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**My family**



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# Abbreviations

cg	conventionally grown
e	estimated
ec	exact composition
eg	ecologically grown
Fdk	<i>Fusarium</i> -damaged kernels
hlk	healthy looking kernels
is	indifferent samples
na	not analyzed
nc	no comment
ncac	no comment about consumption
ncaps	no comment about positive samples
nd	not detected
og	organically grown
tr	traces
s	selected
sa	samples
wp	whole plant



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## Introduction

Feedstuff is a common standard for each kind of food for animals, which are in the charge of man and serve as food. Feed for livestock is of special interest. The quality of feed is responsible for the health of animals and indirectly for the quality of human nutrition. Agriculturally used plants, such as numerous grains, oil seeds and nuts, root crops, and to a smaller extent, many forage crops are susceptible to mycotoxin contamination. Fungal and in the end mycotoxin contaminated feed may be involved in modern livestock production practice (confined rearing on high-density diets) because plant feedstuff especially from multiple sources may be used for feeding. The mixing of mycotoxin contaminated pecan, walnut, or other nut meats into feedstuff is one example. The nuts are pressed to recover the oil while most of the toxin is concentrated in the residual meats. The press cake usually is diverted into animal feed channels. The amount of these (protein supplement) ingredients, while small, could cause problems in the health of animal and human.

Available data suggest that the mold and mycotoxin problem is largely one of the worldwide feed management. Especially individual farm silos and feed troughs are major sites of toxin production in mold-contaminated feeds. Guidelines for the investigation and amelioration of feedstuff quality in different countries have been prepared.

Mycotoxin contamination of feeds occurs as a result of crop invasion by field fungi. Here drought of plants, close planting, competition from weeds, reduced fertilization and other factors are causing stress to plants. Another reason is the growth of storage fungi in improperly stored crops and/or after processing the plants into food products or animal feed. A lot of (microscopic) fungi like *Fusarium* spp. and *Alternaria* spp. (field fungi) as well as *Aspergillus* spp. and *Penicillium* spp. (storage fungi) start growth if suitable conditions prevail. It is well documented that mycotoxin contamination is more regularly associated with low-grade cereals in undeveloped countries. Normally, in developed countries these cereals do not enter the human food chain. Storage fungi also grow during mixing and delivery of grain and animal feed. In the worst case these fungi produce secondary metabolites, the so-called "mycotoxins". They can be very harmful for animals (and man). In 1960 the Turkey "X" disease was caused by a toxin (aflatoxin) produced by molds which belong to the *Aspergillus flavus* group. It resulted in the death of 100,000 turkeys in UK.

The presence of mycotoxins in feedstuffs (maize and cottonseed are particularly affected) could cause serious mycotoxicosis syndromes in animals. At high levels they cause even death shortly after exposure. At lower levels, they can cause disorders in various organs. Decreased feed efficiencies, low weight gain, impaired immunity and other symptoms of acute mycotoxicosis may arise high costs to livestock producers. Especially in equivocal cases of illness of the animal and/or unspecific syndromes of decline in performance feedstuff should be investigated for mycotoxins. Furthermore, these fungal metabolites can end up in meat, milk, or eggs, which are important components of the human food chain. Nowadays consumers pay more attention to their health and therefore a higher quality of food is necessary.

The present book gives an overview of mycotoxins in feedstuffs and ingredients. It lists the degree of contamination, concentration and country of origin/detection for each case of mycotoxin contamination. Besides these information, the book shows whether a feedstuff/ingredient is predisposed for a mycotoxin contamination (number of mycotoxins as well as number of citations concerning one feedstuff).

“Mycotoxins in Feedstuffs” will therefore contribute to more information and transparency in the human food chain. It is especially suitable for responsables in the feed industry (e.g. supervisors of feed, feed producers, feeding traders) just as ministries, offices and departments of farming and environmental control on the national and international level, offices, associations, agricultural chambers, meat industry, veterinaries, farmers (especially livestock breeders), mycologists, mycotoxicologists, biologists, chemists, supervisors in food and feed quality control, lawyers and experts in law of food and feed, students of respective fields and further groups of interests.

The feeds and/or ingredients are listed in alphabetical order. Terms with a comma are following, than terms with definitions in brackets. This was done as far as possible. In some cases, the country of detection is not necessarily the country of origin, but information was lacking concerning the country of origin of such imports in the original literature. If only “imported” occurs after the country of investigation no more data were available in the original literature. Sometimes the original literature neither contained the producing country nor the addition “imported”. In these cases also no indications were given.

Authors are invited to send **accepted** manuscripts or already **published** articles (in English) in **recommended** journals to the author of the book. After critical review relevant results may be published in a later edition.

**Alfalfa** may contain the following mycotoxins:

**AFLATOXIN B<sub>1</sub>**

incidence: 6/55, conc. range: 13–65 µg/kg, Ø conc.: 34.7 µg/kg, country: India<sup>247</sup>  
 see also *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60 % maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm

products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanuts, peanut, kernels, peanut, shells, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

**DIACETOXYSCIRPENOL**

incidence: 1/7345, conc.: nc, country: Hungary<sup>209</sup>

see also barley, feed, feed components, feed (dog), feed (fish), feed (mink), feed (pig), feed (poultry), feed (reindeer), feeds, grain, feedstuff, forage grass, grain, mixed feed, grains (no specification), maize, maize gluten, oat and barley (hammer-milled), oats, peanuts, soybeans, wheat

**OCHRATOXIN A**

incidence: 4/7345, conc. range: nc, country: Hungary<sup>209</sup>

see also barley, barley, oats, barley (high moisture), barley-soybean diet, bird food, domestic, bird food, wild, broilers feed, cereal grains, citrus pulp, coconut, expeller, corn cob mix silage, diet (dairy cow), diet (poultry), diet (starter), dog food, eat, egg production mixed feed, feed, feed wheat, oat and barley, feed, commercial mix, feed, mixed, feed, mixed (pelleted), feed (broilers), feed (cat), feed (cattle), feed (cereals), feed (pig), feed ec (pig), feed (poultry), feed ec (poultry), feed (poultry, pig), feed ec (rabbit), feed (trout), grain, mixed feed, grains, mixed, grains (heated), hay, horse bean, maize, maize feed, milo, maize gluten, maize meal, maize, white, *Makhana* (*Euryale ferox* Salisb) puffs, milk production mixed feed, millet, oat and barley (hammer-milled), oats, palm products, peanut cake, peas, peas and beans, pet food, pig feedstuffs, pig grower diet, pig meal, piglet diet, poultry feedstuffs, rice bran, rice

germ, rice germ cake, rye, sorghum, soybean groats, sunflower, sunflower seeds, extracted, tapioca, triticale, *Vicia faba*, wheat, wheat and barley, wheat bran, wheat hay, wheat, oats

#### T-2 TOXIN

incidence: 2/7345, conc. range: nc, country: Hungary<sup>209</sup>

see also barley, bran, diet (grower), diet (poultry), feed, feed components, feed, layer, feed, mixed, feed (dog), feed (fish), feed (mink), feed (pig), feed (poultry), feedstuff, forage grass, grain, mixed feed, grains (no specification), hay, maize, maize germ/bran, maize gluten, maize meal, maize screenings, maize stalks (pith), oat and barley (hammer-milled), oats, peanuts, pig grower diet, piglet diet, rye, sorghum, triticale, wheat

#### ZEARALENONE

incidence: 1/7345, conc.: nc, country: Hungary<sup>209</sup>

see also barley, barley and feed, barley, husked, barley, unhusked (naked), bone meal, bran, broilers feed, *Carthamus* cake, chick pea, concentrate, mixed, corn cob mix silage, cotton cake, cottonseed, cottonseed cake, diet (dairy cow), diet (poultry), diets (mixed), feed, feed components, feed, mixed, feed, mixed (primarily maize also maize, oats, wheat), feed (bran), feed (broiler chicken), feed (cattle), feed (chicken), feed (dairy), feed (developing pig), feed (mill run, from wheat), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (starter chicken), feedstuff, fish meal, forage grass, grain, bruised, grain, mixed feed, grains (no specification), hay, maize, maize ears, maize flakes, maize germ, maize germ/bran, maize gluten, maize kernels, maize meal, maize oil cake, maize screenings, maize stalks (pith), maize, "Baby", maize, hybrid, maize, shelled, maize, unshelled, maize, white, maize grain, artificially dried, maize grain, crib dried, maize grain, ensiled, milk production mixed feed, oats, *Paspalum palidosum*, straw, peanut hulls/skins, rice bran, rice germ, rice germ cake, rye, silage, sorghum, soybeans, soybeans, extracted, sunflower cake, tapioca, triticale,

wheat, wheat bran, wheat bran and chana testa, wheat soya meal

**Ambadi cake** may contain the following mycotoxins:

#### AFLATOXIN B<sub>1</sub>

incidence: 1/2, conc. range: 59.4 µg/kg, country: India<sup>253</sup>

see also alfalfa, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20% peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5% peanut products), dairy cattle feed (containing 6–10% peanut products), dairy cattle feed (containing 6–12% peanut products), dairy cattle feed (containing more than 20% peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60% maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk

production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanuts, peanut, kernels, peanut, shells, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

**Animal feed (maize)** may contain the following mycotoxins:

#### AFLATOXINS

incidence: 33/70, conc. range:  $\leq 3872 \mu\text{g}/\text{kg}$ ,

$\emptyset$  conc.:  $369 \mu\text{g}/\text{kg}$ , country: USA<sup>280</sup>

incidence: 2/74, conc. range:  $\leq 133 \mu\text{g}/\text{kg}$ ,

$\emptyset$  conc.:  $69 \mu\text{g}/\text{kg}$ , country: USA<sup>280</sup>

incidence: 29/39, conc. range:  $\leq 2839 \mu\text{g}/\text{kg}$ ,

$\emptyset$  conc.:  $406 \mu\text{g}/\text{kg}$ , country: USA<sup>280</sup>

incidence: 1/3, conc.:  $2 \mu\text{g}/\text{kg}$ , country:

USA<sup>280</sup>

see also animal feed (mixed), barley, copra meal, cottonseed, cottonseed fines, cottonseed meal, cottonseed meats, feed, feed ingredients (miscellaneous), feed, mixed, feed (excluding peanuts, suspect), feed (goat), feed (pig), feed (poultry), feedstuff, grain, grain, mixed feed, maize, maize, shelled, millet, peanut cake, peanut meal, peanut meal and by-products, peanuts, protein concentrates, rice, rice bran, sorghum, soybean meal, sunflower

**Animal feed (mixed)** may contain the following mycotoxins:

#### AFLATOXINS

incidence: 2/40, conc. range:  $\leq 105 \mu\text{g}/\text{kg}$ ,

$\emptyset$  conc.:  $94 \mu\text{g}/\text{kg}$ , country: USA<sup>280</sup>

incidence: 5/6\*, conc. range:  $\leq 67 \mu\text{g}/\text{kg}$ ,

$\emptyset$  conc.:  $36 \mu\text{g}/\text{kg}$ , country: USA<sup>280</sup>,

\*imported

see also animal feed (maize), barley, copra meal, cottonseed, cottonseed fines, cottonseed meal, cottonseed meats, feed, feed ingredients (miscellaneous), feed, mixed, feed (excluding peanuts, suspect), feed (goat), feed (pig), feed (poultry), feedstuff, grain, grain, mixed feed, maize, maize, shelled, millet, peanut cake, peanut meal, peanut meal and by-products, peanuts, protein concentrates, rice, rice bran, sorghum, soybean meal, sunflower

**Animal feedstuffs (dairy cake)** may contain the following mycotoxins:

#### AFLATOXIN B<sub>1</sub>

incidence: 1/1, conc.:  $116 \mu\text{g}/\text{kg}$ , country:

Saudi Arabia<sup>288</sup>

see also alfalfa, *Ambadi* cake, bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60 % maize), fish meal, greengram, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni*



cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanuts, peanut, kernels, peanut, shells, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

#### AFLATOXIN B<sub>2</sub>

incidence: 1/1, conc.: 10 µg/kg, country: Saudi Arabia<sup>288</sup>

see also bird food, bird food, wild, biri testa, blackgram, blackgram husk, cottonseed, cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meats, dog food, egg production mixed feed, feed, compound, feed (cat), feed (cattle), feed (dog), feed (pig), feed (poultry), feed (rabbit), feed (sheep), fish meal, horsegram, maize, maize gluten, maize husk, maize, ground, maize, preharvest, mung testa, mustard cake, niger cake, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanuts, peanut, kernels, redgram husk, rice bran, rice bran (deoiled), rice chaff, rice meal, rice (polish), sal seed cake, sesame cake, sorghum, soybean meal, soybeans, wheat, wheat bran

#### AFLATOXIN G<sub>1</sub>

incidence: 1/1, conc.: 10 µg/kg, country: Saudi Arabia<sup>288</sup>

see also bird food, bird food, wild, concentrate, mixed, cottonseed, cottonseed cake, feed (cat), feed (chicken), feed (dog), maize, maize, ground, maize, preharvest, meat meal, milk production mixed feed, murkool, peanut cake, peanut expeller, peanut hay, peanut meal, peanuts, rice bran, rice germ, sorghum, soybeans, wheat, wheat bran, wheat bran and chana testa

#### AFLATOXIN G<sub>2</sub>

incidence: 1/1, conc.: 1 µg/kg, country: Saudi Arabia<sup>288</sup>

see also bird food, feed (cat), feed (dog), maize, maize, preharvest, peanut expeller, peanut hay, peanut meal, peanuts, soybeans

**Bagasse** may contain the following mycotoxins:

#### AFLATOXIN B<sub>1</sub>

incidence: 1/2, conc.: 9.3 µg/kg, country: India<sup>247</sup>

see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken),

feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60 % maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

**Barley** Barley for feed may contain the following mycotoxins:

#### 3-ACETYLDEOXYNIVALENOL

incidence: 4/15\*, conc. range: 20–96 µg/kg, Ø conc.: 58 µg/kg, country: Finland<sup>9</sup>, \*imported?  
 incidence: 54/240, conc. range: 2–224 µg/kg, Ø conc.: 35.9 µg/kg, country: Germany<sup>123</sup>  
 incidence: 21/44, conc. range: 3–17 µg/kg, Ø conc.: 5 µg/kg, country: Germany<sup>130</sup>  
 incidence: 5/7\*, conc. range: 1300–5300 µg/kg, Ø conc.: 2780 µg/kg, country: Canada<sup>202</sup>, \*ncac  
 incidence: 3/23, conc. range: 230–380 µg/kg, country: Canada<sup>410</sup>

see also feed components, feed (poultry), feeds, grain, feeds, industrial, feedstuffs (rapeseed, turnip, fish meal, concentrates), maize, maize ears, maize gluten, maize kernels, maize meal, maize screenings, oats, wheat

#### 15-ACETYLDEOXYNIVALENOL

incidence: 14/153, conc. range: 2–18 µg/kg, Ø conc.: 6.2 µg/kg, country: Germany<sup>123</sup>  
 incidence: 5/7\*, conc. range: 400–2400 µg/kg, Ø conc.: 1280 µg/kg, country: Canada<sup>202</sup>, \*ncac  
 incidence: 1/94, conc.: 5 µg/kg, country: Canada<sup>240</sup>  
 incidence: 2/23, conc. range: 110–160 µg/kg, country: Canada<sup>410</sup>  
 see also feed components, feed, commercial mix, feed (poultry), maize, maize ears, maize germ, maize germ/bran, maize gluten, maize kernels, maize meal, maize screenings, maize, “Baby”, oats, silage, wheat

#### 3,15-ACETYLDEOXYNIVALENOL

incidence: 6/7\*, conc. range: tr–400 µg/kg, country: Canada<sup>202</sup>, \*ncac

#### 15-O-ACETYL-4-DEOXYNIVALENOL

incidence: 6/1494\*, conc. range: 90–190 µg/kg, Ø conc.: 120 µg/kg, country: Canada<sup>323</sup>; \*ncac

#### AFLATOXIN B<sub>1</sub>

incidence: 3/3, conc. range: 10–200 µg/kg, Ø conc.: 103.3 µg/kg, country: Australia<sup>121</sup>  
 incidence: 2/2, conc. range: 100–200 µg/kg, Ø conc.: 150 µg/kg, country: Australia<sup>181</sup>  
 see also alfalfa, *Ambadi* cake, animal feed-stuffs (dairy cake), bagasse, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed

meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cyad meal, dairy cattle feed, dairy cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60 % maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

#### AFLATOXIN B

incidence: 13/14, conc. range:  
≥ 25–> 100 µg/kg, country: France<sup>46</sup>

see also cocoa (oil cake), cottonseed cake, feed, feed (cattle), feed (maize, gluten), feed (pig), feed (poultry), flour (wheat), lucern (dried), maize, maize gluten, maize grains, oats, peanut (oil cake), rice, broken, sorghum, soybean (oil cake), sunflower (oil cake), wheat

#### AFLATOXINS

incidence: 1/23, conc. range: 51–500 µg/kg, country: Australia<sup>21</sup>

see also animal feed (maize), animal feed (mixed), copra meal, cottonseed, cottonseed fines, cottonseed meal, cottonseed meats, feed, feed ingredients (miscellaneous), feed, mixed, feed (excluding peanuts, suspect), feed (goat), feed (pig), feed (poultry), feedstuff, grain, grain, mixed feed, maize, maize, shelled, millet, peanut cake, peanut meal, peanut meal and by-products, peanuts, protein concentrates, rice, rice bran, sorghum, soybean meal, sunflower

#### ALTERNARIOL METHYL ETHER

incidence: 1/10, conc.: 16 µg/kg, country: Germany<sup>294</sup>

see also barley, oats, cereals, mixture, oats, sunflower, wheat, wheat, oats

#### BEAUVERICIN

incidence: 14/14\*, conc. range: tr–19 µg/kg, country: Finland<sup>205</sup>, \*ncac

incidence: 8/8\*, conc. range: tr–13 µg/kg, country: Finland<sup>205</sup>, \*ncac

see also maize, oats, wheat, wheat, summer, wheat, winter

#### CITRININ

incidence: 2/14, conc. range: 160–1000 µg/kg, Ø conc.: 580 µg/kg, country: Denmark<sup>24</sup>

incidence: 1/1, conc.: 800 µg/kg, country: Denmark<sup>82</sup>

incidence: 7/45\*, conc. range: 1–8 µg/kg, country: UK<sup>94</sup>, \*imported?

incidence: 1/94, conc.: 10 µg/kg, country: Canada<sup>240</sup>

incidence: 4/269\*, conc. range: 30–480 µg/kg, Ø conc.: 182.5 µg/kg, country: Sweden<sup>261</sup>,

\*ncac

incidence: 1/1, conc.: 71 µg/kg, country: UK?<sup>288</sup>

see also barley, oats, barley-soybean diet, cottonseed cake, feed, feed, mixed, feed (cattle), feed (pig), fish meal, hay, maize, maize, white, *Makhana (Euryale ferox* Salisb) puffs, oats, palm products, peas and beans, rice bran, rice germ, wheat, wheat and other grains (moldy), wheat bran

#### DEOXYNIVALENOL

incidence: 161/222, conc. range:

50–1200 µg/kg, Ø conc.: 268 µg/kg, country: Hungary<sup>6</sup>

incidence: 15/15\*, conc. range: 8–465 µg/kg, Ø conc.: 77 µg/kg, country: Finland<sup>9</sup>, \*imported?

incidence: 6/86, conc. range: 10–100 µg/kg, country: Germany<sup>68</sup>

incidence: 6/7, conc. range: 5–50 µg/kg, country: Finland<sup>112</sup>

incidence: 194/240, conc. range: 2–4764 µg/kg, Ø conc.: 134.6 µg/kg, country: Germany<sup>123</sup>

incidence: 43/44, conc. range: 4–4764 µg/kg, Ø conc.: 399 µg/kg, country: Germany<sup>130</sup>

incidence: 13/25\*, conc. range: 8–223 µg/kg, Ø conc.: 45.5 µg/kg, country: Norway<sup>132</sup>;

\*probably feed

incidence: 21/25\*, conc. range: 6–2139 µg/kg, Ø conc.: 243.4 µg/kg, country: Norway<sup>132</sup>,

\*probably feed

incidence: 35/35\*, conc. range: ≤10–10,000 µg/kg, country: Germany<sup>192</sup>, \*ncac

incidence: 2/14, conc. range: 80–160 µg/kg, Ø conc.: 120 µg/kg, country: Sweden<sup>197</sup>

incidence: 1/6, conc.: 50 µg/kg, country: Sweden<sup>197</sup>

incidence: 4/32, conc. range: 60–150 µg/kg, Ø conc.: 90 µg/kg, country: Sweden<sup>197</sup>

incidence: 7/7\*, conc. range:

260–24,000 µg/kg, Ø conc.: 13,794 µg/kg, country: Canada<sup>202</sup>, \*ncac

incidence: 48/68, conc. range: 20–99 µg/kg (47 sa), 126 µg/kg (1 sa), country: UK<sup>203</sup>

incidence: 1/6\*, conc.: 390 µg/kg, country: Poland<sup>214</sup>, \*ncac

incidence: 799/1095\*, conc. range:

30–13,330 µg/kg, country: Norway<sup>224</sup>, \*ncac

incidence: 2/2\*, conc. range: 310–350 µg/kg, Ø conc.: 330 µg/kg, country: Japan<sup>230</sup>, \*ncac

incidence: 19/25\*, conc. range: tr–40,400 µg/kg, Ø conc.: 4400 µg/kg, country: Japan<sup>231</sup>, \*ncac

incidence: 2/4\*, conc. range: tr–22 µg/kg, country: France<sup>232</sup>, \*ncac

incidence: 3/5\*, conc. range: tr–30 µg/kg, country: France<sup>232</sup>, \*ncac

incidence: 3/5\*, conc. range: tr µg/kg, country: Denmark<sup>232</sup>, \*ncac

incidence: 3/6\*, conc. range: tr µg/kg, country: unknown<sup>232</sup>, \*ncac

incidence: 4/4\*, conc. range: 140–4500 µg/kg, Ø conc.: 1520 µg/kg, country: Norway<sup>235</sup>, \*ncac

incidence: 7/7\*, conc. range: <30–93 µg/kg, country: Norway<sup>235</sup>, \*ncac

incidence: 4/94, conc. range: 13–70 µg/kg, Ø conc.: 30.6 µg/kg, country: Canada<sup>240</sup>

incidence: 71/94\*, conc. range: 5–3780 µg/kg, Ø conc.: 270 µg/kg, country: Japan<sup>265</sup>, \*ncac

incidence: 17/1494\*, conc. range: 50–2250 µg/kg, Ø conc.: 740.6 µg/kg,

country: Canada<sup>323</sup>; \*ncac

incidence: 50/116?, Ø conc.: 1370 µg/kg, country: Canada<sup>346</sup>

incidence: 12/29\*, conc. range: ≤163 µg/kg, Ø conc.: 49 µg/kg, country: Lithuania<sup>399</sup>,

\*ncac

incidence: 84/116, conc. range: ≤9110 µg/kg, Ø conc.: 1370 µg/kg, country: Canada<sup>410</sup>

incidence: 28/40\*, conc. range: 5–857 µg/kg, Ø conc.: 79.3 µg/kg, country: Sweden<sup>418</sup>,

\*ncac

see also barley, husked, barley, unhusked (naked), barley (pressed), bone meal, bran, broilers feed, calf fattening mixed feed, coconut, expeller, corn cob mix silage, cottonseed, cottonseed cake, dairy cattle feed, egg production mixed feed, feed, feed components, feed, commercial mix, feed, mixed, feed, mixed (primarily maize), feed (barley), feed (cattle), feed (chicken), feed (dog), feed (fish), feed (mill run, from wheat), feed (mink), feed (pig), feed

(poultry), feed (reindeer), feeds, grain, feeds, industrial, feedstuff, feedstuffs (rapeseed, turnip, fish meal, concentrates), fish meal, grain, mixed feed, grains, mixed, grains (no specification), maize, maize ears, maize fibre, maize germ, maize germ/bran, maize germ meal, maize gluten, maize kernels, maize meal, maize powder, maize screenings, maize stalks (pith), maize, "Baby", maize, hybrid, maize, white, oats, rice bran, rice germ cake, rye, silage, sorghum, soybeans, triticale, wheat, wheat and barley, wheat, red hard winter, wheat, soft white winter, wheat, spring, wheat, winter

#### DIACETOXYSCIRPENOL

incidence: 5/45, conc. range: 300–17,000 µg/kg, country: Germany<sup>68</sup>  
 incidence: 11/89, conc. range: 200–700 µg/kg, country: Germany<sup>68</sup>  
 see also alfalfa, feed, feed components, feed (dog), feed (fish), feed (mink), feed (pig), feed (poultry), feed (reindeer), feeds, grain, feedstuff, forage grass, grain, mixed feed, grains (no specification), maize, maize gluten, oat and barley (hammer-milled), oats, peanuts, soybeans, wheat

#### ENNIATIN A

incidence: 14/14\*, conc. range: 2–950 µg/kg, Ø conc.: 87.93 µg/kg, country: Finland<sup>205</sup>, \*ncac  
 incidence: 7/8\*, conc. range: tr–59 µg/kg, country: Finland<sup>205</sup>, \*ncac  
 see also wheat, summer

#### ENNIATIN A<sub>1</sub>

incidence: 14/14\*, conc. range: 18–2000 µg/kg, Ø conc.: 310.3 µg/kg, country: Finland<sup>205</sup>, \*ncac  
 incidence: 8/8\*, conc. range: tr–570 µg/kg, country: Finland<sup>205</sup>, \*ncac  
 see also oats, rye, wheat, wheat, summer, wheat, winter

#### ENNIATIN B

incidence: 14/14\*, conc. range: 150–9760 µg/kg, Ø conc.: 1828.6 µg/kg, country: Finland<sup>205</sup>, \*ncac

incidence: 8/8\*, conc. range: 44–3980 µg/kg, Ø conc.: 1260 µg/kg, country: Finland<sup>205</sup>, \*ncac

see also oats, rye, wheat, wheat, summer, wheat, winter

#### ENNIATIN B<sub>1</sub>

incidence: 14/14\*, conc. range: 89–5720 µg/kg, Ø conc.: 860.1 µg/kg, country: Finland<sup>205</sup>, \*ncac  
 incidence: 8/8\*, conc. range: tr–3240 µg/kg, country: Finland<sup>205</sup>, \*ncac  
 see also oats, rye, wheat, wheat, summer, wheat, winter

#### FUMONISIN B<sub>1</sub>

incidence: 21/29, conc. range: 200–11,600 µg/kg, Ø conc.: 1900 µg/kg, country: Spain<sup>155</sup>  
 see also bird food, wild, dog food, feed, feed, complete ration, feed, general, feed, layer, feed, maize-based, feed, mixed, feed, pelleted ration, feed, screenings, feed, sweet, feed (broilers), feed (cat), feed (chicken), feed (dog), feed (gluten), feed (horse), feed (maize), feed (pig), feed (poultry), feed (rat), feed (rodent), forage grass, maize, maize and maize screenings, maize bran, maize ears, maize fine fractions, maize flakes, maize germ, maize germ/bran, maize germ meal, maize gluten, maize grits, maize kernels, maize meal, maize powder, maize screenings, maize, "Baby", maize, ground, maize, preharvest, maize, sweet feed, maize/oats mix, rat chow, silage, sorghum, soybeans, wheat

#### FUMONISIN B<sub>2</sub>

incidence: 1/29, conc.: 500 µg/kg, country: Spain<sup>155</sup>  
 see also bird food, wild, dog food, feed, feed, maize-based, feed, mixed, feed (cat), feed (dog), feed (gluten), feed (horse), feed (maize), feed (poultry), feed (rodent), maize, maize bran, maize fine fractions, maize flakes, maize germ, maize germ/bran, maize germ meal, maize gluten, maize grits, maize kernels, maize meal, maize powder, maize screenings, maize, "Baby", maize, ground, maize, preharvest, rat chow, wheat

## FUSARENONE-X

incidence: 4/1095\*, conc. range:  
100–224 µg/kg, Ø conc.: 136 µg/kg, country:  
Norway<sup>224</sup>, \*ncac  
see also feed components, feed (poultry),  
maize, maize ears, maize germ/bran, maize  
gluten, maize kernels, maize meal, maize  
screenings, oats, wheat

## HT-2 TOXIN

incidence: 5/24, conc. range: 10–370 µg/kg,  
country: Poland<sup>2</sup>  
incidence: 1/8, conc.: 10,000 µg/kg, country:  
Germany<sup>68</sup>  
incidence: 36/86, conc. range: 100–500 µg/kg,  
country: Germany<sup>68</sup>  
incidence: 1/7, conc. range: 10–20 µg/kg,  
country: Finland<sup>112</sup>  
incidence: 12/189, conc. range: 8–288 µg/kg,  
Ø conc.: 47.7 µg/kg, country: Germany<sup>123</sup>  
incidence: 2/44, conc. range: 10–32 µg/kg,  
Ø conc.: 21 µg/kg, country: Germany<sup>130</sup>  
incidence: 3/94, conc. range: 3–53 µg/kg,  
Ø conc.: 25.7 µg/kg, country: Canada<sup>240</sup>  
incidence: 10/29\*, conc. range: ≤88 µg/kg,  
Ø conc.: 41 µg/kg, country: Lithuania<sup>399</sup>,  
\*ncac  
see also feed components, feed (dog), feed  
(fish), feed (pig), feed (poultry), feed  
(reindeer), grains, mixed, grains, mixed feed,  
grains (no specification), maize, maize  
germ/bran, maize gluten, maize meal, maize  
screenings, oats, rye, silage, wheat

## MONILIFORMIN

incidence: 5/19\*, conc. range: tr–43 µg/kg,  
Ø conc.: <40 µg/kg, country:  
Norway<sup>204</sup>, \*ncac  
incidence: 15/23\*, conc. range: tr–380 µg/kg,  
Ø conc.: 46 µg/kg, country: Norway<sup>204</sup>, \*ncac  
incidence: 33/33\*, conc. range: tr–230 µg/kg,  
Ø conc.: 48 µg/kg, country: Norway<sup>204</sup>, \*ncac  
incidence: 11/14\*, conc. range: tr–290 µg/kg,  
country: Finland<sup>205</sup>, \*ncac  
incidence: 6/8\*, conc. range: 35–750 µg/kg,  
Ø conc.: 390.8 µg/kg, country: Finland<sup>205</sup>,  
\*ncac  
incidence: 11/14\*, conc.  
range: <20–290 µg/kg, country: Finland<sup>312</sup>,  
\*ncac

see also feed, mixed, feed (poultry), maize,  
maize flakes, maize germ, maize germ/bran,  
maize gluten, maize meal, maize screenings,  
maize, “Baby”, oats, rice bran, triticale,  
wheat, wheat, summer, wheat, winter

## NIVALENOL

incidence: 14/222, conc. range: 60–340 µg/kg,  
Ø conc.: 136.4 µg/kg, country: Hungary<sup>6</sup>  
incidence: 1/15\*, conc.: 51 µg/kg, country:  
Finland<sup>9</sup>, \*imported?  
incidence: 5/45, conc. range: ≥50–80 µg/kg,  
Ø conc.: 61 µg/kg, country: Sweden<sup>65</sup>  
incidence: 1/32, conc.: 700 µg/kg, country:  
Sweden<sup>65</sup>  
incidence: 15/67, conc. range: ≥50–130 µg/kg,  
Ø conc.: 78 µg/kg, country: Sweden<sup>65</sup>  
incidence: 6/39, conc. range: ≥50–215 µg/kg,  
Ø conc.: 169 µg/kg, country: Sweden<sup>65</sup>  
incidence: 52/240, conc. range: 2–333 µg/kg,  
Ø conc.: 21.1 µg/kg, country: Germany<sup>123</sup>  
incidence: 5/44, conc. range: 3–10 µg/kg,  
Ø conc.: 5 µg/kg, country: Germany<sup>130</sup>  
incidence: 25/25\*, conc. range: 13–156 µg/kg,  
Ø conc.: 44.4 µg/kg, country: Norway<sup>132</sup>,  
\*probably feed  
incidence: 25/25\*, conc. range: 22–258 µg/kg,  
Ø conc.: 52.1 µg/kg, country: Norway<sup>132</sup>,  
\*probably feed  
incidence: 3/6\*, conc. range: 56–91 µg/kg,  
Ø conc.: 78.3 µg/kg, country: Poland<sup>214</sup>, \*ncac  
incidence: 91/1095\*, conc. range:  
50–770 µg/kg, Ø conc.: 121 µg/kg, country:  
Norway<sup>224</sup>, \*ncac  
incidence: 2/2\*, conc. range: 600–1240 µg/kg,  
Ø conc.: 920 µg/kg, country: Japan<sup>230</sup>, \*ncac  
incidence: 19/25\*, conc. range:  
tr–36,900 µg/kg, Ø conc.: 3900 µg/kg,  
country: Japan<sup>231</sup>, \*ncac  
incidence: 1/94, conc.: 65 µg/kg, country:  
Canada<sup>240</sup>  
incidence: 78/94\*, conc. range: 5–3900 µg/kg,  
Ø conc.: 218 µg/kg, country: Japan<sup>265</sup>, \*ncac  
incidence: 18/29\*, conc. range: ≤571 µg/kg,  
Ø conc.: 101 µg/kg, country: Lithuania<sup>399</sup>,  
\*ncac  
incidence: 18/53, conc. range: ≤360 µg/kg,  
Ø conc.: 170 µg/kg, country: Canada<sup>410</sup>

see also barley, husked, barley, unhusked (naked), barley (pressed), bran, feed, feed components, feed (cattle), feed (poultry), feed (reindeer), feeds, industrial, maize, maize ears, maize germ, maize germ/bran, maize gluten, maize kernels, maize meal, maize powder, maize screenings, maize, “Baby”, oats, rye, silage, triticale, wheat

#### OCHRATOXIN A

incidence: 6/222, conc. range: 50–250 µg/kg, Ø conc.: 76.7 µg/kg, country: Hungary<sup>6</sup>  
 incidence: 10/68\*, conc. range: 0.1–206 µg/kg, Ø conc.: 58.8 µg/kg, country: Germany<sup>13</sup>, \*ncac  
 incidence: 23/85, max. conc.: 17.8 µg/kg, Ø conc.: 2.6 µg/kg, country: UK<sup>15</sup>  
 incidence: 17/17, conc. range: 9–27,520 µg/kg, Ø conc.: 2907.9 µg/kg, country: Denmark<sup>24</sup>  
 incidence: 23/79, conc. range: ≤17.8 µg/kg, Ø conc.: 3 µg/kg, country: UK<sup>43</sup>  
 incidence: 1/1, conc.: 1900 µg/kg, country: Denmark<sup>82</sup>  
 incidence: 19/137, conc. range: 2–200 µg/kg, country: Poland<sup>84</sup>  
 incidence: 12/45\*, conc. range: 1–102 µg/kg, country: UK<sup>94</sup>, \*imported?  
 incidence: 2/8, conc. range: 6–120 µg/kg, Ø conc.: 63 µg/kg, country: The Netherlands<sup>103</sup>  
 incidence: 22/159, conc. range: 10–29 µg/kg, Ø conc.: 18 µg/kg, country: Denmark<sup>193</sup>  
 incidence: 14/68, conc. range: 0.3–9.9 µg/kg (11 sa), 10–99.9 µg/kg (2 sa), 117 µg/kg (1 sa), country: UK<sup>203</sup>  
 incidence: 1/7345, conc.: nc, country: Hungary<sup>209</sup>  
 incidence: 18/127, conc. range: tr–38 µg/kg, country: USA<sup>219</sup>  
 incidence: 1/94, conc.: 60 µg/kg, country: Canada<sup>240</sup>  
 incidence: 17/269\*, conc. range: 2–20 µg/kg, country: Sweden<sup>261</sup>, \*ncac  
 incidence: 1/1, conc.: 68 µg/kg, country: UK<sup>288</sup>  
 incidence: 3/3, conc. range: 15.8–24.3 µg/kg, Ø conc.: 20.2 µg/kg, country: Denmark<sup>297</sup>  
 incidence: 2/36\*\*\*, conc. range: 1.2–9.7 µg/kg, Ø conc.: 5.5 µg/kg, country: Poland<sup>339</sup>, \*ncac, \*\*cg

incidence: 2/17\*\*\*, conc. range: 1.4–35.3 µg/kg, Ø conc.: 18.4 µg/kg, country: Poland<sup>339</sup>, \*ncac, \*\*eg  
 incidence: 1/26\*\*\*, conc.: 0.3 µg/kg, country: Poland<sup>341</sup>, \*ncac, \*\*cg  
 incidence: 3/40\*\*\*, conc. range: 6.7–57 µg/kg, Ø conc.: 25.7 µg/kg, country: Poland<sup>341</sup>, \*ncac, \*\*eg  
 incidence: 6/116, conc. range: 12–26 µg/kg, country: Canada<sup>410</sup>  
 incidence: 21/40\*, conc. range: 3–934 µg/kg, Ø conc.: 119.3 µg/kg, country: Sweden<sup>418</sup>, \*ncac  
 see also alfalfa, barley, oats, barley (high moisture), barley-soybean diet, bird food, domestic, bird food, wild, broilers feed, cereal grains, citrus pulp, coconut, expeller, corn cob mix silage, diet (dairy cow), diet (poultry), diet (starter), dog food, eat, egg production mixed feed, feed, feed wheat, oat and barley, feed, commercial mix, feed, mixed, feed, mixed (pelleted), feed (broilers), feed (cat), feed (cattle), feed (cereals), feed (pig), feed ec (pig), feed (poultry), feed ec (rabbit), feed (trout), grain, mixed feed, grains, mixed, grains (heated), hay, horse bean, maize, maize feed, milo, maize gluten, maize meal, maize, white, *Makhana* (*Euryale ferox* Salisb) puffs, milk production mixed feed, millet, oat and barley (hammer-milled), oats, palm products, peanut cake, peas, peas and beans, pet food, pig feedstuffs, pig grower diet, pig meal, piglet diet, poultry feedstuffs, rice bran, rice germ, rice germ cake, rye, sorghum, soybean groats, sunflower, sunflower seeds, extracted, tapioca, triticale, *Vicia faba*, wheat, wheat and barley, wheat bran, wheat hay, wheat, oats

