oil. $[\alpha]_D^{22}$ −111° (c, 1.12 in $CHCl_3$).

Tori, M. *et al*, *Tetrahedron Lett.*, 1993, **34**, 3753 (*isol, pmr, cmr*)

Seiricardine B S-10044



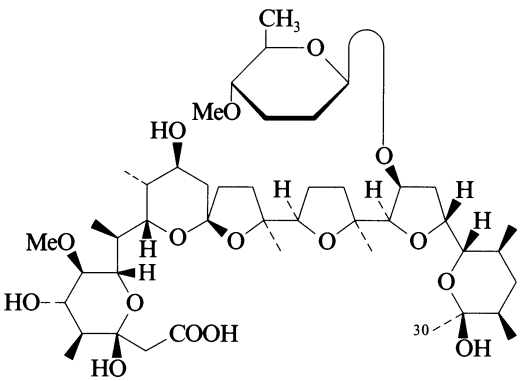
$C_{15}H_{26}O_2$ M 238.369
Metab. of *Seiridium cardinale*, *S. cupressi* and *S. unicorne*. Oil. $[\alpha]_D^{25}$ −29.7° (c, 1.17 in $CHCl_3$).

8-Epimer: ***Seiricardine C***
$C_{15}H_{26}O_2$ M 238.369
Metab. of *S. cardinale*, *S. cupressi* and *S. unicorne*. Oil. $[\alpha]_D^{25}$ −22.3° (c, 1.13 in $CHCl_3$).

Evidente, A. *et al*, *Phytochemistry*, 1993, **33**, 69 (*isol, pmr, cmr, ms*)

Semduramicin, BAN, INN S-10045

Updated Entry replacing S-00522
Antibiotic UK 61689. UK 61689
[113378-31-7]



$C_{45}H_{76}O_{16}$ M 873.086
Polyether antibiotic. Prod. by *Actinomadura roseorufa*. Coccidiostat. Growth promoter. Isol. as Na salt.

Na salt: Mp 175-176° (167°).

30-Hydroxy: ***Antibiotic CP 120509.*** *CP 120509*
$C_{45}H_{76}O_{17}$ M 889.085
Prod. by *Actinomadura roseorufa*. Coccidiostat. Mp 80-82°. $[\alpha]_D$ +32.3° (c, 1 in $CHCl_3$).

30-Hydroxy, Na salt: Mp 143-145°. $[\alpha]_D$ +28.3° (c, 1 in $CHCl_3$).

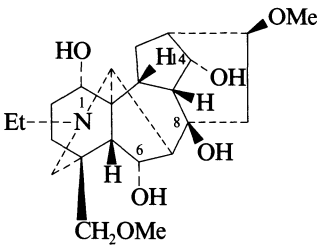
Eur. Pat., 314 330, (1989); *CA*, **112**, 75303 (*isol, cmr*)
Dirlam, J.P. *et al*, *J. Antibiot.*, 1991, **44**, 1262; 1992, **45**, 1545 (*pmr, cmr, CP 120509*)
Tynan, E.J. *et al*, *J. Antibiot.*, 1992, **45**, 813 (*isol*)

Senbusine A S-10046

Updated Entry replacing S-00541

Bataconine

[82202-95-7]



$C_{23}H_{37}NO_6$ M 423.548

Bataconine not proved identical with Senbusine A. Mp refers to Bataconine. Alkaloid from the roots of *Aconitum carmichaeli*, *A. napellus* and *A. ibukiense* (Ranunculaceae). Amorph. powder or cryst. (Me_2CO). Mp 96-99°.

O^1-*Me:* [91794-15-9]. ***Foresticine.*** *Longtouconitine B. 6α-Hydroxytalatizamine*

$C_{24}H_{39}NO_6$ M 437.575

Alkaloid from the roots of *A. forrestii* and *A. longtounense* (Ranunculaceae). Mp 79-80°. $[\alpha]_D^{21}$ −1.9° (c, 1 in $CHCl_3$).

O^1-*Me*, *14*-O-(*4-Methoxybenzoyl):* [99713-74-3]. ***Geniconitine***

$C_{32}H_{45}NO_8$ M 571.709

Alkaloid from roots of *A. geniculatum* (Ranunculaceae).

O^1-*Me*, O^8-*Ac*, O^{14}-*benzoyl:* [132185-72-9]. ***Patentine***

$C_{33}H_{45}NO_8$ M 583.720

Alkaloid from the roots of *A. vilmorrianum* var. *patentipilum* (Ranunculaceae). Amorph. solid.

O^6-*Me:* see *Neoline, N-00225*

O^1,O^6-*Di-Me:* see *Chasmanine, C-00859*

O^8-*Me*, *14-Ac:* [125263-87-8]. ***Nuttalianine.*** *7-Deoxypubescenine*

$C_{26}H_{41}NO_7$ M 479.612

Minor alkaloid from *Delphinium nuttallianum* (Ranunculaceae). Mp 84-86°. $[\alpha]_D^{23}$ ~0°. Plain -ve ORD dispersion curve, $[\alpha]_{365}^{25}$ ~ −15°.

8,14-Di-Ac: [116139-60-7]. ***Delstaphisinine***

$C_{27}H_{41}NO_8$ M 507.623

Alkaloid from seeds of *D. staphisagria* (Ranunculaceae). Cryst. (Et_2O/hexane). Mp 158-160°. $[\alpha]_D^{25}$ −14.1° (c, 0.15 in $CHCl_3$).

Tetra-Ac: Mp 178-180°. $[\alpha]_D^{25}$ +36.4° (c, 0.17 in $CHCl_3$).

O^1,O^{14}-*Di-Me:* ***14-O-Methylforesticine***

$C_{25}H_{41}NO_6$ M 451.602

Alkaloid from roots of *A. septentrionale* (Ranunculaceae). Cryst. (Me_2CO). Mp 127-129°. $[\alpha]_D$ +20.9° (c, 0.134 in $CHCl_3$).

Konno, C. *et al*, *J. Nat. Prod.* (*Lloydia*), 1982, **45**, 128 (*isol, ir, pmr, cmr, struct*)

Hikino, H. *et al*, *J. Nat. Prod.* (*Lloydia*), 1984, **47**, 190 (*isol*)

Pelletier, S.W. *et al*, *J. Nat. Prod.* (*Lloydia*), 1984, **47**, 474 (*isol, pmr, cmr, struct, Foresticine*)

Sakai, S. *et al*, *Yakugaku Zasshi*, 1984, **104**, 222; *CA*, **101**, 69329k (*isol*)

Luo, S. *et al*, *Huaxue Xuebao*, 1985, **43**, 577; *CA*, **103**, 157320x (*Longtouconitine B*)

Hao, X. *et al*, *Zhiwu Xuebao*, 1985, **27**, 504; *CA*, **104**, 31721f (*Geniconitine*)

Ross, S.A. *et al*, *J. Nat. Prod.* (*Lloydia*), 1988, **51**, 572 (*Delstaphisinine*)

Batbayar, N. *et al*, *Khim. Prir. Soedin.*, 1988, **24**, 237; *Chem. Nat. Compd.* (*Engl. Transl.*), 200 (*Bataconine*)

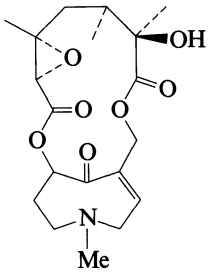
Bai, Y. *et al*, *Heterocycles*, 1989, **29**, 1017 (*Nuttalianine*)

Ding, L.-S. *et al*, *Phytochemistry*, 1990, **29**, 3694 (*Patentine*)

Sayed, H.M. *et al*, *J. Nat. Prod.* (*Lloydia*), 1992, **55**, 1595 (*14-O-Methylforesticine*)

Senecioracenine S-10047

[146573-88-8]



$C_{19}H_{27}NO_7$ M 381.425

Alkaloid from *Senecio racemosus* (Compositae). Oil. $[\alpha]_D$ +50° (c, 0.2 in $CHCl_3$).

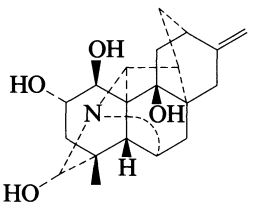
Ahmed, W. *et al*, *J. Nat. Prod.* (*Lloydia*), 1992, **55**, 1764 (*isol, ir, pmr, cmr, ms, struct*)

Septentriosine S-10048

Updated Entry replacing S-00581

Hetisan-1β,2α,9β,19α-tetrol

[115569-73-8]



$C_{20}H_{27}NO_4$ M 345.438

Minor alkaloid from the roots of *Aconitum septentrionale* (Ranunculaceae). Cubes (MeOH). Mp 260-262°. $[\alpha]_D^{28}$ +20.78° (c, 0.55 in MeOH).

B,HCl: Cryst. (MeOH). Mp 299-300°. $[\alpha]_D$ −7.5° (c, 1.0 in MeOH).

O^2-*Ac:* ***2-Acetylseptentriosine***

$C_{22}H_{29}NO_5$ M 387.475

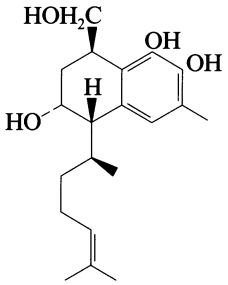
Alkaloid from roots of *A. septentrionale* (Ranunculaceae). Cryst. + $1H_2O$ (Et_2O/hexane). Mp 182-184° (with swelling and darkening at 150-156°). $[\alpha]_D^{15}$ +6.4° (c, 1 in EtOH).

O^1,O^2,O^{19}-*Tri-Ac:* Cryst. (Me_2CO). Mp 210.5-212.5°.

Joshi, B.S. *et al*, *J. Nat. Prod.* (*Lloydia*), 1988, **51**, 265 (*isol, ir, pmr, cmr, ms, cryst struct*)

Ross, S.A. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 424 (*2-Acetylseptentriosine*)

14-Serrulatene-3,7,8,20-tetrol S-10049



$C_{20}H_{30}O_4$ M 334.455

3α-form [148966-05-6]

Constit. of *Eremophila duttonii*.

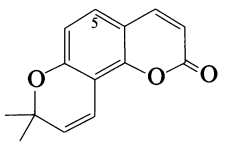
Tippett, L.M. *et al*, *Phytochemistry*, 1993, **33**, 417 (*isol, pmr, cmr*)

Seselin S-10050

Updated Entry replacing S-00645

*8,8-Dimethyl-2*H,*8*H-*benzo[1,2-*b:*3,4-*b′]*dipyran-2-one, 9CI. Amyrolin*

[523-59-1]



$C_{14}H_{12}O_3$ M 228.247

Constit. of the fruits of *Seseli indicum, Ruta pinnata, Flindersia* spp., *Carum roxburghianum, Myrtopsis* spp., *Skimmia* spp., *Pimpinella heyneana* and others. Cryst. ($MeOH/Et_2O$). Mp 119-120°.

2-Deoxo: [98119-92-7]. *8,8-Dimethyl-2*H,*8*H-*benzo[1,2-*b:*3,4-*b′]*dipyran, 9CI.* ***Sesalin***

$C_{14}H_{14}O_2$ M 214.263

Constit. of *Amyris marshii*. Pale yellow oil.

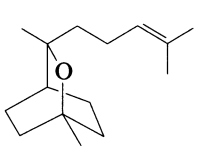
Späth, E. *et al*, *Ber.*, 1939, **72**, 821, 963, 2093 (*isol, synth*)
Barnes, C.S. *et al*, *Aust. J. Chem.*, 1964, **17**, 975 (*ms*)
Shanbhag, S.N. *et al*, *Tetrahedron*, 1964, **20**, 2605 (*synth, pmr*)
Kato, K., *Acta Crystallogr., Sect. B*, 1970, **26**, 2022 (*cryst struct*)
Hlubucek, J., *Aust. J. Chem.*, 1971, **24**, 2347 (*synth*)
Gupta, G.S. *et al*, *J. Indian Chem. Soc.*, 1974, **51**, 904 (*isol*)
Bowden, B.F. *et al*, *Aust. J. Chem.*, 1975, **28**, 1393 (*isol*)
Gray, A.I. *et al*, *J. Chem. Soc., Perkin Trans. 2*, 1978, 391 (*pmr*)
Sattar, A. *et al*, *Phytochemistry*, 1978, **17**, 559 (*isol*)
Dominguez, X.A. *et al*, *Rev. Latinoam. Quim.*, 1985, **16**, 52 (*Sesalin*)
Narkhede, D.D. *et al*, *Tetrahedron*, 1990, **46**, 2031 (*Sesalin*)

Sesquicineol S-10051

Updated Entry replacing S-00652

3,7-Epoxy-10-bisabolene. 3,7-Oxido-10-bisabolene

[90131-02-5]



$C_{15}H_{26}O$ M 222.370

Constit. of *Senecio subrubriflorus, Anthemis alpestris, Aydendron barbeyana* and *Boronia megastigma*. Perfumery compound. Oil. Bp_5 90-94°, $Bp_{0.1}$ 120°. $[\alpha]_D^{24}$ −8.4° (c, 4.06 in $CHCl_3$).

1,2-Didehydro: 3,7-Epoxy-1,10-bisaboladiene. ***Dehydrosesquicineol***

$C_{15}H_{24}O$ M 220.354

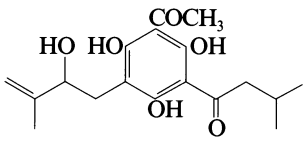
Constit. of *Artemisia sieberi*. Oil. $[\alpha]_D^{20}$ −21.8° (c, 0.1 in $CHCl_3$).

Bohlmann, F. *et al*, *Phytochemistry*, 1982, **21**, 1697 (*isol*)
Pascual Teresa, J. de. *et al*, *Tetrahedron*, 1988, **44**, 5109 (*synth, ir, pmr, cmr, ms*)
Weyerstahl, P. *et al*, *Tetrahedron*, 1990, **46**, 3503 (*synth*)
Weyerstahl, P. *et al*, *Justus Liebigs Ann. Chem.*, 1993, 111 (*Dehydrosesquicineol*)

Sessiliflorene S-10052

1-[3-Acetyl-2,4,6-trihydroxy-5-(2-hydroxy-3-methyl-3-butenyl)phenyl]-3-methyl-1-butanone, 9CI. 2′,4′,6′-Trihydroxy-3′-(2-hydroxy-3-methyl-3-butenyl)-5′-(3-methyl-1-oxobutyl)acetophenone

[119998-59-3]



$C_{18}H_{24}O_6$ M 336.384

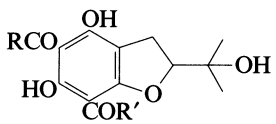
(±)-form

Constit. of the leaves of *Melicope sessiliflora*. Cryst. (Et_2O/hexane). Mp 117-120°.

Chan, J.A. *et al*, *J. Org. Chem.*, 1989, **54**, 2098 (*isol, pmr, cmr*)

Sessiliflorol A S-10053

[119998-60-6]



R = CH_3, R′ = $CH_2CH(CH_3)_2$

$C_{18}H_{24}O_6$ M 336.384

(±)-form

Constit. of the leaves of *Melicope sessiliflora*. Cryst. (Et_2O/hexane). Mp 105-107°.

Chan, J.A. *et al*, *J. Org. Chem.*, 1989, **54**, 2098 (*isol, pmr, cmr*)

Sessiliflorol B S-10054

[119998-61-7]

As Sessiliflorol A, S-10053 with

R = $CH_2CH(CH_3)_2$, R′ = CH_3

$C_{18}H_{24}O_6$ M 336.384

(±)-form

Constit. of the leaves of *Melicope sessiliflora*.

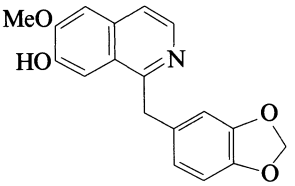
Chan, J.A. *et al*, *J. Org. Chem.*, 1989, **54**, 2098 (*isol, pmr, cmr*)

Sevanine S-10055

Updated Entry replacing S-00663

1-(1,3-Benzodioxol-5-ylmethyl)-6-methoxy-7-isoquinolinol, 9CI. 7-Hydroxy-6-methoxy-1-(3,4-methylenedioxybenzyl) isoquinoline

[54293-58-2]



$C_{18}H_{15}NO_4$ M 309.321

Alkaloid from *Papaver macrostomum* (Papaveraceae). Mp 218°.

Me ether: Mp 106-108°.

β-D-Glucopyranoside: [77396-64-6]. ***Glycomarine***

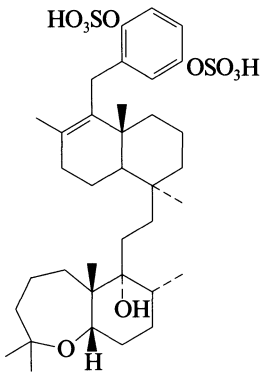
$C_{24}H_{25}NO_9$ M 471.463

Alkaloid from *P. arenarium* (Papaveraceae).

Mnatsakanyan, V.A. *et al, Tetrahedron Lett.*, 1974, 851 (*ms, uv, pmr, struct*)
Simanek, V. *et al, Heterocycles*, 1976, **4**, 1263 (*synth*)
Israilov, I.A. *et al, Khim. Prir. Soedin.*, 1980, 852 (*Glycomarine*)

Shaagrockol C S-10056

[141968-27-6]



$C_{36}H_{56}O_{10}S_2$ M 712.964

Constit. of *Toxiclona toxius*. $[\alpha]_D$ +8° (c, 0.7 in MeOH) (as di-Na salt).

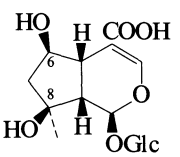
Isaacs, S. *et al, Tetrahedron Lett.*, 1992, **33**, 2227 (*isol, pmr, cmr*)

Shanzhiside S-10057

Updated Entry replacing S-00682

(1-β-D-Glucopyranosyloxy)-1,4a,5,6,7,7a-hexahydro-5,7-dihydroxy-7-methylcyclopenta[c]pyran-4-carboxylic acid, 9CI

[29836-27-9]



$C_{16}H_{24}O_{11}$ M 392.359

Constit. of *Gardenia jasminoides*. Cryst. Mp 82-90°. $[\alpha]_D$ −81.7° (EtOH).

Me ester: [64421-28-9].

$C_{17}H_{26}O_{11}$ M 406.386

Constit. of *Mussaenda parviflora* and *Salvia digitaloides*. Powder. $[\alpha]_D^{30}$ −110.8° (c, 0.42 in MeOH).

Penta-Ac: Cryst. Mp 111-112°.

Me ester, 6'-O-β-D-glucosyl: Shanzhisin methyl ester gentiobioside. Pedicularioside F

$C_{23}H_{36}O_{16}$ M 568.528

Constit. of *Canthium subcordatum*. Cryst. ($MeOH/CHCl_3$) or amorph. powder. Mp >150° dec. $[\alpha]_D^{15}$ −65.4°, $[\alpha]_D^{20}$ −56° (MeOH). The 2 samples apparently not compared.

6-(4-Hydroxy-3,5-dimethoxybenzoyl), 8-Ac, Me ester: [86450-76-2].

$C_{28}H_{36}O_{16}$ M 628.583

Constit. of Chinese drug Bai-Yun-Shen (*S. digitaloides*). Powder. $[\alpha]_D^{24}$ −71.0° (c, 1.01 in MeOH).

8-Ac, Me ester: [57420-46-9]. ***Barlerin.*** *Umbroside*

$C_{19}H_{28}O_{12}$ M 448.423

Constit. of *Barleria prionitis*. Cryst. (EtOAc). Mp 180°. $[\alpha]_D$ −8.5° (c, 0.8 in MeOH).

6,8-Di-O-Ac, Me ester: [57420-45-8]. ***Acetylbarlerin***

$C_{21}H_{30}O_{13}$ M 490.460

From *B. prionitis*. Hygroscopic powder. $[\alpha]_D$ −99° (c, 2.0 in MeOH).

6-Ac, Me ester: [110186-13-5]. ***6-O-Acetylshanghiside methyl ester***

$C_{19}H_{28}O_{12}$ M 448.423

Constit. of *B. lupulina*. Needles (MeOH/EtOAc). Mp 227-228°. $[\alpha]_D^{22}$ −118.7° (c, 0.17 in MeOH).

6-O-(4-Hydroxy-3-methoxycinnamoyl): [91599-28-9]. ***Tarennine***†

Isol. from *Tarenna graveolens*. Cryst. (EtOAc). Mp 158-160°. $[\alpha]_D^{20}$ −117° (c, 0.6 in MeOH).

6'-O-Benzoyl, Me ester: ***6'-O-Benzoylshanzhiside methyl ester***

$C_{24}H_{30}O_{12}$ M 546.527

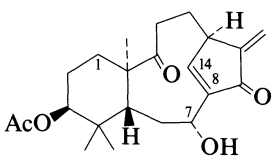
Constit. of *Rhinanthus angustifolius*. Amorph. powder. $[\alpha]_D^{17}$ −94.8° (c, 0.23 in MeOH).

Inouye, H. *et al, Tetrahedron Lett.*, 1970, 3581 (*isol*)
Taneja, S.C. *et al, Tetrahedron Lett.*, 1975, 1995 (*Barlerin*)
Takeda, Y. *et al, Phytochemistry*, 1977, **16**, 1401 (*isol*)
Achenbach, H. *et al, Tetrahedron Lett.*, 1980, 3677 (*isol*)
Damtoft, S. *et al, Phytochemistry*, 1981, **20**, 2717 (*cmr*)
Damtoft, S. *et al, Tetrahedron Lett.*, 1982, **23**, 4155 (*isol*)
Tanaka, T. *et al, Chem. Pharm. Bull.*, 1983, **31**, 780 (*isol*)
Nicoletti, M. *et al, Gazz. Chim. Ital.*, 1984, **114**, 49 (*Tarennine*)
Byrne, L.T. *et al, Aust. J. Chem.*, 1987, **40**, 785 (*isol, cryst struct*)
Zhongjian, J. *et al, Phytochemistry*, 1992, **31**, 263 (*Pedicularioside F*)
Takeda, Y., *Phytochemistry*, 1993, **33**, 623 (*isol, deriv, pmr, cmr*)

Shikoccin S-10058

Updated Entry replacing S-00688

[73211-11-7]



$C_{22}H_{30}O_5$ M 374.476

Constit. of *Rabdosia shikokiana*. Cryst. Mp 150-152°. $[\alpha]_D^{24}$ +47° ($CHCl_3$).

7-Me ether: [83159-26-6]. ***O-Methylshikoccin***

$C_{23}H_{32}O_5$ M 388.503

Constit. of *Rabdosia shikokiana*. Cryst. Mp 268-271°. $[\alpha]_D^{25}$ −4.5° (c, 0.40 in MeOH).

8α,14α-Epoxide: [83159-27-7]. ***Epoxyshikoccin***

$C_{22}H_{30}O_6$ M 390.475

From *R. shikokiana*. Cryst. Mp 124-126°. $[\alpha]_D^{25}$ −6.3° (c, 0.35 in MeOH).

7-Me ether, 8α,14α-epoxide: [83159-28-8]. **O-*Methylepoxyshikoccin***
$C_{23}H_{32}O_6$ M 404.502
From *R. shikokiana*. Cryst. Mp 142-144°. $[\alpha]_D^{25}$ +24.2° (c, 0.60 in MeOH).

1α-Acetoxy: [71503-81-6]. ***Shikodomedin***
$C_{24}H_{32}O_7$ M 432.513
Prod. by *R. shikokiana*. Antitumour agent. Cryst. Mp 193-194°. $[\alpha]_D^{20}$ −67.0° (c, 0.46 in $CHCl_3$).

1α-Acetoxy, 8α,14α-epoxide: [71503-82-7]. ***Shikokiamedin***
$C_{24}H_{32}O_8$ M 448.512
Prod. by *R. shikokiana*. Antitumour agent. Amorph. powder. $[\alpha]_D^{20}$ −42.5° (c, 0.261 in $CHCl_3$).

1α-Hydroxy, 3-deacetoxy: [89354-63-2]. ***Rabdolatifolin***
$C_{20}H_{28}O_4$ M 332.439
Constit. of *R. umbrosa*. Syrup. $[\alpha]_D$ −45.1° (c, 0.14 in MeOH).

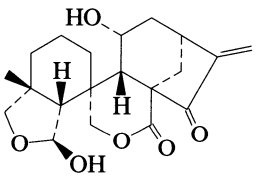
3-Deacetoxy: [123941-77-5]. ***Rabdoumbrosanin***
$C_{20}H_{28}O_3$ M 316.439
Constit. of *R. umbrosa*. Syrup. $[\alpha]_D^{22}$ −40.6° (c, 0.16 in MeOH).

Fujita, E. *et al*, *J. Chem. Soc., Chem. Commun.*, 1979, 806 (*isol*)
Fujita, T. *et al*, *Phytochemistry*, 1979, **18**, 299 (*Shikodomedin, Shikokiamedin*)
Taga, T. *et al*, *Acta Crystallogr., Sect. B*, 1982, **38**, 2941 (*cryst struct*)
Node, M. *et al*, *Chem. Pharm. Bull.*, 1982, **30**, 2639 (*isol*)
Fujita, T. *et al*, *J. Chem. Soc., Chem. Commun.*, 1982, 162 (*Shikodomedin, Shikokiamedin*)
Takeda, Y. *et al*, *Phytochemistry*, 1983, **22**, 2531 (*Rabdolatifolin*)
Node, M. *et al*, *Chem. Pharm. Bull.*, 1985, **33**, 1029 (*isol*)
Takeda, Y. *et al*, *Chem. Pharm. Bull.*, 1989, **37**, 1213 (*Rabdoumbrosanin*)

Shikodonin S-10059

Updated Entry replacing S-00689

[66548-00-3]



$C_{20}H_{26}O_6$ M 362.422
Struct. uncertain. Same struct assigned to Trichorobdal F (see Trichorabdal E, T-01727) and the struct. prev.assigned to Shikodonin is questioned. Constit. of *Isodon shikokianus*. Shows antitumour activity. Cryst. Mp 206-209°.

6-Me ether: [66548-01-4]. ***Angustifolin*†**
$C_{21}H_{28}O_6$ M 376.449
Constit. of *Rabdosia angustifolia*.

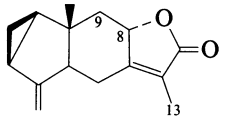
Kubo, I. *et al*, *J. Am. Chem. Soc.*, 1978, **100**, 628.
Node, M. *et al*, *Heterocycles*, 1984, **22**, 1701.
Sun, H. *et al*, *CA*, 1985, **102**, 21180g (*Angustifolin*)
Node, M. *et al*, *Chem. Pharm. Bull.*, 1989, **37**, 1470 (*struct*)

Shizukanolide S-10060

Updated Entry replacing S-00705

Chloranthalactone A

[70578-36-8]



$C_{15}H_{18}O_2$ M 230.306
Sterochem. of related compds. (see 13-Deoxyisoonoceriolide, D-00483) were revised in 1984. Not clear whether compds. covered by this entry are affected by the revision. Constit. of *Chloranthus japonicus* and *C. glaber*. Cryst. (also descr. as oil). Mp 95-96.5°. $[\alpha]_D^{20}$ +200° (c, 2.1 in $CHCl_3$).

8,9-Didehydro: [66395-02-6]. ***Dehydroshizukanolide. Shizukanolide B***
$C_{15}H_{16}O_2$ M 228.290
Constit. of *C. japonicus*. Cryst. or oil. Mp 64-65.5°. $[\alpha]_D^{16}$ +59.8° (c, 1 in $CHCl_3$).

8α,9α-Epoxide: [66395-03-7]. ***Chloranthalactone B***
$C_{15}H_{16}O_3$ M 244.290
Constit. of *C. japonicus* and *C. glaber*. Cryst. (Me_2CO). Mp 145-146°. $[\alpha]_{340}^{27}$ −1303° (c, 0.1 in MeOH).

13-Hydroxy: ***8,9-Dihydroonoseriolide***
$C_{15}H_{18}O_3$ M 246.305
Isol. from *Actinoseris polymorpha*. Cryst. (Et_2O/pet. ether). Mp 174°. $[\alpha]_D^{24}$ −203° (c, 0.31 in $CHCl_3$).

8,9-Didehydro, 13-hydroxy: [76015-58-2]. ***Onoseriolide***
Constit. of *Onoseris albicans*. Oil. Mp 93° (as acetate). $[\alpha]_D^{24}$ −18.3° (c, 0.06 in $CHCl_3$) (acetate).

8β,9β-Epoxide: ***Chloranthalactone F***
$C_{15}H_{16}O_3$ M 244.290
Constit. of *C. glaber*. Cryst. Mp 221-222°. $[\alpha]_D^{20}$ +30.8° (c, 0.52 in $CHCl_3$).

Kawabata, J. *et al*, *Agric. Biol. Chem.*, 1979, **43**, 885; 1981, **45**, 1447.
Bohlmann, F. *et al*, *Phytochemistry*, 1980, **19**, 689; 1981, **20**, 1631.
Bohlmann, F. *et al*, 1984, **10**, 228, 1631.
Takeda, Y. *et al*, *Phytochemistry*, 1993, **33**, 713 (*Chloranthalactone F*)

Siameadin S-10061

Bianthraquinone pigment of unknown struct. Isol. from the bark of *Cassia siamea*. Mp 310° dec.

Chatterjee, A. *et al*, *J. Indian Chem. Soc.*, 1964, **41**, 415 (*isol*)

Escherichia coli Signal peptide S-10062

[80395-90-0]

H-Lys-Gln-Ser-Thr-Ile-Ala-Leu-Ala-Leu-Leu-Pro-Leu-Leu-Phe-Thr-Pro-Val-Thr-Lys-Ala-OH

Constit. of *E. coli*. Bacterial signal peptide.

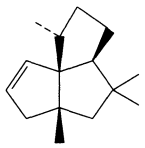
Kikuchi, Y. *et al*, *Agric. Biol. Chem.*, 1981, **45**, 2401 (*struct*)
Inouye, H. *et al*, *J. Bacteriol.*, 1982, **149**, 434 (*struct*)
Reddy, G.L. *et al*, *Proc. Indian Acad. Sci., Chem. Sci.*, 1986, **97**, 71 (*synth*)

1-Silphinene S-10063

Updated Entry replacing S-00741

Silphinene

[74284-57-4]



$C_{15}H_{24}$ M 204.355

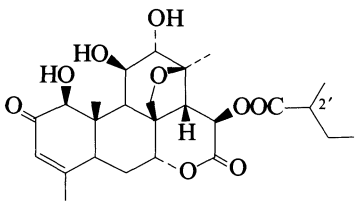
Constit. of *Silphium perfoliatum*. Oil. $[\alpha]_D^{24}$ −21.3° (c, 3.7 in $CHCl_3$).

Bohlmann, F. *et al*, *Phytochemistry*, 1980, **19**, 259 (*isol*)
Leone-Bay, A. *et al*, *J. Org. Chem.*, 1982, **47**, 4173 (*synth*)
Paquette, L.A. *et al*, *J. Am. Chem. Soc.*, 1983, **105**, 7352 (*synth*)
Tsunoda, T. *et al*, *Tetrahedron Lett.*, 1983, **24**, 83 (*synth*)
Sternbach, D.D. *et al*, *J. Am. Chem. Soc.*, 1985, **107**, 2149 (*synth*)
Wender, P.A. *et al*, *Tetrahedron Lett.*, 1985, **26**, 2625 (*synth*)
Crimmins, M.T. *et al*, *Tetrahedron Lett.*, 1987, **28**, 5063 (*synth*)
Yamamura, S. *et al*, *Tetrahedron*, 1991, **47**, 635 (*synth*)
Franck-Neumann, M. *et al*, *Tetrahedron Lett.*, 1991, **32**, 2149 (*synth*)
Fitjer, L. *et al*, *J. Org. Chem.*, 1993, **58**, 6171 (*abs config*)

Simalikalactone D S-10064

Updated Entry replacing S-00758

[35321-80-3]



$C_{25}H_{34}O_9$ M 478.538

Constit. of *Quassia africana* and *Picrolemma granatensis*. Cryst. Mp 228-230°. $[\alpha]_D$ +53°.

2'-Acetoxy: [59938-97-5]. ***Quassimarin***

$C_{27}H_{36}O_{11}$ M 536.575

Constit. of *Q. amara*. Cytoxic agent showing good *in vivo* antitumour activity. Cryst. (EtOAc/hexane). Mp 237.5-238.5°. $[\alpha]_D^{26}$ +22.4° (c, 0.29 in $CHCl_3$).

15-Deacyl, 15-(3-methyl-2-butenoyl): ***Gutolactone***

$C_{25}H_{32}O_9$ M 476.522

Constit. of *Simaba guianensis*. Cryst. (Me_2CO). Mp 230°.

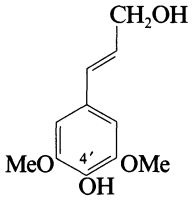
Teresa, J.-P. *et al*, *C. R. Hebd. Seances Acad. Sci. Ser. C*, 1971, **273**, 601 (*Simalikalactone D*)
Kupchan, S.M. *et al*, *J. Org. Chem.*, 1976, **41**, 3481 (*Quassimarin*)
Kraus, G.A. *et al*, *J. Org. Chem.*, 1980, **45**, 1175 (*synth*)
Cabral, J.A. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 1954 (*Gutolactone*)
Rodriguez Fo, E. *et al*, *Phytochemistry*, 1993, **34**, 501 (*isol, pmr, cmr*)

Sinapyl alcohol S-10065

Updated Entry replacing S-00770

4-(3-Hydroxy-1-propenyl)-2,6-dimethoxyphenol, 9CI. 3-(4-Hydroxy-3,5-dimethoxyphenyl)-2-propen-1-ol, 8CI. Syringenin

[537-33-7]



$C_{11}H_{14}O_4$ M 210.229

(E)-form

Principal building block of angiosperm wood lignin. Needles (pet. ether). Mp 63-65°.

4'-O-β-D-Glucopyranoside: [118-34-3]. ***Syringin.*** *Lilacin. Methoxyconiferin. Eleutheroside B. Magnolenin. Alyposide. Syringoside. Ligustrin*

$C_{17}H_{24}O_9$ M 372.371

Isol. from *Syringa vulgaris*, *Ligustrum* spp., *Jasminum* spp., *Phyllyrea latifolia*, *P. decora*, *Paulownia tomentosa*, *Forsythia suspensa*, *Fraxinus* spp. and others. Needles or prisms (H_2O). Mp 191-192°. $[\alpha]_D$ −18° (H_2O).

4'-O-[β-D-Glucopyranosyl(1→6)-β-D-glucopyranoside]: [115124-95-3]. ***Syringinoside***

$C_{23}H_{34}O_{14}$ M 534.513

Isol. from *Wikstroemia sikokiana*. Needles (MeOH aq.). Mp 178-179°. $[\alpha]_D$ −37.6° (c, 1.0 in H_2O).

2,3-Dihydro: 3-(4-Hydroxy-3,5-dimethoxyphenyl)-1-propanol. ***Dihydrosyringenin***

$C_{11}H_{16}O_4$ M 212.245

Constit. of *Jurinea leptoloba*.

Me ether, 4'-O-β-D-glucopyranoside: [139742-20-4]. *Syringin methyl ether*

$C_{18}H_{26}O_9$ M 386.398

Constit. of *Saussurea japonica*.

4'-O-(3,7-Dimethyl-2,6-octadienyl): [77836-86-3]. *O-Geranylsinapyl alcohol*

$C_{21}H_{30}O_4$ M 346.466

Constit. of *Fagaria rhetza* and *Verbesina glabrata*. Oil.

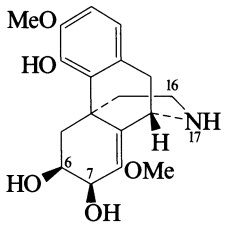
Plouvier, V., *C. R. Hebd. Seances Acad. Sci.*, 1947, **224**, 670; 1948, **227**, 604; 1951, **232**, 1013; 1952, **234**, 1577; 1953, **237**, 1761; 1954, **238**, 1835; 1962, **254**, 4196 (*occur*)
Freudenberg, K. *et al*, *Chem. Ber.*, 1951, **84**, 67.
Aulin-Erdtman, G. *et al*, *Acta Chem. Scand.*, 1968, **22**, 1187 (*uv*)
Sutarjadi, T.M.M. *et al*, *Phytochemistry*, 1978, **17**, 564 (*isol, uv, ir, pmr, Syringin*)
Zanarotti, A., *Tetrahedron Lett.*, 1982, **23**, 3815 (*synth*)
Niwa, M. *et al*, *Chem. Pharm. Bull.*, 1988, **36**, 1158 (*Syringinoside*)
Rustaiyan, A. *et al*, *Phytochemistry*, 1991, **30**, 1929 (*Dihydrosyringenin*)
Shibuya, H. *et al*, *Chem. Pharm. Bull.*, 1992, **40**, 2325 (*O-Geranylsinapyl alcohol*)
Quideau, S. *et al*, *J. Agric. Food Chem.*, 1992, **40**, 1108 (*synth*)

Sinococuline S-10066

Updated Entry replacing S-00781

8,14-Didehydro-3,8-dimethoxymorphinan-4,6,7-triol, 9CI

[109351-36-2]



$C_{18}H_{23}NO_5$ M 333.383

Alkaloid from the stems and rhizomes of *Cocculus trilobus* (Menispermaceae). Possesses antitumour activity. Amorph. powder. $[\alpha]_D^{26}$ −77° (c, 0.1 in MeOH).

O^6,O^7-*Di-Ac:* ***Alkaloid FK 3000.*** *FK 3000*

$C_{22}H_{27}NO_7$ M 417.458

Alkaloid from roots of *Stephania cepharantha* (Menispermaceae). Needles (EtOAc). Mp 185-186°. $[\alpha]_D^{22}$ −163° (c, 0.73 in MeOH).

16,17-Didehydro: ***Cephamorphinanine***

$C_{18}H_{21}NO_5$ M 331.368

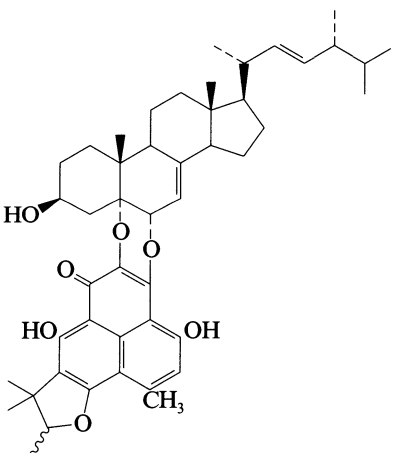
Alkaloid from roots of *S. cepharantha* (Menispermaceae). Needles (Me_2CO/MeOH). Mp 284-285°. $[\alpha]_D^{22}$ −118° (c, 0.07 in MeOH).

Itokawa, H. *et al*, *Chem. Pharm. Bull.*, 1987, **35**, 1660 (*isol, uv, pmr, cmr, cd, struct*)

Deng, J.-Z. *et al*, *Phytochemistry*, 1992, **31**, 1448 (*FK-3000, Cephamorphinanine*)

Sirosterol S-10067

[145428-11-1]



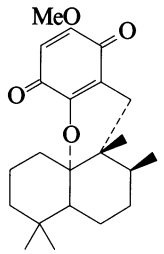
$C_{47}H_{60}O_7$ M 736.987

Metab. of a *Sirococcus* sp. Amorph. powder.

Ayer, W.A. *et al*, *Can. J. Chem.*, 1992, **70**, 1905 (*isol, pmr, cmr*)

Smenoqualone S-10068

[146387-56-6]



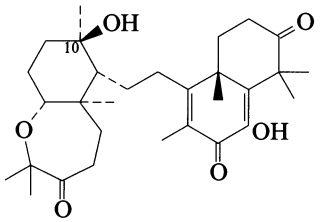
$C_{22}H_{30}O_4$ M 358.477

Constit. of a *Smenospongia* sp. Pale yellow oil. $[\alpha]_D$ +70° (c, 0.00125 in $CHCl_3$).

Bourguet-Kondracki, M.-L. *et al*, *Tetrahedron Lett.*, 1992, **33**, 8079 (*isol, pmr, cmr*)

Sodivanone A S-10069

[150050-12-7]



$C_{30}H_{44}O_6$ M 500.674

Constit. of *Axinella weltneri*. Cryst. Mp 253°. $[\alpha]_D$ −9° (c, 0.1 in $CHCl_3$).

10-Deoxy: [150050-13-8]. ***Sodivanone B***

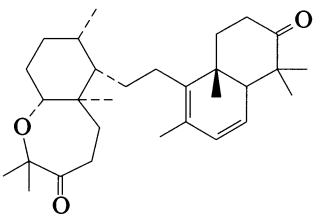
$C_{30}H_{44}O_5$ M 484.675

Constit. of *A. weltneri*. Glass. $[\alpha]_D$ −6° (c, 0.1 in $CHCl_3$).

Rudi, A. *et al*, *Tetrahedron Lett.*, 1993, **34**, 3943 (*isol, pmr, cmr, cryst struct*)

Sodivanone C S-10070

[150079-95-1]



$C_{30}H_{46}O_3$ M 454.692

Constit. of *Axinella weltneri*. Amorph. powder. $[\alpha]_D$ −35° (c, 0.15 in $CHCl_3$).

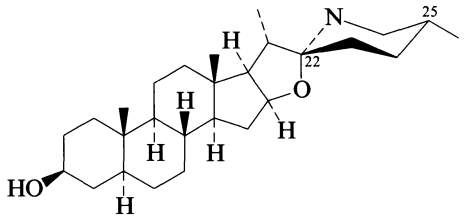
Rudi, A. *et al*, *Tetrahedron Lett.*, 1993, **34**, 3943 (*isol, pmr, cmr*)

Soladulcidine S-10071

Updated Entry replacing S-00853

(3β,5α,22R,25R)-Spirosolan-3-ol, 9CI. 5α-Solasodan-3β-ol, 8CI. Megacarpidine. Dihydrosolasodine. Solasodanol

[511-98-8]



$C_{27}H_{45}NO_2$ M 415.658

Diastereoisomeric with Tomatidine, T-01539 at C22 and C25. Aglycone of several very widespread glycosides found in *Solanum* spp. Said to occur free in *Lycopersicon pimpinellifolium* (Solanaceae). Mp 209-211°. $[\alpha]_D$ −53° (c, 0.64 in Py), $[\alpha]_D$ −50° (c, 0.4 in $CHCl_3$).

B,HCl: Mp 298-299°.

Picrate: Mp 152-154°.

Glycoside (1): ***Megacarpine***

$C_{44}H_{73}NO_{16}$ M 872.058

Alkaloid from *S. megacarpum* (Solanaceae). Mp 259-260°. $[\alpha]_D$ −61.6° (Py). Hydrol. gives 1 Glu, 1 Gal and 2 Xyl.

Glycoside (2): ***Soladulcidine tetroside***

$C_{45}H_{75}NO_{17}$ M 902.084

Alkaloid from *S. dulcamara* (Solanaceae). Mp 268-270°. $[\alpha]_D$ −53° (Py). Hydrol. gives 2 Glu, 1 Gal and 1-Xyl.

Glycoside (3): [37337-73-8]. ***α-Soladulcine***

$C_{50}H_{83}NO_{21}$ M 1034.200

Alkaloid from *S. dulcamara* and *S. pseudopersicum* (Solanaceae). Mp 265-269°. $[\alpha]_D$ −56° (MeOH). Hydrol. gives 2 Glu, 1 Gal and 1 D-Xyl.

Glycoside (4): [11093-43-9]. ***β-Soladulcine***

$C_{45}H_{75}NO_{16}$ M 886.085

Alkaloid from *S. dulcamara* (Solanaceae). Mp 246-248° dec. $[\alpha]_D$ −39° (c, 0.38 in MeOH). Hydrol. gives 1 Glu, 1 Gal and 1 Rha.

Glycoside (5): ***γ-Soladulcine***

Alkaloid from *S. dulcamara* (Solanaceae). Not well characterised. Isol. only (Schreiber) as a mixt. with α- and β- Soladulcines.

15α-Hydroxy: [16137-74-9]. ***15α-Hydroxysoladulcidine***

$C_{27}H_{45}NO_3$ M 431.657

Isol. from *S. dulcamara* (Solanaceae). Prisms + $1H_2O$ (MeOH aq.). Mp 167-168°, Mp 209-212° (Double Mp, rapid htg.). On slow htg. the prisms turn to needles at 150-70°. Anhyd. material (by subl.) has Mp 213-5°.

15β-Hydroxy: [16137-76-1]. ***15β-Hydroxysoladulcidine***

$C_{27}H_{45}NO_3$ M 431.657

Isol. from *S. dulcamara* (Solanaceae).

15-Oxo: ***15-Oxosoladulcidine***

$C_{27}H_{43}NO_3$ M 429.642

May occur in *S. dulcamara* (Solanaceae).

2α-Hydroxy: ***2α-Hydroxysoladulcidine***

$C_{27}H_{45}NO_3$ M 431.657

Alkaloid from roots of *Lycianthes biflora* (Solanaceae). Needles (MeOH aq.). Mp 252-255° dec. $[\alpha]_D^{22}$ −62.5° (c, 0.45 in $CHCl_3$).

23R-Hydroxy: ***23R-Hydroxysoladulcidine***

$C_{27}H_{45}NO_3$ M 431.657

Alkaloid from roots of *S. panduraeforme* (Solanaceae). Mp 192-193°. $[\alpha]_D^{22}$ −65.4° (c, 0.44 in MeOH).

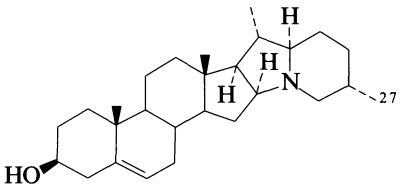
Schreiber, K., *Planta Med.*, 1958, **6**, 94 (*Soladulcines*)
Uhle, F.C., *J. Org. Chem.*, 1962, **27**, 656 (*synth, struct*)
Boll, P.M. *et al, Acta Chem. Scand.*, 1965, **19**, 1365 (*pmr, config*)
Schreiber, K., *Justus Liebigs Ann. Chem.*, 1965, **682**, 219 (*config*)
Rönsch, H. *et al, Justus Liebigs Ann. Chem.*, 1966, **694**, 169 (*15-Hydroxysoladulcidine*)
Schreiber, K. *et al, Phytochemistry*, 1966, **5**, 707 (*isol*)
Adam, G. *et al, Tetrahedron*, 1966, **22**, 3591 (*synth*)
Tukalo, E.A. *et al, Khim. Prir. Soedin.*, 1971, 207 (*Soladulcines*)
Ripperger, H. *et al, Phytochemistry*, 1992, **31**, 725; 1993, **32**, 1607 (*2-Hydroxysoladulcidine, 23-Hydroxysoladulcidine*)

Solanidine S-10072

Updated Entry replacing S-00862

Solanid-5-en-3β-ol, 9CI. Solatubine. Solanidine T

[80-78-4]



$C_{27}H_{43}NO$ M 397.643

Alkaloid from *Solanum tuberosum, Cestrum purpureum, Fritillaria camtschatcensis, Rhinopetalum bucharicum* and *R. stenantherum* (Solanaceae, Liliaceae). Glycosides, (esp. Solanines and chaconine) are trace toxic constits. of potato tubers, and interbreeding of potatoes with wild strains may increase their concn. or introduce other more toxic, solanidine glycosides. Mp 219°. $[\alpha]_D$ −27° ($CHCl_3$), −18° (Py).

B,HCl: Mp 335° dec.

O-*Ac:* Mp 208°.

β-D-Galactopyranoside: [511-37-5]. ***γ-Solanine***

$C_{33}H_{53}NO_6$ M 559.785

Alkaloid from *S. tuberosum, S. chacoense* and *Veratrum album* ssp. *lobelianum* (Solanaceae, Liliaceae). Mp 250° approx. $[\alpha]_D$ −26° (MeOH).

β-D-Glucopyranoside: [511-36-4]. ***γ-Chaconine***

$C_{33}H_{53}NO_6$ M 559.785

Alkaloid from *S. tuberosum* and *S. chacoense* (Solanaceae). Mp 243-244°. $[\alpha]_D$ −40° (Py).

3-O-[β-D-Glucopyranosyl-(1→3)-β-D-glucopyranosyl-(1→4)-α-L-rhamnosyl-(1→2)-β-D-glucopyranoside]: [102728-60-9]. ***Hyacinthoside***

$C_{51}H_{83}NO_{20}$ M 1030.211

Alkaloid from the bulbs of *Notholiron hyacinthinum* (Liliaceae).

[β-D-Glucopyranosyl-(1→6)[α-L-rhamnopyranosyl(1→2)]-β-D-glucopyranosyl-(1→3)-β-D-glucopyranosyl-(1→4)-β-D-glucopyranoside]: [115491-59-3]. ***Neohyacinthoside***

$C_{57}H_{93}NO_{25}$ M 1192.353

Isol. from the bulbs of *N. hyacinthinum.*

3-O-[β-D-Glucopyranosyl-(1→3)-β-D-glucopyranoside]: [61877-94-9]. ***β-Solanine***

$C_{39}H_{63}NO_{11}$ M 721.927

Alkaloid from *S. wrightii, S. tuberosum* and *S. chacoense* (Solanaceae). Mp 290°. $[\alpha]_D$ −31° (MeOH).

3-O-[β-D-Glucopyranosyl-(1→4)-β-D-xylopyranosyl-(1→4)-β-D-xylopyranoside]: ***Solacauline***

$C_{43}H_{69}NO_{14}$ M 824.016

Alkaloid from *S. acaule, S. punae* and *S. schreiteri* (Solanaceae). Mp 260-265°. $[\alpha]_D$ −30° (Py).

[α-L-Rhamnopyranosyl(1→2)-O-[α-L-rhamnopyranosyl-(1→4)]-β-D-glucopyanoside]: [20562-03-2]. ***α-Chaconine***

$C_{45}H_{73}NO_{14}$ M 852.070

Alkaloid from *S. chacoense* and very many other *S.* spp. (Solanaceae). Mp 243°. $[\alpha]_D$ −85° (Py).

▷ Adverse human CNS and gastro-intestinal effects by ingestion (associated with consumption of damaged or rotten potatoes). LD_{50} (rat, ipr) 84 mg/kg. Exp. reprod. and teratogenic effects. FL6700000.

[α-L-*Rhamnopyranosyl*-(1→2)-O-[β-D-*glycopyranosyl*-(1→3)]-β-D-*galactopyranoside*]: [20562-02-1]. ***α-Solanine***
$C_{45}H_{73}NO_{15}$ M 868.069
Alkaloid from *S. tuberosum* and very many other *S.* spp. (Solanaceae). Shows cytotoxic activity against mouse ascites tumour cells. Cholinesterase inhibitor. Responsible for the teratogenicity of sprouting potatoes. Mp 286°. $[\alpha]_D$ −59° (Py).

▷ Adverse human CNS and gastro-intestinal effects by ingestion (associated with consumption of damaged or rotten potatoes). LD_{50} (rat, orl) 590 mg/kg. Exp. reprod. and teratogenic effects. WF0250000.

3-O-[α-L-*Rhamnopyranosyl*-(1→2)-β-D-*glucopyranosyl*-(1→4)-β-D-*glucopyranoside*]: ***Solanidine 3-O-α-L-rhamnopyranosyl-(1→2)-β-D-glucopyranosyl-(1→4)-β-D-glucopyranoside***
$C_{45}H_{73}NO_{15}$ M 868.069
Alkaloid from aerial parts of *Fritillaria thunbergii*. Needles + $2H_2O$ (MeOH). Mp 278-283° dec. $[\alpha]_D$ −58.4° (c, 1 in Py).

3-O-[α-L-*Rhamnosyl*-(1→4)-β-D-*glucopyranosyl*-(1→6)-β-D-*glucopyranoside*]: [80248-79-9]. ***Stenantine***
$C_{45}H_{73}NO_{15}$ M 868.069
Alkaloid from aerial parts of *Rhinopetalum stenantherum* (Liliaceae). Mp 262-264°. $[\alpha]_D$ +46.5°. Partial hydrol → β_2 and γ-Chaconines.

3-O-[β-D-*Glucopyranosyl*-(1→6)-β-D-*glucopyranoside*]: [80248-81-3]. ***Stenantidine***
$C_{39}H_{63}NO_{11}$ M 721.927
Alkaloid from aerial parts of *R. stenantherum* (Liliaceae). Mp 269-271°. $[\alpha]_D$ −47.5°.

3-O-[α-L-*Rhamnopyranosyl*-(1→2)-β-D-*glucopyranoside*]: [472-51-5]. ***β_1-Chaconine***
$C_{39}H_{63}NO_{10}$ M 705.927
Alkaloid from *S. chacoense*, *S. commersonii*, *S. crispum*, *S. tuberosum*, *S. ajanhuiri* and *S. stenotomum* (Solanaceae). Mp 287-292° dec. $[\alpha]_D$ −52.5° (c, 0.9 in Py).

27-Hydroxy: [78719-99-0]. ***Camtschatcanidine***
$C_{27}H_{43}NO_2$ M 413.642
Isol. from *F. camtschatcensis* (Liliaceae). Needles (Me_2CO). Mp 261-265°. $[\alpha]_D$ −19.4° (c, 0.1 in MeOH).

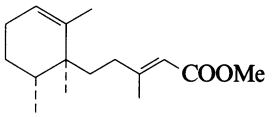
5,6-Dihydro: see *Demissidine, D-00420*

Clemo, G.R. *et al*, *J. Chem. Soc.*, 1936, 1299 (*isol*)
Prelog, V. *et al*, *Helv. Chim. Acta*, 1942, **25**, 1306; 1944, **27**, 390 (*struct*)
Schreiber, K., *Chem. Ber.*, 1954, **87**, 1007 (*Solacauline*)
Correia Alves, L. *et al*, *Garcia de Orta*, 1961, **9**, 713; *CA*, **61**, 12326d (*trioside*)
Budzikiewicz, H., *Tetrahedron*, 1964, **20**, 2267 (*ms*)
Höhne, E. *et al*, *Tetrahedron*, 1966, **22**, 673 (*cryst struct*)
Schreiber, K., *Alkaloids (N.Y.)*, 1968, **10**, 1 (*rev*)
Kessar, S.V. *et al*, *Tetrahedron*, 1971, **27**, 2153 (*synth*)
Radeglia, R. *et al*, *Tetrahedron Lett.*, 1977, 903 (*cmr*)
Ripperer, H. *et al*, *Alkaloids (N.Y.)*, 1981, **19**, 81 (*rev*)
Samikov, K. *et al*, *Khim. Prir. Soedin.*, 1981, **17**, 349; *Chem. Nat. Compd. (Engl. Transl.)*, 273 (*Stenantine, Stenantidine*)
Kaneko, K. *et al*, *Phytochemistry*, 1981, **20**, 327 (*Camtschatcanidine*)
Katajima, J. *et al*, *Phytochemistry*, 1982, **21**, 187 (*glycosides*)
Qiu, F. *et al*, *CA*, 1983, **98**, 104286n (*glycoside*)
Keeler, R.F., *Alkaloids: Chem. Biol. Perspect.*, 1984, **4**, 389 (*rev, tox*)
Xu, W. *et al*, *Yaoxue Xuebao*, 1986, **21**, 177; *CA*, **105**, 21663 (*Hyacinthoside*)
Xu, W.H. *et al*, *Yaoxue Xuebao*, 1988, **23**, 61; *CA*, **109**, 51701 (*Neohyacinthoside*)
Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th Ed., Van Nostrand-Reinhold, 1992, CDG500, SKS000.

Sollasin A S-10073

Fulvanin 1

[149297-97-2]

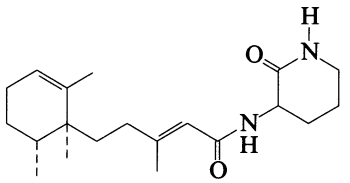


$C_{16}H_{26}O_2$ M 250.380
Constit. of *Poecillastra sollasi*. Oil. $[\alpha]_D^{24}$ +12.2° (c, 1 in $CHCl_3$). Sollasin A and Fulvanin 1 not compared.

Killday, K.B. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 500 (*isol, pmr, cmr*)
Casapullo, A. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 527 (*isol, pmr, cmr*)

Sollasin B S-10074

[149297-98-3]

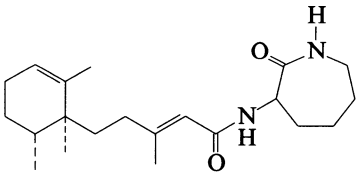


$C_{20}H_{32}N_2O_2$ M 332.485
Constit. of *Poecillastra sollasi*. Solid. $[\alpha]_D^{24}$ +29.8° (c, 2.14 in $CHCl_3$).

Killday, K.B. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 500 (*isol, pmr, cmr*)

Sollasin C S-10075

[149297-99-4]

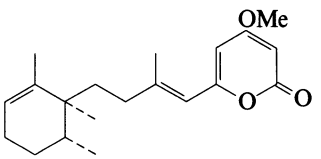


$C_{21}H_{34}N_2O_2$ M 346.512
Constit. of *Poecillastra sollasi*. Oil. $[\alpha]_D^{24}$ +10° (c, 1.26 in $CHCl_3$).

Killday, K.B. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 500 (*isol, pmr, cmr*)

Sollasin D S-10076

[149298-00-0]



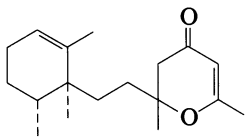
$C_{20}H_{28}O_3$ M 316.439

Constit. of *Paecillastra sollasi*. Yellow oil. $[\alpha]_D^{24}$ −22.1° (c, 2.13 in $CHCl_3$).

Killday, K.B. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 500 (*isol, pmr, cmr*)

Sollasin E S-10077

[149298-01-1]



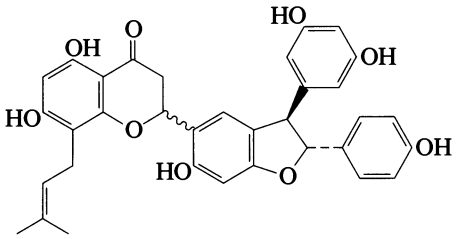
$C_{18}H_{28}O_2$ M 276.418

Constit. of *Paecillastra sollasi*. Oil. $[\alpha]_D^{24}$ +57.6° (c, 0.75 in $CHCl_3$).

Killday, K.B. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 500 (*isol, pmr, cmr*)

Sophoraflavanone H S-10078

[136997-68-7]



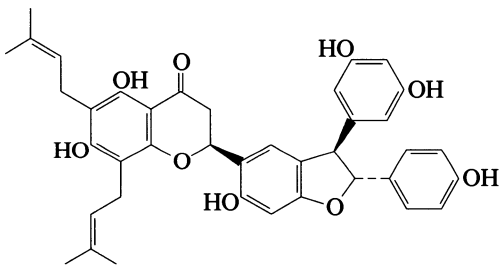
$C_{34}H_{30}O_9$ M 582.606

Constit. of the roots of *Sophora moorcroftiana*. Yellow powder + $1H_2O$ (C_6H_6). Mp 158-162° dec. $[\alpha]_D^{22}$ −114° (c, 1 in MeOH).

Shirataki, Y. *et al*, *Chem. Pharm. Bull.*, 1991, **39**, 1568 (*isol*)

Sophoraflavanone J S-10079

[136997-70-1]



$C_{39}H_{38}O_9$ M 650.724

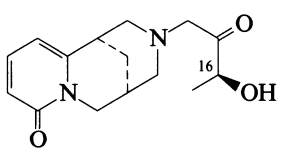
Constit. of the roots of *Sophora moorcroftiana*. Yellow solid + $1\frac{1}{2}H_2O$ (MeOH). $[\alpha]_D^{22}$ −75° (c, 1 in MeOH).

Shirataki, Y. *et al*, *Chem. Pharm. Bull.*, 1991, **39**, 1568 (*isol*)

Sophorasine A S-10080

1,2,3,4,5,6-Hexahydro-3-(3-hydroxy-2-oxobutyl)-1,5-methano-8H-pyrido[1,2-a][1,5]diazocin-8-one, 9CI

[135091-04-2]



$C_{15}H_{20}N_2O_3$ M 276.335

Alkaloid from the leaves of *Sophora griffithii* (Leguminosae). Amorph. solid. $[\alpha]_D^{26}$ −137° (c, 0.02 in MeOH).

16-Epimer: [135213-47-7]. ***Sophorasine B***

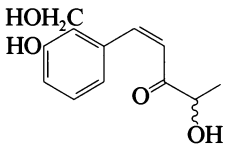
$C_{15}H_{20}N_2O_3$ M 276.335

Alkaloid from the leaves of *S. griffithii* (Leguminosae). Amorph. solid. $[\alpha]_D^{26}$ −136.7° (c, 0.02 in MeOH).

Atta-ur-Rahman, *et al*, *Phytochemistry*, 1991, **30**, 1001 (*isol*)

Sordariolone S-10081

[125092-39-9]



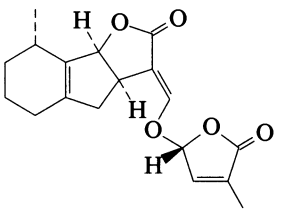
$C_{12}H_{14}O_4$ M 222.240

Isol. from *Sordaria macrospora*. Amorph. powder. Possible artifact.

Bouillant, M.L. *et al*, *Z. Naturforsch., C*, 1989, **44**, 719 (*isol*)

Sorgalactone S-10082

[141262-39-7]

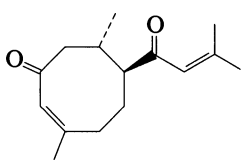


$C_{18}H_{20}O_5$ M 316.353

Isol. from the roots of *Sorghum bicolor* (genuine host plant for *Striga* spp.). Germination stimulant for parasites. Similar to Strigol, S-01447.

Hauck, C. *et al*, *J. Plant Physiol.*, 1992, **139**, 474 (*isol, pmr, ir, ms*)

Spartidienedione S-10083



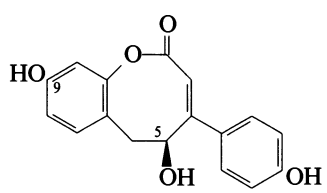
$C_{15}H_{22}O_2$ M 234.338

Constit. of *Baccharis spartioides*. Oil. $[\alpha]_D^{25}$ −37.4° (c, 1.63 in $CHCl_3$).

Norte, M. *et al*, *Tetrahedron Lett.*, 1993, **34**, 5143 (*isol, pmr, cmr*)

Specionin† S-10084

[126643-17-2]



$C_{17}H_{14}O_5$ M 298.295

Constit. of *Ononis speciosa*.

Tri-Ac: $[\alpha]_D^{25}$ −7.2° (c, 0.84 in $CHCl_3$).

5-O-β-D-Glucopyranoside: [126617-61-6]. ***Specioside A***
$C_{23}H_{24}O_{10}$ M 460.437
Constit. of *O. speciosa.*

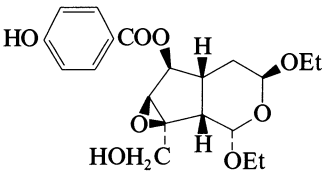
9-O-β-D-Glucopyranoside: [126589-95-5]. ***Specioside B***
$C_{23}H_{24}O_{10}$ M 460.437
Constit. of *O. speciosa.*

Barrero, A.E. *et al, J. Nat. Prod.* (*Lloydia*), 1989, **52**, 1334 (*isol, pmr, cmr*)

Specionin† S-10085

Updated Entry replacing S-00965

[96944-53-5]



$C_{20}H_{26}O_8$ M 394.421
Isol. from leaves of *Catalpa speciosa.* Antifeedant against Eastern spruce budworm. Oil. $[\alpha]_D$ −30.7° (c, 0.8 in $CHCl_3$). Struct. revised in 1985.

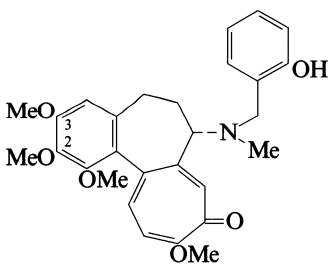
[87946-74-5]

Van der Eycken, E. *et al, Tetrahedron Lett.*, 1985, **26**, 367; 1987, **28**, 3519 (*isol, synth*)
Van der Eycken, E. *et al, Tetrahedron*, 1986, **19**, 5385 (*synth, struct*)
Curran, D. *et al, J. Am. Chem. Soc.*, 1987, **109**, 5280 (*synth*)
Hussain, N. *et al, Tetrahedron Lett.*, 1987, **28**, 4871 (*synth*)
Whitesell, J.K. *et al, J. Am. Chem. Soc.*, 1988, **110**, 3585 (*synth*)
Leonard, J. *et al, J. Chem. Soc., Perkin Trans. 1*, 1994, 61 (*synth*)

Speciosine S-10086

Updated Entry replacing S-00967

[16892-03-8]



$C_{28}H_{31}NO_6$ M 477.556
▷ DF9485000.

(S)-form
Alkaloid from the tubers of *Colchicum speciosum* (Liliaceae). Yellow prisms (C_6H_6/Me_2CO). Mp 209-211°. $[\alpha]_D^{20}$ −21.2° (c, 1.75 in $CHCl_3$).

Deoxy: [97763-01-4]. ***Speciosamine***
$C_{28}H_{31}NO_5$ M 461.557
Alkaloid from *C. speciosum* (Liliaceae). Mp 192-194°. $[\alpha]_D$ −42° (c, 0.26 in $CHCl_3$).

2-O-De-Me: [111509-13-8]. ***Speciocolchine***
$C_{27}H_{29}NO_6$ M 463.529
Alkaloid from *C. ritchii* (Liliaceae). Amorph. $[\alpha]_D$ −37° (c, 0.13 in MeOH).

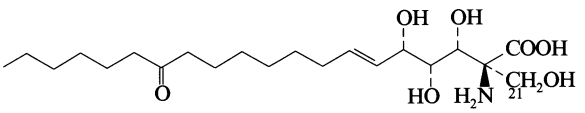
3-O-De-Me: [111509-12-7]. ***Specioritchine***
$C_{27}H_{29}NO_6$ M 463.529
Alkaloid from *C. ritchii* (Liliaceae). Amorph. $[\alpha]_D$ −57° (c, 0.11 in MeOH).

10-O-De-Me: ***Specioseine***
$C_{27}H_{29}NO_6$ M 463.529
Minor alkaloid from *C. speciosum* (Liliaceae). Cryst. (Me_2CO). Mp 169-171°. $[\alpha]_D$ −78° (c, 1.01 in $CHCl_3$).

Kiselev, V.V., *Zh. Obshch. Khim.*, 1956, **26**, 3218; *CA*, **51**, 8119i (*isol*)
Ramage, R., *Tetrahedron*, 1971, **27**, 1499 (*ir, uv, ms, pmr, struct, synth*)
Hrbek, J. *et al, Collect. Czech. Chem. Commun.*, 1982, **47**, 2258 (*cd*)
Chommadov, B. *et al, Khim. Prir. Soedin.*, 1985, **21**, 417; 1991, **27**, 253; *Chem. Nat. Compd.* (*Engl. Transl.*), 394; 218 (*Speciosamine, Specioseine*)
Freyer, A.J. *et al, J. Nat. Prod.* (*Lloydia*), 1987, **50**, 684 (*Speciocolchine, Specioritchine*)

Sphingofungin E S-10087

[145401-47-4]



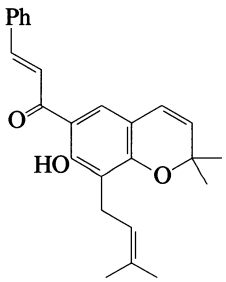
$C_{21}H_{39}NO_7$ M 417.542
Config. not confirmed. Prod. by *Paecilomyces variotii.* Serinepalmitoyl transferase inhibitor. Antifungal agent.

21-Deoxy: [145401-48-5]. ***Sphingofungin F***
$C_{21}H_{39}NO_6$ M 401.542
Prod. by *P. variotii.* Serinepalmitoyl transferase inhibitor. Antifungal agent.

Horn, W.S. *et al, J. Antibiot.*, 1992, **45**, 1692 (*isol, pmr, cmr, struct*)

Spinochalcone C S-10088

[146959-79-7]

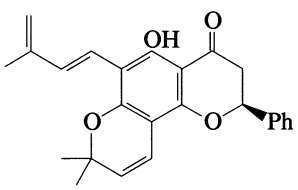


$C_{25}H_{26}O_3$ M 374.479
Constit. of *Tephrosia spinosa.* Yellow oil.

Venkata Rao, E. *et al, Phytochemistry*, 1993, **32**, 183 (*isol*)

Spinoflavanone A S-10089

[146959-80-0]

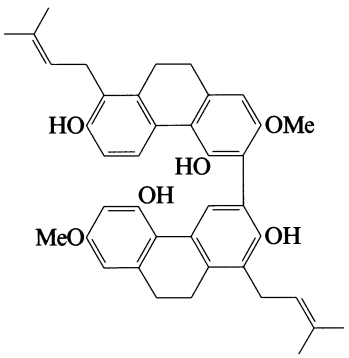


$C_{25}H_{24}O_4$ M 388.462
Constit. of *Tephrosia spinosa.* Yellow needles. Mp 146-148°. $[\alpha]_D^{25}$ −91.3°.

Venkato Rao, E. *et al, Phytochemistry*, 1993, **32**, 183 (*isol, pmr*)

Spiranthesol S-10090

[125263-69-6]

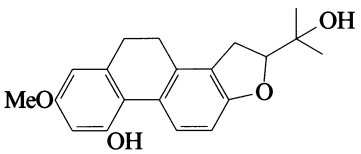


$C_{40}H_{42}O_6$ M 618.768
Constit. of *Spiranthes sinensis* var. *amoena*. Amorph. solid. Opt. inactive.

Tazuka, Y. *et al*, *Chem. Pharm. Bull.*, 1990, **38**, 629 (*isol, pmr, cmr, struct*)

Spiranthol C S-10091

[128321-91-5]



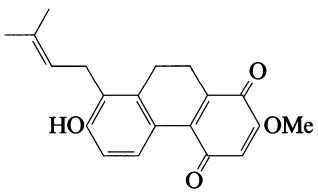
$C_{20}H_{22}O_4$ M 326.391
Constit. of *Spiranthes sinensis* var. *amoena*. Amorph. solid. Opt. inactive.

Tezuka, Y. *et al*, *Chem. Pharm. Bull.*, 1990, **38**, 629 (*isol, pmr, cmr, struct*)

Spiranthoquinone S-10092

9,10-Dihydro-7-hydroxy-2-methoxy-8-(3-methyl-2-butenyl)-1,4-phenanthrenedione, 9CI. 9,10-Dihydro-7-hydroxy-2-methoxy-8-prenyl-1,4-phenanthraquinone

[128321-90-4]

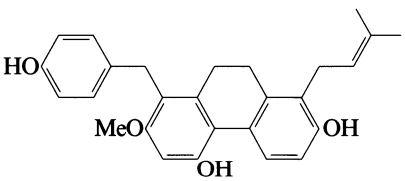


$C_{20}H_{20}O_4$ M 324.376
Constit. of *Spiranthes sinensis* var. *amoena*. Fine red needles (CH_2Cl_2). Mp 150-151°.

Tezuka, Y. *et al*, *Chem. Pharm. Bull.*, 1990, **38**, 629 (*isol, pmr, cmr, struct*)

Spirasineol A S-10093

[126192-37-8]

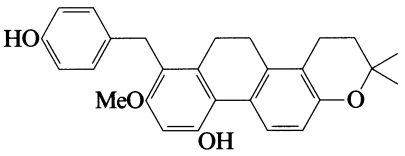


$C_{27}H_{28}O_4$ M 416.516
Constit. of *Spiranthes sinensis* var. *amoena*. Cryst. $+\frac{1}{2}H_2O$ (pet. ether). Mp 165-167.5°.

Tezuka, Y. *et al*, *Chem. Pharm. Bull.*, 1989, **37**, 3195 (*isol, pmr, cmr*)

Spirasineol B S-10094

[128321-92-6]



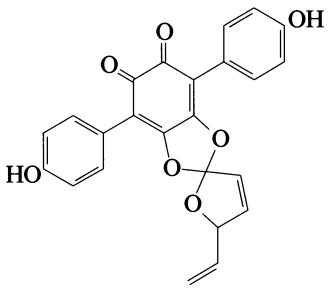
$C_{27}H_{28}O_4$ M 416.516
Constit. of *Spiranthes sinensis* var. *amoena*. Amorph. solid.

Tezuka, Y. *et al*, *Chem. Pharm. Bull.*, 1990, **38**, 629 (*isol*)

Spiromentin A S-10095

5'-Ethylidene-4,7-bis(4-hydroxyphenyl)spiro[1,3-benzodioxole-2,2'(5'H)-furan]-5,6-dione, 9CI

[121254-53-3]

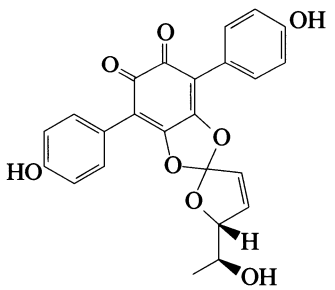


$C_{24}H_{16}O_7$ M 416.386
Constit. of the toadstools *Paxillus atrotomentosus* and *P. panuoides*. Violet cryst.

Besl, H. *et al*, *Justus Liebigs Ann. Chem.*, 1989, 803 (*isol, pmr, cmr, struct*)

Spiromentin B S-10096

[121254-56-6]

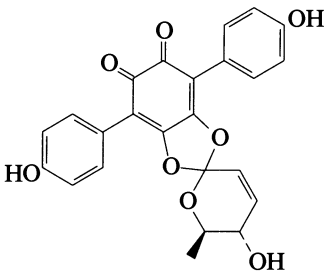


$C_{24}H_{18}O_8$ M 434.401
Constit. of the toadstools *Paxillus atrotomentosus* and *P. panuoides*. Violet solid.

Besl, H. *et al*, *Justus Liebigs Ann. Chem.*, 1989, 803 (*isol, pmr, cmr, struct*)

Spiromentin C S-10097

[121254-57-7]



$C_{24}H_{18}O_8$ M 434.401

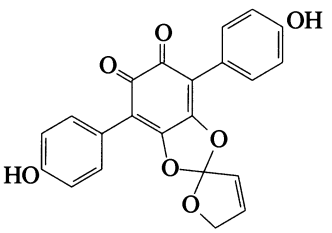
Constit. of the toadstools *Paxillus atrotomentosus* and *P. panuoides*. Violet solid.

Besl, H. *et al*, *Justus Liebigs Ann. Chem.*, 1989, 803 (*isol, pmr, cmr, struct*)

Spiromentin D S-10098

4,7-Bis(4-hydroxyphenyl)spiro[1,3-benzodioxole-2,2'(5'H)-furan]-5,6-dione, 9CI

[121254-58-8]



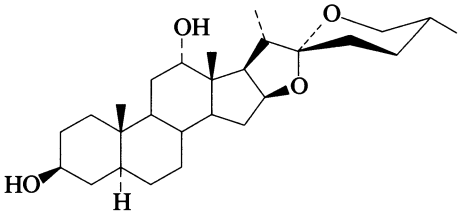
$C_{22}H_{14}O_7$ M 390.348

Constit. of the toadstools *Paxillus atrotomentosus* and *P. panuoides*. Violet solid.

Besl, H. *et al*, *Justus Liebigs Ann. Chem.*, 1989, 803 (*isol, pmr, cmr, struct*)

Spirostane-3,12-diol S-10099

Updated Entry replacing S-01071



$C_{27}H_{44}O_4$ M 432.642

(3β,5α,12α,25R)-form [545-77-7] ***12-Epirockogenin.*** *12*-epi-*Rockogenin*

Constit. of *Agave sisalana*. Cryst. (MeOH). Mp 218-220° (214-217°). $[\alpha]_D$ −42.1° ($CHCl_3$).

Di-Ac: [10007-75-7].
$C_{31}H_{48}O_6$ M 516.717
Mp 156-159°. $[\alpha]_D^{23}$ −15° (c, 1.0 in Me_2CO).

(3β,5α,12β,25R)-form [16653-52-4] ***Rockogenin.*** *Rocogenin*

Constit. of *A. americana, A. gracilipes* and *Yucca gloriosa*. Cryst. (MeOH), needles (Me_2CO). Mp 218-220° (208-210°).

Di-Ac: [10007-76-8].
Mp 204-206°.

(3β,5α,12β,25S)-form [90457-38-8] ***Dihydrochiapagenin***

Cryst. (MeOH aq.). Mp 194-196°, Mp 204-205° (double Mp). $[\alpha]_D$ −79° (c, 1.1 in $CHCl_3$).

12-Ac:
$C_{29}H_{46}O_5$ M 474.679
Cryst. (hexane/C_6H_6). Mp 213-214°. $[\alpha]_D$ −84° (c, 0.3 in $CHCl_3$).

Di-Ac: Cryst. (MeOH). Mp 204-205°. $[\alpha]_D$ −76° (c, 0.6 in $CHCl_3$).

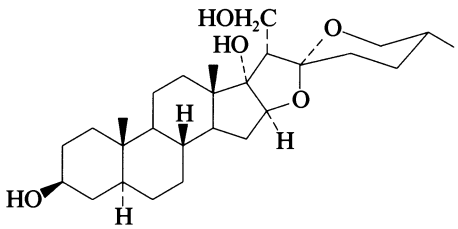
3,12-Diketone: [32101-23-8]. *Spirostane-3,12-dione.* ***Sisalagenone***
$C_{27}H_{40}O_4$ M 428.611
Constit. of *Solanum torrum.*

(3β,5β,12β,25R)-form [38673-26-6] ***12β-Hydroxysmilagenin***

Constit. of *Y. gloriosa*. Cryst. (Me_2CO). Mp 233-235°. $[\alpha]_D$ −62.3° (c, 0.27 in $CHCl_3$).

Hirschman, R.F. *et al*, *J. Am. Chem. Soc.*, 1952, **74**, 2693; 1954, **76**, 4013.
Elks, J. *et al*, *J. Chem. Soc.*, 1954, 1739 (*synth, ir*)
Harrison, I.T. *et al*, *J. Org. Chem.*, 1961, **26**, 155 (*synth, 3β,5α,12β,25S-form*)
Kabasakalian, P. *et al*, *J. Org. Chem.*, 1961, **26**, 1738 (*synth, 3β,5α,12β,25R-form*)
Nussim, M. *et al*, *J. Org. Chem.*, 1964, **29**, 1120 (*synth, 3β,5α,12α,25R-form*)
Ricca, G.S. *et al*, *Gazz. Chim. Ital.*, 1969, **99**, 1284 (*pmr*)
Morales, M. *et al*, *Rev. Latinoam. Quim.*, 1970, **1**, 1 (*Sisalagenone*)
González, A.G. *et al*, *An. Quim.*, 1972, **68**, 309 (*isol*)
Garcia, J.A.R. *et al*, *Magn. Reson. Chem.*, 1987, **25**, 831 (*cmr*)

Spirostane-3,17,21-triol S-10100



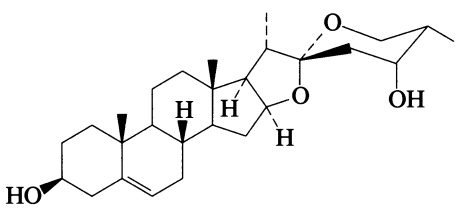
$C_{27}H_{44}O_5$ M 448.642

(3β,5α,25R)-form

3-O-[α-L-*Arabinopyranosyl*-(*1→3*)[α-L-*rhamnopyranosyl*-(*1→2*)]-β-D-*glucopyranoside*]: [125456-47-5]. ***Pardarinoside E***
$C_{44}H_{72}O_{18}$ M 889.042
Constit. of the bulbs of *Lilium pardarinum*. Amorph. powder. $[\alpha]_D^{22}$ −42.5° (c, 0.37 in MeOH).

Shimomura, H. *et al*, *Phytochemistry*, 1989, **28**, 3163 (*isol*)

Spirost-5-ene-3,24-diol S-10101



$C_{27}H_{42}O_4$ M 430.626

(3β,24R,25S)-form

3-O-*Neohesperidoside:* [126453-84-7]. ***Pingpeisaponin***
$C_{39}H_{62}O_{13}$ M 738.911
Constit. of *Fritillaria ussuriensis.*

Xu, D. *et al*, *Zhiwu Xuebao*, 1989, **31**, 285; *CA*, **112**, 175573 (*Pingpeisaponin*)

Spirost-5-ene-1,3,25-triol S-10102

Updated Entry replacing S-01119

$C_{27}H_{42}O_5$ M 446.626

(1β,3β,25S)-form [51847-95-1] ***Isoandrogenin A***
Constit. of *Semele androgyna.*

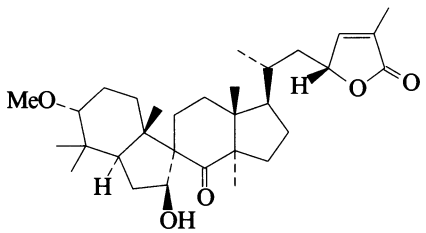
(1β,3β,25R)-form [51918-96-8] ***Isoandrogenin B***
From *S. androgyna.*

(1β,3α,25S)-form [91625-64-8] ***Aurantigenin***
Constit. of *Tupistra aurantiaca.*

González, A.G. *et al*, *Rev. Latinoam. Quim.*, 1973, **4**, 45.
Yang, R. *et al*, *CA*, 1984, **101**, 107361z (*Aurantigenin*)

Spiroveitchionolide S-10103

[145356-49-6]



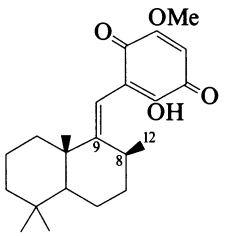
$C_{31}H_{48}O_5$ M 500.717
Constit. of *Abies veitchii.* Cryst. ($CHCl_3$/MeOH). Mp 239.5-242°. $[\alpha]_D^{23}$ −14.2° (c, 0.27 in $CHCl_3$).

Tanaka, R. *et al*, *J. Chem. Soc., Chem. Commun.*, 1992, 1351 (*isol, pmr, cmr, cryst struct*)

Spongiaquinone S-10104

Updated Entry replacing S-01156

[69672-67-9]



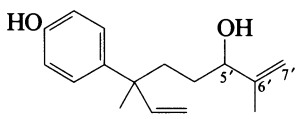
$C_{22}H_{30}O_4$ M 358.477
Constit. of *Stelospongia conulata.* Red cryst. (hexane). Mp 159-160°.

9α,11-Dihydro, 8,12-didehydro:
$C_{22}H_{30}O_4$ M 358.477
Constit. of a *Spongia* sp. Yellow oil.

Kazlauskas, R. *et al*, *Aust. J. Chem.*, 1978, **31**, 2685.
Capon, R.J. *et al*, *Aust. J. Chem.*, 1993, **46**, 1245 (*deriv*)

Sporochnol C S-10105

[147821-61-2]



$C_{16}H_{22}O_2$ M 246.349
Constit. of *Sporochnos bolleanus.* Pale yellow gum.

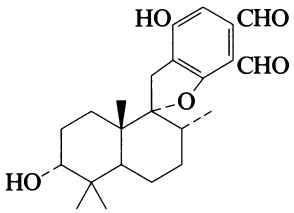
6',7'-Epoxide: [147821-60-1]. ***Sporochnol B***
$C_{16}H_{22}O_3$ M 262.348
Constit. of *S. bolleanus.* Pale yellow gum.

5'-Deoxy, Δ5'-Isomer: [147821-59-8]. ***Sporochnol A***
$C_{16}H_{22}O$ M 230.349
Isol. from *S. bolleanus.* Amorph. solid. $[\alpha]_D$ +10° (c, 1 in $CHCl_3$).

Shen, Y.-C. *et al*, *Phytochemistry*, 1993, **32**, 71 (*isol, pmr, cmr*)

Stachybotrydial S-10106

[149598-70-9]

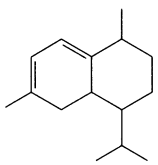


$C_{23}H_{30}O_5$ M 386.487
Metab. of *Stachybotrys cylindrospora.* Amorph. solid (as di-Ac). $[\alpha]_D$ −69° (c, 0.063 in $CHCl_3$) (di-Ac).

Ayer, W.A. *et al*, *Can. J. Chem.*, 1993, **71**, 487 (*isol, pmr, cmr*)

Stachynene S-10107

[99223-33-3]

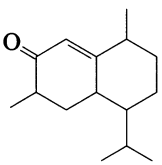


$C_{15}H_{24}$ M 204.355
Constit. of *Stachys* spp.

Maly, E. *et al*, *J. Chromatogr.*, 1985, **333**, 288 (*isol*)

Stachynone S-10108

[99223-32-2]



$C_{15}H_{24}O$ M 220.354
Constit. of *Stachys* spp. Cryst. Mp 54-55°. $[\alpha]_D^{22}$ −2.45° (CCl_4).

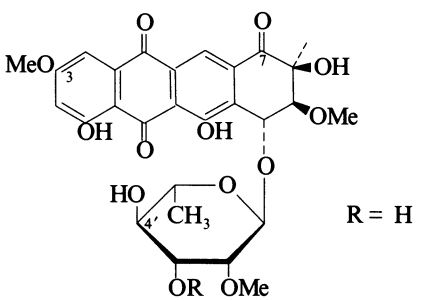
Maly, E. *et al*, *J. Chromatogr.*, 1985, **333**, 288 (*isol*)

Steffimycin, INN, USAN S-10109

Updated Entry replacing S-01215

Steffisburgensimycin. U 20661. Antibiotic U 20661

[11033-34-4]



$C_{28}H_{30}O_{13}$ M 574.537
Anthracycline antibiotic. Isol. from *Streptomyces steffisburgensis*, *S. elgreteus* and *Actinoplanes utahensis*. Antibacterial and antitumour agent. Orange-yellow cryst. Mp 257-265°. $[\alpha]_D^{25}$ +85° (c, 0.05 in MeOH). Shows opposite stereochem. to most anthracyclines.

▷ QI9456000.

4'-Me ether: [54526-94-2]. ***Steffimycin B.*** *U 40615. Antibiotic U 40615*
$C_{29}H_{32}O_{13}$ M 588.564
Isol. from *S. elgreteus*. Antibacterial and antitumour agent. Orange cryst. Mp 240-246°. $[\alpha]_D^{25}$ +94° (c, 1 in $CHCl_3$).

▷ QI9450000.

7-Alcohol: [75086-96-3]. *10-Dihydrosteffimycin*
$C_{28}H_{32}O_{13}$ M 576.553
Semisynthetic. Cryst. (Me_2CO). Mp 253-255°.

7-Alcohol, 4'-Me ether: [75086-97-4]. *10-Dihydrosteffimycin B*
$C_{29}H_{34}O_{13}$ M 590.580
Semisynthetic. Cryst. (Me_2CO). Mp 245-248°.

7-Deoxo: [132354-06-4]. ***Steffimycin D***
$C_{28}H_{32}O_{12}$ M 560.554
From *S.* sp. Collagenase inhibitor.

7-Deoxo, 4'-Me ether: [98813-22-0]. ***Steffimycin C***
$C_{29}H_{34}O_{12}$ M 574.580
From *S. elgreteus*. Only active against *Streptococcus pneumoniae*. Orange cryst.

7-Deoxo, O^3-de-Me: [132354-18-8]. ***Demethylsteffimycin***
$C_{27}H_{30}O_{12}$ M 546.527
From *S.* sp. Orange powder.

Aglycone: [57847-74-2]. *Steffimycinone. 2-Demethoxyaranciamycinone*
$C_{21}H_{18}O_9$ M 414.368
Active against mycobacteria.

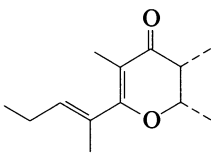
[91310-99-5, 91382-92-2]

Bergy, M.E. *et al*, *Experientia*, 1967, **23**, 254 (*isol*)
Brodasky, T.F. *et al*, *J. Antibiot.*, 1974, **27**, 809 (*isol, uv, ir, pmr, cmr, ms, struct*)
Vaněk, Z. *et al*, *Folia Microbiol.* (*Prague*), 1977, **22**, 139 (*biosynth, struct, pmr, cmr, ms*)
Wiley, P.F. *et al*, *J. Org. Chem.*, 1977, **42**, 3591; 1978, **43**, 3457 (*Steffimycin B*)
Wiley, P.F. *et al*, *J. Antibiot.*, 1980, **33**, 819 (*isol, uv, ir, pmr, cmr*)
Krohn, K. *et al*, *J. Org. Chem.*, 1984, **49**, 3766 (*config*)
Brodasky, T.F. *et al*, *J. Antibiot.*, 1985, **38**, 849 (*Steffimycin C*)
Suzukake-Tsuchiya, K. *et al*, *J. Antibiot.*, 1990, **43**, 1489 (*Steffimycin D*)

Stegobiene S-10110

2,3-Dihydro-2,3,5-trimethyl-6-(1-methyl-1-butenyl)-4H-pyran-4-one, 9CI

[132215-98-6]



$C_{13}H_{20}O_2$ M 208.300
Constit. of the drugstore beetle *Stegobium paniceum*. Pheromone mimic.

[106022-47-3]

Chuman, T., *CA*, 1991, **114**, 96679.

Stellin C S-10111

[142847-28-7]

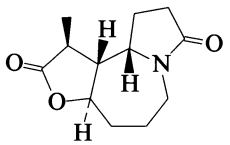
H-Arg-Arg-Arg-Arg-His-Ala-Ser-Thr-Lys-Leu-Lys-Arg-Arg-Arg-Arg-Arg-Arg-Arg-His-Gly-Lys-Lys-Ser-His-Lys-OH

Isol. from the gonads of *Acipenser stellatus*.

Rybin, V.K. *et al*, *Khim. Prir. Soedin.*, 1991, **27**, 590; *Chem. Nat. Compd.* (*Engl. Transl.*), 518.

Stemoamide S-10112

[142905-25-7]

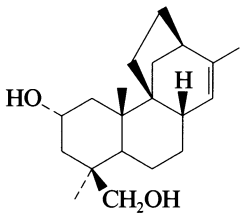


Relative configuration

$C_{12}H_{17}NO_3$ M 223.271
Alkaloid from roots of *Stemona tuberosa* (Stemonaceae). Amorph. $[\alpha]_D^{21.6}$ −28.1° (c, 0.125 in MeOH).

Lin, W.-H. *et al*, *J. Nat. Prod.* (*Lloydia*), 1992, **55**, 571 (*isol, ir, pmr, cmr, ms, struct*)

13-Stemodene-2,19-diol S-10113



$C_{20}H_{32}O_2$ M 304.472

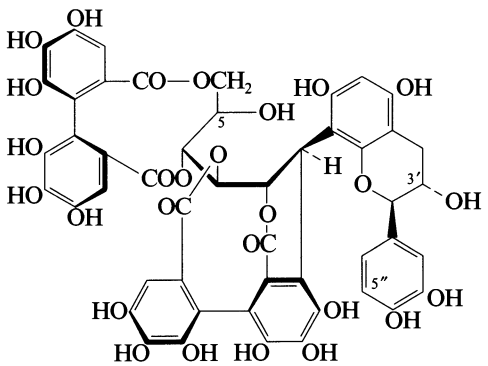
3α-form [143437-61-0] ***Oryzalexin S***
Constit. of rice plants infected with *Pyricularia oryzae*. Cryst. Mp 173°. $[\alpha]_D^{26.5}$ +32° (c, 1 in $CHCl_3$).

Kodama, O. *et al*, *Biosci., Biotechnol., Biochem.*, 1992, **56**, 1002 (*isol, pmr, cmr*)
Tomogami, S. *et al*, *Tetrahedron*, 1993, **49**, 2025 (*isol, pmr, cmr*)

Stenophyllanin C S-10114

Updated Entry replacing S-01259

[97775-90-1]



$C_{49}H_{36}O_{27}$ M 1056.807
Tannin from *Quercus stenophylla*. Off-white amorph. powder + $2\frac{1}{2}$ H_2O. $[\alpha]_D^{21}$ +80.7° (c, 1.3 in MeOH).

5-O-(3,4,5-Trihydroxybenzoyl): [97775-88-7]. ***Stenophyllanin A***

$C_{56}H_{40}O_{31}$ M 1208.913
From *Q. stenophylla*. Amorph. powder. $[\alpha]_D^{28}$ +48.1° (c, 1.2 in MeOH).

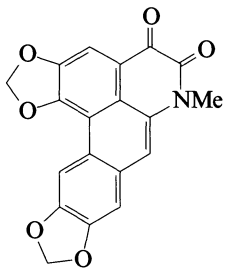
3'-Epimer: [138256-93-6]. ***Camelliatannin A***
$C_{49}H_{36}O_{27}$ M 1056.807
Isol. from leaves of *Camellia japonica*. Off-white powder + $7H_2O$. $[\alpha]_D^{20}$ +68° (c, 1.2 in MeOH).

5-(3,4,5-Trihydroxybenzoyl), 5''-hydroxy: [145826-24-0]. ***Guajavin A***
$C_{56}H_{40}O_{32}$ M 1224.913
Constit. of the bark of *Psidium guajava*. Pale brown powder + $6H_2O$. $[\alpha]_D^{19}$ +73.0° (c, 1 in MeOH). Conformational isomerisation observed.

Nonaka, G.-I. *et al*, *J. Chem. Soc., Perkin Trans. 1*, 1985, 163 (*struct, pmr, cmr*)
Nonaka, G.-I. *et al*, *Chem. Pharm. Bull.*, 1990, **38**, 2151 (*abs config*)
Tanaka, T. *et al*, *Chem. Pharm. Bull.*, 1992, **40**, 2092 (*Guajavin A*)

Stephadione S-10115

[142905-22-4]

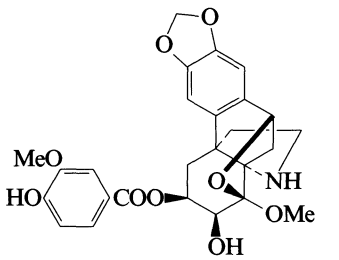


$C_{19}H_{11}NO_6$ M 349.299
Alkaloid from aerial parts of *Stephania tetrandra* (Menispermaceae). Amorph. red powder. Mp >300°.

Si, D.Y. *et al*, *J. Nat. Prod.* (*Lloydia*), 1992, **55**, 828 (*isol, uv, ir, pmr, ms, struct*)

Stephavanine S-10116

Updated Entry replacing S-01280
8,10-Epoxy-8-methoxy-2,3-[methylenebis(oxy)]hasubanan-6-7-diol 6-(4-hydroxy-3-methoxybenzoate), 9CI
[33116-33-5]



Absolute configuration

$C_{26}H_{27}NO_9$ M 497.501
Alkaloid from rhizomes of *Stephania abyssinica* (Menispermaceae). Mp 229-230° dec. $[\alpha]_D^{32}$ +30° (c, 0.90 in Py).

B,HCl: Mp 217-218° dec. $[\alpha]_D^{32}$ +16° (c, 0.73 in MeOH).
B,HBr: Mp 191-192° dec.
N,O,O-*Tri-Ac:* Mp 189-190°.
7-Trimethylsilyl ether: Mp 201-202° dec.
4'-Me ether: ***4'-O-Methylstephavanine***
$C_{27}H_{29}NO_9$ M 511.527
Alkaloid from roots of *S. abyssinica* (Menispermaceae). Amorph. solid. Mp 187-190° dec. $[\alpha]_D^{20}$ −4° (c, 0.01 in $CHCl_3$).

N,O,O-*Tri-Me:* [53111-19-6]. ***N,O,O-Trimethylstephavanine***
$C_{29}H_{33}NO_9$ M 539.581
Alkaloid from *S. abyssinica* (Menispermaceae).

Kupchan, S.M. *et al*, *J. Am. Chem. Soc.*, 1970, **92**, 5756 (*ms, pmr, struct, cryst struct*)
Van Wyk, A.J. *et al*, *J. S. Afr. Chem. Inst.*, 1974, **27**, 95 (*deriv*)
Dagne, E. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 2022 (*4'-O-Methylstephavanine*)

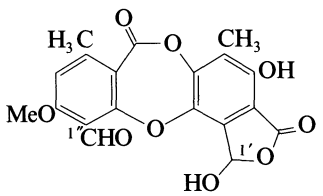
Ulex europaeus Sterol S-10117

$C_{30}H_{50}O$ M 426.724
Struct. unknown. Constit. of the flowers of *Ulex europaeus*. Mp 152-153°.

Schoen, K., *Biochem. J.*, 1936, **30**, 1960.
McLean, J. *et al*, *Phytochemistry*, 1963, **2**, 179.

Stictic acid S-10118

Updated Entry replacing S-01311
1,3-Dihydro-1,4-dihydroxy-10-methoxy-5,8-dimethyl-3,7-dioxo-7H-isobenzofuro[4,5-b][1,4]benzodioxepin-11-carboxaldehyde, 9CI. Pseudopsoromic acid. Stereocaulonic acid. Stictaic acid. Scopularic acid
[549-06-4]



$C_{19}H_{14}O_9$ M 386.314
Isol. from *Menegazzia terebrata, Stereocaulon* spp., *Pseudocyphellaria impressa, Ramalina, Cladonia* and other lichens. Cryst. (Me_2CO). Mp 268-269° dec.

▷ Contact allergen.

1'-Me ether: [74728-13-5]. ***Methylstictic acid.*** *8'-O-Methylstictic acid*
$C_{20}H_{16}O_9$ M 400.341
Isol. from *Lobaria oregana*. Needles (Me_2CO).

1'-Et ether: [63090-99-3]. ***Vesuvianic acid***
$C_{21}H_{18}O_9$ M 414.368
Isol. from *Stereocaulon* spp., possibly an artifact. Cryst. (EtOAc). Mp 245°.

O-*De-Me:* [571-67-5]. ***Norstictic acid.*** *Bryopogonic acid*
$C_{18}H_{12}O_9$ M 372.287
Prod. by *Usnea* spp., *Lobaria* spp., *Pertusaria, Pseudocyphellaria* and other lichens. Needles (Me_2CO aq.). Mp 286-287°.

▷ Contact allergen.

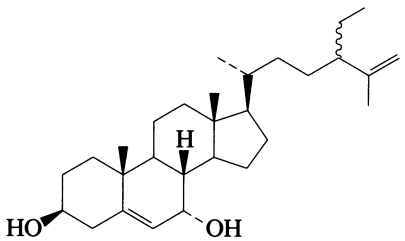
1''-Alcohol: ***Cryptostictic acid***
$C_{19}H_{16}O_9$ M 388.330
Constit. of the lichen *Lobaria oregana*. Needles (Me_2CO aq.). Mp 242-244° dec.