#### T-2 TETRAOL

incidence: 2/24, conc. range: 10–210 µg/kg, country: Poland<sup>2</sup>  
 see also feed components, maize, silage, wheat

#### T-2 TOXIN

incidence: 12/24, conc. range: 20–2400 µg/kg, country: Poland<sup>2</sup>  
 incidence: 16/222, conc. range: 50–310 µg/kg, Ø conc.: 220 µg/kg, country: Hungary<sup>6</sup>

incidence: 2/43, conc. range: 300–14,000  $\mu\text{g}/\text{kg}$ , country: Germany<sup>68</sup>  
 incidence: 4/89, conc. range: 200–500  $\mu\text{g}/\text{kg}$ , country: Germany<sup>68</sup>  
 incidence: 34/240, conc. range: 2–305  $\mu\text{g}/\text{kg}$ ,  $\emptyset$  conc.: 25.5  $\mu\text{g}/\text{kg}$ , country: Germany<sup>123</sup>  
 incidence: 4/44, conc. range: 3–9  $\mu\text{g}/\text{kg}$ ,  $\emptyset$  conc.: 5  $\mu\text{g}/\text{kg}$ , country: Germany<sup>130</sup>  
 incidence: 2/25\*, conc. range: 22–46  $\mu\text{g}/\text{kg}$ ,  $\emptyset$  conc.: 34  $\mu\text{g}/\text{kg}$ , country: Norway<sup>132</sup>, \*probably feed  
 incidence: 1/1, conc.: 25,000  $\mu\text{g}/\text{kg}$ , country: Canada<sup>180</sup>  
 incidence: 1/94, conc.: 14  $\mu\text{g}/\text{kg}$ , country: Canada<sup>240</sup>  
 incidence: 4/29\*, conc. range:  $\leq 76$   $\mu\text{g}/\text{kg}$ ,  $\emptyset$  conc.: 40  $\mu\text{g}/\text{kg}$ , country: Lithuania<sup>399</sup>, \*ncac  
 incidence: 1/116, conc.: 1000  $\mu\text{g}/\text{kg}$ , country: Canada<sup>410</sup>  
 see also alfalfa, bran, diet (grower), diet (poultry), feed, feed components, feed, layer, feed, mixed, feed (dog), feed (fish), feed (mink), feed (pig), feed (poultry), feedstuff, forage grass, grain, mixed feed, grains (no specification), hay, maize, maize germ/bran, maize gluten, maize meal, maize screenings, maize stalks (pith), oat and barley (hammer-milled), oats, peanuts, pig grower diet, piglet diet, rye, sorghum, triticale, wheat

#### T-2 TRIOL

incidence: 5/86, conc. range: 100–300  $\mu\text{g}/\text{kg}$ , country: Germany<sup>68</sup>

see also feed components, grain, mixed feed, grains (no specification), maize, oats, wheat

#### VIOMELLEIN

incidence: 1/1, conc.: 1000  $\mu\text{g}/\text{kg}$ , country: Denmark<sup>82</sup>

#### ZEARALENONE

incidence: 107/222, conc. range: 50–840  $\mu\text{g}/\text{kg}$ ,  $\emptyset$  conc.: 139.8  $\mu\text{g}/\text{kg}$ , country: Hungary<sup>6</sup>

incidence: 5/40, conc. range: 10–20  $\mu\text{g}/\text{kg}$ , country: Germany<sup>68</sup>

incidence: 2/45\*, conc. range: 5–16  $\mu\text{g}/\text{kg}$ , country: UK<sup>94</sup>, \*imported?

incidence: 1/8, conc.: 43  $\mu\text{g}/\text{kg}$ , country: The Netherlands<sup>103</sup>

incidence: 53/240, conc. range: 1–311  $\mu\text{g}/\text{kg}$ ,  $\emptyset$  conc.: 13.5  $\mu\text{g}/\text{kg}$ , country: Germany<sup>123</sup>

incidence: 1/1, conc.:  $\sim 100$   $\mu\text{g}/\text{kg}$ , country: Germany<sup>124</sup>

incidence: 30/44, conc. range: 1–310  $\mu\text{g}/\text{kg}$ ,  $\emptyset$  conc.: 35  $\mu\text{g}/\text{kg}$ , country: Germany<sup>130</sup>

incidence: 3/25\*, conc. range: 1–5  $\mu\text{g}/\text{kg}$ ,  $\emptyset$  conc.: 2.7  $\mu\text{g}/\text{kg}$ , country: Norway<sup>132</sup>, \*probably feed

incidence: 14/25\*, conc. range: 1–4  $\mu\text{g}/\text{kg}$ ,  $\emptyset$  conc.: 2.6  $\mu\text{g}/\text{kg}$ , country: Norway<sup>132</sup>, \*probably feed

incidence: 5/7\*, conc. range: 24–450  $\mu\text{g}/\text{kg}$ ,  $\emptyset$  conc.: 166.2  $\mu\text{g}/\text{kg}$ , country: Canada<sup>202</sup>, \*ncac

incidence: 10/30\*, conc. range: 14–171  $\mu\text{g}/\text{kg}$ ,  $\emptyset$  conc.: 36  $\mu\text{g}/\text{kg}$ , country: Korea<sup>364</sup>, \*ncac

incidence: 17/116, conc. range: 30–840  $\mu\text{g}/\text{kg}$ ,  $\emptyset$  conc.: 250  $\mu\text{g}/\text{kg}$ , country: Canada<sup>410</sup>

see also alfalfa, barley, husked, barley, unhusked (naked), barley and feed, bone meal, bran, broilers feed, *Carthamus* cake, chick pea, concentrate, mixed, corn cob mix silage, cotton cake, cottonseed, cottonseed cake, diet (dairy cow), diet (poultry), diets (mixed), feed, feed components, feed, mixed, feed, mixed (primarily maize also maize, oats, wheat), feed (bran), feed (broiler chicken), feed (cattle), feed (chicken), feed (dairy), feed (developing pig), feed (mill run, from wheat), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (starter chicken), feedstuff, fish meal, forage grass, grain, bruised, grain, mixed feed, grains (no specification), hay, maize, maize ears, maize flakes, maize germ, maize germ/bran, maize gluten, maize kernels, maize meal, maize oil cake, maize screenings, maize stalks (pith), maize, “Baby”, maize, hybrid, maize, shelled, maize, unshelled, maize, white, maize grain, artificially dried, maize grain, crib dried, maize grain, ensiled, milk production mixed feed, oats, *Paspalum palidosum*, straw, peanut hulls/skins, rice bran, rice germ, rice germ cake, rye, silage, sorghum, soybeans, soybeans, extracted, sunflower cake, tapioca, triticale,



wheat, wheat bran, wheat bran and chana testa, wheat soya meal

**Barley, husked** for feed may contain the following mycotoxins:

**DEOXYNIVALENOL**

incidence: 5/6, conc. range: 3–65 µg/kg,  
 Ø conc.: 19 µg/kg, country: Korea<sup>108</sup>  
 incidence: 5/5\*, conc. range: 26–223 µg/kg,  
 Ø conc.: 108.8 µg/kg, country: Korea<sup>227</sup>, \*ncac  
 incidence: 4/14\*, conc. range: 25–85 µg/kg,  
 Ø conc.: 59 µg/kg, country: Korea<sup>227</sup>, \*ncac  
 see also barley, barley, unhusked (naked),  
 barley (pressed), bone meal, bran, broilers  
 feed, calf fattening mixed feed, coconut,  
 expeller, corn cob mix silage, cottonseed,  
 cottonseed cake, dairy cattle feed, egg  
 production mixed feed, feed, feed components,  
 feed, commercial mix, feed, mixed, feed,  
 mixed (primarily maize), feed (barley), feed  
 (cattle), feed (chicken), feed (dog), feed  
 (fish), feed (mill run, from wheat), feed  
 (mink), feed (pig), feed (poultry), feed  
 (reindeer), feeds, grain, feeds, industrial,  
 feedstuff, feedstuffs (rapeseed, turnip, fish  
 meal, concentrates), fish meal, grain, mixed  
 feed, grains, mixed, grains (no specification),  
 maize, maize ears, maize fibre, maize germ,  
 maize germ/bran, maize germ meal, maize  
 gluten, maize kernels, maize meal, maize  
 powder, maize screenings, maize stalks (pith),  
 maize, “Baby”, maize, hybrid, maize, white,  
 oats, rice bran, rice germ cake, rye, silage,  
 sorghum, soybeans, triticale, wheat, wheat  
 and barley, wheat, red hard winter, wheat,  
 soft white winter, wheat, spring, wheat,  
 winter

**NIVALENOL**

incidence: 6/6, conc. range: 39–228 µg/kg,  
 Ø conc.: 112 µg/kg, country: Korea<sup>108</sup>  
 incidence: 5/5\*, conc. range: 12–321 µg/kg,  
 Ø conc.: 222.4 µg/kg, country: Korea<sup>227</sup>, \*ncac  
 incidence: 10/14\*, conc. range: 4–120 µg/kg,  
 Ø conc.: 48.2 µg/kg, country: Korea<sup>227</sup>, \*ncac  
 see also barley, barley, unhusked (naked),  
 barley (pressed), bran, feed, feed components,  
 feed (cattle), feed (poultry), feed (reindeer),

feeds, industrial, maize, maize ears, maize  
 germ/bran, maize gluten, maize kernels,  
 maize meal, maize powder, maize screenings,  
 maize, “Baby”, oats, rye, silage, triticale,  
 wheat

**ZEARALENONE**

incidence: 3/6, conc. range: 1–2 µg/kg,  
 country: Korea<sup>108</sup>  
 incidence: 1/5\*, conc.: 28 µg/kg, country:  
 Korea<sup>227</sup>, \*ncac  
 incidence: 3/14\*, conc. range: 27–49 µg/kg,  
 Ø conc.: 40.7 µg/kg, country: Korea<sup>227</sup>, \*ncac  
 see also alfalfa, barley, barley, unhusked  
 (naked), barley and feed, bone meal, bran,  
 broilers feed, *Carthamus* cake, chick pea,  
 concentrate, mixed, corn cob mix silage,  
 cotton cake, cottonseed, cottonseed cake, diet  
 (dairy cow), diet (poultry), diets (mixed),  
 feed, feed components, feed, mixed, feed,  
 mixed (primarily maize also maize, oats,  
 wheat), feed (bran), feed (broiler chicken),  
 feed (cattle), feed (chicken), feed (dairy), feed  
 (developing pig), feed (mill run, from wheat),  
 feed (miscellaneous), feed (pig), feed  
 (poultry), feed (poultry, pig), feed (starter  
 chicken), feedstuff, fish meal, forage grass,  
 grain, bruised, grain, mixed feed, grains (no  
 specification), hay, maize, maize ears, maize  
 flakes, maize germ, maize germ/bran, maize  
 gluten, maize kernels, maize meal, maize oil  
 cake, maize screenings, maize stalks (pith),  
 maize, “Baby”, maize, hybrid, maize, shelled,  
 maize, unshelled, maize, white, maize grain,  
 artificially dried, maize grain, crib dried,  
 maize grain, ensiled, milk production mixed  
 feed, oats, *Paspalum palidosum*, straw, peanut  
 hulls/skins, rice bran, rice germ, rice germ  
 cake, rye, silage, sorghum, soybeans, soybeans,  
 extracted, sunflower cake, tapioca, triticale,  
 wheat, wheat bran, wheat bran and chana  
 testa, wheat soya meal

**Barley, oats** Barley and oats for feed may  
 contain the following mycotoxins:

**ALTERNARIOL METHYL ETHER**

incidence: 2/7, conc. range: 80–160 µg/kg,  
 Ø conc.: 120 µg/kg, country: Germany<sup>294</sup>

see also barley, cereals, mixture, oats, sunflower, wheat, wheat, oats

#### CITRININ

incidence: 1/1, conc.: 2000 µg/kg, country: Denmark<sup>24</sup>

see also barley, barley-soybean diet, cottonseed cake, feed, feed, mixed, feed (cattle), feed (pig), fish meal, hay, maize, maize, white, *Makhana* (*Euryale ferox* Salisb) puffs, oats, palm products, peas and beans, rice bran, rice germ, wheat, wheat and other grains (moldy), wheat bran

#### OCHRATOXIN A

incidence: 7/84, conc. range: 16–409 µg/kg, country: Sweden<sup>23</sup>

incidence: 19/33, conc. range:

28–27,500 µg/kg, country: Denmark<sup>24</sup>

incidence: 4/4, conc. range: 69–6190 µg/kg,

Ø conc.: 1805.5 µg/kg, country: Denmark<sup>24</sup>

incidence: 3/3, conc. range: 4–141 µg/kg,

Ø conc.: 72.3 µg/kg, country: Finland<sup>281</sup>

see also alfalfa, barley, barley (high moisture), barley-soybean diet, bird food, domestic, bird food, wild, broilers feed, cereal grains, citrus pulp, coconut, expeller, corn cob mix silage, diet (dairy cow), diet (poultry), diet (starter), dog food, eat, egg production mixed feed, feed, feed wheat, oat and barley, feed, commercial mix, feed, mixed, feed, mixed (pelleted), feed (broilers), feed (cat), feed (cattle), feed (cereals), feed (pig), feed ec (pig), feed (poultry), feed ec (poultry), feed (poultry, pig), feed ec (rabbit), feed (trout), grain, mixed feed, grains, mixed, grains (heated), hay, horse bean, maize, maize feed, milo, maize gluten, maize meal, maize, white, *Makhana* (*Euryale ferox* Salisb) puffs, milk production mixed feed, millet, oat and barley (hammer-milled), oats, palm products, peanut cake, peas, peas and beans, pet food, pig feedstuffs, pig grower diet, pig meal, piglet diet, poultry feedstuffs, rice bran, rice germ, rice germ cake, rye, sorghum, soybean groats, sunflower, sunflower seeds, extracted, tapioca, triticale, *Vicia faba*, wheat, wheat and barley, wheat bran, wheat hay, wheat, oats

**Barley, unhusked (naked)** for feed may contain the following mycotoxins:

#### DEOXYNIVALENOL

incidence: 31/31, conc. range: 12–901 µg/kg,

Ø conc.: 124.7 µg/kg, country: Korea<sup>108</sup>

incidence: 17/18\*, conc. range: 8–495 µg/kg,

Ø conc.: 115.9 µg/kg, country: Korea<sup>227</sup>, \*ncac

incidence: 9/20\*, conc. range: 10–161 µg/kg,

Ø conc.: 52.9 µg/kg, country: Korea<sup>227</sup>, \*ncac

incidence: 2/2\*, conc. range: 180–330 µg/kg,

Ø conc.: 255 µg/kg, country: Japan<sup>230</sup>, \*ncac

see also barley, barley, husked, barley

(pressed), bone meal, bran, broilers feed, calf fattening mixed feed, coconut, expeller, corn cob mix silage, cottonseed, cottonseed cake, dairy cattle feed, egg production mixed feed, feed, feed components, feed, commercial mix, feed, mixed, feed, mixed (primarily maize), feed (barley), feed (cattle), feed (chicken), feed (dog), feed (fish), feed (mill run, from wheat), feed (mink), feed (pig), feed (poultry), feed (reindeer), feeds, grain, feeds, industrial, feedstuff, feedstuffs (rapeseed, turnip, fish meal, concentrates), fish meal, grain, mixed feed, grains, mixed, grains (no specification), maize, maize ears, maize fibre, maize germ, maize germ/bran, maize germ meal, maize gluten, maize kernels, maize meal, maize powder, maize screenings, maize stalks (pith), maize, “Baby”, maize, hybrid, maize, white, oats, rice bran, rice germ cake, rye, silage, sorghum, soybeans, triticale, wheat, wheat and barley, wheat, red hard winter, wheat, soft white winter, wheat, spring, wheat, winter

#### NIVALENOL

incidence: 31/31, conc. range:

180–1145 µg/kg, Ø conc.: 489.5 µg/kg,

country: Korea<sup>108</sup>

incidence: 17/18\*, conc. range:

28–1109 µg/kg, Ø conc.: 330.8 µg/kg,

country: Korea<sup>227</sup>, \*ncac

incidence: 14/20\*, conc. range: 3–904 µg/kg,

Ø conc.: 242.5 µg/kg, country: Korea<sup>227</sup>, \*ncac

incidence: 2/2\*, conc. range: 920–1670 µg/kg,

Ø conc.: 1295 µg/kg, country: Japan<sup>230</sup>, \*ncac

see also barley, barley, husked, barley (pressed), bran, feed, feed components, feed (cattle),

feed (poultry), feed (reindeer), feeds, industrial, maize, maize ears, maize germ/ bran, maize gluten, maize kernels, maize meal, maize powder, maize screenings, maize, “Baby”, oats, rye, silage, triticale, wheat

#### ZEARALENONE

incidence: 29/31, conc. range: 1–388 µg/kg, Ø conc.: 26.5 µg/kg, country: Korea<sup>108</sup>  
 incidence: 8/18\*, conc. range: 43–1132 µg/kg, Ø conc.: 280.6 µg/kg, country: Korea<sup>227</sup>, \*ncac  
 incidence: 6/20\*, conc. range: 81–580 µg/kg, Ø conc.: 216 µg/kg, country: Korea<sup>227</sup>, \*ncac  
 see also alfalfa, barley, barley and feed, barley, husked, bone meal, bran, broilers feed, *Carthamus* cake, chick pea, concentrate, mixed, corn cob mix silage, cotton cake, cottonseed, cottonseed cake, diet (dairy cow), diet (poultry), diets (mixed), feed, feed components, feed, mixed, feed, mixed (primarily maize also maize, oats, wheat), feed (bran), feed (broiler chicken), feed (cattle), feed (chicken), feed (dairy), feed (developing pig), feed (mill run, from wheat), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (starter chicken), feedstuff, fish meal, forage grass, grain, bruised, grain, mixed feed, grains (no specification), hay, maize, maize ears, maize flakes, maize germ, maize germ/bran, maize gluten, maize kernels, maize meal, maize oil cake, maize screenings, maize stalks (pith), maize, “Baby”, maize, hybrid, maize, shelled, maize, unshelled, maize, white, maize grain, artificially dried, maize grain, crib dried, maize grain, ensiled, milk production mixed feed, oats, *Paspalum palidosum*, straw, peanut hulls/skins, rice bran, rice germ, rice germ cake, rye, silage, sorghum, soybeans, soybeans, extracted, sunflower cake, tapioca, triticale, wheat, wheat bran, wheat bran and chana testa, wheat soya meal

**Barley (high moisture)** Barley for feed may contain the following mycotoxins:

#### OCHRATOXIN A

incidence: 1/51, conc.: 48 µg/kg, country: Canada<sup>133</sup>

see also alfalfa, barley, barley, oats, barley-soybean diet, bird food, domestic, bird food, wild, broilers feed, cereal grains, citrus pulp, coconut, expeller, corn cob mix silage, diet (dairy cow), diet (poultry), diet (starter), dog food, eat, egg production mixed feed, feed, feed wheat, oat and barley, feed, commercial mix, feed, mixed, feed, mixed (pelleted), feed (broilers), feed (cat), feed (cattle), feed (cereals), feed (pig), feed ec (pig), feed (poultry), feed ec (poultry), feed (poultry, pig), feed ec (rabbit), feed (trout), grain, mixed feed, grains, mixed, grains (heated), hay, horse bean, maize, maize feed, milo, maize gluten, maize meal, maize, white, *Makhana* (*Euryale ferox* Salisb) puffs, milk production mixed feed, millet, oat and barley (hammer-milled), oats, palm products, peanut cake, peas, peas and beans, pet food, pig feedstuffs, pig grower diet, pig meal, piglet diet, poultry feedstuffs, rice bran, rice germ, rice germ cake, rye, sorghum, soybean groats, sunflower, sunflower seeds, extracted, tapioca, triticale, *Vicia faba*, wheat, wheat and barley, wheat bran, wheat hay, wheat, oats

**Barley (pressed)** may contain the following mycotoxins:

#### DEOXYNIVALENOL

incidence: 9/10\*, conc. range: 3–23 µg/kg, Ø conc.: 11 µg/kg, country: Japan<sup>230</sup>, \*ncac  
 see also barley, barley, husked, barley, unhusked (naked), bone meal, bran, broilers feed, calf fattening mixed feed, coconut, expeller, corn cob mix silage, cottonseed, cottonseed cake, dairy cattle feed, egg production mixed feed, feed, feed components, feed, commercial mix, feed, mixed, feed, mixed (primarily maize), feed (barley), feed (cattle), feed (chicken), feed (dog), feed (fish), feed (mill run, from wheat), feed (mink), feed (pig), feed (poultry), feed (reindeer), feeds, grain, feeds, industrial, feedstuff, feedstuffs (rapeseed, turnip, fish meal, concentrates), fish meal, grain, mixed feed, grains, mixed, grains (no specification), maize, maize ears, maize fibre, maize germ, maize germ/bran, maize germ meal, maize gluten, maize kernels, maize

meal, maize powder, maize screenings, maize stalks (pith), maize, “Baby”, maize, hybrid, maize, white, oats, rice bran, rice germ cake, rye, silage, sorghum, soybeans, triticale, wheat, wheat and barley, wheat, red hard winter, wheat, soft white winter, wheat, spring, wheat, winter

#### NIVALENOL

incidence: 2/2\*, conc. range: 16–56 µg/kg, Ø conc.: 33 µg/kg, country: Japan<sup>230</sup>, \*ncac see also barley, barley, husked, barley, unhusked (naked), bran, feed, feed components, feed (cattle), feed (poultry), feed (reindeer), feeds, industrial, maize, maize ears, maize germ/bran, maize gluten, maize kernels, maize meal, maize powder, maize screenings, maize, “Baby”, oats, rye, silage, triticale, wheat

**Barley and feed** may contain the following mycotoxins:

#### ZEARALENONE

incidence: 2/12, conc. range: 500–750 µg/kg, Ø conc.: 625 µg/kg, country: Scotland<sup>178</sup> see also alfalfa, barley, barley, husked, barley, unhusked (naked), bone meal, bran, broilers feed, *Carthamus* cake, chick pea, concentrate, mixed, corn cob mix silage, cotton cake, cottonseed, cottonseed cake, diet (dairy cow), diet (poultry), diets (mixed), feed, feed components, feed, mixed, feed, mixed (primarily maize also maize, oats, wheat), feed (bran), feed (broiler chicken), feed (cattle), feed (chicken), feed (dairy), feed (developing pig), feed (mill run, from wheat), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (starter chicken), feedstuff, fish meal, forage grass, grain, bruised, grain, mixed feed, grains (no specification), hay, maize, maize ears, maize flakes, maize germ, maize germ/bran, maize gluten, maize kernels, maize meal, maize oil cake, maize screenings, maize stalks (pith), maize, “Baby”, maize, hybrid, maize, shelled, maize, unshelled, maize, white, maize grain, artificially dried, maize grain, crib dried, maize grain, ensiled, milk production mixed

feed, rice bran, rice germ, peanut hulls/skins, rice germ cake, rye, sorghum, soybeans, soybeans, extracted, sunflower cake, tapioca, triticale, wheat, wheat bran, wheat bran and chana testa, wheat soya meal

**Barley-soybean diet** may contain the following mycotoxins:

#### CITRININ

incidence: 1/1, conc.: 650 µg/kg, country: Denmark<sup>295</sup> see also barley, barley, oats, cottonseed cake, feed, feed, mixed, feed (cattle), feed (pig), fish meal, hay, maize, maize, white, *Makhana* (*Euryale ferox* Salisb) puffs, oats, palm products, peas and beans, rice bran, rice germ, wheat, wheat and other grains (moldy), wheat bran

#### OCHRATOXIN A

incidence: 1/1, conc.: 1400 µg/kg, country: Denmark<sup>295</sup> see also alfalfa, barley, barley, oats, barley (high moisture), bird food, domestic, bird food, wild, broilers feed, cereal grains, citrus pulp, coconut, expeller, corn cob mix silage, diet (dairy cow), diet (poultry), diet (starter), dog food, eat, egg production mixed feed, feed, feed wheat, oat and barley, feed, commercial mix, feed, mixed, feed, mixed (pelleted), feed (broilers), feed (cat), feed (cattle), feed (cereals), feed (pig), feed ec (pig), feed (poultry), feed ec (poultry), feed (poultry, pig), feed ec (rabbit), feed (trout), grain, mixed feed, grains, mixed, grains (heated), hay, horse bean, maize, maize feed, milo, maize gluten, maize meal, maize, white, *Makhana* (*Euryale ferox* Salisb) puffs, milk production mixed feed, millet, oat and barley (hammer-milled), oats, palm products, peanut cake, peas, peas and beans, pet food, pig feedstuffs, pig grower diet, pig meal, piglet diet, poultry feedstuffs, rice bran, rice germ, rice germ cake, rye, sorghum, soybean groats, sunflower, sunflower seeds, extracted, tapioca, triticale, *Vicia faba*, wheat, wheat and barley, wheat bran, wheat hay, wheat, oats

**Bengalgram husk** may contain the following mycotoxins:

**AFLATOXIN B<sub>1</sub>**

incidence: 2/8, conc. range: nd–17 µg/kg,

country: India<sup>247</sup>

see also alfalfa, *Ambadi* cake, animal feed-stuffs (dairy cake), bagasse, barley, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60 % maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm

products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

**Bird food** may contain the following mycotoxins:

**AFLATOXIN B<sub>1</sub>**

incidence: 8/30, conc. range: 23–256 µg/kg,

Ø conc.: 109.75 µg/kg, country: Brazil<sup>4</sup>

see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit),

feed (sheep), feed (50–60% maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

#### AFLATOXIN B<sub>2</sub>

incidence: 6/30, conc. range: 12–114 µg/kg, Ø conc.: 70.5 µg/kg, country: Brazil<sup>4</sup>  
see also animal feedstuff (dairy cake), bird food, wild, biri testa, blackgram, blackgram husk, cottonseed, cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meats, dog food, egg production mixed feed, feed, compound, feed (cat), feed (cattle), feed (dog), feed (pig), feed (poultry), feed (rabbit), feed (sheep), fish meal, horsegram, maize, maize gluten, maize husk, maize, ground, maize, preharvest, mung testa, mustard cake, niger cake, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanuts, peanut, kernels, redgram husk, rice bran, rice bran (deoiled), rice chaff, rice meal, rice (polish), sal seed cake, sesame cake, sorghum, soybean meal, soybeans, wheat, wheat bran

#### AFLATOXIN G<sub>1</sub>

incidence: 2/30, conc. range: 43–87 µg/kg, Ø conc.: 65 µg/kg, country: Brazil<sup>4</sup>  
see also animal feedstuffs (dairy cake), bird food, wild, concentrate, mixed, cottonseed, cottonseed cake, feed (cat), feed (chicken), feed (dog), maize, maize, ground, maize, preharvest, meat meal, milk production mixed feed, murkool, peanut cake, peanut expeller, peanut hay, peanut meal, peanuts, rice bran, rice germ, sorghum, soybeans, wheat, wheat bran, wheat bran and chana testa

#### AFLATOXIN G<sub>2</sub>

incidence: 2/30, conc. range: 18–36 µg/kg, Ø conc.: 27 µg/kg, country: Brazil<sup>4</sup>  
see also animal feedstuffs (dairy cake), feed (cat), feed (dog), maize, maize, preharvest, peanut expeller, peanut hay, peanut meal, peanuts, soybeans

**Bird food, domestic** may contain the following mycotoxins:

#### OCHRATOXIN A

incidence: 4/15, conc. range: 1.5–7 µg/kg, Ø conc.: 4 µg/kg, country: UK<sup>42</sup>  
see also alfalfa, barley, barley, oats, barley (high moisture), barley-soybean diet, bird food, wild, broilers feed, cereal grains, citrus pulp, coconut, expeller, corn cob mix silage, diet (dairy cow), diet (poultry), diet (starter), dog food, eat, egg production mixed feed, feed, feed wheat, oat and barley, feed, commercial mix, feed, mixed, feed, mixed (pelleted), feed (broilers), feed (cat), feed (cattle), feed (cereals), feed (pig), feed ec (pig), feed (poultry), feed ec (poultry), feed (poultry, pig), feed ec (rabbit), feed (trout), grain, mixed feed, grains, mixed, grains (heated), hay, horse bean, maize, maize feed, milo, maize gluten, maize meal, maize, white, *Makhana* (*Euryale ferox* Salisb) puffs, milk production mixed feed, millet, oat and barley (hammer-milled), oats, palm products, peanut cake, peas, peas and beans, pet food, pig feedstuffs, pig grower diet, pig meal, piglet diet, poultry feedstuffs, rice bran, rice

germ, rice germ cake, rye, sorghum, soybean groats, sunflower, sunflower seeds, extracted, tapioca, triticale, *Vicia faba*, wheat, wheat and barley, wheat bran, wheat hay, wheat, oats

**Bird food, wild** may contain the following mycotoxins:

**AFLATOXIN B<sub>1</sub>**

incidence: 1/15, conc.: 370 µg/kg, country: UK<sup>42</sup>

see also alfalfa, *Ambadi* cake, animal feed-stuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60 % maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest,

maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

**AFLATOXIN B<sub>2</sub>**

incidence: 1/15, conc.: 29 µg/kg, country: UK<sup>42</sup>

see also animal feedstuff (dairy cake), bird food, biri testa, blackgram, blackgram husk, cottonseed, cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meats, dog food, egg production mixed feed, feed, compound, feed (cat), feed (cattle), feed (dog), feed (pig), feed (poultry), feed (rabbit), feed (sheep), fish meal, horsegram, maize, maize gluten, maize husk, maize, ground, maize, preharvest, mung testa, mustard cake, niger cake, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanuts, peanut, kernels, redgram husk, rice bran, rice bran (deoiled), rice chaff, rice meal, rice (polish), sal seed cake, sesame cake, sorghum, soybean meal, soybeans, wheat, wheat bran

**AFLATOXIN G<sub>1</sub>**

incidence: 1/15, conc.: 3.3 µg/kg, country: UK<sup>42</sup>

see also animal feedstuffs (dairy cake), bird food, concentrate, mixed, cottonseed, cottonseed cake, feed (cat), feed (chicken), feed (dog), maize, maize, ground, maize, preharvest, meat meal, milk production mixed feed, murkool, peanut cake, peanut

expeller, peanut hay, peanut meal, peanuts, rice bran, rice germ, sorghum, soybeans, wheat, wheat bran, wheat bran and chana testa

#### FUMONISIN B<sub>1</sub>

incidence: 2/15, conc. range: 240–410 µg/kg, Ø conc.: 325 µg/kg, country: UK<sup>42</sup>

see also barley, dog food, feed, feed, complete ration, feed, general, feed, layer, feed, maize-based, feed, mixed, feed, pelleted ration, feed, screenings, feed, sweet, feed (broilers), feed (cat), feed (chicken), feed (dog), feed (gluten), feed (horse), feed (maize), feed (pig), feed (poultry), feed (rat), feed (rodent), forage grass, maize, maize and maize screenings, maize bran, maize ears, maize fine fractions, maize flakes, maize germ, maize germ/bran, maize germ meal, maize gluten, maize grits, maize kernels, maize meal, maize powder, maize screenings, maize, “Baby”, maize, ground, maize, preharvest, maize, sweet feed, maize/oats mix, rat chow, silage, sorghum, soybeans, wheat

#### FUMONISIN B<sub>2</sub>

incidence: 2/15, conc.: 50 µg/kg, Ø conc.: 50 µg/kg, country: UK<sup>42</sup>

see also barley, dog food, feed, feed, maize-based, feed, mixed, feed (cat), feed (dog), feed (gluten), feed (horse), feed (maize), feed (poultry), feed (rodent), maize, maize bran, maize fine fractions, maize flakes, maize germ, maize germ/bran, maize germ meal, maize gluten, maize grits, maize kernels, maize meal, maize powder, maize screenings, maize, “Baby”, maize, ground, maize, preharvest, rat chow, wheat

#### OCHRATOXIN A

incidence: 1/15, conc.: 6 µg/kg, country: UK<sup>42</sup>

see also alfalfa, barley, barley, oats, barley (high moisture), barley-soybean diet, bird food, domestic, broilers feed, cereal grains, citrus pulp, coconut, expeller, corn cob mix silage, diet (dairy cow), diet (poultry), diet (starter), dog food, eat, egg production mixed feed, feed, feed wheat, oat and barley, feed, commercial mix, feed, mixed, feed, mixed (pelleted), feed (broilers), feed (cat),

feed (cattle), feed (cereals), feed (pig), feed ec (pig), feed (poultry), feed ec (poultry), feed (poultry, pig), feed ec (rabbit), feed (trout), grain, mixed feed, grains, mixed, grains (heated), hay, horse bean, maize, maize feed, milo, maize gluten, maize meal, maize, white, *Makhana* (*Euryale ferox* Salisb) puffs, milk production mixed feed, millet, oat and barley (hammer-milled), oats, palm products, peanut cake, peas, peas and beans, pet food, pig feedstuffs, pig grower diet, pig meal, piglet diet, poultry feedstuffs, rice bran, rice germ, rice germ cake, rye, sorghum, soybean groats, sunflower, sunflower seeds, extracted, tapioca, triticale, *Vicia faba*, wheat, wheat and barley, wheat bran, wheat hay, wheat, oats

**Biri testa** may contain the following mycotoxins:

#### AFLATOXIN B<sub>1</sub>

incidence: 1/1, conc.: 22 µg/kg, country: India<sup>129</sup>

see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed



(dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60% maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

#### AFLATOXIN B<sub>2</sub>

incidence: 1/1, conc.: 4 µg/kg, country: India<sup>129</sup>

see also animal feedstuff (dairy cake), bird food, bird food, wild, blackgram, blackgram husk, cottonseed, cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meats, dog food, egg production mixed feed, feed, compound, feed (cat), feed (cattle), feed (dog), feed (pig), feed (poultry), feed (rabbit), feed (sheep), fish meal, horsegram, maize, maize gluten, maize husk, maize, ground, maize, preharvest, mung testa, mustard cake, niger cake, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanuts, peanut, kernels, redgram husk, rice bran, rice bran (deoiled), rice chaff, rice meal, rice (polish),

sal seed cake, sesame cake, sorghum, soybean meal, soybeans, wheat, wheat bran

**Blackgram** Blackgram for feed may contain the following mycotoxins:

#### AFLATOXIN B<sub>1</sub>

incidence: ?/10, conc. range: 10–15 µg/kg, country: India<sup>183</sup>

see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20% peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5% peanut products), dairy cattle feed (containing 6–10% peanut products), dairy cattle feed (containing 6–12% peanut products), dairy cattle feed (containing more than 20% peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60% maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung

testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

#### AFLATOXIN B<sub>2</sub>

incidence: ?/10, conc. range: 10 µg/kg, country: India<sup>183</sup>

see also animal feedstuff (dairy cake), bird food, bird food, wild, biri testa, blackgram husk, cottonseed, cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meats, dog food, egg production mixed feed, feed, compound, feed (cat), feed (cattle), feed (dog), feed (pig), feed (poultry), feed (rabbit), feed (sheep), fish meal, horsegram, maize, maize gluten, maize husk, maize, ground, maize, preharvest, mung testa, mustard cake, niger cake, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanuts, peanut, kernels, redgram husk, rice bran, rice bran (deoiled), rice chaff, rice meal, rice (polish), sal seed cake, sesame cake, sorghum, soybean meal, soybeans, wheat, wheat bran

**Blackgram husk** may contain the following mycotoxins:

#### AFLATOXIN B<sub>1</sub>

incidence: 2/17, conc. range: ≤25 µg/kg (1 sa), 26–50 µg/kg (1 sa), Ø conc.:

22.5 µg/kg, country: India<sup>247</sup>

see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, bran, broiler mixed feed, calf

fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60 % maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake,

sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

#### AFLATOXIN B<sub>2</sub>

incidence: 1/17, conc.: 3 µg/kg, country: India<sup>247</sup>

see also animal feedstuff (dairy cake), bird food, bird food, wild, biri testa, blackgram, cottonseed, cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meats, dog food, egg production mixed feed, feed (cat), feed (cattle), feed (dog), feed (pig), feed (poultry), feed (rabbit), feed (sheep), fish meal, horsegram, maize, maize gluten, maize husk, maize, ground, maize, preharvest, mung testa, mustard cake, niger cake, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanuts, peanut, kernels, redgram husk, rice bran, rice bran (deoiled), rice chaff, rice meal, rice (polish), sal seed cake, sesame cake, sorghum, soybean meal, soybeans, wheat, wheat bran

#### AFLATOXIN

incidence: 2/17, conc. range: 9–39 µg/kg, country: India<sup>247</sup>

see also bread crumbs, broiler finisher, broiler starter, cotton cake, cottonseed, cottonseed cake, cottonseed extract, cottonseed meal, feed, feed (cattle), feed (cow), feed (dog), feed (horse), feed (maize, gluten), feed (pig), feed (poultry), feed (rabbit), feed (rat/mice), feed (sheep), feeds, grain, fish meal, flour (wheat), groundnut cake, grower's mash, horsegram, layer's mash, maize, maize gluten, maize, white, milo, peanut cake, peanut cake (deoiled), peanut, kernels, peanut (oil cake), pearl millet, pig breeder's mash, pig finisher, pig starter, pod with haulms, poultry breeder's mash, rabbit pellets, redgram husk, rice, rice bran (deoiled), rice, broken, rice (polish), sesame cake, silk worm pupae, sorghum, soybean cake, soybean meal, wheat, wheat bran