1'-Deoxy, 1''-alcohol: [74728-15-7]. *Cryptostictinolide*
$C_{19}H_{16}O_8$ M 372.331
Needles (Me_2CO). Mp 275-276° dec.

Briner, G.D. *et al*, *Aust. J. Chem.*, 1960, **13**, 277.
Huneck, S. *et al*, *Naturwissenschaften*, 1963, **52**, 154; 1964, **51**, 536.
Huneck, S. *et al*, *Tetrahedron*, 1968, **24**, 2707 (*ms*)
Huneck, S. *et al*, *Z. Naturforsch., B*, 1968, **23**, 717; 1989, **44**, 1117 (*pmr*)
Fox, C.H. *et al*, *Phytochemistry*, 1970, **9**, 2057 (*isol*)
Martinez, E. *et al*, *An. Quim.*, 1972, **68**, 1313, 1321.
Huneck, S., *Phytochemistry*, 1972, **11**, 1493; 1974, **13**, 2305, 2315 (*isol*)
Fukuyama, K. *et al*, *Bull. Chem. Soc. Jpn.*, 1975, **48**, 1639 (*cryst struct*)

Hirayama, T. *et al*, *Chem. Pharm. Bull.*, 1976, **24**, 2340 (*isol*)
Thune, P.O. *et al*, *CA*, 1980, **93**, 63143q (*tox*)
Shimada, S. *et al*, *Phytochemistry*, 1980, **19**, 328 (*Methylstictic acid, Cryptostidic acid*)
Culberson, C.F. *et al*, *Bryologist*, 1981, **84**, 16; *CA*, **95**, 183213a (*tlc*)
Sundholm, E.G. *et al*, *Chem. Scr.*, 1981, **18**, 233 (*cmr*)
Ingolfsdottir, K. *et al*, *Phytochemistry*, 1986, **25**, 550 (*isol, struct, deriv*)

Stigmasta-5,25-diene-3,7-diol S-10119



$C_{29}H_{48}O_2$ M 428.697

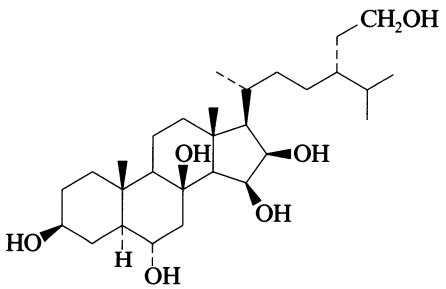
(3β,7α,24ξ)-form [151345-06-1] ***Decortinol***
Constit. of *Codium decorticatum*. Gum.

7-Ketone: [151345-08-3]. *3-Hydroxystigmasta-5,25-dien-7-one.* ***Decortinone***
$C_{29}H_{46}O_2$ M 426.681
Constit. of *C. decorticatum*. Gum.

(3β,7β)-form [151345-07-2] ***Isodecortinol***
Constit. of *C. decorticatum*. Gum.

Ahmad, V.U. *et al*, *Phytochemistry*, 1993, **33**, 1189 (*isol, pmr, cmr*)

Stigmastane-3,6,8,15,16,29-hexol S-10120



$C_{29}H_{52}O_6$ M 496.726

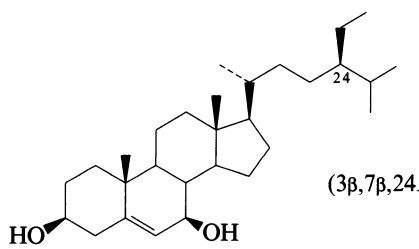
(3β,5α,6α,15β,16β,24R)-form

29-O-(6-O-Sulfo-β-D-glucopyranoside): [131985-14-3]. ***Pisasteroside F***
$C_{35}H_{62}O_{14}S$ M 738.932
Isol. from the starfish *Pisaster giganteus* (as Na salt).
$[\alpha]_D$ +10° (c, 1 in MeOH).

Zollo, F. *et al*, *J. Nat. Prod.* (*Lloydia*), 1990, **53**, 1000.

Stigmast-5-ene-3,7-diol S-10121

Updated Entry replacing H-03045



(3β,7β,24*R*)-*form*

$C_{29}H_{50}O_2$ M 430.713

(3β,7β,24R)-form
Constit. of sponge *Clionia copiosa* and *Corallistes undulatus*.

7-Ketone: [2034-74-4]. *3-Hydroxystigmast-5-en-7-one. 7-Oxo-β-sitosterol*
$C_{29}H_{48}O_2$ M 428.697
Isol. from bark of *Pinus taeda* and *P. banksiana* and from *Cryptocarya foveolata* also after saponification of *Brassica napus* (rapeseed) and *Glycine max* (soyabean) oils. Also found in the sponge *Cliona copiosa*. Prisms (MeOH) or needles (hexane). Mp 165-167°, Mp 129° (synthetic).

7-Ketone, 3-Ac: Mp 176° (170°). $[\alpha]_D^{17}$ −94° ($CHCl_3$).

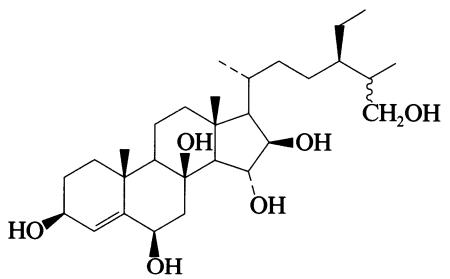
(3β,7β,24S)-form
Isol. from *C. copiosa*.

7-Ketone: 3-Hydroxyporiferast-5-en-7-one
$C_{29}H_{48}O_2$ M 428.697
Constit. of *Gracilaria edulis* and *C. copiosa*. Cryst. Mp 140-141°. $[\alpha]_D^{25}$ −105.6° (c, 0.23 in $CHCl_3$).

Niewiadowski, H. *et al*, *CA*, 1965, **63**, 13588 (*isol*)
Rowe, J.W., *Phytochemistry*, 1965, **4**, 1 (*isol*)
Bishara, R.H. *et al*, *J. Nat. Prod.* (*Lloydia*), 1970, **33**, 477 (*isol, props*)
Notaro, G. *et al*, *J. Nat. Prod.* (*Lloydia*), 1992, **55**, 1588 (*isol, pmr, ms*)
Das, B. *et al*, *Phytochemistry*, 1992, **31**, 2427 (*3-Hydroxyporiferastenone*)
Guerriero, A. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 1962 (*isol, pmr, cmr*)

Stigmast-4-ene-3,6,8,15,16,26-hexol S-10122

24-Ethylcholest-4-ene-3,6,8,15,16,26-hexol



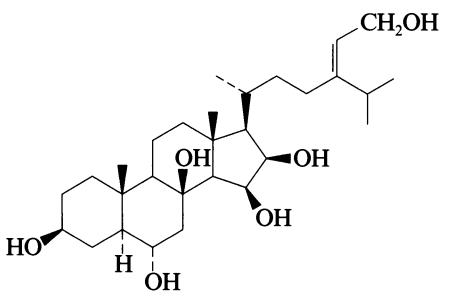
$C_{29}H_{50}O_6$ M 494.710

(3β,6β,15α,16β,25ξ)-form

3-O-(2-O-Methyl-β-D-xylopyranoside): [134985-05-0]. ***Forbeside L***
$C_{35}H_{60}O_{10}$ M 640.853
Isol. from the starfish *Asterias forbesi*. Powder. Mp 210° dec. $[\alpha]_D$ −7.8° (c, 0.4 in H_2O).

Findlay, J.A. *et al*, *J. Nat. Prod.* (*Lloydia*), 1991, **54**, 428.

Stigmast-24(28)-ene-3,6,8,15,16,29-hexol S-10123



$C_{29}H_{50}O_6$ M 494.710

(3β,5α,6α,15β,16β,24(28)E)-form

29-O-(4-O-Sulfo-β-D-xylopyranoside): [123154-35-8].

Pisasteroside C

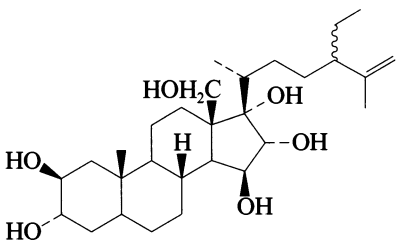
$C_{34}H_{58}O_{13}S$ M 706.890

Isol. from the starfish *Pisaster giganteus* (as Na salt). $[\alpha]_D$ +12° (c, 1 in MeOH).

Zollo, F. *et al*, *J. Nat. Prod.* (*Lloydia*), 1989, **52**, 693.

Stigmast-25-ene-2,3,15,16,17,18-hexol S-10124

24-Ethylcholest-25-ene-2,3,15,16,17,18-hexol



$C_{29}H_{50}O_6$ M 494.710

(2β,3α,15β,16α,17α,24ξ)-form

Echinoclasterol

2-Sulfate:

$C_{29}H_{50}O_9S$ M 574.775

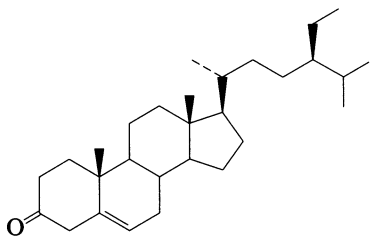
Constit. of *Echinoclathria subhispida*. Solid (as phenethylammonium salt). $[\alpha]_D$ +0.3° (c, 0.15 in MeOH).

Li, H. *et al*, *Tetrahedron Lett.*, 1993, **34**, 5733 (*isol, pmr, cmr*)

Stigmast-5-en-3-one, 9CI S-10125

Δ⁵-Sitosterol-3-one. ***β-Sitosterone***

[51529-11-4]



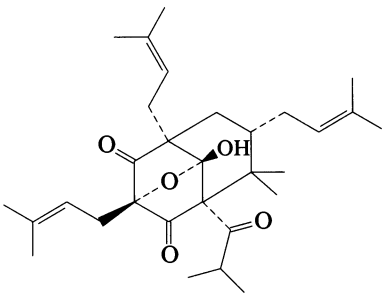
$C_{29}H_{48}O$ M 412.698

Constit. of various plant spp. incl. *Euphorbia* sp., *Gomphrena* sp., *Pieris* sp., *Piptocarpa* sp., *Oxandra* sp., *Torreya* sp. and *Ormosia major* (infected with fungi). Also found in human faeces. Needles ($MeOH/Et_2O$). Mp 94°.

Katai, M. *et al*, *Chem. Pharm. Bull.*, 1983, **31**, 1567 (*isol*)
Dayal, B. *et al*, *Steroids*, 1983, **42**, 635 (*synth*)
Arango, G.J. *et al*, *Phytochemistry*, 1987, **26**, 2093 (*isol*)
Cambie, R.C. *et al*, *Phytochemistry*, 1991, **30**, 287 (*isol*)

Subellinone S-10126

[149725-22-4]



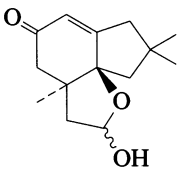
$C_{30}H_{44}O_5$ M 484.675

Constit. of *Garcinea subelliptica*. Viscous oil. $[\alpha]_D^{20}$ −2.8° (c, 1 in EtOH).

Fukuyama, Y. *et al*, *Phytochemistry*, 1993, **33**, 483 (*isol, pmr, cmr*)

Sulcatine F S-10127

[147515-44-4]



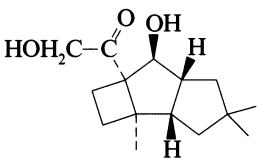
$C_{14}H_{20}O_3$ M 236.310

Metab. of *Laurilia sulcata*. Oil. $[\alpha]_D$ +2.8° (c, 0.1 in $CHCl_3$).

[147455-45-6]

Arnone, A. *et al*, *Gazz. Chim. Ital.*, 1992, **122**, 421 (*isol, pmr, cmr*)

Sulcatine G S-10128



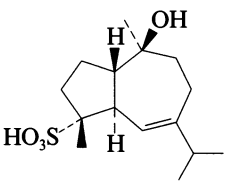
$C_{15}H_{24}O_3$ M 252.353

Metab. of *Laurilia sulcata*. Oil. $[\alpha]_D$ +44.5° (c, 0.15 in $CHCl_3$).

Arnone, A. *et al*, *J. Chem. Soc., Perkin Trans. 1*, 1993, 2723 (*isol, pmr, cmr*)

Sulfoorientalol A S-10129

[151171-36-7]



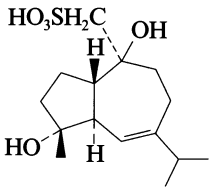
$C_{15}H_{26}O_4S$ M 302.434

Constit. of *Alisma orientale* root. Powder.

Yoshikawa, M. *et al*, *Chem. Pharm. Bull.*, 1993, **41**, 1194 (*isol, pmr, cmr*)

Sulfoorientalol B S-10130

[151171-38-9]

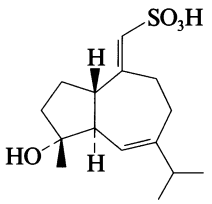


$C_{15}H_{26}O_5S$ M 318.433
Constit. of *Alisma orientale* root. Powder.

Yoshikawa, M. *et al*, *Chem. Pharm. Bull.*, 1993, **41**, 1194 (*isol, pmr, cmr*)

Sulfoorientalol C S-10131

[150975-27-2]

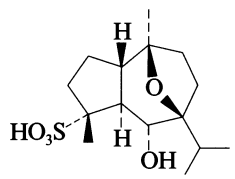


$C_{15}H_{24}O_4S$ M 300.418
Constit. of *Alisma orientale* root. Powder.

Yoshikawa, M. *et al*, *Chem. Pharm. Bull.*, 1993, **41**, 1194 (*isol, pmr, cmr*)

Sulfoorientalol D S-10132

[151171-37-8]



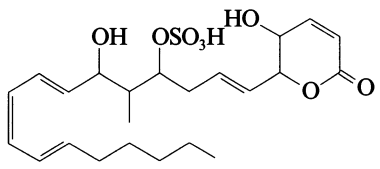
$C_{15}H_{26}O_5S$ M 318.433
Constit. of *Alisma orientale* root. Powder.

Yoshikawa, M. *et al*, *Chem. Pharm. Bull.*, 1993, **41**, 1194 (*isol, pmr, cmr*)

Sultriecin S-10133

BU 3285T. Antibiotic BU 3285T

[131774-59-9]

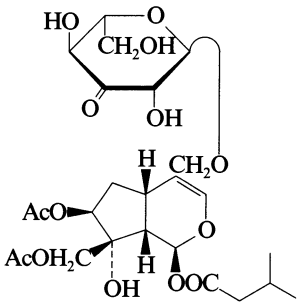


$C_{23}H_{34}O_8S$ M 470.583
Prod. by *Streptomyces roseiscleroticus*. Antifungal and antitumour agent. Powder (as Na salt). Mp 123-125° (as Na salt). $[\alpha]_D^{24}$ +23° (c, 1 in MeOH).

Ohkuma, H. *et al*, *J. Antibiot.*, 1992, **45**, 1239 (*isol, pmr, cmr, ir, props*)

Suspensolide C S-10134

[125002-75-7]



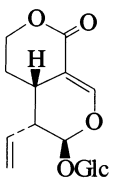
$C_{25}H_{36}O_{14}$ M 560.551
Constit. of *Viburnum suspensum*. Amorph. powder. $[\alpha]_D$ −50° (c, 1 in MeOH).

Iwagawa, T. *et al*, *Phytochemistry*, 1989, **28**, 2393 (*isol, pmr, cmr*)

Sweroside S-10135

Updated Entry replacing S-01575

[14215-86-2]



$C_{16}H_{22}O_9$ M 358.344
Constit. of *Swertia japonica*. Powder. $[\alpha]_D^{26}$ −236° (H_2O).

2′-O-(3,3′-Dihydroxy-2-biphenylcarboxylate): [52811-25-3]. ***Amaropanin.*** *Deoxyamarogentin*
$C_{29}H_{30}O_{12}$ M 570.549
Constit. of roots of *Gentiana pannonica*. Mp 178°. $[\alpha]_D^{26}$ −101.25° (c, 0.47 in MeOH).

2′-O-(3,3′,5-Trihydroxy-2-biphenylcarboxylate): [21018-84-8]. ***Amarogentin***
$C_{29}H_{30}O_{13}$ M 586.548
Isol. from *G.* sp. and *S. japonica*. V. bitter substance. Mp 229-230°. $[\alpha]_D^{20}$ −116.6° (MeOH).

4′-O-(2-Hydroxy-3-glucosyloxybenzoyl), 2′,3′,6′-tri-Ac: [53823-10-2]. ***Trifloroside***
$C_{35}H_{42}O_{20}$ M 782.705
Constit. of *G. triforora* var. *japonica*. Amorph. $[\alpha]_D^{28}$ −122.8° (c, 0.52 in MeOH).

2′-O-(3-Hydroxybenzoyl), 3′-Ac: [59193-73-6]. ***Centapicrin***
$C_{25}H_{28}O_{12}$ M 520.489
Constit. of *Erythraea centaurium*. Cryst. Mp 234-237°. $[\alpha]_D^{28}$ −213° (c, 0.5 in Py).

2′-O-(3-Hydroxybenzoyl): ***Desacetylcentapicrin***
$C_{23}H_{26}O_{11}$ M 478.452
Constit. of *Centaurium erythraea*. Amorph.

3′-O-(3-Hydroxybenzoyl): [77533-68-7]. ***Decentapicrin A***
$C_{23}H_{26}O_{11}$ M 478.452
Constit. of *C. erythraea*. Amorph. $[\alpha]_D$ −203° (MeOH).

4′-O-(3-Hydroxybenzoyl): [77533-67-6]. ***Decentapicrin B***
$C_{23}H_{26}O_{11}$ M 478.452
Constit. of *C. erythraea*. Amorph. $[\alpha]_D$ −211° (MeOH).

6′-O-(3-Hydroxybenzoyl): [77533-66-5]. ***Decentapicrin C***
$C_{23}H_{26}O_{11}$ M 478.452
Constit. of *C. erythraea*. Amorph. $[\alpha]_D$ −192° (MeOH).

3′-Ac: ***3′-Acetylsweroside***
$C_{18}H_{24}O_{10}$ M 400.382
Constit. of *G. formosana*. Oil. $[\alpha]_D^{25}$ −126.1° (c, 1.05 in MeOH).

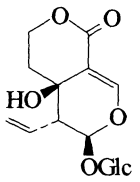
Inoye, H. *et al*, *Tetrahedron Lett.*, 1966, 5229; 1967, 3221; 1968, 4429 (*isol, biosynth, struct*)
Inouye, H. *et al*, *Tetrahedron*, 1971, **27**, 1951; 1974, **30**, 571 (*Amarogentin, Trifloroside*)
Wagner, H. *et al*, *Phytochemistry*, 1974, **13**, 615 (*Amaropanin*)
Sakina, K. *et al*, *Yakugaku Zasshi*, 1976, **96**, 683 (*Centapicrin*)
Van der Sluis, W.G. *et al*, *Planta Med.*, 1981, **41**, 150 (*Decentapicrins*)
Ikeda, T. *et al*, *J. Org. Chem.*, 1984, **49**, 2837 (*synth*)
Chung, M.-I. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 982 (*3'-Acetylsweroside*)

Swertiamarin S-10136

Updated Entry replacing S-01582

Swetiamaroside

[17388-39-5]



$C_{16}H_{22}O_{10}$ M 374.344

Constit. of *Swertia japonica, Anthocleista procera* and *Ericostemma litorale*. Cryst. (EtOH/$CHCl_3$/Et_2O). Mp 110-112°. $[\alpha]_D$ −127°.

2'-O-(2,3',5-Trihydroxybiphenylcarboxylate): [21233-18-1]. ***Amaroswerin***

$C_{29}H_{30}O_{14}$ M 602.548

Isol. from *S. Japonica* and *Gentiana* spp. Highly bitter principle. $[\alpha]_D^{20}$ −13° (MeOH).

6'-O-β-D-Glucopyranoside: ***6'-O-Glucosylswertiamarin***

$C_{22}H_{32}O_{15}$ M 536.486

Constit. of *G. alpina*.

2',3',4',6'-Tetra-Ac: [10289-37-9]. ***Acetylramosin C***

$C_{24}H_{30}O_{14}$ M 542.493

Isol. from *Erythraea ramosissima*. Mp 194°. $[\alpha]_D^{20}$ −110° (c, 0.4 in $CHCl_3$).

4'-O-(3-Glucopyranosyloxy-2-hydroxybenzoyl), 2',3',6'-tri-Ac: see *Gelidoside, G-00184*

6'-O-β-D-Xylopyranoside: ***Chironioside***

$C_{21}H_{30}O_{16}$ M 538.458

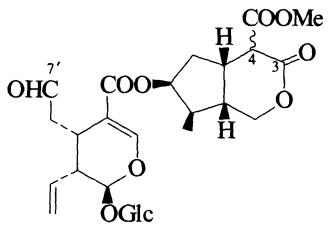
Constit. of *Chironia krebsii*. Amorph. powder. Mp 128°. $[\alpha]_D^{24}$ −107° (c, 0.3 in MeOH).

Koch, M. *et al*, *Bull. Soc. Chim. Fr.*, 1964, 403 (*pmr*)
Inouye, H. *et al*, *Tetrahedron Lett.*, 1968, 4429 (*struct*)
Inouye, H. *et al*, *Chem. Pharm. Bull.*, 1970, **18**, 1856, 2043 (*isol, biosynth*)
Inoye, H. *et al*, *Tetrahedron*, 1971, **27**, 1951 (*Amaroswerin*)
Jewers, K. *et al*, *Phytochemistry*, 1975, **14**, 297 (*Acetylramosin C*)
Mpondo, E.M. *et al*, *Planta Med.*, 1990, **56**, 334 (*6'-O-Glucosylswertiamarin*)
Wolfender, J.-L. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 682 (*Chironioside*)

Sylvestroside IV S-10137

Updated Entry replacing S-01602

[71431-25-9]



$C_{27}H_{36}O_{14}$ M 584.573

Constit. of *Dipsacus sylvestris*. Foam. $[\alpha]_D^{20}$ −57° (c, 0.4 in MeOH).

Tetra-Ac: Cryst. (EtOH). Mp 137-139°. $[\alpha]_D^{22}$ −60° (c, 0.4 in $CHCl_3$).

7'-Alcohol: ***Laciniatoside IV***

$C_{27}H_{38}O_{14}$ M 586.589

Isol. from *D. laciniatus*. $[\alpha]_D^{26}$ −101° (c, 0.43 in MeOH). Assigned 4β-config.

3ξ-Alcohol (lactol): ***Laciniatoside I***

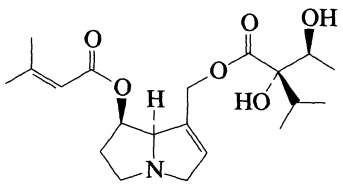
$C_{27}H_{38}O_{14}$ M 586.589

Constit. of *D. laciniatus*. $[\alpha]_D^{24}$ −53° (c, 1.4 in MeOH).

Jensen, S.R. *et al*, *Phytochemistry*, 1979, **18**, 273.
Kocsis, A. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 1486 (*Laciniatosides*)

Symviridine S-10138

[145774-76-1]



$C_{20}H_{31}NO_6$ M 381.468

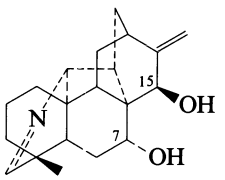
Alkaloid from roots of *Symphytum officinale, S. asperum* and *S.* x *uplandicum* (Boraginaceae). Gum. $[\alpha]_D$ −8° (c, 0.1 in EtOH).

Roeder, E. *et al*, *Phytochemistry*, 1992, **31**, 4041 (*isol, ir, pmr, cmr, ms, struct*)

T

Talassamine T-10001

[142861-01-6]



$C_{20}H_{27}NO_2$ M 313.439

Minor alkaloid from epigeal parts of *Aconitum talassicum* (Ranunculaceae). Cryst. (Me_2CO). Mp 208-210°.

O^7-*Ac:* [142861-10-7]. ***Talassimine***

$C_{22}H_{29}NO_3$ M 355.476

Minor alkaloid from epigeal parts of *A. talassicum* (Ranunculaceae). Cryst. (Et_2O). Mp 242-245°.

O^{15}-*Ac:* [142861-11-8]. ***Talassimidine***

$C_{22}H_{29}NO_3$ M 355.476

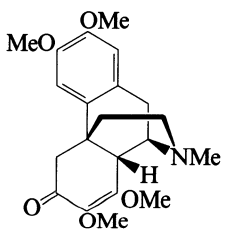
Minor alkaloid from epigeal parts of *A. talassicum* (Ranunculaceae). Cryst. (Me_2CO). Mp 263-265°.

Nishanov, A.A. *et al*, *Khim. Prir. Soedin.*, 1991, 93; *Chem. Nat. Compd.* (*Engl. Transl.*), 82 (*isol, ir, pmr, ms, cryst struct*)

Tannagine T-10002

Updated Entry replacing T-00069

[123750-34-5]



Relative configuration

$C_{21}H_{27}NO_5$ M 373.448

This struct. was originally assigned to Isostephodeline, I-00817. Alkaloid from aerial parts of *Stephania zippeliana* (Menispermaceae). $[\alpha]_D$ +40° (c, 0.80 in $CHCl_3$).

14-Epimer: [56596-12-4]. ***Stephodeline***

$C_{21}H_{27}NO_5$ M 373.448

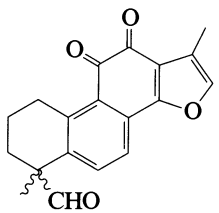
Alkaloid from *S. delavayi.* and *S. zippeliana* (Menispermaceae). $[\alpha]_D$ +20° (c, 0.6 in $CHCl_3$).

Perel'son, M.E. *et al*, *Khim. Prir. Soedin.*, 1975, **11**, 188; *Chem. Nat. Compd.* (*Engl. Transl.*), 197 (*Stephodeline*)

Charles, B. *et al*, *Can. J. Chem.*, 1989, **67**, 1257 (*isol, uv, ir, pmr, cmr, ms, struct*)

Tanshinonal T-10003

[146362-71-2]

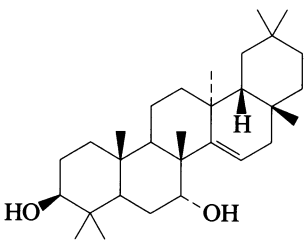


$C_{19}H_{16}O_4$ M 308.333

Constit. of *Salvia miltiorrhiza.* Red needles. Mp 230-233°. $[\alpha]_D^{23}$ −118.5°.

Okamura, N. *et al*, *Planta Med.*, 1992, **58**, 571 (*isol*)

14-Taraxerene-3,7-diol T-10004



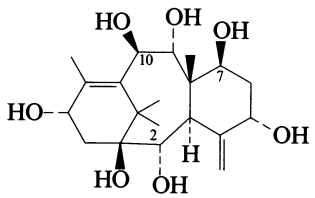
$C_{30}H_{50}O_2$ M 442.724

(3β,7α)-form [145631-53-4]

Constit. of *Bosistoa brassii.* Needles (EtOAc/MeOH). Mp 275-279°. $[\alpha]_D$ −14° (c, 0.14 in $CHCl_3$).

Parsons, I.C. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 46 (*isol, pmr, cmr*)

4(20),11-Taxadiene-1,2,5,7,9,10,13-heptol T-10005



$C_{20}H_{32}O_7$ M 384.469

(1β,2α,5α,7β,9α,10β,13α)-form

7-Benzoyl, 2,9,10-tri-Ac: [147703-44-4]. ***2α-Acetoxybrevifoliol***

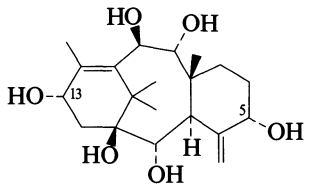
$C_{33}H_{42}O_{11}$ M 614.688

Constit. of *Taxus baccata.* Needles (Me_2CO/Et_2O). Mp 198°. $[\alpha]_D^{25}$ −24° (c, 0.83 in CH_2Cl_2).

Appendino, G. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 514 (*isol, pmr, cmr*)

4(20),11-Taxadiene-1,2,5,9,10,13-hexol T-10006

Updated Entry replacing P-00716



$C_{20}H_{32}O_6$ M 368.469

(1β,2α,5α,9α,10β,13α)-form

5-Cinnamoyl, 9,13-di-Ac:
$C_{33}H_{42}O_9$ M 582.689
Constit. of *Taxus* x. *media.*

5-Cinnamoyl, 10,13-di-Ac:
$C_{33}H_{42}O_9$ M 582.689
Constit. of *T.* x. *media.*

13-Ketone: [5308-89-4]. *1,2,5,9,10-Pentahydroxy-4(20),11-taxadien-13-one. Taxicin I*

13-Ketone, 5-cinnamoyl: [11034-45-0].
$C_{29}H_{36}O_7$ M 496.599
Degradn. prod. of Taxine. Cryst. Mp 233-234°. $[\alpha]_D^{21}$ +285°.

13-Ketone, 5-cinnamoyl, 9-Ac:
$C_{31}H_{38}O_8$ M 538.636
Constit. of *Taxus baccata.* Powder. Mp 163-165°. $[\alpha]_D^{25}$ +186° (c, 0.63 in $CHCl_3$).

13-Ketone, 5-cinnamoyl, 10-Ac:
$C_{31}H_{38}O_8$ M 538.636
Constit. of *T. baccata.* Powder. Mp 145°. $[\alpha]_D^{25}$ +185° (c, 0.61 in $CHCl_3$).

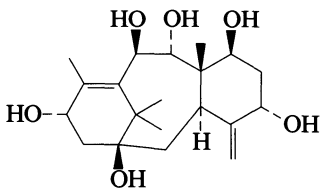
5-(3-Dimethylamino-3-phenylpropanoyl), 10-Ac: see *Taxine B, T-00151*

13-Ketone, 5-cinnamoyl, 2,9-di-Ac:
$C_{33}H_{40}O_9$ M 580.674
Constit. of *T.* x. *media.*

13-Ketone, 5-cinnamoyl, 2,10-di-Ac:
$C_{33}H_{40}O_9$ M 580.674
Constit. of *T.* x. *media.*

Harrison, J.W. *et al, J. Chem. Soc. C,* 1966, 1933 (*synth*)
Eyre, D.H. *et al, J. Chem. Soc. C,* 1967, 452 (*struct*)
Appendino, G. *et al, Phytochemistry,* 1992, **31**, 4253 (*pmr, cmr*)
Chmurny, G.N. *et al, Phytochemistry,* 1993, **34**, 477 (*isol, pmr, cmr*)

4(20),11-Taxadiene-1,5,7,9,10,13-hexol T-10007



$C_{20}H_{32}O_6$ M 368.469

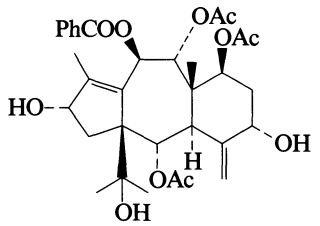
(1β,5α,7β,9α,10β,13α)-form

10-Benzoyl, 7,9-di-Ac:
$C_{31}H_{40}O_9$ M 556.652
Constit.of *Taxus brevifolia.* Cryst. (Me_2CO/hexane). Mp 200-205°. $[\alpha]_D$ −28° (c, 1.02 in $CHCl_3$).

Chu, A. *et al, Phytochemistry,* 1993, **34**, 269 (*isol, pmr, cmr*)

Taxchinin A T-10008

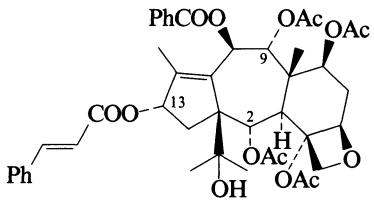
[146621-74-1]



$C_{33}H_{42}O_{11}$ M 614.688
Constit. of *Taxus chinensis.* Plates (Et_2O). Mp 208-210°. $[\alpha]_D^{19}$ −34.62° (c, 0.875 in CH_2Cl_2).

Fuji, K. *et al, J. Nat. Prod.* (*Lloydia*), 1993, **56**, 1520 (*isol, pmr, cmr, cryst struct*)

Taxchinin B T-10009

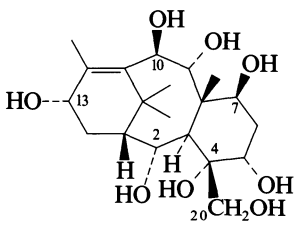


$C_{44}H_{50}O_{14}$ M 802.871
Constit. of *Taxus chinensis.* Needles (MeOH). Mp 176-178°. $[\alpha]_D^{20}$ +7.4° (c, 0.405 in CH_2Cl_2).

2,9,13-Trisdeacyl, 2,9-dibenzoyl, 13-Ac: ***Taxchinin C***
$C_{47}H_{50}O_{14}$ M 838.904
Constit. of *T. chinensis.* Needles (Me_2CO/hexane). Mp 212-214°. $[\alpha]_D^{20}$ −45.6° (c, 3.5 in CH_2Cl_2).

Fuji, K. *et al, J. Nat. Prod.* (*Lloydia*), 1993, **56**, 1520 (*isol, pmr, cmr*)

11-Taxen-2,4,5,7,9,10,13,20-octol T-10010



$C_{20}H_{34}O_8$ M 402.484

(2α,4α,5α,7β,9α,10β,13α)-form

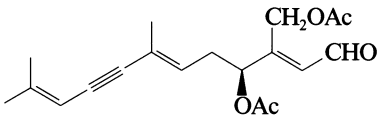
2-Benzoyl, 5,7,9,10,13-penta-Ac: [149155-52-2].
$C_{37}H_{48}O_{14}$ M 716.778
Constit. of *Taxus mairei.* Cryst. (Me_2CO). Mp 114-115°. $[\alpha]_D^{20}$ −30° (c, 0.1 in $CHCl_3$).

2-Benzoyl, 7,9,10,13,20-penta-Ac: [149155-53-3].
$C_{37}H_{48}O_{14}$ M 716.778
Constit. of *T. mairei.* Cryst. (Me_2CO). Mp 122-123°. $[\alpha]_D^{20}$ −37° (c, 0.1 in $CHCl_3$).

Liang, J. *et al, J. Nat. Prod.* (*Lloydia*), 1993, **56**, 594 (*isol, pmr, cmr*)

Taxifolial A T-10011

[142474-75-7]

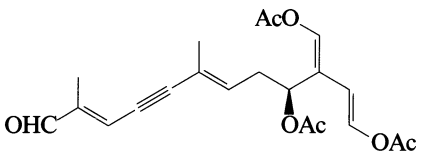


$C_{19}H_{24}O_5$ M 332.396
Constit. of *Caulerpa taxifolia*. Oil. $[\alpha]_D^{20}$ −3.9° (c, 0.47 in EtOH).

Guerriero, A. *et al*, *Helv. Chim. Acta*, 1992, **75**, 689 (*isol, pmr, cmr*)

Taxifolial B T-10012

[142474-76-8]

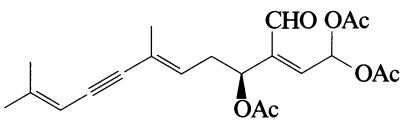


$C_{21}H_{24}O_7$ M 388.416
Constit. of *Caulerpa taxifolia*. Oil. $[\alpha]_D^{20}$ 0° (c, 0.17 in EtOH).

Guerriero, A. *et al*, *Helv. Chim. Acta*, 1992, **75**, 689 (*isol, pmr, cmr*)

Taxifolial C T-10013

[142474-78-0]

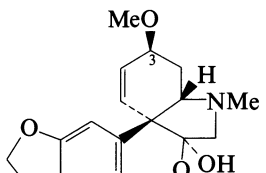


$C_{21}H_{26}O_7$ M 390.432
Constit. of *Caulerpa taxifolia*. Oil. $[\alpha]_D^{20}$ 0° (c, 0.04 in EtOH).

Guerriero, A. *et al*, *Helv. Chim. Acta*, 1992, **75**, 689 (*isol, pmr, cmr*)

Tazettine T-10014

Updated Entry replacing T-00155
Ungernine. Sekisanine. Sekisanoline



Absolute configuration

$C_{18}H_{21}NO_5$ M 331.368

(+)-***form*** [507-79-9]
Isol. from *Narcissus tazetta* and a very large number of spp. in the Amaryllidaceae. Weak hypotensive agent. Mp 210-211°. $[\alpha]_D^{16}$ +150° ($CHCl_3$). Has been shown to be an artifact produced by base-catalysed rearr. of Pretazettine, P-01819 in two cases studied, and is probably an artifact in all cases.

▷ LD_{50} (dog, iv) 71 mg/kg.

O-Ac: Mp 125-126.5°.
Picrate: Mp 205-208°.
3-Epimer: see *Criwelline, C-02010*
1,2-Dihydro, Me ether: [73276-40-1]. ***Ungvedine***

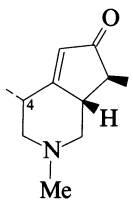
$C_{19}H_{25}NO_5$ M 347.410
Alkaloid from *Ungernia vvedenskyi*. Mp 148-150°. $[\alpha]_D$ +12.5° (c, 0.528 in $CHCl_3$).

(±)-***form*** [28405-99-4]
Synthetic. Cryst. (Me_2CO). Mp 175-176°.

Ikeda, T. *et al*, *J. Chem. Soc.*, 1956, 4749 (*struct*)
Duffield, A.M. *et al*, *J. Am. Chem. Soc.*, 1965, **87**, 4902 (*ms*)
Haugwitz, R.D. *et al*, *J. Chem. Soc.*, 1965, 2001 (*pmr*)
Highet, R.J. *et al*, *Tetrahedron Lett.*, 1966, 4099 (*config*)
Sato, T. *et al*, *J. Chem. Soc. B*, 1971, 1070 (*cryst struct*)
Hendrickson, J.B. *et al*, *J. Am. Chem. Soc.*, 1974, **96**, 7781 (*synth*)
Kadyrov, K.A. *et al*, *Khim. Prir. Soedin.*, 1979, **15**, 585; *Chem. Nat. Compd.* (*Engl. Transl.*), 513 (*Ungvedine*)
Danishefsky, S. *et al*, *J. Am. Chem. Soc.*, 1982, **104**, 7591 (*synth, ir, pmr*)
Suffness, M. *et al*, *Alkaloids* (*N.Y.*), 1985, **25**, 203 (*occur*)

Tecomanine T-10015

Updated Entry replacing T-00163
Tecomine†
[6878-83-7]



Absolute configuration

$C_{11}H_{17}NO$ M 179.261
Major alkaloid from *Calopogonium stans* and *C. fulva* (Leguminosae). Hypoglycaemic agent. *Tecoma* extracts are used in Mexico for control of diabetes. $Bp_{0.1}$ 125°. $[\alpha]_D^{24}$ −175° (c, 1.17 in $CHCl_3$).

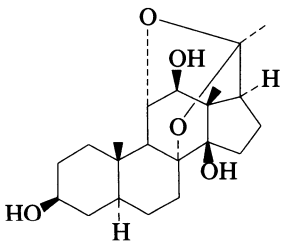
▷ WX8575000.

Picrate: Mp 179.5-180.5°.
2,4-Dinitrophenylhydrazone: Mp 260°.
4-Hydroxy: ***4-Hydroxytecomanine***
$C_{11}H_{17}NO_2$ M 195.261
Alkaloid from fruits of *Tecoma stans* (Bignoniaceae). Oil.

Dickinson, E.M. *et al*, *Tetrahedron*, 1969, **25**, 1523 (*ir, uv, pmr, isol, struct*)
Jones, G. *et al*, *J. Chem. Soc., Chem. Commun.*, 1971, 994 (*cryst struct*)
Berg, W. *et al*, *Pharmazie*, 1977, **32**, 41 (*ms*)
Imanishi, T. *et al*, *Chem. Pharm. Bull.*, 1983, **31**, 1243 (*synth*)
Lins, A.P. *et al*, *Phytochemistry*, 1993, **34**, 876 (*4-Hydroxytecomanine*)

Tenacigenin A T-10016

Updated Entry replacing T-00187
8β,20R:11β,20-Diepoxy-5α-pregnane-3β,12β,14β-triol
[75903-04-7]



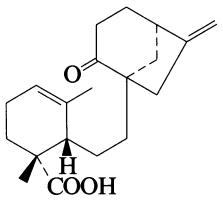
$C_{21}H_{32}O_5$ M 364.481
Constit. of *Marsdenia tenacissima*.
12-Ac:

$C_{23}H_{34}O_6$ M 406.518
Constit. of *M. tenacisima*. Amorph. powder. Mp 162-165°. $[\alpha]_D$ +27.4° (c, 0.4 in $CHCl_3$).

Zhou, J. *et al*, *Zhiwu Xuebao*, 1980, **22**, 67; *CA*, **94**, 4160r.
Luo, S.-Q. *et al*, *Magn. Reson. Chem.*, 1993, **31**, 215 (*pmr, cmr*)

Terminalic acid T-10017

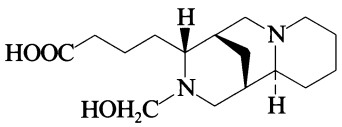
[85527-46-4]



$C_{20}H_{28}O_3$ M 316.439
Constit. of *Ichthyothere terminalis*. $[\alpha]_D^{24}$ +25° (c, 0.7 in $CHCl_3$) (as Me ester).

Bohlmann, F. *et al*, *Phytochemistry*, 1982, **21**, 2317 (*isol, pmr*)

Termisine T-10018

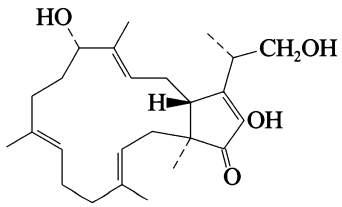


$C_{16}H_{28}N_2O_3$ M 296.409
(±)-***form***
Alkaloid from seeds of *Lupinus termis* (Leguminosae). Fine yellow cryst. Mp 98-99°. Zwitterionic.

Mohamed, M.H. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 1999 (*isol, ir, pmr, cmr, ms, struct*)

Terpestacin T-10019

[146436-22-8]

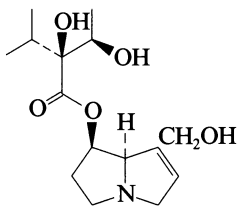


$C_{25}H_{38}O_4$ M 402.573
Metab. of an *Arthrinium* sp. Cryst. (MeOH). Mp 172-173°. $[\alpha]_D^{22}$ +26° (c, 0.5 in $CHCl_3$).

Iimura, S. *et al*, *Tetrahedron Lett.*, 1993, **34**, 493 (*isol, pmr, cmr, cryst struct, abs config, biosynth*)

Tessellatine T-10020

[135683-58-8]



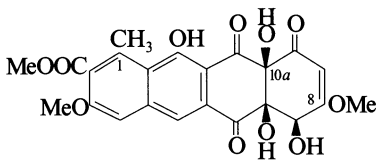
$C_{15}H_{25}NO_5$ M 299.366

Alkaloid from *Amsinckia douglasiana* and *A. tesellata* var. *gloriosa* (Boraginaceae). Oil. $[\alpha]_D^{25}$ +2.4° (c, 0.45 in EtOH).

Kelley, R.B. *et al*, *Phytochemistry*, 1992, **31**, 2513 (*isol, pmr, cmr, ms, struct*)

Tetracenomycin C T-10021

Updated Entry replacing T-00261
H 881I. Antibiotic H 881I
[71135-22-3]



$C_{23}H_{20}O_{11}$ M 472.404
Anthraquinone antibiotic. Isol. from *Streptomyces glaucescens*. Active against gram-positive bacteria. Also shows antiviral props. Pale-yellow needles. Mp 215° dec. $[\alpha]_D^{24}$ +22° (c, 1.0 in dioxan).
Di-Ac: Mp 175°.
Tri-Ac: Mp 183°.
Tetra-Ac: Mp 287°.
O^{10a}-*Me:* [121245-07-6]. ***Tetracenomycin X***
$C_{24}H_{22}O_{11}$ M 486.431
Prod. by *Nocardia mediterranei*. Mp 156° dec. (synthetic).
3-O-De-Me: ***3-O-Demethyltetracenomycin C***
$C_{22}H_{18}O_{11}$ M 458.378
From *S. glaucescens*. Mp 178-181°.

Weber, W. *et al*, *Arch. Microbiol.*, 1979, **121**, 111 (*synth, props*)
Lazar, G. *et al*, *J. Antibiot.*, 1981, **34**, 1067 (*isol, deriv*)
Weber, W. *et al*, *CA*, 1982, **97**, 35719 (*props*)
Alarcon, B. *et al*, *Antiviral Res.*, 1984, **4**, 231 (*props*)
Ye, Y. *et al*, *Kangshengsu*, 1984, **9**, 28; *CA*, **101**, 35591 (*isol*)
Motamedi, H. *et al*, *J. Bacteriol.*, 1986, **167**, 575, 581 (*isol, struct*)
Anderson, M.G. *et al*, *J. Antibiot.*, 1989, **42**, 640 (*Tetracenomycin X*)
Rohr, J. *et al*, *J. Antibiot.*, 1990, **43**, 1169 (*Tetracenomycin X*)
Egert, E. *et al*, *J. Antibiot.*, 1992, **45**, 1190 (*cryst struct*)

13-Tetradecene-1,3-diyne-6,7-diol T-10022

Panaxyne

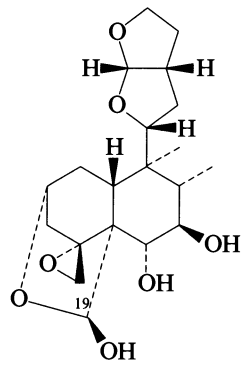
[122855-49-6]

$H_2C{=}CH(CH_2)_5CH(OH)CH(OH)CH_2C{\equiv}CC{\equiv}CH$

$C_{14}H_{20}O_2$ M 220.311
Constit. of the roots of *Panax ginseng*. Cytotoxic.

Kim, S.I. *et al*, *Saengyak Hakhoechi*, 1989, **20**, 71; *CA*, **111**, 224891 (*isol*)

2,19:4,18:11,16:15,16-Tetraepoxy-6,7,19-clerodanetriol T-10023



$C_{20}H_{30}O_7$ M 382.453

(ent-2β,4β,6β,7α,11R,16R,19S)-form

7,19-Ditigloyl, 6-Ac: [149639-77-0]. ***Scutegalin A***

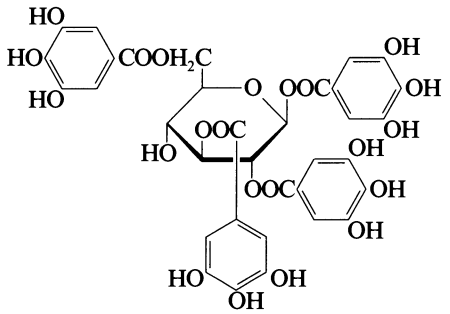
$C_{32}H_{44}O_{10}$ M 588.694

Constit. of *Scutellaria galericulata*. Amorph. solid. Mp 105-110°. $[\alpha]_D^{23}$ +17.0° (c, 0.305 in $CHCl_3$).

Rodríguez, B. *et al*, *Phytochemistry*, 1993, **33**, 309 (*isol, pmr, cmr*)

1,2,3,6-Tetragalloylglucose T-10024

Updated Entry replacing T-00385



$C_{34}H_{28}O_{22}$ M 788.582

β-D-Pyranose-form [79886-50-3]

Isol. from *Fuchsia* spp. *Quercus infectoria, Ceratonia siliqua* and *Epilobium angustifolium*. Fine needles (H_2O). Mp >250°. $[\alpha]_D^{20}$ +41° (c, 0.8 in MeOH).

O-(*3,4,5-Trihydroxybenzoyl*)(*1*): [99907-48-9]. *3*-O-*Digalloyl-1,2,6-tri*-O-*galloyl-β-D-glucopyranose*

$C_{41}H_{32}O_{26}$ M 940.688

Isol. from green alga (*Spirogyra* sp.). Amorph. powder. $[\alpha]_D^{31}$ +60.0° (c, 0.53 in acetone). Contains a digalloyl (galloylgalloyl) residue at C-3.

O-(*3,4,5-Trihydroxybenzoyl*)(*2*): [86709-52-6]. *6*-O-*Digalloyl-1,2,3-tri*-O-*galloyl-β-D-glucopyranose*

$C_{41}H_{32}O_{26}$ M 940.688

Gallotannin from the twig gall of *Quercus infectoria*. Light brown amorph. powder. $[\alpha]_D^{20}$ +44.1° (c, 0.54 in Me_2CO). Contains a Digalloyl (galloylgalloyl) residue at C-6.

O-*Bis*-(*3,4,5-Trihydroxybenzoyl*): *2,6-Bis*-O-*digalloyl-1,3-di*-O-*galloyl-β-D-glucopyranose*

$C_{48}H_{36}O_{30}$ M 1092.794

Gallotannin const. of the twig gall *Q. infectoria*. Light brown amorph. powder. $[\alpha]_D^{20}$ +39.4° (c, 0.33 in Me_2CO). Contains galloylgalloyl residues at C-2 and C-6.

O-(*Galloylgalloyl*): *6*-O-*Trigalloyl-1,2,3-tri*-O-*galloyl-β-D-glucopyranose*

$C_{48}H_{36}O_{30}$ M 1092.794

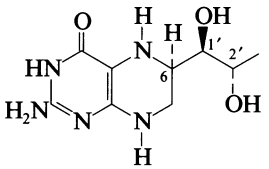
Isol. from the twig gall of *Q. infectoria*. Light brown amorph. powder. $[\alpha]_D^{20}$ +43.4° (c, 0.35 in Me_2CO). Contains a trigalloyl (galloylgalloylgalloyl) residue at C-6.

Haddock, E.A. *et al*, *J. Chem. Soc., Perkin Trans. 1*, 1982, 2515 (*isol, struct, pmr, cmr*)
Nishizawa, M. *et al*, *J. Chem. Soc., Perkin Trans. 1*, 1983, 961 (*derivs*)
Nishizawa, M. *et al*, *Phytochemistry*, 1985, **24**, 2411 (*deriv*)

5,6,7,8-Tetrahydrobiopterin T-10025

2-Amino-6-(1,2-dihydroxypropyl)-5,6,7,8-tetrahydro-4(1H)-pteridinone, 9CI

[17528-72-2]



$C_9H_{15}N_5O_3$ M 241.249

(1'R,2'S,6R)-form [99630-29-2]

Cofactor for phenylalanine, tyrosine and tryptophan hydroxylases which influences the biosynth. of neurotransmitting catecholamines.

B,2HCl: Needles (HCl/EtOH). Mp 245-246° dec. $[\alpha]_D^{25}$ −6.81° (c, 0.67 in 0.1*M* HCl). Other stereoisomers known.

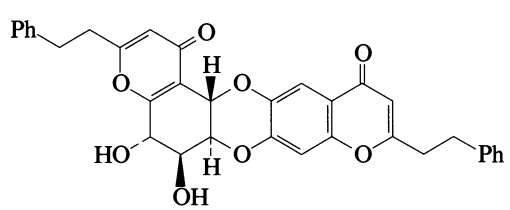
[27070-47-9, 62961-57-3, 62989-33-7, 69056-38-8, 69056-39-9, 71031-45-3, 71074-53-8, 83023-72-7, 83709-59-5, 90366-07-7, 99630-30-5, 105119-62-8, 105119-63-9]

Bretthauer, R., *Z. Naturforsch., B*, 1972, **27**, 580 (*isol, tlc*)
Ayling, J.E. *et al*, *Biochemistry*, 1973, **12**, 2045 (*biochem*)
Williams, V.P. *et al*, *J. Heterocycl. Chem.*, 1973, **10**, 827 (*ms*)
Schircks, B. *et al*, *Helv. Chim. Acta*, 1977, **60**, 211; 1978, **61**, 2731 (*synth, pmr, cmr, cd*)
Bailey, S.W. *et al*, *J. Biol. Chem.*, 1978, **253**, 1598 (*resoln, uv*)
Furrer, H.J. *et al*, *Helv. Chim. Acta*, 1979, **62**, 2577 (*synth, pmr, cmr*)
Armarego, W.L.F. *et al*, *Aust. J. Chem.*, 1982, **35**, 785; 1984, **37**, 355 (*synth, pmr, cmr, abs config*)
Whiteley, J.M. *et al*, *Anal. Biochem.*, 1984, **137**, 394 (*synth*)
Matsuura, S. *et al*, *Heterocycles*, 1985, **23**, 3115 (*synth, uv, pmr, cmr, ms*)
Matsuura, S. *et al*, *J. Biochem.* (*Tokyo*), 1985, **98**, 1341; *CA*, **104**, 30828 (*abs config*)
Smith, G.K. *et al*, *J. Biol. Chem.*, 1986, **261**, 2725 (*biosynth*)

5,6,6*a*,14*a*-Tetrahydro-5,6-dihydroxy-3,10-bis(2-phenylethyl)-1*H*,12*H*-[1]benzopyrano[7,6-*b*]pyrano[3,2-*f*][1,4]benzodioxin-1,12-dione, 9CI T-10026

AH_{21}

[138822-70-5]



$C_{34}H_{28}O_8$ M 564.590

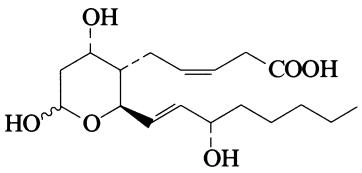
Constit. of agalwood (Jinko). Powder. Mp 123-125°. $[\alpha]_D$ −75.2° (c, 1.09 in MeOH).

Konishi, T. *et al*, *Chem. Pharm. Bull.*, 1991, **39**, 1869 (*isol, pmr, cmr, struct*)

5-[Tetrahydro-4,6-dihydroxy-2-(3-hydroxy-1-octenyl)-2*H*-pyran-3-yl]-3-pentenoic acid T-10027

Dinorthromboxane B_2

[63250-09-9]



$C_{18}H_{30}O_6$ M 342.431

Major human urinary thromboxane metab.

[63635-82-5, 103190-15-4]

Robers, L.J. *et al*, *J. Biol. Chem.*, 1977, **252**, 7415; 1981, **256**, 8384 (*biosynth*)

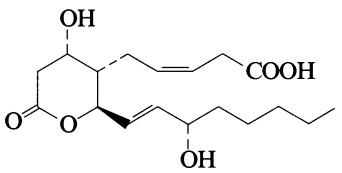
Nelson, N.A. *et al*, *Prostaglandins*, 1978, **16**, 85 (*synth, Me ester*)

Patrignani, P. *et al*, *Biochim. Biophys. Acta*, 1989, **992**, 71 (*biosynth*)

5-[Tetrahydro-4-hydroxy-2-(3-hydroxy-1-octenyl)-6-oxo-2*H*-pyran-3-yl]-3-pentenoic acid T-10028

2,3-Dinor-11-dehydrothromboxane B_2

[79250-60-5]



$C_{18}H_{28}O_6$ M 340.416

Urinary metab. of thromboxane B_2.

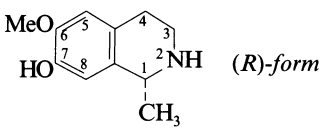
Roberts, L.J. *et al*, *J. Biol. Chem.*, 1981, **256**, 8384 (*biosynth*)

1,2,3,4-Tetrahydro-7-hydroxy-6-methoxy-1-methylisoquinoline T-10029

Updated Entry replacing T-00463

1,2,3,4-Tetrahydro-6-methoxy-1-methyl-7-isoquinolinol, 9CI. ***Isosalsoline***

[4593-97-9]



(*R*)-*form*

$C_{11}H_{15}NO_2$ M 193.245

(R)-form

B,HCl: Synthetic. Mp 241-242°. $[\alpha]_D$ +24.7° (c, 1 in MeOH).

N-*Me:* [35048-35-2]. **N-*Methylisosalsoline.*** *1,2,3,4-Tetrahydro-6-methoxy-1,2-dimethyl-7-isoquinolinol, 9CI. 1,2,3,4-Tetrahydro-7-hydroxy-6-methoxy-1,2-dimethylisoquinoline. 1-Methylcorypalline*

$C_{12}H_{17}NO_2$ M 207.272

Minor alkaloid from tubers of *Corydalis ambigua* (Fumariaceae). Also isol. from *Haloxylon articulatum* (Chenopodiaceae). Mp 156-158°. $[\alpha]_D$ +33.5° (c, 0.23 in $CHCl_3$), $[\alpha]_D$ +1° (c, 0.23 in EtOH).

(S)-form

B,HCl: Synthetic. Mp 241-242°. $[\alpha]_D$ −26.0° (c, 1 in MeOH).

N-*Me:* ***(−)-1-Methylcorypalline***

$C_{12}H_{17}NO_2$ M 207.272

Alkaloid from aerial parts of *Arthrocnemum glaucum* (Chenopodiaceae). Cubes (MeOH). Mp 175-178°. $[\alpha]_D$ −32° (c, 0.79 in MeOH).

(±)-form

N-*Me:* [19641-12-4].

Synthetic. Mp 148-150°.

N-*Me; B,HCl:* Mp 190-192°.

(ξ)-form

Alkaloid from *Pachycereus pecten-aboriginum* (Cactaceae). Spec. rotn. and stereochem. unspecified.

Strukov, I.T. *et al*, *Zh. Obshch. Khim.*, 1959, **29**, 3831; 1961, **31**, 2709; *CA*, **54**, 19676a; **56**, 11567f (*synth, deriv*)

Carling, C. *et al*, *Acta Pharm. Suec.*, 1970, **7**, 285; *CA*, **73**, 63154f (*isol, deriv*)

Naruto, S. *et al*, *Phytochemistry*, 1973, **12**, 3008 (*occur, deriv*)

Teitel, S. *et al*, *J. Med. Chem.*, 1974, **17**, 134 (*synth, uv, ord, cd, pmr*)

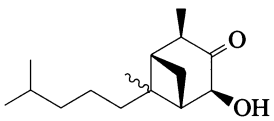
Strombom, J. *et al*, *Acta Pharm. Suec.*, 1978, **15**, 127 (*isol*)

Strombom, J. *et al*, *J. Chromatogr.*, 1978, **147**, 513 (*hplc*)

Khalil, A.T. *et al*, *Phytochemistry*, 1992, **31**, 1023 (*Methylcorypalline*)

1,2,12,13-Tetrahydro-3-hydroxy-2-oxobergamotene T-10030

[145075-57-6]



$C_{15}H_{26}O_2$ M 238.369

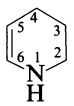
Constit. of *Dracocephalum nutans*. Cryst. Mp 115°. $[\alpha]_D^{25}$ −1.7° (c, 0.02 in MeOH).

Misra, L.N. *et al*, *Planta Med.*, 1992, **58**, 478 (*isol, pmr, cmr*)

1,2,3,4-Tetrahydropyridine T-10031

Δ^2-Piperideine

[37497-65-7]



C_5H_9N M 83.133

Liq. Dimerises on heating.

B,HCl: Mp 230°.

B,HBr: Mp 178°.

Ac: ***1-Acetyl-1,2,3,4-tetrahydropyridine***

$C_7H_{11}NO$ M 125.170

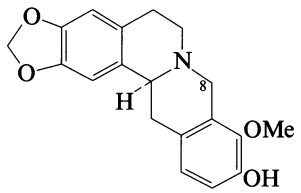
Alkaloid from leaves and twigs of *Dichilus strictus, D. reflexus, D. lebeckioides, D. pilosus* and *D. gracilis* (Leguminosae). Bp 219.5-220.5°.

Paal, C. *et al*, *Ber.*, 1901, **34**, 2757 (*synth*)

Van Wyk, B.-E. *et al*, *Biochem. Syst. Ecol.*, 1988, **16**, 471 (*deriv, isol*)

Tetrahydrothalifendine T-10032

Updated Entry replacing T-00548



Absolute configuration

$C_{19}H_{19}NO_4$ M 325.363

(S)-form

Alkaloid from *Thalictrum fendleri* (Ranunculaceae). Mp 209-211°. $[\alpha]_D$ −175° (MeOH).

Me ether: see *Canadine, C-00207*

8-Oxo: ***8-Oxotetrahydrothalifendine***

$C_{19}H_{17}NO_5$ M 339.347

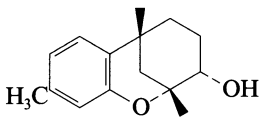
Alkaloid from stems of *Coscinium fenestratum* (Menispermaceae). $[\alpha]_D$ −605° (c, 0.084 in MeOH).

Shamma, M. *et al*, *Tetrahedron*, 1971, **27**, 727 (*uv, pmr, ir, ms, struct*)

Pinho, P.M.M. *et al*, *Phytochemistry*, 1992, **31**, 1403 (*8-Oxotetrahydrothalifendine*)

3,4,5,6-Tetrahydro-2,6,9-trimethyl-2,6-methano-2*H*-1-benzoxocin-3-ol, 9CI T-10033

[145382-79-2]

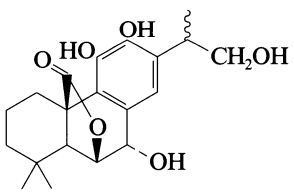


$C_{15}H_{20}O_2$ M 232.322

Constit. of *Laurencia majuscula*. Yellow oil. $[\alpha]_D$ 0° (c, 0.1 in $CHCl_3$).

de Nys, R. *et al*, *Aust. J. Chem.*, 1992, **45**, 1611 (*isol, pmr, cmr*)

7,11,12,16-Tetrahydroxy-8,11,13-abietatrien-20,6-olide T-10034



$C_{20}H_{26}O_6$ M 362.422

(6β,7α,15ξ)-form [150065-57-9] ***16-Hydroxyrosmanol***

Constit. of *Salvia mellifera*. Amorph. solid.

(6β,7β,15ξ)-form [150134-19-3] ***16-Hydroxyepirosmanol***

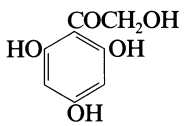
Constit. of *S. mellifera*. Amorph. solid.

Luis, J.G. *et al*, *Phytochemistry*, 1993, **33**, 635 (*isol, pmr, cmr*)

2,2′,4′,6′-Tetrahydroxyacetophenone T-10035

2-Hydroxy-1-(2,4,6-trihydroxyphenyl)ethanone, 9CI. 2,4,6-Trihydroxyphenacyl alcohol

[55313-03-6]



$C_8H_8O_5$ M 184.148

Yellow-white cryst. Mp 226°.

α-Me ether: 2-Methoxy-2′,4′,6′-trihydroxyacetophenone

$C_9H_{10}O_5$ M 198.175

Needles (H_2O). Mp 192°.

Tetra-Me ether: 2,2′,4′,6′-Tetramethoxyacetophenone

$C_{12}H_{16}O_5$ M 240.255

Cryst. (MeOH). Mp 50°.

4′-O-(3,7-Dimethyl-2,6-octadienyl): [142905-41-7]. *4′-(Geranyloxy)-2,2′,6′-trihydroxyacetophenone*

$C_{18}H_{24}O_5$ M 320.385

Isol. from the fruit of *Evodia merrillii*. Cryst. (EtOAc/hexane). Mp 106-108°.

Herzig, J. *et al*, *Ber.*, 1909, **42**, 155.

Perkin, A.G., *J. Chem. Soc.*, 1911, **99**, 1721.

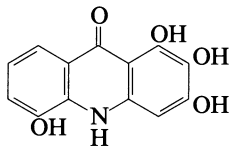
Slater, W.K. *et al*, *J. Chem. Soc.*, 1920, **117**, 309.

Mimter, I. *et al*, *CA*, 1956, **51**, 1915h.

Chou, C.J. *et al*, *J. Nat. Prod.* (*Lloydia*), 1992, **55**, 795 (*isol, deriv*)

1,2,3,5-Tetrahydroxyacridone T-10036

Updated Entry replacing T-00572



$C_{13}H_9NO_5$ M 259.218

2,3,10-O,O,N-Tri-Me: [75821-37-3]. *1,5-Dihydroxy-2,3-dimethoxy-10-methylacridone.* ***5-Hydroxyarborinine***

$C_{16}H_{15}NO_5$ M 301.298

Alkaloid from the stems and leaves of *Glycosmis bilocularis* (Rutaceae). Orange-yellow cryst. (Et_2O/pet. ether). Mp 206-207° (185-187°). Phys. props. differ from those of an alkaloid of the same assigned struct. (Mp 185-7°) isol. from *Atalantia monopylla*.

2,3,10-O,O,N-Tri-Me, 5-OAc: Yellow prisms (Me_2CO/hexane). Mp 128-129°.

2,3,10-O,O,N-Tri-Me, 1,5-di-O-Ac: Pale-yellow prisms (Me_2CO/hexane). Mp 192-193°.

2,3,5,10-O,O,O,N-Tetra-Me: 1-Hydroxy-2,3,5-trimethoxy-10-methylacridone. ***5-Methoxyarborinine***

$C_{17}H_{17}NO_5$ M 315.325

Alkaloid from stem bark of *Luvunga angustifolia* (Rutaceae). Yellow needles (EtOH). Mp 168-169° (135-136°).

O,O,O,O,N-*Penta-Me: 1,2,3,5-Tetramethoxy-10-methylacridone*

Yellow needles (EtOH). Mp 97-98°.

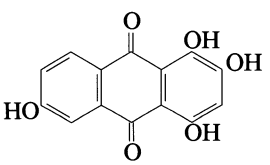
Bowen, I.H. *et al*, *Phytochemistry*, 1978, **17**, 2125; 1980, **19**, 1566 (*isol, uv, ir, pmr, ms, synth*)

Shah, J.S. *et al*, *Indian J. Chem., Sect. B*, 1982, **21**, 16 (*isol, uv, ir, pmr, ms, struct*)

Wijeratne, E.M.K. *et al*, *J. Nat. Prod.* (*Lloydia*), 1992, **55**, 1261 (*5-Methoxyarborinine*)

1,2,4,6-Tetrahydroxyanthraquinone T-10037

[75313-07-4]



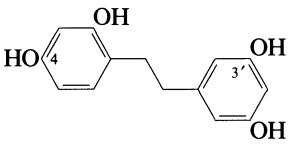
$C_{14}H_8O_6$ M 272.214

2,4-Di-Me ether: [142878-33-9]. *1,6-Dihydroxy-2,4-dimethoxyanthraquinone*
$C_{16}H_{12}O_6$ M 300.267
Constit.of the roots of *Damnacanthus indicus* and *Morinda officinalis.*

Yang, Y.J. *et al*, *Yaoxue Xuebao*, 1992, **27**, 358; *CA*, **117**, 86794.

2,3′,4,5′-Tetrahydroxybibenzyl T-10038

4-[2-(3,5-Dihydroxyphenyl)ethyl]-1,3-benzenediol, 9CI. 4,5′-Ethylenediresorcinol, 8CI. 1-(2,4-Dihydroxyphenyl)-2-(3,5-dihydroxyphenyl)ethane. ***Dihydrooxyresveratrol***
[24082-42-6]



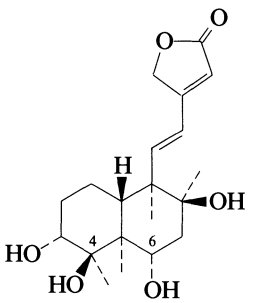
$C_{14}H_{14}O_4$ M 246.262
Isol. from *Erythrina variegata* and *Morus* spp. Cryst. (H_2O). Mp 164-165° (160°).

Tetra-Me ether: [24131-34-8]. *2,3′,4,5′-Tetramethoxybibenzyl*
$C_{18}H_{22}O_4$ M 302.369
Cryst. (hexane). Mp 57-58°.

Mongolsuk, S. *et al*, *J. Chem. Soc.*, 1957, 2231 (*synth*)
Reimann, E., *Chem. Ber.*, 1969, **102**, 2881 (*synth*)
Deshpande, V.H. *et al*, *Indian J. Chem.*, 1975, **13**, 453 (*isol*)
Deshpande, V.H. *et al*, *Indian J. Chem., Sect. B*, 1977, **15**, 205 (*isol*)

3,4,6,8-Tetrahydroxy-11,13-clerodadien-15,16-olide T-10039

Updated Entry replacing T-00629



$C_{20}H_{30}O_6$ M 366.453
(ent-3β,4α,6β,8α,11E)-form

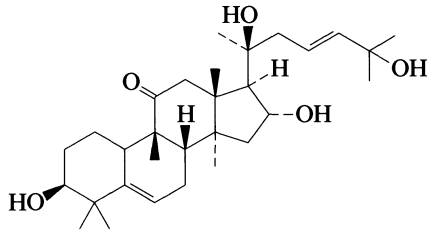
O^6*-Benzoyl:* [112609-09-3]. ***Scuterivulactone D.*** *Scutellone D*
$C_{27}H_{34}O_7$ M 470.561
Constit of crude Chinese drug "Ban Zhi Lian" (*Scutellaria rivularis*). Needles (Me_2CO). Mp 260-262°. $[\alpha]_D^{26}$ +57.5° (MeOH).

4-Me ether, 6-benzoyl: [121924-21-8]. ***Scutellone I***
$C_{28}H_{36}O_7$ M 484.588
Constit. of *S. rivularis*. Needles (Me_2CO). Mp 265-266°. $[\alpha]_D$ +8.7° (c, 0.4 in $CHCl_3$).

4-Et ether, 6-benzoyl: [121904-03-8]. ***Scutellone H***
$C_{29}H_{38}O_7$ M 498.615
Constit. of *S. rivularis*. Needles (Me_2CO). Mp 244-245°. $[\alpha]_D^{23}$ +11.1° (c, 0.3 in $CHCl_3$).

Kizu, H. *et al*, *Chem. Pharm. Bull.*, 1987, **35**, 1656.
Lin, Y.-L. *et al*, *Chem. Pharm. Bull.*, 1988, **36**, 2642; 1989, **37**, 582 (*Scutellones, cryst struct*)

3,16,20,25-Tetrahydroxycucurbita-5,23-dien-11-one T-10040

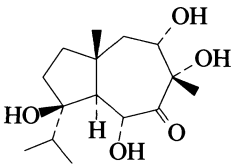


$C_{30}H_{48}O_5$ M 488.706
(3β,16α,23E)-form
Cucurbitacin V

3-O-β-D-Gentiobioside:
$C_{42}H_{68}O_{15}$ M 812.990
Constit. of *Fevillea cordifolia*. Amorph. powder. $[\alpha]_D^{21}$ +30° (c, 0.5 in MeOH).

Achenbach, H. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 1506 (*isol, pmr, cmr*)

4,6,8,9-Tetrahydroxy-7-daucanone T-10041



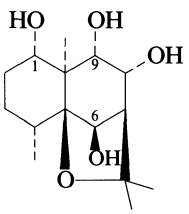
$C_{15}H_{26}O_5$ M 286.367
(4β,6α,8α,9α)-form

6-(4-Hydroxybenzoyl): [149301-71-3].
$C_{22}H_{30}O_7$ M 406.475
Constit. of *Ferula jaeschkeana*. Amorph. powder.

Garg, S.N. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 539 (*isol, pmr, cmr*)

1,6,8,9-Tetrahydroxydihydro-β-agarofuran T-10042

Updated Entry replacing T-00653



(1α,6β,8α,9α)-*form*

$C_{15}H_{26}O_5$ M 286.367
(1α,6β,8α,9α)-form

9-Benzoyl, 1,6-di-Ac:
$C_{26}H_{34}O_8$ M 474.550
Constit. of *Celastrus paniculatus*. Amorph. powder. $[\alpha]_D^{23}$ −78.7° (c, 0.525 in $CHCl_3$).

1,9-Dibenzoyl, 6-Ac: ***Celafolin D2***
$C_{31}H_{36}O_8$ M 536.621
Constit. of *C. stephanotiifolius*. Amorph. powder. $[\alpha]_D$ −19.3° (c, 0.42 in MeOH).

8,9-Dibenzoyl, 1,6-di-Ac: ***Angulatueoid H***
$C_{33}H_{38}O_9$ M 578.658
Constit. of *C. angulatus*.

6,8,9-Tribenzoyl, 1-Ac:
$C_{38}H_{40}O_9$ M 640.729

Constit. of *C. paniculatus*. Amorph. powder. $[\alpha]_D^{23}$ −8.4° (c, 0.5 in $CHCl_3$).

1,8,9-Tribenzoyl, 6-Ac: ***Celafolin D1***
$C_{38}H_{40}O_9$ M 640.729
Constit. of *C. angulatus* and *C. stephanotiifolius*. Amorph. powder. $[\alpha]_D^{23}$ −30.8° (c, 0.52 in $CHCl_3$), $[\alpha]_D^{20}$ −52.8° (c, 0.38 in MeOH).

9-Benzoyl, 8-cinnamoyl, 1,6-di-Ac: 1,6-Diacetoxy-9-benzoyloxy-8-cinnamoyloxydihydro-β-agarofuran
$C_{35}H_{40}O_9$ M 604.696
Constit. of *C. paniculatus*. Cryst. (EtOAc/pet. ether). Mp 219-220°. $[\alpha]_D^{19}$ −92° (c, 0.655 in MeOH).

1,9-Dibenzoyl, 8-(2-methylbutanoyl), 6-Ac: ***Celafolin D3***
$C_{36}H_{44}O_9$ M 620.738
Constit. of *C. stephanotiifolius*. Amorph. powder. $[\alpha]_D^{20}$ −21.9° (c, 0.32 in MeOH).

1-(3-Pyridinecarbonyl), 8,9-dibenzoyl, 6-Ac: [135153-78-5]. ***Triptogelin B2***
$C_{37}H_{39}NO_9$ M 641.716
Alkaloid from *Trypterygium wilfordii*. Powder. $[\alpha]_D^{23}$ +52.3° (c, 0.52 in MeOH).

(1α,6β,8β,9α)-form

9-(3-Pyridinecarbonyl), 6-(3-furoyl), 1,8-di-Ac: [52658-32-9]. ***Celapanine***
$C_{30}H_{35}NO_{10}$ M 569.607
Alkaloid from *C. paniculatus* (Celastraceae). Cryst. (MeOH). Mp 245-249°. $[\alpha]_D^{26}$ −64.7° (c, 0.46 in $CHCl_3$). 4-Config. not certain.

9-(3-Pyridinecarbonyl), 6-benzoyl, 1-Ac: [58074-71-8]. ***Celapagine***
$C_{30}H_{35}NO_8$ M 537.608
Alkaloid from *C. paniculatus* (Celastraceae). Cryst. (MeOH). Mp 275-283°.

1,9-Dibenzoyl, 8-Ac: 8α-Acetoxy-1α,9α-dibenzoyloxy-6β-hydroxydihydro-β-agarofuran
$C_{31}H_{36}O_8$ M 536.621
Constit. of *C. gemmatus*. Amorph. powder.

9-Benzoyl, 1,6,8-Tri-Ac: 1α,6β,8β-Triacetoxy-9α-benzoyloxydihydro-β-agarofuran
$C_{28}H_{36}O_9$ M 516.587
Constit. of *C. gemmatus*. Amorph. powder. $[\alpha]_D^{14}$ −31.46° (c, 0.445 in $CHCl_3$).

(1α,6β,8α,9β)-form

9-(3-Furoyl), 1,6,8-tri-Ac: [112516-44-6]. ***Eumaitenin***
$C_{26}H_{34}O_{10}$ M 506.549
Constit. of *Maytenus boaria*. Cryst. (EtOAc/pet. ether). Mp 183-185°.

9-(3-Pyridinecarbonyl), 6-benzoyl, 1,8-di-Ac: [52691-07-3]. ***Celapanigine***
$C_{32}H_{37}NO_9$ M 579.646
Alkaloid from *C. paniculatus* (Celastraceae). Cryst. (EtOH). Mp 184-185°.

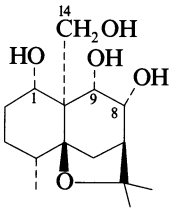
9-Benzoyl, 1,6,8-tri-Ac: ***Celafolin C1***
$C_{28}H_{36}O_9$ M 516.587
Constit. of *C. stephanotiifolius*. Amorph. powder. $[\alpha]_D$ +39.4° (c, 0.66 in MeOH).

Wagner, H. *et al*, *Tetrahedron*, 1975, **31**, 1949 (*Celapanine*)
Becerra, J. *et al*, *Phytochemistry*, 1987, **26**, 3073 (*Eumaitenin*)
Tu, Y.Q. *et al*, *J. Nat. Prod.* (*Lloydia*), 1991, **54**, 1383; 1993, **56**, 122, 126 (*isol, pmr, cmr*)
Tu, Y.Q. *et al*, *Phytochemistry*, 1991, **30**, 271; 1992, **31**, 3633 (*isol, pmr, cmr*)
Takaishi, Y. *et al*, *Phytochemistry*, 1991, **30**, 1567 (*Triptogelin B2*)
Dagang, W. *et al*, *Phytochemistry*, 1992, **31**, 4219 (*Angulatueoid H*)
Takaishi, Y. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 815 (*Celafolin C1*)

1,8,9,14-Tetrahydroxydihydro-β-agarofuran

T-10043

Updated Entry replacing T-00655



(1α,8α,9α)-*form*

$C_{15}H_{26}O_5$ M 286.367

(1α,8α,9α)-form

9-Benzoyl, 1,8,14-tri-Ac:
$C_{28}H_{36}O_9$ M 516.587
Constit. of *Celastrus angulatus*. Amorph. $[\alpha]_D^{23}$ −77.6° (c, 0.515 in $CHCl_3$).

9-Benzoyl, 1,8,14-tri-Ac:
$C_{28}H_{36}O_9$ M 516.587
Constit. of *C. angulatus*. Amorph. $[\alpha]_D^{23}$ −9.2° (c, 0.53 in $CHCl_3$).

14-(3-Pyridinecarbonyl), 8,9-dibenzoyl, 1-Ac:
$C_{37}H_{39}NO_9$ M 641.716
Constit. of *C. angulatus*. Amorph. powder. $[\alpha]_D^{23}$ −102° (c, 0.53 in $CHCl_3$).

(1α,8β,9α)-form

9-Benzoyl, 1,8,14-tri-Ac: [133462-15-4]. ***Angulatueoid C***
$C_{28}H_{36}O_9$ M 516.587
Constit. of *C. angulatus*. Cryst. Mp 192-195°. $[\alpha]_D^{23}$ −9.24° (c, 0.53 in $CHCl_3$).

14-(2-Pyridinecarbonyl), 9-benzoyl, 1,8-di-Ac: [145042-02-0]. ***Angulatueoid D***
$C_{32}H_{37}NO_9$ M 579.646
Constit. of *C. angulatus*. Cryst. Mp 184-185°. Unusual 2-pyridinecarbonyl residue.

14-(3-Pyridinecarbonyl), 9-benzoyl, 1-(2-methylpropanoyl), 8-Ac: [147029-05-8]. ***Angulatueoid E***
$C_{34}H_{41}NO_9$ M 607.699
Constit. of *C. angulatus*. Cryst. (Me_2CO). Mp 175.5-177.5°.

14-(3-Pyridinecarbonyl), 9-benzoyl, 1-propanoyl, 8-Ac: [147029-06-9]. ***Angulatueoid F***
$C_{33}H_{39}NO_9$ M 593.672
Constit. of *C. angulatus*. Cryst. (Me_2CO). Mp 178.5-180.5°.

14-(3-Pyridinecarboxyl), 9-benzoyl, 1-Ac: [145639-84-5].
$C_{30}H_{35}NO_8$ M 537.608
Constit. of *C. angulatus*. Amorph. powder. $[\alpha]_D^{23}$ +47.6° (c, 0.5 in $CHCl_3$).

14-(3-Pyridinecarbonyl), 9-benzoyl, 8-(2-methylbutanoyl), 1-Ac: [145613-75-8].
$C_{35}H_{43}NO_9$ M 621.726
Constit. of *C. angulatus*. Amorph. powder. $[\alpha]_D^{23}$ +44.4° (c, 0.495 in $CHCl_3$).

14-(3-Pyridinecarbonyl), 9-benzoyl, 8-(2-methylpropanoyl), 1-Ac: [145613-76-9].
$C_{34}H_{41}NO_9$ M 607.699
Constit. of *C. angulatus*. Amorph. powder. $[\alpha]_D^{23}$ +49.9° (c, 0.505 in $CHCl_3$).

9,14-Bis-(3-pyridinecarbonyl), 8-benzoyl, 1-Ac: [145047-92-3].
$C_{36}H_{38}N_2O_9$ M 642.704
Constit. of *Celastrus angulatus*. Amorph. $[\alpha]_D^{23}$ +45.4° (c, 0.52 in $CHCl_3$).

(1α,8β,9β)-form [42719-36-8]
Malkanguniol

$C_{15}H_{26}O_5$ M 286.367
Cryst. Mp 171-172°. $[\alpha]_D$ −32.94° (c, 3 in dioxan).

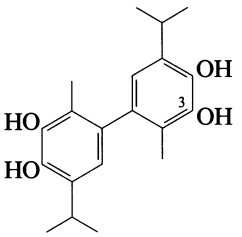
9-Benzoyl, 8-Ac: [52691-06-2]. ***Malkangunin***
$C_{24}H_{32}O_7$ M 432.513
Constit. of *Celastrus paniculatus*. Cryst. (Et_2O/pet. ether). Mp 240-245°. $[\alpha]_D$ −58.8° (c, 1 in $CHCl_3$).

9-(3-Furoyl), 1,8,14-tri-Ac:
$C_{26}H_{34}O_{10}$ M 506.549
Constit. of *C. paniculatus*. Amorph. powder.

Wagner, H. *et al*, *Tetrahedron*, 1975, **31**, 1949 (*isol*)
Lotter, H. *et al*, *Tetrahedron Lett.*, 1978, 3243 (*abs config*)
Hong, S. *et al*, *Phytochemistry*, 1991, **30**, 1547 (*deriv*)
Tu, Y.Q., *Chin. Chem. Lett.*, 1992, **3**, 625 (*isol, pmr, cmr*)
Chunquan, C. *et al*, *Phytochemistry*, 1992, **31**, 2777 (*Angulatueoids C and D*)
Tu, Y.Q. *et al*, *Phytochemistry*, 1992, **31**, 3633 (*isol, pmr, cmr*)
Tu, Y.Q. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 126 (*isol, pmr, cmr*)
Jikai, L. *et al*, *Phytochemistry*, 1993, **32**, 379 (*Angulatueoids E and F*)
Yong-Qiang, T. *et al*, *Phytochemistry*, 1993, **32**, 1339 (*isol, pmr, cmr*)

3,3′,4,4′-Tetrahydroxy-5,5′-diisopropyl-2,2′-dimethylbiphenyl T-10044

[120901-51-1]



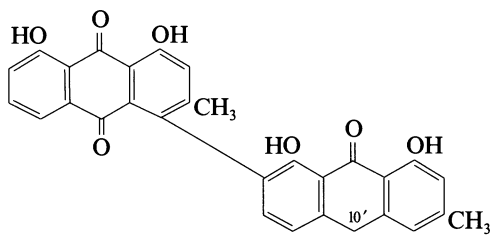
$C_{20}H_{26}O_4$ M 330.423
Constit. of *Thymus vulgaris*. Light brown powder. Mp 104°. $[\alpha]_D^{25}$ −8.8° (c, 0.51 in $CHCl_3$).

3-Deoxy: [123132-69-4]. *3,4,4′-Trihydroxy-5,5′-diisopropyl-2,2′-dimethylbiphenyl*
$C_{20}H_{26}O_3$ M 314.424
Constit. of *T. vulgaris*. Pale brown needles (C_6H_6). Mp 75°. $[\alpha]_D^{25}$ −48° (c, 0.21 in $CHCl_3$).

Miura, K. *et al*, *Chem. Pharm. Bull.*, 1989, **37**, 1816 (*isol, pmr, cmr*)

1,1′,8,8′-Tetrahydroxy-3,3′-dimethyl-4,7′-bianthracene-9,9′,10(10′*H*)-trione, 9CI T-10045

Updated Entry replacing T-00668



$C_{30}H_{20}O_7$ M 492.484
Constit. of the rhizome of *Aloe saponaria*. Yellow needles (Me_2CO). Mp 208-210° dec. $[\alpha]_D^{20}$ +250° (c, 0.55 in dioxan).

10′-C-α-L-Arabinopyranosyl: [138256-96-9].
$C_{35}H_{28}O_{11}$ M 624.600
Constit. of the tubers of *Asphodelus ramosus*. Yellow solid.

10′-C-(6-Deoxy-β-D-glucopyranoside): [138195-68-3].
$C_{36}H_{30}O_{11}$ M 638.626
Constit. of *A. ramosus*. Amorph. solid.

10′-C-(6-Deoxy-β-D-gulopyranoside): [138213-69-1].
$C_{36}H_{30}O_{11}$ M 638.626
Constit. of *A. ramosus*. Amorph. solid.

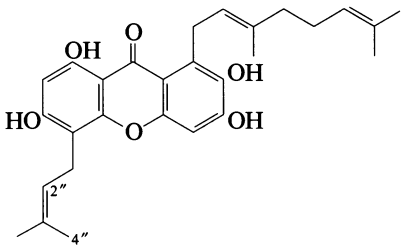
10′-C-α-L-Rhamnopyranosyl: [138213-68-0].
$C_{36}H_{30}O_{11}$ M 638.626
Consti. of *A. ramosus*. Amorph. solid.

10′R-C-β-D-Xylopyranoside: [138195-66-1].
$C_{35}H_{28}O_{11}$ M 624.600
Constit. of *A. ramosus*. Amorph. solid. Obt. with its C-10′ epimer.

Yagi, A. *et al*, *Chem. Pharm. Bull.*, 1978, **26**, 1111 (*isol, struct*)
Adinolfi, M. *et al*, *Tetrahedron*, 1991, **47**, 4435 (*C-glycosides*)

2,3,6,8-Tetrahydroxy-1-(3,7-dimethyl-2,6-octadienyl)-5-prenylxanthone T-10046

1-Geranyl-2,3,6,8-tetrahydroxy-5-prenylxanthone



$C_{28}H_{32}O_6$ M 464.557

(E)-form

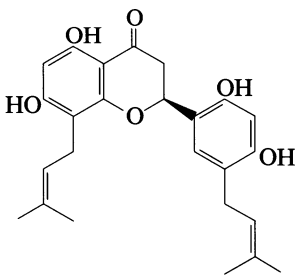
2-Me ether: [105742-84-5]. *1-Geranyl-3,6,8-trihydroxy-2-methoxy-5-prenylxanthone.* ***Isocowanin***
$C_{29}H_{34}O_6$ M 478.584
isol. from *Garcinia* spp. Yellow clusters (EtOAc/petrol). Mp 160°.

2-Me ether, 4″-hydroxy: [105742-85-6]. ***Isocowanol***
$C_{29}H_{34}O_7$ M 494.583
Isol. from *G.* sp. Amorph. solid. C-2″ config. not determined.

Ampofo, S.A. *et al*, *Phytochemistry*, 1986, **25**, 2351 (*isol, pmr, cmr*)

2′,4′,5,7-Tetrahydroxy-5′,8-diprenylflavanone T-10047

Lespedezaflavanone D



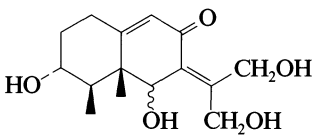
$C_{25}H_{28}O_6$ M 424.493
CA. incorrectly gives the same struct. as 2′,4′,5,7-Tetrahydroxy-5′,6-diprenylflavanone, T-00682.

(S)-form

Constit. of the root bark of *Lespedeza davidii*. Yellow needles. Mp 162-163°. $[\alpha]_D$ −23.1° (c, 0.13 in MeOH).

Li, J. *et al*, *Phytochemistry*, 1989, **28**, 3564 (*isol*)

3,6,12,13-Tetrahydroxy-7(11),9-eremophiladien-8-one T-10048



$C_{15}H_{22}O_5$ M 282.336

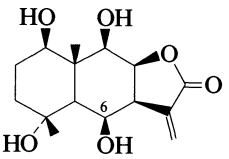
(3α,6ξ)-form [129602-08-0]

Metab. of *Drechslera gigantea.*

Sugawara, F. *et al*, *Biosci., Biotechnol., Biochem.*, 1993, **57**, 236 (*isol, pmr*)

1,4,6,9-Tetrahydroxy-11(13)-eudesmen-12,8-olide T-10049

Updated Entry replacing T-00715



(1β,4α,5α*OH*,6β,8β,9β)-*form*

$C_{15}H_{22}O_6$ M 298.335

(1β,4α,5αOH,6β,8β,9β)-form

1,9-Di-Ac: ***Trilobolide***†
$C_{19}H_{26}O_8$ M 382.410

6-(Methylpropanoyl), 1,9-di-Ac:
$C_{23}H_{32}O_9$ M 452.500
Constit. of *Wedelia trilobata.* Cryst. (Et_2O). Mp 230-231°. $[\alpha]_D^{24}$ +30.8° (c, 0.7 in $CHCl_3$).

6-Angeloyl, 1,9-di-Ac:
$C_{24}H_{32}O_9$ M 464.511
Constit. of *W. trilobata.* Cryst. (Et_2O). Mp 180-186°. $[\alpha]_D^{24}$ +12.8° (c, 0.6 in $CHCl_3$).

6-(Methylpropenoyl), 1,9-di-Ac:
$C_{23}H_{30}O_9$ M 450.485
Constit. of *W. trilobata.* Gum.

(1β,4α,5βOH,6β,8α,9α)-form
Prostatolide

6-(Methylpropanoyl), 1-Ac:
$C_{21}H_{30}O_8$ M 410.463
Constit. of *W. prostata.* Cryst. Mp 195-196°. $[\alpha]_D$ +31° (c, 0.02 in $CHCl_3$).

6-(Methylpropanoyl), 1,9-di-Ac:
$C_{23}H_{32}O_9$ M 452.500
Constit. of *W. prostata.* Cryst. Mp 222-223°. $[\alpha]_D$ +112° (c, 0.02 in $CHCl_3$).

6-(Methylpropenoyl), 1-Ac:
$C_{21}H_{28}O_8$ M 408.447
Constit. of *W. prostata.*

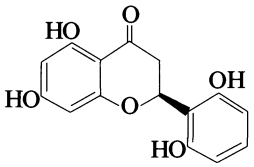
6-(Methylpropenoyl), 1,9-di-Ac:
$C_{23}H_{30}O_9$ M 450.485
Constit. of *W. prostata.* Cryst. Mp 213-214°. $[\alpha]_D$ +90° (c, 0.2 in $CHCl_3$).

Bohlmann, F. *et al*, *Phytochemistry*, 1981, **20**, 751.
Ragasa, C.Y. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 386 (*Prostatolide derivs*)

2′,5,6′,7-Tetrahydroxyflavanone T-10050

Updated Entry replacing T-00729

[104125-36-2]



$C_{15}H_{12}O_6$ M 288.256

(S)-form [80604-16-6]

Isol. from dried roots of *Scutellaria baicalensis* and from the drug Scutellaria Radix. Prisms (EtOAc/hexane). Mp 240° dec. $[\alpha]_D^{22}$ +6.13° (c, 1.02 in MeOH).

5-Me ether: [92519-96-5]. *2′,6′,7-Trihydroxy-5-methoxyflavanone*
$C_{16}H_{14}O_6$ M 302.283
Isol. from *S. baicalensis.* Mp 211° dec.

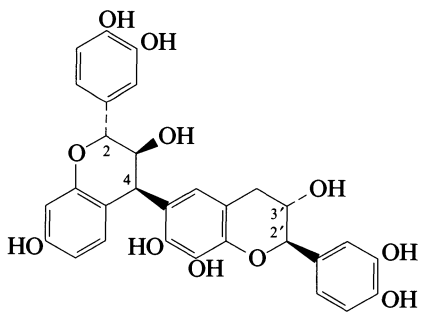
7-Me ether: [129138-49-4]. *2′,5,6′-Trihydroxy-7-methoxyflavanone.* ***Scutamoenin***
$C_{16}H_{14}O_6$ M 302.283
Constit. of the roots of *S. amoena.*

7-Me ether, 2′-O-β-D-glucopyranoside: [123914-35-2]. ***Scuteamoenoside***
$C_{22}H_{24}O_{11}$ M 464.425
Constit. of the roots of *S. amoena.*

Kubo, M. *et al*, *Planta Med.*, 1981, **43**, 194.
Kimura, Y. *et al*, *Chem. Pharm. Bull.*, 1982, **30**, 1792.
Tomimori, T. *et al*, *Yakugaku Zasshi*, 1984, **104**, 529 (*deriv*)
Tanaka, T. *et al*, *Yakugaku Zasshi*, 1987, **107**, 315 (*synth*)
Hu, B.H. *et al*, *Yaoxue Xuebao*, 1989, **24**, 200; 1990, **25**, 302; *CA*, **111**, 228966; **113**, 112503 (*Scuteamoenoside, Scuteamoenin*)

3,3′,4′,7-Tetrahydroxyflavan(4→6)-3,3′,4′,7,8-pentahydroxyflavan T-10051

2,2′-Bis(3,4-dihydroxyphenyl)-3,3′,4,4′-tetrahydro-[4,6′-bi-2H-1-benzopyran]-3,3′,7,7′,8′-pentol, 9CI



$C_{30}H_{26}O_{11}$ M 562.529

(2R,2′R,3S,3′S,4S)-form [109701-80-6] ***Fisetinidol(4α→6)mesquitol***

Constit. of the heartwood of *Prosopis glandulosa.*

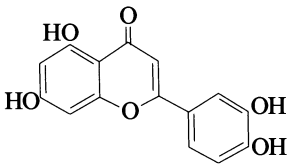
Young, E. *et al*, *J. Chem. Soc., Perkin Trans. 1*, 1986, 1737 (*isol*)

3′,4′,5,7-Tetrahydroxyflavone T-10052

Updated Entry replacing T-00771

2-(3,4-Dihydroxyphenyl)-5,7-dihydroxy-4H-1-benzopyran-4-one, 9CI. ***Luteolin.*** *Digitoflavone. Daphneflavonol. Flavopurpol*

[491-70-3]



$C_{15}H_{10}O_6$ M 286.240

Various methyl and methylene ethers have separate entries. Occurs in many plants in Leguminosae, Resedaceae, Euphorbiaceae, Umbelliferae, Scrophulariaceae, Fabaceae, Asteraceae, Cistaceae, Passifloraceae, Yerbenaceae and Hepaticae. First isol. in 1832 from *Reseda luteola*. Shows anti-HIV activity. Used in EtOH soln. for colour reactions with Al, Be, Cd, Cu, Zr, B. Yellow needles. Mp 328-330° (325°).

▷ LD_{50} (mus, ipr) 180 mg/kg. Exp. reprod. effects. LK9275210.

7-O-β-D-Glucopyranoside: [5373-11-5]. ***Glucoluteolin.*** *Cynaroside. Cinaroside. Luteoloside. Cymaroside. Flavopurposide. Daphneflavonoloside*
$C_{21}H_{20}O_{11}$ M 448.382
Widespread in plants. The commonest of all flavone glycosides. Needles + $1\frac{1}{2}H_2O$ (EtOH), yellow needles + $2H_2O$ (Me_2CO aq.). Mp 256-258° (254°).

7-O-Neohesperidoside: [25694-72-8]. ***Veronicastroside.*** *Lonicerin*†
$C_{27}H_{30}O_{15}$ M 594.525
Constit. of *Veronicastrum sibiricum*, *V. japonicum*, and *Lonicera japonica*. Cryst. (MeOH). Mp 249-251°.

7-O-Primeveroside: [19870-44-1]. ***Cesioside***
$C_{26}H_{28}O_{15}$ M 580.498
Isol. from *Salix caesia*, *S. repens* and *Campanula rotundiflora*. Pale-yellow needles (EtOH aq.). Mp 225-227°. $[\alpha]_D^{20}$ −220° (0.1*M* NaOH aq.).

3′-O-β-D-Glucopyranoside: [5154-41-6]. ***Dracocephaloside***
$C_{21}H_{20}O_{11}$ M 448.382
Isol. from *Dracocephalum thymiflorum* and other plants. Mp 243-245°. $[\alpha]_D$ −103° (c, 0.33 in Py/MeOH/H_2O 1:1:1).

4′-O-α-L-Arabinoside:
$C_{20}H_{18}O_{10}$ M 418.356
Isol. from *Hieracium umbellatum*.

5-O-β-D-Galactopyranoside: [64662-18-6].
$C_{21}H_{20}O_{11}$ M 448.382
Isol. from *Dracocephalum nutans*.

7-O-β-D-Galactopyranoside: [68321-11-9].
$C_{21}H_{20}O_{11}$ M 448.382
Isol. from *Capsella bursa-pastoris* and *Lonicera microphylla*.

3′-O-β-D-Galacturonoside: [56317-12-5].
$C_{21}H_{18}O_{12}$ M 462.366
Isol. from *Marchantia berteroana*.

7-O-β-D-Galacturonoside: [56324-53-9].
$C_{21}H_{18}O_{12}$ M 462.366
Isol. from *Marchantia berteroana*.

4′-O-β-D-Glucopyranoside: [6920-38-3]. ***Juncein***†
$C_{21}H_{20}O_{11}$ M 448.382
Isol. from *Spartium junceum* and many other plant spp. Mp 178-179°.

5-O-β-D-Glucopyranoside: [20344-46-1]. ***Galuteolin***
$C_{21}H_{20}O_{11}$ M 448.382
Isol. from *Galega officinalis* and other plant spp. Yellow needles (EtOH aq.). Mp 260-280° dec.

3′-O-β-D-Glucuronoside: [53527-42-7].
$C_{21}H_{18}O_{12}$ M 462.366
Isol. from *Lunularia cruciata*, *Ricciocarpus natans*, *Riella* spp. and *Marchantia* spp. No phys. props. reported.

4′-O-β-D-Glucuronoside: [53527-43-8].
$C_{21}H_{18}O_{12}$ M 462.366
Isol. from *Riccia fluitans*.

5-O-β-D-Glucuronoside: [80358-01-6].
$C_{21}H_{18}O_{12}$ M 462.366
Isol. from *Torilis arvensis*.

7-O-β-D-Glucuronoside: [29741-10-4].
$C_{21}H_{18}O_{12}$ M 462.366
Isol. from *Antirrhinum majus*, *Chrysanthemum* sp., *Scutellaria* spp. and other plants.

7-O-β-D-Glucuronoside, Me ester: [76939-42-9].
$C_{22}H_{20}O_{12}$ M 476.393
Isol. from *Digitalis lanata*. Mp 206° (as per-Ac).

3′-O-α-L-Rhamnopyranoside: [99694-79-8].
$C_{21}H_{20}O_{10}$ M 432.383
Isol. from *Phyllocladus* spp. $[\alpha]_D^{20}$ −95° (MeOH).

7-O-α-L-Rhamnopyranoside: [18016-54-1].
$C_{21}H_{20}O_{10}$ M 432.383
Isol. from *Phyllocladus* spp.

3′-O-β-D-Xylopyranoside: [93078-91-2].
$C_{20}H_{18}O_{10}$ M 418.356
Isol. from *Podocarpus nivalis*.

7-O-β-D-Xyloside: [98575-26-9].
$C_{20}H_{18}O_{10}$ M 418.356
Isol. from *Thymus membranaceus*.

7-O-[D-Apiofuranosyl(1→2)-β-D-glucopyranoside]: [63808-23-1]. ***Graveobioside A***
$C_{26}H_{28}O_{15}$ M 580.498
Isol. from *Apium graveolens* and *Petroselinum crispum*.

7-O-(Arabinosylglucoside): [34055-20-4].
$C_{26}H_{28}O_{15}$ M 580.498
Isol. from *Vernonia* spp.

7-O-Gentiobioside: Luteolin 7-gentiobioside. ***Glucoluteoloside***
$C_{27}H_{30}O_{16}$ M 610.524
Isol. from *Dahlia variabilis*. Mp 239°.

7-O-(β-D-Glucopyranosylgalactoside): [31511-40-7].
$C_{27}H_{30}O_{16}$ M 610.524
Isol. from *Tragopogon dasyrhynchus*.

7-O-(Galactosylglucopyranoside):
$C_{27}H_{30}O_{16}$ M 610.524
Isol. from *Vernonia* spp.

7-O-Digalactoside: [68566-74-5].
$C_{27}H_{30}O_{16}$ M 610.524
Isol. from *Cephalaria procera*. Yellow needles (MeOH aq.). Mp 220-222°.

3′,4′-Di-O-galacturonoside: [56317-14-7].
$C_{27}H_{26}O_{18}$ M 638.492
Isol. from *Marchantia berteroana*.

3′,7-Di-O-galacturonoside: [56317-13-6].
$C_{27}H_{26}O_{18}$ M 638.492
Isol. from *Marchantia berteroana*.

3′,4′-Di-O-glucopyranoside:
$C_{27}H_{30}O_{16}$ M 610.524
Isol. from *Listera ovata*.

3′,7-Di-O-glucopyranoside: [52187-80-1].
$C_{27}H_{30}O_{16}$ M 610.524
Isol. from *Reseda luteola* and *Launaea* spp.

4′,7-Di-O-glucopyranoside: [70404-47-6].
$C_{27}H_{30}O_{16}$ M 610.524
Isol. from *Launaea* spp., *Antennaria dioica* and other plant spp.

3′,7-Di-O-glucuronoside: [53965-08-5].
$C_{27}H_{26}O_{18}$ M 638.492
Isol. from *Marchantia polymorpha*.

3′,4′-Di-O-glucuronoside: [53527-41-6].
$C_{27}H_{26}O_{18}$ M 638.492
Isol. from *Lunularia cruciata.*

4′,7-Di-O-glucuronoside: [53965-09-6].
$C_{27}H_{26}O_{18}$ M 638.492
Isol. from *Marchantia polymorpha.*

7-O-(Glucosylglucuronoside):
$C_{27}H_{28}O_{17}$ M 624.508
Isol. from *Digitalis purpurea.*

7-O-Sambubioside: [99694-75-4].
$C_{26}H_{28}O_{15}$ M 580.498
Isol. from *Thymus membranaceus* and *Teucrium gnaphalodes.*

7-O-Rutinoside: [20633-84-5]. ***Scolymoside.*** *Scolimoside*
$C_{27}H_{30}O_{15}$ M 594.525
Isol. from *Capsella bursa-pastoris, Centaurea* sp., *Chrysanthemum* sp., *Cynara scolymus* and other plants. Cryst. + $1H_2O$ (MeOH). Mp 192-196° (186-189°). $[\alpha]_D^{27}$ −50.98° (Py).

7-O-(Glucosylrhamnoside):
$C_{27}H_{30}O_{15}$ M 594.525
Isol. from *Wisteria sinensis.*

7-O-Laminaribioside: [29276-58-2].
$C_{27}H_{30}O_{16}$ M 610.524
Isol. from *Colchicum speciosum.*

7-O-[Glucuronosyl-(1→2)-glucuronoside]: [96400-45-2].
$C_{27}H_{26}O_{18}$ M 638.492
Isol. from *Elodea canadensis, Secale cereale* and *Perilla frutescens.*

3′-O-Xylopyranoside, 7-O-glucopyranoside: [102506-55-8].
$C_{26}H_{28}O_{15}$ M 580.498
Isol. from *Podocarpus nivalis.*

3′-O-Glucopyranoside, 7-O-glucuronoside: [69631-14-7].
$C_{27}H_{28}O_{17}$ M 624.508
Isol. from *Riccia fluitans.*

3′-O-(O-Feruloylglucopyranoside), 7-O-glucuronoside: [69645-80-3].
$C_{37}H_{36}O_{20}$ M 800.679
Isol. from *Riccia fluitans.*

4′-O-Glucopyranoside, 7-O-galactopyranoside:
$C_{27}H_{30}O_{16}$ M 610.524
Isol. from *Vernonia* spp.

4′-O-Rhamnoside, 7-O-glucuronoside: [58970-80-2].
$C_{27}H_{28}O_{16}$ M 608.509
Isol. from *Conocephalum conicum.*

4′-O-β-D-Glucofuranoside, 7-O-[α-L-arabinofuranosyl-(1→6)-β-D-glucopyranoside]: [52714-84-8].
$C_{32}H_{38}O_{20}$ M 742.640
Isol. from *Galium mollugo.*

7-O-(Rhamnosylglucosylglucoside):
$C_{33}H_{40}O_{20}$ M 756.667
Isol. from *Wisteria sinensis.*

4′-O-β-D-Glucopyranoside, 7-O-rutinoside: [20056-21-7]. ***Cynarotrioside***
$C_{33}H_{40}O_{20}$ M 756.667
Isol. from *Cynara scolymus.* Cryst. (Me_2CO aq.). Mp 274-276°.

4′-O-Glucopyranoside, 7-O-neohesperidoside: [70404-41-0].
$C_{33}H_{40}O_{20}$ M 756.667
Isol. from *Hedwigia ciliata.* $[\alpha]_D^{24}$ −66.0° (c, 0.15 in Py).

3′,4′-Di-O-rhamnoside, 7-O-glucuronoside: [58970-77-7].
$C_{33}H_{38}O_{20}$ M 754.651
Isol. from *Conocephalum conicum.*

3′-O-Glucopyranoside, 4′,7-di-O-glucuronoside: [69631-11-4].
$C_{33}H_{36}O_{23}$ M 800.634
Isol. from *Riccia fluitans.*

4′-O-β-D-Glucuronoside, 7-O-[β-D-glucuronosyl-(1→2)-β-D-glucuronoside]: [101849-03-0].
$C_{33}H_{34}O_{24}$ M 814.617
Isol. from *Secale cereale.*

3′,4′,7-Tri-O-glucuronoside: [53965-10-9].
$C_{33}H_{34}O_{24}$ M 814.617
Isol. from *Marchantia polymorpha.*

4′-O-Sophoroside, 7-O-neohesperidoside: [63043-64-1].
$C_{39}H_{50}O_{25}$ M 918.809
Isol. from *Hedwigia ciliata.* Mp 219-223°. $[\alpha]_D^{25}$ −90.1° (c, 1.34 in H_2O).

7-O-(2-p-Hydroxycinnamoylglucopyranoside): [95596-61-5]. *Luteolin 7-(2-coumaroylglucoside)*
$C_{30}H_{26}O_{13}$ M 594.528
Isol. from *Barleria prionitis.*

7-O-(3,4-Dihydroxycinnamoylglucoside): [79366-63-5]. *Luteolin 7-(caffeoylglucoside)*
$C_{30}H_{26}O_4$ M 450.533
Isol. from *Perilla frutescens.*

7-O-(6-Malonylglucoside): [98767-38-5].
$C_{24}H_{22}O_{14}$ M 534.429
Isol. from *Bryum capillare.*

7-O-[3″-Acetyl-D-apio-β-D-furanosyl-(1→2)-β-D-xylopyranoside]: [63902-77-2]. ***Campanoside***
$C_{27}H_{28}O_{15}$ M 592.509
Isol. from *Campanula patula.*

3′-O-Feruloylglucoside, 4′,7-di-O-glucuronoside: [69631-12-5].
$C_{43}H_{44}O_{26}$ M 976.805
Isol. from *Riccia fluitans.*

3′-O-Sulfate: [59176-61-3].
$C_{15}H_{10}O_9S$ M 366.305
Isol. from *Lachenalia unifolia.*

4′-O-Sulfate: [60889-07-8].
$C_{15}H_{10}O_9S$ M 366.305
Isol. from *Daucus carota.*

7-O-Sulfate: [56857-57-9].
$C_{15}H_{10}O_9S$ M 366.305
Isol. from *Bixa orellana.*

3′,7-Di-O-sulfate: [59176-62-4].
$C_{15}H_{10}O_{12}S_2$ M 446.369
Isol. from *Zostera marina.*

7-O-(Sulfooxyglucoside):
$C_{21}H_{20}O_{14}S$ M 528.447
Isol. from *Phoenix roebelenii.*

7-O-(Sulfooxyglucuronoside): [88849-97-2].
$C_{21}H_{18}O_{15}S$ M 542.430
Isol. from *Fuchsia* spp.

3′-O-β-D-Glucopyranoside, 7-O-sulfate: [33530-70-0].
$C_{21}H_{20}O_{14}S$ M 528.447
Isol. from *Mascarena verschaffeltii.* Obt. as K salt.

7-O-(Sulfooxyrutinoside):
$C_{27}H_{30}O_{18}S$ M 674.589
Isol. from *Washingtonia robusta.*

3′-O-Rutinoside, 7-O-sulfate:
$C_{27}H_{30}O_{18}S$ M 674.589
Isol. from *Opsiandra maya.*

7-O-(6-O-p-Hydroxycinnamoyl-β-D-glucopyranoside): ***Bignonoside***
$C_{30}H_{26}O_{13}$ M 594.528
Isol. from *Catalpa bignonioides* and *Dracocephalum thymiflorum.* Cryst. Mp 182°.

3′-O-(O-Acetyl-β-D-glucuronoside):
$C_{23}H_{20}O_{13}$ M 504.403
Isol. from *Rosmarinus officinalis.*

5-O-(6-O-Malonyl-β-D-glucopyranoside): [130733-27-6].
$C_{24}H_{22}O_{14}$ M 534.429
Isol. from *Equisetum arvense.*

7-O-(2-Hydroxypropanoyl): [126394-95-4]. *Luteolin 7-lactate*
$C_{18}H_{14}O_8$ M 358.304
Isol. from *Marrubium vulgare.* Dark yellow powder.

7-O-(*2-β-D-Glucopyranosyloxypropanoyl*): [126394-93-2].
Luteolin 7-(2-glucosyllactate)
$C_{24}H_{24}O_{13}$ M 520.446
Isol. from *M. vulgare*. Dark yellow powder.

7-O-(*2-β-D-Glucuronsyloxypropanoyl*): [126394-91-0].
Luteolin 7-(2-glucuronosyllactate)
$C_{24}H_{22}O_{14}$ M 534.429
Isol. from *M. vulgare*. Dark yellow powder.

7-O-(*6-O-Acetyl-β-D-glucopyranoside*): [60355-68-2].
$C_{23}H_{22}O_{12}$ M 490.420
Isol. from *Salix gilgiana*. Yellow needles (MeOH). Mp 224-227°.

3′-O-*β-D-Glucopyranoside*, *7*-O-*rutinoside*: [118024-86-5].
$C_{33}H_{40}O_{20}$ M 756.667
Isol. from *Campanula persicifolia*.

4′-O-*Neohesperidoside*: [70404-48-7].
$C_{27}H_{30}O_{15}$ M 594.525
Isol. from *Caralluma tuberculata*.

7-O-*Di-α-L-rhamnopyranoside*: [131405-85-1].
$C_{27}H_{30}O_{14}$ M 578.526
Isol. from *Asplenium normale*.

7-O-(*6‴-O-Acetylsophoroside*): [135546-08-6].
Linariifolioside
$C_{29}H_{32}O_{17}$ M 652.562
Isol. from *Veronica linariifolia* ssp. *dilatata*. Mp 232-234°.

7-O-(*6-O-E-Cinnamoyl-β-D-glucopyranoside*): [111150-40-4].
$C_{30}H_{26}O_{12}$ M 578.528
Isol. from *S. gilgiana*. Yellow needles (MeOH). Mp 225°.

7-O-(*6-O-p-Hydroxycinnamoyl-β-D-glucopyranoside*): [111188-76-2]. *Luteolin 7-(6-p-Coumaroylglucoside)*
$C_{30}H_{26}O_{13}$ M 594.528
Isol. from *S. gilgiana*. Powder (MeOH). Mp 273-275°.

7-O-(*6-O-4-Hydroxy-3-methoxycinnamoyl-β-D-glucopyranoside*): [111150-41-5]. *Luteolin 7-(6-feruloylglucoside)*
$C_{31}H_{28}O_{14}$ M 624.554
Isol. from *S. gilgiana*. Pale yellow powder (MeOH). Mp 201-203°.

7-O-[*α-L-Arabinofuranosyl-(1→6)-β-D-glucopyranoside*]: [111537-40-7].
$C_{26}H_{28}O_{15}$ M 580.498
Isol. from *Dacrydium intermedium* and *D. laxifolium*.

7-O-[*α-L-Arabinopyranosyl-(1→6)-β-D-glucopyranoside*]: [52714-82-6].
$C_{26}H_{28}O_{15}$ M 580.498
Isol. from *D. intermedium*, *D. laxifolium*, and *Galium mollugo*.

7-O-[*6-O-Acetylallosyl-(1→2)-β-D-glucopyranoside*]: [135649-96-6].
$C_{29}H_{32}O_{17}$ M 652.562
Isol. from *Stachys aegyptiaca*.

7-O-[*β-L-Arabinopyranosyl-(1→6)-β-D-glucopyranoside*]: [80324-88-5]. ***Rotundiside***
$C_{26}H_{28}O_{15}$ M 580.498
Isol. from *Campanula rotundiflora*. Mp 193-196°.

7-O-[*β-D-Allopyranosyl-(1→2)-β-D-glucopyranoside*]: [113471-89-9].
$C_{27}H_{30}O_{16}$ M 610.524
Constit. of *Sideritis maura*.

4′-O-*β-D-Glucopyranoside*, *7*-O-*β-D-galacturonoside*: [126207-52-1].
$C_{27}H_{28}O_{17}$ M 624.508
Isol. from *Cuminum cyminum*.

7-O-(*6″-O-Malonylneohesperidoside*): [127350-65-6].
$C_{30}H_{32}O_{18}$ M 680.572
Isol. from *Bryum pseudotriquetrum*.

7-O-(*Disulfoglucoside*): [121283-87-2].
$C_{21}H_{20}O_{17}S_2$ M 608.511
Isol. from *Phoenix dactylifera*.

5(7)-Galactoside, *7(5)-xyloside*:
$C_{26}H_{28}O_{15}$ M 580.498
Isol. from leaves and stems of *Genista tinctoria*.

O-*Glucoside* (*1*): ***Chaerophyllin***†
$C_{21}H_{20}O_{11}$ M 448.382
Isol. from *Chaerophyllum silvestre* and other Umbelliferae. Light yellow needles (EtOH aq.). Mp 260°. Full struct. not known.

O-*Glucoside* (*2*): ***Paspaloside***
$C_{21}H_{20}O_{11}$ M 448.382
Isol. from *Paspalum conjugatum*. Light yellow needles (EtOH). Mp 274-276°. Full struct. not known.

7-O-*Diglucoside*: [31511-92-9]. *Luteolin 7-diglucoside*
$C_{27}H_{30}O_{16}$ M 610.524
Isol. from aerial parts of *Lathyrus pratensis*.

7-O-(*Rhamnosylglucoside*): [36473-51-5].
$C_{27}H_{30}O_{15}$ M 594.525
Constit. of *Citrus* sp., *Sophora* sp., *Thermopsis* sp. and other plant spp.

7-O-[*β-D-Galactopyranosyl-(1→6)-β-D-galactopyranoside*]: [142561-45-3].
$C_{27}H_{30}O_{16}$ M 610.524
Isol. from the roots of *Anogeissus latifolia*.

3′,4′-Methylene ether: [79339-34-7]. *5,7-Dihydroxy-3′,4′-methylenedioxyflavone*
$C_{16}H_{10}O_6$ M 298.251
Constit. of the seeds of *Cassia marginata*. Yellow cryst. (EtOAc). Mp 265-268° (263-265°).

4′,5-Di-Me ether: [72629-61-9]. *3′,7-Dihydroxy-4′,5-dimethoxyflavone*. *Luteolin 4′,5-dimethyl ether*
$C_{17}H_{14}O_6$ M 314.294
Isol. from *Phyllospadix japonica*.

3′,4′,7-Tri-Me ether: *5-Hydroxy-3′,4′,7-trimethoxyflavone*. *Luteolin 3′,4′,7-trimethyl ether*
$C_{18}H_{16}O_6$ M 328.321
Constit. of *Piper peepuloides*, *Arnica* spp. and *Salvia* spp. Yellow needles (EtOH). Mp 171-172° (161-163°).

5,7-Di-Me ether, *3′,4′-methylene ether*: [89029-12-9]. *5,7-Dimethoxy-3′,4′-methylenedioxyflavone*
$C_{18}H_{14}O_6$ M 326.305
Isol. from *Zygogynum pauciflorum*.

[18695-03-9, 54985-16-9, 62804-16-4, 98716-92-8]

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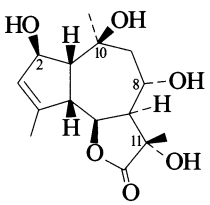
Hattori, S. *et al*, *J. Am. Chem. Soc.*, 1954, **76**, 5792 (*Glucoluteolin*)
Hörhammer, L. *et al*, *Arch. Pharm.* (*Weinheim, Ger.*), 1958, **291**, 44 (*Chaerophyllin*)
Spada, A. *et al*, *Gazz. Chim. Ital.*, 1958, **88**, 204 (*4′-glucoside*)
Litvinenko, V.I. *et al*, *CA*, 1965, **63**, 10233c (*Dracocephaloside*)
Birkhofer, L. *et al*, *Z. Naturforsch., B*, 1965, **20**, 923 (*Bignonoside*)
Dranik, L.I. *et al*, *Khim. Prir. Soedin.*, 1966, **2**, 16 (*Cynarotrioside*)
Thieme, H., *Tetrahedron Lett.*, 1968, 2781 (*derivs*)
Inouye, H. *et al*, *Chem. Ber.*, 1969, **102**, 3009 (*synth*)
Bandyukova, V.A., *Khim. Prir. Soedin.*, 1969, 595 (*laminaribioside*)
Dhar, K.L. *et al*, *Planta Med.*, 1970, **18**, 337 (*isol, deriv*)
Kingston, D.G.I., *Tetrahedron*, 1971, **27**, 2691 (*ms*)
Nevskaya, E.M., *Zh. Anal. Khim.*, 1972, **27**, 1699 (*use*)
Karrer, W. *et al*, *Konstitution und Vorkommen der Organischen Pflanzenstoffe*, 2nd Ed., Birkhäuser Verlag, Basel, 1972-1985, 1470, 1473 (*occur*)
Markham, K.R. *et al*, *Phytochemistry*, 1974, **13**, 1553; 1975, **14**, 1093; 1978, **17**, 1601; 1984, **23**, 2049; 1985, **24**, 2607 (*xylosides, rhamnosides, 3′-xyloside, 7-glucoside, galacturonides, glucuronides*)
Wagner, H. *et al*, *Tetrahedron Lett.*, 1976, 1799 (*nmr*)
Shamyrina, A.A. *et al*, *Khim. Prir. Soedin.*, 1977, **13**, 577 (*5-galactoside*)

Chari, V.M. *et al*, *Phytochemistry*, 1977, **16**, 1273 (*nmr*)
Markham, K.R. *et al*, *Tetrahedron*, 1978, **34**, 1389 (*cmr, glucosides*)
Osterdahl, B.-G., *Acta Chem. Scand., Ser. B*, 1979, **33**, 119; 1983, **37**, 69.
Takagi, M. *et al*, *Agric. Biol. Chem.*, 1979, **43**, 2417 (*isol, 4′,5-dimethyl ether*)
Devi, G. *et al*, *Indian J. Chem., Sect. B*, 1979, **17**, 75 (*3′,4′,7-trimethyl ether*)
Makbul, M.A. *et al*, *Khim. Prir. Soedin.*, 1979, **15**, 725; *Chem. Nat. Compd.* (*Engl. Transl.*), 640 (*Scolymoside*)
Van der Westhuizen, J.H. *et al*, *J. Chem. Soc., Perkin Trans. 1*, 1980, 1003 (*3′,4′,7-trimethyl ether*)
Belenovskaya, L.M. *et al*, *Khim. Prir. Soedin.*, 1980, **16**, 835 (*Campanoside*)
Teslov, L.S., *Khim. Prir. Soedin.*, 1981, 520 (*Rotundiside*)
Reynaud, J. *et al*, *Phytochemistry*, 1981, **20**, 2052 (*7-diglucoside*)
Hiermann, A., *Planta Med.*, 1982, **45**, 59 (*7-glucuronide Me ester*)
Saleh, N.A.M. *et al*, *Phytochemistry*, 1983, **22**, 1417 (*5-glucuronide*)
Voirin, B., *Phytochemistry*, 1983, **22**, 2107 (*uv*)
Mansour, R.M.A. *et al*, *Phytochemistry*, 1983, **22**, 2630 (*derivs*)
Schulz, M. *et al*, *Phytochemistry*, 1985, **24**, 343 (*glucuronosides*)
Tomas, F. *et al*, *Z. Naturforsch., C*, 1985, **40**, 583.
Cody, V. *et al*, *PFBM1*, A.R. Liss, N.Y., 1986 (*biol, prop*)
Cody, V. *et al*, *Plant Flavenoids in Biology and Medicine*, A. R. Liss, N. Y., 1986 (*biol, prop*)
Markham, K.R. *et al*, *J. Nat. Prod.* (*Lloydia*), 1987, **50**, 660 (*derivs*)
Mizuno, M. *et al*, *Phytochemistry*, 1987, **26**, 2418 (*7-acylglucosides*)
Cody, V. *et al*, *Plant Flavenoids in Biology and Medicine II*, A.R. Liss, N.Y., 1988 (*biol prop*)
The Flavonoids: Advances in Research since 1980, (Ed. Harborne, J.B.), Chapman and Hall, London, 1988.
Gupta, V. *et al*, *Indian J. Chem., Sect. B*, 1989, **28**, 92 (*3′,4′-methylene ether*)
Nawwar, M.A.M. *et al*, *Phytochemistry*, 1989, **28**, 3201 (*7-lactates*)
Ono, K., *Eur. J. Biochem.*, 1990, **190**, 469 (*anti-HIV activity*)
Ahond, A. *et al*, *J. Nat. Prod.* (*Lloydia*), 1990, **53**, 875 (*5,7-Di-Me-3′,4′-methylene ether*)
Veit, M. *et al*, *Phytochemistry*, 1990, **29**, 2555 (*5-glucoside, pmr, cmr*)
Stein, W. *et al*, *Z. Naturforsch., C*, 1990, **45**, 25 (*7-malonylneohesperidoside*)
Nagarathnam, D. *et al*, *J. Org. Chem.*, 1991, **56**, 4884 (*synth*)
El-Ansari, M.A. *et al*, *Phytochemistry*, 1991, **30**, 1169 (*derivs*)
Ma, C.Y. *et al*, *Yaoxue Xuebao*, 1991, **26**, 203; *CA*, **115**, 89112 (*Linariifolioside*)

2,8,10,11-Tetrahydroxy-3-guaien-12,6-olide T-10053

Updated Entry replacing T-00802



$C_{15}H_{22}O_6$ M 298.335

(1β,2β,5β,6β,8α,10β,11α)-form

2,8,10,11-Tetrahydroxy-3-slovenolide

2-O-(2-Methylbutanoyl), 8-O-angeloyl, 11-Ac:
$C_{27}H_{38}O_9$ M 506.592
Constit. of roots of *Laser trilobum*. Gum. $[\alpha]_D^{20}$ −66.4°.

2-O-Angeloyl, 8-O-(2-methylbutanoyl), 10,11-di-Ac: [41929-11-7]. ***Archangelolide***
$C_{29}H_{40}O_{10}$ M 548.629
Constit. of *Laser trilobum* and *Laserpitium archangelica*. Cryst. (Et_2O). Mp 109-112°. $[\alpha]_D$ −120.2° (MeOH).

8-(3-Methyl-2-butenoyl), 2,10,11-tri-Ac:
$C_{26}H_{34}O_{10}$ M 506.549
Constit. of *Thapsia villosa*. Amorph. powder. $[\alpha]_D^{26}$ −108° (c, 0.29 in MeOH).

8-(2-Methylbutanoyl), 2,10,11-tri-Ac:
$C_{26}H_{36}O_{10}$ M 508.564
Constit. of *T. villosa*. Amorph. $[\alpha]_D^{26}$ −113° (c, 0.21 in MeOH).

8-(3-Methyl-2-butenoyl), 10,11-di-Ac:
$C_{24}H_{32}O_9$ M 464.511
Constit. of *T. villosa*. Amorph. powder. $[\alpha]_D$ −129° (c, 0.2 in MeOH).

8-(2-Methylbutanoyl), 10,11-di-Ac:
$C_{24}H_{34}O_9$ M 466.527
Constit. of *T. villosa*. Amorph. powder. $[\alpha]_D^{26}$ −50° (c, 0.24 in MeOH).

8-(2-Methylbutanoyl), 2-(3-methylbutanoyl), 10-Ac:
$C_{27}H_{40}O_9$ M 508.608
Constit. of *T. transtagana*.

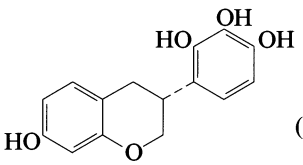
2-(2-Methylbutanoyl), 8-butanoyl, 10-Ac:
$C_{26}H_{38}O_9$ M 494.581
Constit. of *T. transtagana* and *T. garganica*.

Holub, M. *et al*, *Collect. Czech. Chem. Commun.*, 1973, **38**, 731; 1978, **43**, 2444 (*isol, struct*)
Holub, M. *et al*, *Tetrahedron Lett.*, 1984, **25**, 3755 (*isol*)
Smitalová, Z. *et al*, *Collect. Czech. Chem. Commun.*, 1986, **51**, 1323 (*isol*)
Smitt, U.W. *et al*, *J. Nat. Prod.* (*Lloydia*), 1990, **53**, 1479 (*derivs*)
Avato, P. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 411 (*isol*)

2′,3′,4′,7-Tetrahydroxyisoflavan T-10054

Updated Entry replacing T-00813

3,4-Dihydro-7-hydroxy-3-(2,3,4-trihydroxyphenyl)-2H-1-benzopyran



(R)-form

$C_{15}H_{14}O_5$ M 274.273

(R)-form

2′-Me ether: [65466-13-9]. *3′,4′,7-Trihydroxy-2′-methoxyisoflavan. Cyclolobin*
$C_{16}H_{16}O_5$ M 288.299
Lit. inaccessible. Prob. not a nat. prod.

2′,4′-Di-Me ether: see *3′,7-Dihydroxy-2′,4′-dimethoxyisoflavan, D-01705*

3′,4′-Di-Me ether: [64474-51-7]. *2′,7-Dihydroxy-3′,4′-dimethoxyisoflavan.* ***Isomucronulatol***
$C_{17}H_{18}O_5$ M 302.326
Isol. from *Astragalus glycyphyllos, A. penduliflorus, Carmichaelia flagelliformis, Colutea arborescens, Gliricidia sepium* and *Glycyrrhiza glabra*. Cryst. (MeOH aq.). Mp 152-153°. $[\alpha]_D^{20}$ −19.4° (c, 0.24 in EtOH).

3′,4′-Di-Me ether, 7-O-β-D-glucopyranoside: [136087-29-1].
$C_{23}H_{28}O_{10}$ M 464.468
Constit. of *A. membranaceus* and *A. mongholicus*. Needles (MeOH). Mp 145-147°. $[\alpha]_D^{14}$ −14° (c, 0.1 in EtOH).

3′,4′-Di-Me ether, 2′,7-di-O-β-D-glucopyranoside: [137217-84-6].
$C_{29}H_{38}O_{15}$ M 626.610
Constit. of *A. mongholicus*. Needles. Mp 150-151°. $[\alpha]_D$ −24.3° (c, 0.5 in MeOH).

3′,4′,7-Tri-Me ether: [137217-83-5]. ***7-O-Methylisomucronulatol***
$C_{18}H_{20}O_5$ M 316.353

Constit. of *A. mongholicus*. Needles. Mp 140-141°. $[\alpha]_D$ −11.0° (c, 0.4 in $CHCl_3$).

2′,3′,4′-Tri-Me ether: [136027-12-8]. *7-Hydroxy-2′,3′,4′-trimethoxyisoflavan*
$C_{18}H_{20}O_5$ M 316.353
Constit. of *Medicago sativa*. Mp 168-170°. $[\alpha]_D^{27}$ +6.5° (c, 1.15 in $CHCl_3$). Unusual + ve opt. rotn.

(S)-form

2′,3′-Di-Me ether: [56499-30-0]. *4′,7-Dihydroxy-2′,3′-dimethoxyisoflavan.* ***Sphaerosin.*** *Spherosin*
$C_{17}H_{18}O_5$ M 302.326
Isol. form *Sphaerophysa salsula*. Mp 151°. $[\alpha]_D^{20}$ +10.7° (c, 0.7 in Me_2CO).

(±)-form

2′,3′-Di-Me ether: [52305-06-3]. ***Laxifloran.*** *(±)-Sphaerosin*
Isol. from *Lonchocarpus laxiflorus* and *Lablab niger*.
Cryst. (MeOH). Mp 170-171°.

Tetra-Me ether: 2′,3′,4′,7-Tetramethoxyisoflavan
$C_{19}H_{22}O_5$ M 330.380
Mp 65-67°.

[27973-50-8, 52250-35-8]

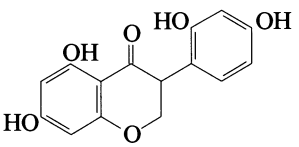
Pelter, A. *et al*, *J. Chem. Soc. C*, 1969, 887 (*Laxifloran*)
Farkas, L. *et al*, *J. Chem. Soc., Perkin Trans. 1*, 1974, 305 (*Laxifloran*)
Kattaev, N.S. *et al*, *Khim. Prir. Soedin.*, 1975, **11**, 147 (*Sphaerosin*)
Al-Ani, H.A.M. *et al*, *Phytochemistry*, 1985, **24**, 55 (*biosynth, bibl, Isomucronulatol*)
He, Z.Q. *et al*, *J. Nat. Prod.* (*Lloydia*), 1991, **54**, 810.
Subarnas, A. *et al*, *Phytochemistry*, 1991, **30**, 2777.
Spencer, G.F. *et al*, *Phytochemistry*, 1991, **30**, 4147 (*7-Hydroxy-2′,3′,4′-trimethoxyisoflavan*)

2′,4′,5,7-Tetrahydroxyisoflavanone T-10055

Updated Entry replacing T-00818

2,3-Dihydro-5,7-dihydroxy-3-(2,4-dihydroxyphenyl)-4H-1-benzopyran-4-one, 9CI. ***Dalbergioidin***

[30368-42-4]



$C_{15}H_{12}O_6$ M 288.256
Isol. from *Dolichos biflorus, Lablab niger, Lespedeza cyrtobotrya, Macrotyloma axillare, Ougeinia dalbergioides, Phaseolus vulgaris* and *Stizolobium deeringianum* (all Leguminosae, Papilionoideae).

2′-Me ether: [76656-75-2]. *4′,5,7-Trihydroxy-2′-methoxyisoflavanone.* ***Isoferreirin***
$C_{16}H_{14}O_6$ M 302.283
Constit. of *D. biflorus* and *S. deeringianum*.

4′-Me ether: [32898-79-6]. *2′,5,7-Trihydroxy-4′-methoxyisoflavanone.* ***Ferreirin***
$C_{16}H_{14}O_6$ M 302.283
Isol. from heartwood of *Ferreirea spectabilis* also from *Haplormosia monophylla* and *Cajanus cajan*. Prisms (MeOH aq. or pet. ether). Mp 210-212°.

7-Me ether: 2′,4′,5-Trihydroxy-7-methoxyisoflavanone. ***Dihydrocajanin***
$C_{16}H_{14}O_6$ M 302.283
Constit. of the heartwood of *Swartzia polyphylla*. Cryst. Mp 214-216°. Racemic.

2′,4′-Di-Me ether: [482-01-9]. *5,7-Dihydroxy-2′,4′-dimethoxyisoflavanone.* ***Homoferreirin***
$C_{17}H_{16}O_6$ M 316.310
Isol. from *Argyrocytisus battandieri, Cicer arietinum, Ferreirea spectabilis* and *O. dalbergioides*. Rectangular plates (C_6H_6/pet. ether or MeOH aq.). Mp 168-169°.

2′,4′-Di-Me ether, di-Ac: Long needles. Mp 132-133°.

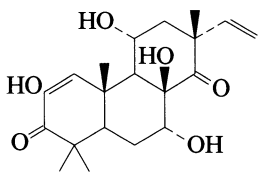
2′,5-Di-Me ether: [99965-02-3]. *4′,7-Dihydroxy-2′,5-dimethoxyisoflavanone*
$C_{17}H_{16}O_6$ M 316.310
Isol. from *Phaseolus coccineus*.

2′,7-Di-Me ether: [61020-70-0]. *4′,5-Dihydroxy-2′,7-dimethoxyisoflavanone.* ***Cajanol***
$C_{17}H_{16}O_6$ M 316.310
Isol. from fungus-infected stems of *Cajanus cajan* and *S. deeringianum*. Revised struct. Formerly considered to be 2′,6-Dihydroxy-4′,7-dimethoxyisoflavanone.

Tetra-Me ether: [28812-39-7]. *2′,4′,5,7-Tetramethoxyisoflavanone*
$C_{19}H_{20}O_6$ M 344.363
Cryst. (C_6H_6). Mp 163°.

King, F.E. *et al*, *J. Chem. Soc.*, 1952, 4580, 4752 (*Ferreirin, Homoferreirin*)
Farkas, L. *et al*, *J. Chem. Soc. C*, 1971, 1994 (*synth*)
Ingham, J.L. *et al*, *Z. Naturforsch., C*, 1976, **31**, 504; 1977, **32**, 1018; 1980, **35**, 923 (*isol, spectra, biosynth, derivs*)
Woodward, M.D., *Phytochemistry*, 1979, **18**, 363 (*isol*)
Ingham, J.L., *Z. Naturforsch., C*, 1979, **34**, 159 (*Cajanol*)
Ingham, J.L., *Prog. Chem. Org. Nat. Prod.*, 1983, **43**, 1 (*rev, occur*)
Adensanya, S.A. *et al*, *Phytochemistry*, 1985, **24**, 2699 (*4′,7-Dihydroxy-2′,5-dimethoxyisoflavanone*)
Osawa, K. *et al*, *Chem. Pharm. Bull.*, 1992, **40**, 2970 (*Dihydrocajanin*)

2,7,8,11-Tetrahydroxy-1,15-isopimaradiene-3,14-dione T-10056



$C_{20}H_{28}O_6$ M 364.438

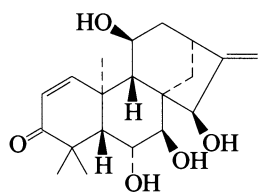
(7α,8β,11α)-form

11-Benzoyl, 7-Ac: [149725-33-7]. ***Orthosiphol E***
$C_{29}H_{34}O_8$ M 510.583
Constit. of *Orthosiphon stamineus*. Amorph. powder. $[\alpha]_D^{22}$ −99.7° (c, 0.47 in MeOH).

11-Benzoyl, 2,7-di-Ac: [149725-32-6]. ***Orthosiphol D***
$C_{31}H_{36}O_9$ M 552.620
Constit. of *O. stamineus*. Amorph. powder. $[\alpha]_D^{22}$ −96° (c, 0.21 in MeOH).

Takeda, Y. *et al*, *Phytochemistry*, 1993, **33**, 411 (*isol, pmr, cmr*)

6,7,11,15-Tetrahydroxy-1,16-kauradien-3-one T-10057



$C_{20}H_{28}O_5$ M 348.438

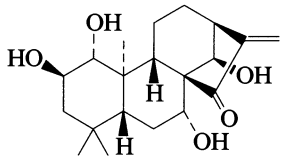
(ent-6β,7α,11α,15α)-form

Tetra-Ac: ***Forrestin F***
$C_{28}H_{36}O_9$ M 516.587

Constit. of *Rabdosia forrestii*. Needles. Mp 255-256°. $[\alpha]_D$ −112.2° (c, 0.55 in MeOH).

Xu, Y. *et al*, *Phytochemistry*, 1993, **34**, 461 (*isol, pmr,cmr*)

1,2,7,14-Tetrahydroxy-16-kauren-15-one T-10058



$C_{20}H_{30}O_5$ M 350.454

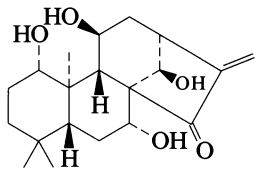
(ent-1β,2α,7β,14α)-form [123941-76-4] ***Umbrosianin***

Constit. of *Rabdosia umbrosa*. Needles (MeOH). Mp 180-182°. $[\alpha]_D^{22}$ −81.5° (c, 0.18 in $CHCl_3$).

Takeda, Y. *et al*, *Chem. Pharm. Bull.*, 1989, **37**, 1213 (*isol, pmr, cmr*)

1,7,11,14-Tetrahydroxy-16-kauren-15-one T-10059

Updated Entry replacing T-00848



$C_{20}H_{30}O_5$ M 350.454

(ent-1α,7β,11α,14α)-form

1,11-Di-Ac: [59859-94-8]. ent-*1α,11α-Diacetoxy-7β,14α-dihydroxy-16-kauren-15-one*. ***Rastronol A***

Constit. of the leaves of *Englerastrum scandens*. Cryst. (Me_2CO/diisopropyl ether). Mp 208.2-209.7°. $[\alpha]_D$ −92.6°.

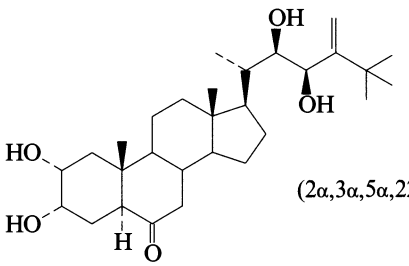
(ent-1β,6β,11α,14α)-form [125456-64-6] ***Rabdoinflexin B***

Constit. of *Rabdosia inflexa*. Needles (MeOH). Mp 266-268°. $[\alpha]_D^{24}$ −74.9° (c, 0.45 in MeOH).

Nomoto, K. *et al*, *Helv. Chim. Acta*, 1976, **59**, 772.

Wang, Z.-Q. *et al*, *Chem. Pharm. Bull.*, 1989, **37**, 2683 (*Rabdoinflexin B*)

2,3,22,23-Tetrahydroxy-25-methylergost-24(28)en-6-one, 9CI T-10060



(2α,3α,5α,22*R*,23*R*)-*form*

$C_{29}H_{48}O_5$ M 476.695

Plant growth regulator.

(2α,3α,5α,22R,23R)-form [111618-87-2] ***25-Methyldiolichosterone***

Constit. of the immature seeds of *Phaseolus vulgaris*. Needles (MeOH). Mp 254° (246-247°). $[\alpha]_D^{22}$ +4.3° (c, 0.13 in MeOH).

(2β,3α,5α,22R,23R)-form [121398-03-6]

Constit. of the immature seeds of *P. vulgaris*.

(2β,3β,5α,22R,23R)-form [114958-54-2]

Constit. of the immature seeds of *P. vulgaris*. Prisms (MeOH). Mp 248°. $[\alpha]_D^{22}$ +4.6° (c, 0.18 in $CHCl_3$). Sinters at 243°.

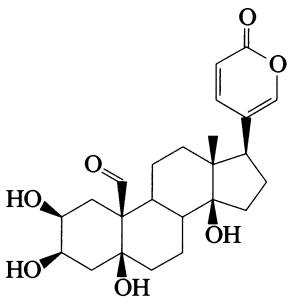
[121398-03-6]

Kim, S.K. *et al*, *Agric. Biol. Chem.*, 1987, **51**, 2303 (*isol*)

Japan. Pat., 88 255 297, (1988); *CA*, **111**, 36804 (*isol*)

Mori, K. *et al*, *Justus Liebigs Ann. Chem.*, 1988, 815 (*synth*)

2,3,5,14-Tetrahydroxy-19-oxo-20,22-bufadienolide T-10061



$C_{24}H_{32}O_7$ M 432.513

(2β,3β,5β)-form

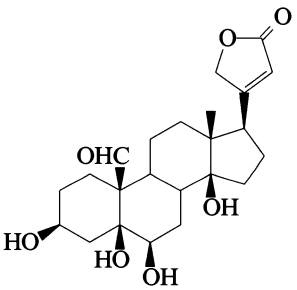
2-Ac, 3-O-[β-D-glucopyranosyl-(1→4)-2-O-acetyl-6-deoxy-3-O-methyl-α-L-glucopyranoside]: [122051-34-7]. ***Physodin B***

$C_{41}H_{58}O_{18}$ M 838.898

Isol. from *Urginea physodes*.

Van Heerden, F.R. *et al*, *S. Afr. J. Chem.*, 1988, **41**, 145.

3,5,6,14-Tetrahydroxy-19-oxocard-20(22)-enolide T-10062



$C_{23}H_{32}O_7$ M 420.502

(3β,5β,6β,14β)-form

3-O-α-L-Rhamnopyranoside: ***Zenkoside***

$C_{29}H_{42}O_{11}$ M 566.644

Isol. from seeds of *Strophanthus tholloni* and *S. sarmentosus*. Tentative struct.

3-O-6-Deoxy-L-taloside: ***Sarmentoside D***

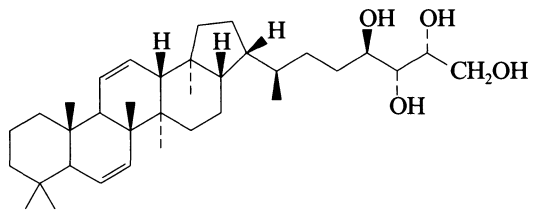
$C_{29}H_{42}O_{11}$ M 566.644

Isol. from seeds of *S. sarmentosus*, *S. tholloni* and *S. gratus*. Cryst. ($MeOH/Et_2O$). Mp 297-303°. $[\alpha]_D$ −45.8° (MeOH aq.).

Reichstein, T. *et al*, *Helv. Chim. Acta*, 1953, **28**, 1; 1957, **40**, 980; 1958, **41**, 736; 1960, **43**, 727; 1965, **48**, 202.

29-(2,3,4,5-Tetrahydroxypentyl)-6,11-hopadiene T-10063

6,11-Bacteriohopadiene-32,33,34,35-tetrol



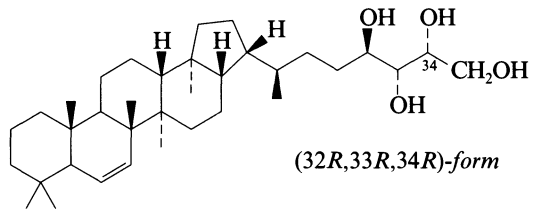
$C_{35}H_{58}O_4$ M 542.841

(32R,33R,34S)-form [144179-09-9]
Constit. of *Acetobacter aceti* and *A. pasteurianus*.

Peiseler, B. *et al*, *J. Chem. Res., Synop.*, 1992, 298; *J. Chem. Res., Miniprint*, 1992, 2353 (*isol, pmr, cmr*)

29-(2,3,4,5-Tetrahydroxypentyl)-6-hopene T-10064

6-Bacteriohopene-32,33,34,35-tetrol



(32*R*,33*R*,34*R*)-*form*

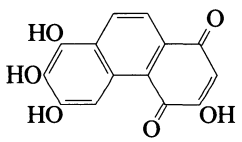
$C_{35}H_{60}O_4$ M 544.857

(32R,33R,34R)-form [144179-06-6]
Constit. of *Acetobacter aceti* and *A. pasteurianus*. Cryst. (CH_2Cl_2/MeOH) (as tetra-Ac). Mp 152-153° (tetra-Ac). $[\alpha]_D$ +22° (c, 0.0068 in $CHCl_3$) (tetra-Ac).

(32R,33R,34S)-form [115795-44-3]
Constit. of *A. aceti* and *A. pasteurianus*. Cryst. (CH_2Cl_2/MeOH) (as tetra-Ac). Mp 135-136° (tetra-Ac).

Peiseler, B. *et al*, *J. Chem. Res., Synop.*, 1992, 298; *J. Chem. Res., Miniprint*, 1992, 2353 (*isol, pmr, cmr*)

3,6,7,8-Tetrahydroxy-1,4-phenanthraquinone T-10065



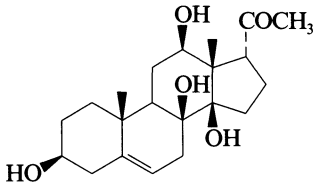
$C_{14}H_8O_6$ M 272.214

Tetra-Me ether: [144027-75-8]. *3,6,7,8-Tetramethoxy-1,4-phenanthraquinone.* ***Cymbinodin B***
$C_{18}H_{16}O_6$ M 328.321
Isol. from *Cymbidium aloifolium*. Dark red needles (C_6H_6). Mp 185-187°.

Ghosh, B.B. *et al*, *Indian J. Chem., Sect. B*, 1992, **31**, 557 (*isol*)

3,8,12,14-Tetrahydroxypregn-5-en-20-one T-10066

Updated Entry replacing T-00987



$C_{21}H_{32}O_5$ M 364.481

(3β,12β,14β,17α)-form [6869-50-7] ***Lineolone.***
Desacylcynanchogenin
Constit. of *Adonis amurensis*. Cryst. (Me_2CO). Mp 238° (233-239°). $[\alpha]_D^{24}$ +130° (c, 0.9 in MeOH).

12-(3,4-Dimethyl-2-pentenoyl): [6870-10-6]. ***Cynanchogenin***
$C_{28}H_{42}O_6$ M 474.636
Aglycone from *Cynanchum caudatum*. Cryst. Mp 167°. $[\alpha]_D$ −39.5° (c, 1.24 in EtOH).

12-(3,4-Dimethyl-2-pentenoyl), 3-O-[β-D-oleandropyranosyl-(1→4)-β-D-cymaropyranosyl-(1→4)-β-D-cymaropyranoside]: [72093-23-3]. ***Cynanchoside C2***
$C_{49}H_{78}O_{15}$ M 907.146
Saponin from *C. caudatum*. Amorph. Mp 132.5-135.5°. $[\alpha]_D$ −14.6° (c,1 in $CHCl_3$).

12-(3,4-Dimethyl-2-pentenoyl), 3-O-[β-D-glucopyranosyl-(1→4)-2,6-dideoxy-3-O-methyl-β-D-ribohexopyranosyl-(1→4)-2,6-dideoxy-3-O-methyl-β-D-ribo-hexopyranosyl-(1→4)-2,6-deoxy-3-O-methyl-β-D-ribo-hexopyranosyl-(1→4)-2,6-dideoxy-3-O-methyl-β-D-arabino-hexopyranoside]: [56768-36-6]. ***Sibiricoside D***
$C_{62}H_{100}O_{23}$ M 1213.458
Constit. of *C. sibiricum*. Amorph.

12-(3,4-Dimethyl-2-pentenoyl), 3-O-[β-D-glucopyranosyl-(1→4)-β-D-glucopyranosyl-(1→4)-2,6-dideoxy-3-O-methyl-β-D-ribohexopyranosyl-(1→4)-2,6-dideoxy-3-O-methyl-β-D-ribohexopyranosyl-(1→4)-2,6-dideoxy-3-O-methyl-β-D-ribohexopyranosyl-(1→4)-2,6-dideoxy-3-O-methyl-β-D-arabinohexopyranoside]: [56768-37-7]. ***Sibiricoside E***
$C_{68}H_{110}O_{28}$ M 1375.600
From *C. sibiricum*. Amorph.

12-O-(3,4-Dimethyl-2-pentenoyl), 3-O-[β-D-cymaropyranosyl-(1→4)-β-D-cymaropyranosyl-(1→4)-β-D-cymaropyranoside]: [84272-81-1]. ***Cynanchoside C***
$C_{49}H_{78}O_{15}$ M 907.146
Saponin from *C. caudatum*. Amorph. solid + $\frac{1}{2}H_2O$. Mp 123.5-129°. $[\alpha]_D$ +30.4° (c, 0.25 in $CHCl_3$).

12-Benzoyl, 3-O-[β-D-cymaropyranosyl-(1→4)-β-D-oleandropyranosyl-(1→4)-β-D-oleandropyranosyl-(1→4)-β-D-cymaropyranosyl-(1→4)-β-D-cymaropyranoside]: [146959-75-3]. ***Calotroposide A***
$C_{63}H_{96}O_{21}$ M 1189.439
Constit. of the roots of *Calotropis gigantea*. Amorph. solid. $[\alpha]_D^{22}$ +2.3° (c, 1 in $CHCl_3$).

12-Benzoyl, 3-O-[β-D-oleandropyranosyl-(1→4)-β-D-oleandropyranosyl-(1→4)-β-D-oleandropyranosyl-(1→4)-β-D-cymaropyranosyl-(1→4)-β-D-cymaropyranoside]: ***Calotroposide D***
$C_{63}H_{96}O_{21}$ M 1189.439
Constit. of the roots of *C. gigantea*. Amorph. solid. $[\alpha]_D^{23}$ −17.6° (c, 1.1 in $CHCl_3$).

12-Benzoyl, 3-O-[β-D-oleandropyranosyl-(1→4)-β-D-oleandropyranosyl-(1→4)-β-D-cymaropyranosyl-(1→4)-β-D-cymaropyranoside]: [146959-76-4]. ***Calotroposide F***
$C_{56}H_{84}O_{18}$ M 1045.269
Constit. of the roots of *C. gigantea*. Amorph. solid. $[\alpha]_D^{23}$ −15.6° (c, 1.5 in $CHCl_3$).

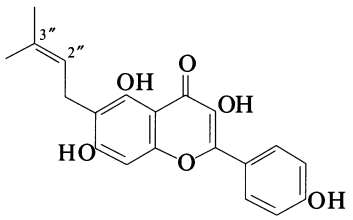
12-Benzoyl, 3-O-[β-D-oleandropyranosyl-(1→4)-β-D-cymaropyranosyl-(1→4)-β-D-cymaropyranoside]: [146959-78-6]. ***Calotroposide G***
$C_{49}H_{72}O_{15}$ M 901.099
Constit. of the roots of *C. gigantea*. Amorph. solid. $[\alpha]_D^{23}$ −17.4° (c, 0.94 in $CHCl_3$).

(3β,12β,14β)-form [7102-32-1] ***Isolineolone***
Constit. of *A. amurensis*.

Shimizu, Y. *et al*, *Tetrahedron*, 1968, **24**, 4143 (*struct*)
Yamagishi, T. *et al*, *Tetrahedron*, 1973, 3527, 3531 (*cmr*)
Tursunova, R.N. *et al*, *Tezisy Dokl. Vses. Simp. Bioorg. Khim., 1975*, 1975, 9; *CA*, 1976, **85**, 108933a (*isol*)
Shimizu, Y. *et al*, *J. Nat. Prod.* (*Lloydia*), 1978, **41**, 1 (*isol*)
Wada, K. *et al*, *Chem. Pharm. Bull.*, 1979, **27**, 2252; 1982, **30**, 3500 (*isol, Cynanchosides*)
Kitagawa, I. *et al*, *Chem. Pharm. Bull.*, 1992, **40**, 2007, 2647 (*Calotroposides*)

3,4′,5,7-Tetrahydroxy-6-prenylflavone T-10067

Updated Entry replacing T-01007
3,5,7-Trihydroxy-2-(4-hydroxyphenyl)-6-(3-methyl-2-butenyl)-4H-1-benzopyran-4-one, 9CI. 4′,5,7-Trihydroxy-6-prenylflavonol. ***Licoflavonol***
[60197-60-6]



$C_{20}H_{18}O_6$ M 354.359
Isol. from the roots of *Glycyrrhiza uralensis*. Yellow needles ($CHCl_3$/MeOH). Mp 185-187° dec.

3-Me ether: [109605-79-0]. *4′,5,7-Trihydroxy-3-methoxy-6-prenylflavone.* ***Topazolin***
$C_{21}H_{20}O_6$ M 368.385
Constit. of *Lupinus luteus* cv. Topaz. Pale-yellow rods (Me_2CO/EtOAc). Mp 227-228.5°.

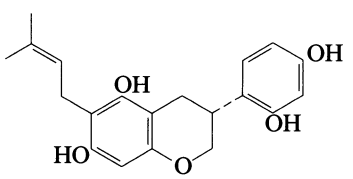
2″,3″-Dihydro, 3″-hydroxy: [143724-79-2]. *3,4′,5,7-Tetrahydroxy-6-(3-hydroxy-3-methylbutyl)flavone*
$C_{20}H_{20}O_7$ M 372.374
Isol. from *Bursera leptophloes*. Yellow needles. Mp 223-224°. Struct. revised in 1992.

2″,3″-Dihydro, 3″-hydroxy, 3-Me ether: [109605-84-7]. ***Topazolin hydrate***
$C_{21}H_{22}O_7$ M 386.401
Constit. of *L. luteus* cv. Topaz. Pale-yellow rods (EtOAc/hexane). Mp 239-241°.

Saitoh, T. *et al*, *Chem. Pharm. Bull.*, 1976, **24**, 1242 (*isol, struct*)
Tahara, S. *et al*, *Agric. Biol. Chem.*, 1987, **51**, 1039.
Fukai, T. *et al*, *Heterocycles*, 1992, **34**, 1213.

2′,4′,5,7-Tetrahydroxy-6-prenylisoflavan T-10068

Updated Entry replacing T-01012
3,4-Dihydro-5,7-dihydroxy-3-(2,4-dihydroxyphenyl)-6-(3-methyl-2-butenyl)-2H-1-benzopyran, 9CI



$C_{20}H_{22}O_5$ M 342.391

(R)-form

5-Me ether: [142474-53-1]. *2′,4′,7-Trihydroxy-5-methoxy-6-prenylisoflavan.* ***Glyasperin C***
$C_{21}H_{24}O_5$ M 356.418
Isol. from *Glycyrrhiza aspera*. Needles (Me_2CO). Mp 79-80°. $[\alpha]_D^{20}$ −15.6° (c, 0.42 in MeOH).

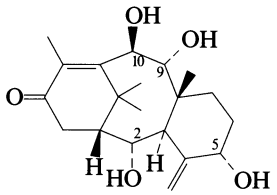
5,7-Di-Me ether: [142561-10-2]. *2′,4′-Dihydroxy-5,7-dimethoxy-6-prenylisoflavan.* ***Glyasperin D***
$C_{22}H_{26}O_5$ M 370.444
Isol. from *G. aspera*. Prisms (Me_2CO). Mp 111-114°. $[\alpha]_D^{20}$ −13.4° (c, 0.21 in MeOH).

2′,5-Di-Me ether: [145382-64-5]. *4′,7-Dihydroxy-2′,5-dimethoxy-6-prenylisoflavan.* ***Glyasperin I***
$C_{22}H_{26}O_5$ M 370.444
Isol. from the roots of *G. aspera*. Amorph. powder. $[\alpha]_D^{20}$ −5.3° (c, 0.095 in $CHCl_3$).

Zeng, L. *et al*, *Heterocycles*, 1992, **34**, 575, 1813 (*isol*)

2,5,9,10-Tetrahydroxy-4(20),11-taxadien-13-one T-10070

Updated Entry replacing T-01059
[5308-90-7]



$C_{20}H_{30}O_5$ M 350.454

(2α,5α,9α,10β)-form
Taxicin II

2,9,10-Tri-Ac: [18530-09-1]. ***Taxinine A***
$C_{26}H_{36}O_8$ M 476.566
Constit. of *Taxus cuspidata*. Cryst. Mp 254-255°. $[\alpha]_D$ +106° ($CHCl_3$).

Tetra-Ac: [18530-10-4]. ***Taxinine H***
$C_{28}H_{38}O_9$ M 518.603
Constit. of *T. cuspidata*. Cryst. Mp 166-167°. $[\alpha]_D$ +96° ($CHCl_3$).

5-Cinnamoyl, 2-Ac:
$C_{31}H_{38}O_7$ M 522.637
Cryst. (MeOH aq.). Mp 224-225°. $[\alpha]_D^{21}$ +121° ($CHCl_3$).

5-Cinnamoyl, 9-Ac: [146257-46-7].
$C_{31}H_{38}O_7$ M 522.637
Constit. of *T. baccata*.

5-Cinnamoyl, 10-Ac: [146257-45-6].
$C_{31}H_{38}O_7$ M 522.637
Constit. of *T. baccata*. Powder. Mp 204-205°. $[\alpha]_D^{25}$ +128° (c, 0.4 in $CHCl_3$).

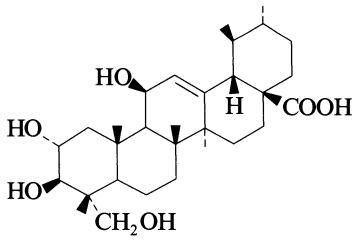
5-Cinnamoyl, 2,9,10-tri-Ac: [3835-52-7]. ***Taxinine***
$C_{35}H_{42}O_9$ M 606.711
Constit. of *T. cuspidata*. Cryst. (EtOH). Mp 265-267°. $[\alpha]_D^{18}$ +137°.

5-(3-Dimethylamino-3-phenylpropanoyl), 2,9,10-tri-Ac: [110042-00-7]. ***Taxine II.*** *1-Deoxydiacetyltaxine B*
$C_{37}H_{49}NO_9$ M 651.795
Constit. of *T. baccata*. Gum. $[\alpha]_D^{25}$ +27° (c, 2.8 in CH_2Cl_2).

Woods, M.C. *et al*, *Tetrahedron*, 1966, **22**, 243 (*pmr*)
Leete, E. *et al*, *Tetrahedron Lett.*, 1966, 3925 (*biosynth*)
Eyre, D.H. *et al*, *J. Chem. Soc. C*, 1967, 452 (*isol*)
Chiang, H.C. *et al*, *J. Chem. Soc., Chem. Commun.*, 1967, 1201 (*isol*)
Koyama, H. *et al*, *J. Chem. Soc. B*, 1971, 1342 (*struct*)
Appendino, G. *et al*, *Phytochemistry*, 1992, **31**, 4253 (*derivs, pmr, cmr*)
Appendino, G. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 514 (*Taxine II*)

2,3,11,23-Tetrahydroxy-12-ursen-28-oic acid T-10071

Updated Entry replacing T-02533



$C_{30}H_{48}O_6$ M 504.706

(2α,3β,11β)-form

11-Me ether: 2,3,23-Trihydroxy-11-methoxy-12-ursen-28-oic acid
$C_{31}H_{50}O_6$ M 518.732
Constit. of *Shorea robusta.*

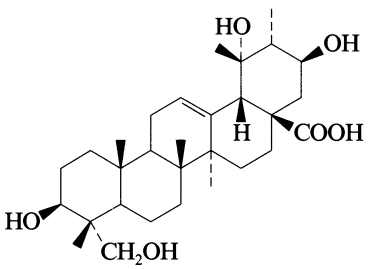
11-Ketone: 2,3,23-Trihydroxy-11-oxo-12-ursen-28-oic acid. ***11-Oxoasiatic acid***
$C_{30}H_{46}O_6$ M 502.690
Minor constit. of resin of *Dryobalanops aromatica.*

11-Ketone, Me ester: [20089-74-1].
Cryst. (H_2O). Mp 184-186°.

11-Ketone, Me ester, tri-Ac: Cryst. Mp 268-269°.

Cheung, H.T. *et al, Tetrahedron Lett.*, 1968, 4363 (*isol, struct*)
Cheung, H.T. *et al, Tetrahedron*, 1969, **25**, 119 (*pmr*)
Hota, R.K. *et al, Phytochemistry*, 1993, **32**, 466 (*isol, pmr, cmr*)

3,19,21,23-Tetrahydroxy-12-ursen-28-oic acid T-10072



$C_{30}H_{48}O_6$ M 504.706

(3β,19α,21β)-form
Ilexolic acid A
Constit. of *Ilex rotunda.* Needles (MeOH). Mp 259-260°. $[\alpha]_D$ +48.5° (c, 0.6 in MeOH).

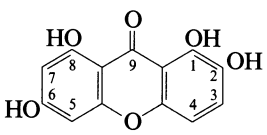
Amimoto, K. *et al, Phytochemistry*, 1993, **33**, 1475 (*isol, pmr, cmr*)

1,2,6,8-Tetrahydroxyxanthone T-10073

Updated Entry replacing T-01090

1,2,6,8-Tetrahydroxy-9H-xanthen-9-one, 9CI. ***Norswertianine***

[22172-15-2]



$C_{13}H_8O_6$ M 260.203
Isol. from *Gentiana bavarica* and *Swertia japonica.* Cryst. (MeOH). Mp 335° (332-333°).

8-O-β-D-Glucopyranoside: [42320-87-6].
$C_{19}H_{18}O_{11}$ M 422.345
Constit. of *G.* and *S.* spp. Cryst. (MeOH). Mp 177-179°.

8-Primeveroside: [53171-13-4]. ***Norswertiaprimeveroside***
$C_{24}H_{26}O_{15}$ M 554.460
From *G. bavarica.* Cryst. (MeOH).

6,8-Di-O-β-D-glucopyranoside: [62421-19-6].
$C_{25}H_{28}O_{16}$ M 584.487
Constit. of *S. perennis.* Yellow needles (MeOH). Mp 210-212°.

8-O-β-D-Laminaribioside:
$C_{25}H_{28}O_{16}$ M 584.487
Isol. from *Asplenium adiantum-nigrum.*

2-Me ether: [5042-15-9]. *1,6,8-Trihydroxy-2-methoxyxanthone*
Constit. of *Canscora decussata.* Yellow needles (EtOH). Mp 291-293° (>300°).

2-Me ether, 8-O-β-D-glucopyranoside: [118096-33-6]. ***Comastomaside***
$C_{20}H_{20}O_{11}$ M 436.371
Constit. of *Comastoma pulmonarium* and *Swertia verticillifolia.*

6-Me ether: [20882-75-1]. *1,2,8-Trihydroxy-6-methoxyxanthone.* ***Swertianine.*** *Gentiakochianine. Gentiachochianine*
$C_{14}H_{10}O_6$ M 274.229
Isol. from *G. bavarica, G. kochiana* and *S. japonica.* Mp 226-227° (221°).

6-Me ether, 1-O-primeveroside: [26097-43-8]. ***Gentiakochianoside***
$C_{25}H_{28}O_{15}$ M 568.487
Constit. of *G. ciliata* and *G. kochiana.* Yellow needles + $\frac{1}{2}H_2O$ (H_2O). Mp 206-207°.

6-Me ether, 8-primeveroside: [53171-11-2]. ***Isogentiakochianoside***
$C_{25}H_{28}O_{15}$ M 568.487
Cryst. (MeOH). Mp 221°.

6-Me ether, 2-rutinoside: [54244-36-9]. ***Desacetylgentiabavarutinoside***
$C_{26}H_{30}O_{15}$ M 582.514
From *G. bavarica.* Cryst. (MeOH). Mp 228°.

6-Me ether, 2-(O-acetylrutinoside): [61252-90-2]. ***Gentiabavarutinoside***
$C_{28}H_{32}O_{16}$ M 624.551
From *G. bavarica.* Cryst. (MeOH). Mp 219-221°.

1,2-Di-Me ether: [25991-81-5]. *6,8-Dihydroxy-1,2-dimethoxyxanthone.* ***Swertinin***
$C_{15}H_{12}O_6$ M 288.256
Constit. of *S. decussata.* Yellow needles ($EtOH/CHCl_3$). Mp 217°. Formerly asssigned the 1,2-dihydroxy-6,8-dimethoxy struct.

1,2-Di-Me ether, di-Ac: Mp 157°.

1,6-Di-Me ether: [15402-27-4]. *2,8-Dihydroxy-1,6-dimethoxyxanthone.* ***Gentiacauleine***
From *G.* spp., incl. *G. bavarica* and *G. acaulis.* Cryst. (MeOH). Mp 194°.

1,6-Di-Me ether, 2-O-primeveroside: [20398-10-1]. ***Gentiacauloside.*** *Gentiacaulin*
$C_{26}H_{30}O_{15}$ M 582.514
Constit. of *G. acaulis* and *G. kochiana.* Yellow needles (EtOH). Mp 223°.

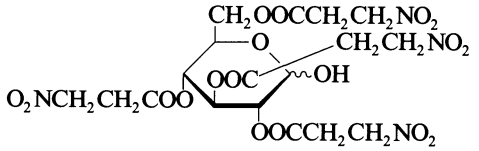
1,6-Di-Me ether, 8-primeveroside: [53171-10-1]. ***Gentiabavaroside***
$C_{26}H_{30}O_{15}$ M 582.514
From *G. bavarica.* Cryst. (MeOH). Mp 163°.

1,8-Di-Me ether: [107110-12-3]. *2,6-Dihydroxy-1,8-dimethoxyxanthone*
$C_{15}H_{12}O_6$ M 288.256
Constit. of *Haploclathra paniculata.* Yellow cryst. (EtOH). Mp 282-284°.

2,6-Di-Me ether: [22172-17-4]. *1,8-Dihydroxy-2,6-dimethoxyxanthone.* ***Swertiaperenine.*** *Swertiaperrenin*
$C_{15}H_{12}O_6$ M 288.256
Constit. of *Centaurium cachanlahuen* and *Canscora decussata.* Mp 191°.
2,6-Di-Me ether, 8-O-primeveroside: [60354-05-4].
$C_{26}H_{30}O_{15}$ M 582.514
Constit. of *Swertia perennis.* Cryst. (MeOH). Mp 167-168° dec.
2,8-Di-Me ether, 1-O-primeveroside: [67783-22-6].
$C_{26}H_{30}O_{15}$ M 582.514
Constit. of *G. ciliata.* Mp 215-218°.
1,2,6-Tri-Me ether: [20882-69-3]. *8-Hydroxy-1,2,6-trimethoxyxanthone.* ***Decussatine***
$C_{16}H_{14}O_6$ M 302.283
Isol. from *Swertia decussata, C. cachanlahuen* and *G. bavarica.* Yellow needles (EtOH). Mp 159°. Revised struct.
1,2,6-Tri-Me ether, 8-primeveroside: [79548-63-3].
$C_{27}H_{32}O_{15}$ M 596.541
Isol. from *G.* spp. Cryst. (MeOH). Mp 192-193° dec.
1,6,8-Tri-Me ether: [114371-78-7]. *2-Hydroxy-1,6,8-trimethoxyxanthone.* ***Anthaxanthone***
$C_{16}H_{14}O_6$ M 302.283
Constit. of *Haploclathra leiantha.* Yellow cryst. (EtOH). Mp 202-204°.
Tetra-Me ether: 1,2,6,8-Tetramethoxyxanthone
$C_{17}H_{16}O_6$ M 316.310
Cryst. (MeOH). Mp 165-167°.

Komatsu, M. *et al, Chem. Pharm. Bull.*, 1969, **17**, 155.
Rivaille, P. *et al, Phytochemistry*, 1969, **8**, 1533 (*Gentiacauloside, Gentiakochianoside*)
Stout, G.H. *et al, Phytochemistry*, 1969, **8**, 2417.
Chaudhuri, R.K. *et al, Phytochemistry*, 1971, **10**, 2425 (*isol*)
Hostettman, K. *et al, Helv. Chim. Acta*, 1974, **57**, 294; 1976, **59**, 2592; 1977, **60**, 262; 1978, **61**, 1549 (*isol, pmr, uv, struct, bibl*)
Guyot, M.P. *et al, Phytochemistry*, 1979, **8**, 1533 (*Swertinin*)
Imperato, F. *et al, Phytochemistry*, 1980, **19**, 2030 (*laminaribioside*)
Versluys, C. *et al, Experientia*, 1982, **38**, 771 (*isol*)
Nagem, T.J. *et al, Phytochemistry*, 1986, **25**, 2681; 1988, **27**, 646 (*isol, Anthaxanthone*)
Fan, S. *et al, Zhiwu Xuebao*, 1988, **30**, 303; *CA*, **110**, 21067 (*Comastomaside*)

2,3,4,6-Tetrakis(3-nitropropanoyl)glucose T-10074

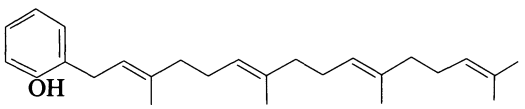


$C_{18}H_{24}N_4O_{18}$ M 584.404
Isol. from *Indigofera suffruticosa.* Cryst. (MeOH). Mp 139-141°. See also Endecaphyllins, E-00238.

Garcez, W.S. *et al, Phytochemistry*, 1989, **28**, 1251.

2-(3,7,11,15-Tetramethyl-2,6,10,14-hexadecatetraenyl)benzene T-10075

Updated Entry replacing T-01167
2-Tetraprenylphenol
[14158-85-1]

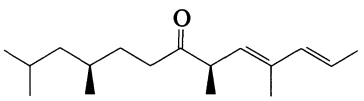


$C_{26}H_{38}O$ M 366.586
Metab. of *Rhodospirillum rubrum.* Precursor of Ubiquinones. Oil.

Olsen, R.K. *et al, J. Am. Chem. Soc.*, 1966, **88**, 5919.

4,6,10,12-Tetramethyl-2,4-tridecadien-7-one T-10076

Matsuone



$C_{17}H_{30}O$ M 250.423
(2E,4E,6R*,10R*)-form
Constit. of the red pine scale *Matsucoccus resinosae* and other *M.* spp. Sex pheromone. Relative config. known.
[121981-51-9, 133697-99-1, 133698-00-7, 133698-01-8, 133698-02-9]

Lanier, G.N. *et al, J. Chem. Ecol.*, 1989, **15**, 1645; 1991, **17**, 89 (*isol, props*)
Cywin, C.L. *et al, J. Org. Chem.*, 1991, **56**, 2953 (*synth, abs config*)

12,21-Tetratriacontanediol T-10077

Randiol
[142942-92-5]

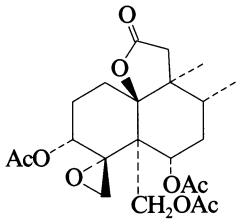
$H_3C(CH_2)_{12}CH(OH)(CH_2)_8CH(OH)(CH_2)_{10}CH_3$

$C_{34}H_{70}O_2$ M 510.926
Isol. from the bark of *Randia longispina.*

Mukherjee, K.S. *et al, Fitoterapia*, 1991, **62**, 506 (*isol*)

Teucrolin D T-10078

[149992-88-1]



$C_{22}H_{30}O_9$ M 438.474

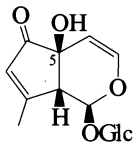
Constit. of *Teucrium oliverianum*. Powder. Mp 77-79°. $[\alpha]_D$ −53° (c, 0.084 in C_6H_6).

Al-Yahya, M.A. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 830 (*isol, pmr, cmr*)

Teuhircoside T-10079

Updated Entry replacing T-01201

[80135-40-6]



$C_{15}H_{20}O_9$ M 344.318

Constit. of *Teucrium arduini* and *T. hyrcanicum*. Cryst. Mp 213°. $[\alpha]_D^{21}$ −400.7° (c, 0.08 in MeOH).

5-O-Rhamnoside: [78280-92-9]. ***Teucardoside***

$C_{21}H_{30}O_{13}$ M 490.460

Constit. of *T. arduini* and *T. hyrcanicum*. Amorph. $[\alpha]_D^{21}$ −183.5° (c, 0.1 in MeOH).

5-Deoxy: ***5-Deoxyteuhircoside***

$C_{15}H_{20}O_8$ M 328.318

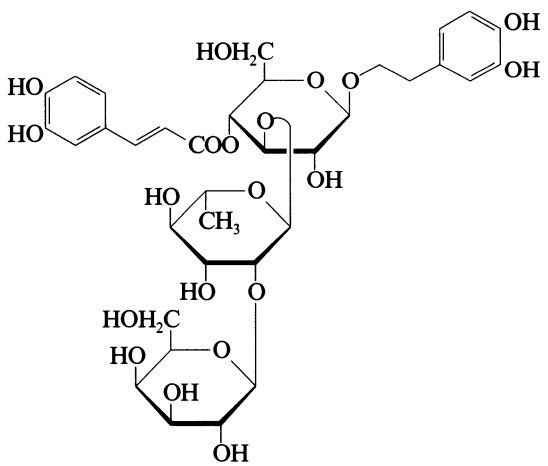
Constit. of *Linaria japonica*. Unstable amorph. powder. $[\alpha]_D$ −161° (c, 0.89 in MeOH).

Ruhdorfer, J. *et al*, *Z. Naturforsch., C*, 1981, **36**, 697.

Otsuka, H., *Phytochemistry*, 1993, **33**, 617 (*5-Deoxyteuhircoside*)

Teupolioside T-10080

[143617-02-1]



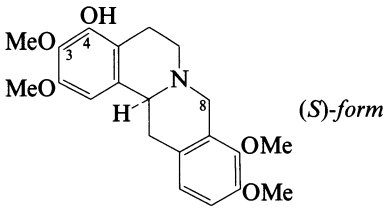
$C_{35}H_{46}O_{20}$ M 786.736

Constit. of *Teucrium polium*. Yellow amorph. solid. $[\alpha]_D^{22}$ −44.0° (c, 1.18 in EtOH).

Oganesyan, G.B. *et al*, *Khim. Prir. Soedin.*, 1991, **27**, 630; *Chem. Nat. Compd.* (*Engl. Transl.*), 556 (*isol, uv, ir, pmr, cmr*)

Thaicanine T-10081

Updated Entry replacing T-01225



(*S*)-*form*

$C_{21}H_{25}NO_5$ M 371.432

(***S*)-*form*** [102828-06-8]

$C_{21}H_{25}NO_5$ M 371.432

Alkaloid from the leaves of *Parabaena sagittata* (Menispermaceae). Cryst. (MeOH/$CHCl_3$). Mp 144-146°. $[\alpha]_D^{20}$ −243° ($CHCl_3$).

N-*Me:* **N-*Methylthaicanine***

$C_{22}H_{28}NO_5^{\oplus}$ M 386.467 (ion)

Alkaloid from leaves of *Anisocycla cymosa* (Menispermaceae). Amorph. powder. $[\alpha]_D^{20}$ −102.1° (c, 0.014 in MeOH).

Me ether: [102828-07-9]. **O-*Methylthaicanine***

$C_{22}H_{27}NO_5$ M 385.459

Isol. from the leaves of *P. sagittata* (Menispermaceae). Cryst. (MeOH/$CHCl_3$). Mp 119-120°. $[\alpha]_D^{20}$ −259° ($CHCl_3$).

N,O-*Di-Me:* **N,O-*Dimethylthaicanine***

$C_{23}H_{30}NO_5^{\oplus}$ M 400.494

Alkaloid from leaves of *A. cymosa* (Menispermaceae). Needles ($CHCl_3$). Mp 218°. $[\alpha]_D^{20}$ −102.8° (c, 0.020 in $CHCl_3$).

8-Oxo: ***8-Oxothaicanine***

$C_{21}H_{23}NO_6$ M 385.416

Alkaloid from stems of *Coscinium fenestratum* (Menispermaceae). Gum. $[\alpha]_D$ −667° (c, 0.003 in $CHCl_3$). Tentative struct.; the 3-OH, 4-OMe struct. cannot be excluded.

(±)-***form*** [126640-91-3]

Me ether: Synthetic. Yellow solid. Mp 116-117°.

O^{10}-*De-Me:* [132923-34-3]. ***Thaipetaline***

$C_{20}H_{23}NO_5$ M 357.405

Alkaloid from *Polyalthia stenopetala* (Annonaceae). Amorph. $[\alpha]_D$ −130° (c, 1 in MeOH).

Ruangrungsi, N. *et al*, *J. Nat. Prod.* (*Lloydia*), 1986, **49**, 253 (*isol, uv, ir, pmr, cmr, ms, struct*)

Mali, R.S. *et al*, *Indian J. Chem., Sect. B*, 1989, **28**, 107 (*synth, uv, ir, pmr, cmr, ms, O-Methylthaicanine*)

Mali, R.S. *et al*, *Synth. Commun.*, 1989, **19**, 2613 (*synth*)

Janssen, R.H.A.M. *et al*, *Phytochemistry*, 1990, **29**, 3331 (*cmr*)

Lavault, M. *et al*, *Phytochemistry*, 1990, **29**, 3845 (*Thaipetaline*)

Kanyinda, B. *et al*, *J. Nat. Prod.* (*Lloydia*), 1992, **55**, 607 (*N-Methylthaicanine, N,O-Dimethylthaicanine*)

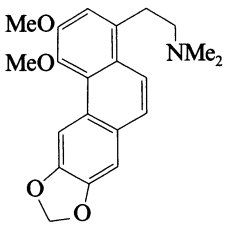
Pinho, P.M.M. *et al*, *Phytochemistry*, 1992, **31**, 1403 (*8-Oxothaicanine*)

Thalicthuberine T-10082

Updated Entry replacing T-01247

*1,2-Dimethoxy-*N,N*-dimethylphenanthro[2,3-*d*][1,3]dioxole-4-ethanamine, 9CI. 1-(2-Dimethylaminoethyl)-3,4-dimethoxy-6,7-methylenedioxyphenanthrene. Thalictuberine*

[477-35-0]



$C_{21}H_{23}NO_4$ M 353.417

Alkaloid from the roots of *Thalictrum thunbergii* and *T. rugosum*, and from the roots and rhizomes of *T. strictum* (Ranunculaceae). Shows a wide range of *in vitro* antimicrobial activity. Needles (Et_2O). Mp 126-127°.

B,HCl: Needles + $0.5H_2O$. Mp 209-210°.

B,(COOH)$_2$: Needles + $0.5H_2O$. Mp 206-207°.

N-*Oxide:* ***Thalicthuberine* N-*oxide***

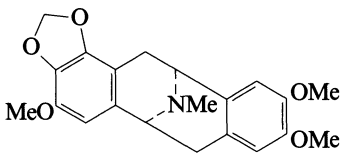
$C_{21}H_{23}NO_5$ M 369.416

Alkaloid from aerial parts of *Platycapnos spicata* (Fumariaceae). Prisms (EtOH). Mp 112-114°.

Fujita, E. *et al*, *Yakugaku Zasshi*, 1959, **79**, 1252; *CA*, **54**, 4643f (*isol, uv, ir, struct*)
Maekh, S.Kh. *et al*, *Khim. Prir. Soedin.*, 1976, 560 (*isol*)
Wu, W.-N. *et al*, *J. Nat. Prod.* (*Lloydia*), 1980, **43**, 143 (*isol, pmr*)
Blanco, O.M. *et al*, *Phytochemistry*, 1993, **32**, 1055 (*oxide*)

Thalimonine T-10083

[142735-70-4]



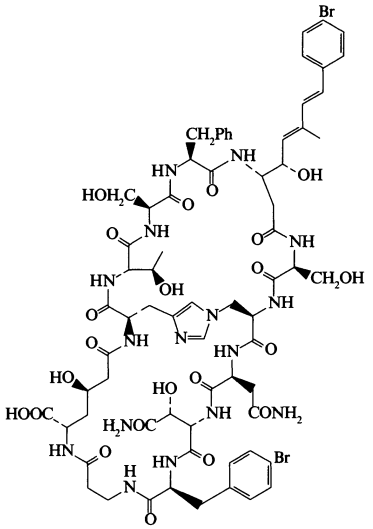
$C_{21}H_{23}NO_5$ M 369.416

Alkaloid from aerial parts of *Thalictrum simplex* (Ranunculaceae). $[\alpha]_D^{22}$ −118° (c, 0.20 in MeOH).

Velcheva, M.P. *et al*, *J. Nat. Prod.* (*Lloydia*), 1992, **55**, 679 (*isol, uv, ir, cd, pmr, cmr, ms, struct*)

Theonellamide F T-10084

[119455-31-1]



$C_{69}H_{86}Br_2N_{16}O_{22}$ M 1651.340

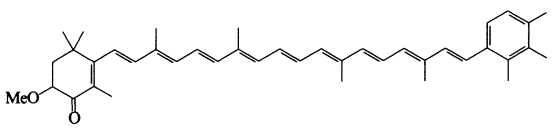
Isol. from a marine sponge *Theonella* sp. Antifungal agent. $[\alpha]_D^{23}$ −5.5° (c, 0.12 in 1-propanol aq.). Other Theonellamides have not been isol. or characterized as yet (1992).

Matsunaga, S. *et al*, *J. Am. Chem. Soc.*, 1989, **111**, 2582 (*isol, struct, pmr, cmr*)

Thorexanthin T-10085

3-Methoxy-β,χ-caroten-4-one

[145038-22-8]



$C_{41}H_{52}O_2$ M 576.861

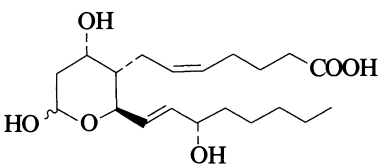
Constit. of *Thorecta horridus*. $[\alpha]_D^{25}$ −15° (c, 0.03 in $CHCl_3$).

Fattorusso, E. *et al*, *Z. Naturforsch., B*, 1992, **47**, 1477 (*isol, pmr, cmr*)

Thromboxane B_2 T-10086

*7-[Tetrahydro-4,6-dihydroxy-2-(3-hydroxy-1-octenyl)-2*H*-pyran-3-yl]-5-heptenoic acid, 9CI. 9α,11,15*S*-Trihydroxythromboxa-5*Z*,13*E*-dien-1-oic acid. TXB_2*

[54397-85-2]



$C_{20}H_{34}O_6$ M 370.485

(+)-***form***

One of the major prods. of the biosynth. system which converts arachidonic acid to prostaglandins. Plates ($EtOAc/Et_2O$/pet. ether). Mp 95-96°. $[\alpha]_D^{25}$ +57.4° (c, 0.26 in EtOAc).

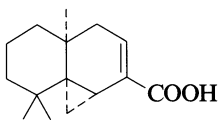
11-Dehydro: [67910-12-7]. *9,15-Dihydroxy-11-oxothromboxa-5,13-dien-1-oic acid. 11-Dehydrothromboxane B_2. 11-Dehydro-TXB$_2$*
Thromboxane B_2 metab.
11-Dehydro, Me ester: [67719-11-3].
$C_{21}H_{34}O_6$ M 382.496
13,14-Dihydro, 15-Oxo: [62107-18-0]. *9,11-Dihydroxy-15-oxothrombox-5-en-1-oic acid. 15-Dehydro-13,14-dihydrothromboxane B_2*
$C_{20}H_{34}O_6$ M 370.485
Thromboxane B_2 metab.

(±)-***form***
Plates (EtOAc/Et_2O/pet. ether). Mp 92-94° (89-90°).

Hamberg, M. *et al, Proc. Natl. Acad. Sci. U.S.A.*, 1974, **71**, 3400 (*struct, ms*)
Nelson, N.A. *et al, Tetrahedron Lett.*, 1976, 3275 (*synth*)
Kelly, R.C. *et al, Tetrahedron Lett.*, 1976, 3279 (*synth*)
Schneider, W.P. *et al, Tetrahedron Lett.*, 1976, 3283 (*synth, ms*)
Hanessian, S. *et al, Can. J. Chem.*, 1977, **55**, 562 (*synth*)
Corey, E.J. *et al, Tetrahedron Lett.*, 1977, 785 (*synth*)
Nelson, N.A. *et al, Prostaglandins*, 1978, **16**, 85 (*synth, ir, pmr, ms*)
Hernandez, O., *Tetrahedron Lett.*, 1978, 219 (*synth*)
Langs, D.A. *et al, Nature (London)*, 1979, **281**, 237 (*cryst struct, conformn*)
Roberts, L.J. *et al, J. Biol. Chem.*, 1981, **256**, 8384 (*biosynth*)
Robinson, C. *et al, Biochim. Biophys. Acta*, 1982, **712**, 315; 1983, **754**, 190 (*biosynth*)
Watanabe, K. *et al, Chem. Pharm. Bull.*, 1989, **37**, 140 (*detn*)

3-Thujopsen-15-oic acid T-10087

Updated Entry replacing T-01438
Hinokiic acid. *Widdringtonic acid I. Widdrenic acid*
[546-53-2]

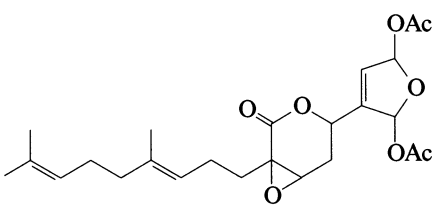


$C_{15}H_{22}O_2$ M 234.338
Constit. of *Widdringtonia* spp., *Chamaecyparis thyoides* and *Juniperus* spp. Cryst. Mp 169-170° (166°). $[\alpha]_D^{20}$ −90.4°.

15-Aldehyde: [470-41-7]. *3-Thujopsen-15-al. Thujopsenal*
$C_{15}H_{22}O$ M 218.338
Made by oxidn. of 3-Thujopsene, T-01437. Perfumery ingredient.

Erdtman, H. *et al, Acta Chem. Scand.*, 1959, **13**, 1124 (*isol*)
Forsén, S. *et al, Acta Chem. Scand.*, 1961, **15**, 1676 (*pmr*)
Takeshita, H. *et al, Tetrahedron Lett.*, 1969, 3095 (*synth, pmr*)
Ito, M. *et al, Bull. Chem. Soc. Jpn.*, 1972, **45**, 1914; 1974, **47**, 3173; 1979, **52**, 261 (*synth*)
Talvitie, A. *et al, Finn. Chem. Lett.*, 1976, 149 (*struct*)

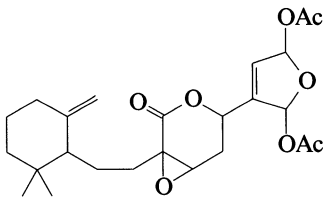
Thuridillin A T-10088



$C_{24}H_{32}O_8$ M 448.512
Constit. of *Thuridilla hopei.* $[\alpha]_D^{25}$ −12.5° (c, 0.4 in $CHCl_3$).

Govagnin, M. *et al, Gazz. Chim. Ital.*, 1993, **123**, 205 (*isol, pmr, cmr*)

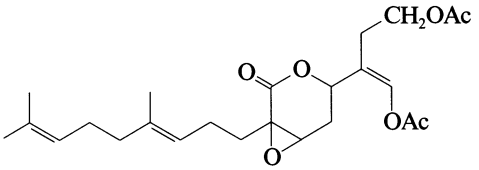
Thuridillin B T-10089



$C_{24}H_{32}O_8$ M 448.512
Constit. of *Thuridilla hopei.* $[\alpha]_D^{25}$ −9.4° (c, 0.48 in $CHCl_3$).

Govagnin, M. *et al, Gazz. Chim. Ital.*, 1993, **123**, 205 (*isol, pmr, cmr*)

Thuridillin C T-10090

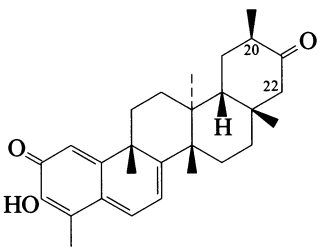


$C_{24}H_{34}O_7$ M 434.528
Constit. of *Thuridilla hopei.* $[\alpha]_D^{25}$ −86.0° (c, 0.05 in $CHCl_3$).

Govagnin, M. *et al, Gazz. Chim. Ital.*, 1993, **123**, 205 (*isol, pmr, cmr*)

Tingenin A T-10091

Updated Entry replacing T-01482
3-Hydroxy-24,29-dinor-1(10),3,5,7-friedelatetraene-2,21-dione. Maitenin. Tingenone
[50802-21-6]



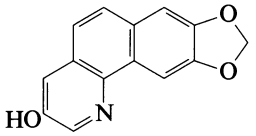
$C_{28}H_{36}O_3$ M 420.591
Isol. from *Maytenus* spp. and *Euonymus tingens*. Also found in *Trypterygium wilfordii*. Shows antitumour props. Cryst. Mp 203-204° (228-229°).

▷ LS6872000.

Ac: Cryst. Mp 175°.
22β-Hydroxy: [50656-68-3]. ***Tingenin B.*** *3,22-Dihydroxy-24,29-dinor-1(10),3,5,7-friedelatetraene-2,21-dione. 22β-Hydroxytingenone*
$C_{28}H_{36}O_4$ M 436.590
Constit. of *M.* spp. and *E. tingens*. Cryst. Mp 210-211°.
20β-Hydroxy: [52475-25-9]. *3,20-Dihydroxy-24,29-dinor-1(10),3,5,7-friedelatetraene-2,21-dione.* ***20-Hydroxytingenone.*** *20-Hydroxymaitenin*
$C_{28}H_{36}O_4$ M 436.590
Isol. from *E. tingens*. Red cryst. (Me_2CO). Mp 207-208.5°. $[\alpha]_D^{20}$ +102° (c, 0.1 in $CHCl_3$). Struct. revised in 1993. Formerly thought to be 20α.
15α,22β-Dihydroxy: ***15α,22β-Dihydroxytingenone***
$C_{28}H_{36}O_5$ M 452.589
Constit. of root bark of *Cassine balae*. Orange-red cryst. ($CHCl_3$/MeOH). Mp 242-243°. $[\alpha]_D$ −182° (c, 1.40 in $CHCl_3$).

Monache, F.D. *et al*, *Gazz. Chim. Ital.*, 1972, **102**, 317; 1973, **103**, 627 (*isol, struct*)
Nakanishi, K. *et al*, *J. Am. Chem. Soc.*, 1973, **95**, 6473 (*isol, cmr*)
Brown, P.M. *et al*, *J. Chem. Soc., Perkin Trans. 1*, 1973, 2721 (*isol, cryst struct*)
Dias, M.N. *et al*, *J. Chem. Res., Synop.*, 1990, 238 (*Dihydroxytingenone*)
Bavovada, R. *et al*, *Planta Med.*, 1990, **56**, 380 (*Tingenin B, pmr, cmr*)
Kutney, J.P. *et al*, *Can. J. Chem.*, 1992, **70**, 1455 (*isol, cryst struct*)
Likhitwitayawuid, K. *et al*, *Phytochemistry*, 1993, **34**, 759 (*pmr, cmr, struct*)
Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th Ed., Van Nostrand-Reinhold, 1992, TGD125.

Toddaquinoline T-10092



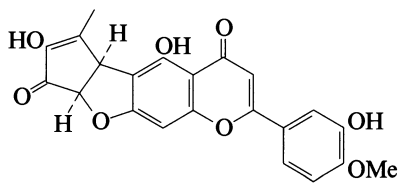
$C_{14}H_9NO_3$ M 239.230
Alkaloid from the root bark of *Toddalia asiatica* (Rutaceae). Prisms (MeOH/Et_2O). Mp 235-237°.
Ac: Needles ($CHCl_3$/MeOH). Mp 174-176°.
Me ether: Prisms (MeOH). Mp 145-148°.
Et ether: Needles ($CHCl_3$/MeOH). Mp 165-168°.

Chen, I.-S. *et al*, *Phytochemistry*, 1993, **34**, 1449 (*isol, uv, ir, pmr, struct*)

Torosaflavone C T-10093

5b,8a-Dihydro-5,7-dihydroxy-2-(3-hydroxy-4-methoxyphenyl)-6-methyl-4H,8H-cyclopenta[4.5]furo[3,2-g]-1-benzopyran-4,8-dione, 9CI

[144049-86-5]

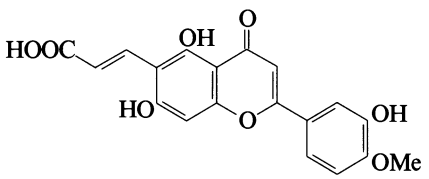


$C_{22}H_{16}O_8$ M 408.364
Constit. of the leaves of *Cassia torosa*. Pale yellow needles (MeOH). Mp 305.5-306°. Racemic.

Kitanaka, S. *et al*, *Chem. Pharm. Bull.*, 1991, **39**, 3254 (*isol, pmr, cmr*)

Torosaflavone D T-10094

[144049-79-6]



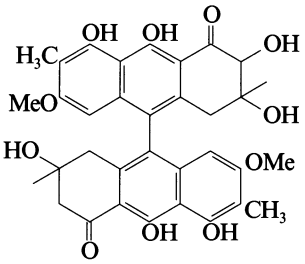
$C_{19}H_{14}O_8$ M 370.315
Constit. of the leaves of *Cassia torosa*. Yellow needles (hexane/Py). Mp 244.5-255.5°.

Kitanaka, S. *et al*, *Chem. Pharm. Bull.*, 1991, **39**, 3254 (*isol, pmr, cmr*)

Torosaol I T-10095

2,2',3,3'-Tetrahydro-2,2',3,5,5',10,10'-heptahydroxy-7,7'-dimethoxy-2,2',6,6'-tetramethyl[9,9'-bianthracene]-4,4'(1H,1'H)-dione, 9CI

[129212-24-4]

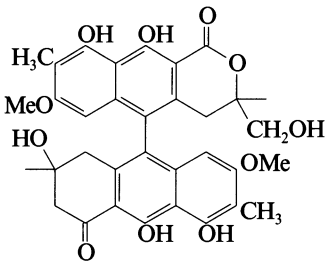


$C_{34}H_{34}O_{11}$ M 618.636
Constit. of the roots of *Cassia torosa*. Yellow-brown prisms (C_6H_6). Mp 300° dec.

Kitanaka, S. *et al*, *Chem. Pharm. Bull.*, 1990, **38**, 1292 (*isol, pmr, struct*)

Torosaol II T-10096

[129085-29-6]

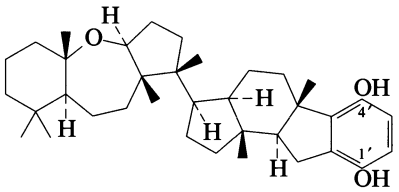


$C_{34}H_{34}O_{11}$ M 618.636
Constit. of the roots of *Cassia torosa*. Yellow-brown prisms (C_6H_6). Mp 230° dec.

Kitanaka, S. *et al*, *Chem. Pharm. Bull.*, 1990, **38**, 1292 (*isol*)

Toxicol B T-10097

[149764-32-9]

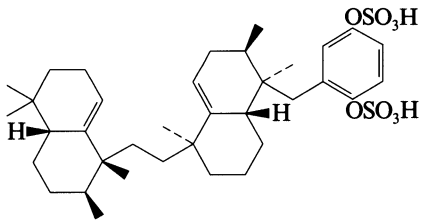


$C_{36}H_{54}O_3$ M 534.821
Constit. of *Toxiclona toxius*. Powder. $[\alpha]_D$ −16° (c, 0.004 in MeOH/CH_2Cl_2).
4'-Sulfate: [149764-33-0]. ***Toxicol C***
$C_{36}H_{54}O_6S$ M 614.885
Constit. of *T. toxius*. Oil (as Na salt). $[\alpha]_D$ +21° (c, 0.07 in MeOH) (as Na salt).
1',4'-Disulfate: [149764-31-8].
$C_{36}H_{54}O_9S_2$ M 694.949
Constit. of *T. toxius*. Oil (as di-Na salt). $[\alpha]_D$ +35° (c, 1 in MeOH) (Na salt).

Isaacs, S. *et al*, *Tetrahedron*, 1993, **49**, 4275 (*isol, pmr, cmr*)

Toxiusol T-10098

[149764-34-1]



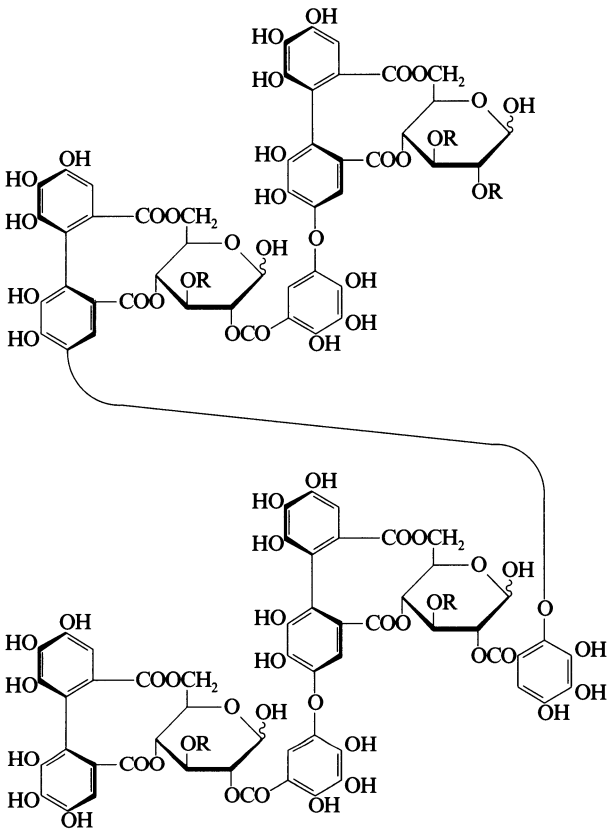
$C_{36}H_{54}O_8S_2$ M 678.950

Constit. of *Toxiclona toxius*. Oil (as di-Na salt).

Isaacs, S. *et al*, *Tetrahedron*, 1993, **49**, 4275 (*isol, pmr, cmr*)

Trapanin B T-10099

[132679-83-5]



R = 3,4,5-Trihydroxybenzoyl

$C_{136}H_{98}O_{88}$ M 3140.217

Ellagitannin constit. of *Trapa japonica*. Off-white amorph. powder + $16H_2O$. $[\alpha]_D^{20}$ +16° (c, 0.3 in MeOH).

Hatano, T. *et al*, *Chem. Pharm. Bull.*, 1990, **38**, 2707 (*struct, uv, ir, cd, pmr, cmr*)

Triacontanoic acid T-10100

Updated Entry replacing T-01645

Melissic acid

[506-50-3]

$H_3C(CH_2)_{28}COOH$

$C_{30}H_{60}O_2$ M 452.803

Found in some plant waxes, eg. cotton, carnauba, various leaf waxes. Main constit. of acid fraction of *Vitex divaricata* wood. Cryst. (C_6H_6/Me_2CO). Mp 93.5-94°.