**Bone meal** may contain the following mycotoxins:

#### DEOXYNIVALENOL

incidence: 2/4, conc. range: 100–150 µg/kg,

Ø conc.: 125 µg/kg, country: Egypt<sup>16</sup>

see also barley, barley, husked, barley, unhusked (naked), barley (pressed), bran, broilers feed, calf fattening mixed feed, coconut, expeller, corn cob mix silage, cottonseed, cottonseed cake, dairy cattle feed, egg production mixed feed, feed, feed components, feed, commercial mix, feed, mixed, feed, mixed (primarily maize), feed (barley), feed (cattle), feed (chicken), feed (dog), feed (fish), feed (mill run, from wheat), feed (mink), feed (pig), feed (poultry), feed (reindeer), feeds, grain, feeds, industrial, feedstuff, feedstuffs (rapeseed, turnip, fish meal, concentrates), fish meal, grain, mixed feed, grains, mixed, grains (no specification), maize, maize ears, maize fibre, maize germ, maize germ/bran, maize germ meal, maize gluten, maize kernels, maize meal, maize powder, maize screenings, maize stalks (pith), maize, "Baby", maize, hybrid, maize, white, oats, rice bran, rice germ cake, rye, silage, sorghum, soybeans, triticale, wheat, wheat and barley, wheat, red hard winter, wheat, spring, wheat, soft white winter, wheat, winter

#### ZEARALENONE

incidence: 4/4, conc. range: 12–55 µg/kg,

Ø conc.: 30 µg/kg, country: Egypt<sup>16</sup>

see also alfalfa, barley, barley, husked, barley, unhusked (naked), barley and feed, bran, broilers feed, *Carthamus* cake, chick pea, concentrate, mixed, corn cob mix silage, cotton cake, cottonseed, cottonseed cake, diet (dairy cow), diet (poultry), diets (mixed), feed, feed components, feed, mixed, feed, mixed (primarily maize also maize, oats, wheat), feed (bran), feed (broiler chicken), feed (cattle), feed (chicken), feed (dairy), feed (developing pig), feed (mill run, from wheat), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (starter chicken), feedstuff, fish meal, forage grass, grain, bruised, grain, mixed feed, grains (no specification), hay, maize, maize ears, maize flakes, maize germ, maize germ/bran, maize

gluten, maize kernels, maize meal, maize oil cake, maize screenings, maize stalks (pith), maize, "Baby", maize, hybrid, maize, shelled, maize, unshelled, maize, white, maize grain, artificially dried, maize grain, crib dried, maize grain, ensiled, milk production mixed feed, oats, *Paspalum palidosum*, straw, peanut hulls/skins, rice bran, rice germ, rice germ cake, rye, silage, sorghum, soybeans, soybeans, extracted, sunflower cake, tapioca, triticale, wheat, wheat bran, wheat bran and chana testa, wheat soya meal

**Bran** Bran for feed may contain the following mycotoxins:

**AFLATOXIN B<sub>1</sub>**

incidence: 1/1, conc.: 70 µg/kg, country: Australia<sup>121</sup>

see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed

(sheep), feed (50–60 % maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

**DEOXYNIVALENOL**

incidence: 78/85, conc. range: 50–960 µg/kg, Ø conc.: 292.9 µg/kg, country: Hungary<sup>6</sup>  
see also barley, barley, husked, barley, unhusked (naked), barley (pressed), bone meal, broilers feed, calf fattening mixed feed, coconut, expeller, corn cob mix silage, cottonseed, cottonseed cake, dairy cattle feed, egg production mixed feed, feed, feed components, feed, commercial mix, feed, mixed, feed, mixed (primarily maize), feed (barley), feed (cattle), feed (chicken), feed (dog), feed (fish), feed (mill run, from wheat), feed (mink), feed (pig), feed (poultry), feed (reindeer), feeds, grain, feeds, industrial, feedstuff, feedstuffs (rapeseed, turnip, fish meal, concentrates), fish meal, grain, mixed feed, grains, mixed, grains (no specification), maize, maize ears, maize fibre, maize germ, maize germ/bran, maize germ meal, maize gluten, maize kernels, maize

meal, maize powder, maize screenings, maize stalks (pith), maize, “Baby”, maize, hybrid, maize, white, oats, rice bran, rice germ cake, rye, silage, sorghum, soybeans, triticale, wheat, wheat and barley, wheat, red hard winter, wheat, soft white winter, wheat, spring, wheat, winter

#### NIVALENOL

incidence: 11/85, conc. range: 60–180 µg/kg, Ø conc.: 137.3 µg/kg, country: Hungary<sup>6</sup>  
see also barley, barley, husked, barley, unhusked (naked), barley (pressed), feed, feed components, feed (cattle), feed (poultry), feed (reindeer), feeds, industrial, maize, maize ears, maize germ, maize germ/bran, maize gluten, maize kernels, maize meal, maize powder, maize screenings, maize, “Baby”, oats, rye, silage, triticale, wheat

#### T-2 TOXIN

incidence: 15/85, conc. range: 50–950 µg/kg, Ø conc.: 234.7 µg/kg, country: Hungary<sup>6</sup>  
see also alfalfa, barley, diet (grower), diet (poultry), feed, feed components, feed, layer, feed, mixed, feed (dog), feed (fish), feed (mink), feed (pig), feed (poultry), feedstuff, grain, mixed feed, grains (no specification), hay, maize, maize germ/bran, maize gluten, maize meal, maize screenings, maize stalks (pith), oat and barley (hammer-milled), oats, peanuts, pig grower diet, piglet diet, rye, sorghum, triticale, wheat

#### ZEARALENONE

incidence: 53/85, conc. range: 50–1560 µg/kg, Ø conc.: 308.5 µg/kg, country: Hungary<sup>6</sup>  
see also alfalfa, barley, barley, husked, barley, unhusked (naked), barley and feed, bone meal, broilers feed, *Carthamus* cake, chick pea, concentrate, mixed, corn cob mix silage, cotton cake, cottonseed, cottonseed cake, diet (dairy cow), diet (poultry), diets (mixed), feed, feed components, feed, mixed, feed, mixed (primarily maize also maize, oats, wheat), feed (bran), feed (broiler chicken), feed (cattle), feed (chicken), feed (dairy), feed (developing pig), feed (mill run, from wheat), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (starter chicken), feedstuff, fish meal, forage grass,

grain, bruised, grain, mixed feed, grains (no specification), hay, maize, maize ears, maize flakes, maize germ, maize germ/bran, maize gluten, maize kernels, maize meal, maize oil cake, maize screenings, maize stalks (pith), maize, “Baby”, maize, hybrid, maize, shelled, maize, unshelled, maize, white, maize grain, artificially dried, maize grain, crib dried, maize grain, ensiled, milk production mixed feed, oats, *Paspalum palidosum*, straw, peanut hulls/skins, rice bran, rice germ, rice germ cake, rye, silage, sorghum, soybeans, soybeans, extracted, sunflower cake, tapioca, triticale, wheat, wheat bran, wheat bran and chana testa, wheat soya meal

**Bread crumbs** may contain the following mycotoxins:

#### AFLATOXIN

incidence: 1/1, conc.: <30 µg/kg, country: India<sup>380</sup>  
see also blackgram husk, broiler finisher, broiler starter, cotton cake, cottonseed, cottonseed cake, cottonseed extract, cottonseed meal, feed, feed (cattle), feed (cow), feed (dog), feed (horse), feed (maize, gluten), feed (pig), feed (poultry), feed (rabbit), feed (rat/mice), feed (sheep), feeds, grain, fish meal, flour (wheat), groundnut cake, grower’s mash, horsegram, layer’s mash, maize, maize gluten, maize, white, milo, peanut cake, peanut cake (deoiled), peanut, kernels, peanut (oil cake), pearl millet, pig breeder’s mash, pig finisher, pig starter, pod with haulms, poultry breeder’s mash, rabbit pellets, redgram husk, rice, rice bran (deoiled), rice, broken, rice (polish), sesame cake, silk worm pupae, sorghum, soybean cake, soybean meal, wheat, wheat bran

**Broiler finisher** may contain the following mycotoxins:

#### AFLATOXIN

incidence: 14/25, conc. range: 0–180 µg/kg, country: Nigeria<sup>109</sup>  
see also blackgram husk, bread crumbs, broiler starter, cotton cake, cottonseed,

cottonseed cake, cottonseed extract, cottonseed meal, feed, feed (cattle), feed (cow), feed (dog), feed (horse), feed (maize, gluten), feed (pig), feed (poultry), feed (rabbit), feed (rat/mice), feed (sheep), feeds, grain, fish meal, flour (wheat), groundnut cake, grower's mash, horsegram, layer's mash, maize, maize gluten, maize, white, milo, peanut cake, peanut cake (deoiled), peanut, kernels, peanut (oil cake), pearl millet, pig breeder's mash, pig finisher, pig starter, pod with haulms, poultry breeder's mash, rabbit pellets, redgram husk, rice, rice bran (deoiled), rice, broken, rice (polish), sesame cake, silk worm pupae, sorghum, soybean cake, soybean meal, wheat, wheat bran

**Broiler mixed feed** may contain the following mycotoxins:

**AFLATOXIN B<sub>1</sub>**

incidence: 2/5, Ø conc.: 10 µg/kg, country: Egypt<sup>16</sup>

see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, calf fattening mixed feed, calf fattening mixed feed (containing 4–20% peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5% peanut products), dairy cattle feed (containing 6–10% peanut products), dairy cattle feed (containing 6–12% peanut products), dairy cattle feed (containing more than 20% peanut products), diets, mixed, dog food, egg production mixed feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed

(dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60% maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

**Broiler starter** may contain the following mycotoxins:

**AFLATOXIN**

incidence: 13/24, conc. range: 0–322 µg/kg, country: Nigeria<sup>109</sup>

see also blackgram husk, bread crumbs, broiler finisher, cotton cake, cottonseed, cottonseed cake, cottonseed extract, cottonseed meal, feed, feed (cattle), feed (cow), feed (dog), feed (horse), feed (maize, gluten), feed (pig), feed (poultry), feed (rabbit), feed (rat/mice), feed (sheep), feeds, grain, fish meal, flour (wheat), groundnut cake, grower's mash, horsegram, layer's mash, maize, maize gluten, maize, white, milo, peanut cake, peanut cake (deoiled), peanut, kernels, peanut (oil cake), pearl millet, pig

breeder's mash, pig finisher, pig starter, pod with haulms, poultry breeder's mash, rabbit pellets, redgram husk, rice, rice bran (deoiled), rice, broken, rice (polish), sesame cake, silk worm pupae, sorghum, soybean cake, soybean meal, wheat, wheat bran

**Broilers feed** may contain the following mycotoxins:

#### DEOXYNIVALENOL

incidence: 2/4, conc. range: 680–960 µg/kg, Ø conc.: 820 µg/kg, country: Egypt<sup>16</sup>  
see also barley, barley, husked, barley, unhusked (naked), barley (pressed), bone meal, bran, calf fattening mixed feed, coconut, expeller, corn cob mix silage, cottonseed, cottonseed cake, dairy cattle feed, egg production mixed feed, feed, feed components, feed, commercial mix, feed, mixed, feed, mixed (primarily maize), feed (barley), feed (cattle), feed (chicken), feed (dog), feed (fish), feed (mill run, from wheat), feed (mink), feed (pig), feed (poultry), feed (reindeer), feeds, grain, feeds, industrial, feedstuff, feedstuffs (rapeseed, turnip, fish meal, concentrates), fish meal, grain, mixed feed, grains, mixed, grains (no specification), maize, maize ears, maize fibre, maize germ, maize germ/bran, maize germ meal, maize gluten, maize kernels, maize meal, maize powder, maize screenings, maize stalks (pith), maize, „Baby“, maize, hybrid, maize, white, oats, rice bran, rice germ cake, rye, silage, sorghum, soybeans, triticale, wheat, wheat and barley, wheat, red hard winter, wheat, soft white winter, wheat, spring, wheat, winter

#### OCHRATOXIN A

incidence: 1/3, conc.: 13 µg/kg, country: Egypt<sup>16</sup>  
see also alfalfa, barley, barley, oats, barley (high moisture), barley-soybean diet, bird food, domestic, bird food, wild, cereal grains, citrus pulp, coconut, expeller, corn cob mix silage, diet (dairy cow), diet (poultry), diet (starter), dog food, eat, egg production mixed feed, feed, feed wheat, oat and barley,

feed, commercial mix, feed, mixed, feed, mixed (pelleted), feed (broilers), feed (cat), feed (cattle), feed (cereals), feed (pig), feed ec (pig), feed (poultry), feed ec (poultry), feed (poultry, pig), feed ec (rabbit), feed (trout), grain, mixed feed, grains, mixed, grains (heated), hay, horse bean, maize, maize feed, milo, maize gluten, maize meal, maize, white, *Makhana (Euryale ferox* Salisb) puffs, milk production mixed feed, millet, oat and barley (hammer-milled), oats, palm products, peanut cake, peas, peas and beans, pet food, pig feedstuffs, pig grower diet, pig meal, piglet diet, poultry feedstuffs, rice bran, rice germ, rice germ cake, rye, sorghum, soybean groats, sunflower, sunflower seeds, extracted, tapioca, triticale, *Vicia faba*, wheat, wheat and barley, wheat bran, wheat hay, wheat, oats

#### ZEARALENONE

incidence: 4/4, conc. range: 3–426 µg/kg, Ø conc.: 143 µg/kg, country: Egypt<sup>16</sup>  
see also alfalfa, barley, barley, husked, barley, unhusked (naked), barley and feed, bone meal, bran, *Carthamus* cake, chick pea, concentrate, mixed, corn cob mix silage, cotton cake, cottonseed, cottonseed cake, diet (dairy cow), diet (poultry), diets (mixed), feed, feed components, feed, mixed, feed, mixed (primarily maize also maize, oats, wheat), feed (bran), feed (broiler chicken), feed (cattle), feed (chicken), feed (dairy), feed (developing pig), feed (mill run, from wheat), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (starter chicken), feedstuff, fish meal, forage grass, grain, bruised, grain, mixed feed, grains (no specification), hay, maize, maize ears, maize flakes, maize germ, maize germ/bran, maize gluten, maize kernels, maize meal, maize oil cake, maize screenings, maize stalks (pith), maize, „Baby“, maize, hybrid, maize, shelled, maize, unshelled, maize, white, maize grain, artificially dried, maize grain, crib dried, maize grain, ensiled, milk production mixed feed, oats, *Paspalum palidosum*, straw, peanut hulls/skins, rice bran, rice germ, rice germ cake, rye, silage, sorghum, soybeans, soybeans, extracted, sunflower cake, tapioca,

triticale, wheat, wheat bran, wheat bran and chana testa, wheat soya meal

#### CALF FEED

see Feed (calf)

**Calf fattening mixed feed** may contain the following mycotoxins:

#### AFATOXIN B<sub>1</sub>

incidence: 3/5, Ø conc.: 50 µg/kg, country: Egypt<sup>16</sup>

incidence: 37/37, conc. range: <5 µg/kg (30 sa), 6–10 µg/kg (5 sa), 11–20 µg/kg (2 sa), country: Germany<sup>298</sup>

see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed (containing 4–20% peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5% peanut products), dairy cattle feed (containing 6–10% peanut products), dairy cattle feed (containing 6–12% peanut products), dairy cattle feed (containing more than 20% peanut products), diets, mixed, dog food, egg production mixed feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60% maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize

gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

#### DEOXYNIVALENOL

incidence: 3/4, conc. range: 80–400 µg/kg, Ø conc.: 230 µg/kg, country: Egypt<sup>16</sup>

see also barley, barley, husked, barley, unhusked (naked), barley (pressed), bone meal, bran, broilers feed, coconut, expeller, corn cob mix silage, cottonseed, cottonseed cake, dairy cattle feed, egg production mixed feed, feed, feed components, feed, commercial mix, feed, mixed, feed, mixed (primarily maize), feed (barley), feed (cattle), feed (chicken), feed (dog), feed (fish), feed (mill run, from wheat), feed (mink), feed (pig), feed (poultry), feed (reindeer), feeds, grain, feeds, industrial, feedstuff, feedstuffs (rapeseed, turnip, fish meal, concentrates), fish meal, grain, mixed feed, grains, mixed, grains (no specification), maize, maize ears, maize fibre, maize germ, maize germ/bran, maize germ meal, maize gluten, maize kernels, maize meal, maize powder, maize screenings, maize stalks (pith), maize, „Baby“, maize, hybrid, maize, white, oats, rice bran, rice germ cake, rye, silage, sorghum, soybeans, triticale, wheat, wheat and barley, wheat, red hard winter, wheat, soft white winter, wheat, spring, wheat, winter



**Calf fattening mixed feed (containing 4–20% peanut products)** may contain the following mycotoxins:

**AFLATOXIN B<sub>1</sub>**

incidence: ?/8, conc. range: 10–300 µg/kg, country: Germany<sup>298</sup>

see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5% peanut products), dairy cattle feed (containing 6–10% peanut products), dairy cattle feed (containing 6–12% peanut products), dairy cattle feed (containing more than 20% peanut products), diets, mixed, dog food, egg production mixed feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60% maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake,

peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

***Carthamus* cake** may contain the following mycotoxins:

**AFLATOXIN B<sub>1</sub>**

incidence: ?/10, conc.: tr µg/kg, country: India<sup>183</sup>

see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20% peanut products), castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5% peanut products), dairy cattle feed (containing 6–10% peanut products), dairy cattle feed (containing 6–12% peanut products), dairy cattle feed (containing more than 20% peanut products), diets, mixed, dog food, egg production mixed feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (calf), feed (broilers), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60% maize), fish meal,

grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

#### ZEARALENONE

incidence: ?/10, conc.: 20 µg/kg, country: India<sup>183</sup>

see also alfalfa, barley, barley, husked, barley, unhusked (naked), barley and feed, bone meal, bran, broilers feed, chick pea, concentrate, mixed, corn cob mix silage, cotton cake, cottonseed, cottonseed cake, diet (dairy cow), diet (poultry), diets (mixed), feed, feed components, feed, mixed, feed, mixed (primarily maize also maize, oats, wheat), feed (bran), feed (broiler chicken), feed (cattle), feed (chicken), feed (dairy), feed (developing pig), feed (mill run, from wheat), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (starter chicken), feedstuff, fish meal, forage grass, grain, bruised, grain, mixed feed, grains (no specification), hay, maize, maize ears, maize flakes, maize germ, maize germ/bran, maize gluten, maize kernels, maize meal, maize oil cake, maize screenings, maize, „Baby“, maize,

hybrid, maize, shelled, maize, unshelled, maize, white, maize grain, artificially dried, maize grain, crib dried, maize grain, ensiled, maize stalks (pith), milk production mixed feed, oats, *Paspalum palidosum*, straw, peanut hulls/skins, rice bran, rice germ, rice germ cake, rye, silage, sorghum, soybeans, soybeans, extracted, sunflower cake, tapioca, triticale, wheat, wheat bran, wheat bran and chana testa, wheat soya meal

**Castor cake** may contain the following mycotoxins:

#### AFLATOXIN B<sub>1</sub>

incidence: 4/6, conc. range: tr–259.1 µg/kg,

Ø conc.: 76.3 µg/kg, country: India<sup>253</sup>

see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20% peanut products), *Carthamus* cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5% peanut products), dairy cattle feed (containing 6–10% peanut products), dairy cattle feed (containing 6–12% peanut products), dairy cattle feed (containing more than 20% peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60% maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni*

cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

#### CATTLE FEED

see Feed (cattle)

**Cereal grains** Cereal grains for feed may contain the following mycotoxins:

#### OCHRATOXIN A

incidence: 20/296\*, conc. range: 20–470 µg/kg, country: Poland<sup>87</sup>, \*ncac see also alfalfa, barley, barley, oats, barley (high moisture), barley-soybean diet, bird food, domestic, bird food, wild, broilers feed, citrus pulp, coconut, expeller, corn cob mix silage, diet (dairy cow), diet (poultry), diet (starter), dog food, eat, egg production mixed feed, feed, feed wheat, oat and barley, feed, commercial mix, feed, mixed, feed, mixed (pelleted), feed (broilers), feed (cat), feed (cattle), feed (cereals), feed (pig), feed ec (pig), feed (poultry), feed ec (poultry), feed (poultry, pig), feed ec (rabbit), feed (trout), grain, mixed feed, grains, mixed, grains (heated), hay, horse bean, maize, maize feed, milo, maize gluten, maize meal, maize, white,

*Makhana* (*Euryale ferox* Salisb) puffs, milk production mixed feed, millet, oat and barley (hammer-milled), oats, palm products, peanut cake, peas, peas and beans, pet food, pig feedstuffs, pig grower diet, pig meal, piglet diet, poultry feedstuffs, rice bran, rice germ, rice germ cake, rye, sorghum, soybean groats, sunflower, sunflower seeds, extracted, tapioca, triticale, *Vicia faba*, wheat, wheat and barley, wheat bran, wheat hay, wheat, oats

**Cereals, cereal products** Cereals and cereal products for feed may contain the following mycotoxins:

#### AFLATOXIN B<sub>1</sub>

incidence: 1/29\* (maize gluten), conc.: 27 µg/kg, country: UK<sup>36</sup>, \*imported? see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20% peanut products), *Carthamus* cake, castor cake, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5% peanut products), dairy cattle feed (containing 6–10% peanut products), dairy cattle feed (containing 6–12% peanut products), dairy cattle feed (containing more than 20% peanut products), diets, mixed, dog food, egg production mixed feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60% maize), fish meal, grain by-products, grains (no specification),

greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

**Cereals, mixture** may contain the following mycotoxins:

**ALTERNARIOL**

incidence: 1/5, conc.: 8 µg/kg, country: Germany<sup>294</sup>

see also oilseed rape meal, sunflower, sunflower seed meal, sunflower seeds, ensiling

**ALTERNARIOL METHYL ETHER**

incidence: 2/7, conc. range: 4–8 µg/kg, Ø conc.: 6 µg/kg, country: Germany<sup>294</sup>

see also barley, barley, oats, oats, sunflower, wheat, wheat, oats

**Chick mash** may contain the following mycotoxins:

**CYCLOPIAZONIC ACID**

incidence: 1/1, conc.: 1500 µg/kg (estimated), country: India<sup>33</sup>

see also feed, groundnut cake, maize, millet, little, peanuts, rice bran, wheat

**Chick pea** Chick pea for feed may contain the following mycotoxins:

**AFLATOXIN B<sub>1</sub>**

incidence: ?/10, conc. range: tr–20 µg/kg,

country: India<sup>183</sup>

see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20% peanut products), *Carthamus* cake, castor cake, cereals, cereal products, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5% peanut products), dairy cattle feed (containing 6–10% peanut products), dairy cattle feed (containing 6–12% peanut products), dairy cattle feed (containing more than 20% peanut products), diets, mixed, dog food, egg production mixed feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60% maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled),

peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

#### ZEARALENONE

incidence: ?/10, conc. range: 20–40 µg/kg, country: India<sup>183</sup>

see also alfalfa, barley, barley, husked, barley, unhusked (naked), barley and feed, bone meal, bran, broilers feed, *Carthamus* cake, concentrate, mixed, corn cob mix silage, cotton cake, cottonseed, cottonseed cake, diet (dairy cow), diet (poultry), diets (mixed), feed, feed components, feed, mixed, feed, mixed (primarily maize also maize, oats, wheat), feed (bran), feed (broiler chicken), feed (cattle), feed (chicken), feed (dairy), feed (developing pig), feed (mill run, from wheat), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (starter chicken), feedstuff, fish meal, forage grass, grain, bruised, grain, mixed feed, grains (no specification), hay, maize, maize ears, maize flakes, maize germ, maize germ/bran, maize gluten, maize kernels, maize meal, maize oil cake, maize screenings, maize stalks (pith), maize, „Baby“, maize, hybrid, maize, shelled, maize, unshelled, maize, white, maize grain, artificially dried, maize grain, crib dried, maize grain, ensiled, milk production mixed feed, oats, *Paspalum palidosum*, straw, peanut hulls/skins, rice bran, rice germ, rice germ cake, rye, silage, sorghum, soybeans, soybeans, extracted, sunflower cake, tapioca, triticale, wheat, wheat bran, wheat bran and chana testa, wheat soya meal

**Citrus pulp** may contain the following mycotoxins:

#### OCHRATOXIN A

incidence: 1/4\*, conc.: 29 µg/kg, country: The Netherlands<sup>103</sup>, \*imported?

see also alfalfa, barley, barley, oats, barley (high moisture), barley-soybean diet, bird food, domestic, bird food, wild, broilers feed, cereal grains, coconut, expeller, corn cob mix silage, diet (dairy cow), diet (poultry), diet (starter), dog food, eat, egg production mixed feed, feed, feed wheat, oat and barley, feed, commercial mix, feed, mixed, feed, mixed (pelleted), feed (broilers), feed (cat), feed (cattle), feed (cereals), feed (pig), feed ec (pig), feed (poultry), feed ec (poultry), feed (poultry, pig), feed ec (rabbit), feed (trout), grain, mixed feed, grains, mixed, grains (heated), hay, horse bean, maize, maize feed, milo, maize gluten, maize meal, maize, white, *Makhana* (*Euryale ferox* Salisb) puffs, milk production mixed feed, millet, oat and barley (hammer-milled), oats, palm products, peanut cake, peas, peas and beans, pet food, pig feedstuffs, pig grower diet, pig meal, piglet diet, poultry feedstuffs, rice bran, rice germ, rice germ cake, rye, sorghum, soybean groats, sunflower, sunflower seeds, extracted, tapioca, triticale, *Vicia faba*, wheat, wheat and barley, wheat bran, wheat hay, wheat, oats

**Cocoa (oilcake)** may contain the following mycotoxins:

#### AFLATOXIN B

incidence: 5/7, conc. range: ≥25–>100 µg/kg, country: France<sup>46</sup>

see also barley, cottonseed cake, feed, feed (cattle), feed (maize, gluten), feed (pig), feed (poultry), flour (wheat), lucern (dried), maize, maize gluten, maize grains, oats, peanut (oil cake), rice, broken, sorghum, soybean (oil cake), sunflower (oil cake), wheat

**Coconut cake** may contain the following mycotoxins:

#### AFLATOXIN B<sub>1</sub>

incidence: 7/10, conc. range: 10–60 µg/kg, country: India<sup>183</sup>

see also alfalfa, *Ambadi* cake, animal feeds-tuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60 % maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds

(peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

**Coconut, expeller** may contain the following mycotoxins:

#### DEOXYNIVALENOL

incidence: 1/4\*, conc.: 620 µg/kg, country:

The Netherlands<sup>103</sup>, \*imported?

see also barley, barley, husked, barley, unhusked (naked), barley (pressed), bone meal, bran, broilers feed, calf fattening mixed feed, corn cob mix silage, cottonseed, cottonseed cake, dairy cattle feed, egg production mixed feed, feed, feed components, feed, commercial mix, feed, mixed, feed, mixed (primarily maize), feed (barley), feed (cattle), feed (chicken), feed (dog), feed (fish), feed (mill run, from wheat), feed (mink), feed (pig), feed (poultry), feed (reindeer), feeds, grain, feeds, industrial, feedstuff, feedstuffs (rapeseed, turnip, fish meal, concentrates), fish meal, grain, mixed feed, grains, mixed, grains (no specification), maize, maize ears, maize fibre, maize germ, maize germ/bran, maize germ meal, maize gluten, maize kernels, maize meal, maize powder, maize screenings, maize stalks (pith), maize, “Baby”, maize, hybrid, maize, white, oats, rice bran, rice germ cake, rye, silage, sorghum, soybeans, triticale, wheat, wheat and barley, wheat, red hard winter, wheat, soft white winter, wheat, spring, wheat, winter

#### OCHRATOXIN A

incidence: 3/4\*, conc. range: 4–6 µg/kg,

Ø conc.: 5 µg/kg, country: The Netherlands<sup>103</sup>, \*imported?

see also alfalfa, barley, barley, oats, barley (high moisture), barley-soybean diet, bird food, domestic, bird food, wild, broilers feed,

cereal grains, citrus pulp, corn cob mix silage, diet (dairy cow), diet (poultry), diet (starter), dog food, eat, egg production mixed feed, feed, feed wheat, oat and barley, feed, commercial mix, feed, mixed, feed, mixed (pelleted), feed (broilers), feed (cat), feed (cattle), feed (cereals), feed (pig), feed ec (pig), feed (poultry), feed ec (poultry), feed (poultry, pig), feed ec (rabbit), feed (trout), grain, mixed feed, grains, mixed, grains (heated), hay, horse bean, maize, maize feed, milo, maize gluten, maize meal, maize, white, *Makhana* (*Euryale ferox* Salisb) puffs, milk production mixed feed, millet, oat and barley (hammer-milled), oats, palm products, peanut cake, peas, peas and beans, pet food, pig feedstuffs, pig grower diet, pig meal, piglet diet, poultry feedstuffs, rice bran, rice germ, rice germ cake, rye, sorghum, soybean groats, sunflower, sunflower seeds, extracted, tapioca, triticale, *Vicia faba*, wheat, wheat and barley, wheat bran, wheat hay, wheat, oats

**Cocos** Cocos for feed may contain the following mycotoxins:

**AFLATOXIN B<sub>1</sub>**

incidence: 7/8, conc. range: 15–59 µg/kg, Ø conc.: 30 µg/kg, country: investigated in Germany<sup>298</sup>

see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20% peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5% peanut products), dairy cattle feed (containing 6–10% peanut products), dairy cattle feed

(containing 6–12% peanut products), dairy cattle feed (containing more than 20% peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60% maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

**Concentrate, mixed** may contain the following mycotoxins:

**AFLATOXIN B<sub>1</sub>**

incidence: 3/5, conc. range: 7–13 µg/kg, Ø conc.: 5.4 µg/kg, country: India<sup>129</sup>

see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler

mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60 % maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake,

sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

#### AFLATOXIN G<sub>1</sub>

incidence: 1/1, conc.: 3 µg/kg, country: India<sup>129</sup>

see also animal feedstuffs (dairy cake), bird food, bird food, wild, cottonseed, cottonseed cake, feed (cat), feed (chicken), feed (dog), maize, maize, ground, maize, preharvest, meat meal, milk production mixed feed, murkool, peanut cake, peanut expeller, peanut hay, peanut meal, peanuts, rice bran, rice germ, sorghum, soybeans, wheat, wheat bran, wheat bran and chana testa

#### ZEARALENONE

incidence: 1/5, conc.: 843 µg/kg, country: India<sup>129</sup>

see also alfalfa, barley, barley, husked, barley, unhusked (naked), barley and feed, bone meal, bran, broilers feed, *Carthamus* cake, chick pea, corn cob mix silage, cotton cake, cottonseed, cottonseed cake, diet (dairy cow), diet (poultry), diets (mixed), feed, feed components, feed, mixed, feed, mixed (primarily maize also maize, oats, wheat), feed (bran), feed (broiler chicken), feed (cattle), feed (chicken), feed (dairy), feed (developing pig), feed (mill run, from wheat), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (starter chicken), feedstuff, fish meal, forage grass, grain, bruised, grain, mixed feed, grains (no specification), hay, maize, maize ears, maize flakes, maize germ, maize germ/bran, maize gluten, maize kernels, maize meal, maize oil cake, maize screenings, maize stalks (pith), maize, “Baby”, maize, hybrid, maize, shelled, maize, unshelled, maize, white, maize grain, artificially dried, maize grain, crib dried, maize grain, ensiled, milk production mixed feed, oats, *Paspalum palidosum*, straw, peanut hulls/skins, rice bran, rice germ, rice germ cake, rye, silage, sorghum, soybeans, soybeans, extracted, sunflower cake, tapioca, triticale, wheat, wheat bran, wheat bran and chana testa, wheat soya meal



**Concentrates** may contain the following mycotoxins:

**AFLATOXIN B<sub>1</sub>**

incidence: 312/1545, conc. range:

1–2000 µg/kg, country: Cuba<sup>106</sup>

see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60 % maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm

products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

**Copra meal** may contain the following mycotoxins:

**AFLATOXINS**

incidence: 1/1\*, conc.: 16 µg/kg, country:

USA<sup>280</sup>, \*imported

see also animal feed (maize), animal feed (mixed), barley, cottonseed, cottonseed fines, cottonseed meal, cottonseed meats, feed, feed ingredients (miscellaneous), feed, mixed, feed (excluding peanuts, suspect), feed (goat), feed (pig), feed (poultry), feedstuff, grain, grain, mixed feed, maize, maize, shelled, millet, peanut cake, peanut meal, peanut meal and by-products, peanuts, protein concentrates, rice, rice bran, sorghum, soybean meal, sunflower

**CORN**

see Maize

**Corn cob mix silage** may contain the following mycotoxins:

**DEOXYNIVALENOL**

incidence: 1/2\*, conc.: 130 µg/kg, country:

The Netherlands<sup>103</sup>, \*not molded

see also barley, barley, husked, barley, unhusked (naked), barley (pressed), bone meal, bran, broilers feed, calf fattening mixed feed, coconut, expeller, cottonseed, cottonseed cake, dairy cattle feed, egg production mixed feed, feed, feed components, feed, commercial mix, feed, mixed, feed, mixed (primarily maize), feed (barley), feed

(cattle), feed (chicken), feed (dog), feed (fish), feed (mill run, from wheat), feed (mink), feed (pig), feed (poultry), feed (reindeer), feeds, grain, feeds, industrial, feedstuff, feedstuffs (rapeseed, turnip, fish meal, concentrates), fish meal, grain, mixed feed, grains, mixed, grains (no specification), maize, maize ears, maize fibre, maize germ, maize germ/bran, maize germ meal, maize gluten, maize kernels, maize meal, maize powder, maize screenings, maize stalks (pith), maize, "Baby", maize, hybrid, maize, white, oats, rice bran, rice germ cake, rye, silage, sorghum, soybeans, triticale, wheat, wheat and barley, wheat, red hard winter, wheat, soft white winter, wheat, spring, wheat, winter

#### OCHRATOXIN A

incidence: 3/4\*, conc. range: 4–5 µg/kg, Ø conc.: 5 µg/kg, country: The Netherlands<sup>103</sup>, \*molded  
 incidence: 2/2\*, conc. range: 3–6 µg/kg, Ø conc.: 5 µg/kg, country: The Netherlands<sup>103</sup>, \*not molded  
 see also alfalfa, barley, barley, oats, barley (high moisture), barley-soybean diet, bird food, domestic, bird food, wild, broilers feed, cereal grains, citrus pulp, coconut, expeller, diet (dairy cow), diet (poultry), diet (starter), dog food, eat, egg production mixed feed, feed, feed wheat, oat and barley, feed, commercial mix, feed, mixed, feed, mixed (pelleted), feed (broilers), feed (cat), feed (cattle), feed (cereals), feed (pig), feed ec (pig), feed (poultry), feed ec (poultry), feed (poultry, pig), feed ec (rabbit), feed (trout), grain, mixed feed, grains, mixed, grains (heated), hay, horse bean, maize, maize feed, milo, maize gluten, maize meal, maize, white, *Makhana* (*Euryale ferox* Salisb) puffs, milk production mixed feed, millet, oat and barley (hammer-milled), oats, palm products, peanut cake, peas, peas and beans, pet food, pig feedstuffs, pig grower diet, pig meal, piglet diet, poultry feedstuffs, rice bran, rice germ, rice germ cake, rye, sorghum, soybean groats, sunflower, sunflower seeds, extracted,

tapioca, triticale, *Vicia faba*, wheat, wheat and barley, wheat bran, wheat hay, wheat, oats

#### ZEARALENONE

incidence: 4/4\*, conc. range: 47–3100 µg/kg, Ø conc.: 890 µg/kg, country: The Netherlands<sup>103</sup>, \*molded  
 incidence: 2/2\*, conc. range: 33–140 µg/kg, Ø conc.: 87 µg/kg, country: The Netherlands<sup>103</sup>, \*not molded  
 see also alfalfa, barley, barley, husked, barley, unhusked (naked), barley and feed, bone meal, bran, broilers feed, *Carthamus* cake, chick pea, concentrate, mixed, cotton cake, cottonseed, cottonseed cake, diet (dairy cow), diet (poultry), diets (mixed), feed, feed components, feed, mixed, feed, mixed (primarily maize also maize, oats, wheat), feed (bran), feed (broiler chicken), feed (cattle), feed (chicken), feed (dairy), feed (developing pig), feed (mill run, from wheat), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (starter chicken), feedstuff, fish meal, forage grass, grain, bruised, grain, mixed feed, grains (no specification), hay, maize, maize ears, maize flakes, maize germ, maize germ/bran, maize gluten, maize kernels, maize meal, maize oil cake, maize screenings, maize stalks (pith), maize, "Baby", maize, hybrid, maize, shelled, maize, unshelled, maize, white, maize grain, artificially dried, maize grain, crib dried, maize grain, ensiled, milk production mixed feed, oats, *Paspalum palidosum*, straw, peanut hulls/skins, rice bran, rice germ, rice germ cake, rye, silage, sorghum, soybeans, soybeans, extracted, sunflower cake, tapioca, triticale, wheat, wheat bran, wheat bran and chana testa, wheat soya meal