Me ester: [629-83-4].
$C_{31}H_{62}O_2$ M 466.830
Cryst. (pet. ether). Mp 71.5°.

Et ester: [7505-12-6].
$C_{32}H_{64}O_2$ M 480.856
Cryst. (EtOH). Mp 70.5°.

Pentyl ester: [116044-06-5].
$C_{35}H_{70}O_2$ M 522.937
Constit. of the leaves of *Ilex aquifolium*.

Hexyl ester: [108706-11-2].
$C_{36}H_{72}O_2$ M 536.964
Constit. of the waxes of *Abies* sp., *Ilex* sp. and *Picea* sp.

Tetradecyl ester: [104932-41-4].
$C_{44}H_{88}O_2$ M 649.178
Constit. of *Abutilon pakistanicum* and the green alga *Chlorella kessleri*.

Hentriacontyl ester: [135729-36-1].
$C_{61}H_{122}O_2$ M 887.634
Constit. of the leaves and stem of *Artemisia annua*.

Robinson, G.M., *J. Chem. Soc.*, 1934, 1543 (*synth*)
Cocker, W. *et al*, *J. Chem. Soc.*, 1962, 5194 (*isol*)
Karrer, W. *et al*, *Konstitution und Vorkommen der Organischen Pflanzenstoffe*, 2nd Ed., Birkhäuser Verlag, Basel, 1972-1985, no. 713 (*occur*)

5-Triacontanol T-10101

$H_3C(CH_2)_{24}CH(OH)(CH_2)_3CH_3$

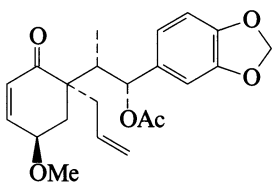
$C_{30}H_{62}O$ M 438.819

Ac: [146356-95-8]. *5-Acetoxytriacontane*
$C_{32}H_{64}O_2$ M 480.856
Constit. of *Leucas aspera*. Cryst. (hexane). Mp 90-91°.

Misra, T.N. *et al*, *Phytochemistry*, 1993, **32**, 199.

Triandrin A T-10102

[119087-41-1]



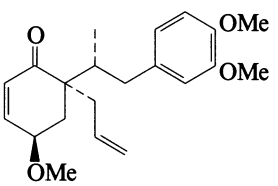
$C_{22}H_{26}O_6$ M 386.444

Neolignan. Constit. of the seeds of *Licaria triandra*.

Castro, C.O. *et al*, *Rev. Latinoam. Quim.*, 1988, **19**, 60 (*isol, struct*)

Triandrin B T-10103

[117505-92-7]



$C_{21}H_{28}O_4$ M 344.450

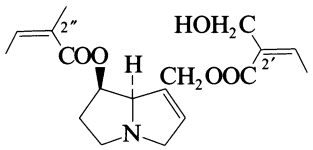
Neolignan. Constit. of the seeds of *Licaria triandra*.

Castro, C.O. *et al*, *Rev. Latinoam. Quim.*, 1988, **19**, 60 (*isol, struct*)

Triangularine T-10104

Updated Entry replacing T-01655

[87340-27-0]



$C_{18}H_{25}NO_5$ M 335.399

Diester of Retronecine (see 2,3,5,7*a*-Tetrahydro-1-hydroxy-1*H*-pyrrolizine-7-methanol, T-00477) with angelic acid (see 2-Methyl-2-butenoic acid, M-00844) and 2-Hydroxymethyl-2-butenoic acid, H-02327. Alkaloid from *Senecio triangularis* and *Alkanna tinctoria* (Compositae, Boraginaceae). Pale-yellow oil. $[\alpha]_D^{25}$ +2.2° (c, 1 in $CHCl_3$).

2′E-Isomer: [87392-67-4]. ***Neotriangularine***
$C_{18}H_{25}NO_5$ M 335.399
Alkaloid from *S. triangularis* (Compositae). Yellow oil.

2″E-Isomer: [136173-28-9]. ***Triangularicine***
$C_{18}H_{25}NO_5$ M 335.399
Alkaloid from *S. hydrophyllus* and *S. mikanoides* (Compositae).

(2′E,2″E)-Isomer: [136173-29-0]. ***Neotriangularicine***
$C_{18}H_{25}NO_5$ M 335.399
Alkaloid from *S. hydrophyllus* (Compositae).

[136173-29-0]

Roitman, J.N. *et al*, *Aust. J. Chem.*, 1983, **36**, 1203 (*isol, pmr, cmr, ms*)
Röder, E. *et al*, *Phytochemistry*, 1984, **23**, 2125 (*isol, cmr*)
Stelljes, M.A. *et al*, *J. Nat. Prod.* (*Lloydia*), 1991, **54**, 759 (*Triangularicine, Neotriangularicine*)

1,1,3-Tribromo-3-chloro-2-propanone, 9CI T-10105

1,1,3-Tribromo-3-chloroacetone

[55716-01-3]

$Br_2CHCOCHBrCl$

$C_3H_2Br_3ClO$ M 329.213

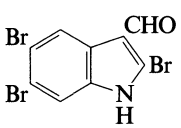
Minor component of the red algae *Asparagopsis taxiformis* and *Falkenbergia rufolanosa*. Liq.

Tetrahydrate: Solid (EtOH aq.). Mp 64-65°.

Moore, J.E. *et al*, *J. Am. Chem. Soc.*, 1917, **39**, 974 (*synth of acetone and tetrahydrate*)
Fenical, W., *Tetrahedron Lett.*, 1974, 4463 (*isol, gc-ms*)
Bruneau, Y. *et al*, *C. R. Hebd. Seances Acad. Sci. Ser. D*, 1978, **286**, 603.
Combaut, G. *et al*, *Phytochemistry*, 1978, **17**, 1661 (*isol, glc*)

2,5,6-Tribromo-1*H*-indole-3-carboxaldehyde T-10106

2,5,6-Tribromo-3-formylindole



$C_9H_4Br_3NO$ M 381.849

N-*Me:* [85908-67-4]. *2,5,6-Tribromo-1-methyl-1H-indole-3-carboxaldehyde*
$C_{10}H_6Br_3NO$ M 395.849

Alkaloid from the marine bryozoan *Zoobotryon verticullatum*. Delays the metamorphosis in fertilised sea urchin eggs at low concentrations. Mp 228.5-229.5°.

Ortega, M.J. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 633 (*isol, uv, ir, pmr, cmr, ms, struct*)

2,3,3-Tribromo-2-propenoic acid, 9CI T-10107

2,3,3-Tribromoacrylic acid, 8CI

[71815-46-8]

$Br_2C{=}CBrCOOH$

$C_3HBr_3O_2$ M 308.752

Minor component of the Hawaiian red alga *Asparagopsis taxiformis*. Monomer for styrene co-polymer exhibiting good photochemical and thermal stability. Yellowish hexagonal prisms (heptane). Mp 119-120°.

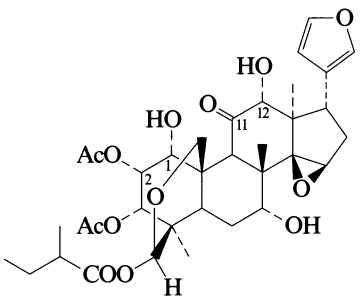
Me ester:
$C_4H_3Br_3O_2$ M 322.778
Liq. $Bp_{0.8}$ 60°.

Strauss, F. *et al*, *Ber., B*, 1930, **63**, 1868 (*synth*)
Levas, M. *et al*, *Bull. Soc. Chim. Fr.*, 1959, 1800 (*synth*)
Castro, C.E. *et al*, *J. Org. Chem.*, 1965, **30**, 586 (*synth, pmr, ir*)
Roedig, A. *et al*, *Justus Liebigs Ann. Chem.*, 1967, **710**, 7 (*synth*)
Woolard, F.X. *et al*, *Phytochemistry*, 1979, **18**, 617 (*isol, synth, glc, Me ester*)

Trichilin B T-10108

Updated Entry replacing T-01696

[77210-33-4]



$C_{35}H_{46}O_{13}$ M 674.741

Constit. of *Trichilia roka* oil. Active against the larval stage of the Southern Army Worm *Spodoptera eridania*. Oil or powder.

12-Deoxy: [77196-03-3]. ***Trichilin D.*** *Meliatoxin* A_1
$C_{35}H_{46}O_{12}$ M 658.741
Isol. from *T. roka* and *Melia azedarach*. Active against *S. eridania*. Oil. Mp 148-154° dec. Trichilin D and Meliatoxin A_1 have not been compared but identical structs. were assigned (except for abs. config. of 2-methylbutanoyl residue).

1-O-Ac, 2-O-de-Ac: [66700-76-3]. ***Aphanastatin.*** *Trichilin E*
$C_{35}H_{46}O_{13}$ M 674.741
Constit. of *Aphanamixis grandiflora* and *T. roka*. Cryst. ($CHCl_3$/MeOH) or oil. Mp 269-271°. $[\alpha]_D^{22}$ −38.9° (c, 0.46 in Py/MeOH)-. Aphanastatin and Trichilin E appear to be identical despite different phys. props.

12-Epimer: [77182-69-5]. ***Trichilin A***
$C_{35}H_{46}O_{13}$ M 674.741
Isol. from *T. roka*. Active against *S. eridania*. Cryst. Mp 191-192° dec.

12-Epimer, 7-Ac: ***7-Acetyltrichilin A***
$C_{37}H_{48}O_{14}$ M 716.778
From *T. roka*.

12-Ketone, 11β-alcohol: [77182-68-4]. ***Trichilin C***
$C_{35}H_{46}O_{13}$ M 674.741

Constit. of *T. roka* oil. Active against *S. eridania*. Oil.

12-Epimer, 2-O-de-Ac: ***Trichilin G***
$C_{33}H_{44}O_{12}$ M 632.703
Constit. of *T. roka*.

12-Epimer, 1-O-Ac, 3-O-de-Ac: ***Trichilin F***
$C_{35}H_{46}O_{13}$ M 674.741
Constit. of *T. roka*.

[87725-70-0]

Polonsky, J. *et al*, *J. Am. Chem. Soc.*, 1978, **100**, 2575 (*Aphanastatin*)
Nakatani, M. *et al*, *J. Am. Chem. Soc.*, 1981, **103**, 1228 (*isol*)
Oelrichs, P.B. *et al*, *Phytochemistry*, 1983, **22**, 531 (*Meliatoxin* A_1)
Nakatani, M. *et al*, *Phytochemistry*, 1985, **24**, 195 (*deriv*)
Nakatani, M. *et al*, *Heterocycles*, 1993, **36**, 725 (*Trichilins A, F, G*)

Trichloroacetaldehyde, 9CI T-10109

Chloral. Trichloroethanal

[75-87-6]

Cl_3CCHO

C_2HCl_3O M 147.387
Versatile synthetic reagent. Intermed. in synth. of DDT. Liq. Sol. H_2O, EtOH, Et_2O. d_4^0 1.542. Mp −57° to −58°. Bp 98°. pK_a 10.04 (25°). n_D^{20} 1.4557.

▷ Eye, skin and respiratory tract irritant. LD_{50} (mus, ipr) 600 mg/kg. FM7870000.

NH_3 addn. compd.: Chloral ammonia
Needles. Insol. H_2O, sol. C_6H_6, Et_2O. Mp 72-74°. Slowly diss. in H_2O with dec.

Oxime: [1117-99-3].
$C_2H_2Cl_3NO$ M 162.402
Mp 56°. Bp_{20} 85°.
▷ Explosive reaction with alkali.

2,4-Dinitrophenylhydrazone: Yellow cryst. Mp 131°.

Mono-Me acetal: [18271-82-4]. *2,2,2-Trichloro-1-methoxyethanol. Chloral methylalcoholate*
$C_3H_5Cl_3O_2$ M 179.429
Needles. Mp 50°. Bp 98°, Bp 106°.

Di-Me acetal: [18272-02-1]. *1,1,1-Trichloro-2,2-dimethoxyethane*
$C_4H_7Cl_3O_2$ M 193.456
d^0 1.40. Bp 183°.

Mono-Et acetal: [515-83-3]. *2,2,2-Trichloro-1-ethoxyethanol, 9CI*
$C_4H_7Cl_3O_2$ M 193.456
Constit. of the aerial parts of *Oxytropis glabra*. Mp 53-54° (46°).

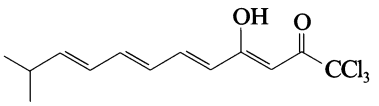
[110085-22-8]

Page, A.G., *Justus Liebigs Ann. Chem.*, 1884, **225**, 209 (*synth*)
Willcox, M. *et al*, *J. Am. Chem. Soc.*, 1916, **38**, 1837 (*synth*)
Ger. Pat., 734 732, (1944); *CA*, **38**, 3671 (*synth*)
Hesse, B. *et al*, *J. Prakt. Chem.*, 1974, **316**, 304 (*hemiethyl acetal*)
Cieslak, M. *et al*, *Przem. Chem.*, 1977, **56**, 594; 1978, **57**, 645; *CA*, **88**, 61932w; **90**, 103329b (*synth*)
Fieser and Fieser's Reagents for Organic Synthesis, Wiley, 1980, **8**, 82.
Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th Ed., Van Nostrand-Reinhold, 1992, TIH825.
Luxon, S.G., *Hazards in the Chemical Laboratory*, 5th edn., Royal Society of Chemistry, Cambridge, 1992, 266.

1,1,1-Trichloro-4-hydroxy-11-methyl-3,5,7,9-dodecatetraen-2-one, 9CI T-10110

Neocarzirin B

[125002-00-8]



$C_{13}H_{15}Cl_3O_2$ M 309.618
Prod. by *Streptomyces carzinostaticus*. Antitumour agent.

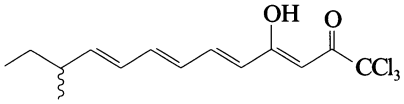
1-Dechloro: [124958-30-1]. *1,1-Dichloro-4-hydroxy-11-methyl-3,5,7,9-dodecatetraen-2-one, 9CI.* ***Neocarzirin C***
$C_{13}H_{16}Cl_2O_2$ M 275.174
Prod. by *S. carzinostaticus*. Antitumour agent.

Japan. Pat., 89 224 341, (1989); *CA*, **112**, 75322 (*isol*)

1,1,1-Trichloro-4-hydroxy-11-methyl-3,5,7,9-tridecatetraen-2-one T-10111

Neocarzirin A

[124958-29-8]



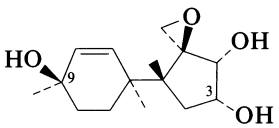
$C_{14}H_{17}Cl_3O_2$ M 323.645
Prod. by *Streptomyces carzinostaticus*. Antitumour agent.

Japan. Pat., 89 224 341, (1989); *CA*, **112**, 75322 (*isol*)

Trichotriol T-10112

Updated Entry replacing T-01744

[109890-37-1]



$C_{15}H_{24}O_4$ M 268.352
9-Config. revised in 1993. Isol. from *Fusarium sporotrichioides*. Mycotoxin. Oil.

3-Deoxy: [40522-81-4]. ***Trichodiol***
$C_{15}H_{24}O_3$ M 252.353
Isol. from the broth of *Trichothecium roseum*. Artifact.

Nozoe, S. *et al*, *Tetrahedron*, 1972, **28**, 5105.
Corley, D.G. *et al*, *J. Org. Chem.*, 1987, **52**, 4405.
Hesketh, A.R. *et al*, *Phytochemistry*, 1993, **32**, 105 (*stereochem*)

17-Tricosenal T-10113

$H_3C(CH_2)_4CH{=}CH(CH_2)_{15}CHO$

$C_{23}H_{44}O$ M 336.600

(Z)-form [140163-47-9]
Constit. of the sponge *Amphimedon compressa*.

Carballeira, N.M. *et al*, *J. Nat. Prod.* (*Lloydia*), 1992, **55**, 333.

16-Tricosenoic acid T-10114

$H_3C(CH_2)_5CH{=}CH(CH_2)_{14}COOH$

$C_{23}H_{44}O_2$ M 352.599

(Z)-form [140163-36-6]

Constit. of the sponges *Amphimedon compressa* and *Mycale laevis.*

Carballeira, N.M. *et al, J. Nat. Prod.* (*Lloydia*), 1992, **55**, 333.

17-Tricosenoic acid T-10115

$H_3C(CH_2)_4CH{=}CH(CH_2)_{15}COOH$

$C_{23}H_{44}O_2$ M 352.599

(Z)-form [140163-37-7]

Constit. of the sponge *Amphimedon compressa.*

Carballeira, N.M. *et al, J. Nat. Prod.* (*Lloydia*), 1992, **55**, 333.

18-Tricosenoic acid T-10116

$H_3C(CH_2)_3CH{=}CH(CH_2)_{16}COOH$

$C_{23}H_{44}O_2$ M 352.599

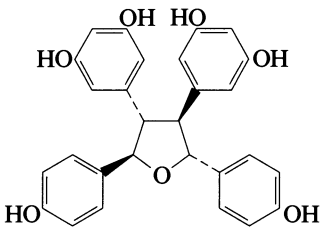
(Z)-form [140163-38-8]

Constit. of the sponge *Amphimedon compressa.*

Carballeira, N.M. *et al, J. Nat. Prod.* (*Lloydia*), 1992, **55**, 333.

Tricuspidatol A T-10117

[137319-39-2]



Relative configuration

$C_{28}H_{24}O_7$ M 472.493

Constit. of the stemwood of *Parthenocissus tricuspidata.*

Lins, A.P. *et al, Phytochemistry*, 1991, **30**, 3144 (*isol, struct*)

1,13-Tridecanediol, 9CI T-10118

[13362-52-2]

$HOCH_2(CH_2)_{11}CH_2OH$

$C_{13}H_{28}O_2$ M 216.363

Mp 81°.

Di-Ph ether: [141620-05-5]. *1,1'-[1,13-Tridecanediylbis(oxy)] bisbenzene, 9CI. 1,13-Diphenoxytridecane*

$C_{25}H_{36}O_2$ M 368.558

Isol. from the leaves of *Arachis hypogaea* infected with *Puccinia arachidis.* Phytoalexin.

Guyer, A. *et al, Helv. Chim. Acta*, 1955, **38**, 976 (*synth*)

Gold'farb, Y.L. *et al, J. Gen. Chem. USSR* (*Engl. Transl.*), 1955, **25**, 1321 (*synth*)

Bianchetti, G., *Farmaco, Ed. Sci.*, 1957, **12**, 441; *CA*, **51**, 17914 (*synth*)

Colonge, J. *et al, Bull. Soc. Chim. Fr.*, 1959, 1248 (*synth*)

Rao, P.V.S. *et al, Oleagineux*, 1991, **46**, 501; *CA*, **116**, 252152 (*di-Ph ether*)

Tridecanoic acid T-10119

[638-53-9]

$H_3C(CH_2)_{11}COOH$

$C_{13}H_{26}O_2$ M 214.347

Constit. of *Erythrina crista-galli* trunk wood and bark.

Cryst. (Me_2CO). Mp 44.5-45.5°. Bp_{24} 199-200°.

▷ LD_{50} (mus, ivn) 130 mg/kg. YD3850000.

Zn salt: Needles (3-methylbutanol). Mp 128°.

Me ester: [1731-88-0].

$C_{14}H_{28}O_2$ M 228.374

Mp 6.5°. Bp_1 90-95°.

Et ester: [28267-29-0].

$C_{15}H_{30}O_2$ M 242.401

Bp_{60} 197-198°, Bp_5 163-165°.

Amide: [34778-57-9].

$C_{13}H_{27}NO$ M 213.362

Mp 100°.

Nitrile: [629-60-7].

$C_{13}H_{25}N$ M 195.347

Mp 9.7°. Bp 275°.

Org. Synth., 1936, **16**, 35.

Karlsson, K. *et al, Acta Chem. Scand.*, 1972, **26**, 2837 (*isol*)

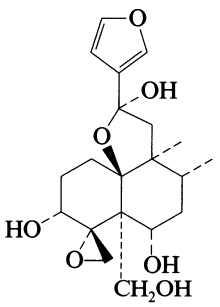
Quraishi, M.S., *Can. Entomol.*, 1972, **104**, 1505 (*tox*)

Peng, A.C., *Lipids*, 1974, **9**, 299 (*isol*)

Imamura, H. *et al, Gigu Daigaku Nogakubu Kenkyu Hokoku*, 1981, 77; *CA*, **96**, 196524y (*occur*)

Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th Ed., Van Nostrand-Reinhold, 1992, TJH750, TJI250.

4,18:10,12:15,16-Triepoxy-13(16),14-clerodadiene-3,6,12,19-tetrol T-10120



$C_{20}H_{28}O_7$ M 380.437

(ent-3β,4β,6β,10α,12β)-form

3,6,19-Tri-Ac: [150132-97-1]. ***Teucrolin A***

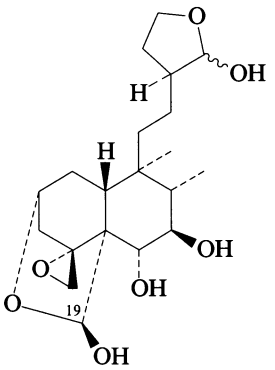
$C_{26}H_{34}O_{10}$ M 506.549

Constit. of *Teucrium olivarianum.* Plates (EtOAc/hexane). Mp 119-120°. $[\alpha]_D$ −45.2° (c, 0.1 in C_6H_6).

[149340-19-2]

Al-Yahya, M.A. *et al, J. Nat. Prod.* (*Lloydia*), 1993, **56**, 830 (*isol, pmr, cmr, cryst struct*)

2,19:4,18:15,16-Triepoxy-6,7,16,19-clerodanetetrol T-10121



$C_{20}H_{32}O_7$ M 384.469

(ent-2β,4β,6β,7α,13R,16ξ,19S)-form

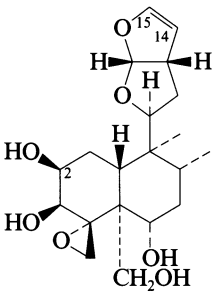
19-Tigloyl, 6-Ac: [149639-78-1]. ***Scutegalin B***
$C_{27}H_{40}O_9$ M 508.608
Constit. of *Scutellaria galericulata.*

[149820-00-8]

Rodríguez, B. *et al, Phytochemistry*, 1993, **33**, 309 (*isol, pmr, cmr, cryst struct*)

4,18:11,16:15,16-Triepoxy-14-clerodene-2,3,6,19-tetrol T-10122

Updated Entry replacing T-01880



(ent-2α,3α,4β,6β,11R,13R,16R)-form

$C_{20}H_{30}O_7$ M 382.453

(ent-2α,3α,4β,6β,11R,13R,16R)-form

14,15-Dihydro, 3-(2-methylpropanoyl), 6,19-di-Ac: [79568-28-8]. ***Ivain I***
$C_{28}H_{42}O_{10}$ M 538.634
Isol. from *Ajuga iva.* Amorph. $[\alpha]_D$ −8.0° (c, 8.0 in $CHCl_3$).

14,15-Dihydro, 3-(2-methylbutanoyl), 6,19-di-Ac: [79495-88-8]. ***Ivain IV***
$C_{29}H_{44}O_{10}$ M 552.661
Isol. from *A. iva.* Amorph. $[\alpha]_D$ +4.1° (c, 4.2 in $CHCl_3$).

14,15-Dihydro, 15-ethoxy, 3-(2-methylpropanoyl), 6,19-di-Ac: [79495-89-9]. ***Ivain III***
$C_{30}H_{46}O_{11}$ M 582.687
Isol. from *A. iva.* Amorph. $[\alpha]_D$ +31.7° (c, 4.6 in $CHCl_3$).

(ent-2β,3α,4β,6β,11R,13R,16R)-form

3-(2-Methylpropanoyl), 6,19-di-Ac: [131086-64-1]. ***Ajugachin A***
$C_{28}H_{40}O_{10}$ M 536.618
Constit. of *A. chamaepitys.* Cryst. (Et_2O/pet. ether). Mp 178-181°. $[\alpha]_D^{22}$ −50.7° (c, 0.946 in $CHCl_3$).

3-(2-Methylbutanoyl), 6,19-di-Ac: [87441-78-9]. ***Ajugapitin***
$C_{29}H_{42}O_{10}$ M 550.645
Constit. of *A. chamaepitys.* Cryst. (Et_2O/hexane). Mp 196-198°. $[\alpha]_D^{20}$ −70.3° (c, 0.26 in $CHCl_3$).

3-(3-Acetoxy-2-methylbutanoyl), 6,19-di-Ac: [131086-65-2]. ***Ajugachin B***
$C_{31}H_{44}O_{12}$ M 608.681
Constit. of *A. chamaepitys.* Cryst. (Et_2O/pet. ether). Mp 207-209°. $[\alpha]_D^{22}$ −66° (c, 0.288 in $CHCl_3$).

14,15-Dihydro, 3-(2-methylbutanoyl), 6,19-di-Ac: ***Dihydroajugapitin***
$C_{29}H_{44}O_{10}$ M 552.661
Constit. of *A. chamaepitys.* Cryst. (EtOAc/Et_2O). Mp 212-214°. $[\alpha]_D^{20}$ −40° (c, 0.25 in $CHCl_3$).

3-Tigloyl, 6,19-di-Ac: [129145-62-6]. ***Galericulin***
$C_{29}H_{40}O_{10}$ M 548.629
Isol. from *Scutellaria galericulata.*

3-(2-Acetoxy-2-methylpropanoyl), 6,19-di-Ac: ***Clerodendrin A***
$C_{30}H_{42}O_{12}$ M 594.655
Constit. of *Clerodendron inerme.* Cryst. (EtOAc/hexane). Mp 208-210°. $[\alpha]_D^{22}$ −71° (c, 0.96 in $CHCl_3$).

3-(2-Acetoxy-2-methylbutanoyl), 6,19-di-Ac: ***Clerodendrin B***
$C_{31}H_{44}O_{12}$ M 608.681
Constit. of *C. inerme.* Cryst. (EtOAc/hexane). Mp 228-230°. $[\alpha]_D^{22}$ −67° (c, 0.209 in $CHCl_3$).

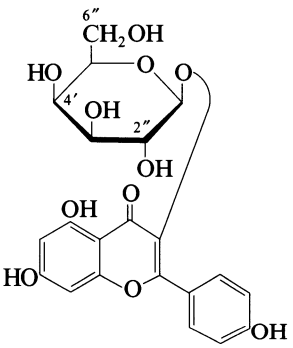
Camps, F. *et al, Chem. Lett.*, 1982, 1053 (*Ivains*)
Hernández, A. *et al, Phytochemistry*, 1982, **21**, 2909 (*Ajugapitin*)
Cole, M.D. *et al, Phytochemistry*, 1990, **29**, 1793 (*Galericulin*)
Boneva, I.M. *et al, Phytochemistry*, 1990, **29**, 2931 (*Ajugachins*)
Rao, L.J.M. *et al, Phytochemistry*, 1993, **34**, 572 (*Clerodendrins*)

Trifolin† T-10123

Updated Entry replacing T-01900

3-O-β-D-Galactopyranosyloxy-4',5,7-trihydroxyflavone. Kaempferol 3-galactoside. Trifolioside

[23627-87-4]



$C_{21}H_{20}O_{11}$ M 448.382

Widespread occurrence in plant world e.g. *Campanula* and *Diospyros* spp., *Trifolium pannonicum* flowers, *Pinus sylvestris*, fruits of *Scolymus hispanicus* and leaves of *Lespedeza cuneata.* Yellowish needles (Py aq.). Mp 235° (229-231°).

6″-O-L-Arabinopyranoside: [78182-90-8].
$C_{26}H_{28}O_{15}$ M 580.498
Isol. from *Lysichiton camtschatcense.*

2″-O-β-D-Xylopyranoside: [83144-68-7].
$C_{26}H_{28}O_{15}$ M 580.498
Isol. from *Armoracia rusticana.*

2″-O-α-L-Rhamnopyranoside: [108906-96-3].
$C_{27}H_{30}O_{15}$ M 594.525
Isol. from *Chenopodium fremontii.*

6″-O-β-D-Glucopyranoside: [73803-52-8].
$C_{27}H_{30}O_{16}$ M 610.524
Isol. from *Eryngium planum.*

2″-O-β-D-Glucopyranoside: [31512-06-8]. ***Panasenoside. Lilyn***
$C_{27}H_{30}O_{16}$ M 610.524
Isol. from *Lilium candidum, Panax ginseng, Sambucus sieboldiana* and *Hypericum* spp. Cryst. (EtOH). Mp 225-228° dec.
O″-β-D-Galactopyranoside: [31514-24-6]. *Kaempferol 3-digalactoside*
$C_{27}H_{30}O_{16}$ M 610.524
Isol. from *Paeonia decora.*
5-O-β-D-Galactopyranoside: [91377-10-5]. *Kaempferol 3,5-digalactoside*
$C_{27}H_{30}O_{16}$ M 610.524
Isol. from *Indigofera hirsuta.*
7-O-β-D-Galactopyranoside: [54557-66-3].
$C_{27}H_{30}O_{16}$ M 610.524
Isol. from *Pachyphragma macrophyllum.* Mp 222-224°.
O″-Rhamnosylglucoside: [64812-32-4].
$C_{33}H_{40}O_{20}$ M 756.667
Isol. from *Peltophorum africanum.*
6″-O-Malonyl: [81202-52-0].
$C_{24}H_{22}O_{14}$ M 534.429
Isol. from *Ceterach officinarum.*
6″-O-(2-O-Acetyl-α-L-arabinopyranoside):
$C_{28}H_{30}O_{16}$ M 622.535
Isol. from *Trillium tschonoskii.* Pale yellow powder (MeOH aq.). $[\alpha]_D^{26}$ −53.9° (c, 1.52 in Py).
6″-O-[β-D-Glucopyranosyl-(1→3)-4-O-acetyl-α-L-rhamnopyranoside]: [79395-74-7]. ***Faralatroside***
$C_{35}H_{42}O_{21}$ M 798.704
Isol. from *Colubrina faralaotra.* Mp 197-199°.
2″-O-β-D-Apiofuranoside: [132294-84-9].
$C_{26}H_{28}O_{15}$ M 580.498
Isol. from *Chenopodium quinoa* and *Monnina sylvatica.* Yellow powder. Mp 166-169°. $[\alpha]_D$ −52° (c, 0.1 in MeOH).
2″-O-β-D-Apiofuranoside, 6″-O-α-L-rhamnopyranoside: [132185-73-0].
$C_{32}H_{38}O_{19}$ M 726.641
Constit. of *Chenopodium quinoa.*
6″-O-[α-L-Rhamnopyranosyl-(1→3)-α-L-rhamnopyranoside]: [83170-31-4].
$C_{33}H_{40}O_{19}$ M 740.668
Isol. from *Rhamnus leptophylla.* Yellow powder. $[\alpha]_D^{22}$ −42.7° (c, 0.99 in MeOH).
6″-O-[α-L-Rhamnopyranosyl-(1→4)-α-L-rhamnopyranoside]: [123618-28-0]. ***Frangulatrioside A***
$C_{33}H_{40}O_{19}$ M 740.668
Constit. of *Actinidia* spp. *Rhamnus frangula* and *Vigina luteola.*
6″-O-[α-L-Rhamnopyranosyl-(1→4)-3-O-acetyl-α-L-rhamnopyranoside]: [128308-96-3].
$C_{35}H_{42}O_{20}$ M 782.705
Constit. of *Actinidia* spp.

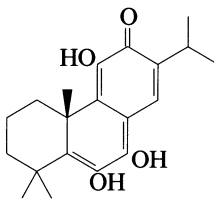
[11055-94-0]

Power, F.B. *et al, J. Chem. Soc.*, 1910, **97**, 231 (*isol*)
Komatsu, M. *et al, Yakugaku Zasshi*, 1969, **89**, 122 (*Panasenoside*)
Ulebulen, A. *et al, Z. Naturforsch., B*, 1970, **25**, 114 (*galactoside*)
Schultz, G., *Z. Naturforsch., B*, 1971, **26**, 972.
Zemtsova, G.N. *et al, Khim. Prir. Soedin.*, 1974, **10**, 669; *Chem. Nat. Compd.* (*Engl. Transl.*), 689 (*7-galactoside*)
Nair, A.G. *et al, Indian J. Chem., Sect. B*, 1977, **15**, 1045.
Roschin, Yu.V., *Khim. Prir. Soedin.*, 1977, **13**, 576; *Chem. Nat. Compd.* (*Engl. Transl.*), 481.
El Sherbeiny, A.E. *et al, Planta Med.*, 1977, **32**, 165 (*rhamnosylglucoside*)
Crawford, D.J. *et al, Biochem. Syst. Ecol.*, 1978, **6**, 189 (*2″-rhamnoside*)
Okuyama, T. *et al, Chem. Pharm. Bull.*, 1978, **26**, 3071 (*cmr*)
Hiller, K. *et al, Pharmazie*, 1980, **35**, 113 (*6″-glucoside*)
Imperato, F., *Chem. Ind.* (*London*), 1981, 696 (*6″-malonate*)
Williams, C.A. *et al, Phytochemistry*, 1981, **20**, 217 (*6″-arabinoside*)
Guinaudeau, H. *et al, Phytochemistry*, 1981, **20**, 1113 (*6″-glucosylacetylrhamnoside*)
Larsen, L.M. *et al, Phytochemistry*, 1982, **21**, 1029 (*2″-xyloside*)
Nakano, K. *et al, Phytochemistry*, 1983, **22**, 1249 (*6″-(acetylarabinoside)*)
Rao, J.U.M. *et al, Indian J. Chem., Sect. B*, 1984, **23**, 91 (*5-galactoside*)
Nagy, E. *et al, Z. Naturforsch., B*, 1984, **39**, 1813 (*Panasenoside*)
The Flavonoids: Advances in Research since 1980, (Eds. Harborne, J.B. *et al*), Chapman and Hall, London, 1988.
Pomilio, A.B. *et al, J. Nat. Prod.* (*Lloydia*), 1989, **52**, 511 (*Frangulatrioside A*)
Webby, R.F. *et al, Phytochemistry*, 1990, **29**, 289 (*6″-(Rhamnosylrhamnoside)*)
De Simone, F. *et al, Phytochemistry*, 1990, **29**, 3690 (*deriv*)

6,7,11-Trihydroxy-5,7,9(11),13-abietatetraen-12-one T-10124

5,6-Didehydro-7-hydroxytaxodone

[150640-79-2]



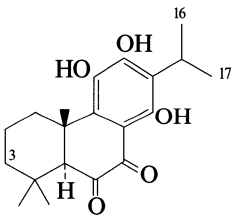
$C_{20}H_{26}O_4$ M 330.423
Constit. of *Salvia munzii.* Cryst.

Luis, J.G. *et al, Tetrahedron*, 1993, **49**, 6277 (*isol, pmr, cmr*)

11,12,14-Trihydroxy-8,11,13-abietatriene-6,7-dione T-10125

Updated Entry replacing T-01923
Coleon V

[65714-70-7]



$C_{20}H_{26}O_5$ M 346.422
Compds. covered by this entry are the keto tautomers of those covered by 6,11,12,14-Tetrahydroxy-5,8,11,13-abietatetraen-7-one, T-00567. Isol. from *Plectranthus myrianthus* and *Coleus carnosus.* Red cryst. (Me_2CO/CH_2Cl_2/hexane). Mp 158-160° dec.
3β-Hydroxy: [63521-55-1]. *3β,11,12,14-Tetrahydroxy-8,11,13-abietatriene-6,7-dione.* ***Coleon T***
$C_{20}H_{26}O_6$ M 362.422
From *P. caninus.* Red-orange amorph. powder.
16-Hydroxy: [38991-79-6]. *11,12,14,16-Tetrahydroxy-8,11,13-abietatriene-6,7-dione.* ***Coleon D***
$C_{20}H_{26}O_6$ M 362.422
Isol. from yellow leaf glands of *C. aquaticus.* Orange-red cryst. (EtOH/2-propanol). Mp 236-239°. Tautomeric with Coleon C.
3β-Acetoxy, 16-hydroxy: [51787-39-4]. ***Coleon I***
$C_{22}H_{28}O_8$ M 420.458
Constit. of *C. somaliensis.* Orange solid. Not obt. pure.
16-Hydroxy, 3β,17-diacetoxy: [51787-38-3]. ***Coleon K***

$C_{24}H_{30}O_{10}$ M 478.495
Isol. from *C. somaliensis*. Orange cryst. (Me_2CO/hexane). Mp 174-175° dec.

3β-Formyloxy, 16-hydroxy: [57932-72-6]. ***Coleon I′***
$C_{21}H_{26}O_8$ M 406.432
Constit. of *P.* sp. *nov.* Orange needles. Mp 179-181.5°. Struct. revised in 1977.

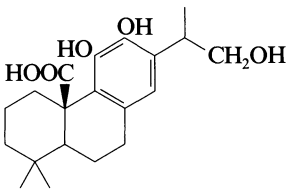
Rüedi, P. *et al*, *Helv. Chim. Acta*, 1972, **55**, 1736; 1977, **60**, 1233 (*Coleon D, Coleon I, Coleon K*)
Ruedi, P. *et al*, *Helv. Chim. Acta*, 1975, **58**, 1899 (*Coleon I′*)
Weber, H.P. *et al*, *Helv. Chim. Acta*, 1976, **59**, 1221 (*cryst struct, Coleon D*)
Arihara, S. *et al*, *Helv. Chim. Acta*, 1977, **60**, 1443.
Miyase, T. *et al*, *Helv. Chim. Acta*, 1977, **60**, 2770 (*isol*)
Yoshizaki, F., *Helv. Chim. Acta*, 1979, **62**, 2754 (*isol*)
Matsumoto, T. *et al*, *Bull. Chem. Soc. Jpn.*, 1982, **55**, 1168 (*synth*)

11,12,16-Trihydroxy-8,11,13-abietatrien-20-oic acid T-10126

Updated Entry replacing T-01925

16-Hydroxycarnosic acid

[128286-67-9]



$C_{20}H_{28}O_5$ M 348.438
Constit. of *Salvia apiana* and *S. mellifera*.

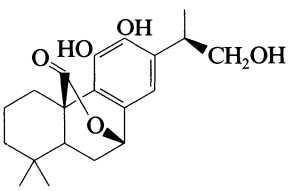
16-Ac: ***16-Acetoxycarnosic acid***
$C_{22}H_{30}O_6$ M 390.475
Constit. of *S. mellifera*. Amorph. solid.

Tri-Ac, Me ester: [128286-68-0].
Cryst. Mp 130-133°. $[\alpha]_D^{24}$ +144.6° (c, 9.3 in $CHCl_3$).

20-Aldehyde: 11,12,16-Trihydroxy-8,11,13-abietatrien-20-al
$C_{20}H_{28}O_4$ M 332.439
Isol. from *S. mellifera*. Amorph. solid.

Pentali, S.J. *et al*, *Phytochemistry*, 1990, **29**, 993 (*isol, pmr, cmr*)
Gonzalez, A.G. *et al*, *Phytochemistry*, 1991, **30**, 4068 (*aldehyde*)
Luis, J.G. *et al*, *Phytochemistry*, 1993, **33**, 635 (*isol, pmr, cmr*)

11,12,16-Trihydroxy-8,11,13-abietatrien-20,7-olide T-10127



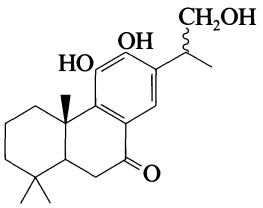
$C_{20}H_{26}O_5$ M 346.422

(7β,15R)-form [149697-32-5] ***16-Hydroxycarnosol***
Constit. of *Salvia mellifera*. Cryst. $[\alpha]_D$ −72.39° (c, 0.384 in $CHCl_3$).

Luis, J.G. *et al*, *Tetrahedron*, 1993, **49**, 4993 (*isol, pmr, cmr, cryst struct*)

11,12,16-Trihydroxy-8,11,13-abietatrien-7-one T-10128

Cyrtophyllone B



$C_{20}H_{28}O_4$ M 332.439
Constit. of *Clerodendron cyrtophyllum*. Needles ($CHCl_3$). Mp 249-251°. $[\alpha]_D$ +17.1° (c, 1.46 in $CHCl_3$).

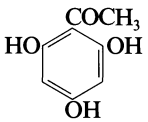
Tian, X. *et al*, *Chem. Pharm. Bull.*, 1993, **41**, 1415 (*isol, pmr, cmr*)

2′,4′,6′-Trihydroxyacetophenone, 8CI T-10129

Updated Entry replacing T-01934

1-(2,4,6-Trihydroxyphenyl)ethanone, 9CI. 2-Acetyl-1,3,5-benzenetriol. Phloracetophenone. Acetophloroglucinol. Acetylphloroglucinol. Phloroacetophenone

[480-66-0]



$C_8H_8O_4$ M 168.149
Isol. from bark of *Prunus domestica*. Needles (H_2O). Mp 219° (anhyd).

4′-Me ether: [7507-89-3]. *2′,6′-Dihydroxy-4′-methoxyacetophenone. 4-O-Methylphloracetophenone*
$C_9H_{10}O_4$ M 182.176
Isol. from the bark of *P. domestica*. Mp 141-142°.

4′-Me ether, O-β-D-glucopyranoside: [24587-97-1]. ***Pleoside.*** *Domesticoside*
$C_{15}H_{20}O_9$ M 344.318
Glycoside from the bark of *P. domestica* and from the fern *Pleopeltis thunbergiana*. Needles (MeOH). Mp 189-191° (sinters at 183°), Mp 200-203°. $[\alpha]_D$ −41.6° (Py). Identity of samples not apparently establ. Higher Mp. and opt. rotn. refer to Pleoside.

4′-Me ether, 2-O-gentiobioside: [63013-34-3]. ***Echisoside***
$C_{21}H_{30}O_{14}$ M 506.460
Constit. of *Dorema aitchisonii*. Mp 167-169°. $[\alpha]_D^{20}$ −54.4° (c, 1.14 in H_2O).

4′-Me ether, 2-O-[α-D-glucopyranosyl-(1→6)-β-D-glucopyranoside]: [60197-59-3]. ***Hyrcanoside***
$C_{21}H_{30}O_{14}$ M 506.460
Constit. of *D. hyrcanum*.

4′-Me ether, 2′-O-rutinoside: [139934-64-8].
$C_{21}H_{30}O_{13}$ M 490.460
Constit. of the bark of *Rhamnus libanoticus*. Needles (MeOH). Mp 156-157°. $[\alpha]_D^{21}$ −89.35° (c, 1 in MeOH).

2′,4′-Di-Me ether: [90-24-4]. *2′-Hydroxy-4′,6′-dimethoxyacetophenone.* ***Xanthoxylin.*** *Brevifolin. 6-Methoxypaeonol*
$C_{10}H_{12}O_4$ M 196.202
Obt. from *Xanthoxylum piperitum, X. alatum* (Rutaceae), *Artemisia brevifolia* (Compositae), *Hippomane mancinella* and *Sapium sebiferum* (Euphorbiaceae). Cryst. (EtOH). Mp 85-88°.

2′,4′-Di-Me ether, Ac: [59263-72-8].
$C_{12}H_{14}O_5$ M 238.240
Prisms (EtOH). Mp 107°.

2′,4′-Di-Me ether, oxime:

$C_{10}H_{13}NO_4$ M 211.217
Mp 108-110°.

Tri-Me ether: [832-58-6]. *2',4',6'-Trimethoxyacetophenone*
$C_{11}H_{14}O_4$ M 210.229
Isol. from tubers of *Lycoris radiata*. Prisms. Mp 103°.

2'-O-(3,7-Dimethyl-2,6-octadienyl): [142905-39-3]. *2'-Geranyloxy-4',6'-dihydroxyacetophenone*
$C_{18}H_{24}O_4$ M 304.385
Isol. from the fruit of *Evodia merrillii*. Needles (EtOAc/hexane). Mp 147-150°.

4'-O-(3,7-Dimethyl-2,6-octadienyl): [142905-40-6]. *4'-Geranyloxy-2',6'-dihydroxyacetophenone*
$C_{18}H_{24}O_4$ M 304.385
Isol. from the fruit of *E. merrillii*. Wax.

2'-Me ether, 4'-O-(3-methyl-2-butenyl): 2-Acetyl-1-O-methyl-6-O-prenylphloroglucinol. 1-Acetyl-4-isopentenyl-6-methylphloroglucinol (incorr.)
$C_{14}H_{18}O_4$ M 250.294
Isol. from *Leucanthemopsis pulverentula*. Mp 60-61°.

2'-O-(p-Hydroxyphenylacetyl), 6'-O-(4-hydroxy-3-methylbutanoyl), 4'-O-[α-L-rhamnopyranosyl(1→2)-β-D-glucopyranoside]: [119558-02-0]. ***Cassioside***†
$C_{33}H_{42}O_{17}$ M 710.685
Isol. from seeds of *Cassia marginata*. Mp 172°.

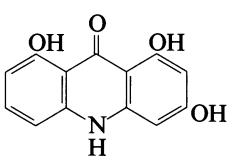
2'-O-(3-Hydroxy-3-methylbutanoyl), 4'-O-(4-p-hydroxyphenylacetyl-β-D-glucopyranoside): [119558-04-2]. ***Marginoside***
$C_{27}H_{32}O_{13}$ M 564.542
Isol. from *C. marginata*. Mp 210°.

v. Kostanecki, S. *et al*, *Ber.*, 1899, **32**, 2262.
Shinoda, J. *et al*, *CA*, 1928, **22**, 2947.
Howells, H.P. *et al*, *J. Am. Chem. Soc.*, 1932, **54**, 2452.
Org. Synth., Coll. Vol., 2, 1943, 522.
Dean, F.M. *et al*, *J. Chem. Soc.*, 1953, 1241.
Hikino, H. *et al*, *Yakugaku Zasshi*, 1969, **89**, 372 (*Pleoside*)
Crow, W.D., *Aust. J. Chem.*, 1976, **29**, 2525.
Nurmukhamedova, M.R. *et al*, *Khim. Prir. Soedin.*, 1976, **12**, 101; *Chem. Nat. Compd.* (*Engl. Transl.*), 92 (*Hydrcanoside*)
Nagarajan, G.R. *et al*, *Indian J. Chem., Sect. B*, 1977, **15**, 955 (*Domesticoside*)
Nagarajan, G.R. *et al*, *Phytochemistry*, 1977, **16**, 614 (*derivs*)
de Pascual-Teresa, J. *et al*, *Phytochemistry*, 1982, **21**, 791 (*deriv*)
Tiwari, H.P. *et al*, *Indian J. Chem., Sect. B*, 1988, **27**, 863 (*Cassioside, Marginoside*)
Bukreeva, T.V. *et al*, *Khim. Prir. Soedin.*, 1991, **27**, 722; *Chem. Nat. Compd.* (*Engl. Transl.*), 638 (*Echisoside*)
Satake, T. *et al*, *Phytochemistry*, 1991, **30**, 4191 (*4'-Me ether rutinoside*)
Chou, C.J. *et al*, *J. Nat. Prod.* (*Lloydia*), 1992, **55**, 795 (*Geranyloxydihydroxyacetophenones*)

1,3,8-Trihydroxyacridone T-10130

Updated Entry replacing T-01939

1,3,8-Trihydroxy-9(10H)-acridinone, 9CI



$C_{13}H_9NO_4$ M 243.218

N-*Me:* ***1,3,8-Trihydroxy-10-methylacridone***
$C_{14}H_{11}NO_4$ M 257.245
Alkaloid from aerial parts of *Boronia lanceolata* (Rutaceae). Yellow needles ($CHCl_3$/MeOH). Mp 285-290°.

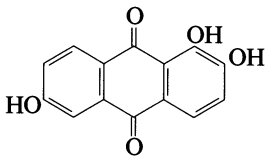
O^3,N-*Di-Me:* [94443-43-3]. *1,8-Dihydroxy-3-methoxy-10-methylacridone.* ***Oligophylidine***
$C_{15}H_{13}NO_4$ M 271.272
Alkaloid from the roots of *Acronychia oligophylebia* (Rutaceae).

Xu, W. *et al*, *Huaxue Xuebao*, 1984, **42**, 899; *CA*, **102**, 59257s.
Ahsan, M. *et al*, *Phytochemistry*, 1993, **33**, 1507 (*1,3,8-Trihydroxy-10-methylacridone*)

1,2,6-Trihydroxyanthraquinone T-10131

1,2,6-Trihydroxy-9,10-anthracenedione, 9CI. Flavopurpurin. 6-Hydroxyalizarin

[82-29-1]



$C_{14}H_8O_5$ M 256.214
Yellow needles. Spar. sol. Et_2O. Mp >330°. Bp 459° dec. Subl. above 160°. Violet soln. in alkali, red to reddish-violet in H_2SO_4.

Tri-Ac:
$C_{20}H_{14}O_8$ M 382.326
Mp 202-203°.

2-Me ether: [142878-32-8]. *1,6-Dihydroxy-2-methoxyanthraquinone*
$C_{15}H_{10}O_5$ M 270.241
Constit. of the roots of *Damnacanthus indicus* and *Morinda officinalis*.

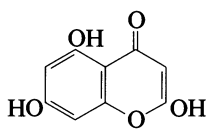
Tri-Me ether: 1,2,6-Trimethoxyanthraquinone
$C_{17}H_{14}O_5$ M 298.295
Yellow needles. Mp 225-226°.

Liebermann, C. *et al*, *Ber.*, 1888, **21**, 1171.
Bistrzycki, A. *et al*, *Ber.*, 1898, **31**, 2790.
Graebe, C. *et al*, *Justus Liebigs Ann. Chem.*, 1906, **349**, 207.
Frobenius, O. *et al*, *Ber.*, 1907, **40**, 1048.
Bloom, H. *et al*, *J. Chem. Soc.*, 1959, 178 (*ir*)
Yang, Y.J. *et al*, *Yaoxue Xuebao*, 1992, **27**, 358; *CA*, **117**, 86794 (*isol, deriv*)

2,5,7-Trihydroxy-4*H*-1-benzopyran-4-one T-10132

2,5,7-Trihydroxychromone

[68499-13-8]



$C_9H_6O_5$ M 194.143

2-O-(4-Hydroxyphenyl): [61854-36-2]. *5,7-Dihydroxy-2-(4-hydroxyphenoxy)-4H-1-benzopyran-4-one. 5,7-Dihydroxy-2-(4-hydroxyphenoxy)chromone.* ***Demethoxycapillarisin***
$C_{15}H_{10}O_6$ M 286.240
Phytoalexin isol. from *Cassia obtusifolia* inoculated with *Alternaria cassiae*. Also isol. from *Artemisia capillaris*. Vasodilator and chloretic.

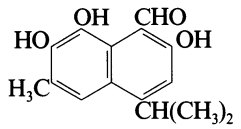
2-O-(4-Methoxyphenyl): [61854-35-1]. *5,7-Dihydroxy-2-(4-methoxyphenoxy)-4H-1-benzopyran-4-one*
$C_{16}H_{12}O_6$ M 300.267
Isol. from *Artemisia capillaris*.

Komiya, T. *et al*, *Yakugaku Zasshi*, 1976, **96**, 855 (*isol*)
Okutani, T. *et al*, *Heterocycles*, 1977, **6**, 1581 (*synth*)
Takeno, H. *et al*, *J. Chem. Soc., Chem. Commun.*, 1981, 474 (*synth*)
Sharon, A. *et al*, *Plant Physiol.*, 1992, **98**, 303 (*isol*)

2,3,9-Trihydroxy-14-cadalenal T-10133

2,7,8-Trihydroxy-4-isopropyl-6-methyl-1-naphthalenecarboxaldehyde

[54835-63-1]



$C_{15}H_{16}O_4$ M 260.289

7-Me ether: [60089-74-9]. *2,8-Dihydroxy-4-isopropyl-7-methoxy-6-methyl-1-naphthalenecarboxaldehyde.* ***Gossyvertin***

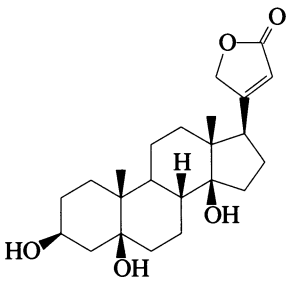
$C_{16}H_{18}O_4$ M 274.316

Isol. from the stems of cotton plants (*Gossypium* sp.) infected with *Verticillium dahliae*. Phytoalexin. Mp 147-149°. Revised struct.

Karimdzhanov, A.K. *et al*, *Khim. Prir. Soedin.*, 1976, **12**, 238; *Chem. Nat. Compd.* (*Engl. Transl.*), 211 (*isol, pmr, ms, uv*)

3,5,14-Trihydroxycard-20(22)-enolide T-10134

Updated Entry replacing T-01993



$C_{23}H_{34}O_5$ M 390.519

(3β,5β,14β)-form [514-39-6] ***Periplogenin***

Isol. from seeds of *Strophanthus preussii*, from *Castilla elastica*, *Pentopetia androsaernifolia*, *Antiaris toxicaria* and others. Cryst. (MeOH aq.). Mp 238° (sinters at 140°). $[\alpha]_D^{31.5}$ +27° (c, 0.667 in $CHCl_3$).

▷ Toxic. LD_{50} 0.72 mg/Kg (cat). FH5387000.

3-Ac: [13077-88-8].

$C_{25}H_{36}O_6$ M 432.556

Constit. of Chinese drug "Wujiapi". Cryst. (EtOAc). Mp 228°. $[\alpha]_D^{25.5}$ +49.9° (c, 1.22 in $CHCl_3$).

*3-O-[β-D-Glucopyranosyl(1→4)-2,6-dideoxy-3-O-methyl-β-D-*ribo*-hexopyranoside]:* [13137-64-9]. ***Periplocin.*** *Periplocoside*

$C_{36}H_{56}O_{13}$ M 696.831

Constit. of *Periploca graeca* and *S. preussii*. Cryst. (H_2O). Mp 209° dec. $[\alpha]_D^{20}$ +22.9° (MeOH).

▷ Highly toxic. LD_{50} 0.12 mg/Kg (cat).

*3-O-(2,6-Dideoxy-3-O-methyl-β-D-*ribo*-hexopyranoside):* [32476-67-8]. ***Periplocymarin***

$C_{30}H_{46}O_8$ M 534.689

Constit. of *Strophanthus* spp., *P.* spp., *C. elastica* and others. Cryst. (MeOH aq.). Mp 145°. $[\alpha]_D^{20}$ +29° (MeOH). A higher-melting form, Mp 212° (from MeOH) has also been reported.

▷ Highly toxic. LD_{50} 0.154 mg/Kg (cat).

3-O-Digitaloside: ***Emicymarin.*** *e-Strophanthin*

$C_{30}H_{46}O_9$ M 550.688

Constit. of many *S.* sp. Cryst. (MeOH/Et_2O). Mp 160-163°. $[\alpha]_D^{18}$ +13.5° (c, 1.112 in MeOH).

*3-O-[2,6-Dideoxy-β-D-*ribo*-hexopyranosyl(1→4)-2,6-dideoxy-3-O-methyl-β-D-*ribo*-hexopyranoside]:* ***Periplogenin digitoxosocymaroside***

$C_{36}H_{56}O_{11}$ M 664.832

Isol. from wood of *Gongronema gazense*. Platelets (Me_2CO aq.). Mp 150-153°. $[\alpha]_D^{23}$ +31.5° (c, 0.78 in MeOH).

3-O-α-L-Rhamnopyranoside: [1064-16-0]. ***Periplorhamnoside***

$C_{29}H_{44}O_9$ M 536.661

Isol. from seeds of *Antiaris toxicaria*. Granules (MeOH/Et_2O). Mp 169-174°, Mp 220-227° (double Mp).

3-O-(2,3-Di-O-methyl-β-D-fucoside): ***Kamaloside***

$C_{31}H_{48}O_9$ M 564.715

Isol. from *Streblus asper*. Cryst. (MeOH/Et_2O). Mp 174-178°. $[\alpha]_D^{28}$ +10.6° (c, 0.63 in MeOH).

3-O-[β-D-Glucopyranosyl(1→4)-2,3-di-O-methyl-β-D-fucopyranoside]: ***Glucokamaloside***

$C_{37}H_{58}O_{14}$ M 726.857

Isol. from fruit rind of *S. asper*. Granules (MeOH/Et_2O). Mp 258-262°. $[\alpha]_D^{24}$ −4.8° (c, 1.005 in MeOH).

3-O-D-Digitoxoside: ***Periplogenin digitoxoside***

$C_{29}H_{44}O_8$ M 520.662

Isol. from *Strophanthus ledienii*. Needles (MeOH/Et_2O). Mp 145-156°. $[\alpha]_D^{26}$ +27.2° ($CHCl_3$). Prob. struct.

3-O-D-Diginoside: ***Vanderoside***

$C_{30}H_{46}O_8$ M 534.689

Isol. from seeds of *S. vanderijstii*. Platelets (MeOH/Et_2O). Mp 217-222°. $[\alpha]_D^{27}$ +7.8° ($CHCl_3$).

D-Fucoside (?): ***Ledienoside***

Isol. from seeds of *S. ledienii* and *S. eminii*. Needles (MeOH/Et_2O). Mp 169-175°. $[\alpha]_D^{23}$ +5.2° (MeOH). Struct. uncertain.

Glycoside: ***Emicin***

$C_{36}H_{56}O_{14}$ M 712.830

Isol. from seeds of *S. preussii*. Rosettes (MeOH). $[\alpha]_D^{18}$ +14.7° (MeOH). Gives periplogenin, 1-Glu and 1 Digitalose on hydrol.

3-O-[6-Deoxy-β-D-glucopyranosyl-(1→4)-α-D-digitalopyranoside]: ***Oxystelmine***

$C_{36}H_{56}O_{13}$ M 696.831

Constit. of *Oxstelma esculentum*. Cryst. Mp 98-100°.

(3β,5β,14β,17α)-form [4433-58-3] ***Alloperiplogenin.*** *17-Isoperiplogenin*

Aglycone from Alloemicymarin, also in seeds of *S. preussii*. Cryst. (MeOH). Mp 250° dec. $[\alpha]_D^{15}$ +41° (MeOH).

3-O-(2,6-Dideoxy-3-O-methyl-β-D-ribohexopyranoside):

$C_{30}H_{46}O_8$ M 534.689

Constit. of *Strophanthus kombe* and *S. eminii*. Cryst. + $2H_2O$ (MeOH/Et_2O). Mp 130-134°. $[\alpha]_D^{16}$ +48.3° (MeOH).

3-Digitaloside: ***Alloemicymarin.*** *17-Isoemicymarin*

$C_{30}H_{46}O_9$ M 550.688

Constit. of *S. kombe* and *S. eminii*. Cryst. (EtOAc). Mp 160-162° and 260-265° (double Mp). $[\alpha]_D^{16}$ +28.7° (MeOH).

3-Cymaroside: ***Alloperiplocymarin.*** *17-Isoperiplocymarin*

$C_{30}H_{46}O_8$ M 534.689

From *S. kombe* and *S. eminii*. Cryst. + $2H_2O$(MeOH/Et_2O). Mp 130-134°. $[\alpha]_D^{16}$ +48.3° (MeOH).

(3α,5β,14β)-form [71884-72-5]

3-epi-Periplogenin. Epiperiplogenin

$C_{23}H_{34}O_5$ M 390.519

Constit. of *Adonis vernalis*. Cryst. ($CHCl_3$/MeOH). Mp 211-214°.

Katz, A. *et al*, *Helv. Chim. Acta*, 1945, **28**, 476 (*Alloperiplogenin*)

Speiser, P. *et al*, *Experientia*, 1947, **3**, 323 (*isol*)
Speiser, P. *et al*, *Helv. Chim. Acta*, 1948, **31**, 622 (*struct*)
von Euw, J. *et al*, *Helv. Chim. Acta*, 1948, **31**, 883 (*Emicymarin*)
Ruppel, E. *et al*, *J. Pharm. Belg.*, 1955, **10**, 221; 1956, **12**, 291; *CA*, **50**, 12089; **52**, 4104 (*Emicin*)
Lichti, H. *et al*, *Helv. Chim. Acta*, 1956, **39**, 1914 (*Ledienoside, Periplogenin digitoxoside*)
Zelnik, R. *et al*, *Helv. Chim. Acta*, 1957, **40**, 2110.
Reichstein, T. *et al*, *Helv. Chim. Acta*, 1962, **45**, 1515, 1534; 1964, **47**, 2303, 2320 (*Kamaloside, Glucokamaloside*)
Lewbart, M.L. *et al*, *Helv. Chim. Acta*, 1963, **46**, 505, 517 (*Digitoxosocymaroside*)
Deghenghi, R. *et al*, *Tetrahedron Lett.*, 1963, 2045 (*synth*)
Mühlradt, P. *et al*, *Helv. Chim. Acta*, 1964, **47**, 2164 (*Periplorhamnoside*)
Shoji, J. *et al*, *Chem. Pharm. Bull.*, 1967, **15**, 720 (*isol*)
Sauer, H.H. *et al*, *Phytochemistry*, 1968, **7**, 1543 (*biosynth*)
Kamano, Y. *et al*, *J. Chem. Soc., Perkin Trans. 1*, 1975, 1976 (*synth*)
Junior, P. *et al*, *Phytochemistry*, 1980, **19**, 2193 (*Epiperiplogenin*)
Srivastava, S. *et al*, *Phytochemistry*, 1993, **32**, 1019 (*Oxystelmine*)

3,6,20-Trihydroxycholest-9(11)-en-23-one T-10135

Updated Entry replacing T-02021

$C_{27}H_{44}O_4$ M 432.642

(3β,5α,6α,20S)-form [55897-77-3] ***Thornasterol A***
Constit. of *Acanthaster planci*.

3,6-Di-Ac: Cryst. (hexane). Mp 158.5-159.5°. $[\alpha]_D^{15}$ +23° (c, 0.1 in MeOH).

6-O-[β-D-Fucopyranosyl-(1→2)-β-D-galactopyranosyl-(1→4)-[β-D-quinovopyranosyl-(1→2)]-β-D-xylopyranosyl-(1→3)-β-D-quinovopyranoside], 3-sulfate: [67849-63-2]. ***Thornasteroside A***
$C_{56}H_{92}O_{28}S$ M 1245.392
From *A. planci*. Cryst. (butanol)(as Na salt). Mp 203-204°. $[\alpha]_D^{25}$ −7° (c, 0.5 in H_2O).

3-O-Sulfate, 6-O-[6-deoxy-β-D-glucopyranosyl-(1→2)[β-D-galactopyranosyl-(1→3)-6-deoxy-β-D-galactopyranosyl-(1→2)-β-D-galactopyranosyl-(1→4)]-β-D-xylopyranosyl-(1→3)-6-deoxy-β-D-glucopyranoside]: [88434-20-2]. ***Forbeside A.*** *Versicoside A*
$C_{62}H_{102}O_{33}S$ M 1407.534
Isol. from the starfish *Asterias amurensis* ssp. *versicolor* and *A. forbesi*. Needles (MeOH aq.) (as Na salt). Mp 200-203° (198.5-200°) (Na salt). $[\alpha]_D$ −1.7° (c, 0.42 in H_2O).

3-O-Sulfate, 6-O-[6-deoxy-β-D-glucopyranosyl-(1→2)[6-deoxy-β-D-glucopyranosyl-(1→2)-β-D-galactopyranosyl-(1→4)]-β-D-xylopyranosyl-(1→3)-6-deoxy-β-D-glucopyranoside]: [110660-85-0]. ***Forbeside B***
$C_{56}H_{92}O_{28}S$ M 1245.392
Isol. from *A. amurensis* and *A. forbesi*. Glassy foam (as Na salt). Mp 206-208° (Na salt). $[\alpha]_D^{28}$ −2.8° (c, 0.009 in H_2O).

*3-O-Sulfate, 6-O-[6-deoxy-β-D-galactopyranosyl-(1→2)-6-deoxy-β-D-galactopyranosyl-(1→4)[6-deoxy-β-D-glucopyranosyl-(1→2)]-6-deoxy-β-D-glucopyranosyl-(1→3)-6-deoxy-β-D-*xylo-*hexopyranosid-4-uloside]:* [95481-80-4]. ***Forbeside C***
$C_{57}H_{92}O_{27}S$ M 1241.404
Isol. from *A. forbesi*. Glassy solid (as Na salt). Mp 180-182° (Na salt).

*3-O-Sulfate, 6-O-[6-deoxy-β-D-galactopyranosyl-(1→4)[6-deoxy-β-D-glucopyranosyl-(1→2)]6-deoxy-β-D-glucopyranosyl-(1→3)-6-deoxy-β-D-*xylo-*hexopyranosid-4-uloside]:* [130014-50-5]. ***Forbeside F***
$C_{51}H_{82}O_{23}S$ M 1095.261
Isol. from *A. forbesi*. Powder (as Na salt). Mp 208° (Na salt). $[\alpha]_D^{20}$ +11.6° (c, 0.01 in H_2O).

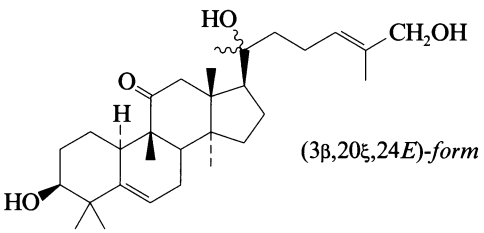
*3-O-Sulfate, 6-O-[6-deoxy-β-D-glucopyranosyl-(1→2)-6-deoxy-β-D-glucopyranosyl-(1→3)-6-deoxy-β-D-*xylo-*hexopyranosid-4-uloside]:* [130014-51-6]. ***Forbeside G***
$C_{45}H_{72}O_{19}S$ M 949.118
Isol. from *A. forbesi*. Powder (as Na salt). Mp 194° (Na salt). $[\alpha]_D^{20}$ −4.7° (c, 0.01 in H_2O).

3-O-Sulfate, 6-O-[6-deoxy-β-D-glucopyranosyl-(1→2)-β-D-xylopyranosyl-(1→3)-6-deoxy-β-D-glucopyranoside]: [130062-45-2]. ***Forbeside H***
$C_{44}H_{72}O_{19}S$ M 937.107
Isol. from *A. forbesi*. Powder (as Na salt). Mp 188° (Na salt). $[\alpha]_D^{20}$ −4.7° (c, 0.01 in H_2O).

[115225-96-2]

Kitagawa, I. *et al*, *Chem. Pharm. Bull.*, 1978, **26**, 1852, 1864 (*isol*)
Itakura, Y. *et al*, *Justus Liebigs Ann. Chem.*, 1983, 2079 (*Forbeside A*)
Honda, M. *et al*, *Tetrahedron Lett.*, 1986, **27**, 3369 (*struct, synth*)
Findlay, J.A. *et al*, *Can. J. Chem.*, 1987, **65**, 1384, 2605; 1990, **68**, 1215 (*Forbesides*)
Riccio, R. *et al*, *J. Chem. Soc., Perkin Trans. 1*, 1988, 1337 (*Forbeside B*)

3,20,26-Trihydroxycucurbita-5,24-dien-11-one, 9CI T-10136



(3β,20ξ,24*E*)-*form*

$C_{30}H_{48}O_4$ M 472.707

(3β,20ξ,24E)-form [114653-43-9]
Scandenogenin A
Powder. $[\alpha]_D^{22}$ +125.7° (c, 0.35 in MeOH).

3-O-β-D-Glucopyranoside: [114637-76-2]. ***Scandenoside R$_1$***
$C_{36}H_{58}O_9$ M 634.849
Constit. of the rhizomes of *Hemsleya panacis-scandens*.
Powder + $1H_2O$. $[\alpha]_D^{24}$ +83.8° (c, 0.68 in MeOH).

3,26-Di-O-β-D-glucopyranoside: [114637-77-3]. ***Scandenoside R$_3$***
$C_{42}H_{68}O_{14}$ M 796.991
Constit. of the rhizomes of *H. panacis-scandens*. Powder + $1\frac{1}{2}$ H_2O. $[\alpha]_D^{24}$ +48° (c, 0.97 in MeOH).

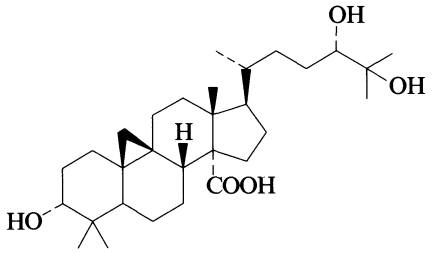
(3β,20ξ,24Z)-form
Scandenogenin B
Needles (EtOAc/hexane). Mp 148-149°. $[\alpha]_D^{22}$ +137.8° (c, 0.45 in MeOH).

3-O-β-D-Glucopyranoside: [114715-44-5]. ***Scandenoside R$_2$***
$C_{36}H_{58}O_9$ M 634.849
Constit. of the rhizomes of *H. panacis-scandens*. Powder + $1H_2O$. $[\alpha]_D^{24}$ +86.0° (c, 0.8 in MeOH).

3,26-Di-O-β-D-glucopyranoside: [114715-45-6]. ***Scandenoside R$_4$***
$C_{42}H_{68}O_{14}$ M 796.991
Constit. of the rhizomes of *H. panacis-scandens*. Powder + $1\frac{1}{2}$ H_2O. $[\alpha]_D^{24}$ +69.7° (c, 0.75 in MeOH).

Kasai, R. *et al*, *Chem. Pharm. Bull.*, 1988, **36**, 234.

3,24,25-Trihydroxycycloartan-30-oic acid T-10137



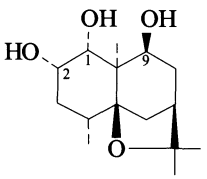
$C_{30}H_{50}O_5$ M 490.722

(3α,24R)-form [12708-28-0] ***Protolyofoligenic acid***
Constit. of *Lyonia ovalifolia* and *Notholaena schaffneri*.

Arriaga-Giner, F.J. *et al*, *Z. Naturforsch., C*, 1992, **47**, 508 (*isol, pmr, cmr*)

1,2,9-Trihydroxydihydro-β-agarofuran T-10138

Updated Entry replacing T-02052



$C_{15}H_{26}O_4$ M 270.368

(1α,2α,9β)-form [59812-47-4] ***Isocelorbicol***
Parent alcohol from esters isol. from the seed oil of *Celastrus orbiculatus*. Cryst. ($CHCl_3$/Me_2CO). Mp 240-241°. $[\alpha]_D^{26}$ −8° (c, 0.3 in $CHCl_3$).

1-E-*Cinnamoyl, 2,9-di-Ac:* [59812-48-5].
$C_{28}H_{36}O_7$ M 484.588
Constit. of *C. orbiculatus*. Amorph. solid.

9-(2,3-Epoxycinnamoyl), 1,2-di-Ac: [130926-66-8].
$C_{28}H_{36}O_8$ M 500.588
Isol. from *C. gemmatus*. Cryst. (MeOH). Mp 173-174°. $[\alpha]_D^{14}$ −7.87° (c, 0.508 in $CHCl_3$). Defectively named, shown in nonstandard orientation and descr. as (1β,2β,9α).

9-(2,3-Epoxycinnamoyl), 2-benzoyl, 1-Ac: [130926-67-9].
$C_{33}H_{38}O_8$ M 562.658
Isol. from *C. gemmatus*. Amorph. powder. $[\alpha]_D^{14}$ +45.37° ($CHCl_3$). Defectively named.

9-(2,3-Epoxycinnamoyl), 2-butanoyl, 1-Ac: [131213-10-0].
$C_{30}H_{40}O_8$ M 528.641
Isol. from *C. gemmatus*. Amorph. powder.

2-(2-Methylbutanoyl), 9-benzoyl, 1-Ac: [137740-06-8]. ***Triptogelin E1***
$C_{29}H_{40}O_7$ M 500.631
Constit. of *Tripterygium wilfordii*. Amorph. powder. $[\alpha]_D^{23}$ +84.5° (c, 1 in MeOH).

9-Benzoyl, 1,2-di-Ac: [137740-07-9]. ***Triptogelin E2***
$C_{26}H_{34}O_7$ M 458.550
Constit. of *T. wilfordii*. Needles. Mp 113-115°. $[\alpha]_D^{27}$ +31.7° (c, 1 in MeOH).

9-E-*Cinnamoyl, 2-(2-methylbutanoyl), 1-Ac:* [137740-08-0]. ***Triptogelin E3***
$C_{31}H_{42}O_7$ M 526.669
Constit. of *T. wilfordii*. Amorph. powder. $[\alpha]_D^{23}$ +155.9° (c, 1.03 in MeOH).

2-Ketone, 1-Ac, 9-benzoyl: [137740-09-1]. ***Triptogelin E4***
$C_{24}H_{30}O_6$ M 414.497
Constit. of *T. wilfordii*. Needles. Mp 201-203°.

9-Benzoyl, 2-butanoyl, 1-Ac: [145940-82-5]. ***Triptogelin E5***
$C_{28}H_{38}O_7$ M 486.604
Constit. of *T. wilfordii*. Amorph. powder. $[\alpha]_D^{23}$ +66.7° (c, 0.3 in $CHCl_3$).

9-Benzoyl, 2-(2-Methylpropanoyl), 1-Ac: [145940-83-6]. ***Triptogelin E6***
$C_{28}H_{38}O_7$ M 486.604
Constit. of *T. wilfordii*. Amorph. powder. $[\alpha]_D^{23}$ +41.4° (c, 0.3 in $CHCl_3$).

9-Cinnamoyl, 2-butanoyl, 1-Ac: [145940-84-7]. ***Triptogelin E7***
$C_{30}H_{40}O_7$ M 512.642
Constit. of *T. wilfordii*. Amorph. powder. $[\alpha]_D^{23}$ +112.9° (c, 0.3 in $CHCl_3$).

9-Cinnamoyl, 2-(2-Methylpropanoyl), 1-Ac: [145940-85-8]. ***Triptogelin E8***
$C_{30}H_{40}O_7$ M 512.642
Constit. of *T. wilfordii*. Amorph. powder.

9-E-*Cinnamoyl, 2-benzoyl, 1-Ac:* ***Celafolin B3***
$C_{33}H_{38}O_7$ M 546.659
Constit. of *C. stephanotiifolius*. Amorph. powder. $[\alpha]_D^{20}$ +232.6° (c, 0.33 in MeOH).

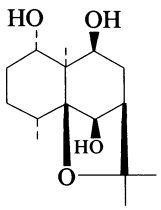
9-E-*Cinnamoyl, 1-Ac:* ***Celafolin B1***
$C_{26}H_{34}O_6$ M 442.551
Constit. of *C. stephanotiifolius*. Amorph. powder. $[\alpha]_D^{20}$ +97.5° (c, 1 in MeOH).

9-E-*Cinnamoyl, 2-Ac:* ***Celafolin B2***
$C_{26}H_{34}O_6$ M 442.551
Constit. of *C. stephanotiifolius*. Amorph. powder. $[\alpha]_D^{20}$ +68.9° (c, 0.46 in MeOH).

Smith, C.R. *et al*, *J. Org. Chem.*, 1976, **41**, 3264 (*isol*)
Huffman, J.W. *et al*, *Tetrahedron*, 1987, **43**, 5557 (*synth*)
Yongqiang, T. *et al*, *Phytochemistry*, 1990, **29**, 2924 (*isol*)
Takaishi, Y. *et al*, *Phytochemistry*, 1991, **30**, 3027; 1992, **30**, 3027 (*Triptogelins*)
Takaishi, Y. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 815 (*Celafolins*)

1,6,9-Trihydroxydihydro-β-agarofuran T-10139

Updated Entry replacing T-02054



$C_{15}H_{26}O_4$ M 270.368

(1α,6β,9β)-form [59812-41-8] ***Celorbicol***
$C_{15}H_{26}O_4$ M 270.368
Parent alcohol of esters from the seed oil of *Celastrus orbiculatus*. Cryst. ($CHCl_3$/Me_2CO). Mp 222-223°. $[\alpha]_D^{26}$ −24° (c, 0.5 in $CHCl_3$).

6-(3-Pyridinecarbonyl), 9-benzoyl, 1-Ac: [145940-86-9]. ***Triptogelin F1***
$C_{30}H_{35}NO_7$ M 521.609
Constit. of *Tripterygium wilfordii*. Needles. Mp 193-195°. $[\alpha]_D^{23}$ +67.7° (c, 0.4 in MeOH).

9-Cinnamoyl, 1,6-di-Ac: [145940-87-0]. ***Triptogelin F2***
$C_{28}H_{36}O_7$ M 484.588
Constit. of *T. wilfordii*. Amorph. powder. $[\alpha]_D^{23}$ +23.3° (c, 0.3 in MeOH).

9-Benzoyl, 1,6-Di-Ac:
$C_{26}H_{34}O_7$ M 458.550
Constit. of *C. orbiculatus* and *C. stephanotiifolius*. Amorph. powder.

6,9-Dibenzoyl, 1-Ac:
$C_{31}H_{36}O_7$ M 520.621

Constit. of *C. orbiculatus* and *C. stephanotiifolius*. Amorph. powder.

9-Benzoyl, 6-cinnamoyl, 1-Ac: ***Celafolin A1***
$C_{33}H_{38}O_7$ M 546.659
Constit. of *C. stephanotiifolius*. $[\alpha]_D^{20}$ +23.2° (c, 0.43 in MeOH).

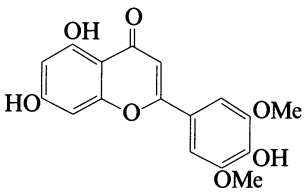
Smith, C.R. *et al*, *J. Org. Chem.*, 1976, **41**, 3264.
Takaishi, Y. *et al*, *Phytochemistry*, 1992, **31**, 3943 (*Triptogelins*)
Takaishi, Y. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 815 (*derivs, pmr, cmr*)

4′,5,7-Trihydroxy-3′,5′-dimethoxyflavone T-10140

Updated Entry replacing T-02065

5,7-Dihydroxy-2-(4-hydroxy-3,5-dimethoxyphenyl)-4H-1-benzopyran-4-one, 9CI. Tricetin 3′,5′-dimethyl ether. ***Tricin.*** *Phelipeone. Phoelipeone*

[520-32-1]



$C_{17}H_{14}O_7$ M 330.293
Constit. of *Aechmea, Billbergia, Veronica* and Gramineae spp. Widespread in the Cyperaceae. Yellow needles (AcOH aq.). Mp 291-292°.

5-O-β-D-Glucopyranoside:
$C_{23}H_{24}O_{12}$ M 492.435
Isol. from leaves of *Triticum* spp., *Cirsium* spp. and others.

7-O-β-D-Glucopyranoside: [32769-01-0]. ***Glucotricin***
$C_{23}H_{24}O_{12}$ M 492.435
Isol. from rice (*Oryza sativa*), *Lycopodium scariosum* and others. Light-yellow powder (butanol/Et_2O); cryst. + $2H_2O$ (MeOH aq.). Mp 260.5-261° (dihydrate), Mp 240-241° (anhyd.).

7-O-Rutinoside:
$C_{29}H_{34}O_{16}$ M 638.578
Constit. of leaves of *Chamaerops humilis*. Pale-yellow needles (EtOH). Mp 192-196°. $[\alpha]_D^{20}$ −93.7° (c, 1.00 in Py).

7-O-Rhamnosylglucoside:
$C_{29}H_{34}O_{16}$ M 638.578
From leaves of *O. sativa*. Yellow powder.

7-O-β-D-Glucuronoside:
$C_{23}H_{22}O_{13}$ M 506.419
Isol. from alfalfa (*Medicago sativa*) and *Stipa lemmonii*.

7-O-(Rhamnosylglucuronoside):
$C_{29}H_{32}O_{17}$ M 652.562
Isol. from *Marchantia foliacea*.

4′-O-Glucopyranoside, 7-O-rutinoside: [58795-16-7].
$C_{35}H_{44}O_{21}$ M 800.720
Isol. from *Hyacinthus orientalis*.

5,7-Di-O-β-D-glucopyranoside: [74336-88-2].
$C_{29}H_{34}O_{17}$ M 654.577
Isol. from *Lycopodium scariosum*.

7-O-(D-Fructosyl-D-glucoside): [58798-49-5].
$C_{29}H_{34}O_{17}$ M 654.577
Isol. from *H. orientalis*.

7-O-Diglucuronoside: [83097-44-3].
$C_{29}H_{30}O_{19}$ M 682.545
Isol. from *Medicago sativa*.

7-O-[α-L-Rhamnosyl-(1→2)-α-D-galacturonoside]: [89915-54-8].
$C_{29}H_{32}O_{17}$ M 652.562
Isol. from *Saccharum* spp.

5-O-Diglucoside:
$C_{29}H_{34}O_{17}$ M 654.577
Isol. from *Triticum dicoccum*.

7-O-Diglucoside: [50867-30-6].
$C_{29}H_{34}O_{17}$ M 654.577
Isol. from *Saccharum officinarum*.

7-O-Neohesperidoside: [53766-40-8].
$C_{29}H_{34}O_{16}$ M 638.578
Isol. from *S. officinarum*.

4′-O-β-D-Glucopyranoside: [71855-50-0].
$C_{23}H_{24}O_{12}$ M 492.435
Isol. from *Lycopodium scariosum*.

7-O-(Sulfooxy-β-D-glucopyranoside):
$C_{23}H_{24}O_{15}S$ M 572.500
Isol. from *S. officinarum*.

7-O-(Sulfooxy-β-D-glucuronoside): [88849-98-3].
$C_{23}H_{22}O_{16}S$ M 586.483
Isol. from *Cyperus polystachyos*.

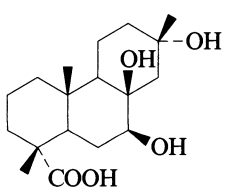
7-O-(Disulfooxy-β-D-glucuronoside):
$C_{23}H_{22}O_{19}S_2$ M 666.547
Isol. from *C. polystachyos*.

7-O-Triglucuronoside: [83097-23-8].
$C_{35}H_{38}O_{25}$ M 858.670
Isol. from *Medicago sativa*.

7-O-β-L-Arabinopyranoside: [126394-59-0]. ***Setaricin***
$C_{22}H_{22}O_{11}$ M 462.409
Constit. of the leaves of *Setaria italica*. Shining yellow needles (MeOH). Mp >300°. Incorrect anomer given in CA.

Gulati, K.L. *et al*, *J. Chem. Soc.*, 1933, 942, 1644 (*synth*)
Harborne, J.B. *et al*, *Phytochemistry*, 1964, **3**, 421 (*5-glucoside, glucuronide*)
Minamikawa, T. *et al*, *Agric. Biol. Chem.*, 1965, **29**, 428 (*Glucotricin*)
Owada, E. *et al*, *Nippon Kagaku Zasshi*, 1970, **91**, 1002; *CA*, **74**, 76265 (*synth*)
Kaneta, M. *et al*, *Bull. Chem. Soc. Jpn.*, 1972, **45**, 528 (*isol*)
Markham, K.R. *et al*, *Phytochemistry*, 1973, **12**, 2007 (*7-rhamnosylglucuronide*)
Williams, C.A. *et al*, *Phytochemistry*, 1973, **12**, 2417 (*occur*)
Williams, C.A. *et al*, *Phytochemistry*, 1974, **13**, 1141 (*7-neohesperidoside*)
Desai, H.K. *et al*, *Indian J. Chem., Sect. B*, 1976, **14**, 473 (*isol*)
Bhattacharyya, J. *et al*, *J. Pharm. Sci.*, 1978, **67**, 1325 (*isol, cmr*)
Saleh, N.A.M. *et al*, *Biochem. Syst. Ecol.*, 1982, **10**, 33 (*7-triglucuronoside*)
Liu, Y.-L. *et al*, *Phytochemistry*, 1982, **21**, 209 (*isol*)
Harborne, J.B. *et al*, *Phytochemistry*, 1982, **21**, 2491 (*glucuronoside sulfates*)
Voirin, B., *Phytochemistry*, 1983, **22**, 2107 (*uv*)
Mabry, T.J. *et al*, *J. Nat. Prod.* (*Lloydia*), 1984, **47**, 127 (*7-rhamnosylgalacturonoside*)
Harborne, J.B. *et al*, *Phytochemistry*, 1985, **24**, 751 (*isol*)
Rofi, R.D. *et al*, *Phytochemistry*, 1985, **24**, 2131 (*isol*)
Hirai, Y. *et al*, *Chem. Pharm. Bull.*, 1986, **34**, 82 (*deriv*)
Jain, N. *et al*, *Chem. Ind.* (*London*), 1989, 422 (*Setaricin*)
Rettig, J.H. *et al*, *Biochem. Syst. Ecol.*, 1990, **18**, 393 (*7-xyloside*)
Nagarathnam, D. *et al*, *J. Org. Chem.*, 1991, **56**, 4884 (*synth*)

7,8,13-Trihydroxy-15,16-dinor-18-isopimaranoic acid T-10141

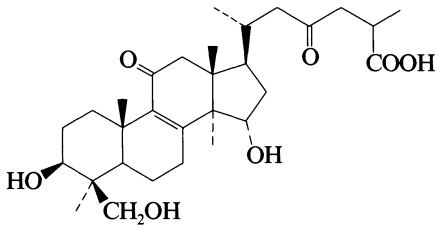


$C_{18}H_{30}O_5$ M 326.432

(7β,8β,13α)-form [150900-96-2]
Constit. of *Vellozia variabilis*. Cryst. (DMF). Mp 262-264°.

Pinto, A.C. *et al*, *Phytochemistry*, 1993, **33**, 1269 (*isol, pmr, cmr, cryst struct*)

3,15,29-Trihydroxy-11,23-dioxolanost-8-en-26-oic acid T-10142



$C_{30}H_{46}O_7$ M 518.689

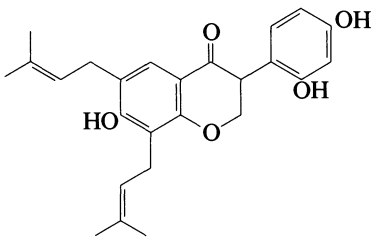
(3β,15α,25ξ)-form [100440-27-5] ***Ganolucidic acid C***
Metab. of *Ganoderma lucidum*.

Nishitoba, T. *et al*, *Agric. Biol. Chem.*, 1985, **49**, 3637 (*isol, pmr, cmr*)

2′,4′,7-Trihydroxy-6,8-diprenylisoflavanone T-10143

Bidwillon A

[147742-10-7]



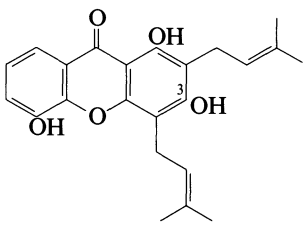
$C_{25}H_{28}O_5$ M 408.493
Constit. of the root bark of *Erythrina* x *bidwilli*. Oil. $[\alpha]_D^{23}$ −35.3° (c, 1.1 in MeOH).

Iinuma, M. *et al*, *Chem. Pharm. Bull.*, 1992, **40**, 2749 (*isol, struct*)

1,3,5-Trihydroxy-2,4-diprenylxanthone T-10144

1,3,5-Trihydroxy-2,4-bis(3-methyl-2-butenyl)-9H-xanthen-9-one. ***8-Desoxygartanin***

[33390-41-9]



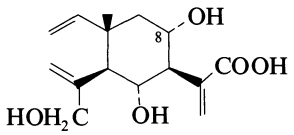
$C_{23}H_{24}O_5$ M 380.440
Isol. from *Garcinia mangostana*. Yellow needles (C_6H_6/hexane). Mp 165.5°.

3-Me ether: [130774-35-5]. *1,5-Dihydroxy-3-methoxy-2,4-diprenylxanthone*
$C_{24}H_{26}O_5$ M 394.466
Constit. of *Cudrania tricuspidata*. Yellow prisms (hexane). Mp 129-131°.

Govindachari, T.R. *et al*, *Tetrahedron*, 1971, **27**, 3919.
Hano, Y. *et al*, *Planta Med.*, 1990, **56**, 399 (*deriv*)

6,8,15-Trihydroxy-1,3,11(13)-elematrien-12-oic acid T-10145

Updated Entry replacing T-02114



$C_{15}H_{22}O_5$ M 282.336

(6α,8α)-form

Me ester:
$C_{16}H_{24}O_5$ M 296.363
Constit. of *Centaurea aspera*. Gum. $[\alpha]_D^{23}$ −15° (c, 0.4 in $CHCl_3$).

8-O-(2-Hydroxymethylpropenoyl), Me ester: [105242-48-6].
Elemacarmanin
$C_{20}H_{28}O_7$ M 380.437
Constit. of *Onopordon carmanicum*. Oil.

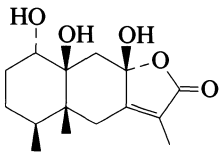
8-(2,3-Epoxy-2-hydroxymethylpropanoyl), Me ester: ***17,18-Epoxyelemacarmanin***
$C_{20}H_{28}O_8$ M 396.436
Constit. of *O. acaulon*.

8-(3-Hydroxy-2R-methylpropanoyl), Me ester: ***17R,18-Dihydroelemacarmanin***
$C_{20}H_{30}O_7$ M 382.453
Constit. of *O. acaulon*. Viscous gum.

8-(3-Hydroxy-2S-methylpropanoyl), Me ester:
$C_{20}H_{30}O_7$ M 382.453
Constit. of *O. acaulon* and *O. ambiguum*. Viscous gum.

Rustaiyan, A. *et al*, *Phytochemistry*, 1986, **25**, 1659.
Cardona, L. *et al*, *Phytochemistry*, 1992, **31**, 3507, 3630; 1993, **33**, 1457 (*isol, pmr, cmr, derivs*)

1,8,10-Trihydroxy-7(11)-eremophilen-12,8-olide T-10146



$C_{15}H_{22}O_5$ M 282.336

(1α,8βOH,10β)-form

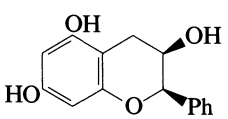
1-Angeloyl: [151334-08-6].
$C_{20}H_{28}O_6$ M 364.438
Constit. of *Roldana sessilifolia*. Cryst. (diisopropyl ether/Me_2CO). Mp 92-94°. $[\alpha]_D^{25}$ +16.1° (c, 0.112 in MeOH).

Delgado, G. *et al*, *Planta Med.*, 1993, **59**, 389 (*isol, pmr, cmr*)

3,5,7-Trihydroxyflavan T-10147

Updated Entry replacing T-02143

3,4-Dihydro-2-phenyl-2H-1-benzopyran-3,5,7-triol, 9CI



$C_{15}H_{14}O_4$ M 258.273

(2R,3R)-form [120693-54-1] ***Distenin***

Isol. from the fronds of *Dennstaedtia distenta*. Needles (EtOAc/hexane). Mp 202-203°. $[\alpha]_D^{24}$ −61.3° (c, 2 in EtOH).

5,7-Di-Me ether: [120786-77-8]. *3-Hydroxy-5,7-dimethoxyflavan*

$C_{17}H_{18}O_4$ M 286.327

Syrup. $[\alpha]_D^{24}$ −38.9° (c, 1.42 in $CHCl_3$).

(2R,3S)-form [40951-67-5] ***3-Oxykoaburagenin***

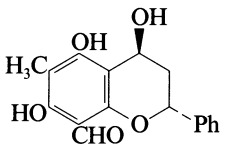
Isol. from the leaves of *Enkianthus nudipes*.

Ogawa, M. *et al*, *Yakugaku Zasshi*, 1972, **92**, 1395 (*3-Oxykoaburagenin*)

Hori, K. *et al*, *Chem. Pharm. Bull.*, 1988, **36**, 4301.

4,5,7-Trihydroxy-8-formyl-6-methylflavan T-10148

3,4-Dihydro-4,5,7-trihydroxy-6-methyl-2H-1-benzopyran-8-carboxaldehyde



relative configuration

$C_{17}H_{16}O_5$ M 300.310

(2R*,4S*)-form

5-Me ether: [121230-30-6]. *4,7-Dihydroxy-8-formyl-5-methoxy-6-methylflavan*

$C_{18}H_{18}O_5$ M 314.337

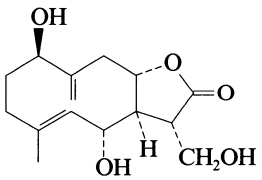
Constit. of *Desmos cochinchiensis*. Also isol. from *D. chinensis* (config. not determined).

[142878-31-7]

Liao, S.X. *et al*, *Yaoxue Xuebao*, 1989, **24**, 110; *CA*, **111**, 20870.

Zhao, J., *CA*, 1992, **117**, 86757.

1,6,13-Trihydroxy-4,10(14)-germacradien-12,8-olide T-10149



$C_{15}H_{22}O_5$ M 282.336

(1β,4E,6α,8α,11βH)-form

13-Me ether: 1,6-Dihydroxy-13-methoxy-4,10(14)-germacradien-12,8-olide. ***Chiliophyllin***

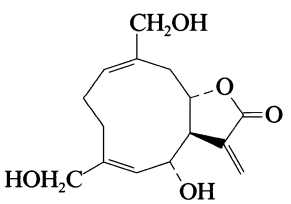
$C_{16}H_{24}O_5$ M 296.363

Constit. of *Tanacetum chiliophyllum*.

Gören, N. *et al*, *Phytochemistry*, 1993, **34**, 1071 (*isol, pmr, cmr*)

6,14,15-Trihydroxy-1(10),4,11(13)-germacratrien-12,8-olide T-10150

Updated Entry replacing T-02202



$C_{15}H_{20}O_5$ M 280.320

(1(10)E,4E,6α,8α)-form

14-Hydroxy-cis,cis-artemisifolin

6-Tigloyl:

$C_{20}H_{26}O_6$ M 362.422

Constit. of *Gochnatia discoidea*. Gum.

(1(10)E,4Z,6α,8α)-form

14,15-Di-Ac: ***14-Acetoxydicomanolide***

$C_{19}H_{24}O_7$ M 364.394

Constit. of *Dicoma anomala*. Oil. $[\alpha]_D$ −35.3° (c, 2.6 in $CHCl_3$). Dicomanolide has not been isol.

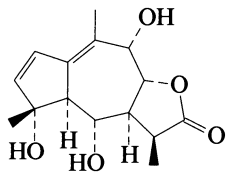
14-Aldehyde, 15-Ac: [67870-30-8].

$C_{17}H_{20}O_6$ M 320.341

Constit. of *D. anomala*. $[\alpha]_D$ +68° (c, 1.9 in $CHCl_3$) (as acetate).

Bohlmann, F. *et al*, *Phytochemistry*, 1978, **17**, 570; 1981, **20**, 109 (*isol, pmr*)

4,6,9-Trihydroxy-1(10),2-guaiadien-12,8-olide T-10151



(4α,5α,6α,8α,9α,11*H*)-*form*

$C_{15}H_{20}O_5$ M 280.320

(4α,5α,6α,8α,9α,11αH)-form

6,9-Di-Ac: [146018-85-1].

$C_{19}H_{24}O_7$ M 364.394

Constit. of *Achilles asplenifolia*.

9-Ac, 6-angeloyl: [146018-86-2].

$C_{22}H_{28}O_7$ M 404.459

Constit. of *A. asplenifolia*.

9-Ac, 6-tigloyl: [146018-84-0].

$C_{22}H_{28}O_7$ M 404.459

Constit. of *A. asplenifolia*.

(4β,5α,6α,8α,9α,11αH)-form

9-Ac, 6-angeloyl: [146018-83-9].

$C_{22}H_{28}O_7$ M 404.459

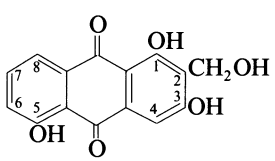
Constit. of *A. asplenifolia*.

Kastner, U. *et al*, *Phytochemistry*, 1992, **31**, 4361 (*isol, pmr, cmr, ms*)

1,3,5-Trihydroxy-2-hydroxymethylanthraquinone T-10152

Updated Entry replacing T-02246

1,3,5-Trihydroxy-2-(hydroxymethyl)-9,10-anthracenedione



$C_{15}H_{10}O_6$ M 286.240

1-Me ether: [568-78-5]. *3,5-Dihydroxy-2-hydroxymethyl-1-methoxyanthraquinone.* ***Juzunol***

$C_{16}H_{12}O_6$ M 300.267

Isol. from roots of *Damnacanthus major*. Orange-brown needles. Mp >300°.

1-Me ether, 1'-Et ether: [103956-44-1]. *2-(Ethoxymethyl)-3,5-dihydroxy-1-methoxyanthraquinone*

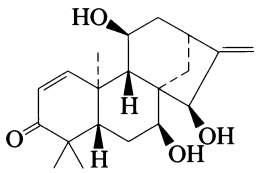
$C_{18}H_{16}O_6$ M 328.321

Isol. from the roots of *D. subspinosus*.

5-Me ether, 1'-Et ether: [139360-95-5]. *2-(Ethoxymethyl)-1,3-dihydroxy-5-methoxyanthraquinone*
$C_{18}H_{16}O_6$ M 328.321
Isol. from the roots of *D. subspinosus*. Incorrectly named as 8-Hydroxysubspinosin before the struct. was revised in 1991.

Hirose, Y. *et al*, *Chem. Pharm. Bull.*, 1960, **8**, 417.
Li, G. *et al*, *Yaoxue Xuebao*, 1986, **21**, 303; *CA*, **105**, 94503 (*1-Me-1'-Et ether*)
Yu, J. *et al*, *Chin. Chem. Lett.*, 1991, **9**, 365 (*5-Me-1'-Et ether*)

7,11,15-Trihydroxy-1,16-kauradien-3-one T-10153

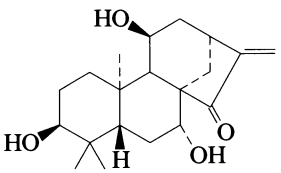


$C_{20}H_{28}O_4$ M 332.439
(ent-7α,11α,15α)-form

Tri-Ac: ***Forrestin G***
$C_{26}H_{34}O_7$ M 458.550
Constit. of *Rabdosia forrestii*. Needles. Mp 204-206°. $[\alpha]_D$ −69.88° (c, 0.508 in MeOH).

Xu, Y. *et al*, *Phytochemistry*, 1993, **34**, 461 (*isol, pmr, cmr*)

3,7,11-Trihydroxy-16-kauren-15-one T-10154

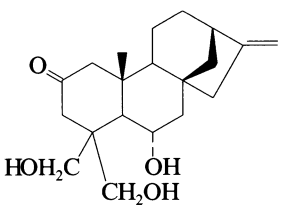


$C_{20}H_{30}O_4$ M 334.455
(ent-3α,7β,11α)-form

3-Ac: [148225-31-4]. ***Inflexarabdonin K***
$C_{22}H_{32}O_5$ M 376.492
Constit. of *Rabdosia inflexa*. Needles. Mp 208-210°. $[\alpha]_D^{26}$ −73.7° (c, 0.57 in MeOH).

Takeda, Y. *et al*, *Phytochemistry*, 1993, **32**, 145 (*isol, pmr, cmr*)

6,18,19-Trihydroxy-16-kauren-2-one T-10155

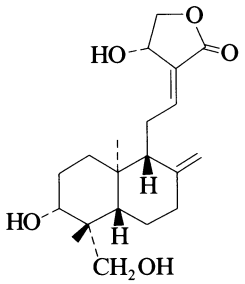


$C_{20}H_{30}O_4$ M 334.455
6β-form
Constit. of *Psiadia arabica*. Needles (MeOH/EtOAc). Mp 210-211°. $[\alpha]_D^{22}$ −153° (c, 0.1 in $CHCl_3$).

El-Domiaty, M.M. *et al*, *Phytochemistry*, 1993, **34**, 467 (*isol, pmr, cmr*)

3,14,19-Trihydroxy-8(17),12-labdadien-16,15-olide T-10156

Updated Entry replacing T-02313

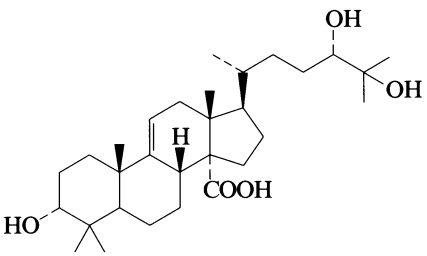


$C_{20}H_{30}O_5$ M 350.454
(ent-3β,14R)-form [5508-58-7] ***Andrographolide***
Constit. of *Andrographis paniculata*. Cryst. (MeOH). Mp 230-231°. $[\alpha]_D^{26}$ −126° (AcOH).

19-O-β-D-Glucopyranoside: [82209-76-5]. ***Andrographiside***
$C_{26}H_{40}O_{10}$ M 512.596
Constit. of *A paniculata*.

Talukdar, P.B. *et al*, *Indian J. Chem.*, 1968, **6**, 252 (*isol*)
Patra, A. *et al*, *Org. Magn. Reson.*, 1981, **16**, 74; **17**, 301 (*cmr*)
Hu, C. *et al*, *CA*, 1982, **97**, 107055b (*Andrographiside*)
Fujita, T. *et al*, *Chem. Pharm. Bull.*, 1984, **32**, 2117 (*cryst struct*)

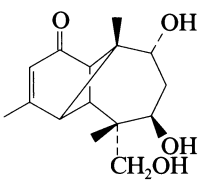
3,24,25-Trihydroxylanost-9(11)-en-30-oic acid T-10157



$C_{30}H_{50}O_5$ M 490.722
(3α,24R)-form [145984-73-2]
Constit. of *Notholaena grayi*. Cryst. (Me_2CO). Mp 198°.

Arriaga-Giner, F.J. *et al*, *Z. Naturforsch., C*, 1992, **47**, 922 (*isol, pmr, cmr*)

8,10,12-Trihydroxy-3-longipinen-5-one T-10158



$C_{15}H_{22}O_4$ M 266.336
(8α,10β)-form

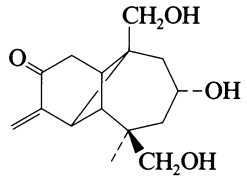
8,12-Diangeloyl, 10-Ac: [151310-24-6].
$C_{27}H_{36}O_7$ M 472.577
Constit. of *Stevia origanoides*. Oil. $[\alpha]_D$ +50° (c, 0.3 in $CHCl_3$).

12-Angeloyl, 8-(3-methyl-2-butenoyl), 10-Ac: [151310-26-8].
$C_{27}H_{36}O_7$ M 472.577
Constit. of *S. origanoides*. Oil. $[\alpha]_D$ +14° (c, 0.05 in $CHCl_3$).

Cerda-García-Rojas, C.M. *et al*, *Phytochemistry*, 1993, **32**, 1219 (*isol, pmr, cmr, cryst struct*)

9,12,14-Trihydroxy-3(15)-longipinen-4-one T-10159

9,11,14-Trihydroxymarsupellone



$C_{15}H_{22}O_4$ M 266.336

9α-form

Tri-Ac:
$C_{21}H_{28}O_7$ M 392.448
Constit. of *Marsupella emarginata*. Oil. $[\alpha]_D$ +45.5° (c, 0.78 in $CHCl_3$).

9β-form

Tri-Ac:
$C_{21}H_{28}O_7$ M 392.448
Constit. of *M. emarginata*. Oil. $[\alpha]_D$ −65.0° (c, 0.89 in $CHCl_3$).

Nagashima, F. *et al*, *Phytochemistry*, 1993, **33**, 1445 (*isol, pmr, cmr*)

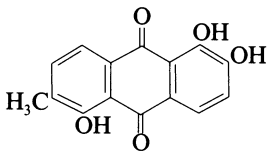
1,2,5-Trihydroxy-6-methylanthraquinone, T-10160

8CI

Updated Entry replacing T-02359

1,2,5-Trihydroxy-6-methyl-9,10-anthracenedione, 9CI.
Morindone

[478-29-5]



$C_{15}H_{10}O_5$ M 270.241
Isol. from *Hymenodictyon excelsum* (roots), *Coprosma australis* (bark) and *Morinda angustifolia* (heartwood and leaves). Also *M. persicaefolia*, *M. umbellata* and *M. tinctoria*. Orange needles. Mp 284°.

2-O-β-Primeveroside: [60450-21-7]. *Morindone 6-β-primeveroside.* ***Morindin***
$C_{26}H_{28}O_{14}$ M 564.499
From *M.* spp. and *C. australis*. Yellow cryst. (EtOH aq.). Mp 257-259°. $[\alpha]_D^{25}$ −87.3° (c, 0.6 in dioxan).

2-O-β-Rutinoside: [1400-38-0]. *Morindone 6-β-rutinoside*
$C_{27}H_{30}O_{14}$ M 578.526
Constit. of *Coprosma australis*. Yellow cryst. (AcOH). Mp 264.5° dec. (darkens > 150°). $[\alpha]_D$ −90.9° (c, 0.054 in dioxan).

1-Me ether: [64809-71-8]. *1,6-Dihydroxy-5-methoxy-2-methylanthraquinone.* ***Morindone 5-methyl ether***
$C_{16}H_{12}O_5$ M 284.268
Isol. from *M. lucida*, *Cinchona ledgeriana* and *Plocama pendula*. Orange-brown cryst. Mp 223°.

2-Me ether: [63965-45-7]. *1,5-Dihydroxy-2-methoxy-6-methylanthraquinone*
$C_{16}H_{12}O_5$ M 284.268
Isol. from the stem bark of *Aegle marmelos*. Cryst. (C_6H_6/pet. ether). Mp 252-253° (248°).

1,2-Di-Me ether: [95393-76-3]. *1-Hydroxy-5,6-dimethoxy-2-methylanthraquinone*
$C_{17}H_{14}O_5$ M 298.295
Mp 238.5-239.5°.

Tri-Me ether: [52541-74-9]. *1,2,5-Trimethoxy-6-methylanthraquinone*
$C_{18}H_{16}O_5$ M 312.321
Yellow needles (Me_2CO). Mp 237-238°.

Jacobson, R.A. *et al*, *J. Am. Chem. Soc.*, 1925, **47**, 283 (*synth*)
Briggs, L.H. *et al*, *J. Chem. Soc.*, 1963, 3471 (*rutinoside*)
Leistner, E., *Phytochemistry*, 1973, **12**, 1669 (*biosynth*)
Leistner, E., *Planta Med.*, (Suppl), 1975, 214 (*biosynth*)
González, A.G. *et al*, *An. Quim.*, 1977, **73**, 869 (*isol, deriv*)
Roberts, J.L. *et al*, *Aust. J. Chem.*, 1977, **30**, 1553 (*isol, ir, pmr*)
Rao, P.S. *et al*, *Indian J. Chem., Sect. B*, 1977, **15**, 497 (*Morindin*)
Vermes, B. *et al*, *Phytochemistry*, 1980, **19**, 119 (*deriv*)
Demagos, G.P. *et al*, *Z. Naturforsch., B*, 1981, **36**, 1180 (*isol, deriv*)
Wijnsma, R. *et al*, *Phytochemistry*, 1984, **23**, 2307 (*isol, deriv*)
Savard, J. *et al*, *Tetrahedron*, 1984, **40**, 3455 (*synth, derivs*)
Nema, D. *et al*, *Proc. Natl. Acad. Sci., India, Sect. A*, 1991, **61**, 465 (*2-Me ether*)

1,3,8-Trihydroxy-2-methylanthraquinone, T-10161

8CI

Updated Entry replacing T-02368

8-Hydroxyrubiadin

[10169-80-9]

$C_{15}H_{10}O_5$ M 270.241
Pigment from the roots of *Cassia spectabilis* and *C. alata*, seeds of *C. multijuga*. Dark-brown solid ($CHCl_3$ or MeOH) or red-orange needles. Mp 232°. λ_{max} (EtOH) 230, 285 and 427 nm.

Tri-Ac: [32834-38-1].
$C_{21}H_{16}O_8$ M 396.353
Mp 205°.

8-Me ether: [71239-18-4]. *1,3-Dihydroxy-8-methoxy-2-methylanthraquinone*
$C_{16}H_{12}O_5$ M 284.268
Yellow-brown needles (EtOAc/pet. ether). Mp 238-240°.

8-Me ether, 3-O-α-L-rhamnopyranoside: [71239-74-2].
$C_{22}H_{22}O_9$ M 430.410
From *C. renigera* and *Acacia leucophloea*.

3-O-Neohesperidoside: [100288-16-2].
$C_{27}H_{30}O_{14}$ M 578.526
Isol. from root bark of *C. sophora*. Orange-yellow cryst. Mp 196°.

3-O-Rutinoside: [87980-51-6].
$C_{27}H_{30}O_{14}$ M 578.526
Isol. from the roots of *C. multijuga*. Mp 300° dec.

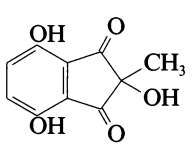
3,8-Di-Me ether: [65615-48-7]. *1-Hydroxy-3,8-dimethoxy-2-methylanthraquinone*
$C_{17}H_{14}O_5$ M 298.295
Isol. from the *C. renigera*. Mp 207°.

Tiwari, R.D. *et al*, *Planta Med.*, 1971, **19**, 299 (*isol, ir, uv*)
Mulchandani, N.B. *et al*, *Planta Med.*, 1977, **32**, 357 (*isol, ir, uv, ms*)
Tiwari, R.D. *et al*, *Planta Med.*, 1977, **32**, 371; 1979, **36**, 91 (*derivs*)
Singh, J., *Planta Med.*, 1981, **41**, 397 (*isol*)
Tiwari, R.D. *et al*, *Z. Naturforsch., B*, 1983, **38**, 1136 (*isol*)
Joshi, T. *et al*, *Phytochemistry*, 1985, **24**, 3073 (*3-neohesperidoside*)
Saxena, M. *et al*, *J. Nat. Prod.* (*Lloydia*), 1986, **49**, 205 (*deriv*)

2,4,7-Trihydroxy-2-methyl-1,3-indanedione T-10162

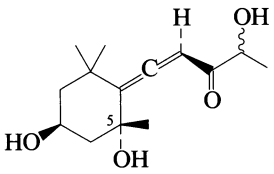
2,4,7-Trihydroxy-2-methyl-1H-indene-1,3(2H)-dione, 9CI.
Peltatone A

[139953-23-4]



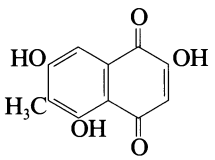
$C_{10}H_8O_5$ M 208.170
Constit. of the whole plant of *Drosera peltata* var. *lunata*.
Hu, X. *et al*, *Yunnan Zhiwu Yanjiu*, 1991, **13**, 334, 340; *CA*, **116**, 170110.

3,5,10-Trihydroxy-10-methyl-6,7-megastigmadien-9-one T-10163



$C_{14}H_{22}O_4$ M 254.325
5-Ac:
$C_{16}H_{24}O_5$ M 296.363
Constit. of *Centaurea aspera* var. *subinermis*. Gum.
Fernández, I. *et al*, *Phytochemistry*, 1993, **34**, 733 (*isol, pmr, cmr*)

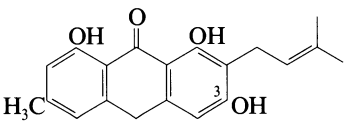
2,5,7-Trihydroxy-6-methyl-1,4-naphthoquinone T-10164



$C_{11}H_8O_5$ M 220.181
7-Me ether, 2-O-(3,7-dimethyl-2,6-octadienyl): 2-Geranyloxy-5-hydroxy-7-methoxy-6-methyl-1,4-naphthoquinone
$C_{22}H_{26}O_5$ M 370.444
Prod. by a *Streptomyces* sp. Orange solid.
Westley, J.W. *et al*, *J. Antibiot.*, 1993, **46**, 280.

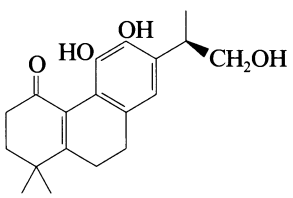
1,3,8-Trihydroxy-6-methyl-2-prenyl-9(10*H*)-anthracenone T-10165

2-Prenylemodinanthranol



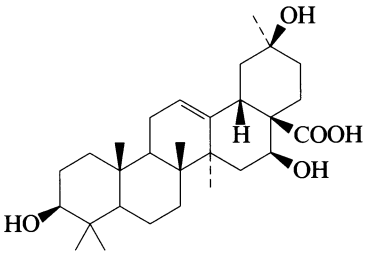
$C_{20}H_{20}O_4$ M 324.376
3-Me ether: [120090-89-3]. *1,8-Dihydroxy-3-methoxy-6-methyl-2-prenylanthrone.* ***2-Prenylphyscion anthrone***
$C_{21}H_{22}O_4$ M 338.402
Isol. from *Psorospermum glaberrimum*. Cryst. Mp 191-192°.
Botta, B. *et al*, *Tetrahedron*, 1988, **44**, 7193.

11,12,16-Trihydroxy-20-nor-5(10),8,11,13-abietatetraen-1-one T-10166



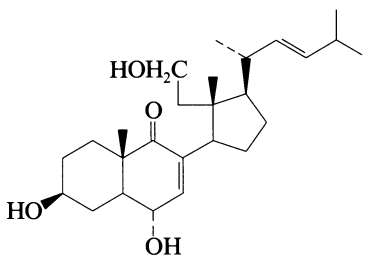
$C_{19}H_{24}O_4$ M 316.396
15R-form [149697-34-7]
Constit. of *Salvia mellifera*. Amorph. solid.
Luis, J.G. *et al*, *Tetrahedron*, 1993, **49**, 4993 (*isol, pmr, cmr*)

3,16,20-Trihydroxy-30-nor-12-oleanen-28-oic acid T-10167



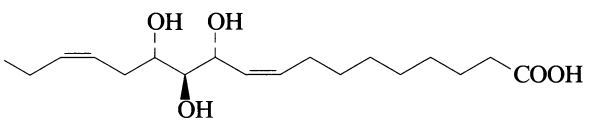
$C_{29}H_{46}O_5$ M 474.679
(3β,16β,20β)-form [149260-90-2] ***Pfameric acid***
Constit. of *Pfaffia glomerata*. Prisms. Mp 280-282°. $[\alpha]_D$ +46° (c, 0.5 in $CHCl_3$/MeOH).
Shiobara, Y. *et al*, *Phytochemistry*, 1993, **32**, 1527 (*isol, pmr, cmr*)

3,6,11-Trihydroxy-24-nor-9,11-secocholesta-7,22-dien-9-one T-10168



$C_{26}H_{42}O_4$ M 418.615
(3β,6α,22E)-form
11-Ac: [147879-65-0].
$C_{28}H_{44}O_5$ M 460.653
Constit. of *Gersemia fruticosa*. Oil. $[\alpha]_D^{22}$ +23° (c, 0.17 in MeOH).
Koljak, R. *et al*, *Tetrahedron Lett.*, 1993, **34**, 1985 (*isol, pmr, cmr*)

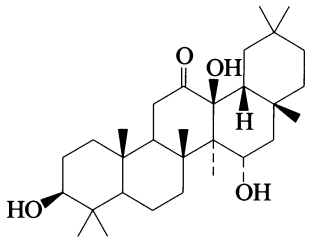
11,12,13-Trihydroxy-9,15-octadecadienoic acid T-10169



(9*Z*,11*R*,12*S*,13*S*,15*Z*)-*form*

$C_{18}H_{32}O_5$ M 328.448
Metab. of plants suffering from rice blast disease. Phytoalexin. Stereochem. of nat. prod. not detd.
(9Z,11R,12S,13S,15Z)-form [102735-55-7]
$[\alpha]_D$ −16.6° (c, 1.4 in $CHCl_3$).
Me ester: [130980-39-1].
$[\alpha]_D$ −16° (c, 0.17 in $CHCl_3$).
[101219-67-4, 102693-71-0]
Kato, T. *et al*, *Chem. Lett.*, 1986, 577 (*isol*)
Yadav, J.-S. *et al*, *Tetrahedron Lett.*, 1990, **31**, 4349 (*synth*)
Wu, W.-L. *et al*, *Tetrahedron Lett.*, 1992, **33**, 3887 (*synth*)

3,13,15-Trihydroxy-12-oleananone T-10170



$C_{30}H_{50}O_4$ M 474.723

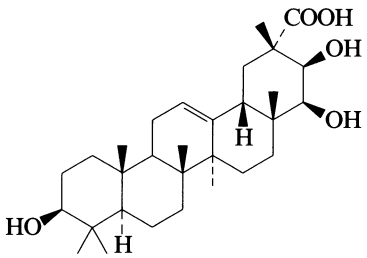
(3β,13β,15α)-form

3-Ac: [125263-65-2]. ***Rubiprasin A***
$C_{32}H_{52}O_5$ M 516.760
Constit. of *Rubia cordifolia* var. *pratensis*. Needles ($CHCl_3$). Mp >300°. $[\alpha]_D$ +12.8° (EtOH).

3,15-Di-Ac: [125263-68-5].
Needles ($CHCl_3$). Mp 270-271°.

Itokawa, H. *et al*, *Chem. Pharm. Bull.*, 1989, **37**, 1670 (*isol, pmr, cmr, cryst struct*)

3,21,22-Trihydroxy-12-oleanen-29-oic acid T-10171



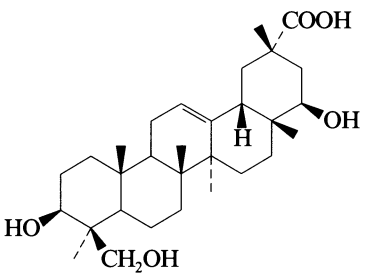
$C_{30}H_{48}O_5$ M 488.706

(3β,21β,22β)-form

3-O-[α-L-*Rhamnopyranosyl*-(*1→2*)-β-D-*galactopyranosyl*-(*1→2*)-β-D-*glucuronopyranoside*]: [124853-93-6].
$C_{48}H_{76}O_{20}$ M 973.116
Constit. of the bark of *Dalbergia hupeana*. Pale yellow powder. $[\alpha]_D^{20}$ −0.6° (c, 1.01 in MeOH aq.).

Yahara, S. *et al*, *Chem. Pharm. Bull.*, 1989, **37**, 2136.

3,22,24-Trihydroxy-12-oleanen-29-oic acid T-10172



$C_{30}H_{48}O_5$ M 488.706

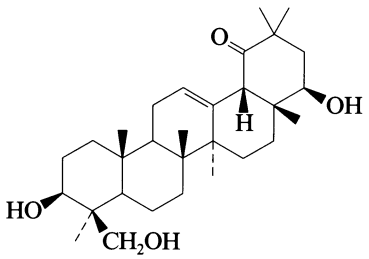
(3β,22β)-form

3-O-[α-L-*Rhamnopyranosyl*-(*1→2*)-β-D-*glucopyranosyl*-(*1→4*)-β-D-*glucuronopyranoside*]: [129369-34-2].
$C_{48}H_{76}O_{20}$ M 973.116
Constit. of *Oxytropis glabra*. Powder. Mp 255-258°. $[\alpha]_D^{25}$ −5.0° (c, 0.24 in Py).

Sun, R. *et al*, *Phytochemistry*, 1990, **29**, 2032.

3,22,24-Trihydroxy-12-oleanen-19-one T-10173

Updated Entry replacing T-02483

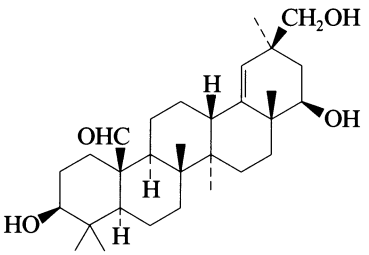


$C_{30}H_{48}O_4$ M 472.707

(3β, 19β, 22β)-form [111150-31-3] ***Sapogenin III***
Constit. of *Astragalus glycyphyllos*.

Elenga, P.A. *et al*, *Pharmazie*, 1987, **42**, 422; *CA*, **107**, 214840a (*isol, pmr*)

3,22,30-Trihydroxy-18-oleanen-25-al T-10174



$C_{30}H_{48}O_4$ M 472.707

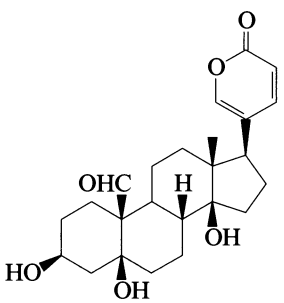
(3β,22β)-form

3-O-[α-L-*Rhamnopyranosyl*(*1→2*)-β-D-*xylopyranosyl*-(*1→2*)-β-D-*glucuronopyranoside*], *22*-O-(*4-hydroxy-3,5-dimethoxybenzoyl*): [135545-88-9]. ***Periandradulcin A***
$C_{56}H_{82}O_{22}$ M 1107.251
Constit. of the roots of *Periandra dulcis*. Phosphodiesterase inhibitor. Pale brown powder. Mp 220-225° dec. $[\alpha]_D^{25}$ −55.0° (c, 0.2 in MeOH).

Ikeda, Y. *et al*, *Chem. Pharm. Bull.*, 1991, **39**, 566.

3,5,14-Trihydroxy-19-oxobufa-20,22-dienolide T-10175

Updated Entry replacing T-02487



$C_{24}H_{32}O_6$ M 416.513

(3β,5β,14β)-form [465-90-7] ***Hellebrigenin.*** *Bufotalidin*
Aglycone from Hellebrin. Cryst. Mp 150-153° and 250-253° (dimorph.).

▷ EI3175800.

3-Ac: [4064-09-9].
$C_{26}H_{34}O_7$ M 458.550
Isol. from *Bersama abyssinica*. Tumour inhibitor. Cryst. (MeOH). Mp 242°. $[\alpha]_D^{15}$ +33.7° (c, 0.7 in $CHCl_3$).

3,5-Di-Ac:
$C_{28}H_{36}O_8$ M 500.588
Isol. from *B. abyssinica*. Tumour inhibitor. Cryst. (MeOH). Mp 217-219°. $[\alpha]_D^{28}$ −23° (c, 0.5 in $CHCl_3$).

3-(3-Methyl-2-butenoyl): [67696-82-6]. ***Acrihellin*, INN.** *D 12316*
$C_{29}H_{38}O_7$ M 498.615
Semisynthetic inotropic agent. Cardiotonic. Mp 218-219°.

3-O-β-D-Glucopyranoside:
$C_{30}H_{42}O_{11}$ M 578.655
Constit. of *Urginea depressa*. Cryst. (MeOH). Mp 240-244°, Mp 260-263°. $[\alpha]_D^{25}$ +0.05° (MeOH).

3-O-[β-D-Glucopyranosyl-(1→4)-α-L-rhamnoside]: [13289-18-4]. ***Hellebrin.*** *Corelborin. Helborsid*
$C_{36}H_{52}O_{15}$ M 724.798
Constit. of *Helleborus niger* and other *H.* spp. Cardiotonic. Cryst. (MeOH). Mp 283-284°. $[\alpha]_D^{20}$ −23.4° (50% MeOH).
▷ EI2958000.

3-Suberoyl-L-arginine ester: [105330-48-1]. ***Hellebritoxin***
$C_{38}H_{56}N_4O_{10}$ M 728.881
Bufotoxin from *Bufo viridis*. Mp 195-197°. $[\alpha]_D^{12}$ −20.0° (c, 0.13 in MeOH).

19-Alcohol: [508-79-2]. ***Hellebrigenol***
$C_{24}H_{34}O_6$ M 418.529
Cryst. (MeOH/Et_2O). Mp 146-153°. $[\alpha]_D^{25}$ +5.3° (MeOH).

19-Alcohol, 3-O-β-glucoside:
$C_{30}H_{44}O_{11}$ M 580.671
From *U. depressa*. Cryst. (MeOH). Mp 215-218°. $[\alpha]_D$ −20.6° (c, 0.778 in MeOH).

3-O-(6-Deoxy-3-O-methyl-α-D-galactopyranoside): [122051-33-6]. ***Physodin A***
$C_{31}H_{44}O_{10}$ M 576.683
Isol. from *Urginea physodes*.

Schmutz, J., *Helv. Chim. Acta*, 1949, **32**, 1442 (*struct*)
Rees, R. *et al*, *Helv. Chim. Acta*, 1959, **42**, 1052 (*isol*)
Gsell, L. *et al*, *Helv. Chim. Acta*, 1969, **52**, 551 (*pmr*)
Kupchan, S.M. *et al*, *J. Org. Chem.*, 1969, **34**, 3894 (*isol*)
Martindale, The Extra Pharmacopoeia, 28th/29th Ed., Pharmaceutical Press, London, 1982/1989, 18718.
Achenbach, C. *et al*, *Arzneim.-Forsch.*, 1983, **33**, 1215, 1425 (*Acrihellin*)
Stroman, F. *et al*, *Arzneim.-Forsch.*, 1984, **34**, 769 (*Acrihellin*)
Shimada, K. *et al*, *Chem. Pharm. Bull.*, 1986, **34**, 3454 (*isol, deriv*)
Van Heerden, F.R. *et al*, *S. Afr. J. Chem.*, 1988, **41**, 145 (*Physodin A*)
Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th Ed., Van Nostrand-Reinhold, 1992, HAN600.

5,14,16-Trihydroxy-19-oxobufa-3,20,22-trienolide T-10176

Updated Entry replacing T-02492

$C_{24}H_{30}O_6$ M 414.497

(5β,14β,16β)-form [30344-97-9] ***Bersenogenin***
Constit. of the fruits of *Bersama abyssinica*. Prisms (Me_2CO), rhombs (MeOH), needles ($CHCl_3$). Mp 189-190° dec. (prisms), Mp 202-204° (rhombs), Mp 226-230° dec. (needles). $[\alpha]_D^{26}$ +108° (c, 1.4 in $CHCl_3$).

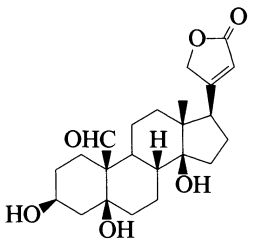
16-Ac: [53823-13-5]. *Scillicyanogenin*
$C_{26}H_{32}O_7$ M 456.535
Formed by enzymic hydrol. of Scillicyanoside. Cryst. (Me_2CO/pentane). Mp 268-274°. $[\alpha]_D^{21}$ +91.3° (c, 1 in MeOH).

5-O-β-D-Glucopyranoside, 16-Ac: [11005-49-5]. ***Scillicyanoside***
$C_{32}H_{42}O_{12}$ M 618.677
Constit. of white squill. $[\alpha]_D^{22}$ +89.1° (c, 0.795 in $CHCl_3$) (as tetra-Ac).

Kupchan, S.M. *et al*, *J. Org. Chem.*, 1971, **36**, 2611.
Lichti, H. *et al*, *Helv. Chim. Acta*, 1973, **56**, 2088 (*Scillicyanoside*)

3,5,14-Trihydroxy-19-oxocard-20(22)-enolide T-10177

Updated Entry replacing T-02493



$C_{23}H_{32}O_6$ M 404.502

(3β,5β,14β)-form [66-28-4] ***Strophanthidin.*** *Corchorin*
Constit. of *Strophanthus kombe*. Cardiotonic agents. Cryst. + $2H_2O$ (H_2O). Mp 169-170° (anhyd. 235°). $[\alpha]_D^{25}$ +43.1° (MeOH).
▷ LD_{50} (mus, ivn) 0.33 mg/kg. Very tox. by intravenous route. FH5425000.

3-O-Digilanidobioside: [7082-34-0]. ***Erysimoside***
$C_{35}H_{52}O_{14}$ M 696.787
Cardiac glycoside present in *Erysimum* spp. and *S. kombe*. Cryst. (EtOH aq.). Mp 169-173°. $[\alpha]_D^{24}$ +22° (MeOH).
▷ KF1360000.

3-O-[β-D-Glucopyranosyl-(1→4)-2-deoxy-β-D-glucopyranoside]: ***Erycanoside***
$C_{35}H_{52}O_{15}$ M 712.787
Isol. from *E. canescens*. Cryst. (2-propanol/Et_2O). Mp 249-253°. $[\alpha]_D$ +50.4° (c, 1.0 in MeOH).

3-O-Digitoxoside: [630-64-8]. ***Helveticoside.*** *Alleoside. Erysimotoxin. Erysimine. Allioside A*
$C_{29}H_{42}O_9$ M 534.645
Constit. of *E.* and *Cheiranthus* spp., also *Hesperis matronalis*, *S. kombe* and others. Cardiac glycoside. Cryst. + $2H_2O$ (EtOH aq.). Mp 168-172° dec. $[\alpha]_D^{20}$ +43.5° (EtOH).
▷ LD_{50} (rat, ivn) 54 mg/kg. MH7440000.

3-(6-Deoxy-4-O-β-D-glucopyranosyl-β-D-gulopyranoside): [7044-33-9]. ***Cheirotoxin***
$C_{35}H_{52}O_{15}$ M 712.787
Constit. of *C. cheiri*, *C. allionii* and *E. cuspidatum*. Cryst. Mp 208-211° (198-201°). $[\alpha]_D^{12}$ −17.2° (MeOH).
▷ FL8500000.

3-(D-Boivinoside): [508-76-9]. ***Corchoroside A***
$C_{29}H_{42}O_9$ M 534.645
Constit. of *Corchorus capsularis*, *C. olitorius*, *E.* spp., *Castilla elastica*, *H. matronalis* and others. Cardiotonic. Cryst. + $2H_2O$ (EtOH). Mp 188-190° (anhyd.). $[\alpha]_D^{20}$ +19° (MeOH).
▷ FH4970000.

3-O-[(2,6-Dideoxy-4-O-β-D-glucopyranosyl-3-O-methyl-β-D-ribo-hexopyranosyl)]: [560-53-2]. ***k-Strophanthin-β***
$C_{36}H_{54}O_{14}$ M 710.814
Constit. of *S. kombe* and other plants. Needles (H_2O). Mp 195°. $[\alpha]_D$ +32.6° (H_2O).
▷ LD_{50} (mus, ipr) 1.07 mg/kg. FH4919750.

3-[(O-β-D-glucopyranosyl-(1→6)-O-β-D-glucopyranosyl-(1→4)-2,6-dideoxy-3-O-methyl-β-D-ribo-hexopyranosyl)]: [33279-57-1]. ***k-Strophanthoside.*** *k-Strophanthin-γ*

Isol. from *S.* spp., *Erysimum transilvanicum* and *Castilla elastica*. Needles (EtOH/$CHCl_3$). Mp 199-200°. $[\alpha]_D^{20}$ +139.9° (MeOH).

▷ FH5091000.

3-(α-L-Mannopyranoside): ***6'-Hydroxyconvallatoxin***

$C_{29}H_{42}O_{11}$ M 566.644

Constit. of *Convallaria* spp. Extremely potent cardenolide. Cryst. Mp 265-269°. $[\alpha]_D^{29}$ +6.28° (c, 0.49 in 95% EtOH).

3-(α-L-Rhamnoside): [508-75-8]. ***Convallatoxin.*** *Convallaton. Convallopan. Convalpur. Convapur. Corglykon. Korglykon. Corglycone. Convallatoxoside*

$C_{29}H_{42}O_{10}$ M 550.645

Constit. of *C. majalis* and other plants. Highly active cardiotonic agent. Cryst. (MeOH/EtOH). Mp 247°, Mp 235-242°. $[\alpha]_D^{22}$ −1.7° (c, 0.65 in MeOH), $[\alpha]_D$ 0° ($CHCl_3$).

▷ LD_{50} (cat, ipr) 0.2 mg/kg. Very toxic by intraperitoneal route. GL4025000.

3-[O-β-D-Glucopyranosyl-(1→4)-2-deoxy-β-D-galactopyranoside]: ***Eryscenoside***

$C_{35}H_{52}O_{15}$ M 712.787

Constit. of *E. canescens*. Cryst. (2-propanol/Et_2O). Mp 138-142°, Mp 162-170°. $[\alpha]_D^{25}$ +20.9° (c, 1 in MeOH).

3-Cymaroside: [508-77-0]. ***Cymarin.*** *Cimarin. k-Strophanthin*

$C_{30}H_{44}O_9$ M 548.672

Constit. of *Apocynum, Adonis* and *S.* spp. Cardiotonic agent. Actions similar to those of digoxin. Cryst. (MeOH). Mp 148°. $[\alpha]_D^{22}$ +39° (c, 1.7 in $CHCl_3$).

▷ LD_{50} (rat, ivn) 20 mg/kg. GZ5600000.

3-O-(β-D-Glucoside): [6014-43-3]. ***Glucostrophanthidin***

$C_{29}H_{42}O_{11}$ M 566.644

Cardiotonic. Mp 234-238° dec. $[\alpha]_D^{24}$ +20.6° (c, 1.058 in H_2O).

3-O-(6-Deoxy-4-O-β-D-glucopyranosyl-α-L-mannopyranoside): [13473-51-3]. ***Convalloside.*** *Bogoroside*

$C_{35}H_{52}O_{15}$ M 712.787

Constit. of seeds of *C. majalis* and some other spp. Needles (MeOH/Et_2O). Mp 201-204°. $[\alpha]_D^{25}$ −10.4° (80% EtOH aq.).

▷ C. Majalis has been designated unsafe for inclusion in foods etc. by USA FDA. GL4207500.

α-D-Rhamnopyranoside: Strophanthidin α-D-rhamnopyranoside

$C_{29}H_{42}O_{10}$ M 550.645

Potent cardenolide. Cryst. (EtOH). Mp 261-263°. $[\alpha]_D$ +95.8° ($CHCl_3$).

3-O-(6-Deoxy-β-D-allopyranoside): [4336-94-1]. ***Strophalloside***

$C_{29}H_{42}O_{10}$ M 550.645

From *Streblus asper* and *Antiaris toxicaria*. Cryst. (MeOH). Mp 163-165°, Mp 183-186° and 177-181° (double Mp). $[\alpha]_D$ +5° (MeOH).

3-O-Digitaloside: [65681-32-5]. *Strophanthidin digitaloside*

$C_{30}H_{44}O_{10}$ M 564.672

Constit. of *Adonis vernalis*.

3-O-[β-D-Glucopyranosyl-(1→4)-2,3,-di-O'-methyl-β-D-fucopyranoside]: ***Glucostrebloside***

$C_{37}H_{56}O_{15}$ M 740.840

From *Streblus asper*. Cryst. (MeOH). Mp 244-248° and 258-262°(double Mp). $[\alpha]_D$ +8.9° (MeOH aq.).

3-O-[6-(3-(4-Hydroxy-3,5-dimethoxyphenyl)-2-propenoyl)-β-D-glucopyranosyl-(1→4)-β-D-glucopyranosyl-(1→4)-digitoxoside]: [58274-19-4]. ***Sinapoylglucoerysimoside***

$C_{52}H_{72}O_{23}$ M 1065.127

Constit. of *Erysimum marschallianum*. Amorph. yellow powder.

3-O-(3-(4-Hydroxy-3,5-dimethoxyphenyl)-2-propenoyl)-β-D-glucopyranosyl-(1→4)-digitoxoside: [53915-37-0]. ***Sinapoylerysimoside***

$C_{46}H_{62}O_{18}$ M 902.985

From *E. diffusum*. Amorph. yellow powder. $[\alpha]_D^{20}$ +33.6° (c, 2.2 in MeOH).

3-O-(2-Deoxy-D-glucoside): ***Perofskoside***

$C_{29}H_{42}O_{10}$ M 550.645

Isol. from *E. perofskianum*. Amorph. $[\alpha]_D^{26}$ +25.5° (c, 1.6 in MeOH).

3-O-D-Gulomethyloside: ***Desglucocheirotoxin***

$C_{29}H_{42}O_{10}$ M 550.645

Isol. from *Convallaria majalis, C. keiskei, E. canescens*. Cryst. (MeOH aq. or MeOH/Et_2O). Mp 188-189° (181-184°). $[\alpha]_D^{20}$ +1.3° (−8.7°)(MeOH).

3-O-(2-Deoxy-D-guloside): ***Kabuloside.*** *Cabuloside*

$C_{29}H_{42}O_{10}$ M 550.645

Isol. from *E. perofskianum* and *Syrenia* spp. Amorph. $[\alpha]_D$ +25.5°.

3-O-[β-D-Xylopyranosyl-(1→4)-β-D-digitoxoside]: [630-65-9]. ***Erychroside.*** *Erysimum glycoside 1*

$C_{34}H_{50}O_{13}$ M 666.761

Isol. from *E. cheiranthoides* and *E. gypsaceum*. Cryst. + $1H_2O$. Mp 239-241°. $[\alpha]_D^{21}$ +21.6° (c, 1.2 in MeOH).

3-O-Bioside: ***Eryperoside***

$C_{35}H_{52}O_{14}$ M 696.787

Isol. from *E. perofskianum*. Powder (2-propanol). Mp 178-180°. $[\alpha]_D^{23}$ +43.9° (c, 1.8 in MeOH). Full struct. unknown.

*3-O-[β-D-Glucopyranosyl-(1→4)-2,6-dideoxy-β-D-*xylo*-hexopyranoside]:* [13289-20-8]. ***Olitoriside.*** *Olitorin*

$C_{35}H_{52}O_{14}$ M 696.787

Isol. from *Corchorus capsularis* and *C. olitorius*. Mp 204-206°. $[\alpha]_D^{22}$ −4.5°.

3-O-Bioside: ***Erycorchoside***

$C_{35}H_{25}O_{14}$ M 669.574

Nodules (2-propanol). Mp 238-240°. $[\alpha]_D^{23}$ +30.3° (c, 1.4 in MeOH). Full struct. unknown.

3-O-(2,3-Di-O-methyl-β-D-fucopyranoside): [59015-79-1]. ***Strebloside***

$C_{31}H_{46}O_{10}$ M 578.698

Isol. from root bark of *Streblus asper*. Needles (MeOH aq. or Me_2CO aq.). Mp 153-158°. $[\alpha]_D^{29}$ +25.3° (c, 0.8 in MeOH).

3-O-β-D-Glucofuranoside: [23444-75-9]. ***Scorpioside***

$C_{29}H_{42}O_{11}$ M 566.644

Isol. from *Coronilla scorpioides*. Mp 267-269°. $[\alpha]_D^{20}$ +8.0° (c, 0.2 in MeOH). Rare occurrence of glucofuranoside.

3-O-(6-Deoxy-3-O-methyl-β-D-allopyranoside): ***Strophanthojavoside***

$C_{30}H_{44}O_{10}$ M 564.672

Isol. from seeds of *Antiaris toxicaria*. Prisms (MeOH). Mp 158-161°. $[\alpha]_D^{24}$ +1.2° (c, 0.96 in $CHCl_3$).

3-O-[β-D-Glucopyranosyl-(1→6)-β-D-glucopyranosyl-(1→4)-β-D-digitoxoside]: [125708-07-8]. ***Olitoriusin***

$C_{41}H_{62}O_{19}$ M 858.929

Isol. from the seeds of *Corchorus olitorius*. Solid (MeOH/Et_2O). Mp 185-188°. $[\alpha]_D$ +21.2° (c, 0.45 in MeOH).

3-O-Thevetoside: [15487-11-3]. ***Strophothevoside***

$C_{30}H_{44}O_{10}$ M 564.672

Constit. of *Mansonia altissima*. Needles. Mp 216-221°. $[\alpha]_D^{24}$ +6.7° (MeOH).

3-O-(2,3-Di-O-methyl-6-deoxyglucopyranoside): [11037-26-6]. ***Mansonin***

$C_{31}H_{46}O_{10}$ M 578.698

Constit. of *M. altissima*. Cryst. Mp 170-175°. $[\alpha]_D^{24}$ +6.7° (MeOH).

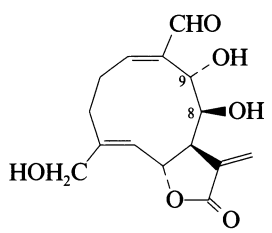
(3β,5β,14β,17α)-form [4331-85-5]
Allostrophanthidin. 17-Isostrophanthidin
Aglycone from *Strophanthus kombe*. Mp 251-253°. $[\alpha]_D^{26}$ +37° (EtOH).

3-O-Digitoxoside: [6869-17-6]. ***17α-Helveticoside***
$C_{29}H_{42}O_9$ M 534.645

Chen, K.K. *et al*, *J. Pharmacol. Exp. Ther.*, 1954, **111**, 365 (*pharmacol*)
Nagata, W. *et al*, *Helv. Chim. Acta*, 1957, **40**, 41 (*isol*)
Mauli, R. *et al*, *Helv. Chim. Acta*, 1957, **40**, 284 (*Glucostrophanthidin*)
Kreis, M.K. *et al*, *Helv. Chim. Acta*, 1957, **40**, 588 (*isol, struct*)
Kowalewski, Z. *et al*, *Helv. Chim. Acta*, 1960, **43**, 1280 (*Perofskoside, Erycorchoside, Kabuloside, Eryperoside*)
Kaiser, F. *et al*, *Justus Liebigs Ann. Chem.*, 1961, **643**, 192 (*Erysimoside*)
Zorbach, W. *et al*, *J. Med. Chem.*, 1963, **6**, 298 (*synth*)
Zorbach, N. *et al*, *Naturwissenschaften*, 1963, **50**, 93 (*6'-Hydroxyconvallatoxin*)
Manzetti, A. *et al*, *Helv. Chim. Acta*, 1964, **47**, 2320; 1969, **52**, 482.
Wyss, E. *et al*, *Helv. Chim. Acta*, 1966, **43**, 664 (*Cymarin*)
Bauer, S. *et al*, *Tetrahedron Lett.*, 1966, 1703 (*Eryscenoside*)
Allgeir, H. *et al*, *Helv. Chim. Acta*, 1967, **50**, 456 (*Strophothevoside*)
Burkhardt, F. *et al*, *Helv. Chim. Acta*, 1967, **50**, 607.
Kommissarenko, N.F. *et al*, *Khim. Prir. Soedin.*, 1969, **5**, 381; *Chem. Nat. Compd.* (*Engl. Transl.*), 317 (*Scorpioside*)
Umarova, R.U. *et al*, *Khim. Prir. Soedin.*, 1970, **6**, 140; *Chem. Nat. Compd.* (*Engl. Transl.*), 138 (*Corchoroside A*)
Karrer, W. *et al*, *Konstitution und Vorkommen der Organischen Pflanzenstoffe*, 2nd Ed., Birkhäuser Verlag, Basel, 1972-1985, nos. 2249, 2251-2254 (*occur*)
Gilardi, R.D. *et al*, *Acta Crystallogr., Sect. B*, 1973, **29**, 1842 (*cryst struct*)
Navruzova, A.M. *et al*, *Khim. Prir. Soedin.*, 1973, **9**, 750; *Chem. Nat. Compd.* (*Engl. Transl.*), 718 (*Sinapoylerysimoside*)
Tori, K. *et al*, *Tetrahedron Lett.*, 1973, 1077 (*cmr*)
Makarevich, I.F. *et al*, *Khim. Prir. Soedin.*, 1974, **10**, 607; *Chem. Nat. Compd.* (*Engl. Transl.*), 616 (*Cheirotoxin*)
Kubelka, W. *et al*, *Phytochemistry*, 1974, **13**, 1805 (*Convallatoxin*)
Gonzalez, A.G. *et al*, *An. Quim.*, 1975, **71**, 97 (*Corchoroside A*)
Maksyutina, N.P. *et al*, *Khim. Prir. Soedin.*, 1975, **11**, 603; *Chem. Nat. Compd.* (*Engl. Transl.*), 632 (*Sinapoylerysimoside*)
Pal'yants, N.Sh. *et al*, *CA*, 1976, **85**, 143397a (*Convallatoxin*)
Wichtl, M. *et al*, *Arch. Pharm.* (*Weinheim, Ger.*), 1977, **310**, 905 (*digitaloside*)
Mahato, S.B. *et al*, *J. Chem. Soc., Perkin Trans. 1*, 1989, 2065 (*Olitoriusin*)
Kreiser, W. *et al*, *Justus Liebigs Ann. Chem.*, 1989, 315 (*pmr, cmr*)
Martindale, The Extra Pharmacopoeia, 30th edn., Pharmaceutical Press, London, 1993, 664.
Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th Ed., Van Nostrand-Reinhold, 1992, CNH780, CQH750, HAN800, SMM500, SMN002.

8,9,15-Trihydroxy-14-oxo-1(10),4,11(13)-germacratrien-12,6-olide T-10178

Updated Entry replacing T-02508



(1(10)*E*,4Z,6α,8β,9α)-*form*

$C_{15}H_{18}O_6$ M 294.304

(1(10)E,4Z,6α,8β,9α)-form

9-Ac: [145052-07-9]. ***Lecocarpinolide E***
$C_{17}H_{20}O_7$ M 336.341
Constit. of *Lecocarpus pinnatifidus*. Gum.

8-Angeloyl, 9-Ac: [117213-71-5]. ***Lecocarpinolide B***
$C_{22}H_{26}O_8$ M 418.443
Constit. of *L. pinnatifidus*. Gum.

8-(2-Methylbutanoyl), 9-Ac: [56679-19-7]. ***Acanthospermal B***
$C_{22}H_{28}O_8$ M 420.458
Constit. of *Acanthospermum hispidum* and *L. pinnatifidus*. Gum.

9-(2-Methylbutanoyl): [145042-09-7]. ***Lecocarpinolide G***
$C_{20}H_{26}O_7$ M 378.421
Constit. of *L. pinnatifidus*.

8-(2-Methylbutanoyl), 9-angeloyl: [146959-84-4]. ***Lecocarpinolide I***
$C_{25}H_{32}O_8$ M 460.523
Constit. of *L. lecocarpoides*. Gum.

8-(2-Methylbutanoyl), 9-(2-methylpropanoyl): [146959-83-3]. ***Lecocarpinolide K***
$C_{24}H_{32}O_8$ M 448.512
Constit. of *L. lecocarpoides*. Gum.

8-(2-Methylpropanoyl), 9-Me ether: ***Lecocarpinolide M***
$C_{20}H_{26}O_7$ M 378.421
Constit. of *L. lecocarpoides*. Gum.

8-(2-Methylbutanoyl), 9-Me ether: [147059-45-8]. ***Lecocarpinolide J***
$C_{21}H_{28}O_7$ M 392.448
Constit. of *L. lecocarpoides*. Gum.

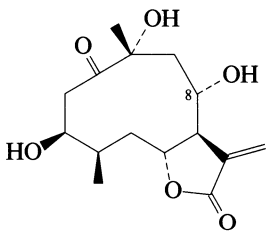
(1(10)E,4Z,6α,8β,9β)-form

9-(2-Methylbutanoyl), 8-angeloyl: [146959-82-2]. ***Lecocarpinolide L***
$C_{25}H_{32}O_8$ M 460.523
Constit. of *L. lecocarpoides*. Gum.

Herz, W. *et al*, *J. Org. Chem.*, 1975, **40**, 3486 (*Acanthospermal B*)
Macías, F.A. *et al*, *Phytochemistry*, 1992, **31**, 2747; 1993, **32**, 127 (*Lecocarpinolides*)

3,8,10-Trihydroxy-1-oxo-11(13)-germacren-12,6-olide T-10179

Updated Entry replacing T-02509



$C_{15}H_{22}O_6$ M 298.335

(3β,4αH,6α,8α,10α)-form

8-Angeloyl, 10-Ac: [80377-60-2]. ***2,3-Dihydro-3β-hydroxyereglomerulide***
$C_{22}H_{30}O_8$ M 422.474
Constit. of *Eremanthus glomerulatus*. Cryst. (Et_2O/pet. ether). Mp 105°. $[\alpha]_D^{24}$ −4.6° (c, 0.7 in $CHCl_3$).

8-(2-Methylpropenoyl), 10-Ac:
$C_{21}H_{28}O_8$ M 408.447
Constit. of *Lychnophora blanchetii*. Gum.

3-Me ether, 8-(2-methylpropenoyl), 10-Ac:
$C_{22}H_{30}O_8$ M 422.474
Isol. from *L. blanchetii*. Gum.

(3β,4αH,6α,8β,10α)-form

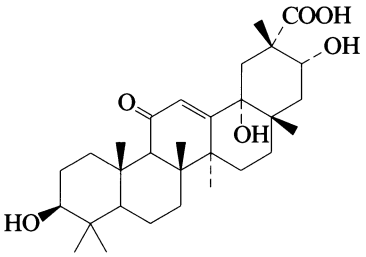
8-Angeloyl: ***8-Angeloyloxyternifolin***
$C_{20}H_{28}O_7$ M 380.437
Constit. of *Helianthus californicus*. Cryst. (CH_2Cl_2). Mp 168-170°.

3-Me ether, 8-angeloyl:

$C_{21}H_{30}O_7$ M 394.464
Constit. of *H. californicus*. Oil.
3-O-Isopropyl, 8-angeloyl:
$C_{23}H_{34}O_7$ M 422.517
Constit. of *H. californicus*. Oil.

Bohlmann, F. *et al*, *Phytochemistry*, 1981, **20**, 1609; 1982, **21**, 1087.
Gershenzon, J. *et al*, *Phytochemistry*, 1984, **23**, 2561 (*isol, pmr, cmr, cryst struct*)

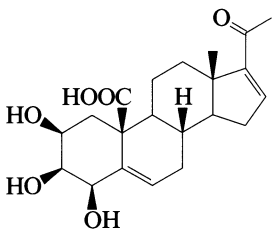
3,18,21-Trihydroxy-11-oxo-12-oleanen-29-oic acid T-10180



$C_{30}H_{46}O_6$ M 502.690
(3β,18α,21α)-form
29 →18 Lactone: [18184-25-3]. *3,21-Dihydroxy-11-oxo-12-oleanen-29,18-olide.* ***21-Hydroxyisoglabrolide***
$C_{30}H_{44}O_5$ M 484.675
Constit. of *Glycyrrhiza glabra*. Cryst. ($CHCl_3$/2-propanol). Mp 304-305°. $[\alpha]_D^{20}$ −11° (c, 1 in Py).

Canonica, L. *et al*, *Gazz. Chim. Ital.*, 1967, **97**, 1347.

2,3,4-Trihydroxy-20-oxopregna-5,16-dien-19-oic acid T-10181

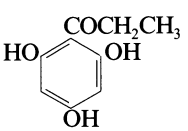


$C_{21}H_{28}O_6$ M 376.449
(2β,3β,4β)-form
19→2 Lactone: 3,4-Dihydroxy-20-oxopregna-5,16-dien-19,2-olide
$C_{21}H_{26}O_5$ M 358.433
Constit. of a *Strongylophora* sponge. $[\alpha]_D$ −130° (c, 1.5 in $CHCl_3$).

Corgiat, J.M. *et al*, *Tetrahedron*, 1993, **49**, 1557 (*isol, pmr, cmr*)

1-(2,4,6-Trihydroxyphenyl)-1-propanone, 9CI T-10182

2′,4′,6′-Trihydroxypropiophenone. ***Flopropione,*** **INN.** *Phloropropiophenone. Fluropropiophenone. Compacsul. Cospanon. Ecapron. Pellegal. Argobyl. Floveton. Saritron. Spamorin. Labrodax. Tryalon. Mirulevatin. Padeskin. Profenon. Ethyl 2,4,6-trihydroxyphenyl ketone*
[2295-58-1]

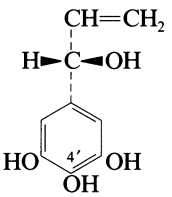


$C_9H_{10}O_4$ M 182.176
Constit. of *Inula viscosa*. Serotonin antagonist, spasmolytic agent. Needles + $1H_2O$ (H_2O). Sl. sol. H_2O. Mp 175-176°.

▷ UH4429100.

Howells, H.P. *et al*, *J. Am. Chem. Soc.*, 1932, **54**, 2451 (*synth*)
Populaire, P. *et al*, *Therapie*, 1968, **23**, 91 (*metab*)
Inoue, S., *Jpn. J. Pharmacol.*, 1969, **19**, 224 (*pharmacol*)
Mizobuchi, S. *et al*, *Agric. Biol. Chem.*, 1985, **49**, 719 (*synth*)
Bolte, M.L. *et al*, *Agric. Biol. Chem.*, 1985, **49**, 761 (*synth*)
Grande, M. *et al*, *Planta Med.*, 1985, 414 (*isol*)
Negwer, M., *Organic-Chemical Drugs and their Synonyms*, 6th Ed., Akademie-Verlag, Berlin, 1987, 1192 (*synonyms*)
Martindale, The Extra Pharmacopoeia, 30th edn., Pharmaceutical Press, London, 1993, 1371.

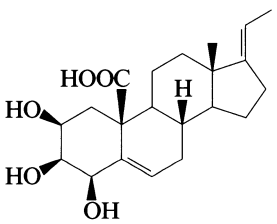
1-(3,4,5-Trihydroxyphenyl)-2-propen-1-ol T-10183



$C_9H_{10}O_4$ M 182.176
(S)-form
3′,5′-Di-Me ether, 4′-O-β-D-glucopyranoside: [117259-33-3]. ***Tangshenoside II***
$C_{17}H_{24}O_9$ M 372.371
Constit. of the roots of *Codonopsis tangshen*. Powder. $[\alpha]_D^{19}$ −29° (c, 1.37 in EtOH).

Mizutani, K. *et al*, *Chem. Pharm. Bull.*, 1988, **36**, 2726.

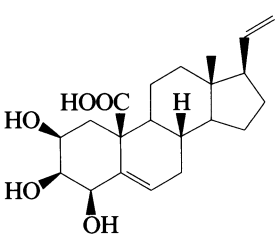
2,3,4-Trihydroxypregna-5,17-dien-19-oic acid T-10184



$C_{21}H_{30}O_5$ M 362.465
(2β,3β,4β,17(20)E)-form
19→2 Lactone: 3,4-Dihydroxypregna-5,17-dien-19,2-olide
$C_{21}H_{28}O_4$ M 344.450
Constit. of a *Strongylophora* sponge. Cryst. $[\alpha]_D$ −82° (c, 1.2 in $CHCl_3$).

Corgiat, J.M. *et al*, *Tetrahedron*, 1993, **49**, 1557 (*isol, pmr, cmr, cryst struct*)

2,3,4-Trihydroxypregna-5,20-dien-19-oic acid T-10185



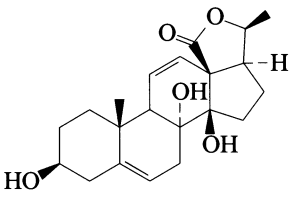
$C_{21}H_{30}O_5$ M 362.465

(2β,3β,4β)-form

19→2 Lactone: 3,4-Dihydroxypregna-5,20-dien-19,2-olide
$C_{21}H_{28}O_4$ M 344.450
Constit. of a *Strongylophora* sponge. $[\alpha]_D$ −96° (c, 5 in $CHCl_3$).

Corgiat, J.M. *et al*, *Tetrahedron*, 1993, **49**, 1557 (*isol, pmr, cmr*)

3,8,14-Trihydroxypregna-5,11-dien-18,20-olide T-10186



$C_{21}H_{28}O_5$ M 360.449

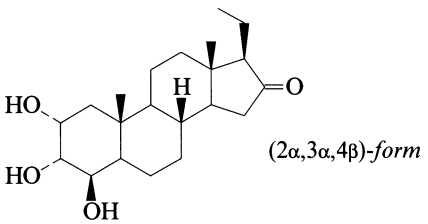
(3β,8α,14β,20S)-form
Amalogenin B
Constit. of *Amalocalyx yunnanensis*. Cryst. Mp 218-220°.

3-O-β-D-Diginopyranoside: ***Amaloside D***
$C_{28}H_{40}O_8$ M 504.619
Constit. of *A. yunnanensis*. Prisms. Mp 240-242°.

Shen, X.-L. *et al*, *Phytochemistry*, 1993, **33**, 687 (*isol, pmr, cmr*)

2,3,4-Trihydroxypregnan-16-one T-10187

Updated Entry replacing T-02572



(2α,3α,4β)-*form*

$C_{21}H_{34}O_4$ M 350.497

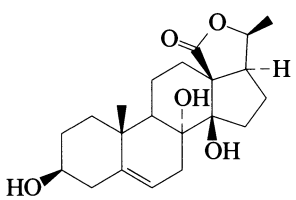
(2α,3α,4β)-form [147058-07-9]
Constit. of *Trichilia schomburgkii*. Cryst. Mp 245-247°. $[\alpha]_D$ −95.2° (c, 0.05 in MeOH).

(2β,3β,4β)-form [137100-72-2]
Constit. of *T. schomburgkii*. Cryst. (Me_2CO/hexane). Mp 262-265°. $[\alpha]_D$ −124° (c, 0.08 in $CHCl_3$).

Tinto, W.F. *et al*, *J. Nat. Prod.* (*Lloydia*), 1991, **54**, 972 (*isol, pmr, cmr*)

Ketwaru, P. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 430 (*isol, pmr, cmr*)

3,8,14-Trihydroxypregn-5-en-18,20-olide T-10188



$C_{21}H_{30}O_5$ M 362.465

(3β,8α,14β,20S)-form

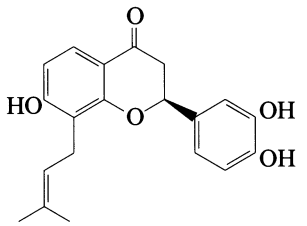
3-O-Diginopyranoside: ***Amaloside C***
$C_{28}H_{42}O_8$ M 506.635
Constit. of *Amalocalyx yunnanensis*. Powder (MeOH). Mp 186°.

Shen, X.-L. *et al*, *Phytochemistry*, 1993, **33**, 687 (*isol, pmr, cmr*)

3′,4′,7-Trihydroxy-8-prenylflavanone T-10189

Updated Entry replacing T-02606

2-(3,4-Dihydroxyphenyl)-2,3-dihydro-7-hydroxy-8-(3-methyl-2-butenyl)-4H-1-benzopyran-4-one



$C_{20}H_{20}O_5$ M 340.375

(S)-form

3′,4′-Methylene ether: [75680-31-8]. *7-Hydroxy-3′,4′-methylenedioxy-8-prenylflavanone.* ***Ovaliflavanone C***
$C_{21}H_{20}O_5$ M 352.386
Isol. from *Milletia ovalifolia*. Needles (EtOAc/pet. ether). Mp 158°. $[\alpha]_D^{25}$ −108° ($CHCl_3$).

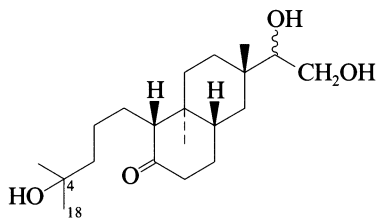
3′,4′-Methylene, 7-Me ether: [115219-94-8]. *7-Methoxy-3′,4′-methylenedioxy-8-prenylflavanone.* ***O-Methylovaliflavanone C***
$C_{22}H_{22}O_5$ M 366.413
Constit. of the roots of *Dahlstedtia pentaphylla*. Cryst. (EtOH). Mp 120-122°. $[\alpha]_D^{38}$ −80.3° (c, 1 in $CHCl_3$).

Islam, A. *et al*, *Phytochemistry*, 1980, **19**, 1558.

Garcez, F.R. *et al*, *Phytochemistry*, 1988, **27**, 1079 (*O*-Methylovaliflavanone C)

4,15,16-Trihydroxy-4,5-seco-5-rosanone T-10190

4,15,16-Trihydroxy-5-pictanone



$C_{20}H_{36}O_4$ M 340.502

(ent-15ξ)-form [150036-57-0]
Constit. of *Erythroxylon pictum*. Powder. Mp 125-128°. $[\alpha]_D$ −20° (CH_2Cl_2).

18-Hydroxy: [150036-59-2]. ***4,5,16,18-Tetrahydroxy-4,5-seco-5-rosanone.*** *4,15,16,18-Tetrahydroxy-5-pictanone*
$C_{20}H_{36}O_5$ M 356.501
Constit. of *E. pictum*. 4-Config. undetd.

4-Deoxy, 4,18-didehydro: ***4,15,16-Trihydroxy-4,5-seco-4(18)-rosen-5-one.*** *4,15,16-Trihydroxy-4(18)-picten-5-one*
$C_{20}H_{34}O_3$ M 322.487
Constit. of *E. pictum*. Oil.

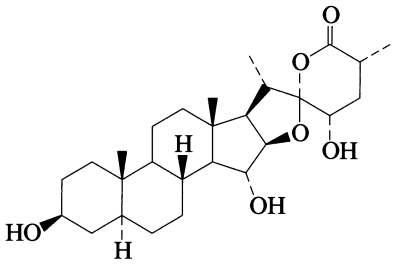
4-Deoxy, 4,18-didehydro, 15-ketone: [150036-60-5]. *16-Hydroxy-4,5-seco-4(18)-rosene-5,15-dione. 16-Hydroxy-4(18)-pictene-15,16-dione*
$C_{20}H_{32}O_3$ M 320.471
Constit. of *E. pictum*.

4-Deoxy, 4,18-didehydro, 4ξ,18-epoxide: [150036-58-1]. *4,18-Epoxy-16-hydroxy-4,5-seco-5-rosanone. 4,18-Epoxy-16-hydroxy-5-pictanone*

$C_{20}H_{34}O_4$ M 338.486
Constit. of *E. pictum.*

Ansell, S.M. *et al*, *Phytochemistry*, 1993, **32**, 945 (*isol, pmr, cmr*)

3,15,23-Trihydroxyspirostan-26-one, 9CI T-10191



$C_{27}H_{42}O_6$ M 462.625

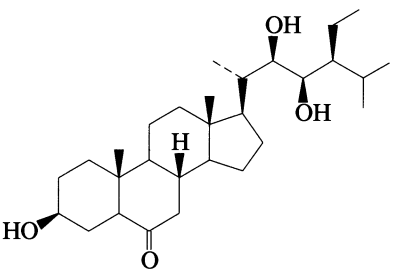
(3β,5α,23S,25R)-form

3-O-Neohesperidoside: [137031-53-9]. ***Soladulcoside A***
$C_{39}H_{62}O_{15}$ M 770.910
Constit. of the aerial parts of *Solanum dulcamara.* Powder. $[\alpha]_D$ −73.8°.

Yamashita, T. *et al*, *Chem. Pharm. Bull.*, 1991, **39**, 1626.

3,22,23-Trihydroxystigmastan-6-one T-10192

3,22,23-Trihydroxy-24-ethylcholestan-6-one



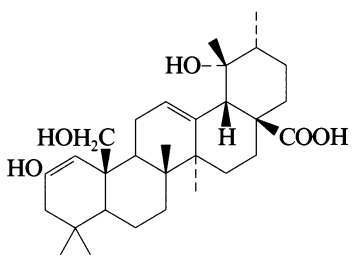
$C_{29}H_{50}O_4$ M 462.712

(3β,22R,23R,24S)-form [90524-90-6] ***28-Homoteasterone***
Constit. of *Raphanus sativus.* Cryst. (EtOAc/hexane). Mp 206-209°.

Takatsuto, S. *et al*, *J. Chem. Soc., Perkin Trans. 1*, 1984, 439 (*synth, pmr*)
Schmidt, J. *et al*, *Phytochemistry*, 1993, **34**, 391 (*isol*)

2,19,25-Trihydroxy-1,12-ursadien-28-oic acid T-10193

19,25-Dihydroxy-2-oxo-12-ursen-28-oic acid



$C_{30}H_{46}O_5$ M 486.690

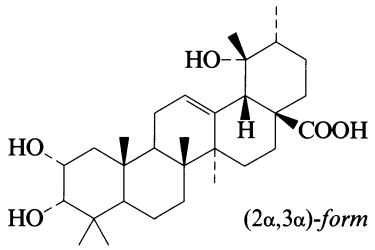
19α-form

1-(2-Methylpropanoyl): [145701-14-0]. ***Alpinic acid***
$C_{34}H_{52}O_6$ M 556.781
Constit. of *Sanguisorba alpina.* Cryst. Mp 123-126°. $[\alpha]_D^{15}$ +47.7° (c, 0.3 in $CHCl_3$). An enol ether.

Liu, X.-Q. *et al*, *Chin. Chem. Lett.*, 1992, **3**, 515 (*isol, pmr, cmr*)

2,3,19-Trihydroxy-12-ursen-28-oic acid T-10194

Updated Entry replacing T-02715



(2α,3α)-*form*

$C_{30}H_{48}O_5$ M 488.706

(2α,3α)-form [53155-25-2] ***Euscaphic acid.*** *Jacarandic acid. Acuminatic acid*
Constit. of *Euxaphis japonica, Coleus amboinicus, Jacaranda caucana* and *Pygeum acuminatum.* Powder or cryst. (MeOH). Mp 270-271° (264°). $[\alpha]_D^{23}$ +12° (c, 1 in MeOH).

Me ester: [52936-89-7].
$C_{31}H_{50}O_5$ M 502.733
From *Myrianthus arboreus.*

2,3-Di-Ac: Cryst. (C_6H_6/hexane). Mp 188°.

β-D-Glucopyranosyl ester: [95298-47-8]. ***Kaji-ichigoside F1***
$C_{36}H_{58}O_{10}$ M 650.848
Constit. of *Sanguisorba alpina.* Needles. Mp 202-204°.

(2α,3β)-form [13850-16-3] ***Tormentic acid***
Aglycone from *Potentilla tormentilla.* Cryst. Mp 273°. $[\alpha]_D$ −20° (Py).

2-Ac: [97094-22-9].
$C_{32}H_{50}O_6$ M 530.743
Isol. from roots of *Musanga cecropioides* and from *Myrianthus arboreus.* Cryst. (Et_2O/pet ether) (as Me ester). Mp 134-135° (Me ester).

3-Ac: [97094-23-0].
$C_{32}H_{50}O_6$ M 530.743
Isol. from roots of *Musanga cecropioides* and from *Myrianthus arboreus.* Cryst. (Et_2O/pet. ether) (as Me ester). Mp 123-125° (Me ester).

β-D-Glucopyranosyl ester: [88515-58-6]. ***Rosamultin.*** *Tormentic acid ester glucoside*
$C_{36}H_{58}O_{10}$ M 650.848
Constit. of *Rosa multiflora* and *Aphloia theiformis.* Amorph. powder.

2-Ketone: [54963-52-9]. *3β,19α-Dihydroxy-2-oxo-12-ursen-28-oic acid.* ***Pirolonic acid.*** *2-Oxopomolic acid*
$C_{30}H_{46}O_5$ M 486.690
Constit. of wood of *Malus pumila* infected by *Chondrostereum purpureum.* Amorph. solid. Mp 204-209°.

3-Ketone, β-D-glucopyranosyl ester: 2-Oxopomolic acid β-D-glucopyranosyl ester
$C_{36}H_{56}O_{10}$ M 648.832
Constit. of *S. alpina.* Platelets. Mp 142-143.5°. $[\alpha]_D^{16}$ +14.5° (c, 1.48 in Py).

3-O-β-D-Glucopyranoside, β-D-glucopyranosyl ester: [146356-80-1]. *Rosamultin 3-glucoside*
$C_{42}H_{68}O_{15}$ M 812.990
Constit. of *S. alpina.* Amorph. powder. Mp 277-280°. $[\alpha]_D$ +5.0° (c, 1.03 in Py).

β-D-Galactopyranosyl ester:
$C_{36}H_{58}O_{10}$ M 650.848
Constit. of *S. alpina.* Amorph. powder. Mp 193-195°. $[\alpha]_D$ +8.8° (c, 1.24 in Py).

3-(p-Hydroxy-E-cinnamoyl): ***3-trans-p-Coumaroyltormentic acid***
$C_{39}H_{54}O_7$ M 634.851

Constit. of Goreishi (the faeces of *Trogopterus xanthipis*). Cryst. (MeOH). Mp 245-247°. $[\alpha]_D^{25}$ +25° (c, 0.3 in MeOH).

3-(p-Hydroxy-Z-cinnamoyl): ***3-cis-p-Coumaroyltormentic acid***

$C_{39}H_{54}O_7$ M 634.851

Constit. of Goreishi. Cryst. (MeOH). Mp 238-240°. $[\alpha]_D^{25}$ +2.1° (c, 0.19 in MeOH).

(2β,3β)-form

2-Epitormentic acid

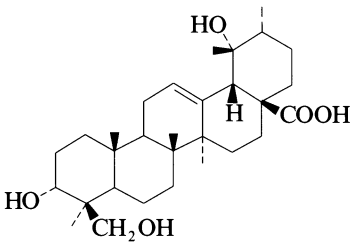
Constit. of *Cunila lythrifolia*.

[54963-57-4, 77820-51-0]

Potier, P. *et al*, *Bull. Soc. Chim. Fr.*, 1966, 3458.
Takahashi, K. *et al*, *Chem. Pharm. Bull.*, 1974, **22**, 650.
Chandel, R.S. *et al*, *Indian J. Chem., Sect. B*, 1977, **15**, 914.
Ojinnaka, C.M. *et al*, *Phytochemistry*, 1980, **19**, 2482 (*acetates*)
Du, H. *et al*, *Yaoxue Xuebao*, 1983, **18**, 314; *CA*, **100**, 48578e (*Rosamultin*)
Seto, T. *et al*, *Phytochemistry*, 1984, **23**, 2829 (*Kaji-ichigoside F1*)
Kemp, M.S. *et al*, *J. Chem. Res., Miniprint*, 1985, 1846 (*2-Oxopomolic acid*)
Gopalsamy, N. *et al*, *Phytochemistry*, 1988, **17**, 3593.
Numata, A. *et al*, *Chem. Pharm. Bull.*, 1989, **37**, 648 (*p-Coumaroyl ester*)
Delgado, G. *et al*, *Phytochemistry*, 1989, **28**, 1483 (*2-Epitormentic acid*)
Lontsi, D. *et al*, *Phytochemistry*, 1992, **31**, 4285 (*Euscaphic acid, pmr, cmr*)
Yang, M.-H. *et al*, *Planta Med.*, 1992, **58**, 227 (*Tormentic acid, cmr*)
Jia, Z.-J. *et al*, *Phytochemistry*, 1993, **32**, 155 (*Rosamultin 3-glucoside*)

3,19,24-Trihydroxy-12-ursen-28-oic acid T-10195

Updated Entry replacing T-02723



$C_{30}H_{48}O_5$ M 488.706

(3α,19α)-form [64199-78-6] ***Barbinervic acid***

Constit. of *Clethra barbinervis*. Cryst. (MeOH). Mp 298°. $[\alpha]_D^{31}$ +18° (c, 1 in EtOH).

(3β,19α)-form

Rotungenic acid

Constit. of *Ilex rotunda*. Cryst. (MeOH aq.). Mp 295-298° dec. $[\alpha]_D$ +16° (MeOH).

*24-O-(3-Hydroxy-4-methoxycinnamoyl): 3β,19α-Dihydroxy-24-*trans*-ferulyloxy-12-ursen-28-oic acid*

$C_{40}H_{56}O_8$ M 664.878

Constit. of *Stizophyllum riparium*. Amorph. Mp 195-197°. $[\alpha]_D^{25}$ +1.58° (c, 0.38 in $CHCl_3$).

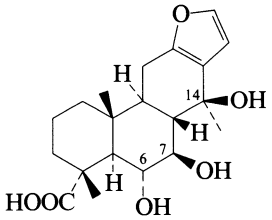
β-D-Glucopyranosyl ester: [121387-38-0]. ***Rotungenoside***

$C_{36}H_{58}O_{10}$ M 650.848

Constit. of the fruit of *I. rotunda*. Amorph. powder. $[\alpha]_D^{25}$ +5° (c, 0.04 in MeOH).

Takani, M. *et al*, *Chem. Pharm. Bull.*, 1977, **25**, 981 (*Barbinervic acid*)
Duh, C.-Y. *et al*, *J. Nat. Prod.* (*Lloydia*), 1987, **50**, 63 (*isol*)
Nakatani, M. *et al*, *Bull. Chem. Soc. Jpn.*, 1989, **62**, 469 (*Rotungenoside*)
Nakatani, M. *et al*, *Phytochemistry*, 1989, **28**, 1479 (*Rotungenic acid*)

6,7,14-Trihydroxy-18-vouacapanoic acid T-10196



$C_{20}H_{28}O_6$ M 364.438

(6α,7β,14β)-form [59462-55-4]

6α,7β,14β-Trihydroxyvinhaticoic acid

6,7-Di-Ac, Me ester: [41370-35-8]. *Methyl 6α,7β-diacetoxy-14-hydroxyvinhaticoate*

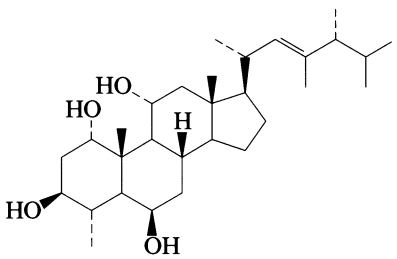
$C_{25}H_{34}O_8$ M 462.539

Isol. from the fruit of *Pterodon pubescens*. Cryst. (Me_2CO/MeOH). Mp 100-105°.

Fascio, M. *et al*, *Phytochemistry*, 1976, **15**, 201.

4,23,24-Trimethylcholest-22-ene-1,3,6,11-tetrol T-10197

4,23-Dimethylergost-22-ene-1,3,6,11-tetrol



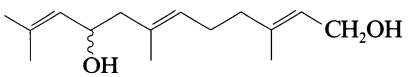
$C_{30}H_{52}O_4$ M 476.738

(1α,3β,5α,6β,11α,24R)-form [145940-74-5] ***Acerosterol***

Constit. of *Pseudopterogorgia acerosa*. Needles. Mp 118-120°. $[\alpha]_D$ −3.3° (c, 0.04 in MeOH).

John, L.M.D. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 144 (*isol, pmr, cmr*)

3,7,11-Trimethyl-2,6,10-dodecatriene-1,9-diol T-10198



$C_{15}H_{26}O_2$ M 238.369

(2E,6E,9ξ)-form

1-Ac:

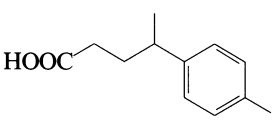
$C_{17}H_{28}O_3$ M 280.406

Constit. of *Achillea pseudoaleppica*. Oil.

Appendino, G. *et al*, *Phytochemistry*, 1993, **34**, 1171 (*isol, pmr, cmr*)

11,12,13-Trinor-1,3,5-bisabolatrien-10-oic acid T-10199

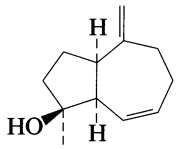
*γ,4-Dimethylbenzenebutanoic acid. 4-(4-Methylphenyl) pentanoic acid. 4-*p*-Tolylpentanoic acid. Dihydro-α-norcurcumenic acid*



$C_{12}H_{16}O_2$ M 192.257
Constit. of East Indian sandalwood oil.

Nikiforov, A. *et al*, *Justus Liebigs Ann. Chem.*, 1990, 119 (*isol, pmr*)

11,12,13-Trinor-6,10(14)-guaiadien-4-ol T-10200

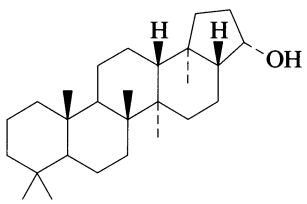


$C_{12}H_{18}O$ M 178.274

(1α,4β,5α)-form [151201-77-3] ***Dictamnol***
Constit. of *Dictammus dasycarpus*. Needles. Mp 72-73°. $[\alpha]_D$ +55° (c, 0.1 in MeOH).

Takeuchi, N. *et al*, *Chem. Pharm. Bull.*, 1993, **41**, 923 (*isol, pmr, cmr*)

22,29,30-Trinor-21-hopanol T-10201



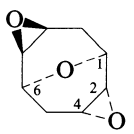
$C_{27}H_{46}O$ M 386.660

21α-form [145211-81-0] ***Glaucanol A***
Constit. of *Adiantum pedatum*. Cryst. (Et_2O/MeOH). Mp 214.5-215.5°. $[\alpha]_D^{23}$ +36.9° ($CHCl_3$).

Shiojima, K. *et al*, *Chem. Pharm. Bull.*, 1993, **41**, 268 (*isol, pmr, cmr*)

3,8,11-Trioxatetracyclo[4.4.1.$0^{2,4}$.$0^{7,9}$] undecane T-10202

2,3:6,7-Diepoxy-9-oxabicyclo[3.3.1]nonane



(1α,2α,4α,6α,7β,9β)-*form*

$C_8H_{10}O_3$ M 154.165

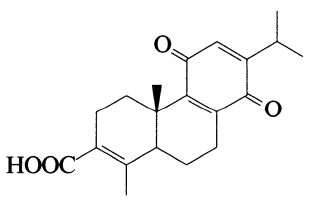
(1α,2α,4α,6α,7β,9β)-form [50267-11-3]
Mp 144-145°.

(1α,2β,4β,6α,7β,9β)-form [50267-13-5]
Constit. of the volatile oil of *Amomum kravanh* fruit. Mp 93-94°.

Portmann, R.E. *et al*, *Helv. Chim. Acta*, 1973, **56**, 1962 (*synth*)
Zhou, C. *et al*, *CA*, 1992, **117**, 4199d (*isol*)

Triptoquinonoic acid A T-10203

[142950-86-5]



$C_{20}H_{24}O_4$ M 328.407
Constit. of *Tripterygium regelii*. Golden needles. Mp 181.5-182.5°. $[\alpha]_D^{15}$ +121° (c, 1.5 in $CHCl_3$).

[146389-40-4]

Shen, J.H. *et al*, *Chin. Chem. Lett.*, 1992, **3**, 113 (*isol, pmr, cmr*)
Shishido, K. *et al*, *Tetrahedron Lett.*, 1993, **34**, 339 (*synth*)

1,2,4-Trithiolane, 9CI T-10204

1,2,4-Trithiacyclopentane

[289-16-7]

$C_2H_4S_3$ M 124.252
Constit. of *Acacia pulchella* and *Parkia speciosa*. Also isol. from the alga *Chondria californica* and the mushroom *Lentinus edodes*. Excretion prod. of *Ochromonas danica*. Component of mushroom flavour. Pale yellow liq. Bp_{10} 102-103°, Bp_3 78-79°.

Morita, K. *et al*, *Chem. Pharm. Bull.*, 1967, **15**, 988 (*synth*)
Tjan, S.B. *et al*, *Tetrahedron*, 1972, **28**, 3489 (*synth, ms*)
Wratten, S.J. *et al*, *J. Org. Chem.*, 1976, **41**, 2465 (*isol*)
Gmelin, R. *et al*, *Phytochemistry*, 1981, **20**, 2521 (*isol*)
Holzmann, G. *et al*, *Org. Mass Spectrom.*, 1982, **17**, 165 (*ms*)
Juettner, F. *et al*, *Phytochemistry*, 1982, **21**, 2185 (*isol*)
Borseth, D.G. *et al*, *J. Am. Chem. Soc.*, 1984, **106**, 841 (*struct*)
Chen, C.C. *et al*, *J. Agric. Food Chem.*, 1986, **34**, 830 (*isol*)

3-Tritriacontanone T-10205

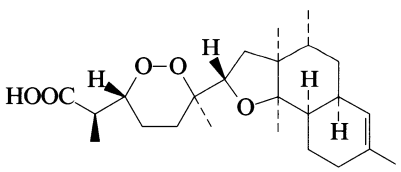
[79097-23-7]

$H_3C(CH_2)_{29}COCH_2CH_3$

$C_{33}H_{66}O$ M 478.884
Constit. of *Hyoscyamus muticus* and *Solanum torvum*. Cryst. (Me_2CO/MeOH). Mp 83°.

Goswami, A. *et al*, *Phytochemistry*, 1981, **20**, 1315 (*isol*)
Mahmood, U. *et al*, *Phytochemistry*, 1983, **22**, 167 (*isol*)

Trunculin F T-10206

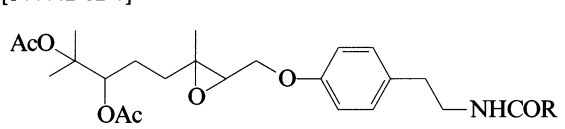


$C_{24}H_{38}O_5$ M 406.561
Constit. of *Latrunculia conulosa*. Unstable oil. $[\alpha]_D$ −27.7° (c, 2.68 in $CHCl_3$) (Me ester).

Butler, M.S. *et al*, *Aust. J. Chem.*, 1993, **46**, 1363 (*isol, pmr, cmr*)

Tubacetine T-10207

[144442-82-0]



R = Ph

$C_{29}H_{37}NO_7$ M 511.614

Alkaloid from aerial parts of *Haplophyllum tuberculatum* (Rutaceae). Microcryst. (Et_2O/hexane). Mp 71.7-72.7°. $[\alpha]_D^{22}$ +12° (c, 0.1 in $CHCl_3$).

Al-Yahya, M.A. *et al*, *J. Nat. Prod.* (*Lloydia*), 1992, **55**, 899 (*isol, uv, ir, pmr, cmr, struct*)

Tubasenecine T-10208

[144425-13-8]

As Tubacetine, T-10207 with

R = —CH=C(CH$_3$)$_2$

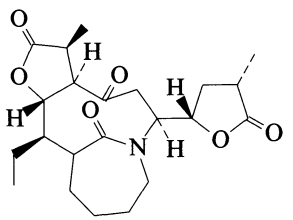
$C_{27}H_{39}NO_7$ M 489.608

Alkaloid from aerial parts of *Haplophyllum tuberculatum* (Rutaceae). Pale yellow gum. $[\alpha]_D^{25}$ +12° (c, 0.1 in $CHCl_3$).

Al-Yahya, M.A. *et al*, *J. Nat. Prod.* (*Lloydia*), 1992, **55**, 899 (*isol, uv, ir, pmr, cmr, struct*)

Tuberostemonone T-10209

[134822-46-1]



Relative configuration

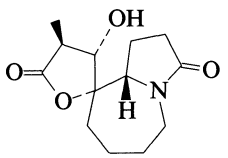
$C_{22}H_{31}NO_6$ M 405.490

Alkaloid from roots of *Stemona tuberosa* (Stemonaceae). Cubes (Me_2CO). Mp 208-209°. $[\alpha]_D^8$ +134.8° (c, 0.1 in $CHCl_3$).

Lin, W.-H. *et al*, *J. Nat. Prod.* (*Lloydia*), 1992, **55**, 571 (*isol, ir, pmr, cmr, ms, struct*)

Tuberostemospironine T-10210

[142905-26-8]



Relative configuration

$C_{13}H_{19}NO_4$ M 253.297

Alkaloid from roots of *Stemona tuberosa* (Stemonaceae). Cubes (Me_2CO). Mp 245-246°. $[\alpha]_D^{16}$ −30° (c, 0.02 in MeOH).

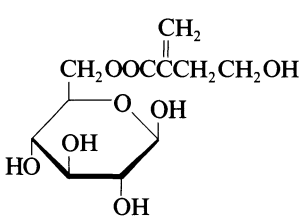
Lin, W.-H. *et al*, *J. Nat. Prod.* (*Lloydia*), 1992, **55**, 571 (*isol, ir, pmr, cmr, ms, struct*)

6-Tuliposide A T-10211

Updated Entry replacing T-03038

β-D-Glucopyranose-6-(4-hydroxy-2-methylenebutanoate), 9CI, 8CI

[19870-31-6]



$C_{11}H_{18}O_8$ M 278.258

Constit. of the tulip (*Tulipa gesneriana*). Exhibits weak biological activity against *Pythium debaryanum* and *Bacillus subtilis*. Mp 128°. $[\alpha]_D^{20}$ +45.5° (c, 1.0 in MeOH).

1-O-Cinnamoyl: [73772-93-7]. ***Spirarin***

$C_{20}H_{24}O_9$ M 408.404

Constit. of the leaves of *Spiraea thunbergii*.

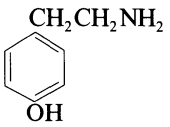
Tschesche, R. *et al*, *Chem. Ber.*, 1969, **102**, 2057 (*struct*)
Schroeder, C., *CA*, 1973, **79**, 102908a (*use*)
Yoshimoto, K. *et al*, *Chem. Pharm. Bull.*, 1980, **28**, 2065 (*cmr*)
Tanabe, Y. *et al*, *Yakugaku Zasshi*, 1980, **100**, 355 (*Spirarin*)

Tyramine T-10212

Updated Entry replacing T-03078

4-(2-Aminoethyl)phenol, 9CI. 2-(p-Hydroxyphenyl) ethylamine. 4-Hydroxyphenethylamine. Tyrosamine. 4-Hydroxybenzeneethanamine

[51-67-2]



$C_8H_{11}NO$ M 137.181

Widespread biogenic amine, found in several plant spp., such as *Magnolia* and *Desmodium* spp., *Pisum sativum* and *Hordeum vulgare* and in putrefied animal tissues. Found in urine of patients with Parkinson's disease. Also in mescal (*Lophophora williamsii*) and other cacti (Magnoliaceae, Leguminosae, Gramineae, Cactaceae). Also isol. from *Actinodaphne* sp., *Cannabis sativa*, *Piper nigrum* and other plant spp. Mp 164-164.5° (161°). pK_{a1} 9.3; pK_{a2} 10.9 (25°).

▷ SJ5950000.

B,HCl: [60-19-5].
Mp 269°.

N-*Ac:* [1202-66-0]. N-[*2-(4-Hydroxyphenyl)ethyl*]*acetamide*. N-(p-*Hydroxyphenethyl*)*acetamide, 8CI*. **N-*Acetyltyramine***
$C_{10}H_{13}NO_2$ M 179.218
Metab. of pathogenic fungi, mycobacteria, enterobacteria and from *Bombyx mori* at the chrysalis stage. Mp 134-135° (sinters at 128°).

O,N-*Di-Ac:* [14383-56-3].
$C_{12}H_{15}NO_3$ M 221.255
Mp 100.5°.

N-*Benzoyl:* [41859-54-5]. N-[*2-(4-Hydroxyphenyl)ethyl*] *benzamide, 9CI*. **N-*Benzoyltyramine***
$C_{15}H_{15}NO_2$ M 241.289
Alkaloid from *Casimiroa edulis* (Rutaceae). Plates (Et_2O). Mp 161-162°.

N-(*4-Hydroxycinnamoyl*)(E-): [36417-86-4]. N-p-*Coumaroyltyramine*
$C_{17}H_{17}NO_3$ M 283.326
Constit. of *A.* spp., *Cannabis sativa*, *Allium chinense* and *Vicia faba*.

N-(*4-Hydroxy-3-methoxycinnamoyl*): [66648-43-9]. ***Moupinamide***
$C_{18}H_{19}NO_4$ M 313.352
Alkaloid from *Aristolochia moupinensis* (Aristolochiaceae) and other plants.

N-*Benzoyl*, O-(*3-methyl-2-butenyl*): ***Hortiamide***
$C_{20}H_{23}NO_2$ M 309.407
Alkaloid from roots of *Hortia regia* (Rutaceae). Cryst. Mp 109-111°.

N-*Me:* [370-98-9]. *4-[2-(Methylamino)ethyl]phenol, 9CI.* **N-*Methyltyramine***
$C_9H_{13}NO$ M 151.208
Alkaloid from *Hordeum vulgare, Panicum miliaceum,* some *Coryphantha* spp. and several other spp. Also found in mescal (*Lophophora williamsii*), *Trichocereus* spp. and other cacti (Gramineae, Cactaceae). Mp 130-131° (127-128°).
▷ SL8300000.

N-*Me*, O-α-*L*-*Rhamnopyranoside:* **N-*Methyltyramine* O-α-*L*-*rhamnopyranoside***
$C_{15}H_{23}NO_5$ M 297.350
Alkaloid from *Selaginella doederleinii* (Selaginellaceae). Amorph. solid. $[\alpha]_D^{20}$ −131° (c, 0.3 in MeOH).

N,N-*Di-Me:* see *Hordenine, H-01049*
Me ether: see *2-(4-Methoxyphenyl)ethylamine, M-00742*

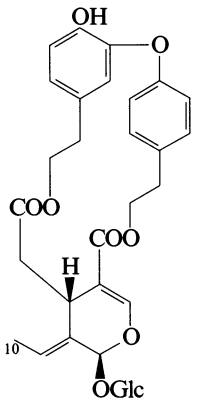
Barger, G., *J. Chem. Soc.*, 1909, **95**, 1127, 1722 (*synth*)
Kincl, F.A. *et al, J. Chem. Soc.*, 1956, 4163 (*N-Benzoyltyramine*)
Butenandt, A. *et al, Arch. Biochem. Biophys.*, 1959, **83**, 76 (*N-Acetyltyramine*)
Kappe, T. *et al, J. Med. Chem.*, 1965, **8**, 368 (*uv*)
Boulton, A.A. *et al, Nature (London)*, 1967, **215**, 132 (*occur*)
Stuart, K.L. *et al, Phytochemistry*, 1971, **10**, 460 (*isol, derivs*)
Milne, G.W. *et al, Anal. Chem.*, 1973, **45**, 1952 (*ms*)
Tamura, K. *et al, Bull. Chem. Soc. Jpn.*, 1974, **47**, 2682 (*cryst struct*)
Lambert, F. *et al, Org. Magn. Reson.*, 1975, **72**, 66 (*pmr*)
Kruger, T.L. *et al, J. Org. Chem.*, 1977, **42**, 4161 (*derivs, ms*)
Smith, T.A., *Phytochemistry*, 1977, **16**, 9 (*rev, occur, derivs*)
Doetsch, P.W. *et al, J. Chromatogr.*, 1980, **189**, 79 (*occur*)
Xu, L. *et al, Yaoxue Xuebao*, 1984, **19**, 48; *CA*, **101**, 107360y (*Moupinamide*)
Chao, L.R. *et al, J. Nat. Prod. (Lloydia)*, 1987, **50**, 477 (*N-Methyltyramine rhamnopyranoside*)
Tinto, W.F. *et al, J. Nat. Prod. (Lloydia)*, 1992, **55**, 1676 (*Hortiamide*)
Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th Ed., Van Nostrand-Reinhold, 1992, TOG250.

U

Uhdoside A U-10001

Ornoside. Insularoside

[150044-49-8]



$C_{32}H_{36}O_{13}$ M 628.629

Constit. of *Fraxinus uhdei, F. insularis* and *F. ornus.* Amorph. powder. $[\alpha]_D$ −72° (c, 1 in MeOH). Uhdoside A, Ornoside and Insularoside not compared.

10-Hydroxy: ***Uhdoside B***

$C_{32}H_{36}O_{14}$ M 644.628

Constit. of *F. uhdei.* Amorph. powder. $[\alpha]_D^{25}$ −80° (c, 0.28 in MeOH).

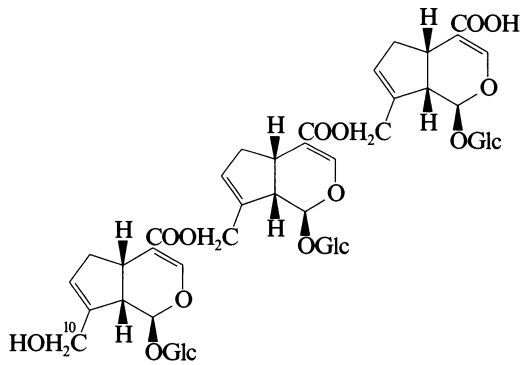
Shen, Y.-C. *et al, J. Nat. Prod.* (*Lloydia*), 1993, **56**, 1905 (*isol, pmr, cmr*)

Tanahashi, T. *et al, Phytochemistry*, 1993, **33**, 397 (*isol, pmr, cmr*)

Iossifova, T. *et al, Phytochemistry*, 1993, **34**, 1373 (*isol, pmr, cmr*)

Ulmoidoside A U-10002

[127214-79-3]



$C_{48}H_{62}O_{28}$ M 1087.001

Constit. of *Eucommia ulmoides.* Powder. $[\alpha]_D$ +7.5° (H_2O). Ester trimer of Geniposidic acid, G-00201.

10-Ac: [127214-80-6]. ***Ulmoidoside B***

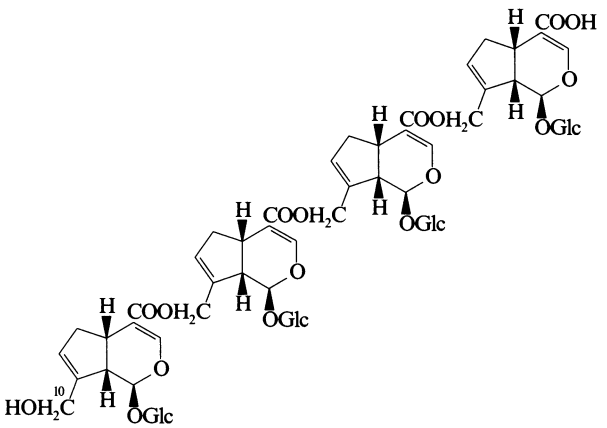
$C_{50}H_{64}O_{29}$ M 1129.038

Constit. of *E. ulmoides.* Powder. $[\alpha]_D$ +8.3° (H_2O).

Yahara, S. *et al, Chem. Pharm. Bull.*, 1990, **38**, 267 (*isol, pmr, cmr*)

Ulmoidoside C U-10003

[127214-81-7]



$C_{64}H_{82}O_{37}$ M 1443.330

Constit. of *Eucommia ulmoides.* Powder. $[\alpha]_D$ +9.5° (H_2O). Ester tetramer of Geniposidic acid, G-00201.

10-Ac: [127214-82-8]. ***Ulmoidoside D***

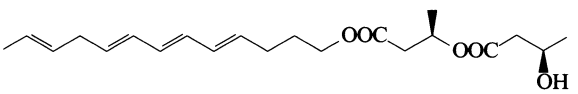
$C_{66}H_{84}O_{38}$ M 1485.367

Constit. of *E. ulmoides.* Powder. $[\alpha]_D$ +15.4° (H_2O).

Yahara, S. *et al, Chem. Pharm. Bull.*, 1990, **38**, 267 (*isol, pmr, cmr*)

Umbraculumin B U-10004

[123444-54-2]



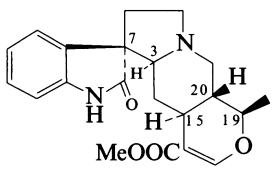
$C_{21}H_{32}O_5$ M 364.481

Isol. from the skin extracts of the mollusc *Umbraculum mediterraneum.*

Cimino, G. *et al, Tetrahedron Lett.*, 1989, **30**, 1147 (*isol, struct*)

Uncarine U-10005

Updated Entry replacing U-00045



(3*S*,7*S*,15*S*,19*R*,20*R*)-*form*

$C_{21}H_{24}N_2O_4$ M 368.432

For other stereoisomers see Mitraphylline, M-10082.

(3S,7S,15S,19R,20R)-form [6899-73-6] ***Uncarine A.***

Isoformosanine

Alkaloid from *Uncaria* spp. and *Ourouparia formosana* (Naucleaceae). Amorph. Mp 120-130°. $[\alpha]_D$ +106.5°.

B,HCl: Needles + ½ H_2O. Mp 231° dec.

N-*Ac:*

$C_{23}H_{26}N_2O_5$ M 410.469

Mp 165°.

(*3S,7R,15S,19R,20R*)-*form* [6883-35-8] ***Uncarine B.***
Formosanine
Alkaloid from *U.* spp. and *O. formosana* (Naucleaceae). Plates or needles. Mp 215-216°. $[\alpha]_D$ +91° ($CHCl_3$).
B,HCl: Mp 227-228° dec.
N-*Ac:*
$C_{23}H_{26}N_2O_5$ M 410.469
Mp 165°.

(*3S,7R,15S,19S,20S*)-*form* [5629-60-7] ***Uncarine C.***
Isospeciophylline. Pteropodine
Alkaloid from *Mitragyna* and *U.* spp.(Naucleaceae). Fine needles (C_6H_6). Mp 212-213°. $[\alpha]_D$ −109° ($CHCl_3$).
Picrate: Mp 143-144°.
B,MeI: Mp 209-211°. $[\alpha]_D$ −149°.
N-*Oxide:* ***Pteropodine* N-*oxide***
$C_{21}H_{24}N_2O_5$ M 384.431
Isol. from *U. bernaysii*, *U. orientalis* and *U. longiflora* (Naucleaceae). Identified by tlc only.
Parent acid: ***Pteropodic acid***
$C_{20}H_{22}N_2O_4$ M 354.405
Alkaloid from stems of *U. sinensis* (Naucleaceae). Mp 227-229° dec. $[\alpha]_D$ −126.0° (c, 0.1 in MeOH).

(*3R,7S,15S,19S,20S*)-*form* [4697-68-1] ***Uncarine D.***
Speciophylline
Alkaloid from *M.* and *U.* spp. Needles (EtOAc or Et_2O). Mp 183-184°. $[\alpha]_D^{21}$ +91° (c, 0.21 in $CHCl_3$).
Picrate: Cryst. (EtOH). Mp 215°.
N-*Oxide:* ***Speciophylline* N-*oxide***
$C_{21}H_{24}N_2O_5$ M 384.431
Alkaloid from *U. bernaysii*, *U. orientalis*, *U. longiflora* and *M. parvifolia* (Naucleaceae). Identified by tlc only.

(*3S,7S,15S,19S,20S*)-*form* [5171-37-9] ***Uncarine E.***
Isopteropodine
Alkaloid from *M. parvifolia* and *U.* spp.(Naucleaceae). Also isol. from the marine mollusk *Nerita albicilla.* Needles (C_6H_6 or MeOH). Mp 209-211°. $[\alpha]_D$ −111° ($CHCl_3$).
B,HCl: Mp 181-183°. $[\alpha]_D$ −124°.
B,MeI: Prisms (Me_2CO aq.). Mp 217-219°. $[\alpha]_D$ −149.5° (EtOH).
N-*Oxide:* ***Isopteropodine* N-*oxide***
$C_{21}H_{24}N_2O_5$ M 384.431
Isol. from *U. bernaysii*, *U. orientalis* and *U. longiflora* (Naucleaceae). Identified by tlc only.
Parent acid: ***Isopteropodic acid***
$C_{20}H_{22}N_2O_4$ M 354.405
Alkaloid from stems of *U. sinensis* (Naucleaceae). Mp 223-224° dec. $[\alpha]_D$ −130.2° (c, 0.04 in MeOH).