#### CORN POWDER

see Maize powder

**Cotton cake** may contain the following mycotoxins:

#### AFLATOXIN B<sub>1</sub>

incidence: ?/10, conc.: 10–40 µg/kg, country: India<sup>183</sup>

incidence: 8/10, conc.: tr–20 µg/kg, country: India<sup>183</sup>

see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, alfalfa, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycled meal, dairy cattle feed, dairy cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60 % maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels,

peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

#### AFLATOXIN

incidence: 9/9, conc. range: 11–30 µg/kg (8 sa), 31–100 µg/kg (1 sa), country: India<sup>311</sup>  
see also blackgram husk, bread crumbs, broiler finisher, broiler starter, cottonseed, cottonseed cake, cottonseed extract, cottonseed meal, feed, feed (cattle), feed (cow), feed (dog), feed (horse), feed (maize, gluten), feed (pig), feed (poultry), feed (rabbit), feed (rat/mice), feed (sheep), feeds, grain, fish meal, flour (wheat), groundnut cake, grower's mash, horsegram, layer's mash, maize, maize gluten, maize, white, milo, peanut cake, peanut cake (deoiled), peanut, kernels, peanut (oil cake), pearl millet, pig breeder's mash, pig finisher, pig starter, pod with haulms, poultry breeder's mash, rabbit pellets, redgram husk, rice, rice bran (deoiled), rice, broken, rice (polish), sesame cake, silk worm pupae, sorghum, soybean cake, soybean meal, wheat, wheat bran

#### ZEARALENONE

incidence: ?/10, conc.: 20 µg/kg, country: India<sup>183</sup>

see also alfalfa, barley, barley, husked, barley, unhusked (naked), barley and feed, bone meal, bran, broilers feed, *Carthamus* cake, chick pea, concentrate, mixed, corn cob mix silage, cottonseed, cottonseed cake, diet (dairy cow), diet (poultry), diets (mixed), feed, feed components, feed, mixed, feed, mixed (primarily maize also maize, oats, wheat), feed (bran), feed (broiler chicken), feed (cattle), feed (chicken), feed (dairy), feed (developing pig), feed (mill run, from wheat), feed (miscellaneous), feed (pig), feed

(poultry), feed (poultry, pig), feed (starter chicken), feedstuff, fish meal, forage grass, grain, bruised, grain, mixed feed, grains (no specification), hay, maize, maize ears, maize flakes, maize germ, maize germ/bran, maize gluten, maize kernels, maize meal, maize oil cake, maize screenings, maize stalks (pith), maize, "Baby", maize, hybrid, maize, shelled, maize, unshelled, maize, white, maize grain, artificially dried, maize grain, crib dried, maize grain, ensiled, milk production mixed feed, oats, *Paspalum palidosum*, straw, peanut hulls/skins, rice bran, rice germ, rice germ cake, rye, silage, sorghum, soybeans, soybeans, extracted, sunflower cake, tapioca, triticale, wheat, wheat bran, wheat bran and chana testa, wheat soya meal

**Cottonseed** may contain the following mycotoxins:

**AFLATOXIN B<sub>1</sub>**

incidence: 4/5, Ø conc. range: 15 µg/kg,

country: Egypt<sup>16</sup>

incidence: 15/21\*, conc. range: 5–20 µg/kg,

country: UK<sup>94</sup>, \*imported?

incidence: 179/388, conc. range: 1–50 µg/kg (76 sa), 51–500 µg/kg (58 sa), 501–1000 µg/kg (18 sa), >1000 µg/kg (29 sa), country: India<sup>210</sup>

incidence: 1/2, conc.: 210 µg/kg, country:

USA<sup>246</sup>

incidence: 1/3, conc.: 404 µg/kg, country:

USA<sup>246</sup>

incidence: 1/9, conc.: 82 µg/kg, country:

USA<sup>246</sup>

incidence: 1/5, conc.: 910 µg/kg, country:

USA<sup>246</sup>

incidence: 5/5, conc. range: <20 µg/kg (3 sa), 51–100 µg/kg (1 sa), 101–1000 µg/kg (1 sa), country: UK<sup>267</sup>

incidence: 7/7?, conc. range: 5–560 µg/kg, Ø conc.: 163.1 µg/kg, country: USA<sup>287</sup>

incidence: 12/12, conc. range: 5–1500 µg/kg, Ø conc.: 197.9 µg/kg, country: USA<sup>304</sup>

incidence: 6/7, conc. range: 10–380 µg/kg, Ø conc.: 110 µg/kg, country: USA<sup>304</sup>

incidence: 62/106\*, conc. range: 1–20 µg/kg (36 sa), 21–100 µg/kg (14 sa), 101–300 µg/kg (5 sa), >300 µg/kg (7 sa), country: USA<sup>370</sup>,

\*includes 73 cottonseed and 33 cottonseed meal sa

see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60 % maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts,

pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

#### AFLATOXIN B<sub>2</sub>

incidence: 1/5, conc.: 810 µg/kg, country: USA<sup>246</sup>

incidence: 3/7, conc. range: 5–90 µg/kg, Ø conc.: 53.3 µg/kg, country: USA<sup>304</sup>  
see also animal feedstuff (dairy cake), bird food, bird food, wild, biri testa, blackgram, blackgram husk, cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meats, dog food, egg production mixed feed, feed, compound, feed (cat), feed (cattle), feed (dog), feed (pig), feed (poultry), feed (rabbit), feed (sheep), fish meal, horsegram, maize, maize gluten, maize husk, maize, ground, maize, preharvest, mung testa, mustard cake, niger cake, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanuts, peanut, kernels, redgram husk, rice bran, rice bran (deoiled), rice chaff, rice meal, rice (polish), sal seed cake, sesame cake, sorghum, soybean meal, soybeans, wheat, wheat bran

#### AFLATOXIN B<sub>1</sub> + B<sub>2</sub>

incidence: 4/24\*, conc.: 100–200 µg/kg, country: Egypt<sup>361</sup>, \*and cottonseed products  
see also feed (poultry), maize, sorghum

#### AFLATOXIN G<sub>1</sub>

incidence: 1/2, conc.: 130 µg/kg, country: USA<sup>246</sup>

incidence: 1/3, conc.: 207 µg/kg, country: USA<sup>246</sup>

see also animal feedstuffs (dairy cake), bird food, bird food, wild, concentrate, mixed, cottonseed cake, feed (cat), feed (chicken), feed (dog), maize, maize, ground, maize, preharvest, meat meal, milk production mixed feed, murkool, peanut cake, peanut

expeller, peanut hay, peanut meal, peanuts, rice bran, rice germ, sorghum, soybeans, wheat, wheat bran, wheat bran and chana testa

#### AFLATOXIN

incidence: 60/928, highest conc.:

> 1500 µg/kg, Ø conc.: 220 µg/kg, country: unknown<sup>193</sup>

incidence: 108/1319, conc. range: ≤ 500 µg/kg, Ø conc.: 44 µg/kg, country: unknown<sup>193</sup>

incidence: 83/943, conc. range: ≤ 1500 µg/kg, Ø conc.: 228 µg/kg, country: unknown<sup>193</sup>

incidence: 11/18, conc. range: ≤ 111 µg/kg, Ø conc.: 37 µg/kg, country: USA<sup>280</sup>

see also blackgram husk, bread crumbs, broiler finisher, broiler starter, cotton cake, cottonseed cake, cottonseed extract, cottonseed meal, feed, feed (cattle), feed (cow), feed (dog), feed (horse), feed (maize, gluten), feed (pig), feed (poultry), feed (rabbit), feed (rat/mice), feed (sheep), feeds, grain, fish meal, flour (wheat), groundnut cake, grower's mash, horsegram, layer's mash, maize, maize gluten, maize, white, milo, peanut cake, peanut cake (deoiled), peanut, kernels, peanut (oil cake), pearl millet, pig breeder's mash, pig finisher, pig starter, pod with haulms, poultry breeder's mash, rabbit pellets, redgram husk, rice, rice bran (deoiled), rice, broken, rice (polish), sesame cake, silk worm pupae, sorghum, soybean cake, soybean meal, wheat, wheat bran

#### AFLATOXINS

incidence: 1/1\*, conc.: 11 µg/kg, country: USA<sup>280</sup>, \*imported

incidence: 9/73, conc.: 20 µg/kg (3 sa), > 300 µg/kg (1 sa), country: USA<sup>195</sup>

incidence: 17/45, conc. range: > 20 µg/kg (12 sa), > 300 µg/kg (5 sa), country: USA<sup>195</sup>

see also maize germ, maize gluten, maize (dark grains), palm products, rice bran, soybeans, sunflower

#### AFLATOXINS (TOTAL)

incidence: 15/21\*, conc. range: 5–25 µg/kg, country: UK<sup>94</sup>, \*imported?

incidence: 4/37, conc. range: > 20 µg/kg (3 sa), > 300 µg/kg (1 sa), country: USA<sup>195</sup>

incidence: 17/45, conc. range: >20 µg/kg (12 sa), >300 µg/kg (5 sa), country: USA<sup>195</sup>  
see also maize germ, maize gluten, maize (dark grains), palm products, rice bran, soybeans, sunflower

#### DEOXYNIVALENOL

incidence: 2/4, conc. range: 830–1100 µg/kg, Ø conc.: 965 µg/kg, country: Egypt<sup>16</sup>  
see also barley, barley, husked, barley, unhusked (naked), barley (pressed), bone meal, bran, broilers feed, calf fattening mixed feed, coconut, expeller, corn cob mix silage, cottonseed cake, dairy cattle feed, egg production mixed feed, feed, feed components, feed, commercial mix, feed, mixed, feed, mixed (primarily maize), feed (barley), feed (cattle), feed (chicken), feed (dog), feed (fish), feed (mill run, from wheat), feed (mink), feed (pig), feed (poultry), feed (reindeer), feeds, grain, feeds, industrial, feedstuff, feedstuffs (rapeseed, turnip, fish meal, concentrates), fish meal, grain, mixed feed, grains, mixed, grains (no specification), maize, maize ears, maize fibre, maize germ, maize germ/bran, maize germ meal, maize gluten, maize kernels, maize meal, maize powder, maize screenings, maize stalks (pith), maize, “Baby”, maize, hybrid, maize, white, oats, rice bran, rice germ cake, rye, silage, sorghum, soybeans, triticale, wheat, wheat and barley, wheat, red hard winter, wheat, soft white winter, wheat, spring, wheat, winter

#### ZEARALENONE

incidence: 2/4, conc. range: 20–46 µg/kg, Ø conc.: 33 µg/kg, country: Egypt<sup>16</sup>  
incidence: 3/15\*, conc. range: 70–150 µg/kg (3 sa), country: USA<sup>370</sup>, \*includes 10 cottonseed and 5 cottonseed meal sa  
see also alfalfa, barley, barley, husked, barley, unhusked (naked), barley and feed, bone meal, bran, broilers feed, *Carthamus* cake, chick pea, concentrate, mixed, corn cob mix silage, cotton cake, cottonseed cake, diet (dairy cow), diet (poultry), diets (mixed), feed, feed components, feed, mixed, feed, mixed (primarily maize also maize, oats,

wheat), feed (bran), feed (broiler chicken), feed (cattle), feed (chicken), feed (dairy), feed (developing pig), feed (mill run, from wheat), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (starter chicken), feedstuff, fish meal, forage grass, grain, bruised, grain, mixed feed, grains (no specification), hay, maize, maize ears, maize flakes, maize germ, maize germ/bran, maize gluten, maize kernels, maize meal, maize oil cake, maize screenings, maize stalks (pith), maize, “Baby”, maize, hybrid, maize, shelled, maize, unshelled, maize, white, maize grain, artificially dried, maize grain, crib dried, maize grain, ensiled, milk production mixed feed, oats, *Paspalum palidosum*, straw, peanut hulls/skins, rice bran, rice germ, rice germ cake, rye, silage, sorghum, soybeans, soybeans, extracted, sunflower cake, tapioca, triticale, wheat, wheat bran, wheat bran and chana testa, wheat soya meal

**Cottonseed cake** may contain the following mycotoxins:

#### AFLATOXIN B<sub>1</sub>

incidence: 44/55, conc. range: 44.5–397.4 µg/kg, Ø conc.: 138.6 µg/kg, country: India<sup>253</sup>  
incidence: 1/1, conc.: ≈500 µg/kg, country: UK<sup>284</sup>  
incidence: 3/3, conc. range: 3.2–4.4 µg/kg, Ø conc.: 3.6 µg/kg, country: Egypt<sup>285</sup>  
incidence: 3/3, conc. range: 4.2–6.1 µg/kg, Ø conc.: 5.2 µg/kg, country: Egypt<sup>285</sup>  
incidence: 4/13, conc. range: 40–500 µg/kg, country: India<sup>358</sup>  
see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed extract, cottonseed meal, cottonseed meal

(ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cyad meal, dairy cattle feed, dairy cattle feed (containing 2–5% peanut products), dairy cattle feed (containing 6–10% peanut products), dairy cattle feed (containing 6–12% peanut products), dairy cattle feed (containing more than 20% peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60% maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

#### AFLATOXIN B<sub>2</sub>

incidence: 3/3, conc. range: 1.6–3.1 µg/kg, Ø conc.: 2.2 µg/kg, country: Egypt<sup>285</sup>

incidence: 3/3, conc. range: 2.7–3 µg/kg, Ø conc.: 2.8 µg/kg, country: Egypt<sup>285</sup>  
see also animal feedstuff (dairy cake), bird food, bird food, wild, biri testa, blackgram, blackgram husk, cottonseed, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meats, dog food, egg production mixed feed, feed, compound, feed (cat), feed (cattle), feed (dog), feed (pig), feed (poultry), feed (rabbit), feed (sheep), fish meal, horsegram, maize, maize gluten, maize husk, maize, ground, maize, preharvest, mung testa, mustard cake, niger cake, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanuts, peanut, kernels, redgram husk, rice bran, rice bran (deoiled), rice chaff, rice meal, rice (polish), sal seed cake, sesame cake, sorghum, soybean meal, soybeans, wheat, wheat bran

#### AFLATOXIN G<sub>1</sub>

incidence: 2/3, conc. range: 1.8–2.6 µg/kg,

Ø conc.: 2.2 µg/kg, country: Egypt<sup>285</sup>

incidence: 3/3, conc. range: 1.9–2.9 µg/kg,

Ø conc.: 2.4 µg/kg, country: Egypt<sup>285</sup>

incidence: 1/13, conc. range: <1 µg/kg,

country: India<sup>358</sup>

see also animal feedstuffs (dairy cake), bird food, bird food, wild, concentrate, mixed, cottonseed, feed (cat), feed (chicken), feed (dog), maize, maize, ground, maize, preharvest, meat meal, milk production mixed feed, murkool, peanut cake, peanut expeller, peanut hay, peanut meal, peanuts, rice bran, rice germ, sorghum, soybeans, wheat, wheat bran, wheat bran and chana testa

#### AFLATOXIN B

incidence: ?/13, conc. range: 6–10 µg/kg, Ø

conc.: 7.3 µg/kg, country: Pakistan<sup>162</sup>

incidence: 5/19, conc. range: 4–19 µg/kg, Ø

conc.: 9 µg/kg, country: Pakistan<sup>412</sup>

see also barley, cocoa (oil cake), feed, feed (cattle), feed (maize, gluten), feed (pig), feed (poultry), flour (wheat), lucern (dried), maize, maize gluten, maize grains, oats, peanut (oil cake), rice, broken, sorghum, soybean (oil cake), sunflower (oil cake), wheat

## AFLATOXIN G

incidence: ?/13, conc. range: 4–8 µg/kg,  
 Ø conc.: 5.7 µg/kg, country: Pakistan<sup>162</sup>  
 incidence: 5/19, conc. range: 0–5 µg/kg,  
 Ø conc.: 3.6 µg/kg, country: Pakistan<sup>412</sup>  
 see also feed (maize, gluten), maize gluten,  
 maize grains, rice, broken

## AFLATOXIN

incidence: 3/6, conc. range: 0–175 µg/kg,  
 country: Nigeria<sup>109</sup>  
 see also blackgram husk, bread crumbs,  
 broiler finisher, broiler starter, cotton cake,  
 cottonseed, cottonseed extract, cottonseed  
 meal, feed, feed (cattle), feed (cow), feed  
 (dog), feed (horse), feed (maize, gluten), feed  
 (pig), feed (poultry), feed (rabbit), feed  
 (rat/mice), feed (sheep), feeds, grain, fish  
 meal, flour (wheat), groundnut cake,  
 grower's mash, horsegram, layer's mash,  
 maize, maize gluten, maize, white, milo,  
 peanut cake, peanut cake (deoiled), peanut,  
 kernels, peanut (oil cake), pearl millet, pig  
 breeder's mash, pig finisher, pig starter, pod  
 with haulms, poultry breeder's mash, rabbit  
 pellets, redgram husk, rice, rice bran  
 (deoiled), rice, broken, rice (polish), sesame  
 cake, silk worm pupae, sorghum, soybean  
 cake, soybean meal, wheat, wheat bran

## CITRININ

incidence: 1/4, conc.: 50 µg/kg, country:  
 Egypt<sup>16</sup>  
 see also barley, barley, oats, barley-soybean  
 diet, feed, feed, mixed, feed (cattle), feed  
 (pig), fish meal, hay, maize, maize, white,  
*Makhana (Euryale ferox* Salisb) puffs, oats,  
 palm products, peas and beans, rice bran,  
 rice germ, wheat, wheat and other grains  
 (moldy), wheat bran

## DEOXYNIVALENOL

incidence: 2/4, conc. range: 310–528 µg/kg,  
 Ø conc.: 419 µg/kg, country: Egypt<sup>16</sup>  
 see also barley, barley, husked, barley,  
 unhusked (naked), barley (pressed), bone  
 meal, bran, broilers feed, calf fattening mixed  
 feed, coconut, expeller, corn cob mix silage,  
 cottonseed, dairy cattle feed, egg production  
 mixed feed, feed, feed components, feed,

commercial mix, feed, mixed, feed, mixed  
 (primarily maize), feed (barley), feed (cattle),  
 feed (chicken), feed (dog), feed (fish), feed  
 (mill run, from wheat), feed (mink), feed  
 (pig), feed (poultry), feed (reindeer), feeds,  
 grain, feeds, industrial, feedstuff, feedstuffs  
 (rapeseed, turnip, fish meal, concentrates),  
 fish meal, grain, mixed feed, grains, mixed,  
 grains (no specification), maize, maize ears,  
 maize fibre, maize germ, maize germ/bran,  
 maize germ meal, maize gluten, maize  
 kernels, maize meal, maize powder, maize  
 screenings, maize stalks (pith), maize,  
 „Baby“, maize, hybrid, maize, white, oats,  
 rice bran, rice germ cake, rye, silage,  
 sorghum, soybeans, triticale, wheat, wheat  
 and barley, wheat, red hard winter, wheat,  
 soft white winter, wheat, spring, wheat,  
 winter

## ZEARALENONE

incidence: 4/4, conc. range: 8–22 µg/kg,  
 Ø conc.: 13 µg/kg, country: Egypt<sup>16</sup>  
 see also alfalfa, barley, barley, husked, barley,  
 unhusked (naked), barley and feed, bone  
 meal, bran, broilers feed, *Carthamus* cake,  
 chick pea, concentrate, mixed, corn cob mix  
 silage, cotton cake, cottonseed, diet (dairy  
 cow), diet (poultry), diets (mixed), feed, feed  
 components, feed, mixed, feed, mixed  
 (primarily maize also maize, oats, wheat),  
 feed (bran), feed (broiler chicken), feed  
 (cattle), feed (chicken), feed (dairy), feed  
 (developing pig), feed (mill run, from  
 wheat), feed (miscellaneous), feed (pig), feed  
 (poultry), feed (poultry, pig), feed (starter  
 chicken), feedstuff, fish meal, forage grass,  
 grain, bruised, grain, mixed feed, grains (no  
 specification), hay, maize, maize ears, maize  
 flakes, maize germ, maize germ/bran, maize  
 gluten, maize kernels, maize meal, maize oil  
 cake, maize screenings, maize stalks (pith),  
 maize, „Baby“, maize, hybrid, maize, shelled,  
 maize, unshelled, maize, white, maize grain,  
 artificially dried, maize grain, crib dried,  
 maize grain, ensiled, milk production mixed  
 feed, oats, *Paspalum palidosum*, straw, peanut  
 hulls/skins, rice bran, rice germ, rice germ  
 cake, rye, silage, sorghum, soybeans,



soybeans, extracted, sunflower cake, tapioca, triticale, wheat, wheat bran, wheat bran and chana testa, wheat soya meal

**Cottonseed extract** may contain the following mycotoxins:

**AFLATOXIN B<sub>1</sub>**

incidence: 3/7, conc. range:  $\leq 25$   $\mu\text{g}/\text{kg}$  (3 sa),  
 $\emptyset$  conc.: 8.7  $\mu\text{g}/\text{kg}$ , country: India<sup>247</sup>

see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20% peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5% peanut products), dairy cattle feed (containing 6–10% peanut products), dairy cattle feed (containing 6–12% peanut products), dairy cattle feed (containing more than 20% peanut products), diets, mixed, dog food, egg production mixed feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60% maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs,

manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

**AFLATOXIN B<sub>2</sub>**

incidence: 1/7, conc.: 5  $\mu\text{g}/\text{kg}$ , country: India<sup>247</sup>

see also animal feedstuff (dairy cake), bird food, bird food, wild, biri testa, blackgram, blackgram husk, cottonseed, cottonseed cake, cottonseed meal, cottonseed meal (ammoniated), cottonseed meats, dog food, egg production mixed feed, feed, compound, feed (cat), feed (cattle), feed (dog), feed (pig), feed (poultry), feed (rabbit), feed (sheep), fish meal, horsegram, maize, maize gluten, maize husk, maize, ground, maize, preharvest, mung testa, mustard cake, niger cake, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanuts, peanut, kernels, redgram husk, rice bran, rice bran (deoiled), rice chaff, rice meal, rice (polish), sal seed cake, sesame cake, sorghum, soybean meal, soybeans, wheat, wheat bran

**AFLATOXIN**

incidence: 3/7, conc. range: 6–19  $\mu\text{g}/\text{kg}$ ,  
 country: India<sup>247</sup>

see also blackgram husk, bread crumbs, broiler finisher, broiler starter, cotton cake, cottonseed, cottonseed cake, cottonseed meal, feed, feed (cattle), feed (cow), feed (dog), feed (horse), feed (maize, gluten), feed (pig), feed (poultry), feed (rabbit), feed (rat/mice), feed (sheep), feeds, grain, fish meal, flour

(wheat), groundnut cake, grower's mash, horsegram, layer's mash, maize, maize gluten, maize, white, milo, peanut cake, peanut cake (deoiled), peanut, kernels, peanut (oil cake), pearl millet, pig breeder's mash, pig finisher, pig starter, pod with haulms, poultry breeder's mash, rabbit pellets, redgram husk, rice, rice bran (deoiled), rice, broken, rice (polish), sesame cake, silk worm pupae, sorghum, soybean cake, soybean meal, wheat, wheat bran

**Cottonseed fines** may contain the following mycotoxins:

**AFLATOXINS**

incidence: 9/9, conc. range: 300–9620 µg/kg, Ø conc.: 4023.7 µg/kg, country: USA<sup>324</sup>  
see also animal feed (maize), animal feed (mixed), barley, copra meal, cottonseed meal, cottonseed meats, feed, feed ingredients (miscellaneous), feed, mixed, feed (excluding peanuts, suspect), feed (goat), feed (pig), feed (poultry), feedstuff, grain, grain, mixed feed, maize, maize, shelled, millet, peanut cake, peanut meal, peanut meal and by-products, peanuts, protein concentrates, rice, rice bran, sorghum, soybean meal, sunflower

**Cottonseed meal** may contain the following mycotoxins:

**AFLATOXIN B<sub>1</sub>**

incidence: 15/17, conc. range: 1.5–11.4 µg/kg, Ø conc.: 5.3 µg/kg, country: Colombia<sup>125</sup>  
incidence: 604/3218, conc. range: 151–1500 µg/kg, country: USA<sup>163,164</sup>  
incidence: 10/19, conc. range: 1.1–210 µg/kg, Ø conc.: 71.3 µg/kg, country: USA<sup>245</sup>  
incidence: 6/6, conc. range: 11.3–117.1 µg/kg, Ø conc.: 41.9 µg/kg, country: USA<sup>274</sup>  
incidence: 12/12, conc. range: 90–650 µg/kg, Ø conc.: 231.7 µg/kg, country: USA<sup>304</sup>  
incidence: 7/7, conc. range: 40–190 µg/kg, Ø conc.: 114.3 µg/kg, country: USA<sup>304</sup>  
see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran,

broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20% peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5% peanut products), dairy cattle feed (containing 6–10% peanut products), dairy cattle feed (containing 6–12% peanut products), dairy cattle feed (containing more than 20% peanut products), diets, mixed, dog food, egg production mixed feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60% maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum,

soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

#### AFLATOXIN B<sub>2</sub>

incidence: 6/17, conc. range: 1.1–2 µg/kg, Ø conc.: 1.6 µg/kg, country: Colombia<sup>125</sup>  
 incidence: 6/6, conc. range: 1.7–18.9 µg/kg, Ø conc.: 6.8 µg/kg, country: USA<sup>274</sup>  
 incidence: 7/7, conc. range: 10–55 µg/kg, Ø conc.: 32.9 µg/kg, country: USA<sup>304</sup>  
 see also animal feedstuffs (dairy cake), bird food, bird food, wild, biri testa, blackgram, blackgram husk, cottonseed, cottonseed cake, cottonseed extract, cottonseed meal (ammoniated), cottonseed meats, dog food, egg production mixed feed, feed, compound, feed (cat), feed (cattle), feed (dog), feed (pig), feed (poultry), feed (rabbit), feed (sheep), fish meal, horsegram, maize, maize gluten, maize husk, maize, ground, maize, preharvest, mung testa, mustard cake, niger cake, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanuts, peanut, kernels, redgram husk, rice bran, rice bran (deoiled), rice chaff, rice meal, rice (polish), sal seed cake, sesame cake, sorghum, soybean meal, soybeans, wheat, wheat bran

#### AFLATOXIN

incidence: 203/964, conc. range: ≤1500 µg/kg, Ø conc.: 136 µg/kg, country: unknown<sup>193</sup>  
 incidence: 278/1293, conc. range: ≤500 µg/kg, Ø conc.: 33 µg/kg, country: unknown<sup>193</sup>  
 incidence: 123/961, conc. range: ≤1500 µg/kg, Ø conc.: 150 µg/kg, country: unknown<sup>193</sup>  
 incidence: 12/15, conc. range: ≤143 µg/kg, Ø conc.: 43 µg/kg, country: USA<sup>280</sup>  
 incidence: 3/12, conc. range: ≤55 µg/kg, Ø conc.: 28 µg/kg, country: USA<sup>280</sup>  
 see also blackgram husk, bread crumbs, broiler finisher, broiler starter, cotton cake, cottonseed, cottonseed cake, cottonseed extract, feed, feed (cattle), feed (cow), feed (dog), feed (horse), feed (maize, gluten), feed (pig), feed (poultry), feed (rabbit), feed

(rat/mice), feed (sheep), feeds, grain, fish meal, flour (wheat), groundnut cake, grower's mash, horsegram, layer's mash, maize, maize gluten, maize, white, milo, peanut cake, peanut cake (deoiled), peanut, kernels, peanut (oil cake), pearl millet, pig breeder's mash, pig finisher, pig starter, pod with haulms, poultry breeder's mash, rabbit pellets, redgram husk, rice, rice bran (deoiled), rice, broken, rice (polish), sesame cake, silk worm pupae, sorghum, soybean cake, soybean meal, wheat, wheat bran

#### AFLATOXINS

incidence: 8/27, conc. range: >20 µg/kg (6 sa), >300 µg/kg (2 sa), country: USA<sup>195</sup>  
 incidence: 3/17, conc. range: >20 µg/kg (3 sa), country: USA<sup>195</sup>  
 see also animal feed (mixed), animal feed (maize), barley, copra meal, cottonseed, cottonseed fines, cottonseed meats, feed, feed ingredients (miscellaneous), feed, mixed, feed (excluding peanuts, suspect), feed (goat), feed (pig), feed (poultry), feedstuff, grain, grain, mixed feed, maize, maize, shelled, millet, peanut cake, peanut meal, peanut meal and by-products, peanuts, protein concentrates, rice, rice bran, sorghum, soybean meal, sunflower

**Cottonseed meal (ammoniated)** may contain the following mycotoxins:

#### AFLATOXIN B<sub>1</sub>

incidence: 6/6, conc. range: 8.7–19.5 µg/kg, Ø conc.: 14.1 µg/kg, country: USA<sup>274</sup>  
 see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20% peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (decorticated), cottonseed

meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60 % maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

#### AFLATOXIN B<sub>2</sub>

incidence: 6/6, conc. range: 2.5–6.3 µg/kg, Ø conc.: 4.4 µg/kg, country: USA<sup>274</sup>  
see also animal feedstuffs (dairy cake), bird food, bird food, wild, biri testa, blackgram,

blackgram husk, cottonseed, cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meats, dog food, egg production mixed feed, feed, compound, feed (cat), feed (cattle), feed (dog), feed (pig), feed (poultry), feed (rabbit), feed (sheep), fish meal, horsegram, maize, maize gluten, maize husk, maize, ground, maize, preharvest, mung testa, mustard cake, niger cake, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanuts, peanut, kernels, redgram husk, rice bran, rice bran (deoiled), rice chaff, rice meal, rice (polish), sal seed cake, sesame cake, sorghum, soybean meal, soybeans, wheat, wheat bran

**Cottonseed meal (decorticated)** may contain the following mycotoxins:

#### AFLATOXIN B<sub>1</sub>

incidence: 3/5, Ø conc.: 60 µg/kg, country: Egypt<sup>16</sup>

see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse),

feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60 % maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

**Cottonseed meats** may contain the following mycotoxins:

**AFLATOXIN B<sub>1</sub>**

incidence: 4/4, conc. range: 26.8–190.5 µg/kg, Ø conc.: 69.7 µg/kg, country: USA<sup>274</sup>  
see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed

meal (decorticated), cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60 % maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

**AFLATOXIN B<sub>2</sub>**

incidence: 4/4, conc. range: 4.7–29.7 µg/kg, Ø conc.: 11.2 µg/kg, country: USA<sup>274</sup>  
see also animal feedstuff (dairy cake), bird food, bird food, wild, biri testa, blackgram,

blackgram husk, cottonseed, cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), dog food, egg production mixed feed, feed, compound, feed (cat), feed (cattle), feed (dog), feed (pig), feed (poultry), feed (rabbit), feed (sheep), fish meal, horsegram, maize, maize gluten, maize husk, maize, ground, maize, preharvest, mung testa, mustard cake, niger cake, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanuts, peanut, kernels, redgram husk, rice bran, rice bran (deoiled), rice chaff, rice meal, rice (polish), sal seed cake, sesame cake, sorghum, soybean meal, soybeans, wheat, wheat bran

#### AFLATOXINS

incidence: 8/9, conc. range: 3–2560 µg/kg, Ø conc.: 318.2 µg/kg, country: USA<sup>324</sup>  
 see also animal feed (mixed), animal feed (maize), barley, copra meal, cottonseed fines, cottonseed meal, feed, feed ingredients (miscellaneous), feed, mixed, feed (excluding peanuts, suspect), feed (goat), feed (pig), feed (poultry), feedstuff, grain, grain, mixed feed, maize, maize, shelled, millet, peanut cake, peanut meal, peanut meal and by-products, peanuts, protein concentrates, rice, rice bran, sorghum, soybean meal, sunflower

**Cottonseed products** may contain the following mycotoxins:

#### AFLATOXIN B<sub>1</sub>

incidence: 40/120\* conc. range: 5–120 µg/kg, country: Denmark<sup>167</sup>,\* imported  
 see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats,

crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60 % maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

**Cottonseed (dehulled)** may contain the following mycotoxins:

#### AFLATOXIN B<sub>1</sub>

incidence: 15/15, conc. range: 7–3258 µg/kg, Ø conc.: 1117.9 µg/kg, country: USA<sup>136</sup>

see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60 % maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram

husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

**Crumbles** may contain the following mycotoxins:

AFLATOXIN B<sub>1</sub>

incidence: 1/2, conc.: 100 µg/kg, country: Australia<sup>181</sup>

see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60 % maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake,

maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

**Crumbles, grower** may contain the following mycotoxins:

**AFLATOXIN B<sub>1</sub>**

incidence: 1/3, conc.: 20 µg/kg, country: Australia<sup>121</sup>

see also alfalfa, *Ambadi* cake, animal feed-stuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more

than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60 % maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

**Cycad meal** may contain the following mycotoxins:

**AFLATOXIN B<sub>1</sub>**

incidence: 2/4, conc. range: 1.1–2.2 µg/kg, Ø conc.: 1.7 µg/kg, country: USA<sup>245</sup>

see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed,



calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, dairy cattle feed, dairy cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60 % maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame,

sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

**Dairy cattle feed** may contain the following mycotoxins:

**AFLATOXIN B<sub>1</sub>**

incidence: 14/14, conc. range: <5 µg/kg

(4 sa), 6–10 (1 sa), 11–20 µg/kg (5 sa), 21–30 µg/kg (3 sa), 37 µg/kg (1 sa), country: Germany<sup>298</sup>

incidence: 30/30, conc. range: <5 µg/kg

(10 sa), 6–10 µg/kg (6 sa), 11–20 µg/kg (9 sa), 21–30 µg/kg (5 sa), country: Germany<sup>298</sup>

incidence: 16/16, conc. range: <5 µg/kg

(6 sa), 6–10 µg/kg (6 sa), 11–20 µg/kg (4 sa), country: Germany<sup>298</sup>

see also alfalfa, *Ambadi* cake, animal feedstuffs

(dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed

(sheep), feed (50–60% maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

#### DEOXYNIVALENOL

incidence: 2/4, conc. range: 950–1056 µg/kg, Ø conc.: 1003 µg/kg, country: Egypt<sup>16</sup>  
see also barley, barley, husked, barley, unhusked (naked), barley (pressed), bone meal, bran, broilers feed, calf fattening mixed feed, coconut, expeller, corn cob mix silage, cottonseed, cottonseed cake, egg production mixed feed, feed, feed components, feed, commercial mix, feed, mixed, feed, mixed (primarily maize), feed (barley), feed (cattle), feed (chicken), feed (dog), feed (fish), feed (mill run, from wheat), feed (mink), feed (pig), feed (poultry), feed (reindeer), feeds, grain, feeds, industrial, feedstuff, feedstuffs (rapeseed, turnip, fish meal, concentrates), fish meal, grain, mixed feed, grains, mixed, grains (no specification), maize, maize ears, maize fibre, maize germ, maize germ/bran, maize germ meal, maize gluten, maize kernels, maize meal, maize powder, maize

screenings, maize stalks (pith), maize, “Baby”, maize, hybrid, maize, white, oats, rice bran, rice germ cake, rye, silage, sorghum, soybeans, triticale, wheat, wheat and barley, wheat, red hard winter, wheat, soft white winter, wheat, spring, wheat, winter

**Dairy cattle feed (containing 2–5% peanut products)** may contain the following mycotoxins:

#### AFLATOXIN B<sub>1</sub>

incidence: ?/13, conc. range: 15–100 µg/kg, country: Germany<sup>298</sup>

incidence: ?/20, conc. range: ≤240 µg/kg, country: Germany<sup>298</sup>

incidence: ?/16, conc. range: 16–260 µg/kg, country: Germany<sup>298</sup>

see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20% peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 6–10% peanut products), dairy cattle feed (containing 6–12% peanut products), dairy cattle feed (containing more than 20% peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60% maize), fish meal, grain by-products, grains (no specification),

greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

**Dairy cattle feed (containing 6–10 % peanut products)** may contain the following mycotoxins:

AFLATOXIN B<sub>1</sub>

incidence: ?/11, conc. range: 13–280 µg/kg,

country: Germany<sup>298</sup>

incidence: ?/5, conc. range: ≤550 µg/kg,

country: Germany<sup>298</sup>

see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed

meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60 % maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

**Dairy cattle feed (containing 6–12 % peanut products)** may contain the following mycotoxins:

AFLATOXIN B<sub>1</sub>

incidence: ?/2, conc. range: 25 µg/kg, country: Germany<sup>298</sup>

see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60 % maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels,

peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

**Dairy cattle feed (containing more than 20 % peanut products)** may contain the following mycotoxins:

AFLATOXIN B<sub>1</sub>

incidence: ?/3, conc. range: 80–1100 µg/kg, country: Germany<sup>298</sup>

see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60 % maize), fish meal, grain by-products, grains (no

specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

**Diet (dairy cow)** may contain the following mycotoxins:

**OCHRATOXIN A**

incidence: 1/7345, conc.: nc, country: Hungary<sup>209</sup>

see also alfalfa, barley, barley, oats, barley (high moisture), barley-soybean diet, bird food, domestic, bird food, wild, broilers feed, cereal grains, citrus pulp, coconut, expeller, corn cob mix silage, diet (poultry), diet (starter), dog food, eat, egg production mixed feed, feed, feed wheat, oat and barley, feed, commercial mix, feed, mixed, feed, mixed (pelleted), feed (broilers), feed (cat), feed (cattle), feed (cereals), feed (pig), feed ec (pig), feed (poultry), feed ec (poultry), feed (poultry, pig), feed ec (rabbit), feed (trout), grain, mixed feed, grains, mixed, grains (heated), hay, horse bean, maize, maize feed, milo, maize gluten, maize meal, maize, white, *Makhana* (*Euryale ferox* Salisb) puffs, milk production mixed feed, millet, oat and barley