(*3R,7R,15S,19S,20S*)-*form* [14019-66-0] ***Uncarine F***
Alkaloid from *M.* and *U.* spp. (Naucleaceae). Amorph. $[\alpha]_D$ +85° ($CHCl_3$).
N-*Oxide:* ***Uncarine F* N-*oxide***
$C_{21}H_{24}N_2O_5$ M 384.431
Isol. from *M. parvifolia*, *U. bernaysii* and *U. orientalis* (Naucleaceae). Identified by tlc only.

Chan, K.C. *et al*, *J. Chem. Soc. C*, 1966, 2245 (*isol, pmr, ir*)
Shamma, M. *et al*, *J. Am. Chem. Soc.*, 1967, **89**, 1739 (*stereochem, pmr*)
Beecham, A.F. *et al*, *Aust. J. Chem.*, 1968, **21**, 491 (*isol, pmr, abs config*)
Winterfeldt, E. *et al*, *Chem. Ber.*, 1969, **102**, 3558 (*synth*)
Phillipson, J.D. *et al*, *Phytochemistry*, 1973, **12**, 1481, 2791; 1975, **14**, 1855 (*isol, ms, pmr, oxides*)
Shellard, E.J. *et al*, *Planta Med.*, 1974, **25**, 172 (*oxide*)
Ban, Y. *et al*, *Chem. Pharm. Bull.*, 1976, **24**, 736 (*synth*)
Martin, G.E. *et al*, *J. Nat. Prod.* (*Lloydia*), 1986, **49**, 406 (*isol, uv, ir, pmr, cmr, ms*)
Liu, H.-M. *et al*, *Phytochemistry*, 1993, **33**, 707 (*Pteropodic acid, Isopteropodic acid*)

Undecanedioic acid U-10006

[1852-04-6]

$HOOC(CH_2)_9COOH$

$C_{11}H_{20}O_4$ M 216.277
Isol. from leaves and stems of *Anthyllis sericea.* Cryst. ($CHCl_3/C_6H_6$ or H_2O). Mp 111-112.5°.
Mono-Me ester:
$C_{12}H_{22}O_4$ M 230.303
Mp 44-46°. Bp_2 165-168°.
Di-Me ester: [4567-98-0].
$C_{13}H_{24}O_4$ M 244.330
Mp 17°. Bp_2 123-124.5°.
Mono-Et ester:
$C_{13}H_{24}O_4$ M 244.330
Mp 43-44°. Bp_3 176-178°.
Di-Et ester: [22543-29-9].
$C_{15}H_{28}O_4$ M 272.384
Bp_6 155-158°, Bp_2 146°.
Dichloride:
$C_{11}H_{18}Cl_2O_2$ M 253.167
Bp_{22} 191-192°.

Walker, J. *et al*, *J. Chem. Soc.*, 1901, **79**, 1191 (*synth*)
v.Braun, J. *et al*, *Ber.*, 1912, **45**, 1930, 1975 (*synth*)
Buu-Hoi, Ng.Ph. *et al*, *C. R. Hebd. Seances Acad. Sci.*, 1955, **240**, 442 (*synth*)
Org. Synth., Coll. Vol., 4, 1963, 510, 635 (*synth*)
Holmes, J.L. *et al*, *Org. Mass Spectrom.*, 1970, **3**, 1505 (*ms*)
Crowell, E.P. *et al*, *J. Chromatogr. Sci.*, 1971, **9**, 296 (*chromatog*)
Marco, J.A. *et al*, *Phytochemistry*, 1978, **17**, 1438 (*isol*)

1,11-Undecanediol, 9CI U-10007

[765-04-8]

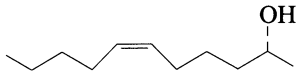
$HOCH_2(CH_2)_9CH_2OH$

$C_{11}H_{24}O_2$ M 188.309
Cryst. (C_6H_6). Mp 61° (57-59°).
Bisphenylurethane: Mp 132-133°.
Di-Ph ether: [141620-04-4]. *1,1'-[1,11-Undecanediylbis(oxy)] bisbenzene, 9CI. 1,11-Diphenoxyundecane*
$C_{23}H_{32}O_2$ M 340.505
Isol. from the leaves of *Arachis hypogaea* infected with *Puccinia arachidis.* Phytoalexin.

Colonge, J. *et al*, *Bull. Soc. Chim. Fr.*, 1959, 1248 (*synth*)
Dulou, R. *et al*, *Bull. Soc. Chim. Fr.*, 1959, 1362 (*synth*)
Tolyanova, S.G. *et al*, *Zh. Obshch. Khim.*, 1963, **34**, 565 (*synth*)
Reinheckel, H., *CA*, 1965, **62**, 8990 (*synth*)
Rao, P.V.S. *et al*, *Oleagineux*, 1991, **46**, 501; *CA*, **116**, 252152 (*di-Ph ether*)

6-Undecen-2-ol U-10008

Nostrenol



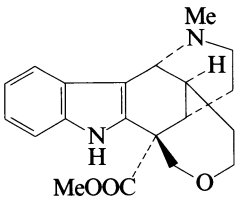
$C_{11}H_{22}O$ M 170.294
(*2R,6Z*)-*form* [120926-44-5]
Constit. of the thoracic gland of *Euroleon nostras* and *Grocus bore.*

[67233-89-0, 67233-90-3, 120876-12-2, 120926-45-6]

Baeckstroem, P. *et al*, *J. Chem. Ecol.*, 1989, **15**, 61 (*isol, synth*)

Undulifoline U-10009

[142750-31-0]



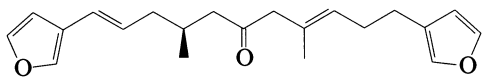
$C_{20}H_{24}N_2O_3$ M 340.421

Alkaloid from the stem bark of *Alstonia undulifolia* (Apocynaceae). $[\alpha]_D$ −33° (c, 0.16 in $CHCl_3$).

Massiot, G. *et al*, *Phytochemistry*, 1992, **31**, 1078 (*isol, uv, ir, pmr, cmr, ms, struct*)

Untenospongin C U-10010

[149298-04-4]



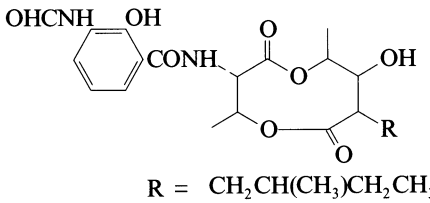
$C_{21}H_{26}O_3$ M 326.435

Constit. of *Hippospongia* sp. Oil. $[\alpha]_D^{20}$ −9.3° (c, 1 in $CHCl_3$).

Kobayashi, J. *et al*, *Chem. Pharm. Bull.*, 1993, **41**, 381 (*isol, pmr, cmr*)

Urauchimycin A U-10011

[148163-07-9]



R = $CH_2CH(CH_3)CH_2CH_3$

$C_{22}H_{30}N_2O_8$ M 450.488

Macrolide antibiotic . Related to Antimycin A, A-02511. Prod. by *Streptomyces* sp. Ni-80. Antifungal agent. $[\alpha]_D^{26}$ +46.7° (c, 0.03 in MeOH).

Imamura, N. *et al*, *J. Antibiot.*, 1993, **46**, 241 (*isol, struct, props*)

Urauchimycin B U-10012

[148163-08-0]

As Urauchimycin A, U-10011 with

R = $CH_2CH_2CH(CH_3)_2$

$C_{22}H_{30}N_2O_8$ M 450.488

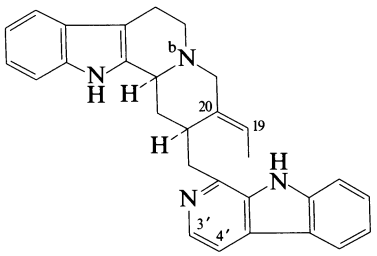
Macrolide antibiotic. Related to Antimycin A, A-02511. Prod. by *Streptomyces* sp. Ni-80. Antifungal agent. $[\alpha]_D^{26}$ +50° (c, 0.1 in MeOH).

Imamura, N. *et al*, *J. Antibiot.*, 1993, **46**, 241 (*isol, struct, props*)

Usambarensine U-10013

Updated Entry replacing U-00170

[36150-14-8]



$C_{29}H_{28}N_4$ M 432.567

Alkaloid from the roots of *Strychnos usambarensis* (Strychnaceae). Muscarinic receptor antagonist in isolated rat intestine. Powder.

N^b-*Me:* [36150-17-1]. ***N^b-Methylusambarensine***

$C_{30}H_{31}N_4^{\oplus}$ M 447.602 (ion)

Quaternary alkaloid from *S. usambarensis* (Strychnaceae).

3′,4′-Dihydro: see *Tchibangensine, T-00156*

19,20-Dihydro (*20β*-H)*:* ***19,20-Dihydrousambarensine***

$C_{29}H_{30}N_4$ M 434.583

Alkaloid from root bark of *S. potatorum* (Strychnaceae).

Angenot, L. *et al*, *J. Pharm. Belg.*, 1971, **26**, 585; *CA*, **76**, 72694w (*isol, struct, derivs*)

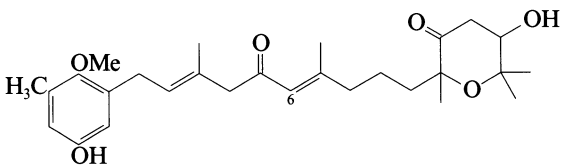
Dideberg, O. *et al*, *Acta Crystallogr., Sect. B*, 1975, **31**, 1571 (*cryst struct*)

Coune, C.A. *et al*, *Phytochemistry*, 1980, **19**, 2009 (*cmr*)

Massiot, G. *et al*, *Phytochemistry*, 1992, **31**, 2873 (*19,20-Dihydrousambarensine*)

Usneoidol E U-10014

Updated Entry replacing U-00093



$C_{28}H_{40}O_6$ M 472.620

Constit. of *Cystoseira usneoides*. $[\alpha]_D^{24}$ −16.47° (c, 0.17 in $CHCl_3$).

6Z-Isomer: ***Usneoidol Z***

$C_{28}H_{40}O_6$ M 472.620

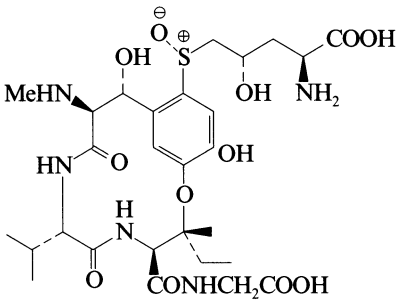
Constit. of *C. usneoides*. $[\alpha]_D^{24}$ +3.66° (c, 0.24 in $CHCl_3$).

[142902-56-5, 143004-42-6]

Urones, J.G. *et al*, *Phytochemistry*, 1992, **31**, 2105 (*isol, pmr, cmr*)

Ustiloxin U-10015

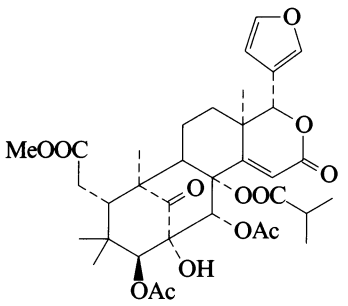
[141044-51-1]



$C_{28}H_{43}N_5O_{12}S$ M 673.740
Cyclic peptide. Isol. from the false smut balls caused by *Ustilaginoidea virens* on rice. Phytotoxin and mycotoxin. Needles + $2\frac{1}{2}$ H_2O (MeOH aq.). Mp 195° dec. $[\alpha]_D$ +14.5° (c, 0.55 in H_2O).

Koiso, Y. *et al*, *Tetrahedron Lett.*, 1992, **33**, 4157 (*isol, pmr, cmr, struct*)

Utilin B U-10016

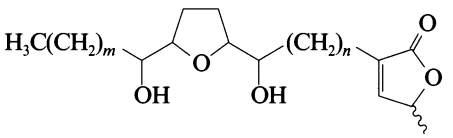


$C_{35}H_{44}O_{13}$ M 672.725
Constit. of *Etandrophragma utile*. Cryst. Mp 145-147°. $[\alpha]_D^{20}$ −24.8° (c, 0.2 in $CHCl_3$).

Daniewski, W.M. *et al*, *Phytochemistry*, 1993, **33**, 1534 (*isol, pmr, cmr, cryst struct*)

Uvariamicin I U-10017

[132309-09-2]



m = 13, *n* = 12

$C_{37}H_{68}O_5$ M 592.941
Isol. from the bark of *Uvaria narum*.

Hisham, A. *et al*, *Tetrahedron Lett.*, 1990, **31**, 4649 (*isol*)

Uvariamicin II U-10018

Reticulatacin

[132309-10-5]

As Uvariamicin I, U-10017 with

m = 11, *n* = 14

$C_{37}H_{68}O_5$ M 592.941
Data refers to Reticulatacin whose relative stereochem. is also known. Stereochem. identity of Uvariamicin with Reticulatacin is not established. Isol. from the bark of *Annona reticulata* and *Uvaria narum*. Fine needles. Mp 80-80.5°. $[\alpha]_D$ +26° (c, 0.005 in $CHCl_3$).

[134876-18-9]

Hisham, A. *et al*, *Tetrahedron Lett.*, 1990, **31**, 4649 (*isol*)
Saad, J.M. *et al*, *Tetrahedron*, 1991, **47**, 2751 (*Reticulatacin*)

Uvariamicin III U-10019

[132309-11-6]

As Uvariamicin I, U-10017 with

m = 9, *n* = 16

$C_{37}H_{68}O_5$ M 592.941
Acetogenin. Isol. from the bark of *Uvaria narum*.

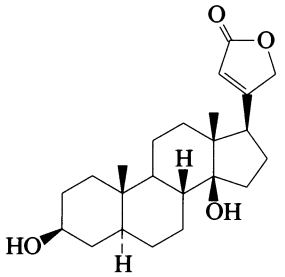
Hisham, A. *et al*, *Tetrahedron Lett.*, 1990, **31**, 4649 (*isol*)

Uzarigenin U-10020

Updated Entry replacing U-00199

3β,14β-Dihydroxy-5α-card-20(22)-enolide. Odorigenin B

[466-09-1]



$C_{23}H_{34}O_4$ M 374.519
Aglycone from uzara root (*Gomphocarpus* spp.). Also isol. from *Asclepias, Isoplexis, Nerium, Pergularia, Xysmalobium, Mallotus* spp. and others. Cardiotonic agents. Cryst. (MeOH/CH_2Cl_2). Mp 246-249°. $[\alpha]_D$ +14° ($CHCl_3$).

▷ YV1950000.

3-O-[β-D-Glucopyranosyl(1→4)-β-D-fucoside]: [17179-38-3]. ***Cheiroside A.*** *Cheiroside H*
$C_{35}H_{54}O_{13}$ M 682.804
Constit. of *Cheiranthus cheiri*. Cryst. Mp 293°. $[\alpha]_D$ −24.9° (Py).
▷ LD_{50} (cat, ivn) 0.681 mg/kg. FH4770800.

3-β-D-Allomethyloside: [3080-19-1]. ***Ascleposide***
$C_{29}H_{44}O_8$ M 520.662
Constit. of *Xysmalobium undulatum* and from *Asclepias glaucophylla*. Cryst. (MeOH/Et_2O). Mp 257-263°. $[\alpha]_D$ −27.1° (MeOH).
▷ CI7560000.

3-O-(6-Deoxy-3-O-methyl-α-L-glucopyranoside): [34302-25-5]. ***Thevefoline.*** *Uzarigenin thevetoside*
$C_{30}H_{46}O_8$ M 534.689
Constit. of *Thevetia peruviana*. Cryst. (EtOH). Mp 260°. $[\alpha]_D^{22}$ −66° (MeOH).
▷ LD_{50} (cat, ivn) 0.28 mg/kg. FH4906000.

3-O-β-D-Sarmentoside: ***Madagascoside***
$C_{30}H_{46}O_7$ M 518.689
From *Roupellina boivinii*. Cryst. Mp 196-198°, Mp 219-222° (double Mp). $[\alpha]_D^{25}$ −23.3° (c, 1.1 in MeOH).

3-O-β-D-Glucopyranoside: ***Desglucouzarin***
$C_{29}H_{44}O_9$ M 536.661
Isol. from *A. syriaca* and *A. mellodora*. Cryst. + $1H_2O$ (EtOH aq.). Mp 260-272°. $[\alpha]_D^{23}$ −44.1° (c, 1 in Py).

3-O-[β-D-Glucopyranosyl-(1→4)-β-D-glucopyranoside]: [41628-29-9].
$C_{35}H_{54}O_{14}$ M 698.803
Constit. of *Asclepias albicans*. Amorph.

3-O-[β-D-Glucopyranosyl-(1→6)-β-D-glucopyranoside]: [20231-81-6]. ***Uzarin***
$C_{35}H_{54}O_{14}$ M 698.803
Constit. of *Xysmalobium undulatum, Pachycarpus schinzianus, Asclepias curassavica* and *Gomphocarpus* sp. (Uzara root). Cryst. (MeOH) or prisms (Py). Mp 266-270°. $[\alpha]_D^{20}$ −27° (c, 1.075 in Py).

3-O-[β-D-Glucopyranosyl-(1→6)-β-D-glucopyranosyl-(1→6)-β-D-glucopyranoside]: [88235-61-4]. ***Uzaroside***
$C_{41}H_{64}O_{19}$ M 860.945
Constit. of uzara root. Amorph. $[\alpha]_D^{20}$ −10° (c, 1 in EtOH).

3-O-(6-Deoxy-3-O-methylmannopyranoside): ***Neriifoside***
$C_{30}H_{46}O_8$ M 534.689

Constit. of the *Thevetia neriifolia*. Needles. Mp 210-212°.

3,14-Diepimer: Urezigenin
Aglycone from Urezin. Mp 270-275° (238-239°). $[\alpha]_D$ +4.1° ($CHCl_3$), $[\alpha]_D^{26}$ +16.7° (EtOH).

3,14-Diepimer, 3-O-[β-D-Glucopyranosyl-(1→6)-β-D-glucopyranoside]: ***Urezin***
$C_{35}H_{54}O_{14}$ M 698.803
From uzara root. Cryst. (MeOH). Mp 185-192°. $[\alpha]_D$ −4.8° (c, 1.04 in EtOH).

3-O-D-Boivinoside: ***Zettoside***
$C_{29}H_{44}O_7$ M 504.662
Isol. from *R. boivinii*. Mp 253-256°. $[\alpha]_D^{26}$ −27.9° (MeOH). Poss. identical with a uzarigenin 2-deoxyhexoside with similar props. Isol. from *Digitalis canariensis* (Rees *et al*, 1961).

3-O-Digitoxoside: Uzarigenin digitoxoside
$C_{29}H_{44}O_7$ M 504.662
Isol. from *Digitalis canariensis*. Needles (Me_2CO/Et_2O). Mp 241-244°. $[\alpha]_D^{22}$ −17.2° (c, 1.1 in $CHCl_3$).

3-O-Diginoside: [58407-69-5]. ***Odoroside B***
$C_{30}H_{46}O_7$ M 518.689
Isol. from *Nerium odorum*. Needles (Me_2CO/Et_2O). Mp 150°, Mp 200° (double Mp). $[\alpha]_D$ −20° ($CHCl_3$).

3-O-[β-D-Glucopyranosyl(1→4)-D-diginoside]: ***Odorobioside K***
$C_{36}H_{56}O_{12}$ M 680.831
Isol. from *N. odorum*. Platelets (MeOH aq.). Mp 208°, Mp 222-260° (double Mp). $[\alpha]_D^{22}$ −36° (dioxan).

3-O-[β-D-Glucopyranosyl(1→6)-β-D-glucopyranosyl(1→4)-D-diginoside]: ***Odoroside K***
$C_{42}H_{66}O_{17}$ M 842.973
Isol. from *N. odorum*. Platelets (MeOH aq.). Mp 242-265°. $[\alpha]_D^{25}$ −37.6° (MeOH).

17-Epimer: [663-97-8]. *Allouzarigenin. 17-Isouzarigenin*
Cryst. (Me_2CO/hexane). Mp 227-229°. $[\alpha]_D^{20}$ +16° (c, 0.5 in MeOH).

5-Epimer: see *Digitoxigenin, D-01096*

17-Epimer, 3-O-D-Sarmentoside: ***Allomadagascoside.*** *17β-H-Madagascoside*
$C_{30}H_{46}O_7$ M 518.689
Isol. from *R. boivinii*. Needles ($MeOH/Et_2O$). Mp 184-190°, Mp 210-212° (double Mp). $[\alpha]_D^{25}$ −6.7° (MeOH).

17-Epimer, 3-O-D-Boivinoside: ***Allozettoside.*** *17β-H-Zettoside*
$C_{29}H_{44}O_7$ M 504.662
Isol. from *R. boivinii*. Platelets ($MeOH/Et_2O$). Mp 135-138°. $[\alpha]_D^{26}$ −12.1° (MeOH).

3-Epimer: 3-epi-Uzarigenin
Aglycone from oxyline. Cryst. Mp 229-232°. $[\alpha]_D^{25}$ +16.9° (c, 0.1 in $CHCl_3$).

3-Epimer, 3-O-β-D-cymaropyranosyl-(1→4)-β-D-thevetopyranosyl-(1→4)-β-D-cymaropyranosyl-(1→4)-β-D-digitoxopyranoside: [132741-68-5]. ***Oxyline***
$C_{50}H_{80}O_{17}$ M 953.172
Constit. of *Oxystelma esculentum*. Cryst. Mp 146-150°. $[\alpha]_D^{25}$ +4.2° (c, 0.11 in MeOH).

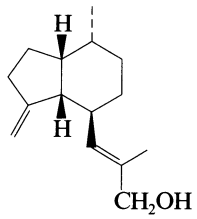
3-O-[6-(4-Hydroxycinnamoyl)-β-D-glucopyranoside]: ***6′-O-(4-Hydroxycinnamoyl)desglucouzarin***
$C_{38}H_{50}O_{11}$ M 682.806
Constit. of *Asclepias asperula* and *A. linaria*. Cryst. Mp 223-224°.

3-O-[β-D-Xylopyranosyl-(1→4)-O-β-D-digitalopyranoside]: ***Oxystelmoside***
$C_{35}H_{54}O_{12}$ M 666.804
Constit. of *Oxystelma esculentum*. Cryst. Mp 105-108°. $[\alpha]_D^{25}$ +3.24° (c, 0.21 in $CHCl_3$).

Tschesche, R. *et al*, *Chem. Ber.*, 1952, **85**, 1042 (*isol, Uzaroside, Urezin*)
Moore, J.A. *et al*, *Helv. Chim. Acta*, 1954, **37**, 755 (*Cheiroside A*)
Rittel, W. *et al*, *Helv. Chim. Acta*, 1954, **37**, 1361 (*Odorosides*)
Karitzkes, A. *et al*, *Helv. Chim. Acta*, 1959, **42**, 1502 (*Urezigenin*)
Russel, J.H. *et al*, *Helv. Chim. Acta*, 1961, **44**, 1293, 1315 (*Madagascoside, Zettoside*)
Rees, R. *et al*, *Helv. Chim. Acta*, 1961, **44**, 1607 (*isol, Uzarigenin digitoxoside*)
Bauer, S. *et al*, *Collect. Czech. Chem. Commun.*, 1962, **27**, 872 (*Desglucouzarin*)
Kuritzkes, A.M. *et al*, *Helv. Chim. Acta*, 1963, **46**, 8 (*Ascleposide*)
Okada, M. *et al*, *Steroids*, 1965, **6**, 645 (*synth*)
Freitag, H. *et al*, *Helv. Chim. Acta*, 1967, **50**, 1336 (*Cheiroside A*)
Sierp, D. *et al*, *Helv. Chim. Acta*, 1970, **53**, 27 (*Ascleposide*)
Frèrejacque, M. *et al*, *C. R. Hebd. Seances Acad. Sci. Ser. D*, 1971, **272**, 2620 (*Thevefoline*)
Kamano, Y. *et al*, *J. Chem. Soc., Perkin Trans. 1*, 1975, 1972 (*synth*)
Koike, K. *et al*, *Chem. Pharm. Bull.*, 1980, **28**, 401 (*isol*)
Srivastava, S. *et al*, *Phytochemistry*, 1991, **30**, 301 (*Oxyline*)
Martin, R.A. *et al*, *Phytochemistry*, 1991, **30**, 3935 (*6′-4-Hydroxycinnamoyldesglucouzarin*)
Rodríguez-Hahn, L. *et al*, *Phytochemistry*, 1991, **30**, 3941 (*6′-4-Hydroxycinnamoyldesglucouzarin*)
Siddiqui, S. *et al*, *Phytochemistry*, 1992, **31**, 3541 (*isol, pmr, cmr*)
Srivastava, S. *et al*, *Phytochemistry*, 1993, **32**, 1019 (*Oxystelmoside*)

V

4(15),7(11)-Valerenadien-12-ol V-10001



$C_{15}H_{24}O$ M 220.354

(1β,5β,10α,7(11)E)-form

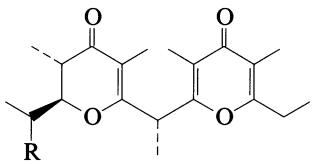
12-Aldehyde: [76985-39-2]. *4(15),7(11)-Valerenadien-12-al.*
β-Valerenal
$C_{15}H_{22}O$ M 218.338
Constit. of *Zexmenia gnaphaloides*. Oil.

(1β,5β,10α,7(11)E)-form
10-Epi-β-valerenol
Constit. of *Z. gnaphaloides*. Oil.

Bohlmann, F. *et al*, *Chem. Ber.*, 1980, **113**, 240 (*isol, pmr*)

Vallartanone A V-10002

[122947-98-2]



R = CH_3

$C_{21}H_{30}O_4$ M 346.466
Metab. of the pulmonate mollusc *Siphonaria maura*. Cryst. Mp 69°. $[\alpha]_D$ −176° (c, 0.68 in $CHCl_3$).

Manker, D.C. *et al*, *J. Org. Chem.*, 1989, **54**, 5374 (*isol, pmr, cmr*)

Vallartanone B V-10003

[122947-99-3]

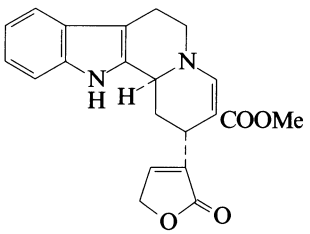
As Vallartanone A, V-10002 with

R = H

$C_{20}H_{28}O_4$ M 332.439
Metab. of the pulmonate mollusc *Siphonaria maurea*. Oil. $[\alpha]_D$ −133° (c, 0.59 in $CHCl_3$).

Manker, D.C. *et al*, *J. Org. Chem.*, 1989, **54**, 5374 (*isol, pmr, cmr*)

Vallesiachotamine lactone V-10004

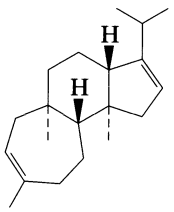


$C_{21}H_{20}N_2O_4$ M 364.400
Alkaloid from aerial parts of *Cephaelis dichroa* (Rubiaceae).

Solis, P.N. *et al*, *Phytochemistry*, 1993, **33**, 1117 (*isol, uv, ir, pmr, ms, struct*)

2,13-Valparadiene V-10005

[144106-88-7]



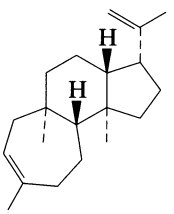
$C_{20}H_{32}$ M 272.473
Constit. of *Halimium viscosum*. Oil. $[\alpha]_D$ +36.7° (c, 1.2 in $CHCl_3$).

Urones, J.G. *et al*, *Tetrahedron*, 1993, **49**, 4051 (*isol, pmr, cmr*)

2,15-Valparadiene V-10006

Updated Entry replacing V-00052
Valparene

[130756-32-0]

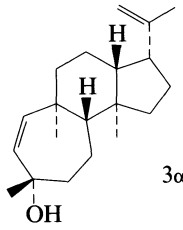


$C_{20}H_{32}$ M 272.473
Constit. of *Halimium viscosum* and *H. verticillatum*. Oil. $[\alpha]_D^{22}$ +11.42° (c, 1.16 in $CHCl_3$).

2β,3β-Epoxide: [130774-09-3]. ***2,3-Epoxy-15-valparene***
$C_{20}H_{32}O$ M 288.472
Constit. of *H. viscosum*. Cryst. (hexane). Mp 129-130°. $[\alpha]_D$ −23.9° (c, 2.4 in $CHCl_3$).

Urones, J.G. *et al*, *Phytochemistry*, 1993, **34**, 567 (*isol, pmr, cmr*)
Urones, J.G. *et al*, *Tetrahedron*, 1993, **49**, 4051 (*isol, pmr, cmr, abs config*)

1,5-Valparadien-3-ol V-10007



3α-*form*

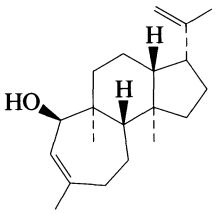
$C_{20}H_{32}O$ M 288.472

3α-form [144177-33-3]
Constit. of *Halimium viscosum*. Oil. $[\alpha]_D$ −34.2° (c, 1.4 in $CHCl_3$).

3β-form [144106-85-4]
Constit. of *H. viscosum*. Oil. $[\alpha]_D$ −60.9° (c, 1.2 in $CHCl_3$).

Urones, J.G. *et al*, *Tetrahedron*, 1993, **49**, 4051 (*isol, pmr, cmr*)

2,15-Valparadien-1-ol V-10008

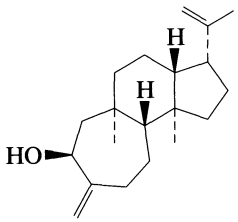


$C_{20}H_{32}O$ M 288.472

1β-form [144106-86-5]
Constit. of *Halimium viscosum*. Oil. $[\alpha]_D$ −1.4° (c, 0.7 in $CHCl_3$).

Urones, J.G. *et al*, *Tetrahedron*, 1993, **49**, 4051 (*isol, pmr, cmr*)

3(19),15-Valparadien-2-ol V-10009

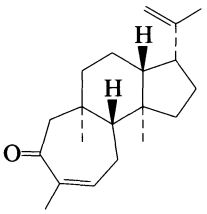


$C_{20}H_{32}O$ M 288.472

2β-form [131916-99-9]
Constit. of *Halimium viscosum*. Needles (EtOAc/hexane). Mp 129-130°. $[\alpha]_D$ +23.6° (c, 0.7 in $CHCl_3$).

Urones, J.G. *et al*, *Tetrahedron*, 1993, **49**, 4051 (*isol, pmr, cmr*)

3,15-Valparadien-2-one V-10010

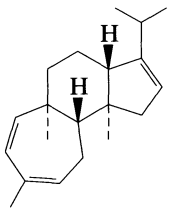


$C_{20}H_{30}O$ M 286.456

Constit. of *Halmium viscosum*. $[\alpha]_D^{22}$ +0.5° (c, 1.7 in $CHCl_3$).

Urones, J.G. *et al*, *Phytochemistry*, 1993, **34**, 747 (*isol, pmr, cmr*)

1,3,13-Valparatriene V-10011

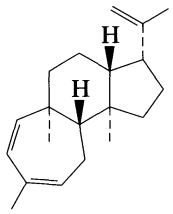


$C_{20}H_{30}$ M 270.457
Constit. of *Halimium viscosum*. Oil. $[\alpha]_D^{22}$ +24.3° (c, 0.43 in $CHCl_3$).

Urones, J.G. *et al*, *Phytochemistry*, 1993, **34**, 747 (*isol, pmr, cmr*)

1,3,15-Valparatriene V-10012

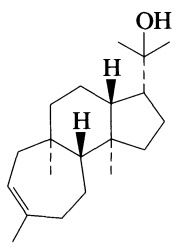
[144106-84-3]



$C_{20}H_{30}$ M 270.457
Constit. of *Halimium viscosum*. Oil. $[\alpha]_D$ +10.3° (c, 0.8 in $CHCl_3$).

Urones, J.G. *et al*, *Tetrahedron*, 1993, **49**, 4051 (*isol, pmr, cmr*)

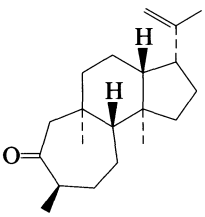
2-Valparen-15-ol V-10013



$C_{20}H_{34}O$ M 290.488
Constit. of *Halimium viscosum*. Oil. $[\alpha]_D$ −5.0° (c, 0.5 in $CHCl_3$).

Urones, J.G. *et al*, *Tetrahedron*, 1993, **49**, 4051 (*isol, pmr, cmr*)

15-Valparen-2-one V-10014

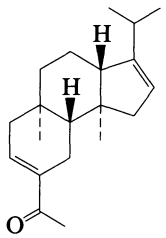


$C_{20}H_{32}O$ M 288.472

3αH-form [130756-34-2] ***Valparone***
Constit. of *Halimium viscosum*. Needles (hexane). Mp 76-77°. $[\alpha]_D$ +11.3° (c, 1.2 in $CHCl_3$).
Urones, J.G. *et al*, *Tetrahedron*, 1993, **49**, 4051 (*isol, pmr, cmr*)

2(4),13-Valparoladien-3-one V-10015

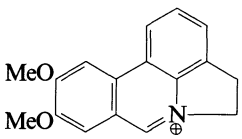
2-(3→4)-Abeo-2(4),13-valparadien-3-one



$C_{20}H_{30}O$ M 286.456
Constit. of *Halmium viscosum*. $[\alpha]_D^{22}$ +13.5° (c, 1.8 in $CHCl_3$).
Urones, J.G. *et al*, *Phytochemistry*, 1993, **34**, 747 (*isol, pmr, cmr*)

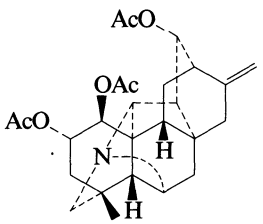
Vasconine V-10016

4,5-Dihydro-9,10-dimethoxypyrrolo[3,2,1-de] phenanthridinium, 9CI
[139955-90-1]



$C_{17}H_{16}NO_2^{\oplus}$ M 266.319 (ion)
Alkaloid from whole plants of *Narcissus vasconicus* (Amaryllidaceae). Mp 233-235°. Counterion not specified.
Bastida, J. *et al*, *J. Nat. Prod.* (*Lloydia*), 1992, **55**, 122 (*isol, ir, pmr, cmr, ms, struct*)

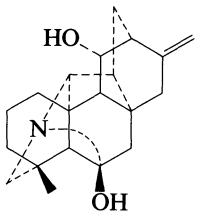
Venudelphine V-10017



$C_{26}H_{33}NO_6$ M 455.550
Alkaloid from aerial parts of *Delphinium venulosum* (Ranunculaceae). $[\alpha]_D^{22}$ 0° (c, 0.1 in $CHCl_3$).
Ulubelen, A. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 780 (*isol, ir, pmr, cmr, ms, struct*)

Venulol V-10018

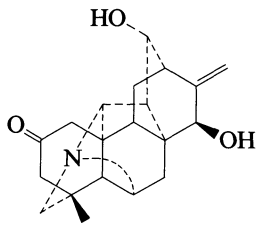
[102517-36-2]



$C_{20}H_{27}NO_2$ M 313.439
Alkaloid from the aerial parts of *Delphinium venulosum* (Ranunculaceae). $[\alpha]_D^{22}$ +19.7° (c, 0.15 in MeOH).
Ulubelen, A. *et al*, *Phytochemistry*, 1992, **31**, 3239 (*isol, ir, pmr, cmr, ms, struct*)

Venulusone V-10019

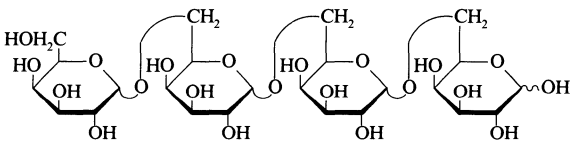
[145237-03-2]



$C_{20}H_{25}NO_3$ M 327.422
Alkaloid from the aerial parts of *Delphinium venulosum* (Ranunculaceae). $[\alpha]_D^{22}$ +27.3° (c, 0.20 in MeOH).
Ulubelen, A. *et al*, *Phytochemistry*, 1992, **31**, 3239 (*isol, ir, pmr, cmr, ms, struct*)

Verbascotetraose V-10020

α-D-Galactopyranosyl-(1→6)-α-D-galactopyranosyl-(1→6)-α-D-galactopyranosyl-(1→6)-D-glucose



Pyranose-*form*

$C_{24}H_{42}O_{21}$ M 666.583
Found in birch sap. Normal constit. of acid-resistant plant tissues. Mp 240°. $[\alpha]_D$ +191°.
Courtois, J.E. *et al*, *Bull. Soc. Chim. Biol.*, 1955, **37**, 1009.
Haq, S. *et al*, *Can. J. Biochem.*, 1962, **40**, 989.

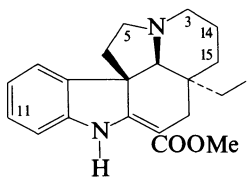
Vinaline V-10021

Struct. unknown. Constit. of the leaves of *Prosopis ruscifolia*.
Cercos, A.P., *CA*, 1952, **46**, 11311d.

Vincadifformine V-10022

Updated Entry replacing V-00281

Methyl 2,3-didehydroaspidospermidine-3-carboxylate, 9CI



(–)-*form*

$C_{21}H_{26}N_2O_2$ M 338.449

(+)-***form*** [15539-10-3]
Alkaloid from *Amsonia tabernaemontana, A. angustifolia, Rhazya stricta, Tabernaemontana riedelii* (Apocynaceae). Mp 96°. $[\alpha]_D^{25}$ +605° (c, 0.2 in EtOH).

(–)-***form*** [3247-10-7]
Alkaloid from *Vinca minor* (Apocynaceae). Mp 96°. $[\alpha]_D^{20}$ −540° (EtOH) (natural), $[\alpha]_D$ −600° (EtOH) (semisynthetic).

3-Oxo: [55528-27-3]. ***3-Oxovincadifformine***
$C_{21}H_{24}N_2O_3$ M 352.432
Alkaloid from seeds of *Stemmadenia grandiflora* (Apocynaceae). Oil. $[\alpha]_D^{21}$ −315° (c, 0.12 in $CHCl_3$).

5-Oxo: [23107-01-9]. ***5-Oxovincadifformine.*** *Ervinidinine*
$C_{21}H_{24}N_2O_3$ M 352.432
Alkaloid from the leaves of *Pterotaberna inconspicua* and *Vinca erecta* (Apocynaceae). Cryst. (MeOH). Mp 265-266° dec. $[\alpha]_D$ −152° (c, 0.25 in MeOH). Identity of Ervinidinine and 5-Oxovincadifformine not certain. Mp. refers to Ervinidinine.

15β-Hydroxy: [119478-89-6]. ***15β-Hydroxyvincadifformine***
$C_{21}H_{26}N_2O_3$ M 354.448
Alkaloid from the leaves of *Rhazya stricta* (Apocynaceae). $[\alpha]_D$ +240.57° ($CHCl_3$).

11-Methoxy: see *Ervinceine, E-01525*

Stereoisomer (?): [6878-14-4]. ***Ervamine***
$C_{21}H_{26}N_2O_2$ M 338.449
Alkaloid from *V. erecta* and *V. rosea* (Apocynaceae). $[\alpha]_D$ −502° (c, 0.29 in MeOH). Stereochem. not clear from the abstr.

Stereoisomer; B,HI: Cryst. (EtOH). Mp 198-200°.

11-Hydroxy: ***11-Hydroxyvincadifformine***
$C_{21}H_{26}N_2O_3$ M 354.448
Alkaloid from aerial parts of *Melodinus hemsleyanus* (Apocynaceae). Amorph. $[\alpha]_D^{23}$ −502° (c, 0.1 in $CHCl_3$).

(±)-***form*** [18374-17-9]
Alkaloid from *V. difformis, R. stricta, T. riedelii* (Apocynaceae). Shows hypotensive activity, about half that of Reserpine. Mp 124-125°.

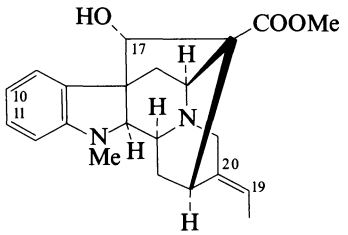
N^a-*Me:* see *Minovine, M-01560*

Plat, M. *et al, Bull. Soc. Chim. Fr.*, 1962, 2237 (*isol*)
Djerassi, C. *et al, Tetrahedron Lett.*, 1962, 235 (*isol, ms, uv, ir*)
Malikov, V.M. *et al, CA*, 1963, **59**, 11584b (*Ervamine*)
Klyne, W. *et al, Helv. Chim. Acta*, 1965, **48**, 443 (*abs config*)
Szadon, B. *et al, Tetrahedron Lett.*, 1970, 4615 (*isol*)
Malikov, V.M. *et al, Khim. Prir. Soedin.*, 1971, **7**, 640; *Chem. Nat. Compd.* (*Engl. Transl.*), 619 (*Ervinidinine*)
Wenkert, E. *et al, J. Am. Chem. Soc.*, 1973, **95**, 4990 (*cmr*)
Laronze, J.Y. *et al, Tetrahedron Lett.*, 1974, 491 (*synth*)
Kuehne, M.E. *et al, J. Org. Chem.*, 1986, **51**, 2913 (*15β-Hydroxyvincadifformine*)
Massiot, G. *et al, Phytochemistry*, 1988, **27**, 1085 (*5-Oxovincadifformine*)
Torrenegra, R. *et al, Phytochemistry*, 1988, **27**, 1843 (*3-Oxovincadifformine*)
Atta-ur-Rahman, *et al, Phytochemistry*, 1988, **27**, 3721 (*15β-Hydroxyvincadifformine*)
Takano, S. *et al, Chem. Lett.*, 1989, 87 (*synth*)
Guo, L.-W. *et al, Phytochemistry*, 1993, **34**, 563 (*11-Hydroxyvincadifformine*)

Vincamajine V-10023

Updated Entry replacing V-00284

[2506-26-5]



$C_{22}H_{26}N_2O_3$ M 366.459

Alkaloid from *Vinca major, V. herbacea, V. libanotica, Alstonia spectabilis, A. quaternata, A. legouixiae, A. odontophora, A. constricta* and *Cabucala torulosa* (Apocynaceae). Needles (MeOH). Mp 226.5-227°. $[\alpha]_D^{35}$ −58° (c, 0.5 in MeOH).

B,HCl: Mp 259-261° dec. $[\alpha]_D$ −40° (c, 0.38 in H_2O).

O-*Ac:* [912-27-6]. ***Vincamedine***
$C_{24}H_{28}N_2O_4$ M 408.496
Alkaloid from *V. difformis* and *V. major* (Apocynaceae). Mp 185.5-186.5°. $[\alpha]_D^{20}$ −75° (c, 1 in $CHCl_3$).

O-*Benzoyl:* **O-*Benzoylvincamajine***
$C_{29}H_{30}N_2O_4$ M 470.567
Constit. of the leaves of *Alstonia macrophylla* (Apocynaceae). Mp 267-269°. $[\alpha]_D^{30}$ −147° ($CHCl_3$).

O-(*3,4,5-Trimethoxycinnamoyl*): [57800-03-0]. ***3,4,5-Trimethoxycinnamoylvincamajine***
$C_{34}H_{38}N_2O_7$ M 586.683
Alkaloid from the root bark of *A. constricta* and from *A. lanceolifera* (Apocynaceae). Noncryst. $[\alpha]_D$ −68° (c, 2.6 in $CHCl_3$).

O-(*4-Hydroxy-3,5-dimethoxybenzoyl*): **O-(*4-Hydroxy-3,5-dimethoxybenzoyl*)*vincamajine***
$C_{31}H_{34}N_2O_7$ M 546.619
Minor alkaloid from roots of *Alstonia angustifolia* (Apocynaceae).

17-Epimer: ***Vincamajinine***
$C_{22}H_{26}N_2O_3$ M 366.459
Alkaloid from aerial parts of *V. major* (Apocynaceae). Mp 257-259°, Mp 274-275°.

10-Hydroxy, O-(*3,4,5-trimethoxybenzoyl*): [57800-05-2]. ***10-Hydroxy-O^{17}-(3,4,5-trimethoxybenzoyl)vincamajine***
$C_{32}H_{36}N_2O_8$ M 576.645
Alkaloid from the aerial parts of *A. lanceolifera* (Apocynaceae). Amorph. $[\alpha]_D$ −43° (c, 1 in $CHCl_3$).

10-Hydroxy, O-(*3,4,5-trimethoxycinnamoyl*): [57808-41-0]. ***10-Hydroxy-O^{17}-(3,4,5-trimethoxycinnamoyl)vincamajine***
$C_{34}H_{38}N_2O_8$ M 602.683
Alkaloid from the aerial parts of *A. lanceolifera* (Apocynaceae). $[\alpha]_D$ −114° (c, 1 in $CHCl_3$).

10-Methoxy: [57800-02-9]. ***10-Methoxyvincamajine***
$C_{23}H_{28}N_2O_4$ M 396.485
Alkaloid from the aerial parts of *A. lanceolifera* and *A. boulindaensis* (Apocynaceae). Amorph. $[\alpha]_D$ 0° (c, 1 in EtOH).

10-Methoxy, O-*Ac:* ***10-Methoxyvincamedine***
$C_{25}H_{30}N_2O_5$ M 438.522
Alkaloid from leaves, fruit and stem bark of *A. sphaerocapitata* (Apocynaceae). $[\alpha]_D$ −9° (c, 1 in $CHCl_3$).

10-Methoxy, O-*Ac*, N^4-*oxide:* ***10-Methoxyvincamedine N(4)-oxide***

$C_{25}H_{30}N_2O_6$ M 454.522
Alkaloid from the leaves, fruit and stem bark of *A. sphaerocapitata* (Apocynaceae). $[\alpha]_D$ −2° (c, 1 in $CHCl_3$).

10-Methoxy, O-(*3,4,5-Trimethoxycinnamoyl*): [57800-04-1]. ***(3,4,5-Trimethoxycinnamoyl)-10-methoxyvincamajine***
$C_{35}H_{40}N_2O_8$ M 616.710
Alkaloid from the aerial parts of *A. lanceolifera* (Apocynaceae). $[\alpha]_D$ −134° (c, 1 in $CHCl_3$).

11-Methoxy: [132242-26-3]. ***11-Methoxyvincamajine***
$C_{23}H_{28}N_2O_4$ M 396.485
Alkaloid from the stem of *Tonduzia pittieri* (*Alstonia pittieri*) (Apocynaceae). $[\alpha]_D$ −14° (c, 0.25 in $CHCl_3$).

11-Methoxy, O-*Ac:* ***11-Methoxyvincamedine***
$C_{25}H_{30}N_2O_5$ M 438.522
Alkaloid from leaves of *Tonduzia pittieri* (*Alstonia pittieri*) (Apocynaceae). $[\alpha]_D$ −7.5° (c, 1 in $CHCl_3$).

11-Methoxy, 17-epimer: [132268-03-2]. ***11-Methoxy-17-epi-vincamajine***
$C_{23}H_{28}N_2O_4$ M 396.485
Alkaloid from the stem bark of *T. pittieri* (*A. pittieri*) (Apocynaceae). $[\alpha]_D$ −12° (c, 0.5 in $CHCl_3$).

19,20-Dihydro, 19ξ-hydroxy: ***19-Hydroxyvincamajine.*** *Dihydro-19-hydroxyvincamajinine*
$C_{22}H_{28}N_2O_4$ M 384.474
Alkaloid from the leaves of *A. macrophylla* (Apocynaceae).

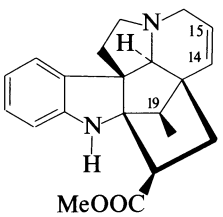
Janot, M.M. *et al*, *C. R. Hebd. Seances Acad. Sci.*, 1956, **243**, 85 (*Vincamedine*)
Trojánek, J. *et al*, *Collect. Czech. Chem. Commun.*, 1962, **27**, 2981 (*isol*)
Crow, W.D. *et al*, *Aust. J. Chem.*, 1970, **23**, 2489 (*isol, pmr, O-3,4,5-Trimethoxycinnamoyl, ir, uv, ms, pmr, struct*)
Hart, N.K. *et al*, *Aust. J. Chem.*, 1972, **25**, 2739 (*isol*)
Aynilian, G.H. *et al*, *J. Nat. Prod.* (*Lloydia*), 1974, **37**, 299 (*isol, uv, ir, ms*)
Lewin, G. *et al*, *Phytochemistry*, 1975, **14**, 2067 (*10-Methoxyvincamajine*)
Chatterjee, A. *et al*, *Tetrahedron Lett.*, 1978, 3879 (*cmr*)
Caron, C. *et al*, *Phytochemistry*, 1984, **23**, 2355 (*10-Methoxyvincamedine*)
Zhukovich, E.N. *et al*, *Khim. Prir. Soedin.*, 1985, **21**, 720; *Chem. Nat. Compd.* (*Engl. Transl.*), 682 (*Vincamajinine*)
Solans, X. *et al*, *Acta Crystallogr., Sect. C*, 1987, **43**, 1981 (*cryst struct, abs config, Vincamedine*)
Ratnayake, C.K. *et al*, *Phytochemistry*, 1987, **26**, 868 (*19-Hydroxyvincamajine*)
Morfaux, A.-M. *et al*, *Phytochemistry*, 1990, **29**, 3345 (*11-Methoxyvincamajine*)
Said, I.M. *et al*, *J. Nat. Prod.* (*Lloydia*), 1992, **55**, 1323 (*O-(4-Hydroxy-3,5-dimethoxybenzoyl)vincamajine*)

Vindolinine V-10024

Updated Entry replacing V-00315

Methyl 6,7-didehydro-2,20-cycloaspidospermidine-3-carboxylate, 9CI

[5980-02-9]



Absolute configuration

$C_{21}H_{24}N_2O_2$ M 336.433
Alkaloid from *Catharanthus roseus* (*Vinca rosea*) and *Melodinus balansae* (Apocynaceae). Mp 214-218°.

B,2HCl: Mp 210-212° dec., Mp 250-252°.

Picrate: Mp 268-272°.

19-Epimer: ***19S-Vindolinine***
$C_{21}H_{24}N_2O_2$ M 336.433
Alkaloid from the leaves of *C. roseus* (Apocynaceae). Cryst. (EtOH). Mp 200°. $[\alpha]_D$ +40° (MeOH). Erroneously descr. as 16-epi-19*S*-vindolinine in the original ref. Isomerises in $CHCl_3$ to Vindolinine.

19-Epimer, N-*oxide:* [88720-99-4]. ***19S-Vindolinine* N-*oxide***
$C_{21}H_{24}N_2O_3$ M 352.432
Alkaloid from *C. roseus* (Apocynaceae). Descr. in the lit. as 16-Epi-19*S*-vindolinine *N*-oxide but this should presumably be revised.

14,15-Dihydro: [17172-16-6]. ***Pseudokopsinine.*** *14,15-Dihydrovindolinine*
$C_{21}H_{26}N_2O_2$ M 338.449
Alkaloid from *V. erecta* epigeal parts (Apocynaceae). Shows hypotensive activity. $[\alpha]_D$ +30.4° (c, 1.51 in MeOH).

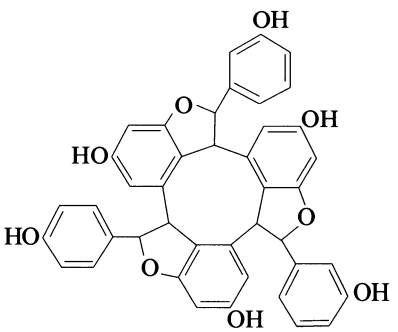
16β-Hydroxy: ***16β-Hydroxy-19R-vindolinine***
$C_{21}H_{24}N_2O_3$ M 352.432
Alkaloid from aerial parts of *Melodinus hemsleyanus* (Apocynaceae). Needles (Me_2CO). Mp 185° dec. $[\alpha]_D^{10}$ −42.9° (c, 0.2 in $CHCl_3$).

19-Epimer, 16β-hydroxy: ***16β-Hydroxy-19S-vindolinine***
$C_{21}H_{24}N_2O_3$ M 352.432
Alkaloid from aerial parts of *M. hemsleyanus* (Apocynaceae). Prisms (Me_2CO). Mp 220° dec. $[\alpha]_D^{10}$ −87.5° (c, 0.03 in $CHCl_3$).

Janot, M.M. *et al*, *Bull. Soc. Chim. Fr.*, 1959, 891 (*isol*)
Djerassi, C. *et al*, *Helv. Chim. Acta*, 1964, **47**, 827 (*ms, struct*)
Ahond, A. *et al*, *J. Am. Chem. Soc.*, 1974, **96**, 633 (*cmr, struct*)
Nasyrov, S.-M. *et al*, *J. Chem. Soc., Chem. Commun.*, 1974, 979 (*cryst struct, Pseudokopsinine*)
Rasonaivo, P. *et al*, *Tetrahedron Lett.*, 1974, 3669 (*abs config*)
Riche, C. *et al*, *Acta Crystallogr., Sect. B*, 1976, **32**, 1975 (*cryst struct*)
Nasyrov, S.-M. *et al*, *Khim. Prir. Soedin.*, 1976, 197; *Chem. Nat. Compd.* (*Engl. Transl.*), 176 (*abs config, Pseudokopsinine*)
Atta-ur-Rahman, *et al*, *Phytochemistry*, 1983, **22**, 1021 (*epimer*)
Atta-ur-Rahman, *et al*, *Planta Med.*, 1983, **49**, 124 (*diepimer oxide*)
Atta-ur-Rahman, *et al*, *Z. Naturforsch., B*, 1986, **41**, 386 (*epimer*)
Guo, L.-W. *et al*, *Phytochemistry*, 1993, **34**, 563 (*16β-Hydroxy-19R-vindolinine, 16β-Hydroxy-19S-vindolinine*)

α-Viniferin V-10025

[62218-13-7]

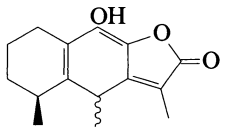


$C_{42}H_{30}O_9$ M 678.694
Isol. from leaves of *Vitis vinifera*. λ_{max} 225 sh (log ε 4.68), 281 sh (3.92), 286 (4.00) and 293 sh nm (3.93).

Langcake, P. *et al*, *Experientia*, 1977, **33**, 151 (*isol*)
Langcake, P. *et al*, *Phytochemistry*, 1977, **16**, 1193 (*biosynth*)
Pryce, R.J. *et al*, *Phytochemistry*, 1977, **16**, 1452 (*isol*)

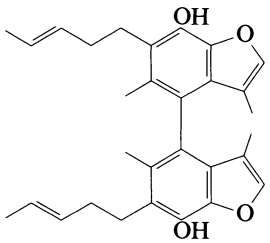
Virgauride V-10026

[140245-68-7]



$C_{15}H_{18}O_3$ M 246.305
Constit. of *Ligularia virgaurea*. Plates.
[140245-65-4]
Chen, H.M. *et al*, *Chin. Chem. Lett.*, 1991, **2**, 847 (*isol, pmr, cmr*)

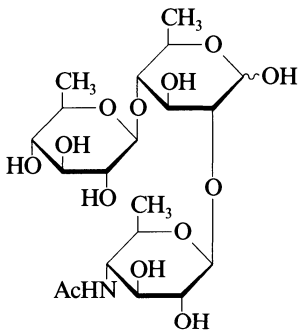
Virgaurin A V-10027



$C_{30}H_{34}O_4$ M 458.596
Constit. of *Ligularia virgaurea*. Orange powder. Mp 122° dec. $[\alpha]_D^{24}$ +3.5° (c, 0.42 in $CHCl_3$).
Chen, H.M. *et al*, *Chin. Chem. Lett.*, 1991, **2**, 847 (*isol, pmr, cmr*)

Viridotriose B V-10028

4-(Acetylamino)-4,6-dideoxy-β-D-glucopyranosyl-(1→2)[6-deoxy-β-D-glucopyranosyl-(1→4)]-6-deoxy-D-glucose, 9CI
[73793-36-9]

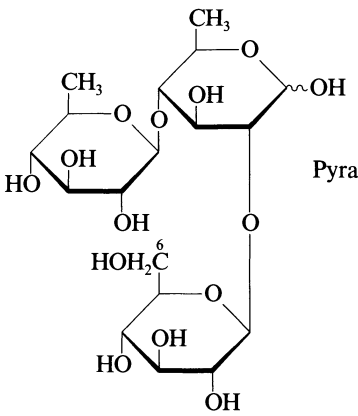


Pyranose-*form*

$C_{20}H_{35}NO_{13}$ M 497.495
Component of Sporaviridin, S-01168. Powder + H_2O. Mp 216-219° dec. $[\alpha]_D^{23}$ +4.7° (c, 0.3 in MeOH).
Harada, K. *et al*, *Tetrahedron Lett.*, 1982, **23**, 2481 (*ms*)
Harada, K. *et al*, *Chem. Pharm. Bull.*, 1983, **31**, 3829, 3844 (*struct, cmr*)

Viridotriose C V-10029

6-Deoxy-β-D-glucopyranosyl-(1→4)-[β-D-glucopyranosyl-(1→2)]-6-deoxy-D-glucose, 9CI
[73942-74-2]

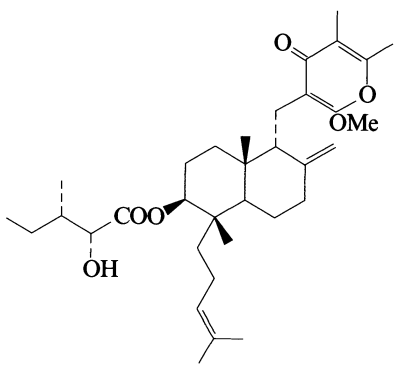


Pyranose-*form*

$C_{18}H_{32}O_{14}$ M 472.442
Component of Sporaviridin, S-01168. Powder $+H_2O$. Mp 168-169° (dec.). $[\alpha]_D^{23}$ +12.3° (c, 0.3 in MeOH).
6-Deoxy: [73938-83-7]. ***Viridotriose A***
$C_{18}H_{32}O_{13}$ M 456.443
Component of Sporaviridin, S-01168. Powder + H_2O. Mp 235-238° dec. $[\alpha]_D^{23}$ +11.3° (c, 0.3 in MeOH).
Harada, K. *et al*, *Tetrahedron Lett.*, 1982, **23**, 2481 (*ms*)
Harada, K. *et al*, *Chem. Pharm. Bull.*, 1983, **31**, 3829, 3844 (*struct, cmr*)

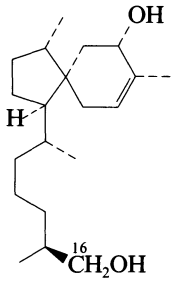
Viridoxin A V-10030

[145940-93-8]



$C_{34}H_{52}O_6$ M 556.781
Constit. of *Metarhizium flavoviride*. Needles (MeCN aq.). Mp 65-66°. $[\alpha]_D^{21}$ −36.5° (c, 1.51 in $CHCl_3$).
O-*Deacyl*, O-(2R-*hydroxy-4-methylpentanoyl*): [145940-94-9]. ***Viridoxin B***
$C_{34}H_{52}O_6$ M 556.781
Constit. of *M. flavoviride*. Rods (MeCN aq.). Mp 105-106°. $[\alpha]_D^{21}$ −31.7° (c, 0.65 in $CHCl_3$).
Gupta, S. *et al*, *J. Org. Chem.*, 1993, **58**, 1062 (*isol, pmr, cmr, cryst struct*)

3-Viscidene-5,16-diol V-10031



$C_{20}H_{36}O_2$ M 308.503
Constit. of *Eremophila verticillata*. Cryst. Mp 84-86°. $[\alpha]_D$ +75° (c, 3.5 in $CHCl_3$).

16-Ac:
$C_{22}H_{38}O_3$ M 350.540
Constit. of *E. verticillata*. Oil. $Bp_{0.9}$ 188-190° (bath). $[\alpha]_D$ +52.9° (c, 0.2 in $CHCl_3$).

5-Ketone: ***16-Hydroxy-3-visciden-5-one***
$C_{20}H_{34}O_2$ M 306.487
Constit. of *E. verticillata*. Oil. $Bp_{0.9}$ 190-195° (bath). $[\alpha]_D$ +67.7° (c, 5.2 in $CHCl_3$).

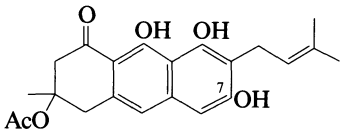
16-Carboxylic acid: ***5-Hydroxy-3-visciden-16-oic acid***
$C_{20}H_{34}O_3$ M 322.487
Constit. of *E. verticillata*. Oil. $[\alpha]_D$ +67° (c, 0.4 in $CHCl_3$).

5-Ketone, 16-carboxylic acid: ***5-Oxo-3-visciden-16-oic acid***
$C_{20}H_{32}O_3$ M 320.471
Constit. of *E. verticillata*. Oil. $[\alpha]_D$ +76.2° (c, 2.4 in $CHCl_3$).

Forster, P.G. *et al*, *Phytochemistry*, 1993, **32**, 1225 (*isol, pmr, cmr*)

Vismione C V-10032

Updated Entry replacing V-00397
[87617-83-2]



$C_{22}H_{24}O_6$ M 384.428
Constit. of *Psorospermum febrifugum*. Orange-brown cryst. (CH_2Cl_2/heptane). Mp 100-105° dec.

7-Me ether, O-*de-Ac:* [87605-73-0]. ***Vismione E***
$C_{21}H_{24}O_5$ M 356.418
Constit. of *P. febrifugum*. Red-brown cryst. (CH_2Cl_2/heptane). Mp 161-164° dec.

7-Me ether, *3*-O-*De-Ac*, *3*-O-(*3-methyl-2-butenyl*): [120090-95-1]. ***O-Prenylvismione E***
$C_{26}H_{32}O_5$ M 424.536
Constit. of *P. glaberrimum*. Oil.

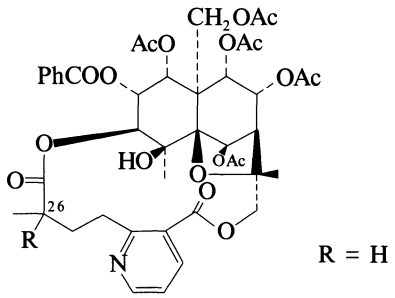
Botta, B. *et al*, *Phytochemistry*, 1983, **22**, 539.
Botta, B. *et al*, *Tetrahedron*, 1988, **44**, 7193 (*O-Prenylvismione E*)

W

Wilforine† W-10001

Updated Entry replacing W-00035

[11088-09-8]



R = H

$C_{43}H_{49}NO_{18}$ M 867.856

Alkaloid from *Tripterygium wilfordii* and *Maytenus senegalensis* (Celestraceae). Shows insecticidal properties. Plates (Me_2CO/MeOH). Mp 169-170°. $[\alpha]_D^{25}$ +30° (Me_2CO).

De-Ac: [37239-46-6]. ***Wilforzine***

$C_{41}H_{47}NO_{17}$ M 825.819

Alkaloid from the roots of *T. wilfordii* (Celestraceae). Needles (Me_2CO/MeOH). Mp 177-178°. $[\alpha]_D^{25}$ +6° (Me_2CO). Prob. the 2- or 6-deacetyl deriv. of Wilforine. Has been shown not to be an artifact.

O^2-*Debenzoyl*, O^2-(*3-pyridinecarbonyl*): [112899-84-0]. ***Wilfornine***

$C_{42}H_{48}N_2O_{18}$ M 868.844

Alkaloid from *T. wilfordii* (Celastraceae). Immunosuppressant. Mp 177-178°.

O^2-*Debenzoyl*, O^2-*furoyl:* [37239-47-7].

$C_{41}H_{47}NO_{19}$ M 857.818

Alkaloid from the roots of *T. hypoglaucum* (Celastraceae). Shows insecticidal props. Plates (Me_2CO/MeOH). Mp 211°. $[\alpha]_D^{25}$ +25° (Me_2CO).

Beroza, M., *J. Am. Chem. Soc.*, 1951, **73**, 3656; 1952, **74**, 1585; 1953, **75**, 2136 (*isol, uv, Wilforzine*)

Tin-Wa, M. *et al*, *J. Nat. Prod.* (*Lloydia*), 1971, **34**, 79 (*isol*)

Zhang, Z. *et al*, *Jiegou Huaxue*, 1986, **5**, 83; *CA*, **107**, 237078x.

Deng, F. *et al*, *Zhiwu Xuebao*, 1987, **29**, 523; *CA*, **108**, 87738s (*Wilfornine*)

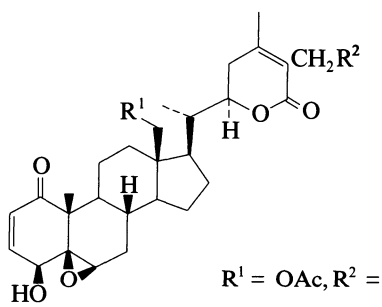
Ya, L. *et al*, *Can. J. Chem.*, 1990, **68**, 371 (*Wilfornine*)

Withacnistin W-10002

Updated Entry replacing W-00044

18-Acetoxy-5,6β-epoxy-4β-hydroxy-1-oxo-5β-20S,22R-witha-2,24-dienolide

[21902-99-8]



R^1 = OAc, R^2 = H

$C_{30}H_{40}O_7$ M 512.642

Constit. of leaves of *Acnistus arborescens*. Amorph. Mp 130-135°. $[\alpha]_D^{27}$ +123° (c, 1.21 in $CHCl_3$).

Ac: Cryst. (Me_2CO/cyclohexane). Mp 131-132°.

2,3-Dihydro, 3-ethoxy: [21903-04-8]. *3-Ethoxy-2,3-dihydrowithacnistin*

Isol. from extracts of *A. arborescens*, probably artifact. Cryst. Mp 134-136°. $[\alpha]_D^{24}$ +29° (c, 0.46 in $CHCl_3$).

24β,25α-Dihydro: ***24,25-Dihydrowithacnistin***

$C_{30}H_{42}O_7$ M 514.658

Constit. of *Iochroma coccineum*. Cryst. Mp 106-112°.

27-Hydroxy: ***27-Hydroxywithacnistin***

$C_{30}H_{40}O_8$ M 528.641

Constit. of *I. coccineum*. Cryst. Mp 134-138°.

16α-Hydroxy: ***16α-Hydroxywithacnistin***

$C_{30}H_{40}O_8$ M 528.641

Constit. of *I. coccineum*. Cryst. Mp 153-157°.

2,3-Dihydro, 3ξ-hydroxy: ***2,3-Dihydro-3-hydroxywithacnistin***

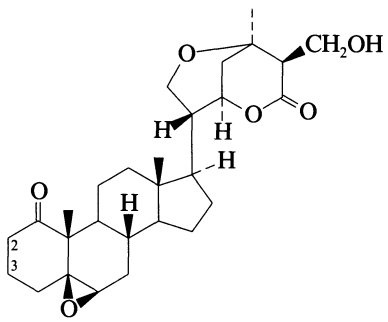
$C_{30}H_{42}O_8$ M 530.657

Constit. of *I. coccineum*. Cryst. Mp 148-154°.

Kupchan, S.M. *et al*, *J. Org. Chem.*, 1969, **34**, 3858 (*isol*)

Alfonso, D. *et al*, *Phytochemistry*, 1993, **34**, 517 (*isol, pmr, cmr, cryst struct*)

Withafastuosin A W-10003



$C_{28}H_{40}O_6$ M 472.620

Constit. of *Datura fastuosa*.

2,3-Didehydro: ***Withafastuosin B***

$C_{28}H_{38}O_6$ M 470.605

Constit. of *D. fastuosa*.

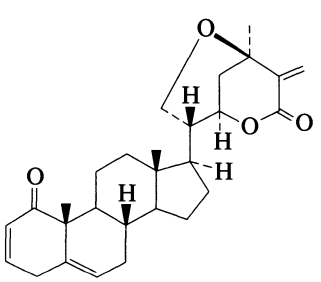
Manickam, M. *et al*, *Phytochemistry*, 1993, **34**, 868 (*isol, pmr, cmr*)

Withametelin W-10004

Updated Entry replacing W-00049

21,24-Epoxy-1-oxowitha-2,5,25-trienolide. Daturilin

[113430-43-6]



$C_{28}H_{36}O_4$ M 436.590
Constit. of *Datura metel*. Needles (EtOAc). Mp 210°. $[\alpha]_D$ −64.4° (c, 0.45 in $CHCl_3$). Some confusion exists in lit. over configs. at C-20 and C-22 posns.

Δ^3-*Isomer:* [123522-98-5]. ***Isowithametelin***
$C_{28}H_{36}O_4$ M 436.590
Isol. from leaves of *D. metel*. Mp 280°. $[\alpha]_D$ −77.7° (c, 0.26 in $CHCl_3$).

5β,6β-Epoxide: [123523-03-5]. ***Withametelin F***
$C_{28}H_{36}O_5$ M 452.589
Constit. of *D. metel*. Cryst. Mp 242-245°. $[\alpha]_D$ −27.6° (c, 0.29 in MeOH).

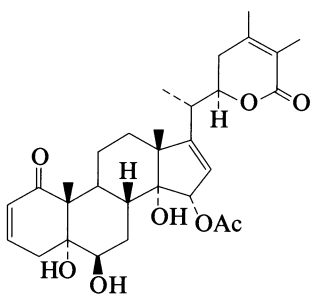
5,6-Dihydro, 5α,6β-dihydroxy: [151344-95-5]. ***Withametelin G***
$C_{28}H_{38}O_6$ M 470.605
Constit. of *D. metel*. Cryst. Mp 159-161°. $[\alpha]_D$ −14.6° (c, 0.15 in MeOH).

[111950-78-8]

Siddiqui, S. *et al*, *Phytochemistry*, 1987, **26**, 2641 (*isol*)
Sinha, S.C. *et al*, *Tetrahedron*, 1989, **45**, 2165 (*isol*)
Jahromi, M.A.F. *et al*, *J. Chem. Res., Synop.*, 1993, 234 (*Withametelins F and G*)

Withaminimin W-10005

Updated Entry replacing W-00051
15α-Acetoxy-5,6β,14-trihydroxy-1-oxo-5α,20S,22R-witha-2,16,24-trienolide



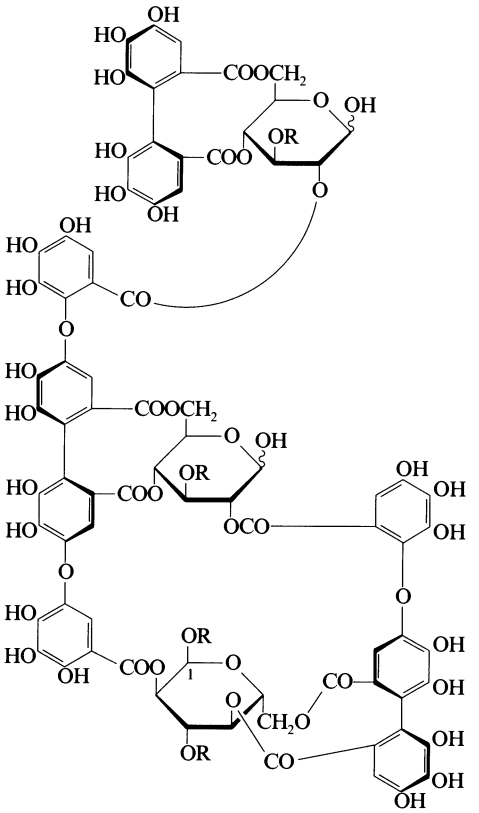
$C_{30}H_{40}O_8$ M 528.641
Constit. of *Physalis minima*. Amorph. powder. Mp 208°.

16β,17β-Epoxide: ***Physagulin F***
$C_{30}H_{40}O_9$ M 544.641
Constit. of *P. angulata*. Powder. $[\alpha]_D$ +70.7° (c, 1.1 in MeOH).

Gottlieb, H.E. *et al*, *Phytochemistry*, 1987, **26**, 1801.
Shingu, K. *et al*, *Chem. Pharm. Bull.*, 1992, **40**, 2448.

Woodfordin D W-10006

[137422-97-0]



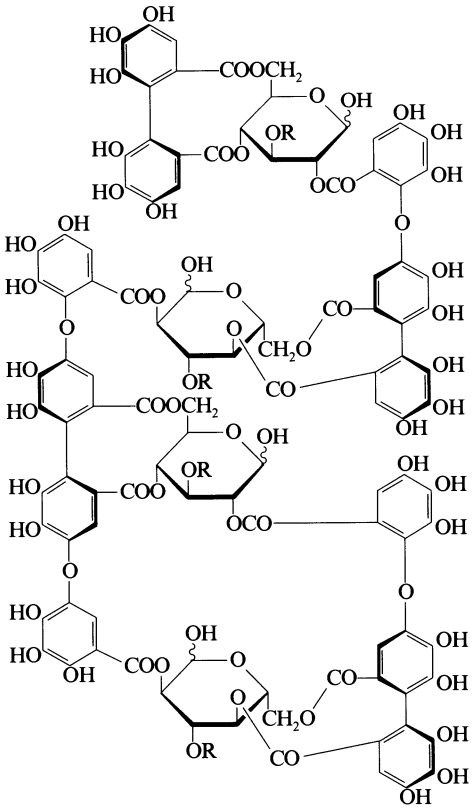
R = 3,4,5-Trihydroxybenzoyl

$C_{109}H_{76}O_{70}$ M 2505.757
Exists as an equilibrated mixt. of α- and β-anomers. A macrocyclic ellagitannin from the flowers of *Woodfordia fruticosa*. Exhibits a potent *in vivo* antitumour activity. Light brown amorph. powder + $21H_2O$. $[\alpha]_D^{20}$ +105° (c, 1.0 in Me_2CO).

O^1-*Degalloyl:* [137422-98-1]. ***Oenothein A***
$C_{102}H_{72}O_{66}$ M 2353.651
Tannin isol. from flowers of *W. fruticosa* and leaves of *Oenanthera biennis*. Shows potent *in vivo* antitumour activity. Light-brown amorph. powder + $23H_2O$. $[\alpha]_D^{20}$ +113° (c, 1.0 in MeOH).

Yoshida, T. *et al*, *Chem. Pharm. Bull.*, 1991, **39**, 1157 (*uv, cd, pmr, struct*)

Woodfordin F W-10007



R = 3,4,5-Trihydroxybenzoyl

$C_{136}H_{96}O_{88}$ M 3138.202

Exists as an equilibrated mixt. of α- and β-anomers. Tetrameric ellagitannin from *Woodfordia fruticosa*. Off-white amorph. powder + $30H_2O$. $[\alpha]_D^{20}$ +83° (c, 1.0 in Me_2CO).

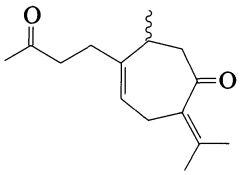
Yoshido, T. *et al*, *Chem. Pharm. Bull.*, 1992, **40**, 2023 (*uv*, *cd*, *pmr*)

X

1(5),7(11)-Xanthadiene-3,8-dione X-10001

Curcumadione

[116425-36-6]



$C_{15}H_{22}O_2$ M 234.338

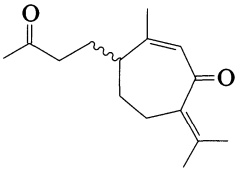
Constit. of *Curcuma aromatica*. Oil.

Kuroyanagi, M. *et al*, *Chem. Pharm. Bull.*, 1990, **38**, 55 (*isol, pmr, cmr*)

7(11),9-Xanthadiene-3,8-dione X-10002

Isocurcumadione

[116446-55-0]



$C_{15}H_{22}O_2$ M 234.338

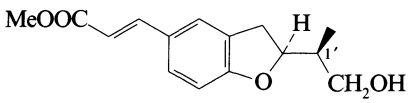
Constit. of *Curcuma aromatica*. Oil.

Kuroyanagi, M. *et al*, *Chem. Pharm. Bull.*, 1990, **38**, 55 (*isol, pmr, cmr*)

Xanthochroa coumarate X-10003

Methyl 3-[2,3-dihydro-2-(2-hydroxy-1-methylethyl)-5-benzofuranyl]-2-propenoate, 9CI. l-*Cyclocapillarol*

[130252-49-2]



$C_{15}H_{18}O_4$ M 262.305

Constit. of *Artemisia monosperma* and *A. xanthochroa*. Gum.

1′-Epimer: [130252-48-1]. ***Epixanthochroa coumarate.*** d-*Cyclocapillarol*

$C_{15}H_{18}O_4$ M 262.305

Constit. of *A. monosperma* and *A. xanthochroa*. Gum.

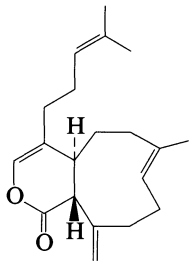
Abdel-Mogib, M. *et al*, *Phytochemistry*, 1990, **29**, 2728 (*isol*)

Jakupovic, J. *et al*, *Phytochemistry*, 1990, **29**, 3683 (*isol*)

1(19),6,10(17),13-Xenicatetraen-18,17-olide X-10004

Acalycigorgin C

[147318-41-0]



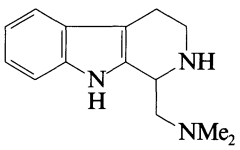
$C_{20}H_{28}O_2$ M 300.440

Constit. of an *Acalycigorgia* sp. Oil. $[\alpha]_D^{21}$ +40.3° (c, 0.28 in $CHCl_3$).

Ochi, M. *et al*, *Heterocycles*, 1993, **36**, 41 (*isol, pmr, cmr*)

Xestoamine X-10005

[145237-04-3]

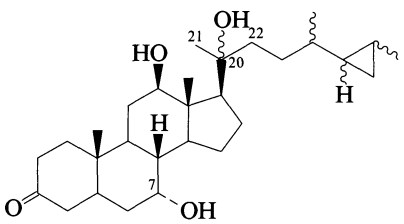


$C_{14}H_{19}N_3$ M 229.324

Alkaloid from the New Caledonian sponge *Xestospongia* sp. Amorph. Opt. inactive.

Quirion, J.-C. *et al*, *J. Nat. Prod.* (*Lloydia*), 1992, **55**, 1505 (*isol, ir, pmr, cmr, ms, struct*)

Xestokerol B X-10006



$C_{29}H_{48}O_4$ M 460.696

Constit. of a *Xestospongia* sp. Amorph. powder. Mp 218-221°. $[\alpha]_D^{21}$ −5.2° (c, 1.1 in MeOH).

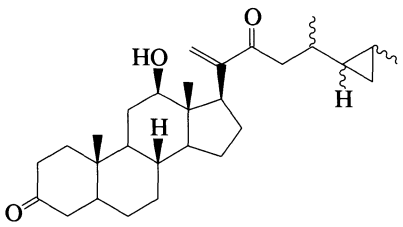
7-Deoxy, 21,22ξ-dihydroxy: ***Xestokerol A***

$C_{29}H_{48}O_5$ M 476.695

Constit. of a *X.* sp. Oil. $[\alpha]_D^{21}$ +30.0° (c, 1.1 in MeOH).

Kobayashi, J. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 1350 (*isol, pmr, cmr*)

Xestokerol C X-10007

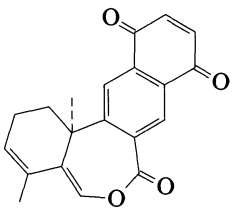


$C_{29}H_{44}O_3$ M 440.665
Constit. of a *Xestospongia* sp. Amorph. powder. Mp 137-140°. $[\alpha]_D^{27}$ −43.6° (c, 0.6 in MeOH).

Kobayashi, J. *et al*, *J. Nat. Prod.* (*Lloydia*), 1993, **56**, 1350 (*isol, pmr, cmr*)

Xestoquinolide A X-10008

[151171-18-5]

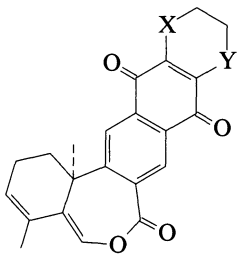


$C_{20}H_{16}O_4$ M 320.344
Constit. of *Xestospongia* cf. *carbonaria*. Yellow powder. $[\alpha]_D$ +32°.

Alvi, K.A. *et al*, *J. Org. Chem.*, 1993, **58**, 4871 (*isol, pmr, cmr*)

Xestoquinolide B X-10009

[151247-69-7]



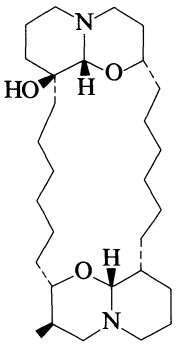
X,Y = −NH−,−SO_2−

$C_{22}H_{19}NO_6S$ M 425.461
2 Possible isomeric structs. not yet distinguished. Constit. of *Xestospongia* cf. *carbonaria*. Yellow powder.

Alvi, K.A. *et al*, *J. Org. Chem.*, 1993, **58**, 4871 (*isol, pmr, cmr*)

Xestospongin B X-10010

Updated Entry replacing X-00088
[88840-01-1]



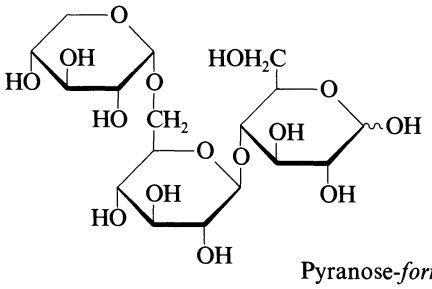
$C_{29}H_{52}N_2O_3$ M 476.741
Isol. from the marine sponge *Xestospongia exigua*. Shows vasodilator props. Cryst. (Et_2O). Mp 179-181°. $[\alpha]_D$ +7.10° (c, 0.91 in $CHCl_3$).

Demethyl: ***Demethylxestospongin B***
$C_{28}H_{50}N_2O_3$ M 462.715
Alkaloid from a New Caledonian sponge *Xestospongia* sp. Amorph. $[\alpha]_D^{20}$ +6° (c, 0.8 in $CHCl_3$).

Nakagawa, M. *et al*, *Tetrahedron Lett.*, 1984, **25**, 3227 (*ir, pmr, cmr, struct*)
Quirion, J.-C. *et al*, *J. Nat. Prod.* (*Lloydia*), 1992, **55**, 1505 (*Demethylxestospongin B*)

α-D-Xylopyranosyl-(1→6)-β-D-glucopyranosyl-(1→4)-D-glucose, 9CI X-10011

[69637-98-5]



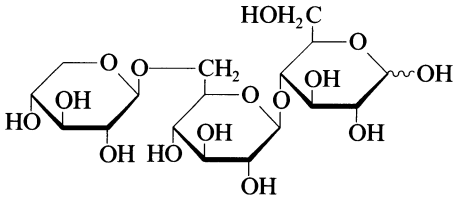
Pyranose-*form*

$C_{17}H_{30}O_{15}$ M 474.415
Isol. from the enzymatic hydrolysates of tamarind polysaccharide, Jack pine (*Pinus banksiana*) glucomannan, leaves of *Nicotiana tabacum*, and other polysaccharide sources. $[\alpha]_D$ +74° (c, 0.5 in H_2O).

Mori, M. *et al*, *Agric. Biol. Chem.*, 1979, **43**, 145 (*isol*)
Kato, Y. *et al*, *Carbohydr. Res.*, 1982, **109**, 233.
Watanabe, T. *et al*, *Carbohydr. Res.*, 1984, **129**, 229.
Zong, N. *et al*, *Agric. Biol. Chem.*, 1989, **53**, 2129 (*isol*)
York, W.S. *et al*, *Carbohydr. Res.*, 1990, **200**, 9 (*ms, cmr*)

β-D-Xylopyranosyl-(1→6)-β-D-glucopyranosyl-(1→4)-D-glucose, 9CI X-10012

[88123-45-9]



Pyranose-*form*

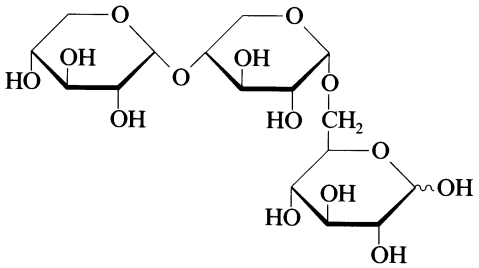
$C_{17}H_{30}O_{15}$ M 474.415

Trans glucosylation product, formed by yeast *Cryptococcus albidus*. Cryst. (MeOH). Mp 225-226°. $[\alpha]_D^{20}$ −3° (c, 1.0 in H_2O).

Biely, P. *et al*, *Carbohydr. Res.*, 1983, **123**, 97 (*synth*, *pmr*)

α-D-Xylopyranosyl-(1→4)-α-D-xylopyranosyl-(1→6)-D-glucose, 9CI X-10013

[125583-30-4]



$C_{16}H_{28}O_{14}$ M 444.389

Transxylosylation product, formed by the action of Bacillus α-D-xylosidase on Isoprimeverose, I-00670. $[\alpha]_D$ +143.5° (c, 0.29 in H_2O).

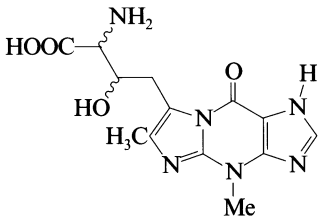
Zong, N. *et al*, *Agric. Biol. Chem.*, 1989, **53**, 3329 (*synth*, *pmr*)

Y

Ye-base Y-10001

α-*Amino-4,9-dihydro-β-hydroxy-4,6-dimethyl-9-oxo-1H-imidazo[1,2-a]purine-7-butanoic acid, 9CI*

[70363-41-6]



$C_{13}H_{16}N_6O_4$ M 320.307

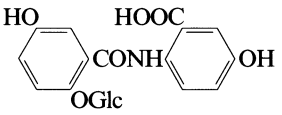
Isol. from transfer RNA of Ehrlich ascites cells.

Kuchino, Y. *et al*, *Biochim. Biophys. Acta*, 1979, **565**, 215 (*isol*)

Yokonoside Y-10002

2-[[2-(β-D-Glucopyranosyloxy)-5-hydroxybenzoyl]amino]-5-hydroxybenzoic acid, 9CI

[53823-12-4]



$C_{20}H_{21}NO_{11}$ M 451.386

Isol. from the roots of *Aconitum japonicum*. Powder. Mp 205-210°.

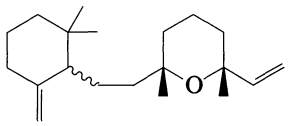
[61377-88-6]

Kosuge, T. *et al*, *Chem. Pharm. Bull.*, 1976, **24**, 176 (*isol*)
Naruta, S. *et al*, *Yakugaku Zasshi*, 1976, **96**, 945 (*synth*)

Z

Zaatirin Z-10001

[145458-10-2]

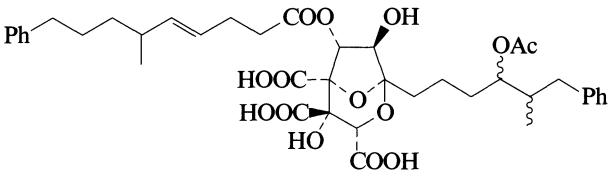


$C_{20}H_{34}O$ M 290.488
Constit. of *Chelonaplysilla erecta*. Oil.

Rudi, A. *et al*, *J. Nat. Prod.* (*Lloydia*), 1992, **55**, 1408 (*isol, pmr, cmr*)

Zaragozic acid C Z-10002

[137681-56-2]



$C_{40}H_{50}O_{14}$ M 754.827
Metab. of *Leptodontium elatius*. Inhibitor of squalene synthase. Powder. $[\alpha]_D^{20}$ +9.6° (c, 0.29 on EtOH).

Dufresne, C. *et al*, *Tetrahedron*, 1992, **48**, 10221 (*isol, pmr, cmr*)

Zervamicin ZL Z-10003

1-(N-Acetyl-L-leucine-3-L-glutamine)zervamicin IC, 9CI

[135995-68-5]

Ac-Leu-Ile-Gln-D-Iva-Ile-Thr-Aib-Leu-Aib-Hyp-Gln-Aib-Hyp-Aib-Pro-Ph-OH

$C_{85}H_{140}N_{18}O_{22}$ M 1766.148
Oligopeptide antibiotic. Isol. from *Emericellopsis salmosynnemata*. Shows membrane ion-channel forming activity.

Karle, I.L. *et al*, *Proc. Natl. Acad. Sci. U.S.A.*, 1991, **88**, 5307 (*isol, cryst struct*)

Name Index

This Index becomes invalid after publication of the Second Supplement.

The Name Index lists in alphabetical order all names and synonyms contained in the First Supplement.

Each index term refers the user to a Dictionary Number consisting of a single letter of the alphabet followed by five digits. The letter is the first letter of the relevant Entry Name.

The first digit of the Dictionary Number (printed in bold type) indicates the number of the Supplement in which the entry is printed.

A Dictionary Number which follows immediately upon an index term means that the term is itself used as the Entry Name.

A Dictionary Number which is preceded by the word '*see*' means that the term is a synonym to an Entry Name.

A Dictionary Number which is preceded by the word '*in*' means that the term is embedded within an Entry, usually as a synonym to a particular stereoisomeric form or to a derivative.

The symbol ▷ preceding an index term indicates that the Dictionary Entry contains information on toxic or hazardous properties of the compound.

The symbol † following an index term indicates that the name is known to the editors as being a duplicate and has been assigned to two or more different compounds. For further details refer to DNP Volume 1, page xiv.

Name Index

Molecular Formula Index

This Index becomes invalid after publication of the Second Supplement.

The Molecular Formula Index lists the molecular formulae of all compounds in the First Supplement whether they occur as main Entry compounds or as derivatives.

Where a molecular formula applies to a compound listed as a derivative the Dictionary Number is prefixed by the word '*in*'.

The symbol ▷ preceding an index term indicates the Dictionary Entry contains information on toxic or hazardous properties of the compound.

The symbol † refers to a name which is known to be duplicated.