(hammer-milled), oats, palm products, peanut cake, peas, peas and beans, pet food, pig feedstuffs, pig grower diet, pig meal, piglet diet, poultry feedstuffs, rice bran, rice germ, rice germ cake, rye, sorghum, soybean groats, sunflower, sunflower seeds, extracted, tapioca, triticale, *Vicia faba*, wheat, wheat and barley, wheat bran, wheat hay, wheat, oats

**ZEARALENONE**

incidence: 1/7345, conc.: nc, country: Hungary<sup>209</sup>

see also alfalfa, barley, barley, husked, barley, unhusked (naked), barley and feed, bone meal, bran, broilers feed, *Carthamus* cake, chick pea, concentrate, mixed, corn cob mix silage, cotton cake, cottonseed, cottonseed cake, diet (poultry), diets (mixed), feed, feed components, feed, mixed, feed, mixed (primarily maize also maize, oats, wheat), feed (bran), feed (broiler chicken), feed (cattle), feed (chicken), feed (dairy), feed (developing pig), feed (mill run, from wheat), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (starter chicken), feedstuff, fish meal, forage grass, grain, bruised, grain, mixed feed, grains (no specification), hay, maize, maize ears, maize flakes, maize germ, maize germ/bran, maize gluten, maize kernels, maize meal, maize oil cake, maize screenings, maize stalks (pith), maize, "Baby", maize, hybrid, maize, shelled, maize, unshelled, maize, white, maize grain, artificially dried, maize grain, crib dried, maize grain, ensiled, milk production mixed feed, oats, *Paspalum palidosum*, straw, peanut hulls/skins, rice bran, rice germ, rice germ cake, rye, silage, sorghum, soybeans, soybeans, extracted, sunflower cake, tapioca, triticale, wheat, wheat bran, wheat bran and chana testa, wheat soya meal

**Diet (grower)** may contain the following mycotoxins:

**PATULIN**

incidence: 1/7345, conc.: nc, country: Hungary<sup>209</sup>

see also hay, maize meal, piglet diet, wheat

**RUBRATOXIN B**

incidence: 1/7345, conc.: nc, country:

Hungary<sup>209</sup>

see also diet (poultry), diet (starter), pig diet (fattening), pig grower diet, soybean groats, wheat

**T-2 TOXIN**

incidence: 1/7345, conc.: nc, country:

Hungary<sup>209</sup>

see also alfalfa, barley, bran, diet (poultry), feed, feed components, feed, layer, feed, mixed, feed (dog), feed (fish), feed (mink), feed (pig), feed (poultry), feedstuff, forage grass, grain, mixed feed, grains (no specification), hay, maize, maize germ/bran, maize gluten, maize meal, maize screenings, maize stalks (pith), oat and barley (hammer-milled), oats, peanuts, pig grower diet, piglet diet, rye, sorghum, triticale, wheat

**Diet (poultry)** may contain the following mycotoxins:

**OCHRATOXIN A**

incidence: 4/7345, conc. range: nc, country:

Hungary<sup>209</sup>

see also alfalfa, barley, barley, oats, barley (high moisture), barley-soybean diet, bird food, domestic, bird food, wild, broilers feed, cereal grains, citrus pulp, coconut, expeller, corn cob mix silage, diet (dairy cow), diet (starter), dog food, eat, egg production mixed feed, feed, feed wheat, oat and barley, feed, commercial mix, feed, mixed, feed, mixed (pelleted), feed (broilers), feed (cat), feed (cattle), feed (cereals), feed (pig), feed ec (pig), feed (poultry), feed ec (poultry), feed (poultry, pig), feed ec (rabbit), feed (trout), grain, mixed feed, grains, mixed, grains (heated), hay, horse bean, maize, maize feed, milo, maize gluten, maize meal, maize, white, *Makhana* (*Euryale ferox* Salisb) puffs, milk production mixed feed, millet, oat and barley (hammer-milled), oats, palm products, peanut cake, peas, peas and beans, pet food, pig feedstuffs, pig grower diet, pig meal, piglet diet, poultry feedstuffs, rice bran, rice germ, rice germ cake, rye, sorghum, soybean

groats, sunflower, sunflower seeds, extracted, tapioca, triticale, *Vicia faba*, wheat, wheat and barley, wheat bran, wheat hay, wheat, oats

**RUBRATOXIN B**

incidence: 2/7345, conc. range: nc, country:

Hungary<sup>209</sup>

see also diet (grower), diet (starter), pig diet (fattening), pig grower diet, soybean groats, wheat

**T-2 TOXIN**

incidence: 1/7345, conc.: nc, country:

Hungary<sup>209</sup>

see also alfalfa, barley, bran, diet (grower), feed, feed components, feed, layer, feed, mixed, feed (dog), feed (fish), feed (mink), feed (pig), feed (poultry), feedstuff, forage grass, grain, mixed feed, grains (no specification), hay, maize, maize germ/bran, maize gluten, maize meal, maize screenings, maize stalks (pith), oat and barley (hammer-milled), oats, peanuts, pig grower diet, piglet diet, rye, sorghum, triticale, wheat

**ZEARALENONE**

incidence: 6/7345, conc. range: nc, country:

Hungary<sup>209</sup>

see also alfalfa, barley, barley, husked, barley, unhusked (naked), barley and feed, bone meal, bran, broilers feed, *Carthamus* cake, chick pea, concentrate, mixed, corn cob mix silage, cotton cake, cottonseed, cottonseed cake, diet (dairy cow), diets (mixed), feed, feed components, feed, mixed, feed, mixed (primarily maize also maize, oats, wheat), feed (bran), feed (broiler chicken), feed (cattle), feed (chicken), feed (dairy), feed (developing pig), feed (mill run, from wheat), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (starter chicken), feedstuff, fish meal, forage grass, grain, bruised, grain, mixed feed, grains (no specification), hay, maize, maize ears, maize flakes, maize germ, maize germ/bran, maize gluten, maize kernels, maize meal, maize oil cake, maize screenings, maize stalks (pith), maize, "Baby", maize, hybrid, maize, shelled, maize, unshelled, maize, white, maize grain, artificially dried, maize grain, crib dried, maize grain, ensiled,

milk production mixed feed, oats, *Paspalum palidosum*, straw, peanut hulls/skins, rice bran, rice germ, rice germ cake, rye, silage, sorghum, soybeans, soybeans, extracted, sunflower cake, tapioca, triticale, wheat, wheat bran, wheat bran and chana testa, wheat soya meal

**Diet (starter)** may contain the following mycotoxins:

#### OCHRATOXIN A

incidence: 4/7345, conc. range: nc, country: Hungary<sup>209</sup>

see also alfalfa, barley, barley, oats, barley (high moisture), barley-soybean diet, bird food, domestic, bird food, wild, broilers feed, cereal grains, citrus pulp, coconut, expeller, corn cob mix silage, diet (dairy cow), diet (poultry), dog food, eat, egg production mixed feed, feed, feed wheat, oat and barley, feed, commercial mix, feed, mixed, feed, mixed (pelleted), feed (broilers), feed (cat), feed (cattle), feed (cereals), feed (pig), feed ec (pig), feed (poultry), feed ec (poultry), feed (poultry, pig), feed ec (rabbit), feed (trout), grain, mixed feed, grains, mixed, grains (heated), hay, horse bean, maize, maize feed, milo, maize gluten, maize meal, maize, white, *Makhana* (*Euryale ferox* Salisb) puffs, milk production mixed feed, millet, oat and barley (hammer-milled), oats, palm products, peanut cake, peas, peas and beans, pet food, pig feedstuffs, pig grower diet, pig meal, piglet diet, poultry feedstuffs, rice bran, rice germ, rice germ cake, rye, sorghum, soybean groats, sunflower, sunflower seeds, extracted, tapioca, triticale, *Vicia faba*, wheat, wheat and barley, wheat bran, wheat hay, wheat, oats

#### RUBRATOXIN B

incidence: 2/7345, conc. range: nc, country: Hungary<sup>209</sup>

see also diet (grower), diet (poultry), pig diet (fattening), pig grower diet, soybean groats, wheat

**Diets, mixed** may contain the following mycotoxins:

#### AFLATOXIN B<sub>1</sub>

incidence: 32/111, conc. range: 1–20 µg/kg (20 sa), 21–100 µg/kg (8 sa), 101–300 µg/kg (4 sa), country: USA<sup>370</sup>

see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60 % maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled),

peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

#### ZEARALENONE

incidence: 2/10, conc. range: 70–150 µg/kg (2 sa), country: USA<sup>370</sup>

see also alfalfa, barley, barley, husked, barley, unhusked (naked), barley and feed, bone meal, bran, broilers feed, *Carthamus* cake, chick pea, concentrate, mixed, corn cob mix silage, cotton cake, cottonseed, cottonseed cake, diet (dairy cow), diet (poultry), feed, feed components, feed, mixed, feed, mixed (primarily maize also maize, oats, wheat), feed (bran), feed (broiler chicken), feed (cattle), feed (chicken), feed (dairy), feed (developing pig), feed (mill run, from wheat), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (starter chicken), feedstuff, fish meal, forage grass, grain, bruised, grain, mixed feed, grains (no specification), hay, maize, maize ears, maize flakes, maize germ, maize germ/bran, maize gluten, maize kernels, maize meal, maize oil cake, maize screenings, maize stalks (pith), maize, “Baby”, maize, hybrid, maize, shelled, maize, unshelled, maize, white, maize grain, artificially dried, maize grain, crib dried, maize grain, ensiled, milk production mixed feed, oats, *Paspalum palidusum*, straw, peanut hulls/skins, rice bran, rice germ, rice germ cake, rye, silage, sorghum, soybeans, soybeans, extracted, sunflower cake, tapioca, triticale, wheat, wheat bran, wheat bran and chana testa, wheat soya meal

#### DOG FEED

see Feed (dog)

**Dog food** may contain the following mycotoxins:

#### AFLATOXIN B<sub>1</sub>

incidence: 3/45, conc. range: 15–25 µg/kg,

Ø conc.: 19 µg/kg, country: Brazil<sup>4</sup>

see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60 % maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, cocos, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller,



peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

#### AFATOXIN B<sub>2</sub>

incidence: 1/45, conc.: 12 µg/kg, country: Brazil<sup>4</sup>

see also animal feedstuffs (dairy cake), bird food, bird food, wild, biri testa, blackgram, blackgram husk, cottonseed, cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meats, egg production mixed feed, feed, compound, feed (cat), feed (cattle), feed (dog), feed (pig), feed (poultry), feed (rabbit), feed (sheep), fish meal, horsegram, maize, maize gluten, maize husk, maize, ground, maize, preharvest, mung testa, mustard cake, niger cake, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanuts, peanut, kernels, redgram husk, rice bran, rice bran (deoiled), rice chaff, rice meal, rice (polish), sal seed cake, sesame cake, sorghum, soybean meal, soybeans, wheat, wheat bran

#### FUMONISIN B<sub>1</sub>

incidence: 1/35, conc.: 105 µg/kg, country: UK<sup>42</sup>

see also barley, bird food, wild, feed, feed, complete ration, feed, general, feed, layer, feed, maize-based, feed, mixed, feed, pelleted ration, feed, screenings, feed, sweet, feed (cat), feed (chicken), feed (dog), feed (gluten), feed (broilers), feed (horse), feed (maize), feed (pig), feed (poultry), feed (rat), feed (rodent), forage grass, maize, maize and maize screenings, maize bran, maize ears, maize fine fractions, maize flakes, maize germ, maize germ/bran, maize germ meal,

maize gluten, maize grits, maize kernels, maize meal, maize powder, maize screenings, maize, "Baby", maize, ground, maize, preharvest, maize, sweet feed, maize/oats mix, rat chow, silage, sorghum, soybeans, wheat

#### FUMONISIN B<sub>2</sub>

incidence: 1/35, conc.: 30 µg/kg, country: UK<sup>42</sup>

see also barley, bird food, wild, feed, feed, maize-based, feed, mixed, feed (cat), feed (dog), feed (gluten), feed (horse), feed (maize), feed (poultry), feed (rodent), maize, maize bran, maize fine fractions, maize flakes, maize germ, maize germ/bran, maize germ meal, maize gluten, maize grits, maize kernels, maize meal, maize powder, maize screenings, maize, "Baby", maize, ground, maize, preharvest, rat chow, wheat

#### OCHRATOXIN A

incidence: 2/35, conc. range: 1.1–1.3 µg/kg, Ø conc.: 1.2 µg/kg, country: UK<sup>42</sup>

see also alfalfa, barley, barley, oats, barley (high moisture), barley-soybean diet, bird food, domestic, bird food, wild, broilers feed, cereal grains, citrus pulp, coconut, expeller, corn cob mix silage, diet (dairy cow), diet (poultry), diet (starter), eat, egg production mixed feed, feed, feed wheat, oat and barley, feed, commercial mix, feed, mixed, feed, mixed (pelleted), feed (broilers), feed (cat), feed (cattle), feed (cereals), feed (pig), feed ec (pig), feed (poultry), feed ec (poultry), feed (poultry, pig), feed ec (rabbit), feed (trout), grain, mixed feed, grains, mixed, grains (heated), hay, horse bean, maize, maize feed, milo, maize gluten, maize meal, maize, white, *Makhana* (*Euryale ferox* Salisb) puffs, milk production mixed feed, millet, oat and barley (hammer-milled), oats, palm products, peanut cake, peas, peas and beans, pet food, pig feedstuffs, pig grower diet, pig meal, piglet diet, poultry feedstuffs, rice bran, rice germ, rice germ cake, rye, sorghum, soybean groats, sunflower, sunflower seeds, extracted, tapioca, triticale, *Vicia faba*, wheat, wheat and barley, wheat bran, wheat hay, wheat, oats

**Eat** may contain the following mycotoxins:

**OCHRATOXIN A**

incidence: 1/7345, conc. range: nc, country: Hungary<sup>209</sup>

see also alfalfa, barley, barley, oats, barley (high moisture), barley-soybean diet, bird food, domestic, bird food, wild, broilers feed, cereal grains, citrus pulp, coconut, expeller, corn cob mix silage, diet (dairy cow), diet (poultry), diet (starter), dog food, egg production mixed feed, feed, feed wheat, oat and barley, feed, commercial mix, feed, mixed, feed, mixed (pelleted), feed (broilers), feed (cat), feed (cattle), feed (cereals), feed (pig), feed ec (pig), feed (poultry), feed ec (poultry), feed (poultry, pig), feed ec (rabbit), feed (trout), grain, mixed feed, grains, mixed, grains (heated), hay, horse bean, maize, maize feed, milo, maize gluten, maize meal, maize, white, *Makhana* (*Euryale ferox* Salisb) puffs, milk production mixed feed, millet, oat and barley (hammer-milled), oats, palm products, peanut cake, peas, peas and beans, pet food, pig feedstuffs, pig grower diet, pig meal, piglet diet, poultry feedstuffs, rice bran, rice germ, rice germ cake, rye, sorghum, soybean groats, sunflower, sunflower seeds, extracted, tapioca, triticale, *Vicia faba*, wheat, wheat and barley, wheat bran, wheat hay, wheat, oats

**Egg production mixed feed** may contain the following mycotoxins:

**AFLATOXIN B<sub>1</sub>**

incidence: 1/5, conc.: 10 µg/kg, country: Egypt<sup>16</sup>

see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake,

cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meals, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60 % maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

**AFLATOXIN B<sub>2</sub>**

incidence: 1/5, conc.: 20 µg/kg, country: Egypt<sup>16</sup>

see also animal feedstuffs (dairy cake), bird food, bird food, wild, biri testa, blackgram, blackgram husk, cottonseed, cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meats, dog food, feed, compound, feed (cat), feed (cattle), feed (dog), feed (pig), feed (poultry), feed (rabbit), feed (sheep), fish meal, horsegram, maize, maize gluten, maize husk, maize, ground, maize, preharvest, mung testa, mustard cake, niger cake, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanuts, peanut, kernels, redgram husk, rice bran, rice bran (deoiled), rice chaff, rice meal, rice (polish), sal seed cake, sesame cake, sorghum, soybean meal, soybeans, wheat, wheat bran

#### DEOXYNIVALENOL

incidence: 3/4, conc. range: 225–528 µg/kg, Ø conc.: 345 µg/kg, country: Egypt<sup>16</sup>  
 see also barley, barley, husked, barley, unhusked (naked), barley (pressed), bone meal, bran, broilers feed, calf fattening mixed feed, coconut, expeller, corn cob mix silage, cottonseed, cottonseed cake, dairy cattle feed, feed, feed components, feed, commercial mix, feed, mixed, feed, mixed (primarily maize), feed (barley), feed (cattle), feed (chicken), feed (dog), feed (fish), feed (mill run, from wheat), feed (mink), feed (pig), feed (poultry), feed (reindeer), feeds, grain, feeds, industrial, feedstuff, feedstuffs (rapeseed, turnip, fish meal, concentrates), fish meal, grain, mixed feed, grains, mixed, grains (no specification), maize, maize ears, maize fibre, maize germ, maize germ/bran, maize germ meal, maize gluten, maize kernels, maize meal, maize powder, maize screenings, maize stalks (pith), maize, “Baby”, maize, hybrid, maize, white, oats, rice bran, rice germ cake, rye, silage, sorghum, soybeans, triticale, wheat, wheat and barley, wheat, red hard winter, wheat, soft white winter, wheat, spring, wheat, winter

#### OCHRATOXIN A

incidence: 1/3, conc.: 14 µg/kg, country: Egypt<sup>16</sup>

see also alfalfa, barley, barley, oats, barley (high moisture), barley-soybean diet, bird food, domestic, bird food, wild, broilers feed, cereal grains, citrus pulp, coconut, expeller, corn cob mix silage, diet (dairy cow), diet (poultry), diet (starter), dog food, eat, feed, feed wheat, oat and barley, feed, commercial mix, feed, mixed, feed, mixed (pelleted), feed (broilers), feed (cat), feed (cattle), feed (cereals), feed (pig), feed ec (pig), feed (poultry), feed ec (poultry), feed (poultry, pig), feed ec (rabbit), feed (trout), grain, mixed feed, grains, mixed, grains (heated), hay, horse bean, maize, maize feed, milo, maize gluten, maize meal, maize, white, *Makhana (Euryale ferox Salisb)* puffs, milk production mixed feed, millet, oat and barley (hammer-milled), oats, palm products, peanut cake, peas, peas and beans, pet food, pig feedstuffs, pig grower diet, pig meal, piglet diet, poultry feedstuffs, rice bran, rice germ, rice germ cake, rye, sorghum, soybean groats, sunflower, sunflower seeds, extracted, tapioca, triticale, *Vicia faba*, wheat, wheat and barley, wheat bran, wheat hay, wheat, oats

**Feed** may contain the following mycotoxins:

#### AAL-TOXIN

incidence: 61/63, conc. range: 90–1470 µg/kg, Ø conc.: 560 µg/kg, country: USA<sup>334</sup>

#### AFLATOXIN B<sub>1</sub>

incidence: 12/42, conc. range: <5–40 µg/kg, country: South Africa<sup>79</sup>

incidence: 68/194, conc. range:

<5–400 µg/kg, country: South Africa<sup>79</sup>

incidence: 42/825, conc. range: ≤200 µg/kg, country: USA<sup>165</sup>

incidence: 61/61, conc. range: <1–60 µg/kg, country: The Netherlands<sup>283</sup>

incidence: 14/104\*, conc. range:

tr–1920 µg/kg, country: Czechoslovakia<sup>374</sup>,

\*partly imported

incidence: 45/105, conc. range: ≤300 µg/kg, country: Germany<sup>376</sup>

incidence: 41/226, conc. range:

0.1–1000 µg/kg, country: Spain<sup>377</sup>

incidence: ?/226, conc. range: <4–34 µg/kg, country: The Netherlands<sup>379</sup>  
 see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60 % maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts,

pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

#### AFLATOXIN B

incidence: 7/20, conc. range: ≥ 25→100 µg/kg, country: France<sup>46</sup>  
 see also barley, cocoa (oil cake), cottonseed cake, feed (cattle), feed (maize, gluten), feed (pig), feed (poultry), flour (wheat), lucern (dried), maize, maize gluten, maize grains, oats, peanut (oil cake), rice, broken, sorghum, soybean (oil cake), sunflower (oil cake), wheat

#### AFLATOXIN

incidence: 18/71, conc. range: 2–20 µg/kg (7 sa), >20 µg/kg (11 sa), country: Uruguay<sup>91</sup>  
 incidence: 2/120, conc. range: 14–24 µg/kg, Ø conc.: 19 µg/kg, country: Germany<sup>343</sup>  
 incidence: 4/118, conc. range: 1.4–4 µg/kg, country: Germany<sup>353</sup>  
 incidence: ?/142\*, conc. range: 0–2780 µg/kg, country: USA<sup>406</sup>, \*wild bird seed  
 see also blackgram husk, bread crumbs, broiler finisher, broiler starter, cotton cake, cottonseed, cottonseed cake, cottonseed extract, cottonseed meal, feed (cattle), feed (cow), feed (dog), feed (horse), feed (maize, gluten), feed (pig), feed (poultry), feed (rabbit), feed (rat/mice), feed (sheep), feeds, grain, fish meal, flour (wheat), groundnut cake, grower's mash, horsegram, layer's mash, maize, maize gluten, maize, white, milo, peanut cake, peanut cake (deoiled), peanut, kernels, peanut (oil cake), pearl millet, pig breeder's mash, pig finisher, pig starter, pod with haulms, poultry breeder's mash, rabbit pellets, redgram husk, rice, rice bran (deoiled), rice, broken, rice (polish), sesame cake, silk worm pupae, sorghum, soybean cake, soybean meal, wheat, wheat bran

## AFLATOXINS

incidence: 13/427, conc. range: 2–39 µg/kg,  
country: Slovenia<sup>424</sup>

incidence: 50/342, conc. range: 5–1906 µg/kg,  
country: Brazil<sup>425</sup>

see also animal feed (maize), animal feed (mixed), barley, copra meal, cottonseed, cottonseed fines, cottonseed meats, cottonseed meal, feed ingredients (miscellaneous), feed, mixed, feed (excluding peanuts, suspect), feed (goat), feed (pig), feed (poultry), feedstuff, grain, grain, mixed feed, maize, maize, shelled, millet, peanut cake, peanut meal, peanut meal and by-products, peanuts, protein concentrates, rice, rice bran, sorghum, soybean meal, sunflower

## CITRININ

incidence: 2/60, conc. range:  
2000–3000 µg/kg, country: USA<sup>32</sup>

see also barley, barley, oats, barley-soybean diet, cottonseed cake, feed, mixed, feed (cattle), feed (pig), fish meal, hay, maize, maize, white, *Makhana (Euryale ferox* Salisb) puffs, oats, palm products, peas and beans, rice bran, rice germ, wheat, wheat and other grains (moldy), wheat bran

## CYCLOPIAZONIC ACID

incidence: 55/63, conc. range:  
120–1820 µg/kg, Ø conc.: 340 µg/kg, country:  
USA<sup>334</sup>

see also chick mash, groundnut cake, maize, millet, little, peanuts, rice bran, wheat

## DEOXYNIVALENOL

incidence: 11/167, conc. range: 10–120 µg/kg,  
country: Finland<sup>10</sup>

incidence: 37/43 (barley), conc. range:  
≥20–<500 µg/kg, country: UK<sup>36</sup>

incidence: 1/1, conc.: 1400 µg/kg, country:  
Canada<sup>71</sup>

incidence: 1/1, conc. range: 40–60 µg/kg,  
country: ?<sup>71</sup>

incidence: 17/58, conc. range: 8–500 µg/kg  
(6 sa), 500–1000 µg/kg (4 sa), >1000 µg/kg  
(7 sa), country: Uruguay<sup>91</sup>

incidence: 4/4, conc. range: 210–623.3 µg/kg,  
Ø conc.: 361.7 µg/kg, country: USA\*<sup>120</sup>,

\*probably

incidence: 6/? , conc. range: 40–1800 µg/kg,  
country: USA<sup>174</sup>

incidence: 24/55, conc. range: <100 µg/kg  
(6 sa), 100–1000 µg/kg (14 sa), >1000 µg/kg  
(4 sa), country: Austria<sup>196</sup>

incidence: 193/319, conc. range: <100 µg/kg  
(35 sa), 100–1000 µg/kg (104 sa),  
>1000 µg/kg (54 sa), country: Austria<sup>196</sup>

incidence: 124/297, conc. range: <100 µg/kg  
(17 sa), 100–1000 µg/kg (76 sa), >1000 µg/kg  
(31 sa), country: Austria<sup>196</sup>

incidence: 112/244, conc. range: <100 µg/kg  
(11 sa), 100–1000 µg/kg (78 sa), >1000 µg/kg  
(23 sa), country: Austria<sup>196</sup>

incidence: 269/409, conc. range: <100 µg/kg  
(24 sa), 100–1000 µg/kg (164 sa),  
>1000 µg/kg (81 sa), country: Austria<sup>196</sup>

incidence: 174/389, conc. range: <100 µg/kg  
(25 sa), 100–1000 µg/kg (134 sa),  
>1000 µg/kg (15 sa), country: Austria<sup>196</sup>

incidence: 157/200, conc. range: <100 µg/kg  
(26 sa), 100–1000 µg/kg (113 sa),  
>1000 µg/kg (18 sa), country: Austria<sup>196</sup>

incidence: 63/63, conc. range:  
340–6020 µg/kg, Ø conc.: 730 µg/kg, country:  
USA<sup>334</sup>

incidence: 77/296, conc. range:

1.8–10,000 µg/kg, country: Germany<sup>353</sup>

incidence: 8/77, conc. range: <2–300 µg/kg,  
Ø conc.: 159.1 µg/kg, country: Saudi  
Arabia<sup>389</sup>

see also barley, barley, husked, barley, unhusked (naked), barley (pressed), bone meal, bran, broilers feed, calf fattening mixed feed, coconut, expeller, corn cob mix silage, cottonseed, cottonseed cake, dairy cattle feed, egg production mixed feed, feed components, feed, commercial mix, feed, mixed, feed, mixed (primarily maize), feed (barley), feed (cattle), feed (chicken), feed (dog), feed (fish), feed (mill run, from wheat), feed (mink), feed (pig), feed (poultry), feed (reindeer), feeds, grain, feeds, industrial, feedstuff, feedstuffs (rapeseed, turnip, fish meal, concentrates), fish meal, grain, mixed feed, grains, mixed, grains (no specification), maize, maize ears, maize fibre, maize germ, maize germ/bran, maize germ meal, maize

gluten, maize kernels, maize meal, maize powder, maize screenings, maize stalks (pith), maize, "Baby", maize, hybrid, maize, white, oats, rice bran, rice germ cake, rye, silage, sorghum, soybeans, triticale, wheat, wheat and barley, wheat, red hard winter, wheat, soft white winter, wheat, spring, wheat, winter

#### DEOXYNIVALENOL AND METABOLITES

incidence: 345/505, conc. range:  
20–8510 µg/kg, country: Slovenia<sup>424</sup>

#### DIACETOXYSCIRPENOL

incidence: 2/2, conc. range: 500–580 µg/kg,  
Ø conc.: 540 µg/kg, country: USA<sup>71</sup>  
incidence: 2/?, conc. range: 380–500 µg/kg,  
Ø conc.: 490 µg/kg, country: USA<sup>174</sup>  
see also alfalfa, barley, feed components, feed (dog), feed (fish), feed (mink), feed (pig), feed (poultry), feed (reindeer), feeds, grain, feedstuff, forage grass, grain, mixed feed, grains (no specification), maize, maize gluten, oat and barley (hammer-milled), oats, peanuts, soybeans, wheat

#### DIACETOXYSCIRPENOL AND METABOLITES

incidence: 19/215, conc. range: 20–160 µg/kg,  
country: Slovenia<sup>424</sup>

#### ERGOT ALKALOID

incidence: 15/35, conc. range: 150–450 µg/kg  
(6 sa), 450–750 µg/kg (6 sa), >750 µg/kg  
(3 sa), country: Uruguay<sup>91</sup>  
incidence: 2/2, conc. range:  
8000–18,000 µg/kg\*, Ø conc.: 13,000 µg/kg,  
country: Australia<sup>331</sup>, \* >90 % dihydroergosine  
see also feedstuff, grain, grain diets, tall  
fescue grass (*Festuca arundinacea* Scrb)

#### FUMONISIN B<sub>1</sub>

incidence: 1/1, conc.: 4 µg/kg, country: USA<sup>58</sup>  
incidence: 13/13, conc. range:  
1300–16,800 µg/kg, Ø conc.: 6246.2 µg/kg,  
country: USA<sup>101</sup>  
incidence: 18/18, conc. range: 0–2200 µg/kg,  
Ø conc.: 536 µg/kg, country: Spain<sup>159</sup>  
incidence: 1/1, conc.: 756 µg/kg, country:  
USA<sup>161</sup>

incidence: 7/50, conc. range:

278–637.2 µg/kg, Ø conc.: 366.4 µg/kg,  
country: Germany, France<sup>225</sup>

incidence: 23/63, conc. range: 20–2120 µg/kg,  
Ø conc.: 280 µg/kg, country: USA<sup>334</sup>

incidence: 11/13, conc. range:

89.1–2105 µg/kg, Ø conc.: 585 µg/kg,  
country: Spain<sup>347</sup>

incidence: 9/11, conc. range:

2150–10,650 µg/kg, Ø conc.: 5718 µg/kg,  
country: Brazil<sup>144</sup>

see also barley, bird food, wild, dog food,  
feed, complete ration, feed, general, feed,  
layer, feed, maize-based, feed, mixed, feed,  
pelleted ration, feed, screenings, feed, sweet,  
feed (broilers), feed (cat), feed (chicken), feed  
(dog), feed (gluten), feed (horse), feed  
(maize), feed (pig), feed (poultry), feed (rat),  
feed (rodent), forage grass, maize, maize and  
maize screenings, maize bran, maize ears,  
maize fine fractions, maize flakes, maize  
germ, maize germ/bran, maize germ meal,  
maize gluten, maize grits, maize kernels,  
maize meal, maize powder, maize screenings,  
maize, "Baby", maize, ground, maize,  
preharvest, maize, sweet feed, maize/oats mix,  
rat chow, silage, sorghum, soybeans, wheat

#### FUMONISIN B<sub>2</sub>

incidence: 13/13, conc. range:

100–6500 µg/kg, Ø conc.: 2253.8 µg/kg,  
country: USA<sup>101</sup>

incidence: 8/18, conc. range: 0–600 µg/kg,  
Ø conc.: 308 µg/kg, country: Spain<sup>159</sup>

incidence: 1/1, conc.: 252 µg/kg, country:  
USA<sup>161</sup>

incidence: 2/50, conc. range:

109.1–144.8 µg/kg, Ø conc.: 127 µg/kg,  
country: Germany, France<sup>225</sup>

incidence: 9/11, conc. range: 740–4060 µg/kg,  
Ø conc.: 1991 µg/kg, country: Brazil<sup>414</sup>

see also barley, bird food, wild, dog food,  
feed, maize-based, feed, mixed, feed (cat),  
feed (dog), feed (gluten), feed (horse), feed  
(maize), feed (poultry), feed (rodent), maize,  
maize bran, maize fine fractions, maize  
flakes, maize germ, maize germ/bran, maize  
germ meal, maize gluten, maize grits, maize  
kernels, maize meal, maize powder, maize

screenings, maize, “Baby”, maize, ground, maize, preharvest, rat chow, wheat

#### FUMONISIN B<sub>3</sub>

incidence: 12/13, conc. range: 50–2650 µg/kg, Ø conc.: 560 µg/kg, country: USA<sup>101</sup>  
see also feed (maize), feed (rodent), maize, maize bran, maize fine fractions, maize germ meal, maize kernels, maize powder, maize screenings

#### FUSARIC ACID

incidence: 15/15, conc. range: 70–12,390 µg/kg, Ø conc.: 3367 µg/kg, country: USA<sup>413</sup>  
see also feedstuff (barley), feedstuff (dry corn), feedstuff (high-moisture corn), feedstuff (wheat), feedstuff (whole seeds)

#### NEOSOLANIOL

incidence: 1/77, conc.: 200 µg/kg, country: Saudi Arabia<sup>389</sup>  
see also feed components, feed, mixed, feed (poultry), peanut cake, wheat

#### NIVALENOL

incidence: 4/77, conc.: 25–600 µg/kg, Ø conc.: 337.5 µg/kg, country: Saudi Arabia<sup>389</sup>  
see also barley, barley, husked, barley, unhusked (naked), barley (pressed), bran, feed components, feed (cattle), feed (poultry), feed (reindeer), feeds, industrial, maize, maize ears, maize germ, maize germ/bran, maize gluten, maize kernels, maize meal, maize powder, maize screenings, maize, “Baby”, oats, rye, silage, triticale, wheat

#### OCHRATOXIN A

incidence: 30/170, conc. range: 100–1000 µg/kg, country: Austria<sup>29</sup>  
incidence: 3/10, conc. range: 140–360 µg/kg, country: Tunisia<sup>31</sup>  
incidence: 57/177, conc. range: ≤2389 µg/kg, country: Germany<sup>73</sup>  
incidence: 5/28, conc. range: ≤670 µg/kg, country: Germany<sup>73</sup>  
incidence: 38/608, conc. range: ≤206 µg/kg, country: Germany<sup>73</sup>  
incidence: 21/150, conc. range: ≤40 µg/kg, country: Germany<sup>73</sup>

incidence: 54/100, conc. range: ≤1300 µg/kg, country: Norway<sup>291</sup>  
incidence: 68/384, conc. range: 0.1–≥20 µg/kg, country: Germany<sup>332</sup>  
incidence: 42/170, conc. range: 0.1–145 µg/kg, country: Germany<sup>353</sup>  
incidence: 8/150, conc. range: 50–200 µg/kg, country: Poland<sup>359</sup>  
incidence: 216/235, conc. range: tr–400 µg/kg, country: Yugoslavia<sup>373</sup>  
incidence: 24/326, conc. range: 20–580 µg/kg, country: Slovenia<sup>424</sup>  
incidence: 9/342, conc. range: 14–745 µg/kg, country: Brazil<sup>425</sup>

see also alfalfa, barley, barley, oats, barley (high moisture), barley-soybean diet, bird food, domestic, bird food, wild, broilers feed, cereal grains, citrus pulp, coconut, expeller, corn cob mix silage, diet (dairy cow), diet (poultry), diet (starter), dog food, eat, egg production mixed feed, feed wheat, oat and barley, feed, commercial mix, feed, mixed, feed, mixed (pelleted), feed (broilers), feed (cat), feed (cattle), feed (cereals), feed (pig), feed ec (pig), feed (poultry), feed ec (poultry), feed (poultry, pig), feed ec (rabbit), feed (trout), grain, mixed feed, grains, mixed, grains (heated), hay, horse bean, maize, maize feed, milo, maize gluten, maize meal, maize, white, *Makhana* (*Euryale ferox* Salisb) puffs, milk production mixed feed, millet, oat and barley (hammer-milled), oats, palm products, peanut cake, peas, peas and beans, pet food, pig feedstuffs, pig grower diet, pig meal, piglet diet, poultry feedstuffs, rice bran, rice germ, rice germ cake, rye, sorghum, soybean groats, sunflower, sunflower seeds, extracted, tapioca, triticale, *Vicia faba*, wheat, wheat and barley, wheat bran, wheat hay, wheat, oats

#### PR TOXIN

incidence: 48/63, conc. range: 50–260 µg/kg, Ø conc.: 130 µg/kg, country: USA<sup>334</sup>

#### TENUAZONIC ACID

incidence: 1/1, conc.: 10 µg/kg, country: Australia<sup>188</sup>  
see also feed (GP No. 1), oilseed rape meal, sunflower seed meal, sunflower seeds, ensiling

TYPE-A-TRICHOHECENE (HT-2 TOXIN,  
T-2 TOXIN)

incidence: 7/174, conc. range:

18.8–29.3 µg/kg, country: Germany<sup>353</sup>

T-2 TOXIN

incidence: 2/2, conc. range: 76–300 µg/kg,  
Ø conc.: 188 µg/kg, country: USA<sup>71</sup>

see also alfalfa, barley, bran, diet (grower),  
diet (poultry), feed components, feed, layer,  
feed, mixed, feed (dog), feed (fish), feed  
(mink), feed (pig), feed (poultry), feedstuff,  
forage grass, grain, mixed feed, grains (no  
specification), hay, maize, maize germ/bran,  
maize gluten, maize meal, maize screenings,  
maize stalks (pith), oat and barley (hammer-  
milled), oats, peanuts, pig grower diet, piglet  
diet, rye, sorghum, triticale, wheat

T-2 TOXIN AND METABOLITES

incidence: 42/232, conc. range: 20–490 µg/kg,  
country: Slovenia<sup>424</sup>

ZEARALENONE

incidence: 12/69, conc. range: 100–200 µg/kg  
(2 sa), >200 µg/kg (10 sa), country:

Uruguay<sup>91</sup>

incidence: 14/14, conc. range: 65–5600 µg/kg,  
country: USA, Canada<sup>174</sup>

incidence: 7/9, conc. range: tr–3600 µg/kg,  
country: USA<sup>174</sup>

incidence: 1/1, conc.: 25,000 µg/kg, country:  
USA<sup>175,176</sup>

incidence: 36/100, conc. range: ≤137 µg/kg,  
country: Norway<sup>291</sup>

incidence: 291/384, conc. range:  
1–≥20.1 µg/kg, country: Germany<sup>332</sup>

incidence: 2/63, conc. range: 120–310 µg/kg,  
Ø conc.: 215 µg/kg, country: USA<sup>334</sup>

incidence: 14/120, conc. range: 50–600 µg/kg,  
217 µg/kg, country: Germany<sup>343</sup>

incidence: 129/345, conc. range:  
0.1–769 µg/kg, country: Germany<sup>353</sup>

incidence: 40/372, conc. range: 20–460 µg/kg,  
country: Slovenia<sup>424</sup>

incidence: 20/342, conc. range:

100–4982 µg/kg, country: Brazil<sup>425</sup>

see also alfalfa, barley, barley, husked, barley,  
unhusked (naked), barley and feed, bone  
meal, bran, broilers feed, *Carthamus* cake,

chick pea, concentrate, mixed, corn cob mix  
silage, cotton cake, cottonseed, cottonseed  
cake, diet (dairy cow), diet (poultry), diets  
(mixed), feed components, feed, mixed, feed,  
mixed (primarily maize also maize, oats,  
wheat), feed (bran), feed (broiler chicken),  
feed (cattle), feed (chicken), feed (dairy), feed  
(developing pig), feed (mill run, from  
wheat), feed (miscellaneous), feed (pig), feed  
(poultry), feed (poultry, pig), feed (starter  
chicken), feedstuff, fish meal, forage grass,  
grain, bruised, grain, mixed feed, grains (no  
specification), hay, maize, maize ears, maize  
flakes, maize germ, maize germ/bran, maize  
gluten, maize kernels, maize meal, maize oil  
cake, maize screenings, maize stalks (pith),  
maize, “Baby”, maize, hybrid, maize, shelled,  
maize, unshelled, maize, white, maize grain,  
artificially dried, maize grain, crib dried,  
maize grain, ensiled, milk production mixed  
feed, oats, *Paspalum palidosum*, straw, peanut  
hulls/skins, rice bran, rice germ, rice germ  
cake, rye, silage, sorghum, soybeans,  
soybeans, extracted, sunflower cake, tapioca,  
triticale, wheat, wheat bran, wheat bran and  
chana testa, wheat soya meal

**Feed components** may contain the following  
mycotoxins:

3-ACETYLDEOXYNIVALENOL

incidence: 13/15, conc. range: 14–114 µg/kg,  
Ø conc.: 50 µg/kg, country: Germany<sup>366</sup>

see also barley, feed (poultry), feeds, grain,  
feeds, industrial, feedstuffs (rapeseed, turnip,  
fish meal, concentrates), maize, maize ears,  
maize gluten, maize kernels, maize meal,  
maize screenings, oats, wheat

15-ACETYLDEOXYNIVALENOL

incidence: 14/15, conc. range:

165–1780 µg/kg, Ø conc.: 573 µg/kg, country:  
Germany<sup>366</sup>

see also barley, feed, commercial mix, feed  
(poultry), maize, maize ears, maize germ,  
maize germ/bran, maize gluten, maize  
kernels, maize meal, maize screenings, maize,  
“Baby”, oats, silage, wheat



**DEOXYNIVALENOL**

incidence: 15/15, conc. range:

634–6682 µg/kg, Ø conc.: 1990 µg/kg,

country: Germany<sup>366</sup>

see also barley, barley, husked, barley, unhusked (naked), barley (pressed), bone meal, bran, broilers feed, calf fattening mixed feed, coconut, expeller, corn cob mix silage, cottonseed, cottonseed cake, dairy cattle feed, egg production mixed feed, feed, feed, commercial mix, feed, mixed, feed, mixed (primarily maize), feed (barley), feed (cattle), feed (chicken), feed (dog), feed (fish), feed (mill run, from wheat), feed (mink), feed (pig), feed (poultry), feed (reindeer), feeds, grain, feeds, industrial, feedstuff, feedstuffs (rapeseed, turnip, fish meal, concentrates), fish meal, grain, mixed feed, grains, mixed, grains (no specification), maize, maize ears, maize fibre, maize germ, maize germ/bran, maize germ meal, maize gluten, maize kernels, maize meal, maize powder, maize screenings, maize stalks (pith), maize, “Baby”, maize, hybrid, maize, white, oats, rice bran, rice germ cake, rye, silage, sorghum, soybeans, triticale, wheat, wheat and barley, wheat, red hard winter, wheat, soft white winter, wheat, spring, wheat, winter

**DIACETOXYSCIRPENOL**

incidence: 1/15, conc.: 21 µg/kg, country:

Germany<sup>366</sup>

see also alfalfa, barley, feed, feed (dog), feed (fish), feed (mink), feed (pig), feed (poultry), feed (reindeer), feeds, grain, feedstuff, forage grass, grain, mixed feed, grains (no specification), maize, maize gluten, oat and barley (hammer-milled), oats, peanuts, soybeans, wheat

**FUSARENONE-X**

incidence: 7/15, conc. range: 29–494 µg/kg,

Ø conc.: 124 µg/kg, country: Germany<sup>366</sup>

see also barley, feed (poultry), maize, maize ears, maize germ/bran, maize gluten, maize kernels, maize meal, maize screenings, oats, wheat

**HT-2 TOXIN**

incidence: 13/15, conc. range: 5–99 µg/kg,

Ø conc.: 34 µg/kg, country: Germany<sup>366</sup>

see also barley, feed (dog), feed (fish), feed (pig), feed (poultry), feed (reindeer), grains, mixed, grains, mixed feed, grains (no specification), maize, maize germ/bran, maize gluten, maize meal, maize screenings, oats, rye, silage, wheat

**MONOACETOXYSCIRPENOL**

incidence: 10/15, conc. range: 5–39 µg/kg,

Ø conc.: 14 µg/kg, country: Germany<sup>366</sup>

see also maize, maize gluten, maize meal, maize screenings, silage, wheat

**NEOSOLANIOL**

incidence: 1/15, conc.: 9 µg/kg, country:

Germany<sup>366</sup>

see also feed, feed, mixed, feed (poultry), peanut cake, wheat

**NIVALENOL**

incidence: 15/15, conc. range: 21–2050 µg/kg,

Ø conc.: 374 µg/kg, country: Germany<sup>366</sup>

see also barley, barley, husked, barley, unhusked (naked), barley (pressed), bran, feed, feed (cattle), feed (poultry), feed (reindeer), feeds, industrial, maize, maize ears, maize germ, maize germ/bran, maize gluten, maize kernels, maize meal, maize powder, maize screenings, maize, “Baby”, oats, rye, silage, triticale, wheat

**T-2 TETRAOL**

incidence: 3/15, conc. range: 11–56 µg/kg,

Ø conc.: 39 µg/kg, country: Germany<sup>366</sup>

see also barley, maize, silage, wheat

**T-2 TOXIN**

incidence: 10/15, conc. range: 7–70 µg/kg,

Ø conc.: 21 µg/kg, country: Germany<sup>366</sup>

see also alfalfa, barley, bran, diet (grower), diet (poultry), feed, feed, layer, feed, mixed, feed (dog), feed (fish), feed (mink), feed (pig), feed (poultry), feedstuff, forage grass, grain, mixed feed, grains (no specification), hay, maize, maize germ/bran, maize gluten, maize meal, maize screenings, maize stalks (pith), oat and barley (hammer-milled), oats, peanuts, pig grower diet, piglet diet, rye, sorghum, triticale, wheat

**T-2 TRIOL**

incidence: 1/15, conc.: 8 µg/kg, country: Germany<sup>366</sup>

see also alfalfa, barley, grain, mixed feed, grains (no specification), maize, oats, wheat

**ZEARALENONE**

incidence: 15/15, conc. range: 57–1362 µg/kg, Ø conc.: 328 µg/kg, country: Germany<sup>366</sup>

see also alfalfa, barley, barley, husked, barley, unhusked (naked), barley and feed, bone meal, bran, broilers feed, *Carthamus* cake, chick pea, concentrate, mixed, corn cob mix silage, cotton cake, cottonseed, cottonseed cake, diet (dairy cow), diet (poultry), diets (mixed), feed, feed, mixed, feed, mixed (primarily maize also maize, oats, wheat), feed (bran), feed (broiler chicken), feed (cattle), feed (chicken), feed (dairy), feed (developing pig), feed (mill run, from wheat), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (starter chicken), feedstuff, fish meal, forage grass, grain, bruised, grain, mixed feed, grains (no specification), hay, maize, maize ears, maize flakes, maize germ, maize germ/bran, maize gluten, maize kernels, maize meal, maize oil cake, maize screenings, maize stalks (pith), maize, “Baby”, maize, hybrid, maize, shelled, maize, unshelled, maize, white, maize grain, artificially dried, maize grain, crib dried, maize grain, ensiled, milk production mixed feed, oats, *Paspalum palidosum*, straw, peanut hulls/skins, rice bran, rice germ, rice germ cake, rye, silage, sorghum, soybeans, soybeans, extracted, sunflower cake, tapioca, triticale, wheat, wheat bran, wheat bran and chana testa, wheat soya meal

**Feed ingredients (miscellaneous)** may contain the following mycotoxins:

**AFLATOXINS**

incidence: 12/116, conc. range: ≤135 µg/kg, Ø conc.: 42 µg/kg, country: USA<sup>280</sup>

see also animal feed (maize), animal feed (mixed), barley, copra meal, cottonseed, cottonseed fines, cottonseed meal, cottonseed meats, feed, feed, mixed, feed (excluding

peanuts, suspect), feed (goat), feed (pig), feed (poultry), feedstuff, grain, mixed feed, maize, maize, shelled, millet, peanut cake, peanut meal, peanut meal and by-products, peanuts, protein concentrates, rice, rice bran, sorghum, soybean meal, sunflower

**Feed wheat, oat and barley** may contain the following mycotoxins:

**OCHRATOXIN A**

incidence: 1/51, conc.: 5900 µg/kg, country: Canada<sup>133</sup>

see also alfalfa, barley, barley, oats, barley (high moisture), barley-soybean diet, bird food, domestic, bird food, wild, broilers feed, cereal grains, citrus pulp, coconut, expeller, corn cob mix silage, diet (dairy cow), diet (poultry), diet (starter), dog food, eat, egg production mixed feed, feed, feed, commercial mix, feed, mixed, feed, mixed (pelleted), feed (broilers), feed (cat), feed (cattle), feed (cereals), feed (pig), feed ec (pig), feed (poultry), feed ec (poultry), feed (poultry, pig), feed ec (rabbit), feed (trout), grain, mixed feed, grains, mixed, grains (heated), hay, horse bean, maize, maize feed, milo, maize gluten, maize meal, maize, white, *Makhana* (*Euryale ferox* Salisb) puffs, milk production mixed feed, millet, oat and barley (hammer-milled), oats, palm products, peanut cake, peas, peas and beans, pet food, pig feedstuffs, pig grower diet, pig meal, piglet diet, poultry feedstuffs, rice bran, rice germ, rice germ cake, rye, sorghum, soybean groats, sunflower, sunflower seeds, extracted, tapioca, triticale, *Vicia faba*, wheat, wheat and barley, wheat bran, wheat hay, wheat, oats

**Feed and ingredients** may contain the following mycotoxins:

**AFLATOXIN B<sub>1</sub>**

incidence: 45/100, conc. range: 7–300 µg/kg, country: Germany<sup>169</sup>

incidence: 39/306, conc. range: ≤2000 µg/kg, country: Poland<sup>170</sup>

see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram

husk, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20% peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5% peanut products), dairy cattle feed (containing 6–10% peanut products), dairy cattle feed (containing 6–12% peanut products), dairy cattle feed (containing more than 20% peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed, compound, feed, layer, feed, mixed, feed (beef), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60% maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice

germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

**Feed, commercial mix** may contain the following mycotoxins:

**15-ACETYLDEOXYNIVALENOL**

incidence: 1/94, conc.: 11 µg/kg, country: Canada<sup>240</sup>

see also barley, feed components, feed (poultry), maize, maize ears, maize germ, maize germ/bran, maize gluten, maize kernels, maize meal, maize screenings, maize, “Baby”, oats, silage, wheat

**DEOXYNIVALENOL**

incidence: 3/94, conc. range: 19–45 µg/kg, Ø conc.: 27.7 µg/kg, country: Canada<sup>240</sup>

see also barley, barley, husked, barley, unhusked (naked), barley (pressed), bone meal, bran, broilers feed, calf fattening mixed feed, coconut, expeller, corn cob mix silage, cottonseed, cottonseed cake, dairy cattle feed, egg production mixed feed, feed, feed components, feed, mixed, feed, mixed (primarily maize), feed (barley), feed (cattle), feed (chicken), feed (dog), feed (fish), feed (mill run, from wheat), feed (mink), feed (pig), feed (poultry), feed (reindeer), feeds, grain, feeds, industrial, feedstuff, feedstuffs (rapeseed, turnip, fish meal, concentrates), fish meal, grain, mixed feed, grains, mixed, grains (no specification), maize, maize ears, maize fibre, maize germ, maize germ/bran, maize germ meal, maize gluten, maize kernels, maize meal, maize powder, maize screenings, maize stalks (pith), maize, “Baby”, maize, hybrid, maize, white, oats, rice bran, rice germ cake, rye, silage, sorghum, soybeans, triticale, wheat, wheat and barley, wheat, red hard winter, wheat, soft white winter, wheat, spring, wheat, winter

**OCHRATOXIN A**

incidence: 1/94, conc.: 5 µg/kg, country: Canada<sup>240</sup>

see also alfalfa, barley, barley, oats, barley (high moisture), barley-soybean diet, bird food, domestic, bird food, wild, broilers feed, cereal grains, citrus pulp, coconut, expeller, corn cob mix silage, diet (dairy cow), diet (poultry), diet (starter), dog food, eat, egg production mixed feed, feed, feed wheat, oat and barley, feed, mixed, feed, mixed (pelleted), feed (broilers), feed (cat), feed (cattle), feed (cereals), feed (pig), feed ec (pig), feed (poultry), feed ec (poultry), feed (poultry, pig), feed ec (rabbit), feed (trout), grain, mixed feed, grains, mixed, grains (heated), hay, horse bean, maize, maize feed, milo, maize gluten, maize meal, maize, white, *Makhana (Euryale ferox* Salisb) puffs, milk production mixed feed, millet, oat and barley (hammer-milled), oats, palm products, peanut cake, peas, peas and beans, pet food, pig feedstuffs, pig grower diet, pig meal, piglet diet, poultry feedstuffs, rice bran, rice germ, rice germ cake, rye, sorghum, soybean groats, sunflower, sunflower seeds, extracted, tapioca, triticale, *Vicia faba*, wheat, wheat and barley, wheat bran, wheat hay, wheat, oats

**Feed, complete ration** may contain the following mycotoxins:

**FUMONISIN B<sub>1</sub>**

incidence: 9/10, conc. range: 4–83 µg/kg,

Ø conc.: 25.6 µg/kg, country: USA<sup>58</sup>

incidence: 14/16, conc. range: 1–121 µg/kg,

Ø conc.: 26.2 µg/kg, country: USA<sup>58</sup>

incidence: 1/1, conc.: 3 µg/kg, country: USA<sup>58</sup>

incidence: 2/2, conc. range: 3–4 µg/kg,

Ø conc.: 3.5 µg/kg, country: USA<sup>58</sup>

incidence: 1/2, conc.: 6 µg/kg, country: USA<sup>58</sup>

incidence: 11/11, conc. range: 2–91 µg/kg,

Ø conc.: 29.2 µg/kg, country: USA<sup>58</sup>

incidence: 7/8, conc. range: 4–19 µg/kg,

Ø conc.: 8.4 µg/kg, country: USA<sup>58</sup>

incidence: 1/1, conc.: 12 µg/kg, country:

USA<sup>58</sup>

see also barley, bird food, wild, dog food, feed, feed, general, feed, layer, feed, maize-based, feed, mixed, feed, pelleted ration, feed, screenings, feed, sweet, feed (broilers), feed (cat), feed (chicken), feed

(dog), feed (gluten), feed (horse), feed (maize), feed (pig), feed (poultry), feed (rat), feed (rodent), forage grass, maize, maize and maize screenings, maize bran, maize ears, maize fine fractions, maize flakes, maize germ, maize germ/bran, maize germ meal, maize gluten, maize grits, maize kernels, maize meal, maize powder, maize screenings, maize, “Baby”, maize, ground, maize, preharvest, maize, sweet feed, maize/oats mix, rat chow, silage, sorghum, soybeans, wheat

**Feed, compound** may contain the following mycotoxins:

**AFLATOXIN B<sub>1</sub>**

incidence: 8/8, conc. range: 0.6–36.5 µg/kg,

Ø conc.: 7.5 µg/kg, country: UK<sup>122</sup>

see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, layer, feed, mixed, feed (beef), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60 % maize), fish meal, grain by-products, grains (no

specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

#### AFLATOXIN B<sub>2</sub>

incidence: 7/8, conc. range: tr–7.4 µg/kg, country: UK<sup>122</sup>

see also animal feedstuffs (dairy cake), bird food, bird food, wild, biri testa, blackgram, blackgram husk, cottonseed, cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meats, dog food, egg production mixed feed, feed (cat), feed (cattle), feed (dog), feed (pig), feed (poultry), feed (rabbit), feed (sheep), fish meal, horsegram, maize, maize gluten, maize husk, maize, ground, maize, preharvest, mung testa, mustard cake, niger cake, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanuts, peanut, kernels, redgram husk, rice bran, rice bran (deoiled), rice chaff, rice meal, rice (polish), sal seed cake, sesame cake, sorghum, soybean meal, soybeans, wheat, wheat bran

**Feed, general** may contain the following mycotoxins:

#### FUMONISIN B<sub>1</sub>

incidence: 5/5, conc. range:

200–<1000 µg/kg, country: South Africa<sup>44</sup>

see also barley, bird food, wild, dog food, feed, feed, complete ration, feed, layer, feed, maize-based, feed, mixed, feed, pelleted ration, feed, screenings, feed, sweet, feed (broilers), feed (cat), feed (chicken), feed (dog), feed (gluten), feed (horse), feed (maize), feed (pig), feed (poultry), feed (rat), feed (rodent), forage grass, maize, maize and maize screenings, maize bran, maize ears, maize fine fractions, maize flakes, maize germ, maize germ/bran, maize germ meal, maize gluten, maize grits, maize kernels, maize meal, maize powder, maize screenings, maize, “Baby”, maize, ground, maize, preharvest, maize, sweet feed, maize/oats mix, rat chow, silage, sorghum, soybeans, wheat

**Feed, layer** may contain the following mycotoxins:

#### AFLATOXIN B<sub>1</sub>

incidence: 15/15, conc. range: 65–150 µg/kg, country: India<sup>386</sup>

see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and

ingredients, feed, compound, feed, mixed, feed (beef), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (compound), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60 % maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

#### FUMONISIN B<sub>1</sub>

incidence: 13/15, conc. range: 80–8500 µg/kg, country: India<sup>386</sup>

see also barley, bird food, wild, dog food, feed, feed, complete ration, feed, general, feed, maize-based, feed, mixed, feed, pelleted ration, feed, screenings, feed, sweet, feed (broilers), feed (cat), feed (chicken), feed (dog), feed (gluten), feed (horse), feed (maize), feed (pig), feed (poultry), feed (rat), feed (rodent), forage grass, maize, maize and maize screenings, maize bran, maize ears, maize fine fractions, maize flakes, maize germ, maize germ/bran, maize germ meal,

maize gluten, maize grits, maize kernels, maize meal, maize powder, maize screenings, maize, “Baby”, maize, ground, maize, preharvest, maize, sweet feed, maize/oats mix, rat chow, silage, sorghum, soybeans, wheat

#### T-2 TOXIN

incidence: 5/7345, conc. range: nc, country: Hungary<sup>209</sup>

see also alfalfa, barley, bran, diet (grower), diet (poultry), feed, feed components, feed, mixed, feed (dog), feed (fish), feed (mink), feed (pig), feed (poultry), feedstuff, forage grass, grain, mixed feed, grains (no specification), hay, maize, maize germ/bran, maize gluten, maize meal, maize screenings, maize stalks (pith), oat and barley (hammer-milled), oats, peanuts, pig grower diet, piglet diet, rye, sorghum, triticale, wheat

**Feed, maize-based** may contain the following mycotoxins:

#### FUMONISIN B<sub>1</sub>

incidence: 13/13, conc. range:

256–6342 µg/kg, Ø conc.: 2573 µg/kg,

country: Uruguay<sup>7</sup>

incidence: 61/61, conc. range:

100–126,000 µg/kg, Ø conc.: 25,000 µg/kg,

country: USA<sup>140</sup>

incidence: 13/13, conc. range:

100–32,000 µg/kg, country: USA<sup>140</sup>

incidence: 20/21, conc. range:

200–38,500 µg/kg, country: Brazil<sup>143</sup>

see also barley, bird food, wild, dog food, feed, feed, complete ration, feed, general, feed, layer, feed, mixed, feed, pelleted ration, feed, screenings, feed, sweet, feed (broilers), feed (cat), feed (chicken), feed (dog), feed (gluten), feed (horse), feed (maize), feed (pig), feed (poultry), feed (rat), feed (rodent), forage grass, maize, maize and maize screenings, maize bran, maize ears, maize fine fractions, maize flakes, maize germ, maize germ/bran, maize germ meal, maize gluten, maize grits, maize kernels, maize meal, maize powder, maize screenings, maize, “Baby”, maize, ground, maize, preharvest, maize, sweet feed, maize/oats mix, rat chow, silage, sorghum, soybeans, wheat

**FUMONISIN B<sub>2</sub>**

incidence: 18/21, conc. range: 100–12,000 µg/kg, country: Brazil<sup>143</sup>

see also barley, bird food, wild, dog food, feed, feed, mixed, feed (cat), feed (dog), feed (gluten), feed (horse), feed (maize), feed (poultry), feed (rodent), maize, maize bran, maize fine fractions, maize flakes, maize germ, maize germ/bran, maize germ meal, maize gluten, maize grits, maize kernels, maize meal, maize powder, maize screenings, maize, “Baby”, maize, ground, maize, preharvest, rat chow, wheat

**Feed, mixed** may contain the following mycotoxins:

**AFLATOXIN B<sub>1</sub>**

incidence: 12/102, conc. range:

40–3000 µg/kg, country: India<sup>127</sup>

incidence: ?/30, conc. range: 20–80 µg/kg, country: India<sup>183</sup>

incidence: ?/30, conc. range: 40–60 µg/kg, country: India<sup>183</sup>

incidence: 4/4, conc. range: 16.8–146 µg/kg, Ø conc.: 63.1 µg/kg, country: USA<sup>387</sup>

see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and

ingredients, feed, compound, feed, layer, feed (beef), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60 % maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm products, palm kernels, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

**AFLATOXINS**

incidence: 2/18, conc. range: 51–500 µg/kg, country: Australia<sup>21</sup>

incidence: 4/27, conc. range: <5 µg/kg, country: Spain<sup>128</sup>

incidence: 18/30, conc. range: 10–1500 µg/kg, country: India<sup>349</sup>

incidence: 44/49, conc. range: 2–10 µg/kg, Ø conc.: 3.2 µg/kg, country: Egypt<sup>357</sup>

see also animal feed (maize), animal feed (mixed), barley, copra meal, cottonseed, cottonseed fines, cottonseed meal, cottonseed meats, feed, feed ingredients (miscellaneous), feed (excluding peanuts, suspect), feed (goat), feed (pig), feed (poultry), feedstuff, grain,

grain, mixed feed, maize, maize, shelled, millet, peanut cake, peanut meal, peanut meal and by-products, peanuts, protein concentrates, rice, rice bran, sorghum, soybean meal, sunflower

#### CITRININ

incidence: 1/7345, conc.: nc, country:

Hungary<sup>209</sup>

see also barley, barley, oats, barley-soybean diet, cottonseed cake, feed, feed (cattle), feed (pig), fish meal, hay, maize, maize, white, *Makhana (Euryale ferox* Salisb) puffs, oats, palm products, peas and beans, rice bran, rice germ, wheat, wheat and other grains (moldy), wheat bran

#### DEOXYNIVALENOL

incidence: 1/1, conc.: 1000 µg/kg, country:

USA<sup>71</sup>

see also barley, barley, husked, barley, unhusked (naked), barley (pressed), bone meal, bran, broilers feed, calf fattening mixed feed, coconut, expeller, corn cob mix silage, cottonseed, cottonseed cake, dairy cattle feed, egg production mixed feed, feed, feed components, feed, commercial mix, feed, mixed (primarily maize), feed (barley), feed (cattle), feed (chicken), feed (dog), feed (fish), feed (mill run, from wheat), feed (mink), feed (pig), feed (poultry), feed (reindeer), feeds, grain, feeds, industrial, feedstuff, feedstuffs (rapeseed, turnip, fish meal, concentrates), fish meal, grain, mixed feed, grains, mixed, grains (no specification), maize, maize ears, maize fibre, maize germ, maize germ/bran, maize germ meal, maize gluten, maize kernels, maize meal, maize powder, maize screenings, maize stalks (pith), maize, "Baby", maize, hybrid, maize, white, oats, rice bran, rice germ cake, rye, silage, sorghum, soybeans, triticale, wheat, wheat and barley, wheat, red hard winter, wheat, soft white winter, wheat, spring, wheat, winter

#### FUMONISIN B<sub>1</sub>

incidence: 1/1, conc.: 8850 µg/kg, country:

South Africa<sup>100</sup>

see also barley, bird food, wild, dog food, feed, feed, complete ration, feed, general, feed, layer, feed, maize-based, feed, pelleted ration, feed, screenings, feed, sweet, feed (broilers), feed (cat), feed (chicken), feed (dog), feed (gluten), feed (horse), feed (maize), feed (pig), feed (poultry), feed (rat), feed (rodent), forage grass, maize, maize and maize screenings, maize bran, maize ears, maize fine fractions, maize flakes, maize germ, maize germ/bran, maize germ meal, maize gluten, maize grits, maize kernels, maize meal, maize powder, maize screenings, maize, "Baby", maize, ground, maize, preharvest, maize, sweet feed, maize/oats mix, rat chow, silage, sorghum, soybeans, wheat

#### FUMONISIN B<sub>2</sub>

incidence: 1/1, conc.: 3000 µg/kg, country:

South Africa<sup>100</sup>

see also barley, bird food, wild, dog food, feed, feed, maize-based, feed (cat), feed (dog), feed (gluten), feed (horse), feed (maize), feed (poultry), feed (rodent), maize, maize bran, maize fine fractions, maize flakes, maize germ, maize germ/bran, maize germ meal, maize gluten, maize grits, maize kernels, maize meal, maize powder, maize screenings, maize, "Baby", maize, ground, maize, preharvest, rat chow, wheat

#### MONILIFORMIN

incidence: 15/15, conc. range: <10 µg/kg

(7 sa), 10–100 µg/kg (5 sa), 100–150 µg/kg

(3 sa), country: Austria<sup>182</sup>

see also barley, feed (poultry), maize, maize flakes, maize germ, maize germ/bran, maize gluten, maize meal, maize screenings, maize, "Baby", oats, rice bran, triticale, wheat, wheat, summer, wheat, winter

#### NEOSOLANIOL

incidence: ?/30, conc.: 20 µg/kg, country:

India<sup>183</sup>

see also feed, feed components, feed (poultry), peanut cake, wheat

#### OCHRATOXIN A

incidence: 89/630, conc. range:

0.2–12.5 µg/kg, Ø conc.: 2.3 µg/kg, country:

Germany<sup>13</sup>



incidence: 5/474, conc. range: 30–100 µg/kg, country: Canada<sup>19</sup>

incidence: 4/51, conc. range: 48–5900 µg/kg, country: Canada<sup>20</sup>

incidence: 1/25, conc.: 70,000 µg/kg? country: Australia<sup>21</sup>

incidence: 19/1240, conc. range: 10–200 µg/kg, country: Poland<sup>26</sup>

incidence: 10/203, conc. range: 10–50 µg/kg, country: Poland<sup>27</sup>

incidence: 27/812, conc. range: 25–250 µg/kg, country: UK<sup>30</sup>

incidence: 2/13, conc. range: 20–530 µg/kg, country: Canada<sup>92</sup>

incidence: 1/7345, conc.: nc, country: Hungary<sup>209</sup>

see also alfalfa, barley, barley, oats, barley (high moisture), barley-soybean diet, bird food, domestic, bird food, wild, broilers feed, cereal grains, citrus pulp, coconut, expeller, corn cob mix silage, diet (dairy cow), diet (poultry), diet (starter), dog food, eat, egg production mixed feed, feed, feed wheat, oat and barley, feed, commercial mix, feed, mixed (pelleted), feed (broilers), feed (cat), feed (cattle), feed (cereals), feed (pig), feed ec (pig), feed (poultry), feed ec (poultry), feed (poultry, pig), feed ec (rabbit), feed (trout), grain, mixed feed, grains, mixed, grains (heated), hay, horse bean, maize, maize feed, milo, maize gluten, maize meal, maize, white, *Makhana* (*Euryale ferox* Salisb) puffs, milk production mixed feed, millet, oat and barley (hammer-milled), oats, palm products, peanut cake, peas, peas and beans, pet food, pig feedstuffs, pig grower diet, pig meal, piglet diet, poultry feedstuffs, rice bran, rice germ, rice germ cake, rye, sorghum, soybean groats, sunflower, sunflower seeds, extracted, tapioca, triticale, *Vicia faba*, wheat, wheat and barley, wheat bran, wheat hay, wheat, oats

#### T-2 TOXIN

incidence: 3/7345, conc. range: nc, country: Hungary<sup>209</sup>

see also alfalfa, barley, bran, diet (grower), diet (poultry), feed, feed components, feed, layer, feed (dog), feed (fish), feed (mink), feed (pig), feed (poultry), feedstuff, forage

grass, grain, mixed feed, grains (no specification), hay, maize, maize germ/bran, maize gluten, maize meal, maize screenings, maize stalks (pith), oat and barley (hammer-milled), oats, peanuts, pig grower diet, piglet diet, rye, sorghum, triticale, wheat

#### ZEARALENONE

incidence: 1/1, conc.: 89 µg/kg, country: China<sup>70</sup>

incidence: 20/31, conc. range: 3.6–55.8 µg/kg, Ø conc.: 11.6 µg/kg, country: Germany<sup>107</sup>

incidence: 1/1, conc.: ~100 µg/kg, country: Germany<sup>124</sup>

incidence: ?/30, conc. range: 40 µg/kg, country: India<sup>183</sup>

incidence: ?/30, conc. range: 30 µg/kg, country: India<sup>183</sup>

incidence: 1/7345, conc.: nc, country: Hungary<sup>209</sup>

see also alfalfa, barley, barley, husked, barley, unhusked (naked), barley and feed, bone meal, bran, broilers feed, *Carthamus* cake, chick pea, concentrate, mixed, corn cob mix silage, cotton cake, cottonseed, cottonseed cake, diet (dairy cow), diet (poultry), diets (mixed), feed, feed components, feed, mixed (primarily maize also maize, oats, wheat), feed (bran), feed (broiler chicken), feed (cattle), feed (chicken), feed (dairy), feed (developing pig), feed (mill run, from wheat), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (starter chicken), feedstuff, fish meal, forage grass, grain, bruised, grain, mixed feed, grains (no specification), hay, maize, maize ears, maize flakes, maize germ, maize germ/bran, maize gluten, maize kernels, maize meal, maize oil cake, maize screenings, maize stalks (pith), maize, “Baby”, maize, hybrid, maize, shelled, maize, unshelled, maize, white, maize grain, artificially dried, maize grain, crib dried, maize grain, ensiled, milk production mixed feed, oats, *Paspalum palidosum*, straw, peanut hulls/skins, rice bran, rice germ, rice germ cake, rye, silage, sorghum, soybeans, soybeans, extracted, sunflower cake, tapioca, triticale, wheat, wheat bran, wheat bran and chana testa, wheat soya meal

**Feed, mixed (crumbled)** may contain the following mycotoxins:

STERIGMATOCYSTIN

incidence: 1/51, conc.: 2300 µg/kg, country: Canada<sup>133</sup>

see also feed (excluding peanut meal, suspect), wheat

**Feed, mixed (pelleted)** may contain the following mycotoxins:

OCHRATOXIN A

incidence: 1/51, conc.: 140 µg/kg, country: Canada<sup>133</sup>

see also alfalfa, barley, barley, oats, barley (high moisture), barley-soybean diet, bird food, domestic, bird food, wild, broilers feed, cereal grains, citrus pulp, coconut, expeller, corn cob mix silage, diet (dairy cow), diet (poultry), diet (starter), dog food, eat, egg production mixed feed, feed, feed wheat, oat and barley, feed, commercial mix, feed, mixed, feed (broilers), feed (cat), feed (cattle), feed (cereals), feed (pig), feed ec (pig), feed (poultry), feed ec (poultry), feed (poultry, pig), feed ec (rabbit), feed (trout), grain, mixed feed, grains, mixed, grains (heated), hay, horse bean, maize, maize feed, milo, maize gluten, maize meal, maize, white, *Makhana* (*Euryale ferox* Salisb) puffs, milk production mixed feed, millet, oat and barley (hammer-milled), oats, palm products, peanut cake, peas, peas and beans, pet food, pig feedstuffs, pig grower diet, pig meal, piglet diet, poultry feedstuffs, rice bran, rice germ, rice germ cake, rye, sorghum, soybean groats, sunflower, sunflower seeds, extracted, tapioca, triticale, *Vicia faba*, wheat, wheat and barley, wheat bran, wheat hay, wheat, oats

**Feed, mixed (primarily maize)** may contain the following mycotoxins:

DEOXYNIVALENOL

incidence: 134/342, conc. range: 100–22,000 µg/kg, Ø conc.: 2700 µg/kg, country: USA<sup>237</sup>

see also barley, barley, husked, barley, unhusked (naked), barley (pressed), bone

meal, bran, broilers feed, calf fattening mixed feed, coconut, expeller, corn cob mix silage, cottonseed, cottonseed cake, dairy cattle feed, egg production mixed feed, feed, feed components, feed, commercial mix, feed, mixed, feed (barley), feed (cattle), feed (chicken), feed (dog), feed (fish), feed (mill run, from wheat), feed (mink), feed (pig), feed (poultry), feed (reindeer), feeds, grain, feeds, industrial, feedstuff, feedstuffs (rapeseed, turnip, fish meal, concentrates), fish meal, grain, mixed feed, grains, mixed, grains (no specification), maize, maize ears, maize kernels, maize fibre, maize germ, maize germ/bran, maize germ meal, maize gluten, maize kernels, maize meal, maize powder, maize screenings, maize stalks (pith), maize, “Baby”, maize, hybrid, maize, white, oats, rice bran, rice germ cake, rye, silage, sorghum, soybeans, triticale, wheat, wheat and barley, wheat, red hard winter, wheat, soft white winter, wheat, spring, wheat, winter

**Feed, mixed (primarily maize also maize, oats, wheat)** may contain the following mycotoxins:

ZEARALENONE

incidence: 40/342, conc. range:

100–8000 µg/kg, Ø conc.: 660 µg/kg, country: USA<sup>237</sup>

see also alfalfa, barley, barley, husked, barley, unhusked (naked), barley and feed, bone meal, bran, broilers feed, *Carthamus* cake, chick pea, concentrate, mixed, corn cob mix silage, cotton cake, cottonseed, cottonseed cake, diet (dairy cow), diet (poultry), diets (mixed), feed, feed components, feed, mixed, feed (bran), feed (broiler chicken), feed (cattle), feed (chicken), feed (dairy), feed (developing pig), feed (mill run, from wheat), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (starter chicken), feedstuff, fish meal, forage grass, grain, bruised, grain, mixed feed, grains (no specification), hay, maize, maize ears, maize flakes, maize germ, maize germ/bran, maize gluten, maize kernels, maize meal, maize oil cake, maize screenings, maize stalks (pith),

maize, “Baby”, maize, hybrid, maize, shelled, maize, unshelled, maize, white, maize grain, artificially dried, maize grain, crib dried, maize grain, ensiled, milk production mixed feed, oats, *Paspalum palidosum*, straw, peanut hulls/skins, rice bran, rice germ, rice germ cake, rye, silage, sorghum, soybeans, soybeans, extracted, sunflower cake, tapioca, triticale, wheat, wheat bran, wheat bran and chana testa, wheat soya meal

**Feed, pelleted ration** may contain the following mycotoxins:

FUMONISIN B<sub>1</sub>

incidence: 6/6, conc. range: 5–22 µg/kg, Ø conc.: 11.2 µg/kg, country: USA<sup>58</sup>  
 see also barley, bird food, wild, dog food, feed, feed, complete ration, feed, general, feed, layer, feed, maize-based, feed, mixed, feed, screenings, feed, sweet, feed (broilers), feed (cat), feed (chicken), feed (dog), feed (gluten), feed (horse), feed (maize), feed (pig), feed (poultry), feed (rat), feed (rodent), forage grass, maize, maize and maize screenings, maize bran, maize ears, maize fine fractions, maize flakes, maize germ, maize germ/bran, maize germ meal, maize gluten, maize grits, maize kernels, maize meal, maize powder, maize screenings, maize, “Baby”, maize, ground, maize, preharvest, maize, sweet feed, maize/oats mix, rat chow, silage, sorghum, soybeans, wheat

**Feed, screenings** may contain the following mycotoxins:

FUMONISIN B<sub>1</sub>

incidence: 8/9, conc. range: 16–209 µg/kg, Ø conc.: 86.7 µg/kg, country: USA<sup>58</sup>  
 incidence: 9/9, conc. range: 16–330 µg/kg, Ø conc.: 143.7 µg/kg, country: USA<sup>58</sup>  
 incidence: 4/4, conc. range: 14–76 µg/kg, Ø conc.: 49.5 µg/kg, country: USA<sup>58</sup>  
 incidence: 3/4, conc. range: 9–61 µg/kg, Ø conc.: 28 µg/kg, country: USA<sup>58</sup>  
 incidence: 16/16, conc. range: 14–95 µg/kg, Ø conc.: 45.8 µg/kg, country: USA<sup>58</sup>

incidence: 4/4, conc. range: 37–126 µg/kg, Ø conc.: 85.8 µg/kg, country: USA<sup>58</sup>  
 see also barley, bird food, wild, dog food, feed, feed, complete ration, feed, general, feed, layer, feed, maize-based, feed, mixed, feed, pelleted ration, feed, sweet, feed (broilers), feed (cat), feed (chicken), feed (dog), feed (gluten), feed (horse), feed (maize), feed (pig), feed (poultry), feed (rat), feed (rodent), forage grass, maize, maize and maize screenings, maize bran, maize ears, maize fine fractions, maize flakes, maize germ, maize germ/bran, maize germ meal, maize gluten, maize grits, maize kernels, maize meal, maize powder, maize screenings, maize, “Baby”, maize, ground, maize, preharvest, maize, sweet feed, maize/oats mix, rat chow, silage, sorghum, soybeans, wheat