Molecular Formula Index

$C_6H_5NO_4$
1*H*-Pyrrole-2,5-dicarboxylic acid, P-10179

$C_6H_6O_3$
▷ 1,2,4-Benzenetriol, B-10013
▷ 2-Furancarboxylic acid; Me ester, *in* F-10028

$C_6H_6O_5$
2-Methylene-4-oxopentanedioic acid, M-10054
2-Oxo-4-methylenepentanedioic acid, O-10059

$C_6H_7NO_4$
2-Oxo-4-methylenepentanedioic acid; 5-Amide, *in* O-10059

$C_6H_8Cl_2O_2$
Hexanedioic acid; Dichloride, *in* H-10060

$C_6H_8N_2$
▷ 1,4-Dicyanobutane, *in* H-10060

$C_6H_8O_3$
5,6-Dihydro-4-hydroxy-6-methyl-2*H*-pyran-2-one, D-10097
3-Hydroxy-4,5-dimethyl-2(5*H*)-furanone, H-10111

$C_6H_8O_5$
2-Methyl-4-oxopentanedioic acid, M-10067

$C_6H_8O_6$
Glucurolactone, G-10088

C_6H_8S
▷ 2,4-Dimethylthiophene, D-10287

$C_6H_9NO_6$
Glucurolactone; Oxime, *in* G-10088

$C_6H_{10}O$
▷ 2,4-Hexadien-1-ol, H-10046

$C_6H_{10}O_2$
3-Butenoic acid; Et ester, *in* B-10052
4-Ethyldihydro-2(3*H*)-furanone, E-10199

$C_6H_{10}O_3$
3,4-Dihydro-2-methyl-2*H*-pyran-3,4-diol, D-10098
3-Oxopropanoic acid; Isopropyl ester, *in* O-10061

$C_6H_{10}O_4$
▷ Hexanedioic acid, H-10060

$C_6H_{11}ClN_4O$
2-Amino-α-(2-amino-1-chloroethyl)-1*H*-imidazole-4-methanol, A-10056

$C_6H_{11}NO$
4-Piperidinone; *N*-Me, *in* P-10119

$C_6H_{11}NO_2$
▷ Morpholine; *N*-Ac, *in* M-10091

$C_6H_{11}NO_3$
Adipamic acid, *in* H-10060

$C_6H_{12}N_2O_2$
2,6-Diamino-4-hexenoic acid, D-10046
▷ Hexanediamide, *in* H-10060

$C_6H_{12}N_2O_3$
2,6-Diamino-4-oxohexanoic acid, D-10047

$C_6H_{12}O_5$
6-Deoxyaltrose, D-10037
5-(Hydroxymethyl)-1,2,3,4-cyclopentanetetrol, H-10182

$C_6H_{13}AsO_3$
(2-Carboxy-2-hydroxyethyl)trimethylarsonium hydroxide inner salt, C-10023

$C_6H_{13}NO$
4-Amino-4-methyl-2-pentanone, A-10071
▷ Morpholine; *N*-Et, *in* M-10091

$C_6H_{14}N_2O$
4-Amino-4-methyl-2-pentanone; Oxime, *in* A-10071

$C_6H_{14}N_2O_2$
Ornithine; N^{δ}-Me, *in* O-10049

$C_6H_{14}O_5$
Rhamnitol, R-10020

$C_6H_{16}N_2$
1,4-Butanediamine; *N*,*N*′-Di-Me, *in* B-10051
1,4-Butanediamine; *N*-Et, *in* B-10051

$C_7H_6O_3$
2,3-Dihydroxybenzaldehyde, D-10108
2,4-Dihydroxybenzaldehyde, D-10109

$C_7H_6O_4$
▷ 3,5-Dihydroxybenzoic acid, D-10110

$C_7H_6O_7$
Pentahydroxybenzoic acid, P-10039

$C_7H_7NO_3$
3,5-Dihydroxybenzoic acid; Amide, *in* D-10110
Resorcylaldoxime, *in* D-10109

$C_7H_7NO_4$
1*H*-Pyrrole-2,5-dicarboxylic acid; Mono-Me ester, *in* P-10179

$C_7H_8O_3$
2,3-Dimethoxy-2,4-cyclopentadien-1-one, *in* D-10130
▷ 2-Furancarboxylic acid; Et ester, *in* F-10028
2-Methoxy-1,4-benzenediol, *in* B-10013
4-Methoxy-1,3-benzenediol, *in* B-10013
2-Methyl-1,3,5-benzenetriol, M-10043

$C_7H_{10}Cl_2O_2$
Heptanedioic acid; Dichloride, *in* H-10027

$C_7H_{10}N_2$
▷ 1,5-Dicyanopentane, *in* H-10027

$C_7H_{10}O$
3-Methyl-2-cyclohexen-1-one, M-10050

$C_7H_{10}O_3$
5,6-Dihydro-4-methoxy-6-methyl-2*H*-pyran-2-one, *in* D-10097

$C_7H_{10}O_4$
Ethyl 3-acetoxyacrylate, *in* O-10061

$C_7H_{10}O_6$
Methyl β-D-furanosidurono-6,3-lactone, *in* G-10088
Methyl α-D-glucofuranosidurono-6,3-lactone, *in* G-10088

$C_7H_{11}NO$
1-Acetyl-1,2,3,4-tetrahydropyridine, *in* T-10031
3-Methyl-2-cyclohexen-1-one; Oxime, *in* M-10050

$C_7H_{11}NO_2$
4-Piperidinone; *N*-Ac, *in* P-10119

$C_7H_{12}N_2O_5$
N^{γ}-Glutamylglycine, G-10094

$C_7H_{12}O$
4-Methyl-4-hexen-3-one, M-10063

$C_7H_{12}O_3$
3-Oxopropanoic acid; *tert*-Butyl ester, *in* O-10061

$C_7H_{12}O_4$
▷ Heptanedioic acid, H-10027
Hexanedioic acid; Me ester, *in* H-10060

$C_7H_{12}O_5$
1-(Hydroxymethyl)-5-cyclohexene-1,2,3,4-tetrol, H-10180
5-(Hydroxymethyl)-5-cyclohexene-1,2,3,4-tetrol, H-10181

$C_7H_{13}NO_4$
4-Ethylglutamic acid, E-10201

$C_7H_{14}N_2O_3$
Acetylornithine, *in* O-10049
Ornithine; N^{α}-Ac, *in* O-10049

$C_7H_{14}O$
4-Methyl-3-hexanone, M-10062

$C_7H_{14}O_4$
2,2-Diethoxypropanoic acid, *in* P-10180

$C_7H_{14}O_5$
Salpantiol, *in* H-10182

$C_7H_{15}NO_3$
2,2-Diethoxypropanamide, *in* P-10180

$C_7H_{16}N_2O_2$
Emeriamine, *in* D-10044

$C_8H_6O_4$
5,6-Dihydroxy-1(3*H*)-isobenzofuranone, D-10182

$C_8H_7ClO_2$
3-Methoxybenzoic acid; Chloride, *in* M-10038

C_8H_7NO
1-Cyano-3-methoxybenzene, *in* M-10038
▷ 4-Hydroxybenzeneacetonitrile, *in* H-10215

$C_8H_7NO_2$
2-Hydroxy-2-(3-hydroxyphenyl)acetic acid; Nitrile, *in* H-10166

$C_8H_8N_2O_3$
2,4-Dihydroxybenzaldehyde; Formylhydrazone, *in* D-10109

$C_8H_8O_3$
Gibepyrone F, G-10032
▷ 2-Hydroxy-3-methoxybenzaldehyde, *in* D-10108
2-Hydroxy-4-methoxybenzaldehyde, *in* D-10109
3-Hydroxy-2-methoxybenzaldehyde, *in* D-10108
4-Hydroxy-2-methoxybenzaldehyde, *in* D-10109
▷ 4-Hydroxyphenylacetic acid, H-10215
▷ 3-Methoxybenzoic acid, M-10038

$C_8H_8O_4$
3,5-Dihydroxybenzoic acid; Me ester, *in* D-10110
2-Hydroxy-2-(3-hydroxyphenyl)acetic acid, H-10166
3-Hydroxy-5-methoxybenzoic acid, *in* D-10110
2′,4′,6′-Trihydroxyacetophenone, T-10129

$C_8H_8O_5$
2,2′,4′,6′-Tetrahydroxyacetophenone, T-10035

C_8H_9NO
▷ 2-Aminoacetophenone, A-10055

$C_8H_9NO_2$
4-Hydroxyphenylacetic acid; Amide, *in* H-10215
3-Methoxybenzoic acid; Amide, *in* M-10038

$C_8H_9NO_4$
1*H*-Pyrrole-2,5-dicarboxylic acid; Di-Me ester, *in* P-10179

$C_8H_9N_3O_2S$
2,4-Dihydroxybenzaldehyde; Thiosemicarbazone, *in* D-10109

$C_8H_9N_3O_3$
2,4-Dihydroxybenzaldehyde; Semicarbazone, *in* D-10109

$C_8H_{10}N_2O$
2-Aminoacetophenone; Oxime, *in* A-10055

$C_8H_{10}O$
Taxifolione, M-10060

$C_8H_{10}O_2$
2-Hydroxy-6-methylbenzyl alcohol, H-10178

$C_8H_{10}O_3$
2-(3,4-Dihydroxyphenyl)ethanol, D-10235
5-Methoxy-2-methyl-1,3-benzenediol, *in* M-10043
5-Methoxy-4-methyl-1,3-benzenediol, *in* M-10043
3,8,11-Trioxatetracyclo[4.4.1.$0^{2,4}$.$0^{7,9}$]undecane, T-10202
Vinylacetic anhydride, *in* B-10052

$C_8H_{11}NO$
▷ Tyramine, T-10212

$C_8H_{11}NO_2$
3,4-Dihydro-4-propylidene-2*H*-pyrrole-2-carboxylic acid, D-10101
▷ Dopamine, D-10305

$C_{15}H_{22}O_4$
3,11-Dihydroxy-7,9-eremophiladien-8-one, D-10153
5,9-Dihydroxy-4(15),11(13)-eudesmadien-12-oic acid, D-10157
1,6-Dihydroxy-1,10-seco-5(10),11(13)-eudesmadien-12,8-olide, D-10252
1-Epierivanin, *in* D-10158
3-Epierivanin, *in* D-10158
Epirugosal D, *in* R-10059
Erivanin, *in* D-10158
8α-Hydroxy-11β,13-dihydrobalchanin, *in* D-10159
8α-Hydroxysambucoin, *in* S-10009
8β-Hydroxysambucoin, *in* S-10009
Rugosal D, R-10059
8,10,12-Trihydroxy-3-longipinen-5-one, T-10158
9,12,14-Trihydroxy-3(15)-longipinen-4-one, T-10159

$C_{15}H_{22}O_5$
4,5-Epoxy-6,13-dihydroxy-1(10)-germacren-12,8-olide, E-10066
6,7-Epoxy-3,11,12-trihydroxy-9-eremophilen-8-one, E-10157
Pseudomajucin, P-10162
3,6,12,13-Tetrahydroxy-7(11),9-eremophiladien-8-one, T-10048
6,8,15-Trihydroxy-1,3,11(13)-elematrien-12-oic acid, T-10145
1,8,10-Trihydroxy-7(11)-eremophilen-12,8-olide, T-10146
1,6,13-Trihydroxy-4,10(14)-germacradien-12,8-olide, T-10149

$C_{15}H_{22}O_6$
4,15-Epoxy-1,6,8-trihydroxy-11(13)-eudesmen-12-oic acid, E-10158
1,4,6,9-Tetrahydroxy-11(13)-eudesmen-12,8-olide, T-10049
2,8,10,11-Tetrahydroxy-3-guaien-12,6-olide, T-10053
3,8,10-Trihydroxy-1-oxo-11(13)-germacren-12,6-olide, T-10179

$C_{15}H_{22}O_8$
Antirride, A-10105
1,4,5,8,10,13-Hexahydroxy-7(11)-muurolen-12,6-olide, H-10058
Linarioloside, L-10054

$C_{15}H_{22}O_9$
6β-Hydroxyantirride, *in* A-10105
Secolinarioside, S-10040

$C_{15}H_{23}BrO_2$
Palisadin A, *in* A-10109

$C_{15}H_{23}BrO_3$
3,4-Epoxypalisadin A, *in* A-10109

$C_{15}H_{23}Br_3O$
12-Bromopalisadin B, *in* P-10003

$C_{15}H_{23}NO_5$
N-Methyltyramine *O*-α-L-rhamnopyranoside, *in* T-10212

$C_{15}H_{24}$
3,9-Acoradiene, A-10022
10(14)-Aromadendrene, A-10125
8,11-Daucadiene, D-10017
Erythrodiene, E-10193
α-Isocomene, I-10026
β-Isocomene, I-10027
Silphinene, S-10063
Stachynene, S-10107

$C_{15}H_{24}Br_2O$
2,11-Dibromo-7(14)-chamigren-3-ol, D-10050
Palisadin B, P-10003

$C_{15}H_{24}Br_2O_2$
12-Hydroxypalisadin B, *in* P-10003
5β-Hydroxypalisadin B, *in* P-10003

$C_{15}H_{24}N_2O$
N-Methylangustifoline, *in* A-10087

$C_{15}H_{24}O$
β-Acoradienol, A-10024
α-Agarofuran, A-10031
β-Agarofuran, *in* A-10031
Alloaromadendrene epoxide, *in* A-10125
1(10)-Aristolen-12-ol, A-10122
Aromadendrene epoxide, *in* A-10125
3,5,10-Bisabolatrien-12-ol, B-10033
β-Bisabolenol, B-10032
1(10),4-Cadinadien-8-ol, C-10003
4,10(14)-Cadinadien-8-ol, C-10004
4,11(13)-Cadinadien-12-ol, C-10005
Dehydrosesquicineol, *in* S-10051
Epiguadalupol, *in* P-10078
1,8-Epoxy-4-cadinene, E-10035
1(10),4,11-Germacratrien-9-ol, G-10027
Guadalupol, *in* P-10078
6,10(14)-Guaiadien-4-ol, G-10131
Isodaucenol, D-10018
Isohumbertiol, I-10033
4,10(14)-Muuroladien-8α-ol, *in* C-10004
Oreodaphnenol, O-10044
6,9,12-Pentadecatrien-2-one, P-10033
8,11,13-Pentadecatrien-2-one, P-10034
Rosaacorenol, A-10023
Salsolene ketone, S-10004
β-Santala-3(15),10-dien-12-ol, S-10014
Sesquiphellandren-7-ol, B-10031
Stachynone, S-10108
4(15),7(11)-Valerenadien-12-ol, V-10001

$C_{15}H_{24}O_2$
α-Agarofuran; 3α,4α-Epoxide, *in* A-10031
α-Agarofuran; 3β,4β-Epoxide, *in* A-10031
α-Bisabololone, H-10090
3(15)-Caryophyllen-14-oic acid, *in* C-10027
Dehydrobaimuxinol, *in* H-10110
Dihydro-α-santalic acid, *in* S-10015
11,12-Drimanedial, D-10308
Drimeninol, *in* D-10310
3,7-Epoxy-1,10-bisaboladien-12-ol, E-10032
6,7-Epoxy-3(15)-caryophyllen-14-ol, *in* C-10027
11,12-Epoxy-8(12)-drimen-11-ol, E-10076
5,8-Epoxy-9-guaien-8-ol, E-10093
6,7-Epoxy-10(14)-guaien-4-ol, E-10094
12,13-Epoxy-9,10-trichodien-11-ol, *in* I-10056
9-Humulene-2,6-dione, H-10073
2-Hydroxy-3(15)-bicyclohumulen-6-one, H-10089
8-Hydroxy-11-eremophilen-2-one, H-10133
8-Hydroxy-10(14)-oplopen-4-one, H-10199
9-Hydroxy-10(14)-oplopen-4-one, H-10200
Isodrimeninol, *in* D-10310
Prehelminthosporol, P-10142

$C_{15}H_{24}O_3$
Agerol diepoxide, *in* G-10027
Baimuxifuranic acid, *in* H-10110
2-Deoxy-11-epi-3α-hydroxysambucoin, *in* S-10009
4,6-Dihydroxy-7-daucen-9-one, D-10131
4,6-Dihydroxy-8-daucen-10-one, D-10132
8α,9α-Dihydroxy-10βH-eremophil-11-en-2-one, *in* E-10170
3,11-Dihydroxy-3-eudesmen-2-one, D-10160
3,11-Dihydroxy-6-eudesmen-8-one, D-10161
9,10-Dihydroxy-5-longipinanone, D-10190
7,11-Dihydroxy-1(10)-nardosinen-9-one, D-10202
8-Hydroxy-12,11-drimanolide, H-10125
11-Hydroxy-8(12)-drimen-13-oic acid, H-10126
9-Hydroxyprehelminthosporol, *in* P-10142
Isotrichodiol, I-10056
Prehelminthosporal, *in* P-10142
Sulcatine G, S-10128
Trichodiol, *in* T-10112

$C_{15}H_{24}O_4$
7,10-Dihydroxy-2,11-bisaboladien-15-oic acid, D-10119
7,11-Dihydroxy-2,9-bisaboladien-15-oic acid, D-10120
3,8-Dihydroxy-12,11-drimanolide, D-10143
3,11-Dihydroxy-8(12)-drimen-13-oic acid, D-10144
2,4-Dihydroxy-12,8-pseudoguaianolide, D-10251
5,6-Epoxy-4(15)-eudesmene-3,7,11-triol, E-10082
8α-Hydroxyisotrichodiol, *in* I-10056
3-Hydroxy-9-oxo-1-bisabolen-15-oic acid, H-10204
8-Hydroxy-9-oxo-2-bisabolen-15-oic acid, H-10205
Parathylone, P-10011
Trichotriol, T-10112

$C_{15}H_{24}O_4S$
Sulfoorientalol C, S-10131

$C_{15}H_{24}O_{13}$
4-*O*-α-D-Galactopyranuronosyl-D-galacturonic acid; Me glycoside, 6,6′-di-Me ester, *in* G-10015

$C_{15}H_{25}BrO$
7-Acetyl-4-bromo-1-isopropyl-3*a*-methylindane, A-10015

$C_{15}H_{25}Cl$
6-Chloro-4(15)-eudesmene, C-10079

$C_{15}H_{25}NO_4$
Amabiline†, A-10052
▷ Cynaustine, *in* A-10052
▷ Supinine, *in* A-10052

$C_{15}H_{25}NO_5$
Amabiline *N*-oxide, *in* A-10052
Tessellatine, T-10020

$C_{15}H_{26}O$
Dihydroagarofuran, *in* A-10031
cis-Dihydroagarofuran, *in* A-10031
4(15)-Eremophilen-11-ol, E-10171
Ginsenol, G-10035
Isonaviculol, I-10038
1(10)-Lepidozen-5-ol, L-10041
Peculiaroxide, P-10023
6,9-Pentadecadien-2-one, P-10030
8,11-Pentadecadien-2-one, P-10031
8,13-Pentadecadien-2-one, P-10032
Sesquicineol, S-10051

$C_{15}H_{26}O_2$
1,10-Bisaboladiene-3,12-diol, B-10026
3,15-Cedranediol, C-10042
8-Daucene-4,6-diol, D-10019
11,12-Epoxy-11-drimanol, E-10075
4,7-Epoxy-11-eremophilanol, E-10080
6,7-Epoxy-2-humulen-1-ol, E-10097
1(10)-Eremophilene-8,11-diol, E-10168
4(15)-Eudesmene-2,11-diol, E-10218
11-Eudesmene-2,4-diol, E-10219
11-Eudesmene-4,7-diol, E-10220
10(14)-Guaiene-4,6-diol, G-10134
10(14)-Guaiene-4,11-diol, G-10135
7-Hydroxy-6,11-cyclofarnes-3(15)-en-2-one, H-10106
4α-Hydroxydihydroagarofuran, *in* A-10031
15-Hydroxydihydro-β-agarofuran, H-10110
Seiricardine B, S-10044
Seiricardine C, *in* S-10044
Tedonodiol, E-10169
1,2,12,13-Tetrahydro-3-hydroxy-2-oxobergamotene, T-10030
3,7,11-Trimethyl-2,6,10-dodecatriene-1,9-diol, T-10198

$C_{15}H_{26}O_3$
8-Daucene-4,6,10-triol, D-10020
9-Daucene-4,6,8-triol, D-10021
9,10-Dihydroxy-4-oplopanone, D-10215
7-Drimene-3,5,11-triol, D-10309
11-Eremophilene-2,8,9-triol, E-10170
4(15)-Eudesmene-2,3,11-triol, E-10222
5,10(14)-Germacradiene-1,4,8-triol, G-10026
6-Guaiene-4,10,14-triol, G-10136
4-Muurolene-1,10,11-triol, M-10094
Salvinin†, D-10142

$C_{15}H_{26}O_4$
Celorbicol, *in* T-10139
7-Hydroperoxy-8-eudesmene-1,4-diol, H-10078
7-Hydroxymethyl-3,11-dimethyl-2,6,9-dodecatriene-1,5,11-triol, H-10183
7-Hydroxymethyl-3,11-dimethyl-2,6,11-dodecatriene-1,5,10-triol, H-10184

1,2,9-Trihydroxydihydro-β-agarofuran, T-10138
1,6,9-Trihydroxydihydro-β-agarofuran, T-10139

$C_{15}H_{26}O_4S$
Sulfoorientalol A, S-10129

$C_{15}H_{26}O_5$
4-Eudesmene-3,6,7,11,15-pentol, E-10221
Malkanguniol, *in* T-10043
4,6,8,9-Tetrahydroxy-7-daucanone, T-10041
1,6,8,9-Tetrahydroxydihydro-β-agarofuran, T-10042
1,8,9,14-Tetrahydroxydihydro-β-agarofuran, T-10043

$C_{15}H_{26}O_5S$
Sulfoorientalol B, S-10130
Sulfoorientalol D, S-10132

$C_{15}H_{26}O_6$
1,2,4,6,9-Pentahydroxydihydro-β-agarofuran, P-10045
1,2,6,8,9-Pentahydroxydihydro-β-agarofuran, P-10046
1,4,6,8,14-Pentahydroxydihydro-β-agarofuran, P-10047

$C_{15}H_{26}O_7$
1,4,6,8,9,14-Hexahydroxydihydro-β-agarofuran, H-10054

$C_{15}H_{26}O_8$
1,2,4,6,8,9,14-Heptahydroxydihydro-β-agarofuran, H-10025

$C_{15}H_{26}O_{10}$
1,2,3,4,6,8,9,13,14-Nonahydroxydihydro-β-agarofuran, N-10039

$C_{15}H_{28}$
Eudesmane, E-10215

$C_{15}H_{28}O$
Artemisinol, C-10006

$C_{15}H_{28}O_2$
3,11-Eudesmanediol, E-10216
4,11-Eudesmanediol, E-10217

$C_{15}H_{28}O_3$
4,6,10-Guaianetriol, G-10133

$C_{15}H_{28}O_4$
Undecanedioic acid; Di-Et ester, *in* U-10006

$C_{15}H_{28}O_5$
3,4,10,11,14-Guaianepentol, G-10132

$C_{15}H_{30}O_2$
Tridecanoic acid; Et ester, *in* T-10119

$C_{15}H_{37}N_5$
N'-(4-Aminobutyl)canavalmine, *in* C-10018

$C_{16}H_{10}O_6$
5,7-Dihydroxy-3',4'-methylenedioxyflavone, *in* T-10052

$C_{16}H_{11}NO_3$
Piperolactam A, P-10121

$C_{16}H_{12}Cl_2O_5$
2,4-Dichloro-3,6-di-*O*-methylnorlichexanthone, *in* D-10059

$C_{16}H_{12}O_4$
Cryptochrysin, D-10201
2'-Hydroxy-7-methoxyflavone, *in* D-10164
8-Hydroxy-7-methoxyflavone, *in* D-10165
Pallidiflorin, *in* D-10183

$C_{16}H_{12}O_5$
Damnacanthol, *in* D-10180
1,3-Dihydroxy-8-methoxy-2-methylanthraquinone, *in* T-10161
1,5-Dihydroxy-2-methoxy-6-methylanthraquinone, *in* T-10160
Genkwanin, D-10195
Morindone 5-methyl ether, *in* T-10160
Phyllozutin, *in* D-10237

$C_{16}H_{12}O_6$
1,6-Dihydroxy-2,4-dimethoxyanthraquinone, *in* T-10037
5,7-Dihydroxy-2-(4-methoxyphenoxy)-4*H*-1-benzopyran-4-one, *in* T-10132
Juzunol, *in* T-10152

$C_{16}H_{12}O_7$
1,2-Epoxy-8-hydroxy-6-(hydroxymethyl)-1-methoxycarbonylxanthone, E-10110

$C_{16}H_{12}O_8$
2,4,5,6,7-Pentahydroxy-1-methoxy-3-methylanthraquinone, *in* H-10057

$C_{16}H_{14}O_2$
4-Methoxychalcone, *in* H-10218

$C_{16}H_{14}O_5$
Cassiapyrone, C-10030
3'-Deoxysappanone B, D-10178
Sabilactone, S-10001

$C_{16}H_{14}O_6$
Anthaxanthone, *in* T-10073
Decussatine, *in* T-10073
Dihydrocajanin, *in* T-10055
Ferreirin, *in* T-10055
Isoferreirin, *in* T-10055
3-*O*-Methylokanin, *in* P-10040
4-*O*-Methylokanin, *in* P-10040
Perforatic acid, P-10077
Sappanone B, D-10113
Scutamoenin, *in* T-10050
2',6',7-Trihydroxy-5-methoxyflavanone, *in* T-10050

$C_{16}H_{14}O_7$
Dihydroisorhamnetin, *in* P-10050
Hultenin, *in* P-10050
Padmatin, *in* P-10050
3,3',5,7-Tetrahydroxy-4'-methoxyflavanone, *in* P-10050
3,4',5,7-Tetrahydroxy-6-methoxyflavanone, *in* P-10051

$C_{16}H_{14}O_8S$
Cassiapyrone 10-sulfate, *in* C-10030

$C_{16}H_{15}BrN_2O$
Eudistalbin B, E-10224

$C_{16}H_{15}NO_4$
Asimicilone, A-10131

$C_{16}H_{15}NO_5$
5-Hydroxyarborinine, *in* T-10036

$C_{16}H_{15}NO_6$
Citramine, *in* P-10038
2,3-Dimethoxy-1,5,6-trihydroxy-10-methylacridone, *in* P-10038

$C_{16}H_{16}N_2O_2$
Paspalic acid, P-10013

$C_{16}H_{16}O_4$
8-Acetoxy-2-(2,4-hexadiynylidene)-1,6-dioxaspiro[4.5]dec-3-ene, *in* H-10049

$C_{16}H_{16}O_5$
3-(4-Hydroxybenzyl)-3,4,7-chromantriol, H-10086
Torosachrysone, *in* D-10102
3',4',7-Trihydroxy-2'-methoxyisoflavan, *in* T-10054

$C_{16}H_{16}O_6$
3-(3,4-Dihydroxybenzyl)-3,4,7-chromantriol, D-10112
α,3,4,4'-Tetrahydroxy-2'-methoxydihydrochalcone, *in* D-10233

$C_{16}H_{17}BrN_2$
Arborescidine B, *in* A-10114

$C_{16}H_{17}Br_2N_5O_4$
Aplysinamisine I, A-10107

$C_{16}H_{17}NO_3$
Neoacutifolin, N-10011

$C_{16}H_{17}NO_4$
Obesine, O-10002

$C_{16}H_{17}N_3O_2$
3-Ethylidene-6-(1*H*-indol-3-ylmethyl)-1-methyl-2,5-piperazinedione, E-10203
10-Hydroxy-*cis*-paspalic acid amide, *in* P-10013
10-Hydroxy-*trans*-paspalic acid amide, *in* P-10013

$C_{16}H_{18}BrN_3$
Eudistalbin A, E-10223

$C_{16}H_{18}O_4$
Gossyvertin, *in* T-10133

$C_{16}H_{18}O_8$
Gerberinside, *in* H-10176

$C_{16}H_{19}BrN_2O$
Arborescidine C, A-10114
Arborescidine D, *in* A-10114

$C_{16}H_{19}NO_2$
Coclafine, *in* C-10111

$C_{16}H_{19}NO_4$
Acutifolidin, *in* A-10026
Amabiline†, A-10051

$C_{16}H_{20}N_2O$
Huperzine B, H-10075

$C_{16}H_{20}O$
3-Methoxycadalene, *in* C-10002

$C_{16}H_{20}O_4$
3-[4-Hydroxy-3-(4-hydroxy-3-methyl-2-butenyl)phenyl]-2-propenoic acid; 4'-Me ether, Me ester, *in* H-10163

$C_{16}H_{22}N_2O_4$
Metacyclofilin, M-10037

$C_{16}H_{22}N_4O_2$
Aurantiamine, A-10143

$C_{16}H_{22}O$
Sporochnol A, *in* S-10105

$C_{16}H_{22}O_2$
Sporochnol C, S-10105

$C_{16}H_{22}O_3$
Sporochnol B, *in* S-10105

$C_{16}H_{22}O_6$
p-Mentha-1,3,5-triene-2,5,8,9,10-pentol; 9-Tigloyl, 2-Me ether, *in* M-10030

$C_{16}H_{22}O_8$
Citrusin D, *in* D-10243
Coniferin, *in* D-10243
Faguside, *in* D-10243

$C_{16}H_{22}O_9$
2-Methyl-1-(2,4,6-trihydroxyphenyl)-1-propanone; 2-*O*-β-Glucopyranoside, *in* M-10077
Sweroside, S-10135

$C_{16}H_{22}O_{10}$
Gardoside, G-10020
Swertiamarin, S-10136

$C_{16}H_{22}O_{11}$
8-Epikingsidic acid, *in* K-10012
Kingisidic acid, *in* K-10012

$C_{16}H_{23}Br_2N_5O_4$
Aplysinamisine II, A-10108

$C_{16}H_{23}NO$
Cavernoisonitrile, C-10039

$C_{16}H_{24}N_2O_2$
13-Methoxymultiflorine, *in* M-10092

$C_{16}H_{24}N_2O_3$
Angustifoline *N*-carboxymethyl ester, *in* A-10087

$C_{16}H_{24}O$
Contrunculin A, C-10122

$C_{16}H_{24}O_2$
Contrunculin B, C-10123
5-Pentyl-2-prenyl-1,3-benzenediol, P-10073

$C_{16}H_{24}O_3$
Norafricanone, N-10041
Secoswartzianin B, S-10043

$C_{18}H_{16}O_6$
Americanin D, A-10054
Cymbinodin B, *in* T-10065
2-(Ethoxymethyl)-1,3-dihydroxy-5-methoxyanthraquinone, *in* T-10152
2-(Ethoxymethyl)-3,5-dihydroxy-1-methoxyanthraquinone, *in* T-10152
5-Hydroxy-3′,4′,7-trimethoxyflavone, *in* T-10052

$C_{18}H_{16}O_7$
Lathycarpin, *in* P-10062

$C_{18}H_{16}O_8$
3-Acetoxy-4′,5,7-trihydroxy-6-methoxyflavanone, *in* P-10051
3-*O*-Acetylpadmatin, *in* P-10050

$C_{18}H_{16}O_9$
3′,4′,5,7-Tetrahydroxy-3,5′,6-trimethoxyflavone, *in* H-10026
3,5,5′,7-Tetrahydroxy-3′,4′,6-trimethoxyflavone, *in* H-10026
3′,5,5′,7-Tetrahydroxy-3,4′,6-trimethoxyflavone, *in* H-10026
4′,5,6,7-Tetrahydroxy-3,3′,5′-trimethoxyflavone, *in* H-10026

$C_{18}H_{18}N_2O_3$
N-Carbamoylasimilobine, *in* A-10132

$C_{18}H_{18}O_4$
Metochalcone, *in* D-10240

$C_{18}H_{18}O_5$
4,7-Dihydroxy-8-formyl-5-methoxy-6-methylflavan, *in* T-10148
Neocomantherin, N-10016

$C_{18}H_{18}O_6$
Isoamericanol A, I-10021

$C_{18}H_{18}O_7$
2,4-Dimethoxybenzoic acid; Anhydride, *in* D-10265

$C_{18}H_{19}NO$
Lansiumamide C, *in* P-10098

$C_{18}H_{19}NO_3$
Aegeline, A-10027

$C_{18}H_{19}NO_4$
N-Feruloyltyramine, F-10006
7-Isopentenyloxy-γ-fagarine, *in* H-10002
Moupinamide, *in* T-10212

$C_{18}H_{19}NO_5$
7-(2,3-Epoxy-3-methylbutoxy)-4,8-dimethoxyfuro[2,3-*b*]quinoline, *in* H-10002
Evodine†, *in* H-10002
Haplatine, *in* H-10002

$C_{18}H_{19}NO_6$
▷ Cusculine, *in* P-10038
1-Hydroxy-2,3,5,6-tetramethoxy-10-methylacridone, *in* P-10038

$C_{18}H_{20}N_2O_2$
Haplamide, *in* B-10051

$C_{18}H_{20}O_5$
7-Hydroxy-2′,3′,4′-trimethoxyisoflavan, *in* T-10054
7-*O*-Methylisomucronulatol, *in* T-10054
Sorgalactone, S-10082

$C_{18}H_{20}O_6$
5′-Hydroxy-3′-methoxysativan, *in* P-10057

$C_{18}H_{21}NO_3$
Pandamarilactone 32, P-10008

$C_{18}H_{21}NO_4$
Anomoline, *in* A-10090
Epihomolycorine, *in* H-10069
Homolycorine, H-10069
Penarcine, *in* H-10069

$C_{18}H_{21}NO_5$
Cephamorphinanine, *in* S-10066
Homolycorine *N*-oxide, *in* H-10069
5α-Hydroxyhomolycorine, *in* H-10069
Tazettine, T-10014

$C_{18}H_{22}NO_3^{\oplus}$
Roserine, R-10046

$C_{18}H_{22}N_2O_2$
Dehydroodorine, *in* O-10018

$C_{18}H_{22}N_4O_3$
Anacine, A-10077

$C_{18}H_{22}O_4$
2,3′,4,5′-Tetramethoxybibenzyl, *in* T-10038

$C_{18}H_{22}O_9$
Piptocarphol; 8-Ac, 1-formyl, *in* E-10151

$C_{18}H_{23}NO$
N-Isobutyl-2,4,12-tetradecatriene-8,10-diynamide, *in* A-10079

$C_{18}H_{23}NO_3$
Cohirsitinine, C-10114

$C_{18}H_{23}NO_4$
O-Methylacutifolin, *in* A-10026
Pandamarilactone 1, P-10006

$C_{18}H_{23}NO_5$
Sinococuline, S-10066

$C_{18}H_{23}NO_6$
Erucifoline, E-10189

$C_{18}H_{23}NO_7$
Erucifoline *N*-oxide, *in* E-10189

$C_{18}H_{24}N_2O_2$
Odorine, O-10018

$C_{18}H_{24}N_2O_3$
(+)-Odorinol, *in* O-10018
(−)-Odorinol, *in* O-10018

$C_{18}H_{24}N_4O_{18}$
2,3,4,6-Tetrakis(3-nitropropanoyl)glucose, T-10074

$C_{18}H_{24}O_4$
2′-Geranyloxy-4′,6′-dihydroxyacetophenone, *in* T-10129
4′-Geranyloxy-2′,6′-dihydroxyacetophenone, *in* T-10129
6-Hydroxyfuranoeremophilan-9-one; Propanoyl, *in* H-10148

$C_{18}H_{24}O_5$
4′-(Geranyloxy)-2,2′,6′-trihydroxyacetophenone, *in* T-10035

$C_{18}H_{24}O_6$
Sessiliflorene, S-10052
Sessiliflorol A, S-10053
Sessiliflorol B, S-10054

$C_{18}H_{24}O_7$
p-Mentha-1,3,5-triene-2,5,8,9,10-pentol; 9-Tigloyl, 2-Me ether, 10-Ac, *in* M-10030

$C_{18}H_{24}O_8$
Piptocarphol; 13-Me ether, 8-Ac, *in* E-10151

$C_{18}H_{24}O_{10}$
3′-Acetylsweroside, *in* S-10135
Regaloside A, R-10012
Regaloside D, R-10013
Regaloside H, R-10014

$C_{18}H_{24}O_{11}$
Regaloside C, *in* R-10012

$C_{18}H_{25}NO$
Anacycline, A-10079

$C_{18}H_{25}NO_5$
7-Angeloyl-9-sarracinoylretronecine, *in* S-10023
Neotriangularicine, *in* T-10104
Neotriangularine, *in* T-10104
Triangularicine, *in* T-10104
Triangularine, T-10104

$C_{18}H_{25}NO_6$
▷ Anacrotine, A-10078
trans-Anacrotine, *in* A-10078

$C_{18}H_{26}O_3$
Luffarin Z, L-10079

$C_{18}H_{26}O_4$
2-Hydroxy-4-methoxy-6-pentyl-3-prenylbenzoic acid, *in* D-10225

$C_{18}H_{26}O_6$
7,14-Dihydroxy-4,8,10,12-octadecatetraenedioic acid, D-10205

$C_{18}H_{26}O_9$
Syringin methyl ether, *in* S-10065

$C_{18}H_{26}O_{10}$
3-Allosyloxy-1-(2-hydroxy-4,6-dimethoxyphenyl)-1-butanone, *in* H-10234
Onioside, *in* H-10234

$C_{18}H_{26}O_{11}$
Secologanoside 7-methyl ester, *in* S-10041

$C_{18}H_{26}O_{12}$
Osmantolide, *in* B-10013

$C_{18}H_{26}O_{19}$
α-D-Galactopyranuronosyl-(1→4)-α-D-galactopyranuronosyl-(1→4)-D-galacturonic acid, G-10011

$C_{18}H_{27}NO_5$
Neosarracine, *in* S-10023
Neosarranicine, *in* S-10023
▷ Sarracine, S-10023
Sarranicine, *in* S-10023

$C_{18}H_{27}NO_6$
Crotalarine lactone, C-10134
Sarracine *N*-oxide, *in* S-10023

$C_{18}H_{27}NO_8$
Ruzorine, R-10063

$C_{18}H_{28}O_2$
7,9-Octadecadiynoic acid, O-10008
Sollasin E, S-10077
Sollasin F, H-10116

$C_{18}H_{28}O_3$
3,7-Epoxy-1,10-bisaboladien-12-ol; Propanoyl, *in* E-10032
10-Methoxy-1-heptadecene-4,6-diyne-3,9-diol, *in* H-10024

$C_{18}H_{28}O_4$
6-Hydroxy-14,15-dinor-13-oxo-8(17)-labden-18-oic acid, H-10117

$C_{18}H_{28}O_6$
5-[Tetrahydro-4-hydroxy-2-(3-hydroxy-1-octenyl)-6-oxo-2*H*-pyran-3-yl]-3-pentenoic acid, T-10028

$C_{18}H_{28}O_8$
2-(4-Carboxy-2-oxobutyl)-3,5-dihydroxy-2-oxocyclopentaneoctanoic acid, C-10024

$C_{18}H_{28}O_{17}$
β-D-Galactopyranuronosyl-(1→3)-β-D-galactopyranuronosyl-(1→3)-L-rhamnose, G-10012
α-D-Glucopyranuronosyl-(1→3)-α-D-galactopyranuronosyl-(1→2)-L-rhamnose, G-10074
β-D-Glucopyranuronosyl-(1→3)-α-D-galactopyranuronosyl-(1→2)-L-rhamnose, G-10075

$C_{18}H_{30}O_2$
2,4,14-Octadecatrienoic acid, O-10011
10-Octadecen-8-ynoic acid, O-10012

$C_{18}H_{30}O_3$
3,4-Dimethyl-5-pentyl-2-furanheptanoic acid, D-10284
12-Hydroxy-5,8,10-heptadecatrienoic acid; Me ester, *in* H-10159

$C_{18}H_{30}O_4$
Podoscyphic acid; Et ester, *in* D-10293

$C_{18}H_{30}O_5$
7,8,13-Trihydroxy-15,16-dinor-18-isopimaranoic acid, T-10141

$C_{18}H_{30}O_6$
5-[Tetrahydro-4,6-dihydroxy-2-(3-hydroxy-1-octenyl)-2*H*-pyran-3-yl]-3-pentenoic acid, T-10027

$C_{19}H_{20}N_2O_4$
Ornithuric acid, *in* O-10049

$C_{19}H_{20}O_3$
9,10-Dihydro-2,5,7-trihydroxy-1-prenylphenanthrene, D-10104
14,16-Epoxy-20-nor-5(10),6,8,13-abietatetraene-11,12-dione, E-10132

$C_{19}H_{20}O_4$
Deoxybruceol, D-10038
17-Hydroxycryptotanshinone, *in* E-10132

$C_{19}H_{20}O_5$
Ribitol; 2,3:4,5-Di-*O*-benzylidene, *in* R-10032

$C_{19}H_{20}O_6$
Dehydrocyanaropicrin, *in* D-10175
2′-Hydroxy-3,3′,4,4′-tetramethoxychalcone, *in* P-10040
2′,4′,5,7-Tetramethoxyisoflavanone, *in* T-10055

$C_{19}H_{20}O_{11}$
3-Glucosyl-2,3′,4,4′,6-pentahydroxybenzophenone, G-10087

$C_{19}H_{21}NO_3$
N-[2-Methoxy-2-(4-methoxyphenyl)ethyl] cinnamide, *in* A-10027

$C_{19}H_{21}NO_4$
Caseamine, C-10029

$C_{19}H_{21}NO_5$
cis-Caseamine *N*-oxide, *in* C-10029
9-*O*-Demethyl-9-*O*-acetylhomolycorine, *in* H-10069
N-*trans*-Feruloyl-4-*O*-methyldopamine, *in* D-10305

$C_{19}H_{21}NO_9$
Glycohaplopine, *in* H-10002
Glycoperine, *in* H-10002

$C_{19}H_{22}N_2O$
Eburnamonine, E-10002

$C_{19}H_{22}N_2O_2$
Alkaloid RB20, *in* P-10076
1,4-Butanediamine; *N*-Me, dibenzoyl, *in* B-10051
Eburnamonine N^4-oxide, *in* E-10002
Peraksine, P-10076

$C_{19}H_{22}O_2$
2-(3-Methyl-2-butenyl)-5-(2-phenylethyl)-1,3-benzenediol, M-10048

$C_{19}H_{22}O_3$
14-Hydroxyandrosta-4,6,15-triene-3,17-dione, H-10084

$C_{19}H_{22}O_4$
15,16-Epoxy-18-nor-4-oxo-1,13(16),14-clerodatrien-17,12-olide, E-10136
15,16-Epoxy-18-nor-4-oxo-2,13(16),14-clerodatrien-17,12-olide, E-10137
8-Isovaleryloxy-2-(2,4-hexadiynylidene)-1,6-dioxaspiro[4.5]dec-3-ene, *in* H-10049

$C_{19}H_{22}O_5$
Aguerin B, *in* D-10175
1-Deoxy-2,3-dehydronagilactone A, *in* N-10001
3,6-Dihydroxyfuranoeremophil-1(10)-en-9-one; 6-(Methylpropenoyl), *in* D-10170
Gibberellin A_{62}, *in* G-10030
2′,3′,4′,7-Tetramethoxyisoflavan, *in* T-10054

$C_{19}H_{22}O_6$
8α-Acetoxyzaluzanin D, *in* D-10175
Cynaropicrin, *in* D-10175
5,6-Dehydroeurycomalactone, *in* E-10232
2,3-Didehydronagilactone A, *in* N-10001
Glucurolactone; α-1,2-*O*-Cyclohexylidene, 5-benzyl, *in* G-10088
8-Hydroxyzaluzanin C; 3-(2-Hydroxymethylpropenoyl), *in* D-10175
19-Nor-2-oxo-3,13-clerodadiene-15,16:20,12-diolide, N-10049
19-Nor-2-oxo-3,13-clerodadiene-16,15:20,12-diolide, N-10050
Salograviolide C, *in* D-10175
Saupirin, *in* D-10175

$C_{19}H_{22}O_7$
Ligstral, L-10051

$C_{19}H_{22}O_8$
1,4-Epoxy-8,10,13-trihydroxy-1,5,7(11)-germacratrien-12,6-olide; 8,13-Di-Ac, *in* E-10159

$C_{19}H_{22}O_9$
5-Acetonyl-6-glucosyl-7-hydroxy-2-methyl-4*H*-1-benzopyran-4-one, A-10013
Eurylactone, E-10233
Eurylactone B, E-10235

$C_{19}H_{22}O_{10}$
Mollin, *in* D-10133

$C_{19}H_{23}ClO_6$
Linichlorin B, *in* D-10175

$C_{19}H_{23}NO_4$
Annonelliptine, A-10090

$C_{19}H_{24}ClNO_8$
1*a*-Hydroxymagnocurarine; Perchlorate, *in* H-10172

$C_{19}H_{24}NO_4^{\oplus}$
1*a*-Hydroxymagnocurarine, H-10172

$C_{19}H_{24}N_2O_2$
10-Hydroxygeissoschizol, H-10149
Isoneolaugerine, *in* N-10020
Neolaugerine, N-10020
Norajmaline, *in* A-10035

$C_{19}H_{24}N_2O_3$
15-Hydroxyisoneolaugerine, *in* N-10020

$C_{19}H_{24}O$
15,16-Epoxy-19-nor-1,3,5(10),13(16),14-clerodapentaene, E-10133

$C_{19}H_{24}O_2$
Dehydrofalcarinol; Ac, *in* H-10022

$C_{19}H_{24}O_3$
Ginsenoyne F, *in* H-10022
11-Hydroxyandrosta-1,4-diene-3,17-dione, H-10083
6β-(2-Methylacryloyloxy)euryopsin, *in* F-10033
16-Nor-15-oxo-7,13-abietadien-19,6-olide, N-10048

$C_{19}H_{24}O_4$
1β,10β-Epoxy-6β-(2-methylacryloyloxy) furanoeremophilane, *in* E-10087
Furanoeremophil-1(10)-ene-6,9-diol; 6-(2-Methylpropenoyl), *in* F-10031
Furanoeremophil-1(10)-ene-6,9-diol; 6-(2-Methylpropenoyl), *in* F-10031
6-Hydroxyfuranoeremophilan-9-one; Methylpropenoyl, *in* H-10148
6-Hydroxyfuranoeremophilan-9-one; *O*-(2-Methyl-2-propenoyl), *in* H-10148
11,12,16-Trihydroxy-20-nor-5(10),8,11,13-abietatetraen-1-one, T-10166

$C_{19}H_{24}O_5$
Aguerin A, *in* D-10175
Cebellin O, *in* D-10174
▷ Crotocin, *in* C-10135
1-Deoxynagilactone A, *in* N-10001
1,10-Epoxyfuranoeremophilane-3,6-diol; 3-(2-Methyl-2-propenoyl), *in* E-10085
1,10-Epoxyfuranoeremophilane-6,9-diol; 6-(2-Methylpropenoyl), *in* E-10086
5,8-Epoxy-18-nor-3,6-dioxo-11,15-cembradien-20,10-olide, E-10134
Gibberellin A_{61}, G-10030
Taxifolial A, T-10011

$C_{19}H_{24}O_6$
Calein E, *in* D-10220
1-Deoxy-2α-hydroxynagilactone A, *in* N-10001
5,8:11,12-Diepoxy-18-nor-3,6-dioxo-11,15-cembradien-20,10-olide, *in* E-10134
Dimerostemmabrasiolide; 1-*O*-(2-Hydroxymethylpropenoyl), *in* D-10159
5,8-Epoxy-11α-hydroxy-18-nor-3,6-dioxo-12,15-cembradien-20,10-olide, *in* E-10134
5,8-Epoxy-11β-hydroxy-18-nor-3,6-dioxo-12,15-cembradien-20,10-olide, *in* E-10134
Eurycomalactone, E-10232
Gibberellin A_{16}, G-10029
Gibberellin A_{54}, *in* G-10029
Gibberellin A_{60}, *in* G-10030
Gibberellin A_{90}, *in* G-10030
Gochnatolide, *in* D-10172
8-Hydroxyzaluzanin C; 8-(3-Hydroxy-2-methylpropanoyl), *in* D-10175
Nagilactone A, N-10001
Sellowin C, *in* N-10001

$C_{19}H_{24}O_7$
14-Acetoxydicomanolide, *in* T-10150
1,4-Epidioxy-9,10-dihydroxy-2,11(13)-guaiadien-12,6-olide; 9-(2-Methylpropanoyl), *in* E-10027
Gibberellin A_{57}, *in* G-10029
Gibberellin A_{79}, *in* G-10029
6α-Hydroxyeurycomalactone, *in* E-10232
3β-Hydroxynagilactone A, *in* N-10001
Nagilactone B, *in* N-10001
4,6,9-Trihydroxy-1(10),2-guaiadien-12,8-olide; 6,9-Di-Ac, *in* T-10151
Urbalactone, *in* N-10001

$C_{19}H_{24}O_8$
Indaquassin A, I-10007
Piptocarphin C, *in* E-10151
Piptocarphin H, *in* E-10151

$C_{19}H_{24}O_9$
Hirsutolide, *in* E-10151
Piptocarphol; 10,13-Di-Ac, *in* E-10151
Spicatolide A, *in* E-10166

$C_{19}H_{25}NO_3$
Cryprochine, C-10136
11-Hydroxyandrosta-1,4-diene-3,17-dione; 17-Oxime, *in* H-10083

$C_{19}H_{25}NO_4$
Pandamarilactone 31, P-10007

$C_{19}H_{25}NO_5$
Kobutimycin A, K-10014
Ungvedine, *in* T-10014

$C_{19}H_{25}NO_{11}$
Zierinxyloside, *in* H-10166

$C_{19}H_{26}N_2O$
Crooksidine, *in* D-10024
19-Oxodecarbomethoxytetrahydrosecodine, *in* D-10024

$C_{19}H_{26}N_2O_5$
Saussureamine C, S-10027

$C_{19}H_{26}O_3$
Ginsenoyne H, *in* H-10017
Ocimepyrone, O-10005

$C_{19}H_{26}O_4$
6-Hydroxyfuranoeremophilan-9-one; *O*-(2-Methylpropanoyl), *in* H-10148
Salvicanaraldehyde, S-10006

$C_{19}H_{26}O_5$
4,6-Dihydroxyfuranoeremophilan-9-one; 6-(Methylpropanoyl), *in* D-10169
12,14-Dihydroxy-3(15)-longipinen-4-one; Di-Ac, *in* D-10192
1,10-Epoxyfuranoeremophilane-6,9-diol; 9-(2-Methylpropanoyl), *in* E-10086
Schkuhrioidin, *in* D-10172

$C_{19}H_{26}O_6$
Britannilactone; Di-Ac, *in* D-10252
Dehydroxylongilactone, *in* L-10061
Dihydroeurycomalactone, *in* E-10232
7α-Hydroxyeurycomalactone, *in* E-10232

$C_{19}H_{26}O_7$
Eurycomalactone; 2α-Alcohol, 6α-hydroxy, $\Delta^{4,18}$-isomer, *in* E-10232
Longilactone, L-10061

$C_{21}H_{20}O_8$
Piscerythrol, P-10122

$C_{21}H_{20}O_9$
Hemidesmin 1, H-10012
Macrophylloside†, *in* D-10164

$C_{21}H_{20}O_{10}$
Afzelin, A-10030
Isoneoavroside, *in* N-10012
Isoneovitexin, *in* N-10023
Luteolin; 3′-*O*-α-L-Rhamnopyranoside, *in* T-10052
Luteolin; 7-*O*-α-L-Rhamnopyranoside, *in* T-10052
Neoavroside, N-10012
Neovitexin, N-10023
Rheinanthrone; *O*-Glucoside, *in* D-10094

$C_{21}H_{20}O_{11}$
Chaerophyllin†, *in* T-10052
Dracocephaloside, *in* T-10052
Galuteolin, *in* T-10052
Glucoluteolin, *in* T-10052
Juncein†, *in* T-10052
Luteolin; 5-*O*-β-D-Galactopyranoside, *in* T-10052
Luteolin; 7-*O*-β-D-Galactopyranoside, *in* T-10052
Paspaloside, *in* T-10052
Populnin, P-10133
Quercetin 3-*O*-α-L-rhamnofuranoside, Q-10006
Trifolin†, T-10123

$C_{21}H_{20}O_{12}$
Incarnatrin, I-10004

$C_{21}H_{20}O_{13}$
Atyloside, *in* H-10056

$C_{21}H_{20}O_{13}S$
Afzelin; *O*″-Sulfate, *in* A-10030

$C_{21}H_{20}O_{14}S$
Luteolin; 3′-*O*-β-D-Glucopyranoside, 7-*O*-sulfate, *in* T-10052
Luteolin; 7-*O*-(Sulfooxyglucoside), *in* T-10052

$C_{21}H_{20}O_{17}S_2$
Luteolin; 7-*O*-(Disulfoglucoside), *in* T-10052

$C_{21}H_{21}NO_5$
Oxypalmatine, O-10064

$C_{21}H_{21}NO_7$
Narlumicine, *in* N-10006

$C_{21}H_{21}N_3O_2$
16-Carbomethoxy 18,19-dihydronaufoline, *in* N-10010

$C_{21}H_{22}N_2O_3$
Scandine, S-10030

$C_{21}H_{22}N_2O_4$
14,15-Epoxyscandine, *in* S-10030
10-Hydroxyscandine, *in* S-10030
Lapidilectine B, L-10026
5-Oxo-19,20-dehydroervatamine, *in* E-10191

$C_{21}H_{22}O_3$
Isoderricin A, *in* H-10222

$C_{21}H_{22}O_4$
2-Hydroxy-4-methoxy-3-(3-methyl-2-butenyl)-6-(2-phenylethenyl)benzoic acid, *in* D-10249
6-Hydroxy-4-methoxy-3-(3-methyl-2-butenyl)-2-(2-phenylethenyl)benzoic acid, *in* D-10250
2-Prenylphyscion anthrone, *in* T-10165

$C_{21}H_{22}O_6$
Croverin, *in* D-10067
Ribitol; 2,3:4,5-Di-*O*-benzylidene, 1-Ac, *in* R-10032

$C_{21}H_{22}O_7$
4,5-Demethylene-7-deoxypodophyllotoxin, D-10035
Topazolin hydrate, *in* T-10067

$C_{21}H_{22}O_8$
1,2,4,5,6,7-Hexamethoxy-3-methylanthraquinone, *in* H-10057

$C_{21}H_{22}O_9$
1,8-Dihydroxy-3-(hydroxymethyl)-9(10*H*)-anthracenone; *O*-Glucoside, *in* D-10179
4′-Hydroxy-3,3′,5,5′,6,7-hexamethoxyflavone, *in* H-10026
5-Hydroxy-3,3′,4′,5′,6,7-hexamethoxyflavone, *in* H-10026

$C_{21}H_{22}O_{11}$
Astilbin, *in* P-10050
Isoastilbin, *in* P-10050
Marein, *in* P-10040
Neoastilbin, *in* P-10050
Neoisoastilbin, *in* P-10050
Okanin; 3′-*O*-β-D-Glucopyranoside, *in* P-10040

$C_{21}H_{22}O_{12}$
Dihydrohyperin, *in* P-10050
Glucodistylin, *in* P-10050
Isoglucodistylin, *in* P-10050
Taxifolin; 5-*O*-β-D-Galactopyranoside, *in* P-10050
Taxifolin; 7-*O*-β-D-Galactopyranoside, *in* P-10050
Taxifolin; 7-*O*-α-D-Glucopyranoside, *in* P-10050
Taxifolin; 3′-*O*-β-D-Glucopyranoside, *in* P-10050
Taxifolin; 7-*O*-β-D-Glucopyranoside, *in* P-10050
Taxifolin 4′-glucoside, *in* P-10050

$C_{21}H_{23}Br_4N_3O_5$
Hexadellin A, H-10045

$C_{21}H_{23}NO_4$
Thalicthuberine, T-10082

$C_{21}H_{23}NO_5$
Thalicthuberine *N*-oxide, *in* T-10082
Thalimonine, T-10083

$C_{21}H_{23}NO_6$
N-Deacetyl-*N*-formyl-β-lumicolchicine, *in* L-10082
N-Deacetyl-*N*-formyl-γ-lumicolchicine, *in* L-10082
2-*O*-Demethyl-β-lumicolchicine, *in* L-10082
3-*O*-Demethyl-β-lumicolchicine, *in* L-10082
2-*O*-Demethyl-γ-lumicolchicine, *in* L-10082
3-*O*-Demethyl-γ-lumicolchicine, *in* L-10082
8-Oxothaicanine, *in* T-10081

$C_{21}H_{24}NO_5^{\oplus}$
Fumaritine *N*-methosalt, *in* F-10027

$C_{21}H_{24}N_2O_2$
Vindolinine, V-10024
19*S*-Vindolinine, *in* V-10024

$C_{21}H_{24}N_2O_3$
19,20-Didehydroervatamine, *in* E-10191
Ervincine, *in* P-10116
16β-Hydroxy-19*R*-vindolinine, *in* V-10024
16β-Hydroxy-19*S*-vindolinine, *in* V-10024
3-Oxovincadifformine, *in* V-10022
5-Oxovincadifformine, *in* V-10022
Rhazimol, *in* A-10036
19*S*-Vindolinine *N*-oxide, *in* V-10024

$C_{21}H_{24}N_2O_4$
Ercinamine, *in* A-10036
Gambirdine, *in* M-10082
Isogambirdine, *in* M-10082
Isomitraphylline, *in* M-10082
Mitraphylline, M-10082
Ornithine; N^{α},N^{δ}-Dibenzoyl, Et ester, *in* O-10049
Uncarine, U-10005

$C_{21}H_{24}N_2O_5$
Isomitraphylline *N*-oxide, *in* M-10082
Isopteropodine *N*-oxide, *in* U-10005
Mitraphylline *N*-oxide, *in* M-10082
Pteropodine *N*-oxide, *in* U-10005
Speciophylline *N*-oxide, *in* U-10005
Uncarine F *N*-oxide, *in* U-10005

$C_{21}H_{24}N_2O_6$
Ornithine; N^{α},N^{δ}-Bis(benzyloxycarbonyl), *in* O-10049

$C_{21}H_{24}O_3$
Spiranthol B, *in* D-10104

$C_{21}H_{24}O_4$
2-Hydroxy-4-methoxy-6-(2-phenylethyl)-3-prenylbenzoic acid, *in* D-10236

$C_{21}H_{24}O_5$
Glyasperin C, *in* T-10068
Vismione E, *in* V-10032

$C_{21}H_{24}O_6$
Armenin B, A-10124
Dihydrocroverin, *in* D-10067
Penicillide, P-10025
Tinophyllone, *in* E-10101

$C_{21}H_{24}O_7$
Medioresinol, M-10024
Taxifolial B, T-10012

$C_{21}H_{24}O_8$
1,4-Epoxy-8,10,13-trihydroxy-1,5,7(11)-germacratrien-12,6-olide; 8-(2-Methylpropenoyl), 13-Ac, *in* E-10159
9α-Hydroxymedioresinol, *in* M-10024

$C_{21}H_{24}O_9$
1,10:4,5-Diepoxy-8,13,14-trihydroxy-2,7(11)-germacradien-12,6-olide; 8-(2-Methylpropenyl), 13-Ac, *in* D-10088

$C_{21}H_{24}O_{10}$
Dehydrobruceolide, D-10029

$C_{21}H_{24}O_{11}$
Roccellin, *in* D-10133

$C_{21}H_{24}O_{12}$
2-(3,4-Dihydroxyphenyl)ethanol; 4-*O*-(6-*O*-Galloyl-β-D-glucopyranoside), *in* D-10235

$C_{21}H_{25}NO_4$
Coryphenanthrine, *in* M-10069
Thaliporphinemethine, *in* M-10069

$C_{21}H_{25}NO_5$
Thaicanine, T-10081
Thaicanine; (*S*)-*form*, *in* T-10081

$C_{21}H_{26}ClNO_8$
Romneine; *N*-Me, perchlorate, *in* R-10041

$C_{21}H_{26}INO_4$
Romneine; *N*-Me, iodide, *in* R-10041

$C_{21}H_{26}NO_4^{\oplus}$
Escholinine, *in* R-10041
β-*N*-Methylisocorypalminium, *in* I-10029

$C_{21}H_{26}N_2O_2$
Ervamine, *in* V-10022
Pseudokopsinine, *in* V-10024
Vincadifformine, V-10022

$C_{21}H_{26}N_2O_3$
Deacetyl-1,2β-dihydroakuammiline, *in* A-10036
17-Demethoxyisorhyncophylline, *in* R-10031
Dimethoxyeburnamonine, *in* E-10002
20-Epiervatamine, *in* E-10191
Ervatamine, E-10191
11-Hydroxyvincadifformine, *in* V-10022
15β-Hydroxyvincadifformine, *in* V-10022

$C_{21}H_{26}N_2O_4$
Isorhynchophyllic acid, *in* R-10031
Rhynchophyllic acid, *in* R-10031

$C_{21}H_{26}O_3$
Untenospongin C, U-10010

$C_{21}H_{26}O_4$
Kurchinin; Ac, *in* H-10083

$C_{21}H_{26}O_5$
Cyrtophyllone A, C-10173
3,4-Dihydroxy-20-oxopregna-5,16-dien-19,2-olide, *in* T-10181

$C_{21}H_{26}O_6$
Biondinin A, B-10024

Isomahubenolide, *in* M-10004
Leukotriene A_3; Me ester, *in* E-10078
Mahubenolide, *in* M-10004
Pregn-5-ene-3,14,20-triol, P-10139
Pregn-5-ene-3,17,20-triol, P-10140
Pregn-9(11)-ene-3,6,20-triol, P-10141

$C_{21}H_{34}O_4$
15-Hydroperoxy-5,8,11,13-eicosatetraenoic acid; Me ester, *in* H-10077
Methyl 8-hydroxy-10-[3-(2-octenyl)oxiranyl]-5,9-decadienoate, *in* H-10130
Schistochilic acid B, *in* C-10106
2,3,4-Trihydroxypregnan-16-one, T-10187

$C_{21}H_{34}O_5$
▷ Allopertusaric acid, *in* M-10093
Betaenone C, *in* B-10017
Dehydroconstipatic acid, *in* I-10037
Isomuronic acid, I-10037
Muronic acid, *in* M-10093

$C_{21}H_{34}O_6$
Protopraesorediosic acid, P-10156
Thromboxane B_2; 11-Dehydro, Me ester, *in* T-10086

$C_{21}H_{36}O_2$
ent-16α-Methoxy-17-kauranol, *in* K-10003

$C_{21}H_{36}O_3$
Dihydromahubenolide A, *in* H-10044
Dihydromahubenolide B, *in* H-10044
15,16-Epoxy-15-methoxy-3-cleroden-18-ol, *in* E-10048
Isodihydromahubenolide A, *in* H-10044
Isodihydromahubenolide B, *in* H-10044
Isomahubanolide, *in* M-10004
Mahubanolide, *in* M-10004

$C_{21}H_{36}O_4$
ent-15,16-Epoxy-15-methoxy-3-clerodene-7,18-diol, *in* E-10049

$C_{21}H_{36}O_5$
Constipatic acid, *in* I-10037
Dihydropertusaric acid, *in* M-10093
Murolic acid, M-10093
Neuropogolic acid, *in* I-10037
Pregnane-3,12,14,17,20-pentol, P-10138

$C_{21}H_{36}O_6$
Betaenone D, B-10017

$C_{21}H_{36}O_7$
Atractyloside C, *in* E-10218

$C_{21}H_{36}O_8$
Atractyloside G, *in* E-10222

$C_{21}H_{36}O_{10}$
Atractyloside A, *in* G-10132
Kenposide B, *in* L-10033
Shionoside A, *in* D-10269

$C_{21}H_{38}N_2O_2$
3,20-Diaminopregnane-2,4-diol, D-10048

$C_{21}H_{38}O_3$
Dihydromahubanolide A, *in* H-10044
Dihydromahubanolide B, *in* H-10044
Isodihydromahubanolide A, *in* H-10044
Isodihydromahubanolide B, *in* H-10044

$C_{21}H_{38}O_5$
Neodihydromurolic acid, *in* M-10093

$C_{21}H_{39}NO_6$
Sphingofungin F, *in* S-10087

$C_{21}H_{39}NO_7$
Sphingofungin E, S-10087

$C_{21}H_{40}O_3$
5-Oxoheneicosanoic acid, O-10057

$C_{21}H_{42}O$
Alfalfone, A-10042

$C_{21}H_{42}O_3$
14-Hydroxyheneicosanoic acid, H-10156
15-Hydroxyheneicosanoic acid, H-10157

$C_{22}H_{14}O_7$
Spiromentin D, S-10098

$C_{22}H_{16}O_8$
Torosaflavone C, T-10093

$C_{22}H_{16}O_9$
BL V, *in* P-10056
6-(3,4-Dihydroxyphenyl)-6*a*,12*b*-dihydro-3,10,11,12-tetrahydroxy[2]benzopyrano[3,4-*c*][1]benzopyran-8(6*H*)-one, D-10232

$C_{22}H_{16}O_{10}$
6*a*,12*b*-Dihydro-3,10,11,12-tetrahydroxy-6-(3,4,5-trihydroxyphenyl)[2]benzopyrano[3,4-*c*][1]benzopyran-8[6*H*]one, *in* D-10232

$C_{22}H_{18}O_{11}$
3-*O*-Demethyltetracenomycin C, *in* T-10021

$C_{22}H_{19}NO_6S$
Xestoquinolide B, X-10009

$C_{22}H_{20}N_2O_8$
Scabrosine; Di-Ac, *in* S-10029

$C_{22}H_{20}O_4$
3,5-Dihydroxybenzoic acid; Dibenzyl ether, Me ester, *in* D-10110

$C_{22}H_{20}O_6$
Ovalichromene A†, O-10050

$C_{22}H_{20}O_{12}$
Luteolin; 7-*O*-β-D-Glucuronoside, Me ester, *in* T-10052

$C_{22}H_{22}O_5$
Curcumin II, *in* C-10149
O-Methylovaliflavanone C, *in* T-10189
Ponganone I, P-10131

$C_{22}H_{22}O_9$
1,3,8-Trihydroxy-2-methylanthraquinone; 8-Me ether, 3-*O*-α-L-rhamnopyranoside, *in* T-10161

$C_{22}H_{22}O_{10}$
Genkwanin; 4′-*O*-β-D-Galactopyranoside, *in* D-10195
Glucogenkwanin, *in* D-10195
Phegopolin, *in* D-10195

$C_{22}H_{22}O_{11}$
Setaricin, *in* T-10140

$C_{22}H_{22}O_{14}$
1,3-Hexahydroxydiphenoylglucose; 4′,4″-Di-Me ether, *in* H-10055

$C_{22}H_{24}O_5$
Glyasperin H, G-10098

$C_{22}H_{24}O_6$
Vismione C, V-10032
Vismione H, *in* D-10102

$C_{22}H_{24}O_8$
Anhydroexfoliamycin, *in* E-10238

$C_{22}H_{24}O_9$
3,3′,4′,5,5′,6,7-Heptamethoxyflavone, *in* H-10026

$C_{22}H_{24}O_{11}$
Lanceolin†, *in* P-10040
Okanin; 4-Me ether, 3′-*O*-β-D-glucopyranoside, *in* P-10040
Okanin; 4-Me ether, 4′-*O*-β-D-glucopyranoside, *in* P-10040
Scuteamoenoside, *in* T-10050

$C_{22}H_{24}O_{12}$
Taxifolin; 7-Me ether, 3-*O*-β-D-glucopyranoside, *in* P-10050
Taxifolin; 7-Me ether, 5-*O*-β-D-glucopyranoside, *in* P-10050

$C_{22}H_{25}NO_5$
1-(*N*-Acetyl-*N*-methylamino)ethyl-7-hydroxy-3,4,6-trimethoxyphenanthrene, *in* M-10069

$C_{22}H_{25}NO_6$
β-Lumicolchicine, L-10082
γ-Lumicolchicine, *in* L-10082

$C_{22}H_{26}N_2O_3$
Vincamajine, V-10023
Vincamajinine, *in* V-10023

$C_{22}H_{26}N_2O_4$
Gambireine, *in* P-10019
N^1-Methoxy-19,20-dehydroervatamine, *in* E-10191
Nervobscurine, *in* A-10036
Quaternidine, *in* P-10116

$C_{22}H_{26}N_2O_5$
Volkensine†, *in* P-10116

$C_{22}H_{26}N_2O_6$
Ornithine; N^{α},N^{δ}-Bis(benzyloxycarbonyl), Me ester, *in* O-10049

$C_{22}H_{26}N_4$
Isocalycanthine, I-10024

$C_{22}H_{26}O_5$
2-Geranyloxy-5-hydroxy-7-methoxy-6-methyl-1,4-naphthoquinone, *in* T-10164
Glyasperin D, *in* T-10068
Glyasperin I, *in* T-10068

$C_{22}H_{26}O_6$
Triandrin A, T-10102

$C_{22}H_{26}O_8$
1,4-Epoxy-8,10,13-trihydroxy-1,5,7(11)-germacratrien-12,6-olide; 8-Tigloyl, 13-Ac, *in* E-10159
Lecocarpinolide B, *in* T-10178
Plicatipyrone, P-10124
Teumassin, *in* D-10075

$C_{22}H_{26}O_9$
Exfoliamycin, E-10238
Prevernocistifolide-8-*O*-senecioate, *in* D-10088

$C_{22}H_{26}O_{10}$
1,10:4,5-Diepoxy-8,13,14-trihydroxy-2,7(11)-germacradien-12,6-olide; 2α,3α-Epoxide, 8-(3-methyl-2-butenoyl), 13-Ac, *in* D-10088
Melampyroside, M-10026

$C_{22}H_{26}O_{12}$
Obtusaside, O-10004

$C_{22}H_{27}ClN_2O_3$
Lorajmine, *in* A-10035

$C_{22}H_{27}NO_4$
Epocarbazolin A, E-10028
Fissumine, F-10011
N-Methylsecoglaucine, M-10069

$C_{22}H_{27}NO_5$
O-Methylthaicanine, *in* T-10081

$C_{22}H_{27}NO_7$
Alkaloid FK 3000, *in* S-10066

$C_{22}H_{28}NO_5^{\oplus}$
N-Methylthaicanine, *in* T-10081

$C_{22}H_{28}N_2O_4$
Excelsinine, *in* M-10042
19-Hydroxyvincamajine, *in* V-10023
Isogambirine, I-10032
Isorhyncophylline, *in* R-10031
10-Methoxy-17-epialloyohimbine, *in* M-10042
10-Methoxy-3-epi-α-yohimbine, *in* M-10042
10-Methoxyyohimbine, M-10042
10-Methoxy-α-yohimbine, *in* M-10042
10-Methoxy-β-yohimbine, *in* M-10042
Rhyncophylline, R-10031

$C_{22}H_{28}N_2O_5$
Isorhyncophylline *N*-oxide, *in* R-10031
Rhyncophylline *N*-oxide, *in* R-10031

$C_{22}H_{28}O_4$
Metachromin E, M-10033

$C_{22}H_{28}O_5$
Furanoeremophil-1(10)-ene-3,6-diol; 6-Angeloyl, 3-Ac, *in* F-10030
Furanoeremophil-1(10)-ene-3,6-diol; 6-(3-Methyl-2-butenoyl), 3-Ac, *in* F-10030
Furanoeremophil-1(10)-ene-3,6-diol; 6-Tigloyl, 3-Ac, *in* F-10030
Lancerodiol; 6-(4-Hydroxybenzoyl), *in* D-10131
Lapidol; 6-(4-Hydroxybenzoyl), *in* D-10132
Stevionolide, *in* H-10208

2-Acetamido-2-deoxy-β-D-glucopyranosyl-(1→3)[2-acetamido-2-deoxy-β-D-glucopyranosyl-(1→6)]-D-glucose, *in* A-10065
2-Acetamido-2-deoxy-β-D-glucopyranosyl-(1→3)-β-D-galactopyranosyl-(1→3)-2-acetamido-2-deoxy-D-glucose, *in* A-10066
2-Acetamido-2-deoxy-β-D-glucopyranosyl-(1→6)-β-D-galactopyranosyl-(1→3)-2-acetamido-2-deoxy-D-glucose, *in* A-10067

$C_{22}H_{38}O_2$
13,16,19-Docosatrienoic acid, D-10300

$C_{22}H_{38}O_3$
3-Clerodene-15,18-diol; 15-Ac, *in* C-10106
3-Clerodene-15,18-diol; 18-Ac, *in* C-10106
15,16-Epoxy-15-ethoxy-3-cleroden-18-ol, *in* E-10048
3-Viscidene-5,16-diol; 16-Ac, *in* V-10031

$C_{22}H_{38}O_5$
14,15-Dihydro-14,15-dihydroxygeranyllinalol; 9-Acetoxy, *in* P-10112

$C_{22}H_{38}O_{10}$
Anatolioside, *in* D-10279
Linalool; 3-*O*-[β-L-Fucopyranosyl-(1→6)-β-D-glucopyranoside], *in* D-10279
Shionoside B, *in* D-10269

$C_{22}H_{40}N_4O_5$
Matlystatin B, M-10020

$C_{23}H_{16}O_5$
Ohioensin A, O-10019

$C_{23}H_{20}O_{11}$
Tetracenomycin C, T-10021

$C_{23}H_{20}O_{13}$
Luteolin; 3′-*O*-(*O*-Acetyl-β-D-glucuronoside), *in* T-10052

$C_{23}H_{22}O_7$
Amorphispironone, A-10074
Ponganone II, P-10132

$C_{23}H_{22}O_8$
Acetylpiperenol A, *in* H-10181

$C_{23}H_{22}O_{11}$
2″-*O*-Acetylafzelin, *in* A-10030
3″-*O*-Acetylafzelin, *in* A-10030
4″-*O*-Acetylafzelin, *in* A-10030

$C_{23}H_{22}O_{12}$
Luteolin; 7-*O*-(6-*O*-Acetyl-β-D-glucopyranoside), *in* T-10052

$C_{23}H_{22}O_{13}$
Tricin; 7-*O*-β-D-Glucuronoside, *in* T-10140

$C_{23}H_{22}O_{16}S$
Tricin; 7-*O*-(Sulfooxy-β-D-glucuronoside), *in* T-10140

$C_{23}H_{22}O_{19}S_2$
Tricin; 7-*O*-(Disulfooxy-β-D-glucuronoside), *in* T-10140

$C_{23}H_{24}O_5$
8-Desoxygartanin, T-10144
Folipastatin, F-10014
Glyasperin G, G-10097

$C_{23}H_{24}O_6$
Curcumin I, *in* C-10149
2-(3,7-Dimethyl-2,6-octadienyl)-1,3,6,7-tetrahydroxyxanthone, D-10281
Isorheediaxanthone B, I-10050

$C_{23}H_{24}O_7$
Garvin A quinone, G-10023

$C_{23}H_{24}O_{10}$
Specioside A, *in* S-10084
Specioside B, *in* S-10084

$C_{23}H_{24}O_{12}$
Glucotricin, *in* T-10140
Tricin; 4′-*O*-β-D-Glucopyranoside, *in* T-10140
Tricin; 5-*O*-β-D-Glucopyranoside, *in* T-10140

$C_{23}H_{24}O_{15}S$
Tricin; 7-*O*-(Sulfooxy-β-D-glucopyranoside), *in* T-10140

$C_{23}H_{25}Br_4N_3O_7$
Aplysinamisine III, *in* H-10045

$C_{23}H_{25}ClN_2O_9$
8-Methoxychlorotetracycline, M-10039

$C_{23}H_{25}ClN_2O_{10}$
Dactylocyclinone, *in* M-10039

$C_{23}H_{25}NO$
Mahanimbine, M-10003

$C_{23}H_{25}NO_2$
Murrayamine C†, *in* M-10003

$C_{23}H_{25}NO_3$
Dioncophylline B, D-10290
Dioncophylline C, D-10291

$C_{23}H_{26}N_2O_4$
Akuammiline, A-10036

$C_{23}H_{26}N_2O_5$
Uncarine A; *N*-Ac, *in* U-10005
Uncarine B; *N*-Ac, *in* U-10005

$C_{23}H_{26}O_5$
8-Phenylacetoxyludalbin, *in* D-10159

$C_{23}H_{26}O_6$
3,6-Dihydroxyfuranoeremophil-1(10)-en-9-one; 3,6-Bis(methylpropenoyl), *in* D-10170

$C_{23}H_{26}O_7$
Purpactin A, *in* P-10025

$C_{23}H_{26}O_8$
8-Hydroxyzaluzanin C; 3,8-Bis-(2-hydroxymethylpropenoyl), *in* D-10175

$C_{23}H_{26}O_{11}$
Calceolarioside D, C-10015
Decentapicrin A, *in* S-10135
Decentapicrin B, *in* S-10135
Decentapicrin C, *in* S-10135
Dehydrobrucein B, *in* D-10029
Desacetylcentapicrin, *in* S-10135
Okanin; 3,4-Di-Me ether, 4′-*O*-β-D-glucopyranoside, *in* P-10040

$C_{23}H_{26}O_{12}$
cis-Coniferyl alcohol 4-*O*-(6-galloylglucopyranoside), *in* D-10243
Gardoside; 7-(4-Hydroxybenzoyl), *in* G-10020
Lobodirin, *in* D-10134

$C_{23}H_{27}NO_2$
Mahanimbicine, *in* M-10003

$C_{23}H_{27}NO_7$
Asimilobine 2-*O*-β-D-glucoside, *in* A-10132

$C_{23}H_{28}N_2O_4$
1,2β-Dihydroakuammiline, *in* A-10036
3-Isopaynantheine, *in* P-10019
N-Jasmonoyltryptophan, J-10004
10-Methoxyvincamajine, *in* V-10023
11-Methoxyvincamajine, *in* V-10023
11-Methoxy-17-*epi*-vincamajine, *in* V-10023
Paynantheine, P-10019

$C_{23}H_{28}N_2O_5$
Quaternine, *in* P-10116

$C_{23}H_{28}N_2O_6$
Carapanaubine, C-10021
10,11-Dimethoxyisomitraphylline, *in* M-10082
Isocarapanaubine, *in* C-10021
Neisosposinine, *in* C-10021

$C_{23}H_{28}N_2O_7$
Carapanaubine *N*-oxide, *in* C-10021

$C_{23}H_{28}O_6$
3,6-Dihydroxyfuranoeremophilan-9-one; 3,6-Bis(2-methyl-2-propenoyl), *in* D-10168
3,6-Dihydroxyfuranoeremophil-1(10)-en-9-one; 3-Angeloyl, 6-propanoyl, *in* D-10170

$C_{23}H_{28}O_7$
Koberin B, *in* E-10103
Schizanlignone B, S-10035

$C_{23}H_{28}O_9$
3-*O*-Methylexfoliamycin, *in* E-10238

$C_{23}H_{28}O_{10}$
1,10:4,5-Diepoxy-8,13,14-trihydroxy-2,7(11)-germacradien-12,6-olide; 8-(2-Methylpropanoyl), 13,14-di-Ac, *in* D-10088
2′,3′,4′,7-Tetrahydroxyisoflavan; 3′,4′-Di-Me ether, 7-*O*-β-D-glucopyranoside, *in* T-10054

$C_{23}H_{28}O_{11}$
7-*O*-Benzoylloganic acid, *in* L-10059

$C_{23}H_{28}O_{12}$
7-*p*-Hydroxybenzoyl-8-epiloganic acid, *in* L-10059
Swertiaside A, *in* L-10059

$C_{23}H_{29}NO_4$
Corymotine, C-10128
Epocarbazolin B, E-10029

$C_{23}H_{30}NO_5^{\oplus}$
N,*O*-Dimethylthaicanine, *in* T-10081

$C_{23}H_{30}N_2O_4$
N-Cucurbinoyltryptophan, *in* J-10004

$C_{23}H_{30}O_5$
Andirobicin B, A-10086
Ferutidin, *in* D-10132
Furanoeremophil-1(10)-ene-3,6-diol; 6-(3-Methyl-2-pentenoyl), 3-Ac, *in* F-10030
Jaeskeanidin, *in* D-10019
Lancerodiol; 6-(4-Methoxybenzoyl), *in* D-10131
Stachybotrydial, S-10106

$C_{23}H_{30}O_6$
Lancerodiol vanillate, *in* D-10131

$C_{23}H_{30}O_7$
7,8-Epoxy-3,11,14-trihydroxy-12-oxocard-20(22)-enolide, E-10164
7,8-Epoxy-3,12,14-trihydroxy-11-oxocard-20(22)-enolide, E-10165
Polysyphorin, P-10130

$C_{23}H_{30}O_9$
Piptocarphin E, *in* E-10151
Prostatolide; 6-(Methylpropenoyl), 1,9-di-Ac, *in* T-10049
1,4,6,9-Tetrahydroxy-11(13)-eudesmen-12,8-olide; 6-(Methylpropenoyl), 1,9-di-Ac, *in* T-10049

$C_{23}H_{30}O_{10}$
Neohelmanticin, N-10018

$C_{23}H_{30}O_{12}$
1,4,5,8,10,13-Hexahydroxy-7(11)-muurolen-12,6-olide; 5,8,10,13-Tetra-Ac, *in* H-10058
1,4,5,8,10,13-Hexahydroxy-7(11)-muurolen-12,6-olide; 5,8,10,13-Tetra-Ac, *in* H-10058
Isonishindaside, *in* N-10028
Nishindaside, N-10028

$C_{23}H_{31}NO_8$
Angeloyl-*trans*-anacrotine *N*-oxide, *in* A-10078

$C_{23}H_{32}O_2$
1,1′-[1,11-Undecanediylbis(oxy)]bisbenzene, *in* U-10007

$C_{23}H_{32}O_4$
3,14-Dihydroxycarda-16,20(22)-dienolide, D-10122
6,7-Epoxy-2-humulen-1-ol; (4-Methoxybenzoyl), *in* E-10097
3-Hydroxypregn-5-ene-7,20-dione; Ac, *in* H-10221

$C_{23}H_{32}O_5$
Antibiotic L 671776, A-10100
Ferutin, *in* D-10019
O-Methylshikoccin, *in* S-10058
Teferin, *in* D-10019

$C_{23}H_{32}O_6$
O-Methylepoxyshikoccin, *in* S-10058
1α-*O*-Methylquassin, *in* Q-10003
3,5,14-Trihydroxy-19-oxocard-20(22)-enolide, T-10177

$C_{25}H_{40}O_7$
15,16-Epoxy-3-clerodene-7,15,18-triol; 15-Me ether, 18-(methylmalonoyl), *in* E-10049
Tomentin†, *in* P-10138

$C_{25}H_{41}NO_6$
14-*O*-Methylforesticine, *in* S-10046

$C_{25}H_{41}NO_7$
Delbiterine, *in* D-10032
6-Demethyldelphatine, *in* D-10032

$C_{25}H_{42}N_2O_6S$
Leukotriene D_3, *in* L-10047

$C_{25}H_{42}O_7$
Palmonine A, *in* E-10083

$C_{25}H_{43}NO$
Pipereicosalidine, *in* E-10010

$C_{25}H_{43}NO_6$
10-Deoxymethymycin, *in* M-10079

$C_{25}H_{43}NO_7$
Methymycin, M-10079

$C_{25}H_{46}O_2$
23-Methyl-5,9-tetracosadienoic acid, M-10072

$C_{25}H_{48}$
3-(3,7-Dimethyloctyl)-2,6,10-trimethyl-1,11-dodecadiene, D-10283

$C_{25}H_{48}N_2O_5$
Antibiotic Sch 38518, *in* F-10013
Fluvirucin B_3, *in* F-10013

$C_{25}H_{48}O$
19-Pentacosenal, *in* P-10029

$C_{25}H_{48}O_2$
16-Pentacosenoic acid, P-10026
17-Pentacosenoic acid, P-10027
18-Pentacosenoic acid, P-10028
19-Pentacosenoic acid, P-10029

$C_{25}H_{50}O_3$
Cerebronic acid; Me ester, *in* H-10229

$C_{26}H_{20}O_{11}$
BL III, *in* P-10056
1,2,4,7,8-Pentahydroxy-3-(4-hydroxyphenyl) dibenzofuran; 1,2,4,7-Tetra-Ac, *in* P-10056
1,2,4,7,8-Pentahydroxy-3-(4-hydroxyphenyl) dibenzofuran; 1,2,4,8-Tetra-Ac, *in* P-10056

$C_{26}H_{24}O_7$
Ribitol; 2,4-*O*-Benzylidene, 1,5-dibenzoyl, *in* R-10032

$C_{26}H_{24}O_8$
Ribitol; 2,3,4-Tribenzoyl, *in* R-10032

$C_{26}H_{24}O_{13}$
3-Glucosyl-2,3′,4,4′,6-pentahydroxybenzophenone; 6″-(*p*-Hydroxybenzoyl), *in* G-10087

$C_{26}H_{26}O_{10}$
Ikarisoside E, *in* C-10099

$C_{26}H_{26}O_{14}P_2$
Ribitol; 2,3,4-Tribenzoyl, 1,5-diphosphate, *in* R-10032

$C_{26}H_{27}NO_4$
Dioncophyllacine A, D-10289

$C_{26}H_{27}NO_9$
Stephavanine, S-10116

$C_{26}H_{28}N_2O_8$
Scabrosine; 4-Ac, 4′-hexanoyl, *in* S-10029
Scabrosine; Dibutanoyl, *in* S-10029

$C_{26}H_{28}O_6$
4,6′-Epoxyoritiniflavanol, E-10139
Lupinol B, *in* L-10086

$C_{26}H_{28}O_7$
Erythbigenin, *in* P-10048

$C_{26}H_{28}O_9$
Brownin D, B-10048

$C_{26}H_{28}O_{14}$
Afzelin; 7-*O*-α-L-Arabinopyranoside, *in* A-10030
Afzelin; *O*″-β-D-Xylopyranoside, *in* A-10030
Morindin, *in* T-10160

$C_{26}H_{28}O_{15}$
Cesioside, *in* T-10052
Graveobioside A, *in* T-10052
Lucenin 3, L-10067
Luteolin; 7-*O*-[α-L-Arabinofuranosyl-(1→6)-β-D-glucopyranoside], *in* T-10052
Luteolin; 7-*O*-[α-L-Arabinopyranosyl-(1→6)-β-D-glucopyranoside], *in* T-10052
Luteolin; 7-*O*-(Arabinosylglucoside), *in* T-10052
Luteolin; 5(7)-Galactoside, 7(5)-xyloside, *in* T-10052
Luteolin; 7-*O*-Sambubioside, *in* T-10052
Luteolin; 3′-*O*-Xylopyranoside, 7-*O*-glucopyranoside, *in* T-10052
Populnin; 3-*O*-D-Xyloside, *in* P-10133
Rotundiside, *in* T-10052
Trifolin†; 2″-*O*-β-D-Apiofuranoside, *in* T-10123
Trifolin†; 6″-*O*-L-Arabinopyranoside, *in* T-10123
Trifolin†; 2″-*O*-β-D-Xylopyranoside, *in* T-10123

$C_{26}H_{29}NO_9$
13-Deoxocarminomycin I, *in* F-10007
6-Deoxyoxaunomycin, *in* O-10052

$C_{26}H_{29}NO_{10}$
1-Hydroxy-13-deoxocarminomycin I, *in* F-10007
Oxaunomycin, O-10052

$C_{26}H_{29}NO_{11}$
1-Hydroxyoxaunomycin, *in* O-10052

$C_{26}H_{30}O_{11}$
Simplexoside, *in* P-10120

$C_{26}H_{30}O_{15}$
Desacetylgentiabavarutinoside, *in* T-10073
Gentiabavaroside, *in* T-10073
Gentiacauloside, *in* T-10073
Norswertianine; 2,6-Di-Me ether, 8-*O*-primeveroside, *in* T-10073
Norswertianine; 2,8-Di-Me ether, 1-*O*-primeveroside, *in* T-10073
Okanin; 4′-*O*-[α-L-Arabinofuranosyl(1→4)-β-D-glucopyranoside], *in* P-10040

$C_{26}H_{31}NO_4$
▷ Ancistrocline, *in* A-10084
Ancistroealaensine, *in* A-10083
Anistrocline, *in* A-10083
O-Methylancistrocladine, *in* A-10083

$C_{26}H_{31}N_3O_4$
Cadabicine methyl ether, *in* C-10001

$C_{26}H_{31}N_3O_5$
Capparisine, C-10020
Isocodonocarpine, *in* C-10001

$C_{26}H_{32}O_5$
O-Prenylvismione E, *in* V-10032
Scoparic acid C, *in* H-10196

$C_{26}H_{32}O_6$
Deacetylnimbinene, *in* N-10027

$C_{26}H_{32}O_7$
Nimbandiol, N-10026
Scillicyanogenin, *in* T-10176

$C_{26}H_{32}O_{11}$
Dehydrobrucein A, *in* D-10029

$C_{26}H_{32}O_{13}$
7-Caffeoylloganin, *in* L-10059

$C_{26}H_{33}NO_6$
Venudelphine, V-10017

$C_{26}H_{34}O_5$
7,21-Dihydroxy-3-oxo-24,25,26,27-tetranorapotirucalla-1,14,20(22)-trien-23,21-olide, *in* D-10224

$C_{26}H_{34}O_6$
Celafolin B1, *in* T-10138
Celafolin B2, *in* T-10138

$C_{26}H_{34}O_7$
Celorbicol; 9-Benzoyl, 1,6-Di-Ac, *in* T-10139
Cinobufaginol, *in* E-10155
Forrestin G, *in* T-10153
Hellebrigenin; 3-Ac, *in* T-10175
Triptogelin E2, *in* T-10138

$C_{26}H_{34}O_8$
1,6,8,9-Tetrahydroxydihydro-β-agarofuran; 9-Benzoyl, 1,6-di-Ac, *in* T-10042

$C_{26}H_{34}O_9$
Adenanthin, *in* K-10007
2-*O*-α-L-Fucopyranosyl-L-fucose; Benzyl glycoside, 2′-benzyl, *in* F-10023
Shikokianidin, *in* E-10119
Teucrolin C, *in* D-10066

$C_{26}H_{34}O_{10}$
9α,14-Diacetoxy-1α-benzoyloxy-4β,6β,8β-trihydroxydihydro-β-agarofuran, *in* H-10054
Eumaitenin, *in* T-10042
Malkanguniol; 9-(3-Furoyl), 1,8,14-tri-Ac, *in* T-10043
2,8,10,11-Tetrahydroxy-3-slovenolide; 8-(3-Methyl-2-butenoyl), 2,10,11-tri-Ac, *in* T-10053
Teucrolin A, *in* T-10120

$C_{26}H_{34}O_{12}$
1,4,5,8,10,13-Hexahydroxy-7(11)-muurolen-12,6-olide; 13-Tigloyl, 5,8,10-tri-Ac, *in* H-10058

$C_{26}H_{35}NO_6$
Lactimidomycin, L-10016

$C_{26}H_{36}O_5$
7,21-Dihydroxy-3-oxo-24,25,26,27-tetranorapotirucalla-14,20(22)-dien-23,21-olide, D-10224
4-*O*-Methylvaldivone A, *in* D-10162

$C_{26}H_{36}O_8$
Taxinine A, *in* T-10070

$C_{26}H_{36}O_9$
Fischeriana B, *in* C-10037
Rabdosianin A, *in* E-10119
Weisiensin A, *in* K-10007

$C_{26}H_{36}O_{10}$
2,8,10,11-Tetrahydroxy-3-slovenolide; 8-(2-Methylbutanoyl), 2,10,11-tri-Ac, *in* T-10053

$C_{26}H_{36}O_{11}$
6-Hydroxyboschnaloside; 6-(2,6-Dimethyl-8-oxo-2*E*,6ξ-octadienoyl), *in* H-10091

$C_{26}H_{36}O_{17}$
4-*O*-β-D-Glucopyranosyl-L-rhamnose; Hepta-Ac, *in* G-10072

$C_{26}H_{36}O_{18}$
Acaciabiuronic acid; Me glycoside, hexa-Ac, Me ester, *in* A-10011
4-*O*-α-D-Galactopyranuronosyl-D-galactose; Me glycoside, 6′-Me ester, hexa-Ac, *in* G-10013

$C_{26}H_{37}NO_7$
Barbinidine, *in* D-10033

$C_{26}H_{37}NO_8$
Pergilone, P-10080

$C_{26}H_{38}O$
2-(3,7,11,15-Tetramethyl-2,6,10,14-hexadecatetraenyl)benzene, T-10075

$C_{26}H_{38}O_4$
22-Hydroxy-24-methyl-12,24-dioxo-16-scalaren-25-al, H-10185

$C_{26}H_{38}O_5$
▷ Ingenol; 20-Deoxy, 3-hexanoyl, *in* I-10012

$C_{26}H_{38}O_7$
15,16-Epoxy-3,12-clerodadiene-14,15,16-triol; Tri Ac, *in* E-10043

15,16-Epoxy-4(18),12-clerodadiene-14,15,16-triol; Tri-Ac, *in* E-10044
3,10(18),14-Prenylguaiatriene-6,9,12,13-tetrol; 6,12,13-Tri-Ac, *in* P-10147

$C_{26}H_{38}O_9$
Forrestin C, *in* K-10007
16-Kaurene-1,3,6,7,11,15-hexol; 7,11,15-Tri-Ac, *in* K-10007
2,8,10,11-Tetrahydroxy-3-slovenolide; 2-(2-Methylbutanoyl), 8-butanoyl, 10-Ac, *in* T-10053

$C_{26}H_{38}O_{11}$
6-Hydroxyboschnaloside; 6-(8-Hydroxy-2,6-dimethyl-2*E*,6*E*-octadienoyl), *in* H-10091
Shinjuglycoside D, *in* A-10053

$C_{26}H_{38}O_{12}$
Casteloside C, C-10035

$C_{26}H_{39}NO_3$
Metachromin H, M-10036

$C_{26}H_{39}NO_7$
Aranorosinol B, A-10113

$C_{26}H_{40}O_2$
3-Hydroxy-24-norcholesta-5,22-dien-7-one, H-10193

$C_{26}H_{40}O_3$
12-Hydroxy-24-methyl-24-oxo-16-scalaren-25-al, H-10187
3-Hydroxy-24,25,26,27-tetranorcycloartan-23,21-olide, H-10231

$C_{26}H_{40}O_4$
Glaciasterol A, G-10037

$C_{26}H_{40}O_5$
16,22-Dihydroxy-24-methyl-12,24-dioxo-25-scalaranal, D-10200

$C_{26}H_{40}O_6$
Asbestinin 1, *in* A-10130
Asbestinin 2, A-10130

$C_{26}H_{40}O_7$
Asbestinin epoxide, *in* A-10130
Palmonine B, *in* E-10084

$C_{26}H_{40}O_8$
Clerodinin C, C-10110
Clerodinin D, *in* C-10110
Gomojoside P, *in* D-10188
15-Hydroxy-16-kauren-19-oic acid; β-D-Allopyranosyl ester, *in* H-10170
Paniculoside I, *in* H-10170

$C_{26}H_{40}O_{10}$
Andrographiside, *in* T-10156

$C_{26}H_{40}O_{11}$
Parvifoliside, *in* E-10119
Rabdoside 1, *in* E-10121
Shikokiaside A, *in* E-10119

$C_{26}H_{41}NO_6$
Deoxydelcorine, *in* N-10052
Paciline, *in* D-10033
Peregrine, *in* B-10021

$C_{26}H_{41}NO_7$
Nuttalianine, *in* S-10046

$C_{26}H_{41}NO_8$
6-Epipubescenine, *in* P-10169
19-Oxodelphatine, *in* D-10032
Pubescenine†, P-10169

$C_{26}H_{42}N_2O$
N^b-Demethylharappamine, *in* H-10003

$C_{26}H_{42}N_2O_6S$
Leukotriene D_4; Me ester, *in* L-10047

$C_{26}H_{42}N_6O_6$
Matlystatin E, M-10022

$C_{26}H_{42}O_4$
24,25-Epoxy-24-methyl-16-scalarene-12,22,25-triol, E-10129
3,6,11-Trihydroxy-24-nor-9,11-secocholesta-7,22-dien-9-one, T-10168

$C_{26}H_{42}O_6$
Deacetyltomentosin, *in* P-10138

$C_{26}H_{42}O_7$
Calocin, *in* P-10139
3-Clerodene-7,15,16,18-tetrol; 15,16,18-Tri-Ac, *in* C-10107

$C_{26}H_{42}O_8$
Gomojoside Q, *in* D-10189

$C_{26}H_{42}O_9$
16,17,19-Kauranetriol; 19-Carboxylic acid, 19-β-D-glucopyranosyl ester, *in* K-10005
Paniculoside IV, *in* K-10005
Suavioside E, *in* K-10005

$C_{26}H_{43}NO_7$
Delphatine, D-10032

$C_{26}H_{44}O_8$
Gomojoside M, *in* L-10007
Gomojoside N, *in* L-10005
Gomojoside O, *in* L-10006

$C_{26}H_{45}NO_{21}$
β-D-Galactopyranosyl-(1→3)-2-acetamido-2-deoxy-β-D-glucopyranosyl-(1→3)-β-D-galactopyranosyl-(1→4)-D-glucose, G-10002
Lacto-*N*-neotetraose, *in* G-10004

$C_{26}H_{46}O_3$
4,7-Epoxy-11-eremophilanol; Undecanoyl, *in* E-10080

$C_{26}H_{46}O_8$
Gomojoside L, *in* L-10011

$C_{26}H_{46}O_{12}$
Atractyloside D, *in* E-10218

$C_{26}H_{48}N_5O_3$
Efrapeptin B, E-10007

$C_{26}H_{48}O_2$
17,20-Hexacosadienoic acid, H-10036

$C_{26}H_{50}O$
19-Hexacosenal, H-10037

$C_{26}H_{50}O_4$
Cerebronic acid; Ac, *in* H-10229

$C_{27}H_{20}O_{18}$
Castalin, C-10032

$C_{27}H_{22}O_6$
Rubioncolin C, R-10056

$C_{27}H_{22}O_{18}$
Juglanin†, J-10006

$C_{27}H_{22}O_{19}$
Lagerstannin C, L-10019

$C_{27}H_{26}O_{16}$
3-Methoxy-4-hydroxyphenyl 1-*O*-2,6-di-*O*-galloyl-β-D-glucopyranoside, *in* B-10013

$C_{27}H_{26}O_{18}$
Luteolin; 3′,4′-Di-*O*-galacturonoside, *in* T-10052
Luteolin; 3′,7-Di-*O*-galacturonoside, *in* T-10052
Luteolin; 3′,4′-Di-*O*-glucuronoside, *in* T-10052
Luteolin; 3′,7-Di-*O*-glucuronoside, *in* T-10052
Luteolin; 4′,7-Di-*O*-glucuronoside, *in* T-10052
Luteolin; 7-*O*-[Glucuronosyl-(1→2)-glucuronoside], *in* T-10052

$C_{27}H_{28}O_4$
Spirasineol A, S-10093
Spirasineol B, S-10094

$C_{27}H_{28}O_{10}$
Acuminatin†, *in* C-10099

$C_{27}H_{28}O_{15}$
Campanoside, *in* T-10052

$C_{27}H_{28}O_{16}$
Luteolin; 4′-*O*-Rhamnoside, 7-*O*-glucuronoside, *in* T-10052

$C_{27}H_{28}O_{17}$
Luteolin; 4′-*O*-β-D-Glucopyranoside, 7-*O*-β-D-galacturonoside, *in* T-10052
Luteolin; 3′-*O*-Glucopyranoside, 7-*O*-glucuronoside, *in* T-10052
Luteolin; 7-*O*-(Glucosylglucuronoside), *in* T-10052
Populnin; 3-*O*-β-D-Glucuronoside, *in* P-10133

$C_{27}H_{29}NO_6$
Speciocolchine, *in* S-10086
Specioritchine, *in* S-10086
Specioseine, *in* S-10086

$C_{27}H_{29}NO_9$
4′-*O*-Methylstephavanine, *in* S-10116

$C_{27}H_{30}O_8$
▷ Daphnetoxin, D-10012

$C_{27}H_{30}O_{10}$
Brownin E, B-10049

$C_{27}H_{30}O_{12}$
Demethylsteffimycin, *in* S-10109

$C_{27}H_{30}O_{14}$
Genkwanin; 4′-*O*-[β-D-Glucopyranosyl-(1→3)-β-D-xylopyranoside], *in* D-10195
Genkwanin; 5-*O*-[α-D-Xylopyranosyl(1→6)-β-D-glucopyranoside], *in* D-10195
▷ Kaempferitrin, *in* A-10030
Luteolin; 7-*O*-Di-α-L-rhamnopyranoside, *in* T-10052
Morindone 6-β-rutinoside, *in* T-10160
Nivyaside, N-10033
1,3,8-Trihydroxy-2-methylanthraquinone; 3-*O*-Neohesperidoside, *in* T-10161
1,3,8-Trihydroxy-2-methylanthraquinone; 3-*O*-Rutinoside, *in* T-10161
Yuankanin, *in* D-10195

$C_{27}H_{30}O_{15}$
6,8-Diglucosyl-3′,4′,7-trihydroxyflavone, D-10091
6-Glucopyranosyl-8-xylopyranosylchrysoeriol, *in* L-10067
Luteolin; 7-*O*-(Glucosylrhamnoside), *in* T-10052
Luteolin; 4′-*O*-Neohesperidoside, *in* T-10052
Luteolin; 7-*O*-(Rhamnosylglucoside), *in* T-10052
Multiflorin B, *in* A-10030
Populnin; 3-*O*-α-L-Rhamnopyranoside, *in* P-10133
Rheinanthrone; *O*-Diglucoside, *in* D-10094
Scolymoside, *in* T-10052
Trifolin†; 2″-*O*-α-L-Rhamnopyranoside, *in* T-10123
Veronicastroside, *in* T-10052

$C_{27}H_{30}O_{16}$
Glucoluteoloside, *in* T-10052
Kaempferol 3,5-digalactoside, *in* T-10123
Kaempferol 3-digalactoside, *in* T-10123
Luteolin; 7-*O*-[β-D-Allopyranosyl-(1→2)-β-D-glucopyranoside], *in* T-10052
Luteolin; 7-*O*-Digalactoside, *in* T-10052
Luteolin; 3′,4′-Di-*O*-glucopyranoside, *in* T-10052
Luteolin; 3′,7-Di-*O*-glucopyranoside, *in* T-10052
Luteolin; 4′,7-Di-*O*-glucopyranoside, *in* T-10052
Luteolin 7-diglucoside, *in* T-10052
Luteolin; 7-*O*-[β-D-Galactopyranosyl-(1→6)-β-D-galactopyranoside], *in* T-10052
Luteolin; 7-*O*-(Galactosylglucopyranoside), *in* T-10052
Luteolin; 4′-*O*-Glucopyranoside, 7-*O*-galactopyranoside, *in* T-10052
Luteolin; 7-*O*-(β-D-Glucopyranosylgalactoside), *in* T-10052
Luteolin; 7-*O*-Laminaribioside, *in* T-10052
Panasenoside, *in* T-10123
Trifolin†; 7-*O*-β-D-Galactopyranoside, *in* T-10123
Trifolin†; 6″-*O*-β-D-Glucopyranoside, *in* T-10123

$C_{27}H_{30}O_{18}$
Taxifolin; 3-*O*-[β-D-Galactopyranosyl-(1→6)-β-D-glucopyranoside], *in* P-10050

3,3′,4′,7,8-Pentahydroxyflavan(4→8)-3,3′,4′,5,7-pentahydroxyflavan, P-10052
3,3′,4′,7,8-Pentahydroxyflavan(5→6′)-3,3′,4′,7,8-pentahydroxyflavan, P-10053
Robinetinidol(4β→8)catechin, *in* P-10049

$C_{30}H_{26}O_{13}$
Bignonoside, *in* T-10052
Luteolin 7-(2-coumaroylglucoside), *in* T-10052
Luteolin 7-(6-*p*-Coumaroylglucoside), *in* T-10052
3,3′,4′,5′,7-Pentahydroxyflavan(4→8)-3,3′,4′,5,5′,7-hexahydroxyflavan, P-10049

$C_{30}H_{28}O_{7}$
Benastatin A, B-10011
Euchretin D, E-10207
Euchretin E, E-10208

$C_{30}H_{28}O_{12}$
6-[1-(3,4-Dihydroxyphenyl)-2-hydroxy-3-(3,4,5-trihydroxyphenyl)propyl]-3′,4′,7,8-tetrahydroxyflavan, D-10241

$C_{30}H_{30}O_{7}$
Benastatin B, *in* B-10011

$C_{30}H_{30}O_{8}$
▷ Gossypol, G-10113

$C_{30}H_{31}N_{4}^{\oplus}$
N^{b}-Methylusambarensine, *in* U-10013

$C_{30}H_{32}O_{6}$
Sanggenon J, S-10010
Sanggenon K, S-10011

$C_{30}H_{32}O_{12}$
Sachaliside 2, S-10002

$C_{30}H_{32}O_{14}$
Senburiside II, *in* L-10059

$C_{30}H_{32}O_{18}$
Luteolin; 7-*O*-(6″-*O*-Malonylneohesperidoside), *in* T-10052

$C_{30}H_{34}BrN_{5}O_{15}$
Neosurugatoxin, N-10022

$C_{30}H_{34}O_{4}$
Virgaurin A, V-10027

$C_{30}H_{34}O_{10}$
Lappaol C, L-10029
Lappaol E, L-10031

$C_{30}H_{35}NO_{7}$
Triptogelin F1, *in* T-10139

$C_{30}H_{35}NO_{8}$
Celapagine, *in* T-10042
1,8,9,14-Tetrahydroxydihydro-β-agarofuran; 14-(3-Pyridinecarboxyl), 9-benzoyl, 1-Ac, *in* T-10043

$C_{30}H_{35}NO_{9}$
Triptogelin A7, *in* P-10046

$C_{30}H_{35}NO_{10}$
Celapanine, *in* T-10042

$C_{30}H_{36}N_{2}O_{6}$
Ajmalimine, *in* A-10035
Willicourtine, *in* A-10035

$C_{30}H_{36}O_{6}$
Nymphaeol C, N-10055

$C_{30}H_{36}O_{12}$
Tectoroside, *in* D-10175

$C_{30}H_{36}O_{13}$
1,2,4,6,8,9,14-Heptahydroxydihydro-β-agarofuran; 8-Ketone, 9-benzoyl, 1,2,6,14-tetra-Ac, *in* H-10025

$C_{30}H_{36}O_{18}$
Chemochinenoside A, C-10073

$C_{30}H_{37}NO_{5}$
8-*O*-Cinnamoylgraciline, *in* P-10036

$C_{30}H_{38}N_{4}O_{4}$
Lotusine A, L-10065

$C_{30}H_{38}O_{8}$
Excoecaria factor B_4, *in* G-10107
Ingol; 8-Benzoyl, 3,12-di-Ac, *in* I-10013

$C_{30}H_{38}O_{9}$
Peddiea factor A_1, P-10024

$C_{30}H_{38}O_{12}$
ent-5α,11-Epoxy-1β,4α,6α,8β,9β,14-eudesmanehexol; 9-Benzoyl, 1,6,8,15-tetra-Ac, *in* H-10054
Ixerisoside B, *in* D-10175
6β,8β,9α,14-Tetraacetoxy-1α-benzoyloxy-4β-hydroxydihydro-β-agarofuran, *in* H-10054

$C_{30}H_{38}O_{14}$
Stecholide K, *in* E-10141

$C_{30}H_{38}O_{15}$
Phtheirospermoside, *in* D-10235

$C_{30}H_{38}O_{16}$
Crenulatin†, C-10131

$C_{30}H_{39}NO_{3}$
Antibiotic L 696475, *in* A-10101

$C_{30}H_{39}NO_{4}$
Antibiotic L 697318, A-10101

$C_{30}H_{39}NO_{5}$
Cytochalasin U, *in* A-10101

$C_{30}H_{39}N_{7}O_{6}$
Chymostatin B, *in* C-10096

$C_{30}H_{40}O_{3}$
Chamaecydin, C-10064
Isochamaecydin, *in* C-10064

$C_{30}H_{40}O_{4}$
Chamaecydinol, *in* C-10064
6β-Hydroxychamaecydin, *in* C-10064
10′α-Hydroxycryptoquinone, *in* C-10064
10′β-Hydroxycryptoquinone, *in* C-10064

$C_{30}H_{40}O_{5}$
Euphorbia factor H_7, *in* I-10012
Ingenol; 20-Deoxy, 3-(2*E*,4*Z*,6-decatrienoyl), *in* I-10012
Schisanlactone C, S-10032

$C_{30}H_{40}O_{6}$
5,6-Epoxy-16-hydroxy-1-oxowitha-2,24-dienolide; Ac, *in* E-10114
▷ Euphorbia factor E_2, *in* I-10012

$C_{30}H_{40}O_{7}$
5,6-Epoxy-16,17-dihydroxy-1-oxowitha-2,24-dienolide; 16-Ac, *in* E-10072
Iochromolide, I-10016
Triptogelin E7, *in* T-10138
Triptogelin E8, *in* T-10138
Withacnistin, W-10002

$C_{30}H_{40}O_{8}$
Euphorbia factor Ti_3, *in* P-10063
Excoecariatoxin, *in* G-10107
27-Hydroxyiochromolide, *in* I-10016
27-Hydroxywithacnistin, *in* W-10002
16α-Hydroxywithacnistin, *in* W-10002
Isocelorbicol; 9-(2,3-Epoxycinnamoyl), 2-butanoyl, 1-Ac, *in* T-10138
Withaminimin, W-10005

$C_{30}H_{40}O_{9}$
Physagulin F, *in* W-10005

$C_{30}H_{40}O_{12}$
Stecholide I, *in* E-10141

$C_{30}H_{40}O_{13}$
Stecholide M, *in* E-10141

$C_{30}H_{42}N_{4}O_{4}$
N^{1}-(*Z*)-*p*-Methoxycinnamoylbuchnerine, *in* B-10050

$C_{30}H_{42}O_{4}$
Peradione, P-10075
Pseudolarolide B, *in* P-10160

$C_{30}H_{42}O_{6}$
▷ Euphorbia factor E_1, *in* I-10012

$C_{30}H_{42}O_{7}$
▷ Cucurbitacin I, C-10140
24,25-Dihydroiochromolide, *in* I-10016
24,25-Dihydrowithacnistin, *in* W-10002
3,20-Dihydroxy-7,11,15-trioxolanosta-8,24-dien-26-oic acid, D-10255
Drevogenin II, *in* P-10138
Ganoderic acid J, *in* H-10232
15-Hydroxy-3,7,11,23-tetraoxolanost-8-en-26-oic acid, H-10232

$C_{30}H_{42}O_{8}$
2,3-Dihydro-3-hydroxywithacnistin, *in* W-10002

$C_{30}H_{42}O_{9}$
Ingol; 7-Angeloyl, O^8-Me, 3,12-Di-Ac, *in* I-10013
Ingol; 7-Tigloyl, O^8-Me, 3,12-di-Ac, *in* I-10013

$C_{30}H_{42}O_{10}$
Buchanin, *in* E-10164
Cryptanoside B, *in* E-10165
Intermedioside, *in* E-10164
Sarveroside, *in* E-10164

$C_{30}H_{42}O_{11}$
Ajugamacrin A, *in* E-10150
Ajugamacrin A, *in* E-10150
Forrestin A, *in* K-10007
Hellebrigenin; 3-*O*-β-D-Glucopyranoside, *in* T-10175
Panstroside, *in* E-10164

$C_{30}H_{42}O_{12}$
Clerodendrin A, *in* T-10122

$C_{30}H_{44}O_{3}$
Schisanlactone D, S-10033

$C_{30}H_{44}O_{4}$
Colupone, C-10118
28-Hydroxy-3-oxo-20(29)-lupen-30,21-olide, H-10209
15-Hydroxy-3-oxooleana-1,12-dien-28-oic acid, H-10211
Pseudolarolide A, P-10160

$C_{30}H_{44}O_{5}$
16,23:16,24-Diepoxy-15,25-dihydroxycycloart-7-en-3-one, *in* D-10070
Eunicenone B, E-10226
Gouanic acid, *in* D-10194
11-Hydroxy-3,21-dioxo-12-oleanen-28-oic acid, H-10119
21-Hydroxyisoglabrolide, *in* T-10180
Mimusopsic acid, M-10081
Petuniasterone C 22-*O*-acetate, *in* P-10088
Petuniasterone D, P-10089
Pseudolarolide D, *in* P-10161
Sodivanone B, *in* S-10069
Subellinone, S-10126

$C_{30}H_{44}O_{6}$
11-Deoxocucurbitacin I, *in* C-10140
Sodivanone A, S-10069

$C_{30}H_{44}O_{7}$
Andirobicin A, A-10085
16-Anhydrodesacetylnerigoside, *in* D-10122
Cucurbitacin L, *in* C-10140
16-Desacetyl-16-anhydrocryptograndoside A, *in* D-10122
16-Desacetyl-16-anhydrohongheloside A, *in* D-10122
16-Desacetyl-16-anhydrooleandrin, *in* D-10122
16,22-Dihydroxy-24-methyl-12,24-dioxo-25-scalaranal; Di-Ac, *in* D-10200

$C_{30}H_{44}O_{8}$
16-Anhydrostrospeside, *in* D-10122
16-Desacetyl-16-anhydroacoschimperoside P, *in* D-10122
Obeside D, *in* D-10122
▷ Simplexin, *in* G-10107

$C_{30}H_{44}O_{9}$
▷ Cymarin, *in* T-10177

$C_{30}H_{44}O_{10}$
Strophanthidin digitaloside, *in* T-10177
Strophanthojavoside, *in* T-10177
Strophothevoside, *in* T-10177

Cycloart-24-ene-3,21-diol, C-10161
Cycloart-25-ene-3,22-diol, C-10162
Dammara-20(22),24-diene-3,12-diol, D-10003
Eupha-7,24-diene-1,3-diol, E-10227
15-Hydroxy-3-friedelanone, H-10147
21-Hydroxy-3-friedelanone, *in* F-10021
Kokoonol, *in* D-10167
20(29)-Lupene-3,15-diol, L-10083
12-Oleanene-3,22-diol, O-10024
12-Oleanene-3,27-diol, O-10025
18-Oleanene-3,22-diol, O-10026
14-Taraxerene-3,7-diol, T-10004

$C_{30}H_{50}O_3$
Cucurbita-5,24-diene-3,11,26-triol, C-10142
Cycloart-23-ene-3,25,26-triol, C-10163
Cycloart-24-ene-3,21,23-triol, C-10164
Cycloart-24-ene-3,22,26-triol, C-10165
Dammara-20(22),24-diene-3,6,12-triol, D-10004
Dammara-20,24-diene-3,6,12-triol, D-10005
12,20-Dihydroxydammar-24-en-3-one, *in* D-10011
6,26-Dihydroxy-3-friedelanone, D-10166
21,26-Dihydroxy-3-friedelanone, D-10167
3,13-Dihydroxy-12-oleananone, D-10206
12,23-Epoxydammar-24-ene-3,20-diol, E-10058
3-Hydroxycycloartan-21-oic acid, H-10102
3-Hydroxycycloartan-26-oic acid, H-10103
20(29)-Lupene-3,6,16-triol, L-10085
12-Oleanene-3,22,30-triol, O-10032

$C_{30}H_{50}O_4$
3,19:20,24-Diepoxydammarane-3,25-diol, D-10071
17,24:20,24-Diepoxydammarane-3,25-diol, D-10072
20,24-Epoxy-25,26-dihydroxydammaran-3-one, E-10063
20,24-Epoxy-25,26-dihydroxydammaran-3-one; (20*S*,24*R*,25ξ)-*form*, *in* E-10063
Gorgost-5-ene-1,3,11,21-tetrol, G-10112
20(30)-Lupene-1,3,11,29-tetrol, L-10084
12-Oleanene-3,6,16,28-tetrol, O-10028
12-Oleanene-3,11,23,28-tetrol, O-10029
12-Oleanene-3,16,22,24-tetrol, O-10030
12-Oleanene-3,21,22,24-tetrol, O-10031
3,13,15-Trihydroxy-12-oleananone, T-10170

$C_{30}H_{50}O_5$
Gorgost-5-ene-1,3,9,11,21-pentol, G-10111
12-Oleanene-3,16,21,23,28-pentol, O-10027
3,24,25-Trihydroxycycloartan-30-oic acid, T-10137
3,24,25-Trihydroxylanost-9(11)-en-30-oic acid, T-10157

$C_{30}H_{52}O$
Lanost-8-en-3-ol, L-10024

$C_{30}H_{52}O_2$
Cycloartane-3,21-diol, C-10156
Cycloartane-3,25-diol, C-10157
3,21-Friedelanediol, F-10021
3,4-Seco-4(23)-friedelene-3,5-diol, S-10039

$C_{30}H_{52}O_3$
Dammar-24-ene-3,12,20-triol, D-10011

$C_{30}H_{52}O_4$
Cucurbit-5-ene-3,11,24,25-tetrol, C-10143
Dammar-23-ene-3,12,20,25-tetrol, D-10008
Dammar-24-ene-3,6,12,20-tetrol, D-10009
Dammar-24-ene-3,12,20,26-tetrol, D-10010
20,24-Epoxydammarane-3,12,25-triol, E-10057
4,23,24-Trimethylcholest-22-ene-1,3,6,11-tetrol, T-10197

$C_{30}H_{52}O_5$
Dammar-24-ene-1,3,12,20,26-pentol, D-10006
Dammar-25-ene-3,6,12,20,24-pentol, D-10007
20,24-Epoxy-1,3,12,25-dammaranetetrol, E-10055
20,24-Epoxy-3,6,12,25-dammaranetetrol, E-10056

$C_{30}H_{52}O_8$
Longilene peroxide, L-10062

$C_{30}H_{52}O_{26}$
β-D-Fructofuranosyl-(2→1)-β-D-fructofuranosyl-β-D-fructofuranosyl-(2→1)-β-D-fructofuranosyl-(2→6)-α-D-glucopyranoside, F-10022

$C_{30}H_{54}Br_2Cl_2O_6$
Intricatetraol, I-10014

$C_{30}H_{54}O_5$
Quassiol, Q-10004

$C_{30}H_{60}O_2$
Triacontanoic acid, T-10100

$C_{30}H_{62}O$
5-Triacontanol, T-10101

$C_{31}H_{24}O_8$
Calodenone, *in* L-10064

$C_{31}H_{24}O_{10}$
Rubioncolin B, R-10055

$C_{31}H_{26}O_{10}$
Mopanane(4→8)-3,3′,4,7-tetrahydroxyflavan, M-10090

$C_{31}H_{28}O_{14}$
Luteolin 7-(6-feruloylglucoside), *in* T-10052

$C_{31}H_{30}O_{13}$
Okanin; 4′-Me ether, 4-*O*-(6-*O*-coumaroyl-β-D-glucopyranoside), *in* P-10040

$C_{31}H_{32}O_8$
Gossypol; 6-Me ether, *in* G-10113

$C_{31}H_{34}N_2O_7$
O-(4-Hydroxy-3,5-dimethoxybenzoyl) vincamajine, *in* V-10023

$C_{31}H_{34}O_9$
Lappaol B, L-10028
Mortonol B, *in* P-10045

$C_{31}H_{34}O_{13}$
Resinoside A, R-10015
Resinoside B, *in* R-10015

$C_{31}H_{35}NO_7$
Cossonine, C-10130

$C_{31}H_{36}O_7$
Celorbicol; 6,9-Dibenzoyl, 1-Ac, *in* T-10139

$C_{31}H_{36}O_8$
8α-Acetoxy-1α,9α-dibenzoyloxy-6β-hydroxydihydro-β-agarofuran, *in* T-10042
Celafolin D2, *in* T-10042

$C_{31}H_{36}O_9$
Angulatueoid G, *in* P-10046
Orthosiphol D, *in* T-10056

$C_{31}H_{36}O_{10}$
Lappaol D, L-10030

$C_{31}H_{38}ClN_3O_{14}$
Dactylocycline B, D-10002

$C_{31}H_{38}O_7$
Taxicin II; 5-Cinnamoyl, 2-Ac, *in* T-10070
Taxicin II; 5-Cinnamoyl, 9-Ac, *in* T-10070
Taxicin II; 5-Cinnamoyl, 10-Ac, *in* T-10070

$C_{31}H_{38}O_8$
4(20),11-Taxadiene-1,2,5,9,10,13-hexol; 13-Ketone, 5-cinnamoyl, 9-Ac, *in* T-10006
4(20),11-Taxadiene-1,2,5,9,10,13-hexol; 13-Ketone, 5-cinnamoyl, 10-Ac, *in* T-10006

$C_{31}H_{38}O_{11}$
Humilinolide D, *in* H-10072

$C_{31}H_{39}N_5O_5$
β-Ergoptine, E-10172
β-Ergoptinine, *in* E-10172

$C_{31}H_{40}ClN_3O_{13}$
Dactylocycline A, D-10001

$C_{31}H_{40}O_8$
Calbistrin A, C-10013
Calbistrin B, *in* C-10013

$C_{31}H_{40}O_9$
4(20),11-Taxadiene-1,5,7,9,10,13-hexol; 10-Benzoyl, 7,9-di-Ac, *in* T-10007

$C_{31}H_{40}O_{11}$
Humilinolide A, H-10071

$C_{31}H_{40}O_{16}$
2-*O*-β-D-Glucopyranosyl-L-rhamnose; Benzyl glycoside, hexa-Ac, *in* G-10070

$C_{31}H_{41}N_5O_7$
Brevigellin, B-10043

$C_{31}H_{41}N_7O_6$
Chymostatin A, *in* C-10096
Chymostatin C, *in* C-10096

$C_{31}H_{42}N_2O_2$
Coryphine, C-10129

$C_{31}H_{42}N_4O_4$
Frangufoline, F-10018
Sanjoinine Ah_1, *in* F-10018

$C_{31}H_{42}O_7$
Triptogelin E3, *in* T-10138

$C_{31}H_{42}O_8$
Calbistrin C, C-10014
Calbistrin D, *in* C-10014
Fevicordin A, F-10008

$C_{31}H_{42}O_{10}$
Ingol; 7-Angeloyl, 3,8,12-tri-Ac, *in* I-10013
Ingol; 7-Tigloyl, 3,8,12-tri-Ac, *in* I-10013
Ingol; 12-Tigloyl, 3,7,8-tri-Ac, *in* I-10013

$C_{31}H_{42}O_{11}$
Ajugamarin A2, *in* E-10150
Bovocryptoside, B-10040
Bovoruboside, B-10042

$C_{31}H_{42}O_{17}$
Angustifolioside B, *in* O-10033
β-D-Glucopyranosylformoside, *in* E-10237

$C_{31}H_{42}O_{18}$
Angustifolioside A, *in* O-10033
Hiiragilide, *in* O-10033

$C_{31}H_{42}O_{19}$
Multiroside, *in* O-10033

$C_{31}H_{44}O_8$
Fevicordin B, *in* F-10008

$C_{31}H_{44}O_{10}$
Ingol; 8-(2-Methylbutanoyl), 3,7,12-tri-Ac, *in* I-10013
Physodin A, *in* T-10175

$C_{31}H_{44}O_{11}$
Ajugamacrin B, *in* E-10150
Ajugamacrin B, *in* E-10150
Ajugamarin B2, *in* E-10150
Bovoneoside, B-10041

$C_{31}H_{44}O_{12}$
Ajugachin B, *in* T-10122
Clerodendrin B, *in* T-10122

$C_{31}H_{45}NO_8$
Auriculine†, *in* P-10005
Paludosine, P-10005

$C_{31}H_{46}O_4$
Poricoic acid C, P-10135

$C_{31}H_{46}O_5$
Poricoic acid A, P-10134
Propapyriogenin A_1, *in* H-10119

$C_{31}H_{46}O_6$
Poricoic acid D, P-10136

$C_{31}H_{46}O_9$
Methyl briareolate, *in* E-10154

$C_{31}H_{46}O_{10}$
Mansonin, *in* T-10177
Strebloside, *in* T-10177

$C_{31}H_{48}O_4$
Formylursolic acid, *in* H-10242

$C_{31}H_{48}O_5$
25-Methylacerinol, *in* A-10012
Spiroveitchionolide, S-10103

$C_{31}H_{48}O_6$
12,16-Dihydroxy-20,24-dimethyl-24-oxo-25-scalaranal; 12,16-Di-Ac, *in* D-10136
12-Epirockogenin; Di-Ac, *in* S-10099
Pseudolarolide C, P-10161
Scalarherbacin B acetate, *in* D-10136

$C_{31}H_{48}O_9$
Kamaloside, *in* T-10134

$C_{31}H_{48}O_{12}$
Rufososide, *in* H-10170

$C_{31}H_{49}N_3O_9S$
11-*trans*-Leukotriene C_4; Me-ester, *in* L-10046
N-Methylleukotriene C_4, *in* L-10046

$C_{31}H_{50}N_2O$
Sarain 1, S-10020

$C_{31}H_{50}O$
24-Isopropenyl-4-methylcholesta-7,22-dien-3-ol, I-10047

$C_{31}H_{50}O_2$
24-Methylenelanosta-7,9(11)-diene-3,15-diol, M-10053

$C_{31}H_{50}O_3$
3-Methoxycycloartan-26,23-olide, *in* H-10104
Ursolic acid; Me ester, *in* H-10242

$C_{31}H_{50}O_4$
24-Methylenecycloart-25-ene-3,21,22,23-tetrol, M-10052

$C_{31}H_{50}O_5$
Ampelozigenin, A-10075
Euscaphic acid; Me ester, *in* T-10194

$C_{31}H_{50}O_6$
2,3,23-Trihydroxy-11-methoxy-12-ursen-28-oic acid, *in* T-10071

$C_{31}H_{50}O_7$
Pectinoacetal C, P-10022

$C_{31}H_{50}O_8$
Antibiotic AB 023A, *in* A-10097
Blancasterol, B-10037

$C_{31}H_{52}O_2$
25-Methoxycycloart-23-en-3β-ol, *in* C-10160
24-Methylenecycloartane-3,20-diol, M-10051

$C_{31}H_{52}O_3$
3-Methoxycycloartan-26-oic acid, *in* H-10103
3-Methoxycycloart-23-ene-25,26-diol, *in* C-10163

$C_{31}H_{52}O_{12}S_3$
Ibisterol, I-10001

$C_{31}H_{53}N_{11}O_5$
Argiotoxin 659, A-10119

$C_{31}H_{54}O$
Cycloswietenol, C-10171

$C_{31}H_{54}O_{16}$
Atractyloside E, *in* E-10218

$C_{31}H_{54}O_{17}$
Atractyloside H, *in* E-10222

$C_{31}H_{62}O_2$
9-Hydroxy-3-hentriacontanone, H-10158
Triacontanoic acid; Me ester, *in* T-10100

$C_{32}H_{26}O_9$
2′,7-Dihydroxy-4′-methoxyflavone(3→5′)-2′,7-dihydroxy-4′-methoxyisoflavan, D-10196

$C_{32}H_{28}O_9$
7-Hydroxy-4′-methoxyisoflavan-2′,5′-quinone(4→5′)-2′,7-dihydroxy-4′-methoxyisoflavan, H-10175

$C_{32}H_{30}O_{15}$
Okanin; 4′-*O*-(6-*O*-Acetyl-2-*O*-caffeoyl-β-D-glucopyranoside), *in* P-10040

$C_{32}H_{34}O_8$
Gossypol; 6,6′-Di-Me ether, *in* G-10113

$C_{32}H_{36}N_2O_8$
10-Hydroxy-O^{17}-(3,4,5-trimethoxybenzoyl) vincamajine, *in* V-10023

$C_{32}H_{36}O_8$
Cycloshizukaol A, C-10170

$C_{32}H_{36}O_{13}$
Uhdoside A, U-10001

$C_{32}H_{36}O_{14}$
Uhdoside B, *in* U-10001

$C_{32}H_{37}NO_9$
Angulatueoid D, *in* T-10043
Celapanigine, *in* T-10042
Rzedowskin D, *in* P-10045

$C_{32}H_{37}NO_{11}$
Tripterregeline C, *in* H-10054

$C_{32}H_{38}O_{13}$
Framoside, *in* I-10036
Fraxiformoside, F-10019

$C_{32}H_{38}O_{15}$
Antibiotic NG 011, A-10102
Antibiotic NG 012, *in* A-10102

$C_{32}H_{38}O_{19}$
Frachinoside, F-10017
Populnin; 3-*O*-(Rhamnopyranosylxyloside), *in* P-10133
Trifolin†; 2″-*O*-β-D-Apiofuranoside, 6″-*O*-α-L-rhamnopyranoside, *in* T-10123

$C_{32}H_{38}O_{20}$
Leucovernide, *in* P-10133
Luteolin; 4′-*O*-β-D-Glucofuranoside, 7-*O*-[α-L-arabinofuranosyl-(1→6)-β-D-glucopyranoside], *in* T-10052

$C_{32}H_{39}NO_4$
β-Aflatrem, A-10029

$C_{32}H_{39}O_{15}^{\oplus}$
6-(1-Ethyl-1-propenyl)-3,4′,5,7-tetrahydroxyflavylium(1+); 3-*O*-Diglucoside, *in* E-10204

$C_{32}H_{40}O_9$
Ingol; O^7-Benzoyl, O^8-Me, 3,12-di-Ac, *in* I-10013

$C_{32}H_{40}O_{14}$
Celangulin, *in* H-10025

$C_{32}H_{40}O_{18}$
3-*O*-β-D-Glucopyranuronosyl-D-galactose; Benzylglycoside, hexa-Ac, Me ester, *in* G-10078

$C_{32}H_{42}O_6$
▷ Euphorbia factor E_3, *in* I-10012

$C_{32}H_{42}O_8$
Euphorbia factor Ti_6, *in* P-10063

$C_{32}H_{42}O_{12}$
Scillicyanoside, *in* T-10176

$C_{32}H_{42}O_{18}$
Periclymenosidic acid, *in* L-10059

$C_{32}H_{44}O_7$
Tomentidin, *in* P-10138
Tomentodin, *in* P-10138

$C_{32}H_{44}O_8$
▷ Cucurbitacin E, *in* C-10140
Datiscacin, *in* C-10140

$C_{32}H_{44}O_{10}$
Scutegalin A, *in* T-10023

$C_{32}H_{45}NO_8$
Geniconitine, *in* S-10046

$C_{32}H_{45}N_9O_{11}$
Biphenomycin C, B-10025

$C_{32}H_{46}O_6$
Petuniasterone C 7,22-di-*O*-acetate, *in* P-10088

$C_{32}H_{46}O_6S$
Petuniasterone C 22-*O*-[(methylthio)carbonyl] acetate, *in* P-10088

$C_{32}H_{46}O_{11}$
Ajugamacrin C, *in* E-10150

$C_{32}H_{48}ClNO_8$
Paludosine; *N*-Me, chloride, *in* P-10005

$C_{32}H_{48}NO_8^{\oplus}$
Kumokirine, *in* P-10005

$C_{32}H_{48}N_2O_4$
Axillarine C, *in* D-10048

$C_{32}H_{48}O_4$
3,13-Dihydroxy-11-ursen-28-oic acid; 20→13 Lactone, 3-Ac, *in* D-10258

$C_{32}H_{48}O_5$
Poricoic acid AM, *in* P-10134

$C_{32}H_{48}O_6$
25-Acetylacerinol, *in* A-10012
7,8-Didehydrocimigenol; 25-Ac, *in* D-10070
Phyllactone D, *in* D-10137
Phyllactone E, *in* D-10137
Poricoic acid DM, *in* P-10136

$C_{32}H_{48}O_7$
Petuniasterone B 22-*O*-acetate, *in* P-10087
Petuniasterone S, P-10090

$C_{32}H_{48}O_8$
▷ Cocarcinogen A2, *in* P-10063
▷ Cocarcinogen B7, *in* P-10063

$C_{32}H_{50}O_4$
Acetylursolic acid, *in* H-10242

$C_{32}H_{50}O_5$
Rubiprasin C, *in* D-10210

$C_{32}H_{50}O_6$
Dehydrofoliaspongin, *in* D-10136
12,16-Dihydroxy-20,24-dimethyl-24-oxo-25-scalaranal; 16-Propanoyl, 12-Ac, *in* D-10136
12,16-Dihydroxy-20,24-dimethyl-17-scalaren-25,24-olide; 12-(3-Hydroxypentanoyl), *in* D-10138
Glabretol, G-10036
Glabretol; 7-Deacetyl, 3-Ac, *in* G-10036
Phyllactone B, *in* D-10138
Raspacionin B, R-10009
Tormentic acid; 2-Ac, *in* T-10194
Tormentic acid; 3-Ac, *in* T-10194

$C_{32}H_{50}O_7$
Heracleifolinol, H-10032

$C_{32}H_{50}O_{13}$
Paniculoside V, *in* H-10170

$C_{32}H_{52}N_2O$
Sarain 3, S-10022

$C_{32}H_{52}O_2$
Dihydroagnosterol; Ac, *in* L-10023

$C_{32}H_{52}O_3$
Cycloart-23-ene-3,25-diol; 3-Ac, *in* C-10160
Kalamadiol; 3-Ac, *in* O-10026

$C_{32}H_{52}O_4$
3-Hydroxycycloartan-21-oic acid; Ac, *in* H-10102
Machaerinic acid; Et ester, *in* D-10211
Rubiprasin B, *in* D-10206

$C_{32}H_{52}O_5$
Macrophyllogenin acetate, *in* O-10028
Rubiprasin A, *in* T-10170

$C_{32}H_{52}O_6$
Foliaspongin, *in* D-10136

$C_{32}H_{52}O_8$
Antibiotic AB 023B, *in* A-10097

$C_{32}H_{52}O_{12}$
Anatolioside A, *in* D-10279

$C_{32}H_{54}O_2$
Dihydroepilanosterol; Ac, *in* L-10024

$C_{32}H_{54}O_3$
3,21-Friedelanediol; 21-Ac, *in* F-10021

$C_{32}H_{54}O_4$
Betulafolienetriol; 3-Ketone, 12-Ac, *in* D-10011

$C_{32}H_{54}O_5$
Pyxinol; 3-Ac, *in* E-10057
Pyxinol; 12-Ac, *in* E-10057

$C_{32}H_{54}O_{12}$
▷ Lyciumoside I, *in* P-10111

$C_{32}H_{54}O_{12}S$
Pisasteroside D, *in* C-10092
Pisasteroside E, *in* C-10092
Scoparioside D, *in* C-10093

$C_{32}H_{54}O_{13}$
Corymbosin†, *in* K-10005
Epicorymbosin, *in* K-10005

$C_{32}H_{55}N_{11}O_5$
Argiotoxin 673, A-10120

$C_{32}H_{56}O_7$
Eurylene; 14-De-Ac, *in* E-10236

$C_{32}H_{56}O_9$
Pycnopodioside A, *in* C-10091

$C_{32}H_{56}O_{12}S$
Aphelasteroside A, *in* C-10091
Glacialoside A, *in* C-10091
Pisasteroside B, *in* C-10091
Pycnopodioside B, *in* C-10091
Scoparioside A, *in* C-10091
Scoparioside B, *in* C-10091

$C_{32}H_{56}O_{13}$
Gomojoside F, *in* L-10011
Lyciumoside III, *in* P-10112

$C_{32}H_{56}O_{13}S$
Glacialoside B, *in* C-10090

$C_{32}H_{58}N_7O_5$
Efrapeptin A, E-10006

$C_{32}H_{64}O$
2-Dotriacontanone, D-10307

$C_{32}H_{64}O_2$
5-Acetoxytriacontane, *in* T-10101
5-Hydroxy-9-dotriacontanone, H-10120
7-Hydroxy-2-dotriacontanone, H-10121
25-Hydroxy-3-dotriacontanone, H-10122
25-Hydroxy-6-dotriacontanone, H-10123
30-Hydroxy-5-dotriacontanone, H-10124
Triacontanoic acid; Et ester, *in* T-10100

$C_{32}H_{66}$
▷ Dotriacontane, D-10306

$C_{33}H_{28}O_{17}$
3-Glucosyl-2,3′,4,4′,6-pentahydroxybenzophenone; 2″-(*p*-Hydroxybenzoyl), 6″-(3,4,5-trihydroxybenzoyl), *in* G-10087
3-Glucosyl-2,3′,4,4′,6-pentahydroxybenzophenone; 6″-(*p*-Hydroxybenzoyl), 2″-(3,4,5-trihydroxybenzoyl), *in* G-10087

$C_{33}H_{30}N_2O_5$
2′-Norcocsoline, *in* C-10113

$C_{33}H_{32}N_4O_4$
Chlorophyllonic acid a, C-10085

$C_{33}H_{32}O_{15}$
Okanin; 4′-Me ether, 4-*O*-(6-*O*-acetyl-2-*O*-caffeoyl-β-D-glucopyranoside), *in* P-10040

$C_{33}H_{34}O_{24}$
Luteolin; 4′-*O*-β-D-Glucuronoside, 7-*O*-[β-D-glucuronosyl-(1→2)-β-D-glucuronoside], *in* T-10052
Luteolin; 3′,4′,7-Tri-*O*-glucuronoside, *in* T-10052

$C_{33}H_{36}O_{23}$
Luteolin; 3′-*O*-Glucopyranoside, 4′,7-di-*O*-glucuronoside, *in* T-10052

$C_{33}H_{38}O_7$
Celafolin A1, *in* T-10139
Celafolin B3, *in* T-10138

$C_{33}H_{38}O_8$
Isocelorbicol; 9-(2,3-Epoxycinnamoyl), 2-benzoyl, 1-Ac, *in* T-10138

$C_{33}H_{38}O_9$
Angulatueoid H, *in* T-10042

$C_{33}H_{38}O_{10}$
1,2,4,6,9-Pentahydroxydihydro-β-agarofuran; 1,9-Dibenzoyl, 2,6-di-Ac, *in* P-10045

$C_{33}H_{38}O_{11}$
9α,14-Diacetoxy-1α,8β-dibenzoyloxy-4β,8β-dihydroxydihydro-β-agarofuran, *in* H-10054
ent-5α,11-Epoxy-1β,4α,6α,8β,9β,14-eudesmanehexol; 8,9-Dibenzoyl, 6,15-di-Ac, *in* H-10054

$C_{33}H_{38}O_{20}$
Luteolin; 3′,4′-Di-*O*-rhamnoside, 7-*O*-glucuronoside, *in* T-10052

$C_{33}H_{39}NO_9$
Angulatueoid F, *in* T-10043

$C_{33}H_{40}O_7$
Pycnidione, P-10175

$C_{33}H_{40}O_9$
4(20),11-Taxadiene-1,2,5,9,10,13-hexol; 13-Ketone, 5-cinnamoyl, 2,9-di-Ac, *in* T-10006
4(20),11-Taxadiene-1,2,5,9,10,13-hexol; 13-Ketone, 5-cinnamoyl, 2,10-di-Ac, *in* T-10006

$C_{33}H_{40}O_{19}$
Frangulatrioside A, *in* T-10123
Trifolin†; 6″-*O*-[α-L-Rhamnopyranosyl-(1→3)-α-L-rhamnopyranoside], *in* T-10123

$C_{33}H_{40}O_{20}$
Cynarotrioside, *in* T-10052
Luteolin; 4′-*O*-Glucopyranoside, 7-*O*-neohesperidoside, *in* T-10052
Luteolin; 3′-*O*-β-D-Glucopyranoside, 7-*O*-rutinoside, *in* T-10052
Luteolin; 7-*O*-(Rhamnosylglucosylglucoside), *in* T-10052
Populnin; 3-*O*-Neohesperidoside, *in* P-10133
Populnin; 3-*O*-[α-L-Rhamnopyranosyl-(1→2)-β-D-galactopyranoside], *in* P-10133
Populnin; 3-*O*-Robinobioside, *in* P-10133
Populnin; 3-*O*-Rutinoside, *in* P-10133
Trifolin†; *O*″-Rhamnosylglucoside, *in* T-10123

$C_{33}H_{40}O_{21}$
Populnin; 3-*O*-Gentiobioside, *in* P-10133
Populnin; 3-*O*-Sophoroside, *in* P-10133

$C_{33}H_{42}O_6$
Euphorbia factor P_9, *in* I-10012

$C_{33}H_{42}O_9$
4(20),11-Taxadiene-1,2,5,9,10,13-hexol; 5-Cinnamoyl, 9,13-di-Ac, *in* T-10006
4(20),11-Taxadiene-1,2,5,9,10,13-hexol; 5-Cinnamoyl, 10,13-di-Ac, *in* T-10006

$C_{33}H_{42}O_{11}$
2α-Acetoxybrevifoliol, *in* T-10005
13-Deacetylbaccatin VI, *in* E-10148
Taxchinin A, T-10008

$C_{33}H_{42}O_{12}$
Humilinolide B, *in* H-10071

$C_{33}H_{42}O_{17}$
Cassioside†, *in* T-10129

$C_{33}H_{44}N_2O_{17}S$
O-Demethylpaulomycin A, *in* P-10016

$C_{33}H_{44}O_{12}$
1α,6β,14-Triacetoxy-9α-benzoyloxy-4β-hydroxy-8α-(2-methylbutanoyloxy)dihydro-β-agarofuran, *in* H-10054
Trichilin G, *in* T-10108

$C_{33}H_{44}O_{17}$
Medioresinol; Di-*O*-β-D-glucopyranoside, *in* M-10024

$C_{33}H_{44}O_{18}$
Periclymenoside, *in* L-10059

$C_{33}H_{45}NO_8$
Patentine, *in* S-10046

$C_{33}H_{45}NO_{12}$
Beiwutine, *in* A-10021

$C_{33}H_{46}O_{16}$
Borapetoside D, *in* E-10104

$C_{33}H_{48}O_8$
▷ Cocarcinogen B6, *in* P-10063

$C_{33}H_{48}O_{11}$
5,6-Epoxy-4(15)-eudesmene-3,7,11-triol; 11-*O*-(3-Acetyl-2,4-diangeloyl-β-D-fucopyranoside), *in* E-10082

$C_{33}H_{50}O_6$
Cynoterpene, *in* H-10242

$C_{33}H_{50}O_8$
▷ Cocarcinogen B5, *in* P-10063

$C_{33}H_{51}NO_5$
Acutifolin palmitate, *in* A-10026

$C_{33}H_{52}O_6$
Phyllofoliaspongin, *in* D-10136

$C_{33}H_{52}O_7$
12,16-Dihydroxy-20,24-dimethyl-24-oxo-25-scalaranal; 16-(3*R*-Hydroxybutanoyl), 12-Ac, *in* D-10136

$C_{33}H_{53}NO_6$
γ-Chaconine, *in* S-10072
γ-Solanine, *in* S-10072

$C_{33}H_{54}O_7$
Deacetylpapyriferic acid, *in* E-10057

$C_{33}H_{55}NO_7$
Capsicastrine, *in* E-10206
Capsimine 3-*O*-β-D-glucoside, *in* E-10206
Isocapsicastrine, *in* E-10206

$C_{33}H_{58}O_{12}S$
Asterosaponin P_1, *in* C-10091
Scoparioside C, *in* C-10091

$C_{33}H_{58}O_{13}S$
Pycnopodioside C, *in* C-10091

$C_{33}H_{64}O_3$
4-Hydroxy-16,18-tritriacontanedione, H-10239

$C_{33}H_{66}O$
3-Tritriacontanone, T-10205

$C_{33}H_{66}O_2$
18-Hydroxy-16-tritriacontanone, H-10240

$C_{34}H_{24}N_4O$
Cryptospirolepine, C-10139

$C_{34}H_{24}O_{22}$
Castanin, *in* C-10036
Casuariin, *in* C-10036
Granatin A, G-10128

$C_{34}H_{24}O_{23}$
Lagerstannin A, L-10017

$C_{34}H_{26}O_{23}$
Mallorepanin, M-10007

$C_{34}H_{28}O_8$
5,6,6*a*,14*a*-Tetrahydro-5,6-dihydroxy-3,10-bis(2-phenylethyl)-1*H*,12*H*-[1]benzopyrano[7,6-*b*]pyrano[3,2-*f*][1,4]benzodioxin-1,12-dione, T-10026

$C_{34}H_{28}O_{22}$
1,2,3,6-Tetragalloylglucose, T-10024

$C_{34}H_{30}Br_4N_4O_7$
Bastadin 12, B-10010

$C_{34}H_{30}N_2O_5$
1,2-Dehydromicranthine, *in* C-10113

$C_{34}H_{30}O_9$
Sophoraflavanone H, S-10078

$C_{34}H_{30}O_{20}$
3-Methoxy-4-hydroxyphenyl 1-*O*-(2,3,6-tri-*O*-galloyl-β-D-glucopyranoside), *in* B-10013

$C_{35}H_{46}O_8$
Euphorbia factor I_5, *in* I-10012

$C_{35}H_{46}O_{12}$
Trichilin D, *in* T-10108

$C_{35}H_{46}O_{13}$
Aphanastatin, *in* T-10108
Trichilin A, *in* T-10108
Trichilin B, T-10108
Trichilin C, *in* T-10108
Trichilin F, *in* T-10108

$C_{35}H_{46}O_{14}$
Celangulin III, *in* H-10025
Celangulin IV, *in* H-10025

$C_{35}H_{46}O_{20}$
Teupolioside, T-10080

$C_{35}H_{47}NO_{13}$
3-*O*-Acetylbeiwutine, *in* A-10021

$C_{35}H_{48}N_2O_{17}S$
Paulomycin U, *in* P-10016

$C_{35}H_{48}O_{17}$
Erythrolide J, *in* H-10052

$C_{35}H_{50}O_{12}$
Fevicordin C glucoside, *in* F-10008

$C_{35}H_{52}O_8$
▷ Cocarcinogen B3, *in* P-10063

$C_{35}H_{52}O_9$
Pfaffoside F, *in* P-10091
Pfaffoside G, *in* P-10091

$C_{35}H_{52}O_{11}$
Cayaponoside B_{6a}, *in* C-10041
Cayaponoside B_{6b}, *in* C-10041
5,6-Epoxy-4(15)-eudesmene-3,7,11-triol; 11-*O*-[2,4-Diangeloyl-3-(2-methylpropanoyl)-β-D-fucopyranoside], *in* E-10082
Fevicordin E glucoside, *in* F-10008

$C_{35}H_{52}O_{12}$
Cayaponoside C_3, *in* C-10041
Cayaponoside D_{3a}, *in* C-10041
Fevicordin D glucoside, *in* F-10008

$C_{35}H_{52}O_{13}$
4-Eudesmene-3,6,7,11,15-pentol; 11-*O*-(3-Acetyl-2,4-diangeloyl-β-D-fucopyranoside), 15-Ac, *in* E-10221

$C_{35}H_{52}O_{14}$
Eryperoside, *in* T-10177
▷ Erysimoside, *in* T-10177
Olitoriside, *in* T-10177

$C_{35}H_{52}O_{15}$
▷ Cheirotoxin, *in* T-10177
▷ Convalloside, *in* T-10177
Erycanoside, *in* T-10177
Eryscenoside, *in* T-10177

$C_{35}H_{54}O_6$
Glabretol; 7-Deacetyl, 3-tigloyl, *in* G-10036
Hericenone F, H-10033

$C_{35}H_{54}O_8$
▷ Cocarcinogen B2, *in* P-10063

$C_{35}H_{54}O_9$
16,23:16,24-Diepoxycycloart-7-ene-3,15,25-triol; 3-*O*-β-D-Xylopyranoside, *in* D-10070

$C_{35}H_{54}O_{12}$
Cayaponoside D_{3b}, C-10041
Oxystelmoside, *in* U-10020

$C_{35}H_{54}O_{13}$
▷ Cheiroside A, *in* U-10020

$C_{35}H_{54}O_{14}$
Urezin, *in* U-10020
Uzarigenin; 3-*O*-[β-D-Glucopyranosyl-(1→4)-β-D-glucopyranoside], *in* U-10020
Uzarin, *in* U-10020

$C_{35}H_{55}NO_8$
Veralosine, *in* E-10206

$C_{35}H_{56}O_5$
Lantaiursolic acid, *in* D-10260

$C_{35}H_{56}O_7$
Betulafolienetriol; 3-Malonyl, 12-Ac, *in* D-10011
Pendulic acid, *in* D-10011

$C_{35}H_{56}O_8$
Anemosapogenin; 3-*O*-α-L-Arabinopyranoside, *in* D-10193
Betulafolienetetrol B; 3-Malonyl, 12-Ac, *in* D-10008
Cauloside A, *in* D-10212
Ilexoside A, *in* D-10210
Papyriferic acid, *in* E-10057
Prosapogenin CP_0, *in* D-10212

$C_{35}H_{56}O_{10}$
Astralagus alexandrinus Saponin, S-10017

$C_{35}H_{58}O_4$
29-(2,3,4,5-Tetrahydroxypentyl)-6,11-hopadiene, T-10063

$C_{35}H_{58}O_9$
Bafilomycin A_1, B-10005

$C_{35}H_{59}ClO_7$
Blattellastanoside A, *in* C-10078

$C_{35}H_{60}N_{12}O_6$
Argiopinin II, A-10118

$C_{35}H_{60}O_4$
29-(2,3,4,5-Tetrahydroxypentyl)-6-hopene, T-10064

$C_{35}H_{60}O_{10}$
Forbeside L, *in* S-10122

$C_{35}H_{61}ClO_7$
Blattellastanoside B, *in* C-10086

$C_{35}H_{61}N_3O_9$
Enniatin A_1, E-10017
Enniatin E, E-10020

$C_{35}H_{62}O_{14}S$
Pisasteroside F, *in* S-10120

$C_{35}H_{64}O_7$
Annoreticuin, A-10091
Isoannoreticuin, I-10022

$C_{35}H_{66}O$
6,26-Pentatriacontadien-2-one, P-10066
8,26-Pentatriacontadien-2-one, P-10067

$C_{35}H_{70}O$
3-Pentatriacontanone, P-10069
4-Pentatriacontanone, P-10070
5-Pentatriacontanone, P-10071
1-Pentatriaconten-17-ol, P-10072

$C_{35}H_{70}O_2$
Triacontanoic acid; Pentyl ester, *in* T-10100

$C_{35}H_{72}O$
1-Pentatriacontanol, P-10068

$C_{36}H_{30}O_{11}$
1,1′,8,8′-Tetrahydroxy-3,3′-dimethyl-4,7′-bianthracene-9,9′,10(10′*H*)-trione; 10′-*C*-(6-Deoxy-β-D-glucopyranoside), *in* T-10045
1,1′,8,8′-Tetrahydroxy-3,3′-dimethyl-4,7′-bianthracene-9,9′,10(10′*H*)-trione; 10′-*C*-(6-Deoxy-β-D-gulopyranoside), *in* T-10045
1,1′,8,8′-Tetrahydroxy-3,3′-dimethyl-4,7′-bianthracene-9,9′,10(10′*H*)-trione; 10′-*C*-α-L-Rhamnopyranosyl, *in* T-10045

$C_{36}H_{36}N_4O_8Zn$
Zincphyrin, *in* C-10126

$C_{36}H_{36}O_{19}$
Populnin; 3-(*O*-Caffeoyl-β-D-glucopyranoside), *in* P-10133

$C_{36}H_{38}N_2O_6$
Chitraline, *in* P-10001
2-Norlimacine, *in* F-10001
2′-Norlimacine, *in* F-10001
2′-Norpakistanine, *in* P-10001
Porveniramine, *in* P-10001

$C_{36}H_{38}N_2O_9$
1,8,9,14-Tetrahydroxydihydro-β-agarofuran; 9,14-Bis-(3-pyridinecarbonyl), 8-benzoyl, 1-Ac, *in* T-10043

$C_{36}H_{38}N_4O_5$
Methyl phaeophorbide a, *in* P-10092

$C_{36}H_{38}N_4O_8$
Coproporphyrin III, C-10126

$C_{36}H_{43}NO_{13}$
1,14-Diacetoxy-9-benzoyloxy-4,6-dihydroxy-2-isobutanoyloxy-8-nicotinoyloxydihydro-β-agarofuran, *in* H-10025
1,2,4,6,8,9,14-Heptahydroxydihydro-β-agarofuran; 2-(2-Methylpropanoyl), 8-(3-pyridinecarbonyl), 9-benzoyl, 1,14-di-Ac, *in* H-10025

$C_{36}H_{44}N_4O_8$
Coproporphyrinogen III, *in* C-10126

$C_{36}H_{44}O_9$
Celafolin D3, *in* T-10042

$C_{36}H_{44}O_{10}$
1,2,6,8,9-Pentahydroxydihydro-β-agarofuran; 8,9-Dibenzoyl, 2-(2-methylbutanoyl), 1-Ac, *in* P-10046

$C_{36}H_{44}O_{13}$
Mombasone, *in* M-10084

$C_{36}H_{44}O_{16}$
Celangulin II, *in* H-10025

$C_{36}H_{45}NO_7$
Tomentomin, *in* P-10138

$C_{36}H_{46}O_8$
Euphorbia factor Ti_7, *in* P-10063
Euphorbia factor Ti_9, *in* P-10063

$C_{36}H_{46}O_{13}$
Mombasol, M-10084

$C_{36}H_{47}NO_6$
Petunaisterone C 22-nicotinate-7-acetate, *in* P-10088

$C_{36}H_{48}O_8$
Euphorbia factor Ti_8, *in* P-10063
Excoecaria factor A_2, *in* E-10202

$C_{36}H_{48}O_{19}$
Lagotoside, L-10021

$C_{36}H_{49}NO_7$
Petunianine C, P-10086
Petuniasterone B 22-nicotinate, *in* P-10087

$C_{36}H_{50}O_6$
34-Ethylhuratoxin; 5-Deoxy, 6,7-deepoxy, 6,7,26,27-tetradehydro, *in* E-10202

$C_{36}H_{50}O_8$
Excoecaria factor A_1, *in* E-10202

$C_{36}H_{50}O_{10}$
Subtoxin A, *in* H-10076

$C_{36}H_{50}O_{14}$
Physagulin E, P-10107

$C_{36}H_{50}O_{15}$
Physagulin G, *in* P-10107

$C_{36}H_{52}O_8$
▷ 34-Ethylhuratoxin, E-10202

$C_{36}H_{52}O_{11}$
Reveromycin A, R-10016
Reveromycin B, R-10017

$C_{36}H_{52}O_{12}$
▷ Cucurbitacin I 2-*O*-β-D-glucopyranoside, *in* C-10140

$C_{36}H_{52}O_{15}$
Cryptanoside C, *in* E-10164
Cryptanoside D, *in* E-10165
▷ Hellebrin, *in* T-10175

$C_{36}H_{53}NO_{12}$
Nervosine, *in* P-10005

Fevicordin B glucoside, *in* F-10008
2,3,16,20,25-Pentahydroxy-29-norcucurbita-1,3,5(10)-triene-11,22-dione; 2-*O*-β-D-Glucopyranoside, 25-Ac, *in* P-10058
Physodin C, *in* D-10121

$C_{37}H_{54}O_{14}$
Borovoluboside, B-10038

$C_{37}H_{56}O_2$
Dihydrolanosterol; Benzoyl, *in* L-10024

$C_{37}H_{56}O_{10}$
Cumindyoside A, C-10144
16,23:16,24-Diepoxycycloart-7-ene-3,15,25-triol; 3-*O*-(3-Acetyl-β-D-xylopyranoside), *in* D-10070

$C_{37}H_{56}O_{15}$
Glucostrebloside, *in* T-10177

$C_{37}H_{58}O_6$
Hericenone G, H-10034

$C_{37}H_{58}O_8$
▷ Cocarcinogen B1, *in* P-10063

$C_{37}H_{58}O_9$
Hederagenin; 3-*O*-(2-*O*-Acetyl-α-L-arabinopyranoside), *in* D-10212

$C_{37}H_{58}O_{11}$
16,23-Epoxycycloart-7-ene-3,15,16,24,25-pentol; 3-*O*-β-D-Xylopyranoside, 24-Ac, *in* E-10052

$C_{37}H_{58}O_{14}$
Glucokamaloside, *in* T-10134

$C_{37}H_{60}N_6O_7S$
Patellin 2, P-10014

$C_{37}H_{66}O_6$
Giganenin, G-10033
Gigantrionenin, *in* G-10034

$C_{37}H_{66}O_7$
Gigantetronin, G-10034

$C_{37}H_{68}O_5$
Uvariamicin I, U-10017
Uvariamicin II, U-10018
Uvariamicin III, U-10019

$C_{37}H_{70}O$
8,28-Heptatriacontadien-2-one, H-10028

$C_{37}H_{70}O_6$
Glycerol 1-dodecanoate 2-tetradecanoate 3-octanoate, G-10100

$C_{37}H_{72}O$
28-Heptatriaconten-2-one, H-10030

$C_{37}H_{76}O$
1-Heptatriacontanol, H-10029

$C_{38}H_{40}N_4O$
Longicaudatine, L-10060

$C_{38}H_{40}O_9$
Celafolin D1, *in* T-10042
1,6,8,9-Tetrahydroxydihydro-β-agarofuran; 6,8,9-Tribenzoyl, 1-Ac, *in* T-10042

$C_{38}H_{40}O_{10}$
1,2,4,6,9-Pentahydroxydihydro-β-agarofuran; 1,6,9-Tribenzoyl, 2-Ac, *in* P-10045
Sincassiol†, *in* P-10046

$C_{38}H_{42}N_2O_6$
Cycleaneonine, C-10154
▷ Isotetrandrine, I-10052
1-*O*-Methylpakistanine, *in* P-10001
Obaberine, O-10001

$C_{38}H_{42}N_2O_7$
Isotetrandrine *N*-2′-oxide, *in* I-10052

$C_{38}H_{42}N_4O$
Dihydrolongicaudatine, *in* L-10060

$C_{38}H_{43}N_2O_6^{\oplus}$
N^2-Methylfangchinoline, *in* F-10001

$C_{38}H_{44}N_2O_6$
▷ Dauricine, D-10022

$C_{38}H_{46}O_9$
Neogambogic acid, N-10017

$C_{38}H_{46}O_{12}$
6β,14-Diacetoxy-1α,9α-dibenzoyloxy-4β-hydroxy-8α-(2-methylbutanoyloxy)dihydro-β-agarofuran, *in* H-10054

$C_{38}H_{46}O_{18}$
Fraxuhdoside, F-10020

$C_{38}H_{47}NO_{15}$
1,2,4,6,8,9,14-Heptahydroxydihydro-β-agarofuran; 2-(3-Furoyl), 8,14-bis(2-methylpropanoyl), 9-(3-pyridinecarbonyl), 1,6-di-Ac, *in* H-10025

$C_{38}H_{47}NO_{18}$
Peritassine A, P-10083

$C_{38}H_{47}N_5O_5$
Neobonellin; α-Me ester, *in* N-10013

$C_{38}H_{50}O_6$
Guttiferone A, G-10139
Guttiferone E, G-10142

$C_{38}H_{50}O_{11}$
6′-*O*-(4-Hydroxycinnamoyl)desglucouzarin, *in* U-10020

$C_{38}H_{52}O_{10}$
5,20-Diacetylhuratoxin, *in* H-10076

$C_{38}H_{54}O_{13}$
▷ Elaterinide, *in* C-10140

$C_{38}H_{55}NO_9$
Lituarine A, *in* L-10057

$C_{38}H_{55}NO_{11}$
Lituarine C, L-10057

$C_{38}H_{56}N_4O_{10}$
Hellebritoxin, *in* T-10175

$C_{38}H_{56}N_8O_8$
Pseudoaxinellin, P-10159

$C_{38}H_{56}O_{13}$
25-*O*-Acetylbryoamaride, *in* C-10140

$C_{38}H_{60}O_8$
▷ Cocarcinogen A4, *in* P-10063

$C_{38}H_{60}O_{17}$
Anatolioside C, *in* A-10080

$C_{38}H_{62}O_{10}$
Cumingianoside F, C-10147

$C_{38}H_{62}O_{17}$
Anatolioside B, A-10080

$C_{38}H_{64}O_{11}$
Cumingianoside B, C-10146

$C_{38}H_{64}O_{17}$
Lyciumoside II, *in* P-10111

$C_{38}H_{76}O_2$
34-Hydroxy-8-methyl-5-heptatriacontanone, H-10186

$C_{38}H_{78}O$
1-Octatriacontanol, O-10015

$C_{39}H_{34}O_{16}$
Okanin; 4′-*O*-(2-*O*-Caffeoyl-6-*O*-*p*-coumaroyl-β-D-glucopyranoside), *in* P-10040

$C_{39}H_{38}O_9$
Sophoraflavanone J, S-10079

$C_{39}H_{43}NO_{12}$
19-Hydroxyingol; 19-(3-Pyridinecarbonyl), 8-benzoyl, 3,7,12-tri-Ac, *in* H-10168

$C_{39}H_{45}N_2O_6^{\oplus}$
2′-*N*-Methylisotetrandrine, *in* I-10052

$C_{39}H_{46}N_2O_6$
O-Methyldauricine, *in* D-10022

$C_{39}H_{46}N_2O_7$
O-Methyldauricine 2-*N*-oxide, *in* D-10022
O-Methyldauricine 2′-*N*-oxide, *in* D-10022

$C_{39}H_{48}O_{17}$
Hazaleanin B, H-10006

$C_{39}H_{49}NO_{23}$
Xeranthin, *in* H-10166

$C_{39}H_{50}O_{13}$
α-L-Rhamnopyranosyl-(1→3)-α-L-rhamnopyranosyl-(1→2)-L-rhamnose; Benzyl glycoside, 3,4-dibenzyl, *in* R-10028

$C_{39}H_{50}O_{15}$
α-L-Fucopyranosyl-(1→2)-β-D-galactopyranosyl-(1→4)-D-glucose; 2″,3″,4″-Tribenzyl, *in* F-10024

$C_{39}H_{50}O_{25}$
Luteolin; 4′-*O*-Sophoroside, 7-*O*-neohesperidoside, *in* T-10052

$C_{39}H_{50}O_{26}$
Populnin; 3-*O*-Sophorotrioside, *in* P-10133

$C_{39}H_{52}O_5$
Tereticornate B, *in* D-10258

$C_{39}H_{54}O_5$
Machaerinic acid; 21-Cinnamoyl, *in* D-10211
Ursolic acid; 3-(4-Hydroxycinnamoyl), *in* H-10242

$C_{39}H_{54}O_6$
Obtusilic acid, *in* D-10262

$C_{39}H_{54}O_7$
3-*cis*-*p*-Coumaroyltormentic acid, *in* T-10194
3-*trans*-*p*-Coumaroyltormentic acid, *in* T-10194

$C_{39}H_{54}O_{26}$
α-D-Glucopyranosyl-(1→3)-α-D-glucopyranosyl-(1→3)-D-glucose; Me glycoside, deca-Ac, *in* G-10048

$C_{39}H_{56}O_2$
Euphol cinnamate, *in* E-10228

$C_{39}H_{56}O_{12}$
Spinoside A, *in* C-10140

$C_{39}H_{58}O_{11}$
16,23:16,24-Diepoxycycloart-7-ene-3,15,25-triol; 3-*O*-(2,4-Diacetyl-β-D-xylopyranoside), *in* D-10070

$C_{39}H_{60}O_{12}$
Beesioside I, *in* D-10069

$C_{39}H_{61}N_5O_{12}$
▷ 11-Oxoonnamide A, *in* O-10035

$C_{39}H_{62}O_{12}$
Hispidin†, *in* H-10224

$C_{39}H_{62}O_{13}$
Pingpeisaponin, *in* S-10101

$C_{39}H_{62}O_{15}$
Soladulcoside A, *in* T-10191

$C_{39}H_{63}NO_{10}$
β_1-Chaconine, *in* S-10072

$C_{39}H_{63}NO_{11}$
β-Solanine, *in* S-10072
Stenantidine, *in* S-10072

$C_{39}H_{63}NO_{12}$
Etiolinine, *in* E-10206

$C_{39}H_{63}N_5O_{12}$
▷ 6,7-Dihydro-11-oxoonamide A, *in* O-10035
Onnamide A, O-10035
▷ 4*Z*-Onnamide A, *in* O-10035

$C_{39}H_{65}N_5O_{12}$
▷ 6,7-Dihydroonnamide A, *in* O-10035

$C_{39}H_{66}O_{14}$
Forbeside K, *in* E-10185

$C_{39}H_{68}O_{14}$
Culcitoside C_1, *in* C-10090
Forbeside J, *in* C-10090

$C_{39}H_{70}O_{19}$
Operculinic acid F, *in* H-10160

$C_{40}H_{32}O_{15}$
Buccinulin, *in* R-10032

$C_{42}H_{46}N_4O_5$
Scandomelidine, S-10031

$C_{42}H_{46}O_{22}$
Populnin; 3-*O*-(p-Coumaroylrutinoside), *in* P-10133
Variabiloside C, *in* P-10133
Variabiloside D, *in* P-10133

$C_{42}H_{46}O_{23}$
Populnin; 3-*O*-(*p*-Coumaroyl-β-D-glucopyranoside), 4′-*O*-β-D-glucopyranoside, *in* P-10133

$C_{42}H_{47}NO_{11}$
Triptogelin A5, *in* P-10046

$C_{42}H_{48}N_2O_{18}$
Wilfornine, *in* W-10001

$C_{42}H_{51}NO_{15}$
▷ Aclacinomycin Y, A-10020
Cinerubin R, *in* A-10020

$C_{42}H_{51}NO_{16}$
▷ Cinerubin B, C-10098
Pyrraculomycin, *in* A-10020
Spartanamicin A, *in* C-10098

$C_{42}H_{52}N_2O_8$
Petuniasterone B 7,22-dinicotinate, *in* P-10087

$C_{42}H_{52}N_6O_{10}$
RA-VIII, R-10010

$C_{42}H_{53}NO_{16}$
Spartanamicin B, *in* A-10020

$C_{42}H_{54}O_{24}$
Jasamplexoside A, J-10002

$C_{42}H_{54}O_{25}$
Jasamplexoside B, *in* J-10002

$C_{42}H_{58}O_9$
Neosartortuic acid, N-10021

$C_{42}H_{60}O_{14}$
Cryptoporic acid G; 5‴→15-Lactone, dicarboxylic acid, *in* C-10138

$C_{42}H_{64}O_{14}$
Cynatratoside F, *in* G-10039

$C_{42}H_{64}O_{15}$
Glaucoside E, *in* G-10039

$C_{42}H_{64}O_{16}$
Licoricesaponin J2, *in* D-10213

$C_{42}H_{64}O_{17}$
Brydioside A, *in* C-10140

$C_{42}H_{66}O_{13}$
Gouanoside A, *in* G-10114

$C_{42}H_{66}O_{14}$
Cynarasaponin C, *in* H-10242

$C_{42}H_{66}O_{15}$
Cynarasaponin E, *in* D-10261
Spinasaponin B, *in* D-10212

$C_{42}H_{66}O_{17}$
Odoroside K, *in* U-10020

$C_{42}H_{68}O_{13}$
Azukisaponin I, *in* O-10024
Carnosifloside I, *in* C-10142
3,16-Dihydroxy-24-cycloarten-6-one; Di-*O*-β-D-glucopyranoside, *in* D-10129
Kaikasaponin I, *in* O-10024

$C_{42}H_{68}O_{14}$
Gouanoside B, *in* G-10115
Scandenoside R_3, *in* T-10136
Scandenoside R_4, *in* T-10136

$C_{42}H_{68}O_{15}$
Cucurbitacin V; 3-*O*-β-D-Gentiobioside, *in* T-10040
Kinoin A; 23,24-Dihydro, 22-ketone, 3-*O*-[α-L-rhamnopyranosyl-(1→2)-β-D-glucopyranoside], *in* P-10043
Kinoin A; 3-*O*-[α-L-Rhamnopyranosyl-(1→2)-β-D-glucopyranoside], *in* P-10043
Rosamultin 3-glucoside, *in* T-10194

$C_{42}H_{68}O_{16}$
Cucurbitacin U; 3-*O*-β-D-Gentiobioside, *in* C-10141

$C_{42}H_{70}O_{12}$
Dammara-20,24-diene-3,6,12-triol; 6-*O*-[α-L-Rhamnopyranosyl-(1→2)-β-D-glucopyranoside], *in* D-10005
Ginsenoside F_4, *in* D-10004

$C_{42}H_{70}O_{13}$
Ginsenoside La, *in* E-10058
Junceoside, *in* O-10030

$C_{42}H_{70}O_{15}$
Pardarinoside B, *in* F-10038

$C_{42}H_{70}O_{16}$
Pardarinoside A, *in* F-10036

$C_{42}H_{72}O_4$
5,7-Dihydroxy-2-tritriacontyl-4*H*-1-benzopyran-4-one, D-10256

$C_{42}H_{72}O_{12}$
Gynosaponin N, *in* D-10011

$C_{42}H_{72}O_{13}$
Ginsenoside C, *in* D-10009
Ginsenoside F_2, *in* D-10011
Ginsenoside Rg_3, *in* D-10011
(20*R*)-Ginsenoside Rg_3, *in* D-10011

$C_{42}H_{72}O_{14}$
Ginsenoside A_1, *in* E-10056
▷ Ginsenoside A_2, *in* D-10009
Ginsenoside R_f, *in* D-10009
Gynosaponin U, *in* D-10010

$C_{42}H_{72}O_{15}$
Gycomoside I, *in* D-10006

$C_{42}H_{76}O_3$
Parvifolinic acid, P-10012

$C_{42}H_{83}NO_{10}$
Asteriacerebroside E, A-10140

$C_{43}H_{44}O_{26}$
Luteolin; 3′-*O*-Feruloylglucoside, 4′,7-di-*O*-glucuronoside, *in* T-10052

$C_{43}H_{49}NO_{11}$
Triptogelin A9, *in* P-10046

$C_{43}H_{49}NO_{18}$
Peritassine B, *in* P-10083
Wilforine†, W-10001

$C_{43}H_{50}N_6O_{10}$
RA-IX, R-10003

$C_{43}H_{52}N_6O_{11}$
RA-X, R-10011

$C_{43}H_{52}O_{20}$
Complanatin, C-10120

$C_{43}H_{58}O_6$
Guttiferone B, G-10140
Guttiferone C, G-10141
Guttiferone D, *in* G-10141

$C_{43}H_{60}O_9$
Methyl neosartortuate, *in* N-10021

$C_{43}H_{62}O_{18}$
Fevicordin A gentiobioside, *in* F-10008

$C_{43}H_{64}O_4$
Petiolate, P-10085

$C_{43}H_{64}O_{11}$
Glochidioside N, *in* O-10027

$C_{43}H_{64}O_{18}$
Fevicordin B gentiobioside, *in* F-10008

$C_{43}H_{68}O_3$
41-Hydroxy-2,42-tritetracontapentaenediynoic acid, H-10238

$C_{43}H_{69}NO_{14}$
Solacauline, *in* S-10072

$C_{43}H_{70}O_{14}$
Thalictoside I, *in* E-10053
Thalictoside II, *in* E-10053

$C_{43}H_{72}O_{13}$
Antibiotic NK 155141, *in* B-10005

$C_{43}H_{74}O_4$
5-Hydroxy-7-methoxy-2-tritriacontyl-4*H*-1-benzopyran-4-one, *in* D-10256

$C_{43}H_{80}O_6$
Glycerol 1-(9-octadecenoate) 2-octanoate 3-tetradecanoate, G-10101

$C_{43}H_{81}NO_9$
Asteriacerebroside A, A-10136

$C_{43}H_{83}NO_{10}$
Asteriacerebroside D, A-10139
Astrocerebroside A, *in* A-10142

$C_{44}H_{32}O_{22}$
Samarangenin B, *in* S-10008

$C_{44}H_{36}O_{22}$
Assamicain A, A-10134
Assamicain B, *in* A-10134
Assamicain C, A-10135

$C_{44}H_{43}NO_{11}$
Triptogelin A6, *in* P-10046
Triptogelin A10, *in* P-10046

$C_{44}H_{43}N_3O_{14}$
Cangorin A, *in* H-10025

$C_{44}H_{50}N_4O_{10}$
Conophylline, C-10121

$C_{44}H_{50}N_8$
Psycholeine, P-10166

$C_{44}H_{50}O_{14}$
Taxchinin B, T-10009

$C_{44}H_{50}O_{25}$
Populnin; 3-*O*-(2″-*O*-Sinapoylsophoroside), *in* P-10133

$C_{44}H_{54}O_{17}$
Dutomycin, D-10313

$C_{44}H_{64}O_{10}$
Isodopharicin E, I-10031

$C_{44}H_{64}O_{14}$
Cryptoporic acid D, *in* C-10138

$C_{44}H_{66}O_{14}$
Cryptoporic acid F, *in* C-10138

$C_{44}H_{66}O_{15}$
Cryptoporic acid G, C-10138

$C_{44}H_{68}O_{15}$
Lucyoside M, *in* D-10212

$C_{44}H_{70}O_3$
Petroformyne A, *in* H-10238

$C_{44}H_{72}O_{14}$
Didemnaketal A, D-10062

$C_{44}H_{72}O_{18}$
Pardarinoside E, *in* S-10100

$C_{44}H_{72}O_{19}S$
Forbeside H, *in* T-10135

$C_{44}H_{73}NO_{16}$
Megacarpine, *in* S-10071

$C_{44}H_{80}NO_7P$
1-*O*-Hexadecyl-2-*O*-eicosapentaenoyl-*sn*-glycero-3-phosphocholine, H-10043

$C_{44}H_{82}NO_7P$
1-*O*-Hexadecyl-2-*O*-arachidonoyl-*sn*-glycero-3-phosphocholine, H-10039

$C_{44}H_{83}NO_9$
Asteriacerebroside B, A-10137
Asteriacerebroside C, A-10138

$C_{44}H_{84}NO_7P$
1-*O*-Hexadecyl-2-*O*-dihomogammalinolenoyl-*sn*-glycero-3-phosphocholine, H-10041

$C_{44}H_{85}NO_{10}$
Astrocerebroside B, *in* A-10142

Chemical Abstracts Service Registry Number Index

This index becomes invalid after publication of the Second Supplement.

This index lists in numerical order all Chemical Abstracts Service (CAS) registry numbers contained in the First Supplement (Volume 8 of DNP).

Where a CAS registry number applies to a derivative or to a stereoisomer or other variant embedded within the entry, the Dictionary number is preceded by the word '*in*'.

The symbol ▷ preceding an index term indicates that the Dictionary Entry contains information on toxic or hazardous properties.

The symbol † refers to a name which is known to be duplicated.

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144027-79-2 Resinoside A, R-10015
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144179-09-9 29-(2,3,4,5-Tetrahydroxypentyl)-6,11-hopadiene; (32*R*,33*R*,34*S*)*-form, in* T-10063
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144967-83-9 2,12-Cyathadien-1-ol; 1*β-form, in* C-10152
144967-84-0 8*α*-Acetoxy-12*α*,13*α*-epoxy-2-cyathene, *in* E-10050
144967-85-1 1*β*-Acetoxy-12*α*,13*α*-epoxy-2-cyathene, *in* C-10152
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145038-59-1 Lobomichaolide, *in* E-10060
145042-02-0 Angulatueoid D, *in* T-10043
145042-09-7 Lecocarpinolide G, *in* T-10178
145047-92-3 1,8,9,14-Tetrahydroxydihydro-*β*-agarofuran; (1*α*,8*β*,9*α*)*-form*, 9,14-Bis-(3-pyridinecarbonyl), 8-benzoyl, 1-Ac, *in* T-10043
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145066-21-3 Antibiotic AH 135Y, A-10098
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145075-02-1 Cholesta-5,22-diene-3,7-diol; (3*β*,7*β*,22*E*)*-form, in* C-10087
145075-03-2 Cholesta-5,22-diene-3,7-diol; (3*β*,7*α*,22*E*)*-form, in* C-10087
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145164-00-7 Ergosta-5,22-diene-3,7-diol; (3*β*,7*α*,24*S*)*-form, in* E-10173
145176-85-8 Lintenone, L-10055
145204-90-6 Chaparramarin, *in* C-10066
145204-91-7 Punctanecine, P-10172
145204-97-3 *O*-Methylacutifolin, *in* A-10026
145204-98-4 Acutifolin palmitate, *in* A-10026
145211-81-0 Glaucanol A, *in* T-10201
145223-62-7 15*α*-Hydroxyfriedelin, *in* H-10147
145223-63-8 15-Hydroxy-1,3-friedelanedione; 15*α-form, in* H-10146
145223-65-0 24,28-Epoxyergost-5-ene-3,7-diol, *in* E-10174
145223-66-1 Ergost-5-ene-3,7,24,28-tetrol; (3*β*,7*α*,24*ξ*)*-form, in* E-10186
145237-03-2 Venulusone, V-10019
145237-04-3 Xestoamine, X-10005
145237-07-6 Acutifolin, A-10026
145237-08-7 Acutifolidin, *in* A-10026
145237-09-8 Neoacutifolin, N-10011
145237-20-3 Pipereicosalidine, *in* E-10010
145274-72-2 Roshenin E, R-10049
145274-73-3 Roshenin D, R-10048
145274-77-7 Malabathrin D, *in* N-10035
145307-22-8 Incarvilline, I-10006
145307-23-9 Punctanecine, *see* P-10172
145356-49-6 Spiroveitchionolide, S-10103
145382-61-2 Glyasperin F, G-10096
145382-62-3 Glyasperin G, G-10097
145382-63-4 Glyasperin H, G-10098
145382-64-5 Glyasperin I, *in* T-10068
145382-65-6 Glyasperin J, G-10099
145382-77-0 2-(3-Chloro-1,3-dimethylcyclohexyl)-5-methylphenol, C-10074
145382-78-1 2-(4-Chloro-1,3-dimethylcyclohexyl)-5-methylphenol, C-10075
145382-79-2 3,4,5,6-Tetrahydro-2,6,9-trimethyl-2,6-methano-2*H*-1-benzoxocin-3-ol, T-10033
145398-59-0 Luffarin A, L-10069
145398-60-3 Luffarin D, *in* L-10071
145398-61-4 Luffarin M, *in* L-10073
145398-62-5 Luffarin G, *in* L-10071
145398-63-6 Luffarin I, L-10072
145398-64-7 Luffarin J, *in* L-10072
145398-68-1 Luffarin P, L-10074
145398-69-2 Luffarin Q, L-10075
145398-70-5 Luffarin S, *in* L-10076
145398-71-6 Luffarin T, L-10077
145398-72-7 Luffarin V, *in* L-10077
145398-73-8 Luffarin W, L-10078
145398-74-9 Luffarin X, P-10113
145398-75-0 Luffarin Y, D-10288
145398-76-1 Luffarin Z, L-10079
145400-85-7 Peniopholide, *in* H-10125
145400-87-9 3*β*-Hydroxypeniopholide, *in* D-10143
145401-47-4 Sphingofungin E, S-10087
145401-48-5 Sphingofungin F, *in* S-10087
145403-31-2 Gigantetronin, G-10034
145403-35-6 Gigantrionenin, *in* G-10034
145416-92-8 Macrocarpal G, M-10002
145427-70-9 Luffarin B, L-10070
145427-72-1 Luffarin K, L-10073
145427-73-2 Luffarin R, L-10076
145428-11-1 Sirosterol, S-10067
145458-08-8 Chelodane, *in* C-10103
145458-09-9 Barekoxide, B-10009
145458-10-2 Zaatirin, Z-10001
145458-38-4 Napalilactone, N-10003
145458-91-9 Kobutimycin A, K-10014
145458-92-0 Kobutimycin B, K-10015
145459-46-7 Borapetoside C, *in* E-10102
145512-19-2 Luffarin H, *in* L-10071
145512-20-5 Luffarin U, *in* L-10077
145512-52-3 3*α*-Hydroxypeniopholide, *in* D-10143
145512-54-5 7*α*-Hydroxyconfertifolin, *in* H-10127
145514-35-8 Luffarin E, *see* L-10071
Luffarin K, *see* L-10073
145514-36-9 Luffarin L, *in* L-10073
145525-30-0 Harziandione, H-10005
145543-56-2 Cavernoisonitrile, C-10039
145543-57-3 Cavernothiocyanate, C-10040
145545-24-0 Chrysorrheal, C-10094
145613-54-3 12,16-Dihydroxy-20,24-dimethyl-17-scalaren-25,24-olide; (12*β*,16*α*,24*βH*)*-form*, 12-(3-Hydroxypentanoyl), *in* D-10138

145613-55-4 Phyllactone C, *in* D-10138
145613-56-5 Phyllactone D, *in* D-10137
145613-75-8 1,8,9,14-Tetrahydroxydihydro-β-agarofuran; (1α,8β,9α)-*form*, 14-(3-Pyridinecarbonyl), 9-benzoyl, 8-(2-methylbutanoyl), 1-Ac, *in* T-10043
145613-76-9 1,8,9,14-Tetrahydroxydihydro-β-agarofuran; (1α,8β,9α)-*form*, 14-(3-Pyridinecarbonyl), 9-benzoyl, 8-(2-methylpropanoyl), 1-Ac, *in* T-10043
145631-53-4 14-Taraxerene-3,7-diol; (3β,7α)-*form*, *in* T-10004
145631-62-5 7-Hydroxy-6,11-cyclofarnes-3(15)-en-2-one, H-10106
145631-63-6 12-Isoprenyl-3-cedrene-14,19-dioic acid; 19-Me ester, *in* I-10046
145632-88-8 10-Isocyano-4-amorphene; 10α-*form*, *in* I-10030
145639-84-5 1,8,9,14-Tetrahydroxydihydro-β-agarofuran; (1α,8β,9α)-*form*, 14-(3-Pyridinecarboxyl), 9-benzoyl, 1-Ac, *in* T-10043
145644-02-6 3-Oxocycloartan-21-oic acid, *in* H-10102
145671-15-4 3-Hydroxycycloartan-21-oic acid; 3α-*form*, Ac, *in* H-10102
145680-52-0 Phyllactone B, *in* D-10138
145680-53-1 Phyllactone E, *in* D-10137
145700-87-4 12-Hydroxy-6,11,14-trioxo-8,12-abietadien-18-oic acid, H-10237
145700-88-5 12-Methoxy-6,11,14-trioxo-8,12-abietadien-18-oic acid, *in* H-10237
145700-89-6 Horminone-18-oic acid, *in* D-10140
145700-90-9 20,24-Epoxy-1,3,12,25-dammaranetetrol; (1β,3α,12β,20*S*,24*S*)-*form*, *in* E-10055
145700-91-0 20,24-Epoxy-1,3,12,25-dammaranetetrol, *see* E-10055
145700-96-5 7,16,17-Kauranetriol; (*ent*-7α,16β)-*form*, 17-(2-Methylbutanoyl), 7-Ac, *in* K-10004
145700-97-6 7,16,17-Kauranetriol; (*ent*-7α,16β)-*form*, *in* K-10004
145700-98-7 *ent*-7α-Acetoxy-16β,17-kauranediol, *in* K-10004
145701-00-4 16,17-Dihydroxy-7-kauranone, *in* K-10004
145701-01-5 7,16,17-Kauranetriol; (*ent*-7α,16β)-*form*, 7-Ketone, 17-Ac, *in* K-10004
145701-02-6 15,16-Dihydroxy-8(14)-isopimaren-7-one; (*ent*-15*S*)-*form*, *in* D-10184
145701-03-7 14,16-Epoxy-7-isopimarene-6,15-diol; (*ent*-6α,14α,15α)-*form*, *in* E-10117
145701-06-0 Asimicilone, A-10131
145701-14-0 Alpinic acid, *in* T-10193
145701-28-6 Salvinin†, D-10142
145706-88-3 Candidissiol, C-10019
145757-44-4 Sarsolide A, S-10024
145774-69-2 14,16-Epoxy-7-isopimaren-15-ol; (*ent*-14α,15α)-*form*, *in* E-10118
145774-76-1 Symviridine, S-10138
145826-23-9 Guajavin B, G-10137
145826-24-0 Guajavin A, *in* S-10114
145826-26-2 Psidinin A, *in* M-10086
145826-27-3 Psidinin B, *in* M-10087
145826-28-4 Psidinin C, P-10163
145826-29-5 Psiguavin, P-10164
145851-28-1 Lambertianin A, L-10022
145851-29-2 Roshenin A, R-10047
145900-94-3 14-Acetylsarcophytol B, *in* C-10049
145904-72-9 Peniophoral, H-10203
145930-50-3 Fusoxysporone, F-10039
145940-29-0 Zeylaninone, *in* H-10152
145940-30-3 Acutotrinol, *in* D-10171
145940-31-4 Acutotrine, *in* D-10077
145940-74-5 Acerosterol, *in* T-10197
145940-82-5 Triptogelin E5, *in* T-10138
145940-83-6 Triptogelin E6, *in* T-10138
145940-84-7 Triptogelin E7, *in* T-10138
145940-85-8 Triptogelin E8, *in* T-10138
145940-86-9 Triptogelin F1, *in* T-10139
145940-87-0 Triptogelin F2, *in* T-10139
145940-93-8 Viridoxin A, V-10030
145940-94-9 Viridoxin B, *in* V-10030
145963-73-1 Acutotrinone, *in* H-10152
145984-73-2 3,24,25-Trihydroxylanost-9(11)-en-30-oic acid; (3α,24*R*)-*form*, *in* T-10157
145986-76-1 14-Acetylsarcophytol J, *in* C-10049
146001-22-1 Emeniveol, E-10012
146018-83-9 4,6,9-Trihydroxy-1(10),2-guaiadien-12,8-olide; (4β,5α,6α,8α,9α,11α*H*)-*form*, 9-Ac, 6-angeloyl, *in* T-10151
146018-84-0 4,6,9-Trihydroxy-1(10),2-guaiadien-12,8-olide; (4α,5α,6α,8α,9α,11α*H*)-*form*, 9-Ac, 6-tigloyl, *in* T-10151
146018-85-1 4,6,9-Trihydroxy-1(10),2-guaiadien-12,8-olide; (4α,5α,6α,8α,9α,11α*H*)-*form*, 6,9-Di-Ac, *in* T-10151
146018-86-2 4,6,9-Trihydroxy-1(10),2-guaiadien-12,8-olide; (4α,5α,6α,8α,9α,11α*H*)-*form*, 9-Ac, 6-angeloyl, *in* T-10151
146028-66-2 Acoseptrine, A-10025
146201-43-6 2-Hydroxy-1(10),11-guaiadien-15-oic acid; (2α,4β,5α)-*form*, *in* H-10154
146257-45-6 Taxicin II; 5-Cinnamoyl, 10-Ac, *in* T-10070
146257-46-7 Taxicin II; 5-Cinnamoyl, 9-Ac, *in* T-10070
146257-57-0 Cycloart-24-ene-3,21,23-triol; (3β,23*R*)-*form*, *in* C-10164
146257-58-1 21,23-Epoxycycloart-24-en-3-ol; (3α,23*S*)-*form*, *in* E-10054
146257-61-6 3-Hydroxy-24,25,26,27-tetranorcycloartan-23,21-olide; 3β-*form*, *in* H-10231
146257-69-4 21,23-Epoxycycloart-24-ene-3,21-diol, *see* E-10051
146257-70-7 21,23-Epoxycycloart-24-ene-3,21-diol; (3β,21ξ,23*R*)-*form*, *in* E-10051
146257-74-1 21,23-Epoxycycloart-24-en-3-ol; (3β,23*R*)-*form*, 3-Ketone, *in* E-10054
146257-75-2 21,23-Epoxycycloart-24-en-3-one, *in* E-10054
146257-76-3 21,23-Epoxycycloart-24-en-3-ol; (3β,23*R*)-*form*, *in* E-10054
146257-77-4 21,23-Epoxycycloart-24-en-3-ol; (3β,23*S*)-*form*, *in* E-10054
146257-94-5 Okanin; 4-Me ether, 4′-*O*-primveroside, *in* P-10040
146259-43-0 Dethymicin, D-10042
146293-93-8 Kahukuene A, K-10001
146293-94-9 Kahukuene B, K-10002
146356-80-1 Rosamultin 3-glucoside, *in* T-10194
146356-83-4 Eupha-7,24-diene-1,3-diol; (1β,3β)-*form*, *in* E-10227
146356-87-8 26-Nor-14-friedelen-3-one, *in* N-10045
146356-88-9 26-Nor-14-friedelen-3-ol; 3β-*form*, *in* N-10045
146356-94-7 7-Hydroxy-2-dotriacontanone, H-10121
146356-95-8 5-Acetoxytriacontane, *in* T-10101
146362-71-2 Tanshinonal, T-10003
146387-56-6 Smenoqualone, S-10068
146389-40-4 Tryptoquinone A, A-10005
Triptoquinonoic acid A, *see* T-10203
146406-84-0 Pyrizinostatin, P-10178
146426-35-9 3-Ethyl-1*H*-pyrazolo[1,5-b]isoquinolin-9-one, E-10205
146426-36-0 3-Propyl-1*H*-pyrazolo[1,5-*b*]isoquinolin-9-one, P-10153
146428-63-9 Teumassin, *in* D-10075
146436-22-8 Terpestacin, T-10019
146445-76-3 Thalictoside A, *in* C-10165
146445-91-2 Hoduloside IV, *in* J-10007
146445-92-3 Hoduloside V, *in* J-10007
146446-05-1 Gibepyrone A, G-10031
146446-06-2 Gibepyrone B, *in* G-10031
146446-07-3 Gibepyrone C, *in* G-10031
146446-08-4 Gibepyrone D, *in* G-10031
146446-10-8 Gibepyrone E, *in* G-10031
146446-11-9 Gibepyrone F, G-10032
146453-58-9 Thalictogenin a, *in* C-10165
146467-22-3 Methyl briareolate, *in* E-10154
146469-97-8 Thalictoside C, *in* C-10165
146471-70-7 Dioncophyllacine A; (±)-*form*, *in* D-10289
146471-74-1 Ancistrobrevine B, A-10081
146471-75-2 Dioncophylline C, D-10291
146471-82-1 Asbestinin 6, *in* A-10130
146471-83-2 Asbestinin 7, *in* A-10130
146471-84-3 Asbestinin 8, *in* A-10130
146471-85-4 Asbestinin 9, *in* A-10130
146471-86-5 Asbestinin 10, *in* A-10130
146488-63-3 Marinone, M-10017
146488-64-4 Debromomarinone, *in* M-10017
146503-30-2 Hoduloside III, *in* J-10007
146506-41-4 4(17),10(18),14-Prenylguaiatriene-3,6,9,12-tetrol; (3β,6β,9α,12ξ)-*form*, 12-Ac, *in* P-10148
146506-42-5 4(17),10(18),15-Prenylguaiatriene-6,9,12,14-tetrol; (6β,9α,12ξ,14ξ)-*form*, 12-Ac, *in* P-10149
146506-43-6 2,10(18),14-Prenylguaiatriene-4,6,13-triol; (4ξ,6β,13ξ)-*form*, 13-Ac, *in* P-10150
146522-99-8 4(17),10(18),14-Prenylguaiatriene-3,6,9,12,13-pentol; (3β,6β,9α,12ξ,13ξ)-*form*, 12,13-Di-Ac, *in* P-10144
146523-00-4 2,10(18),14-Prenylguaiatriene-4,6,9,12,13-pentol; (4ξ,6β,9α,12ξ,13ξ)-*form*, 12,13-Di-Ac, *in* P-10143
146539-97-1 Cycloart-25-ene-3,22-diol; (3β,22*R*)-*form*, *in* C-10162
146539-98-2 Cycloart-20-ene-3,25-diol; 3β-*form*, *in* C-10159
146564-20-7 1(10)-Lepidozen-5-ol; (1(10)*E*,4*S**,5*S**,6*R**,7*R**)-*form*, *in* L-10041
146564-55-8 1,10:8,14-Diepoxy-14-hydroxy-4,11(13)-germacradien-12,6-olide; (1α,4*E*,6α,8β,10α,14α)-*form*, *in* D-10079
146564-66-1 2,7,11-Cembratriene-4,6,13-triol; (1*S*,2*E*,4*R*,6*R*,7*E*,11*E*,13*R*)-*form*, *in* C-10058
146564-67-2 2,7,11-Cembratriene-4,6,20-triol, *see* C-10059
146573-88-8 Senecioracenine, S-10047
146607-48-9 6,7-Dimethoxy-5-(3-oxo-1-butenyl)-2*H*-1-benzopyran-2-one, D-10268
146609-89-4 2,7,11-Cembratriene-4,6,13-triol, *see* C-10058
146609-90-7 2,7,11-Cembratriene-4,6,20-triol; (1*S*,2*E*,4*S*,6*R*,7*E*,11*Z*)-*form*, *in* C-10059
146609-95-2 2,7,11-Cembratriene-4,6,13-triol, *see* C-10058
146609-96-3 2,7,11-Cembratriene-4,6,13-triol, *see* C-10058
146621-73-0 Setiformenol, E-10038
146621-74-1 Taxchinin A, T-10008

146663-67-4 Dutomycin, D-10313
146669-24-1 3-Hydroxy-3-(2-methylphenyl) propanamide, *in* H-10189
146714-10-5 Genistifolin, G-10024
146787-96-4 Alpinoside, *in* D-10257
146790-55-8 3,4-Dihydro-4-propylidene-2*H*-pyrrole-2-carboxylic acid, D-10101
146830-04-8 20,24-Epoxy-25,26-dihydroxydammaran-3-one; (20*S*,24*R*,25ξ)-*form*, *in* E-10063
146874-41-1 Cochinmicin IV, *in* C-10112
146876-02-0 Cochinmicin V, *in* C-10112
146924-31-4 Isohumbertiol A, *in* I-10033
146924-32-5 Isohumbertiol B, *in* I-10033
146924-33-6 Isohumbertiol C, *in* I-10033
146924-34-7 Isohumbertiol D, *in* I-10033
146959-75-3 Calotroposide A, *in* T-10066
146959-76-4 Calotroposide F, *in* T-10066
146959-78-6 Calotroposide G, *in* T-10066
146959-79-7 Spinochalcone C, S-10088
146959-80-0 Spinoflavanone A, S-10089
146959-82-2 Lecocarpinolide L, *in* T-10178
146959-83-3 Lecocarpinolide K, *in* T-10178
146959-84-4 Lecocarpinolide I, *in* T-10178
146959-86-6 Cebellin O, *in* D-10174
146959-88-8 2,3,14,20,24,25-Hexahydroxycholest-7-en-6-one; (2β,3β,5β,14α,20*S*,24ξ)-*form*, *in* H-10053
147029-00-3 Rugosal D, R-10059
147029-01-4 Secocarotanal, D-10295
147029-02-5 Isodaucenol, D-10018
147029-03-6 Bisaborosaol F, *in* D-10120
147029-04-7 Bisaborosaol E, *in* D-10119
147029-05-8 Angulatueoid E, *in* T-10043
147029-06-9 Angulatueoid F, *in* T-10043
147029-14-9 β-Bisabolenal, *in* B-10032
147044-48-2 Obtusilic acid, *in* D-10262
147058-07-9 2,3,4-Trihydroxypregnan-16-one; (2α,3α,4β)-*form*, *in* T-10187
147059-45-8 Lecocarpinolide J, *in* T-10178
147103-18-2 Samarangenin A, S-10008
147103-19-3 Samarangenin B, *in* S-10008
147126-85-0 Epirugosal D, *in* R-10059
147126-86-1 7,10-Dihydroxy-2,11-bisaboladien-15-oic acid, *see* D-10119
147126-90-7 β-Bisabolenol, B-10032
147127-62-6 Cryprochine, C-10136
147139-55-7 Biphenomycin C, B-10025
147151-92-6 Gorgost-5-ene-1,3,9,11,21-pentol; (1β,3β,9α,11α)-*form*, *in* G-10111
147151-93-7 Gorgost-5-ene-1,3,11,21-tetrol; (1β,3β,11α)-*form*, *in* G-10112
147167-61-1 20(29)-Lupene-3,6,16-triol; (3β,6β,16β)-*form*, *in* L-10085
147170-08-9 23-Norgorgost-7-ene-3,5,6-triol; (3β,5α,6β,22*R*,23*R*,24*R*)-*form*, *in* N-10047
147170-09-0 Ergostane-3,5,6,7,15-pentol; (3β,5α,6β,7β,15β,24*S*)-*form*, *in* E-10180
147171-70-8 Pepticinnamin F, *in* P-10074
147171-71-9 Pepticinnamin C, *in* P-10074
147171-72-0 Pepticinnamin D, *in* P-10074
147171-73-1 Pepticinnamin A, *in* P-10074
147171-74-2 Pepticinnamin B, *in* P-10074
147199-47-1 Betulafolienetriol; 3-Malonyl, 12-Ac, *in* D-10011
147217-19-4 8,11-Epoxy-1,3-cembradiene-7,12-diol; (1*E*,3*E*,7β,8α,11α,12β)-*form*, *in* E-10037
147217-20-7 8,11-Epoxy-1,3-cembradiene-7,12-diol; (1*E*,3*E*,7β,8α,11α,12β)-*form*, 7-Ac, *in* E-10037
147217-21-8 7,11-Epoxy-1,3-cembradiene-8,12-diol, E-10036
147217-22-9 11,12-Dihydroxy-1,3-cembradien-7-one, D-10124
147235-23-2 Isonaviculol, I-10038
147235-24-3 Furanopinguisanol, F-10035
147317-36-0 Pepticinnamin E, *in* P-10074
147317-95-1 Nitrosoxacin C, N-10032
147317-96-2 Nitrosoxacin A, N-10030
147317-97-3 Nitrosoxacin B, N-10031
147318-39-6 Acalycigorgin A, *in* E-10074
147318-40-9 Acalycigorgin B, *in* E-10074
147318-41-0 Acalycigorgin C, X-10004
147348-08-1 Salvitriol, *in* O-10023
147368-34-1 Orientalol A, *in* G-10136
147368-35-2 Orientalol B, *in* G-10136
147395-09-3 Cholesta-8(14),24-diene-3,6-diol; (3β,7α)-*form*, *in* C-10088
147395-93-5 Arborescidine B, *in* A-10114
147395-94-6 Arborescidine C, A-10114
147395-95-7 Leucettamine A, L-10044
147395-96-8 Leucettamine B, L-10045
147395-97-9 Leucettamidine, L-10043
147396-19-8 Chrysorrhelactone, C-10095
147419-93-0 Dammara-20,24-diene-3,6,12-triol; (3β,6α,12β)-*form*, 6-*O*-[α-L-Rhamnopyranosyl-(1→2)-β-D-glucopyranoside], *in* D-10005
147455-45-6 Sulcatine F, *see* S-10127
147511-74-8 Orientalol C, *in* E-10094
147511-75-9 6,7-Epoxy-10(14)-guaien-4-ol, *see* E-10094
147512-45-6 Arborescidine D, *in* A-10114
147515-44-4 Sulcatine F, S-10127
147526-83-8 Casteloside C, C-10035
147526-84-9 Leptadenol, L-10042
147526-85-0 Euphoractine A, E-10229
147526-86-1 Euphoractine B, *in* E-10229
147545-38-8 Tuberonone, *in* H-10200
147568-32-9 12-Acetoxy-4,11(13)-cadinadiene, *in* C-10005
147568-33-0 9-Hydroxy-8(14),15-isopimaradien-1-one, *in* I-10042
147568-34-1 8(14),15-Isopimaradiene-1,9-diol; (1α,9α)-*form*, *in* I-10042
147568-35-2 8(14),15-Isopimaradiene-1,6,9-triol; (1α,6β,9α)-*form*, 1-Ketone, 6-Ac, *in* I-10044
147568-36-3 6,9-Dihydroxy-8(14),15-isopimaradien-1-one, *in* I-10044
147568-37-4 8(14),15-Isopimaradiene-1,6,9-triol; (1α,6β,9α)-*form*, 6-Ac, *in* I-10044
147568-38-5 8(14),15-Isopimaradiene-1,6,9-triol; (1α,6β,9α)-*form*, *in* I-10044
147612-77-9 Anatolioside B, A-10080
147612-78-0 Anatolioside C, *in* A-10080
147612-79-1 Anatolioside D, *in* A-10080
147641-71-2 3-Hydroxycholesta-5,22-diene-7,24-dione; (3β,22*E*)-*form*, *in* H-10096
147641-72-3 3-Hydroxycholest-5-ene-7,24-dione; 3β-*form*, *in* H-10099
147641-73-4 3-Hydroxy-26,27-dinorcholesta-5,22-diene-7,24-dione; (3β,22*E*)-*form*, *in* H-10115
147641-74-5 3,25-Dihydroxyergosta-5,24(28)-dien-7-one; 3β-*form*, *in* D-10155
147648-62-2 4,11(13)-Cadinadien-12-ol, C-10005
147658-98-8 Isokarounidiol, I-10034
147658-99-9 Parathylone, P-10011
147659-01-6 20(29)-Lupene-3,15-diol; (3β,15α)-*form*, *in* L-10083
147663-78-3 Luffariolide F, L-10080
147663-79-4 Luffariolide G, L-10081
147666-65-7 Lagerstannin A, L-10017
147666-67-9 Lagerstannin B, L-10018
147687-34-1 Guttiferone A, G-10139
147687-35-2 Guttiferone B, G-10140
147687-36-3 Guttiferone C, G-10141
147687-37-4 Guttiferone D, *in* G-10141
147703-44-4 2α-Acetoxybrevifoliol, *in* T-10005
147727-65-9 Gouanogenin A, G-10114
147727-66-0 Gouanogenin B, G-10115
147731-93-9 13-Nor-1,3-elemadien-11-one, N-10044
147736-85-4 Ferrocin C, *in* F-10005
147741-98-8 Cajucarinolide, *in* N-10050
147742-01-6 Jasamplexoside C, J-10003
147742-02-7 Jasamplexoside B, *in* J-10002
147742-03-8 Isocajucarinolide, *in* N-10049
147742-04-9 2,3,16,20,25-Pentahydroxy-29-norcucurbita-1,3,5(10)-triene-11,22-dione; (16α,20*R*)-*form*, 2-*O*-β-D-Glucopyranoside, 25-Ac, *in* P-10058
147742-10-7 Bidwillon A, T-10143
147742-11-8 Bidwillon B; (±)-*form*, *in* B-10022
147742-23-2 Hazaleanin B, H-10006
147743-15-5 15-Acetoxy-17-nor-8-labden-7-one, *in* H-10194
147743-23-5 1,10-Bisaboladiene-3,12-diol; 3-Epimer, 12-Ac, *in* B-10026
147764-93-0 Jasamplexoside A, J-10002
147782-04-5 Guttiferone E, G-10142
147783-00-4 Ferrocin D, *in* F-10005
147783-27-5 1,10-Bisaboladiene-3,12-diol; 12-Ac, *in* B-10026
147802-34-4 Ergostane-3,22-diol; (3α,5α,22*S*,24*S*)-*form*, *in* E-10177
147809-20-9 13,14-Epoxy-9,11,12-trihydroxytriptolide, *in* A-10004
147821-59-8 Sporochnol A, *in* S-10105
147821-60-1 Sporochnol B, *in* S-10105
147821-61-2 Sporochnol C, S-10105
147852-61-7 8(26),13,17,21-Polypodatetraen-3-ol; 3β-*form*, *in* P-10129
147852-63-9 3-Methoxycycloartan-26,23-olide, *in* H-10104
147879-65-0 3,6,11-Trihydroxy-24-nor-9,11-secocholesta-7,22-dien-9-one; (3β,6α,22*E*)-*form*, 11-Ac, *in* T-10168
147914-20-3 9-Humulene-2,6-dione, H-10073
147921-90-2 Repandiol, *in* D-10073
147974-64-9 12-Oleanene-3,27-diol; 3α-*form*, *in* O-10025
148044-48-8 Cycloartane-3,21-diol; 3β-*form*, *in* C-10156
148044-49-9 24-Methylenecycloart-25-ene-3,21,22,23-tetrol; (3β,22ξ,23ξ)-*form*, *in* M-10052
148054-13-1 Physagulin E, P-10107
148054-17-5 Heliannuol A, E-10034
148076-22-6 Physagulin G, *in* P-10107
148084-37-1 Exfoliamycin, E-10238
148084-38-2 3-*O*-Methylexfoliamycin, *in* E-10238
148084-39-3 Anhydroexfoliamycin, *in* E-10238
148084-40-6 Anthrotainin, A-10096
148101-50-2 Ibisterol, I-10001
148139-97-3 Phygrine, P-10104
148149-82-0 14-Deoxycrassin, *in* H-10094
148149-83-1 Pseudoplexaurol, *in* E-10040
148163-07-9 Urauchimycin A, U-10011
148163-08-0 Urauchimycin B, U-10012
148218-52-4 Phygrine; Dipicrate, *in* P-10104
148225-29-0 Inflexarabdonin I, *in* D-10186
148225-30-3 Inflexarabdonin J, *in* D-10187
148225-31-4 Inflexarabdonin K, *in* T-10154
148225-32-5 Riccardiphenol A, R-10033
148225-33-6 Riccardiphenol B, R-10034
148225-34-7 Norafricanone, N-10041
148225-51-8 Saussureamine D, S-10028
148225-52-9 Saussureamine E, *in* S-10028
148245-82-3 Saussureamine A, S-10026
148245-83-4 Saussureamine C, S-10027
148302-73-2 Crolechinol, *in* C-10109
148302-74-3 Crolechinic acid, *in* E-10045
148371-04-4 4-Hydroxy-2,8-neolemnadien-5-one; 4β-*form*, Ac, *in* H-10192
148371-05-5 1(10)-Aristolen-12-ol; Ac, *in* A-10122
148371-08-8 Raspacionin B, R-10009