**Feed, sweet** may contain the following mycotoxins:

FUMONISIN B<sub>1</sub>

incidence: 1/1, conc.: 8 µg/kg, country: USA<sup>58</sup>  
 incidence: 1/1, conc.: 16 µg/kg, country: USA<sup>58</sup>  
 incidence: 1/1, conc.: 20 µg/kg, country: USA<sup>58</sup>  
 incidence: 1/1, conc.: 4 µg/kg, country: USA<sup>58</sup>  
 incidence: 1/2, conc.: 13 µg/kg, country: USA<sup>58</sup>  
 incidence: 1/1, conc.: 29 µg/kg, country: USA<sup>58</sup>  
 see also barley, bird food, wild, dog food, feed, feed, complete ration, feed, general, feed, layer, feed, maize-based, feed, mixed, feed, pelleted ration, feed, screenings, feed (broilers), feed (cat), feed (chicken), feed (dog), feed (gluten), feed (horse), feed (maize), feed (pig), feed (poultry), feed (rat), feed (rodent), forage grass, maize, maize and maize screenings, maize bran, maize ears, maize fine fractions, maize flakes, maize germ, maize germ/bran, maize germ meal, maize gluten, maize grits, maize kernels, maize meal, maize powder, maize screenings, maize, “Baby”, maize, ground, maize, preharvest, maize, sweet feed, maize/oats mix, rat chow, silage, sorghum, soybeans, wheat

**Feed (barley)** may contain the following mycotoxins:

**DEOXYNIVALENOL**

incidence: 22/43\*, conc. range:

≥10–>100 µg/kg, country: UK<sup>55</sup>, \*imported ?

see also barley, barley, husked, barley, unhusked (naked), barley (pressed), bone meal, bran, broilers feed, calf fattening mixed feed, coconut, expeller, corn cob mix silage, cottonseed, cottonseed cake, dairy cattle feed, egg production mixed feed, feed, feed components, feed, commercial mix, feed, mixed, feed, mixed (primarily maize), feed (cattle), feed (chicken), feed (dog), feed (fish), feed (mill run, from wheat), feed (mink), feed (pig), feed (poultry), feed (reindeer), feeds, grain, feeds, industrial, feedstuff, feedstuffs (rapeseed, turnip, fish meal, concentrates), fish meal, grain, mixed feed, grains, mixed, grains (no specification), maize, maize ears, maize fibre, maize germ, maize germ/bran, maize germ meal, maize gluten, maize kernels, maize meal, maize powder, maize screenings, maize stalks (pith), maize, “Baby”, maize, hybrid, maize, white, oats, rice bran, rice germ cake, rye, silage, sorghum, soybeans, triticale, wheat, wheat and barley, wheat, red hard winter, wheat, soft white winter, wheat, spring, wheat, winter

**Feed (beef)** may contain the following mycotoxins:

**AFLATOXIN B<sub>1</sub>**

incidence: 4/10, conc. range: <5 µg/kg (2 sa),

6–20 µg/kg (1 sa), 51–100 µg/kg (1 sa),

country: UK<sup>267</sup>

see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed,

cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60 % maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

**Feed (bran)** may contain the following mycotoxins:

**ZEARALENONE**

incidence: 1/1, conc.: 3 µg/kg, country: China<sup>70</sup>

see also alfalfa, barley, barley, husked, barley, unhusked (naked), barley and feed, bone meal, bran, broilers feed, *Carthamus* cake, chick pea, concentrate, mixed, corn cob mix silage, cotton cake, cottonseed, cottonseed cake, diet (dairy cow), diet (poultry), diets (mixed), feed, feed components, feed, mixed, feed, mixed (primarily maize also maize, oats, wheat), feed (broiler chicken), feed (cattle), feed (chicken), feed (dairy), feed (developing pig), feed (mill run, from wheat), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (starter chicken), feedstuff, fish meal, forage grass, grain, bruised, grain, mixed feed, grains (no specification), hay, maize, maize ears, maize flakes, maize germ, maize germ/bran, maize gluten, maize kernels, maize meal, maize oil cake, maize screenings, maize stalks (pith), maize, “Baby”, maize, hybrid, maize, shelled, maize, unshelled, maize, white, maize grain, artificially dried, maize grain, crib dried, maize grain, ensiled, milk production mixed feed, oats, *Paspalum palidosum*, straw, peanut hulls/skins, rice bran, rice germ, rice germ cake, rye, silage, sorghum, soybeans, soybeans, extracted, sunflower cake, tapioca, triticale, wheat, wheat bran, wheat bran and chana testa, wheat soya meal

**Feed (broiler chicken)** may contain the following mycotoxins:

**ZEARALENONE**

incidence: 2/19, conc.: 405–1238 µg/kg, Ø conc.: 821.5 µg/kg, country: Taiwan<sup>221</sup>

see also alfalfa, barley, barley, husked, barley, unhusked (naked), barley and feed, bone meal, bran, broilers feed, *Carthamus* cake, chick pea, concentrate, mixed, corn cob mix silage, cotton cake, cottonseed, cottonseed cake, diet (dairy cow), diet (poultry), diets (mixed), feed, feed components, feed, mixed, feed, mixed (primarily maize also maize, oats, wheat), feed (bran), feed (cattle), feed (chicken), feed (dairy), feed (developing pig),

feed (mill run, from wheat), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (starter chicken), feedstuff, fish meal, forage grass, grain, bruised, grain, mixed feed, grains (no specification), hay, maize, maize ears, maize flakes, maize germ, maize germ/bran, maize gluten, maize kernels, maize meal, maize oil cake, maize screenings, maize stalks (pith), maize, “Baby”, maize, hybrid, maize, shelled, maize, unshelled, maize, white, milk production mixed feed, oats, *Paspalum palidosum*, straw, peanut hulls/skins, rice bran, rice germ, rice germ cake, rye, silage, sorghum, soybeans, soybeans, extracted, sunflower cake, tapioca, triticale, wheat, wheat bran, wheat bran and chana testa, wheat soya meal

**Feed (broilers)** may contain the following mycotoxins:

**AFLATOXIN B<sub>1</sub>**

incidence: 14/14, conc. range: tr–108 µg/kg, country: India<sup>386</sup>

see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed,

mixed, feed (beef), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60 % maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

#### FUMONISIN B<sub>1</sub>

incidence: 5/14, conc. range: 20–200 µg/kg, country: India<sup>386</sup>

see also barley, bird food, wild, dog food, feed, feed, complete ration, feed, general, feed, layer, feed, maize-based, feed, mixed, feed, pelleted ration, feed, screenings, feed, sweet, feed (cat), feed (chicken), feed (dog), feed (gluten), feed (horse), feed (maize), feed (pig), feed (poultry), feed (rat), feed (rodent), forage grass, maize, maize and maize screenings, maize bran, maize ears, maize fine fractions, maize flakes, maize germ, maize germ/bran, maize germ meal, maize gluten, maize grits, maize kernels, maize meal, maize powder, maize screenings, maize, “Baby”,

maize, ground, maize, preharvest, maize, sweet feed, maize/oats mix, rat chow, silage, sorghum, soybeans, wheat

#### OCHRATOXIN A

incidence: 1/3, conc.: 13 µg/kg, country: Egypt<sup>16</sup>

see also alfalfa, barley, barley, oats, barley (high moisture), barley-soybean diet, bird food, domestic, bird food, wild, broilers feed, cereal grains, citrus pulp, coconut, expeller, corn cob mix silage, diet (dairy cow), diet (poultry), diet (starter), dog food, eat, egg production mixed feed, feed, feed wheat, oat and barley, feed, commercial mix, feed, mixed, feed, mixed (pelleted), feed (cat), feed (cattle), feed (cereals), feed (pig), feed ec (pig), feed (poultry), feed ec (poultry), feed (poultry, pig), feed ec (rabbit), feed (trout), grain, mixed feed, grains, mixed, grains (heated), hay, horse bean, maize, maize feed, milo, maize gluten, maize meal, maize, white, *Makhana* (*Euryale ferox* Salisb) puffs, milk production mixed feed, millet, oat and barley (hammer-milled), oats, palm products, peanut cake, peas, peas and beans, pet food, pig feedstuffs, pig grower diet, pig meal, piglet diet, poultry feedstuffs, rice bran, rice germ, rice germ cake, rye, sorghum, soybean groats, sunflower, sunflower seeds, extracted, tapioca, triticale, *Vicia faba*, wheat, wheat and barley, wheat bran, wheat hay, wheat, oats

**Feed (calf)** may contain the following mycotoxins:

#### AFLATOXIN B<sub>1</sub>

incidence: 2/3, conc. range: tr–1670 µg/kg, Ø conc.: 690 µg/kg, country: India<sup>321</sup>

see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed,

cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60 % maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm products, palm kernels, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

**Feed (cat)** may contain the following mycotoxins:

#### AFLATOXICOL

incidence: 14/16, Ø conc.: 0.01 µg/kg, country: Mexico<sup>395</sup>  
see also feed (dog)

#### AFLATOXIN B<sub>1</sub>

incidence: 1/25, conc.: 16 µg/kg, country: Brazil<sup>4</sup>

incidence: 1/35, conc.: 2.1 µg/kg, country: UK<sup>42</sup>

incidence: 16/16, conc. range: ≤46.1 µg/kg,

Ø conc.: 8.02 µg/kg, country: Mexico<sup>395</sup>

see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60 % maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize,

ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm products, palm kernels, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

#### AFLATOXIN B<sub>2</sub>

incidence: 4/16, Ø conc.: 0.01 µg/kg, country: Mexico<sup>395</sup>

see also animal feedstuffs (dairy cake), bird food, bird food, wild, biri testa, blackgram, blackgram husk, cottonseed, cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meats, dog food, egg production mixed feed, feed, compound, feed (cattle), feed (dog), feed (pig), feed (poultry), feed (rabbit), feed (sheep), fish meal, horsegram, maize, maize gluten, maize husk, maize, ground, maize, preharvest, mung testa, mustard cake, niger cake, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanuts, peanut, kernels, redgram husk, rice bran, rice bran (deoiled), rice chaff, rice meal, rice (polish), sal seed cake, sesame cake, sorghum, soybean meal, soybeans, wheat, wheat bran

#### AFLATOXIN G<sub>1</sub>

incidence: 12/16, Ø conc.: 0.04 µg/kg, country: Mexico<sup>395</sup>

see also animal feedstuffs (dairy cake), bird food, bird food, wild, concentrate, mixed, cottonseed, cottonseed cake, feed (chicken), feed (dog), maize, maize, ground, maize,

preharvest, meat meal, milk production mixed feed, murkool, peanut cake, peanut expeller, peanut hay, peanut meal, peanuts, rice bran, rice germ, sorghum, soybeans, wheat, wheat bran, wheat bran and chana testa

#### AFLATOXIN G<sub>2</sub>

incidence: 4/16, Ø conc.: 0.05 µg/kg, country: Mexico<sup>395</sup>

see also animal feedstuffs (dairy cake), bird food, feed (dog), maize, maize, preharvest, peanut expeller, peanut hay, peanut meal, peanuts, soybeans

#### AFLATOXIN M<sub>1</sub>

incidence: 14/16, Ø conc.: 3 µg/kg, country: Mexico<sup>395</sup>

see also feed (dog), maize, maize, ground

#### AFLATOXIN M<sub>2</sub>

incidence: 11/16, Ø conc.: 0.76 µg/kg, country: Mexico<sup>395</sup>

see also feed (dog)

#### AFLATOXIN P<sub>1</sub>

incidence: 13/16, Ø conc.: 0.01 µg/kg, country: Mexico<sup>395</sup>

see also feed (dog)

#### FUMONISIN B<sub>1</sub>

incidence: 3/35, conc. range: 90–690 µg/kg, Ø conc.: 340 µg/kg, country: UK<sup>42</sup>

incidence: 2/2, conc. range: 220–990 µg/kg, Ø conc.: 605 µg/kg, country: USA<sup>154</sup>

see also barley, bird food, wild, dog food, feed, feed, complete ration, feed, general, feed, layer, feed, maize-based, feed, mixed, feed, pelleted ration, feed, screenings, feed, sweet, feed (broilers), feed (chicken), feed (dog), feed (gluten), feed (horse), feed (maize), feed (pig), feed (poultry), feed (rat), feed (rodent), forage grass, maize, maize and maize screenings, maize bran, maize ears, maize fine fractions, maize flakes, maize germ, maize germ/bran, maize germ meal, maize gluten, maize grits, maize kernels, maize meal, maize powder, maize screenings, maize, “Baby”, maize, ground, maize, preharvest, maize, sweet feed, maize/oats mix, rat chow, silage, sorghum, soybeans, wheat



**FUMONISIN B<sub>2</sub>**

incidence: 2/35, conc. range: 60–80 µg/kg,

Ø conc.: 70 µg/kg, country: UK<sup>42</sup>

incidence: 2/2, conc. range: 125–140 µg/kg,

Ø conc.: 132.5 µg/kg, country: USA<sup>154</sup>

see also barley, bird food, wild, dog food, feed, feed, maize-based, feed, mixed, feed (dog), feed (gluten), feed (horse), feed (maize), feed (poultry), feed (rodent), maize, maize bran, maize fine fractions, maize flakes, maize germ, maize germ/bran, maize germ meal, maize gluten, maize grits, maize kernels, maize meal, maize powder, maize screenings, maize, “Baby”, maize, ground, maize, preharvest, rat chow, wheat

**OCHRATOXIN A**

incidence: 3/35, conc. range: 1.2–2.3 µg/kg,

Ø conc.: 1.6 µg/kg, country: UK<sup>42</sup>

see also alfalfa, barley, barley, oats, barley (high moisture), barley-soybean diet, bird food, domestic, bird food, wild, broilers feed, cereal grains, citrus pulp, coconut, expeller, corn cob mix silage, diet (dairy cow), diet (poultry), diet (starter), dog food, eat, egg production mixed feed, feed, feed wheat, oat and barley, feed, commercial mix, feed, mixed, feed, mixed (pelleted), feed (broilers), feed (cattle), feed (cereals), feed (pig), feed ec (pig), feed (poultry), feed ec (poultry), feed (poultry, pig), feed ec (rabbit), feed (trout), grain, mixed feed, grains, mixed, grains (heated), hay, horse bean, maize, maize feed, milo, maize gluten, maize meal, maize, white, *Makhana (Euryale ferox* Salisb) puffs, milk production mixed feed, millet, oat and barley (hammer-milled), oats, palm products, peanut cake, peas, peas and beans, pet food, pig feedstuffs, pig grower diet, pig meal, piglet diet, poultry feedstuffs, rice bran, rice germ, rice germ cake, rye, sorghum, soybean groats, sunflower, sunflower seeds, extracted, tapioca, triticale, *Vicia faba*, wheat, wheat and barley, wheat bran, wheat hay, wheat, oats

**Feed (cattle)** may contain the following mycotoxins:

**AFLATOXIN B<sub>1</sub>**

incidence: 26/318, conc. range:

<10–750 µg/kg, country: UK<sup>30</sup>

incidence: 2/2, conc. range: 100–200 µg/kg,

Ø conc.: 150 µg/kg, country: Australia<sup>121</sup>

incidence: 378/498, conc. range: ≤25 µg/kg

(131 sa), 26–50 µg/kg (87 sa), 51–100 µg/kg

(61 sa), 101–200 µg/kg (60 sa), 201–500 µg/kg

(25 sa), 501–1000 µg/kg (9 sa),

1001–1500 µg/kg (4 sa), 1501–2000 µg/kg

(1 sa), Ø conc.: 103 µg/kg, country: India<sup>247</sup>

incidence: 4/4, conc. range: 59.4–192.6 µg/kg,

Ø conc.: 116 µg/kg, country: India<sup>253</sup>

incidence: 22/25, conc. range: 0–6000 µg/kg,

Ø conc.: 1620 µg/kg, country: India<sup>321</sup>

incidence: 14/96, conc. range:

11.5–287 µg/kg, country: Brazil<sup>1409</sup>

see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60 % maize), fish meal, grain by-products, grains

(no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm products, palm kernels, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

#### AFLATOXIN B<sub>2</sub>

incidence: 234/498, conc. range: nc, Ø conc.: 19.3 µg/kg, country: India<sup>247</sup>

incidence: 14/96, conc. range: 19–40 µg/kg, country: Brazil<sup>409</sup>

see also animal feedstuffs (dairy cake), bird food, bird food, wild, biri testa, blackgram, blackgram husk, cottonseed, cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meats, dog food, egg production mixed feed, feed, compound, feed (cat), feed (dog), feed (pig), feed (poultry), feed (rabbit), feed (sheep), fish meal, horsegram, maize, maize gluten, maize husk, maize, ground, maize, preharvest, mung testa, mustard cake, niger cake, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanuts, peanut, kernels, redgram husk, rice bran, rice bran (deoiled), rice chaff, rice meal, rice (polish), sal seed cake, sesame cake, sorghum, soybean meal, soybeans, wheat, wheat bran

#### AFLATOXIN B

incidence: 7/20, conc. range:

≥25–>100 µg/kg, country: France<sup>46</sup>

see also barley, cocoa (oil cake), cottonseed cake, feed, feed (maize, gluten), feed (pig), feed (poultry), flour (wheat), lucern (dried), maize, maize gluten, maize grains, oats, peanut (oil cake), rice, broken, sorghum, soybean (oil cake), sunflower (oil cake), wheat

#### AFLATOXIN

incidence: 45/124, conc. range: 1–3000 µg/kg, country: India<sup>229</sup>

incidence: 378/498, conc. range:

3–1754 µg/kg, country: India<sup>247</sup>

incidence: 3/3, conc. range: <30 µg/kg (2 sa), >30 µg/kg (1 sa), country: India<sup>380</sup>

see also blackgram husk, bread crumbs, broiler finisher, broiler starter, cotton cake, cottonseed, cottonseed cake, cottonseed extract, cottonseed meal, feed, feed (cow), feed (dog), feed (horse), feed (maize, gluten), feed (pig), feed (poultry), feed (rabbit), feed (rat/mice), feed (sheep), feeds, grain, fish meal, flour (wheat), groundnut cake, grower's mash, horsegram, layer's mash, maize, maize gluten, maize, white, milo, peanut cake, peanut cake (deoiled), peanut, kernels, peanut (oil cake), pearl millet, pig breeder's mash, pig finisher, pig starter, pod with haulms, poultry breeder's mash, rabbit pellets, redgram husk, rice, rice bran (deoiled), rice, broken, rice (polish), sesame cake, silk worm pupae, sorghum, soybean cake, soybean meal, wheat, wheat bran

#### AFLATOXIN B<sub>1</sub> + B<sub>2</sub> + G<sub>1</sub> + G<sub>2</sub>

incidence: 11/59, conc. range: <50 µg/kg,

country: Poland<sup>84</sup>

see also feed (pig), feed (poultry)

#### AFLATOXIN B+G

incidence: 5/23, conc. range: 5–2000 µg/kg,

Ø conc.: 90 µg/kg, country: France<sup>45</sup>

see also feed (pig), feed (poultry), feed (rabbit), feed (rat), mice feed, peanut (oil cake)

## CITRININ

incidence: 14/124, conc. range:

251–2000 µg/kg, country: India<sup>229</sup>

see also barley, barley, oats, barley-soybean diet, cottonseed cake, feed, feed, mixed, feed (pig), fish meal, hay, maize, maize, white, *Makhana* (*Euryale ferox* Salisb) puffs, oats, palm products, peas and beans, rice bran, rice germ, wheat, wheat and other grains (moldy), wheat bran

## DEOXYNIVALENOL

incidence: 2/18, conc. range: 200 µg/kg,

Ø conc.: 200 µg/kg, country: Saudi Arabia<sup>389</sup>

see also barley, barley, husked, barley, unhusked (naked), barley (pressed), bone meal, bran, broilers feed, calf fattening mixed feed, coconut, expeller, corn cob mix silage, cottonseed, cottonseed cake, dairy cattle feed, egg production mixed feed, feed, feed components, feed, commercial mix, feed, mixed, feed, mixed (primarily maize), feed (barley), feed (chicken), feed (dog), feed (fish), feed (mill run, from wheat), feed (mink), feed (pig), feed (poultry), feed (reindeer), feeds, grain, feeds, industrial, feedstuff, feedstuffs (rapeseed, turnip, fish meal, concentrates), fish meal, grain, mixed feed, grains, mixed, grains (no specification), maize, maize ears, maize fibre, maize germ, maize germ/bran, maize germ meal, maize gluten, maize kernels, maize meal, maize powder, maize screenings, maize stalks (pith), maize, “Baby”, maize, hybrid, maize, white, oats, rice bran, rice germ cake, rye, silage, sorghum, soybeans, triticale, wheat, wheat and barley, wheat, red hard winter, wheat, soft white winter, wheat, spring, wheat, winter

## NIVALENOL

incidence: 1/18, conc.: 1250 µg/kg, country: Saudi Arabia<sup>389</sup>

see also barley, barley, husked, barley, unhusked (naked), barley (pressed), bran, feed, feed components, feed (poultry), feed (reindeer), feeds, industrial, maize, maize ears, maize germ, maize germ/bran, maize gluten, maize kernels, maize meal, maize

powder, maize screenings, maize, “Baby”, oats, rye, silage, triticale, wheat

## OCHRATOXIN A

incidence: 1/59, conc. between 10 and

50 µg/kg, country: Poland<sup>84</sup>

incidence: 26/124, conc. range:

251–1500 µg/kg, country: India<sup>229</sup>

see also alfalfa, barley, barley, oats, barley (high moisture), barley-soybean diet, bird food, domestic, bird food, wild, broilers feed, cereal grains, citrus pulp, coconut, expeller, corn cob mix silage, diet (dairy cow), diet (poultry), diet (starter), dog food, eat, egg production mixed feed, feed, feed wheat, oat and barley, feed, commercial mix, feed, mixed, feed, mixed (pelleted), feed (broilers), feed (cat), feed (cereals), feed (pig), feed ec (pig), feed (poultry), feed ec (poultry), feed (poultry, pig), feed ec (rabbit), feed (trout), grain, mixed feed, grains, mixed, grains (heated), hay, horse bean, maize, maize feed, milo, maize gluten, maize meal, maize, white, *Makhana* (*Euryale ferox* Salisb) puffs, milk production mixed feed, millet, oat and barley (hammer-milled), oats, palm products, peanut cake, peas, peas and beans, pet food, pig feedstuffs, pig grower diet, pig meal, piglet diet, poultry feedstuffs, rice bran, rice germ, rice germ cake, rye, sorghum, soybean groats, sunflower, sunflower seeds, extracted, tapioca, triticale, *Vicia faba*, wheat, wheat and barley, wheat bran, wheat hay, wheat, oats

## ZEARALENONE

incidence: 8/8, conc. range: 23–694 µg/kg,

Ø conc.: 168.6 µg/kg, country: USA<sup>119</sup>

incidence: 18/124, conc. range:

251–1500 µg/kg, country: India<sup>229</sup>

see also alfalfa, barley, barley, husked, barley, unhusked (naked), barley and feed, bone meal, bran, broilers feed, *Carthamus* cake, chick pea, concentrate, mixed, corn cob mix silage, cotton cake, cottonseed, cottonseed cake, diet (dairy cow), diet (poultry), diets (mixed), feed, feed components, feed, mixed, feed, mixed (primarily maize also maize, oats, wheat), feed (bran), feed (broiler chicken), feed (chicken), feed (dairy), feed (developing

pig), feed (mill run, from wheat), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (starter chicken), feedstuff, fish meal, forage grass, grain, bruised, grain, mixed feed, grains (no specification), hay, maize, maize ears, maize flakes, maize germ, maize germ/bran, maize gluten, maize kernels, maize meal, maize oil cake, maize screenings, maize stalks (pith), maize, "Baby", maize, hybrid, maize, shelled, maize, unshelled, maize, white, maize grain, artificially dried, maize grain, crib dried, maize grain, ensiled, milk production mixed feed, oats, *Paspalum palidosum*, straw, peanut hulls/skins, rice bran, rice germ, rice germ cake, rye, silage, sorghum, soybeans, soybeans, extracted, sunflower cake, tapioca, triticale, wheat, wheat bran, wheat bran and chana testa, wheat soya meal

**Feed (cattle and dairy)** may contain the following mycotoxins:

**FUMONISINS**

incidence: 7/7, conc. range:  $\leq 5000 \mu\text{g}/\text{kg}$ , country: USA<sup>147</sup>

see also feed (chicken), feed (dairy), feed (horse), maize, maize germ, maize gluten, maize meal, maize screenings

**Feed (cereals)** may contain the following mycotoxins:

**OCHRATOXIN A**

incidence: 57/177, conc. range:  $\leq 2389 \mu\text{g}/\text{kg}$ , Ø conc.:  $103 \mu\text{g}/\text{kg}$ , country: Germany<sup>184</sup>

incidence: 38/608, conc. range:  $\leq 206 \mu\text{g}/\text{kg}$ , country: Germany<sup>185</sup>

incidence: 21/150, conc. range:  $\leq 40 \mu\text{g}/\text{kg}$ , country: Germany<sup>186</sup>

see also alfalfa, barley, barley, oats, barley (high moisture), barley-soybean diet, bird food, domestic, bird food, wild, broilers feed, cereal grains, citrus pulp, coconut, expeller, corn cob mix silage, diet (dairy cow), diet (poultry), diet (starter), dog food, eat, egg production mixed feed, feed, feed wheat, oat and barley, feed, commercial mix, feed, mixed, feed, mixed (pelleted), feed (broilers),

feed (cat), feed (cattle), feed (pig), feed ec (pig), feed (poultry), feed ec (poultry), feed (poultry, pig), feed ec (rabbit), feed (trout), grain, mixed feed, grains, mixed, grains (heated), hay, horse bean, maize, maize feed, milo, maize gluten, maize meal, maize, white, *Makhana* (*Euryale ferox* Salisb) puffs, milk production mixed feed, millet, oat and barley (hammer-milled), oats, palm products, peanut cake, peas, peas and beans, pet food, pig feedstuffs, pig grower diet, pig meal, piglet diet, poultry feedstuffs, rice bran, rice germ, rice germ cake, rye, sorghum, soybean groats, sunflower, sunflower seeds, extracted, tapioca, triticale, *Vicia faba*, wheat, wheat and barley, wheat bran, wheat hay, wheat, oats

**Feed (chicken)** may contain the following mycotoxins:

**AFLATOXIN B<sub>1</sub>**

incidence: 4/4, conc. range:  $0.2\text{--}0.5 \mu\text{g}/\text{kg}$ , country: Botswana<sup>102</sup>

incidence: 274/290, conc. range:  $1\text{--}500 \mu\text{g}/\text{kg}$ , country: Indonesia<sup>118</sup>

see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20% peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5% peanut products), dairy cattle feed (containing 6–10% peanut products), dairy cattle feed (containing 6–12% peanut products), dairy cattle feed (containing more than 20% peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer,

feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60 % maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm products, palm kernels, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

#### AFLATOXIN G<sub>1</sub>

incidence: 4/4, conc. range: 0.2–0.5 µg/kg, country: Botswana<sup>102</sup>

see also animal feedstuffs (dairy cake), bird food, bird food, wild, concentrate, mixed, cottonseed, cottonseed cake, feed (cat), feed (dog), maize, maize, ground, maize, preharvest, meat meal, milk production mixed feed, murkool, peanut cake, peanut expeller, peanut hay, peanut meal, peanuts, rice bran, rice germ, sorghum, soybeans, wheat, wheat bran, wheat bran and chana testa

#### DEOXYNIVALENOL

incidence: 1/1, conc. range: <400 µg/kg, country: USA<sup>71</sup>

see also barley, barley, husked, barley, unhusked (naked), barley (pressed), bone meal, bran, broilers feed, calf fattening mixed feed, coconut, expeller, corn cob mix silage, cottonseed, cottonseed cake, dairy cattle feed, egg production mixed feed, feed, feed components, feed, commercial mix, feed, mixed, feed, mixed (primarily maize), feed (barley), feed (cattle), feed (dog), feed (fish), feed (mill run, from wheat), feed (mink), feed (pig), feed (poultry), feed (reindeer), feeds, grain, feeds, industrial, feedstuff, feedstuffs (rapeseed, turnip, fish meal, concentrates), fish meal, grain, mixed feed, grains, mixed, grains (no specification), maize, maize ears, maize fibre, maize germ, maize germ/bran, maize germ meal, maize gluten, maize kernels, maize meal, maize powder, maize screenings, maize stalks (pith), maize, “Baby”, maize, hybrid, maize, white, oats, rice bran, rice germ cake, rye, silage, sorghum, soybeans, triticale, wheat, wheat and barley, wheat, red hard winter, wheat, soft white winter, wheat, spring, wheat, winter

#### FUMONISIN B<sub>1</sub>

incidence: ?/3, conc. range: 100–15,000 µg/kg, country: USA<sup>158</sup>

see also barley, bird food, wild, dog food, feed, feed, complete ration, feed, general, feed, layer, feed, maize-based, feed, mixed, feed, pelleted ration, feed, screenings, feed, sweet, feed (cat), feed (broilers), feed (dog), feed (gluten), feed (horse), feed (maize), feed (pig), feed (poultry), feed (rat), feed (rodent), forage grass, maize, maize and maize screenings, maize bran, maize ears, maize fine fractions, maize flakes, maize germ, maize germ/bran, maize germ meal, maize gluten, maize grits, maize kernels, maize meal, maize powder, maize screenings, maize, “Baby”, maize, ground, maize, preharvest, maize, sweet feed, maize/oats mix, rat chow, silage, sorghum, soybeans, wheat

#### FUMONISINS

incidence: 4/4, conc. range: 163–1050 µg/kg, Ø conc.: 572 µg/kg, country: Botswana<sup>102</sup>

see also feed (cattle and dairy), feed (dairy), feed (horse), maize, maize germ, maize gluten, maize meal, maize screenings

#### ZEARALENONE

incidence: 1/4, conc.: 40 µg/kg, country: Botswana<sup>102</sup>

see also alfalfa, barley, barley, husked, barley, unhusked (naked), barley and feed, bone meal, bran, broilers feed, *Carthamus* cake, chick pea, concentrate, mixed, corn cob mix silage, cotton cake, cottonseed, cottonseed cake, diet (dairy cow), diet (poultry), diets (mixed), feed, feed components, feed, mixed, feed, mixed (primarily maize also maize, oats, wheat), feed (bran), feed (broiler chicken), feed (cattle), feed (dairy), feed (developing pig), feed (mill run, from wheat), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (starter chicken), feedstuff, fish meal, forage grass, grain, bruised, grain, mixed feed, grains (no specification), hay, maize, maize ears, maize flakes, maize germ, maize germ/bran, maize gluten, maize kernels, maize meal, maize oil cake, maize screenings, maize stalks (pith), maize, "Baby", maize, hybrid, maize, shelled, maize, unshelled, maize, white, maize grain, artificially dried, maize grain, crib dried, maize grain, ensiled, milk production mixed feed, oats, *Paspalum palidosum*, straw, peanut hulls/skins, rice bran, rice germ, rice germ cake, rye, silage, sorghum, soybeans, soybeans, extracted, sunflower cake, tapioca, triticale, wheat, wheat bran, wheat bran and chana testa, wheat soya meal

**Feed (cow)** may contain the following mycotoxins:

#### AFLATOXIN

incidence: 13/18, conc. range: 0–268 µg/kg, country: Nigeria<sup>109</sup>

see also blackgram husk, bread crumbs, broiler finisher, broiler starter, cotton cake, cottonseed, cottonseed cake, cottonseed extract, cottonseed meal, feed, feed (cattle), feed (dog), feed (horse), feed (maize, gluten), feed (pig), feed (poultry), feed (rabbit), feed

(rat/mice), feed (sheep), feeds, grain, fish meal, flour (wheat), groundnut cake, grower's mash, horsegram, layer's mash, maize, maize gluten, maize, white, milo, peanut cake, peanut cake (deoiled), peanut, kernels, peanut (oil cake), pearl millet, pig breeder's mash, pig finisher, pig starter, pod with haulms, poultry breeder's mash, rabbit pellets, redgram husk, rice, rice bran (deoiled), rice, broken, rice (polish), sesame cake, silk worm pupae, sorghum, soybean cake, soybean meal, wheat, wheat bran

**Feed (dairy)** may contain the following mycotoxins:

#### AFLATOXIN B<sub>1</sub>

incidence: 62/206, conc. range: <5 µg/kg (17 sa), 6–20 µg/kg (24 sa), 21–50 µg/kg (19 sa), >100 µg/kg (2 sa), country: UK<sup>267</sup>

see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig),

feed (rabbit), feed (sheep), feed (50–60 % maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

#### FUMONISINS

incidence: 1/1, conc. range:  $\leq 5000 \mu\text{g}/\text{kg}$ , country: USA<sup>147</sup>

see also feed (cattle and dairy), feed (chicken), feed (horse), maize, maize germ, maize gluten, maize meal, maize screenings

#### ZEARALENONE

incidence: 35/275, conc. range:

140–960  $\mu\text{g}/\text{kg}$ , country: Hungary<sup>344</sup>

see also alfalfa, barley, barley, husked, barley, unhusked (naked), barley and feed, bone meal, bran, broilers feed, *Carthamus* cake, chick pea, concentrate, mixed, corn cob mix silage, cotton cake, cottonseed, cottonseed cake, diet (dairy cow), diet (poultry), diets (mixed), feed, feed components, feed, mixed, feed, mixed (primarily maize also maize, oats, wheat), feed (bran), feed (broiler chicken), feed (cattle), feed (chicken), feed (mill run, from wheat), feed (miscellaneous), feed (pig),

feed (poultry), feed (poultry, pig), feed (starter chicken), feedstuff, fish meal, forage grass, grain, bruised, grain, mixed feed, grains (no specification), hay, maize, maize ears, maize flakes, maize germ, maize germ/bran, maize gluten, maize kernels, maize meal, maize oil cake, maize screenings, maize stalks (pith), maize, “Baby”, maize, hybrid, maize, shelled, maize, unshelled, maize, white, maize grain, artificially dried, maize grain, crib dried, maize grain, ensiled, milk production mixed feed, oats, *Paspalum palidosum*, straw, peanut hulls/skins, rice bran, rice germ, rice germ cake, rye, silage, sorghum, soybeans, soybeans, extracted, sunflower cake, tapioca, triticale, wheat, wheat bran, wheat bran and chana testa, wheat soya meal

**Feed (developing pig)** may contain the following mycotoxins:

#### ZEARALENONE

incidence: 1/7, conc.: 1203  $\mu\text{g}/\text{kg}$ , country: Taiwan<sup>221</sup>

see also alfalfa, barley, barley, husked, barley, unhusked (naked), barley and feed, bone meal, bran, broilers feed, *Carthamus* cake, chick pea, concentrate, mixed, corn cob mix silage, cotton cake, cottonseed, cottonseed cake, diet (dairy cow), diet (poultry), diets (mixed), feed, feed components, feed, mixed, feed, mixed (primarily maize also maize, oats, wheat), feed (bran), feed (broiler chicken), feed (cattle), feed (chicken), feed (dairy), feed (mill run, from wheat), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (starter chicken), feedstuff, fish meal, forage grass, grain, bruised, grain, mixed feed, grains (no specification), hay, maize, maize ears, maize flakes, maize germ, maize germ/bran, maize gluten, maize kernels, maize meal, maize oil cake, maize screenings, maize stalks (pith), maize, “Baby”, maize, hybrid, maize, shelled, maize, unshelled, maize, white, maize grain, artificially dried, maize grain, crib dried, maize grain, ensiled, milk production mixed feed, oats, *Paspalum palidosum*, straw, peanut hulls/skins, rice bran, rice germ, rice germ cake, rye, silage,

sorghum, soybeans, soybeans, extracted, sunflower cake, tapioca, triticale, wheat, wheat bran, wheat bran and chana testa, wheat soya meal

**Feed (dog)** may contain the following mycotoxins:

**AFLATOXICOL**

incidence: 9/19, Ø conc.: 0.3 µg/kg, country: Mexico<sup>395</sup>  
see also feed (cat)

**AFLATOXIN B<sub>1</sub>**

incidence: 15/19, conc. range: ≤39.7 µg/kg, Ø conc.: 5 µg/kg, country: Mexico<sup>395</sup>  
see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60 % maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture,

linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

**AFLATOXIN B<sub>2</sub>**

incidence: 5/19, Ø conc.: 0.07 µg/kg, country: Mexico<sup>395</sup>

see also animal feedstuffs (dairy cake), bird food, bird food, wild, biri testa, blackgram, blackgram husk, cottonseed, cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meats, dog food, egg production mixed feed, feed, compound, feed (cat), feed (cattle), feed (pig), feed (poultry), feed (rabbit), feed (sheep), fish meal, horsegram, maize, maize gluten, maize husk, maize, ground, maize, preharvest, mung testa, mustard cake, niger cake, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanuts, peanut, kernels, redgram husk, rice bran, rice bran (deoiled), rice chaff, rice meal, rice (polish), sal seed cake, sesame cake, sorghum, soybean meal, soybeans, wheat, wheat bran

**AFLATOXIN G<sub>1</sub>**

incidence: 12/19, Ø conc.: 0.05 µg/kg, country: Mexico<sup>395</sup>



see also animal feedstuffs (dairy cake), bird food, bird food, wild, concentrate, mixed, cottonseed, cottonseed cake, feed (cat), feed (chicken), maize, maize, ground, maize, preharvest, meat meal, milk production mixed feed, murkool, peanut cake, peanut expeller, peanut hay, peanut meal, peanuts, rice bran, rice germ, sorghum, soybeans, wheat, wheat bran, wheat bran and chana testa

#### AFLATOXIN G<sub>2</sub>

incidence: 4/19, Ø conc.: 0.03 µg/kg, country: Mexico<sup>395</sup>

see also animal feedstuffs (dairy cake), bird food, feed (cat), maize, maize, preharvest, peanut expeller, peanut hay, peanut meal, peanuts, soybeans

#### AFLATOXIN M<sub>1</sub>

incidence: 12/19, Ø conc.: 2 µg/kg, country: Mexico<sup>395</sup>

see also feed (cat), maize, maize, ground

#### AFLATOXIN M<sub>2</sub>

incidence: 17/19, Ø conc.: 0.14 µg/kg, country: Mexico<sup>395</sup>

see also feed (cat)

#### AFLATOXIN P<sub>1</sub>

incidence: 11/19, conc. range: ≤12.5 µg/kg, Ø conc.: 1.16 µg/kg, country: Mexico<sup>395</sup>

see also feed (cat)

#### AFLATOXIN

incidence: 3/18, conc. range: <1.75–20 µg/kg, country: Turkey<sup>340</sup>

see also blackgram husk, bread crumbs, broiler finisher, broiler starter, cotton cake, cottonseed, cottonseed cake, cottonseed extract, cottonseed meal, feed, feed (cattle), feed (cow), feed (horse), feed (maize, gluten), feed (pig), feed (poultry), feed (rabbit), feed (rat/mice), feed (sheep), feeds, grain, fish meal, flour (wheat), groundnut cake, grower's mash, horsegram, layer's mash, maize, maize gluten, maize, white, milo, peanut cake, peanut cake (deoiled), peanut, kernels, peanut (oil cake), pearl millet, pig breeder's mash, pig finisher, pig starter, pod with haulms, poultry breeder's mash, rabbit pellets, redgram husk, rice, rice bran

(deoiled), rice, broken, rice (polish), sesame cake, silk worm pupae, sorghum, soybean cake, soybean meal, wheat, wheat bran

#### DEOXYNIVALENOL

incidence: 2/2\*, conc. range: 14–15 µg/kg, Ø conc.: 14.5 µg/kg, country: Finland<sup>62</sup>, \*imported ?

incidence: 1/1, conc.: 300 µg/kg, country: USA<sup>71</sup>

incidence: 2/2, conc. range: 70–1000 µg/kg, Ø conc.: 535 µg/kg, country: USA<sup>71</sup>

see also barley, barley, husked, barley, unhusked (naked), barley (pressed), bone meal, bran, broilers feed, calf fattening mixed feed, coconut, expeller, corn cob mix silage, cottonseed, cottonseed cake, dairy cattle feed, egg production mixed feed, feed, feed components, feed, commercial mix, feed, mixed, feed, mixed (primarily maize), feed (barley), feed (cattle), feed (chicken), feed (fish), feed (mill run, from wheat), feed (mink), feed (pig), feed (poultry), feed (reindeer), feeds, grain, feeds, industrial, feedstuff, feedstuffs (rapeseed, turnip, fish meal, concentrates), fish meal, grain, mixed feed, grains, mixed, grains (no specification), maize, maize ears, maize fibre, maize germ, maize germ/bran, maize germ meal, maize gluten, maize kernels, maize meal, maize powder, maize screenings, maize stalks (pith), maize, "Baby", maize, hybrid, maize, white, oats, rice bran, rice germ cake, rye, silage, sorghum, soybeans, triticale, wheat, wheat and barley, wheat, red hard winter, wheat, soft white winter, wheat, spring, wheat, winter

#### DIACETOXYSCIRPENOL

incidence: 1/2\*, conc.: 60 µg/kg, country: Finland<sup>62</sup>, \*imported ?

see also alfalfa, barley, feed, feed components, feed (fish), feed (mink), feed (pig), feed (poultry), feed (reindeer), feeds, grain, feedstuff, forage grass, grain, mixed feed, grains (no specification), maize, maize gluten, oat and barley (hammer-milled), oats, peanuts, soybeans, wheat

**FUMONISIN B<sub>1</sub>**

incidence: 2/2, conc. range: 820–1410 µg/kg,  
 Ø conc.: 1115 µg/kg, country: USA<sup>154</sup>

see also barley, bird food, wild, dog food, feed, feed, complete ration, feed, general, feed, layer, feed, maize-based, feed, mixed, feed, pelleted ration, feed, screenings, feed, sweet, feed (broilers), feed (cat), feed (chicken), feed (gluten), feed (horse), feed (maize), feed (pig), feed (poultry), feed (rat), feed (rodent), forage grass, maize, maize and maize screenings, maize bran, maize ears, maize fine fractions, maize flakes, maize germ, maize germ/bran, maize germ meal, maize gluten, maize grits, maize kernels, maize meal, maize powder, maize screenings, maize, “Baby”, maize, ground, maize, preharvest, maize, sweet feed, maize/oats mix, rat chow, silage, sorghum, soybeans, wheat

**FUMONISIN B<sub>2</sub>**

incidence: 2/2, conc. range: 102–144 µg/kg,  
 Ø conc.: 123 µg/kg, country: USA<sup>154</sup>

see also barley, bird food, wild, dog food, feed, feed, maize-based, feed, mixed, feed (cat), feed (gluten), feed (horse), feed (maize), feed (poultry), feed (rodent), maize, maize bran, maize fine fractions, maize flakes, maize germ, maize germ/bran, maize germ meal, maize gluten, maize grits, maize kernels, maize meal, maize powder, maize screenings, maize, “Baby”, maize, ground, maize, preharvest, rat chow, wheat

**HT-2 TOXIN**

incidence: 1/2\*, conc.: 12 µg/kg, country: Finland<sup>62</sup>, \*imported ?

see also barley, feed components, feed (fish), feed (pig), feed (poultry), feed (reindeer), grain, mixed feed, grains, mixed, grains (no specification), maize, maize germ/bran, maize gluten, maize meal, maize screenings, oats, rye, silage, wheat

**T-2 TOXIN**

incidence: 1/2\*, conc.: 37 µg/kg, country: Finland<sup>62</sup>, \*imported ?

see also alfalfa, barley, bran, diet (grower), diet (poultry), feed, feed components, feed, layer, feed, mixed, feed (fish), feed (mink),

feed (pig), feed (poultry), feedstuff, forage grass, grain, mixed feed, grains (no specification), hay, maize, maize germ/bran, maize gluten, maize meal, maize screenings, maize stalks (pith), oat and barley (hammer-milled), oats, peanuts, pig grower diet, piglet diet, rye, sorghum, triticale, wheat  
 For further information see also dog food

**Feed (dug)** may contain the following mycotoxins:

**AFLATOXIN B<sub>1</sub>**

incidence: 2/3, conc. range: 20–50 µg/kg,  
 Ø conc.: 35 µg/kg, country: Australia<sup>121</sup>

see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60 % maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake,

maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

**Feed (excluding peanuts, suspect)** may contain the following mycotoxins:

**AFLATOXINS**

incidence: 4/123, conc. range: 40–270 µg/kg, country: UK<sup>168</sup>

see also animal feed (maize), animal feed (mixed), barley, copra meal, cottonseed, cottonseed fines, cottonseed meal, cottonseed meats, feed, feed ingredients (miscellaneous), feed, mixed, feed (goat), feed (pig), feed (poultry), feedstuff, grain, grain, mixed feed, maize, maize, shelled, millet, peanut cake, peanut meal, peanut meal and by-products, peanuts, protein concentrates, rice, rice bran, sorghum, soybean meal, sunflower

**Feed (excluding peanut meal, suspect)** may contain the following mycotoxins:

**STERIGMATOCYSTIN**

incidence: 3/188, conc. range: ≤3000 µg/kg, country: UK<sup>168</sup>

see also feed, mixed (crumbled), wheat

**Feed (fish)** may contain the following mycotoxins:

**AFLATOXIN B<sub>1</sub>**

incidence: 1/41, conc.: 20 µg/kg, country: South Africa<sup>79</sup>

see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60 % maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal,

peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

#### DEOXYNIVALENOL

incidence: 3/3\*, conc. range: 1–60 µg/kg, Ø conc.: 33 µg/kg, country: Finland<sup>62</sup>, \*imported ?

see also barley, barley, husked, barley, unhusked (naked), barley (pressed), bone meal, bran, broilers feed, calf fattening mixed feed, coconut, expeller, corn cob mix silage, cottonseed, cottonseed cake, dairy cattle feed, egg production mixed feed, feed, feed components, feed, commercial mix, feed, mixed, feed, mixed (primarily maize), feed (barley), feed (cattle), feed (chicken), feed (dog), feed (mill run, from wheat), feed (mink), feed (pig), feed (poultry), feed (reindeer), feeds, grain, feeds, industrial, feedstuff, feedstuffs (rapeseed, turnip, fish meal, concentrates), fish meal, grain, mixed feed, grains, mixed, grains (no specification), maize, maize ears, maize fibre, maize germ, maize germ/bran, maize germ meal, maize gluten, maize kernels, maize meal, maize powder, maize screenings, maize stalks (pith), maize, “Baby”, maize, hybrid, maize, white, oats, rice bran, rice germ cake, rye, silage, sorghum, soybeans, triticale, wheat, wheat and barley, wheat, red hard winter, wheat, soft white winter, wheat, spring, wheat, winter

#### DIACETOXYSCIRPENOL

incidence: 1/3\*, conc.: 41 µg/kg, country: Finland<sup>62</sup>, \*imported ?

see also alfalfa, barley, feed, feed components, feed (dog), feed (mink), feed (pig), feed (poultry), feed (reindeer), feeds, grain, feedstuff, forage grass, grain, mixed feed,

grains (no specification), maize, maize gluten, oat and barley (hammer-milled), oats, peanuts, soybeans, wheat

#### HT-2 TOXIN

incidence: 2/3\*, conc. range: 10–90 µg/kg, Ø conc.: 50 µg/kg, country: Finland<sup>62</sup>, \*imported ?

see also barley, feed components, feed (dog), feed (pig), feed (poultry), feed (reindeer), grains, mixed, grains, mixed feed, grains (no specification), maize, maize germ/bran, maize gluten, maize meal, maize screenings, oats, rye, silage, wheat

#### T-2 TOXIN

incidence: 3/3\*, conc. range: 206–705 µg/kg, Ø conc.: 440 µg/kg, country: Finland<sup>62</sup>, \*imported ?

see also alfalfa, barley, bran, diet (grower), diet (poultry), feed, feed components, feed, layer, feed, mixed, feed (dog), feed (mink), feed (pig), feed (poultry), feedstuff, forage grass, grain, mixed feed, grains (no specification), hay, maize, maize germ/bran, maize gluten, maize meal, maize screenings, maize stalks (pith), oat and barley (hammer-milled), oats, peanuts, pig grower diet, piglet diet, rye, sorghum, triticale, wheat

**Feed (gluten)** may contain the following mycotoxins:

#### AFLATOXIN B<sub>1</sub>

incidence: 6/6, conc. range: 6.3–18.6 µg/kg, Ø conc.: 12 µg/kg, country: Japan<sup>141</sup>

see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed

meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60 % maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

#### FUMONISIN B<sub>1</sub>

incidence: 6/6, conc. range: 300–2400 µg/kg, Ø conc.: 1100 µg/kg, country: Japan<sup>141</sup>  
see also barley, bird food, wild, dog food, feed, feed, complete ration, feed, general,

feed, layer, feed, maize-based, feed, mixed, feed, pelleted ration, feed, screenings, feed, sweet, feed (broilers), feed (cat), feed (chicken), feed (dog), feed (horse), feed (maize), feed (pig), feed (poultry), feed (rat), feed (rodent), forage grass, maize, maize and maize screenings, maize bran, maize ears, maize fine fractions, maize flakes, maize germ, maize germ/bran, maize germ meal, maize gluten, maize grits, maize kernels, maize meal, maize powder, maize screenings, maize, “Baby”, maize, ground, maize, preharvest, maize, sweet feed, maize/oats mix, rat chow, silage, sorghum, soybeans, wheat

#### FUMONISIN B<sub>2</sub>

incidence: 6/6, conc. range:  
<100–8500 µg/kg, Ø conc.: 3700 µg/kg,  
country: Japan<sup>141</sup>

see also barley, bird food, wild, dog food, feed, feed, maize-based, feed, mixed, feed (cat), feed (dog), feed (horse), feed (maize), feed (poultry), feed (rodent), maize, maize bran, maize fine fractions, maize flakes, maize germ, maize germ/bran, maize germ meal, maize gluten, maize grits, maize kernels, maize meal, maize powder, maize screenings, maize, “Baby”, maize, ground, maize, preharvest, rat chow, wheat

**Feed (goat)** may contain the following mycotoxins:

#### AFLATOXINS

incidence: 1/1, conc.: 510–2000 µg/kg,  
country: Australia<sup>21</sup>

see also animal feed (maize), animal feed (mixed), barley, copra meal, cottonseed, cottonseed fines, cottonseed meal, cottonseed meats, feed, feed ingredients (miscellaneous), feed, mixed, feed (excluding peanuts, suspect), feed (pig), feed (poultry), feedstuff, grain, grain, mixed feed, maize, maize, shelled, millet, peanut cake, peanut meal, peanut meal and by-products, peanuts, protein concentrates, rice, rice bran, sorghum, soybean meal, sunflower

**Feed (GP No.1)** may contain the following mycotoxins:

**TENUAZONIC ACID**

incidence: 10/10, conc. range: <10–20 µg/kg,

country: Australia<sup>188</sup>

see also feed, oilseed rape meal, sunflower seed meal, sunflower seeds, ensiling

**Feed (horse)** may contain the following mycotoxins:

**AFLATOXIN B<sub>1</sub>**

incidence: 5/5, conc. range: 80–150 µg/kg,

country: India<sup>386</sup>

see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60 % maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize,

ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

**AFLATOXIN**

incidence: 2/20, conc. range: <1.75–14 µg/kg,

country: Turkey<sup>340</sup>

see also blackgram husk, bread crumbs, broiler finisher, broiler starter, cotton cake, cottonseed, cottonseed cake, cottonseed extract, cottonseed meal, feed, feed (cattle), feed (cow), feed (dog), feed (maize, gluten), feed (pig), feed (poultry), feed (rabbit), feed (rat/mice), feed (sheep), feeds, grain, fish meal, flour (wheat), groundnut cake, grower's mash, horsegram, layer's mash, maize, maize gluten, maize, white, milo, peanut cake, peanut cake (deoiled), peanut, kernels, peanut (oil cake), pearl millet, pig breeder's mash, pig finisher, pig starter, pod with haulms, poultry breeder's mash, rabbit pellets, redgram husk, rice, rice bran (deoiled), rice, broken, rice (polish), sesame cake, silk worm pupae, sorghum, soybean cake, soybean meal, wheat, wheat bran

**FUMONISIN B<sub>1</sub>**

incidence: 14/20, conc. range:

400–23,600 µg/kg, Ø conc.: 3500 µg/kg,

country: Spain<sup>155</sup>

incidence: ?/5, conc. range:

<100–37,000 µg/kg, country: USA<sup>158</sup>

incidence: 1/5, conc. range: 560 µg/kg,

country: India<sup>386</sup>

see also barley, bird food, wild, dog food, feed, feed, complete ration, feed, general, feed, layer, feed, maize-based, feed, mixed, feed, pelleted ration, feed, screenings, feed, sweet, feed (broilers), feed (cat), feed (chicken), feed (dog), feed (gluten), feed (maize), feed (pig), feed (poultry), feed (rat), feed (rodent), forage grass, maize, maize and maize screenings, maize bran, maize ears, maize fine fractions, maize flakes, maize germ, maize germ/bran, maize germ meal, maize gluten, maize grits, maize kernels, maize meal, maize powder, maize screenings, maize, "Baby", maize, ground, maize, preharvest, maize, sweet feed, maize/oats mix, rat chow, silage, sorghum, soybeans, wheat

#### FUMONISIN B<sub>2</sub>

incidence: 1/20, conc.: 300 µg/kg, country: Spain<sup>155</sup>

see also barley, bird food, wild, dog food, feed, feed, maize-based, feed, mixed, feed (cat), feed (dog), feed (gluten), feed (maize), feed (poultry), feed (rodent), maize, maize bran, maize fine fractions, maize flakes, maize germ, maize germ/bran, maize germ meal, maize gluten, maize grits, maize kernels, maize meal, maize powder, maize screenings, maize, "Baby", maize, ground, maize, preharvest, rat chow, wheat

#### FUMONISINS

incidence: 3/3, conc. range: ≤5000 µg/kg, country: USA<sup>147</sup>

see also feed (cattle and dairy), feed (chicken), feed (dairy), maize, maize germ, maize gluten, maize meal, maize screenings

**Feed (maize)** may contain the following mycotoxins:

#### FUMONISIN B<sub>1</sub>

incidence: ?/165, conc. range: 0–8550 µg/kg, Ø conc.: 570 µg/kg\*, country: South Africa<sup>147</sup>, \*mean of all samples

see also barley, bird food, wild, dog food, feed, feed, complete ration, feed, general, feed, layer, feed, maize-based, feed, mixed, feed, pelleted ration, feed, screenings, feed,

sweet, feed (broilers), feed (cat), feed (chicken), feed (dog), feed (gluten), feed (horse), feed (pig), feed (poultry), feed (rat), feed (rodent), forage grass, maize, maize and maize screenings, maize bran, maize ears, maize fine fractions, maize flakes, maize germ, maize germ/bran, maize germ meal, maize gluten, maize grits, maize kernels, maize meal, maize powder, maize screenings, maize, "Baby", maize, ground, maize, preharvest, maize, sweet feed, maize/oats mix, rat chow, silage, sorghum, soybeans, wheat

#### FUMONISIN B<sub>2</sub>

incidence: ?/165, conc. range: 0–1500 µg/kg, Ø conc.: 140 µg/kg\*, country: South Africa<sup>147</sup>, \*mean of all samples

see also barley, bird food, wild, dog food, feed, feed, maize-based, feed, mixed, feed (cat), feed (dog), feed (gluten), feed (horse), feed (poultry), feed (rodent), maize, maize bran, maize fine fractions, maize flakes, maize germ, maize germ/bran, maize germ meal, maize gluten, maize grits, maize kernels, maize meal, maize powder, maize screenings, maize, "Baby", maize, ground, maize, preharvest, rat chow, wheat

#### FUMONISIN B<sub>3</sub>

incidence: ?/165, conc. range: 0–740 µg/kg, Ø conc.: 50 µg/kg\*, country: South Africa<sup>147</sup>, \*mean of all samples

see also feed, feed (rodent), maize, maize bran, maize fine fractions, maize germ meal, maize kernels, maize powder, maize screenings

**Feed (maize, gluten)** may contain the following mycotoxins:

#### AFLATOXIN B

incidence: 7/20, conc. range: ≥25–>100 µg/kg, country: France<sup>46</sup>  
incidence: ?/8, conc. range: 6–57 µg/kg, Ø conc.: 31.5 µg/kg, country: Pakistan<sup>162</sup>

see also barley, cocoa (oil cake), cottonseed cake, feed, feed (cattle), feed (pig), feed (poultry), flour (wheat), lucern (dried), maize, maize gluten, maize grains, oats,

peanut (oil cake), rice, broken, sorghum, soybean (oil cake), sunflower (oil cake), wheat

#### AFATOXIN G

incidence: ?/8, conc.: 22 µg/kg, country: Pakistan<sup>162</sup>

see also cottonseed cake, maize gluten, maize grains, rice, broken

#### AFATOXIN

incidence: 125/156, conc. range: 3–60 µg/kg, country: USA<sup>86</sup>

see also blackgram husk, bread crumbs, broiler finisher, broiler starter, cotton cake, cottonseed, cottonseed cake, cottonseed extract, cottonseed meal, feed, feed (cattle), feed (cow), feed (dog), feed (horse), feed (pig), feed (poultry), feed (rabbit), feed (rat/mice), feed (sheep), feeds, grain, fish meal, flour (wheat), groundnut cake, grower's mash, horsegram, layer's mash, maize, maize gluten, maize, white, milo, peanut cake, peanut cake (deoiled), peanut, kernels, peanut (oil cake), pearl millet, pig breeder's mash, pig finisher, pig starter, pod with haulms, poultry breeder's mash, rabbit pellets, redgram husk, rice, rice bran (deoiled), rice, broken, rice (polish), sesame cake, silk worm pupae, sorghum, soybean cake, soybean meal, wheat, wheat bran

**Feed (mill run, from wheat)** may contain the following mycotoxins:

#### DEOXYNIVALENOL

incidence: 1/1\*, conc.: 550 µg/kg, country: Australia<sup>72</sup>, \*mainly

see also barley, barley, husked, barley, unhusked (naked), barley (pressed), bone meal, bran, broilers feed, calf fattening mixed feed, coconut, expeller, corn cob mix silage, cottonseed, cottonseed cake, dairy cattle feed, egg production mixed feed, feed, feed components, feed, commercial mix, feed, mixed, feed, mixed (primarily maize), feed (barley), feed (cattle), feed (chicken), feed (dog), feed (fish), feed (mink), feed (pig), feed (poultry), feed (reindeer), feeds, grain,

feeds, industrial, feedstuff, feedstuffs (rapeseed, turnip, fish meal, concentrates), fish meal, grain, mixed feed, grains, mixed, grains (no specification), maize, maize ears, maize fibre, maize germ, maize germ/bran, maize germ meal, maize gluten, maize kernels, maize meal, maize powder, maize screenings, maize stalks (pith), maize, "Baby", maize, hybrid, maize, white, oats, rice bran, rice germ cake, rye, silage, sorghum, soybeans, triticale, wheat, wheat and barley, wheat, red hard winter, wheat, soft white winter, wheat, spring, wheat, winter

#### ZEARALENONE

incidence: 1/1\*, conc.: 1020 µg/kg, country: Australia<sup>72</sup>, \*mainly

see also alfalfa, barley, barley, husked, barley, unhusked (naked), barley and feed, bone meal, bran, broilers feed, *Carthamus* cake, chick pea, concentrate, mixed, corn cob mix silage, cotton cake, cottonseed, cottonseed cake, diet (dairy cow), diet (poultry), diets (mixed), feed, feed components, feed, mixed, feed, mixed (primarily maize also maize, oats, wheat), feed (bran), feed (broiler chicken), feed (cattle), feed (chicken), feed (dairy), feed (developing pig), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (starter chicken), feedstuff, fish meal, forage grass, grain, bruised, grain, mixed feed, grains (no specification), hay, maize, maize ears, maize flakes, maize germ, maize germ/bran, maize gluten, maize kernels, maize meal, maize oil cake, maize screenings, maize stalks (pith), maize, "Baby", maize, hybrid, maize, shelled, maize, unshelled, maize, white, maize grain, artificially dried, maize grain, crib dried, maize grain, ensiled, milk production mixed feed, oats, *Paspalum palidosum*, straw, peanut hulls/skins, rice bran, rice germ, rice germ cake, rye, silage, sorghum, soybeans, soybeans, extracted, sunflower cake, tapioca, triticale, wheat, wheat bran, wheat bran and chana testa, wheat soya meal

**Feed (mink)** may contain the following mycotoxins:



**DEOXYNIVALENOL**

incidence: 2/2\*, conc. range: 32–47 µg/kg, Ø conc.: 39.5 µg/kg, country: Finland<sup>62</sup>, \*imported?

see also barley, barley, husked, barley, unhusked (naked), barley (pressed), bone meal, bran, broilers feed, calf fattening mixed feed, coconut, expeller, corn cob mix silage, cottonseed, cottonseed cake, dairy cattle feed, egg production mixed feed, feed, feed components, feed, commercial mix, feed, mixed, feed, mixed (primarily maize), feed (barley), feed (cattle), feed (chicken), feed (dog), feed (fish), feed (mill run, from wheat), feed (pig), feed (poultry), feed (reindeer), feeds, grain, feeds, industrial, feedstuff, feedstuffs (rapeseed, turnip, fish meal, concentrates), fish meal, grain, mixed feed, grains, mixed, grains (no specification), maize, maize ears, maize fibre, maize germ, maize germ/bran, maize germ meal, maize gluten, maize kernels, maize meal, maize powder, maize screenings, maize stalks (pith), maize, “Baby”, maize, hybrid, maize, white, oats, rice bran, rice germ cake, rye, silage, sorghum, soybeans, triticale, wheat, wheat and barley, wheat, red hard winter, wheat, soft white winter, wheat, spring, wheat, winter

**DIACETOXYSCIRPENOL**

incidence: 2/2\*, conc. range: 155–230 µg/kg, Ø conc.: 192.5 µg/kg, country: Finland<sup>62</sup>, \*imported?

see also alfalfa, barley, feed, feed components, feed (dog), feed (fish), feed (pig), feed (poultry), feed (reindeer), feeds, grain, feedstuff, forage grass, grain, mixed feed, grains (no specification), maize, maize gluten, oat and barley (hammer-milled), oats, peanuts, soybeans, wheat

**T-2 TOXIN**

incidence: 2/2\*, conc. range: 23–109 µg/kg, Ø conc.: 66 µg/kg, country: Finland<sup>62</sup>, \*imported?

see also alfalfa, barley, bran, diet (grower), diet (poultry), feed, feed components, feed, layer, feed, mixed, feed (dog), feed (fish),

feed (pig), feed (poultry), feedstuff, forage grass, grain, mixed feed, grains (no specification), hay, maize, maize germ/bran, maize gluten, maize meal, maize screenings, maize stalks (pith), oat and barley (hammer-milled), oats, peanuts, pig grower diet, piglet diet, rye, sorghum, triticale, wheat

**Feed (miscellaneous)** may contain the following mycotoxins:

**AFLATOXIN B<sub>1</sub>**

incidence: 5/27, conc. range: 1–20 µg/kg (4 sa), >300 µg/kg (1 sa), country: USA<sup>370</sup>  
see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60 % maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits,

maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

#### ZEARALENONE

incidence: 1/21, conc.: 162 µg/kg, country:

Taiwan<sup>221</sup>

incidence: 1/6, conc.: 203 µg/kg, country:

Taiwan<sup>221</sup>

incidence: 2/9, conc. range: 126–152 µg/kg,

Ø conc.: 139 µg/kg, country: Taiwan<sup>221</sup>

see also alfalfa, barley, barley, husked, barley, unhusked (naked), barley and feed, bone meal, bran, broilers feed, *Carthamus* cake, chick pea, concentrate, mixed, corn cob mix silage, cotton cake, cottonseed, cottonseed cake, diet (dairy cow), diet (poultry), diets (mixed), feed, feed components, feed, mixed, feed, mixed (primarily maize also maize, oats, wheat), feed (bran), feed (broiler chicken), feed (cattle), feed (chicken), feed (dairy), feed (developing pig), feed (mill run, from wheat), feed (pig), feed (poultry), feed (poultry, pig), feed (starter chicken), feedstuff, fish meal, forage grass, grain, bruised, grain, mixed feed, grains (no specification), hay, maize, maize ears, maize flakes, maize germ, maize germ/bran, maize gluten, maize kernels, maize meal, maize oil cake, maize screenings, maize stalks (pith), maize, “Baby”, maize, hybrid, maize, shelled,

maize, unshelled, maize, white, maize grain, artificially dried, maize grain, crib dried, maize grain, ensiled, milk production mixed feed, oats, *Paspalum palidosum*, straw, peanut hulls/skins, rice bran, rice germ, rice germ cake, rye, silage, sorghum, soybeans, soybeans, extracted, sunflower cake, tapioca, triticale, wheat, wheat bran, wheat bran and chana testa, wheat soya meal

**Feed (pig)** may contain the following mycotoxins:

#### AFLATOXIN B<sub>1</sub>

incidence: 1/1, conc.: 400 µg/kg, country:

Australia<sup>121</sup>

incidence: 7/16, conc. range: 1.7–12.3 µg/kg,

Ø conc.: 6.8 µg/kg, country: Colombia<sup>125</sup>

incidence: 146/163, conc. range: ≤25 µg/kg

(36 sa), 26–50 µg/kg (45 sa), 51–100 µg/kg

(35 sa), 101–200 µg/kg (15 sa), 201–500 µg/kg

(11 sa), 501–1000 µg/kg (3 sa),

1001–1500 µg/kg (1 sa), Ø conc.: 91.3 µg/kg,

country: India<sup>247</sup>

incidence: 7/70, conc. range: <5 µg/kg (2 sa),

6–20 µg/kg (2 sa), 51–100 µg/kg (1 sa),

>100 µg/kg (2), country: UK<sup>267</sup>

incidence: 4/4, conc. range: 270–6000 µg/kg,

Ø conc.: 2250 µg/kg, country: India<sup>321</sup>

see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy

cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60 % maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana *testa*

#### AFLATOXIN B<sub>2</sub>

incidence: 1/16, conc.: 1.1 µg/kg, country: Colombia<sup>125</sup>

incidence: 115/163, conc. range: nc, Ø conc.: 18.9 µg/kg, country: India<sup>247</sup>

see also animal feedstuffs (dairy cake), bird food, bird food, wild, biri testa, blackgram, blackgram husk, cottonseed, cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meats, dog food, egg production mixed feed,

feed, compound, feed (cat), feed (cattle), feed (dog), feed (poultry), feed (rabbit), feed (sheep), fish meal, horsegram, maize, maize gluten, maize husk, maize, ground, maize, preharvest, mung testa, mustard cake, niger cake, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanuts, peanut, kernels, redgram husk, rice bran, rice bran (deoiled), rice chaff, rice meal, rice (polish), sal seed cake, sesame cake, sorghum, soybean meal, soybeans, wheat, wheat bran

#### AFLATOXIN B

incidence: 19/30, conc. range:

≥25–>100 µg/kg, country: France<sup>46</sup>

see also barley, cocoa (oil cake), cottonseed cake, feed, feed (cattle), feed (maize, gluten), feed (poultry), flour (wheat), lucern (dried), maize, maize gluten, maize grains, oats, peanut (oil cake), rice, broken, sorghum, soybean (oil cake), sunflower (oil cake), wheat

#### AFLATOXIN

incidence: 146/163, conc. range:

3–1231 µg/kg, country: India<sup>247</sup>

see also blackgram husk, bread crumbs, broiler finisher, broiler starter, cotton cake, cottonseed, cottonseed cake, cottonseed extract, cottonseed meal, feed, feed (cattle), feed (cow), feed (dog), feed (horse), feed (maize, gluten), feed (poultry), feed (rabbit), feed (rat/mice), feed (sheep), feeds, grain, fish meal, flour (wheat), groundnut cake, grower's mash, horsegram, layer's mash, maize, maize gluten, maize, white, milo, peanut cake, peanut cake (deoiled), peanut, kernels, peanut (oil cake), pearl millet, pig breeder's mash, pig finisher, pig starter, pod with haulms, poultry breeder's mash, rabbit pellets, redgram husk, rice, rice bran (deoiled), rice, broken, rice (polish), sesame cake, silk worm pupae, sorghum, soybean cake, soybean meal, wheat, wheat bran

#### AFLATOXIN B<sub>1</sub> + B<sub>2</sub> + G<sub>1</sub> + G<sub>2</sub>

incidence: 14/90, conc.: range: <50 µg/kg,

country: Poland<sup>84</sup>

see also feed (cattle), feed (poultry)

**AFLATOXIN B + G**

incidence: 3/12, conc. range: 10–50 µg/kg,  
country: France<sup>45</sup>

see also feed (cattle), feed (poultry), feed  
(rabbit), feed (rat), mice feed, peanut (oil  
cake)

**AFLATOXINS**

incidence: 1/12, conc.: 51–500 µg/kg, country:  
Australia<sup>21</sup>

see also animal feed (maize), animal feed  
(mixed), barley, copra meal, cottonseed,  
cottonseed fines, cottonseed meal, cottonseed  
meats, feed, feed ingredients (miscellaneous),  
feed, mixed, feed (excluding peanuts,  
suspect), feed (goat), feed (poultry), feedstuff,  
grain, grain, mixed feed, maize, maize,  
shelled, millet, peanut cake, peanut meal,  
peanut meal and by-products, peanuts,  
protein concentrates, rice, rice bran,  
sorghum, soybean meal, sunflower

**CITRININ**

incidence: 1/2, conc.: 8600 µg/kg, country:  
UK<sup>93</sup>

see also barley, barley, oats, barley-soybean  
diet, cottonseed cake, feed, feed, mixed, feed  
(cattle), fish meal, hay, maize, maize, white,  
*Makhana* (*Euryale ferox* Salisb) puffs, oats,  
palm products, peas and beans, rice bran,  
rice germ, wheat, wheat and other grains  
(moldy), wheat bran

**DEOXYNIVALENOL**

incidence: 1/1\*, conc.: 120 µg/kg, country:  
Finland<sup>62</sup>, \*imported ?

incidence: 3/3, conc. range: 2000–9700 µg/kg,  
Ø conc.: 5633 µg/kg, country: USA<sup>71</sup>

incidence: 3/3, conc. range: 1700–8000 µg/kg,  
Ø conc.: 4100 µg/kg, country: Argentina<sup>213</sup>

see also barley, barley, husked, barley,  
unhusked (naked), barley (pressed), bone  
meal, bran, broilers feed, calf fattening mixed  
feed, coconut, expeller, corn cob mix silage,  
cottonseed, cottonseed cake, dairy cattle feed,  
egg production mixed feed, feed, feed  
components, feed, commercial mix, feed,  
mixed, feed, mixed (primarily maize), feed  
(barley), feed (cattle), feed (chicken), feed  
(dog), feed (fish), feed (mill run, from

wheat), feed (mink), feed (poultry), feed  
(reindeer), feeds, grain, feeds, industrial,  
feedstuff, feedstuffs (rapeseed, turnip, fish  
meal, concentrates), fish meal, grain, mixed  
feed, grains, mixed, grains (no specification),  
maize, maize ears, maize fibre, maize germ,  
maize germ/bran, maize germ meal, maize  
gluten, maize kernels, maize meal, maize  
powder, maize screenings, maize stalks (pith),  
maize, “Baby”, maize, hybrid, maize, white,  
oats, rice bran, rice germ cake, rye, silage,  
sorghum, soybeans, triticale, wheat, wheat  
and barley, wheat, red hard winter, wheat,  
soft white winter, wheat, spring, wheat,  
winter

**DIACETOXYSCIRPENOL**

incidence: 1/1\*, conc.: 60 µg/kg, country:  
Finland<sup>62</sup>, \*imported ?

see also alfalfa, barley, feed, feed components,  
feed (dog), feed (fish), feed (mink), feed  
(poultry), feed (reindeer), feeds, grain,  
feedstuff, forage grass, grain, mixed feed,  
grains (no specification), maize, maize  
gluten, oat and barley (hammer-milled), oats,  
peanuts, soybeans, wheat

**FUMONISIN B<sub>1</sub>**

incidence: 42/47, conc. range:

400–11,600 µg/kg, Ø conc.: 2400 µg/kg,

country: Spain<sup>155</sup>

see also barley, bird food, wild, dog food,  
feed, feed, complete ration, feed, general,  
feed, layer, feed, maize-based, feed, mixed,  
feed, pelleted ration, feed, screenings, feed,  
sweet, feed (broilers), feed (cat), feed  
(chicken), feed (dog), feed (gluten), feed  
(horse), feed (maize), feed (poultry), feed  
(rat), feed (rodent), forage grass, maize,  
maize and maize screenings, maize bran,  
maize ears, maize fine fractions, maize flakes,  
maize germ, maize germ/bran, maize germ  
meal, maize gluten, maize grits, maize  
kernels, maize meal, maize powder, maize  
screenings, maize, “Baby”, maize, ground,  
maize, preharvest, maize, sweet feed,  
maize/oats mix, rat chow, silage, sorghum,  
soybeans, wheat

FUMONISIN B<sub>1</sub> + B<sub>2</sub>

incidence: 12/12, conc. range:

7000–73,000 µg/kg, Ø conc.: 31,000 µg/kg,  
country: USA<sup>144</sup>

incidence: 8/9, conc. range:

6000–33,000 µg/kg, Ø conc.: 14,750 µg/kg,  
country: USA<sup>144</sup>

see also maize, maize and feed samples

## HT-2 TOXIN

incidence: 1/1\*, conc.: 207 µg/kg, country:

Finland<sup>62</sup>, \*imported ?

see also barley, feed components, feed (dog),  
feed (fish), feed (poultry), feed (reindeer),  
grain, mixed feed, grains, mixed, grains (no  
specification), maize, maize germ/bran, maize  
gluten, maize meal, maize screenings, oats,  
rye, silage, wheat

## OCHRATOXIN A

incidence: 8/90, conc. range: 10–50 µg/kg,  
country: Poland<sup>84</sup>

see also alfalfa, barley, barley, oats, barley  
(high moisture), barley-soybean diet, bird  
food, domestic, bird food, wild, broilers feed,  
cereal grains, citrus pulp, coconut, expeller,  
corn cob mix silage, diet (dairy cow), diet  
(poultry), diet (starter), dog food, eat, egg  
production mixed feed, feed, feed wheat, oat  
and barley, feed, commercial mix, feed,  
mixed, feed, mixed (pelleted), feed (broilers),  
feed (cat), feed (cattle), feed (cereals), feed ec  
(pig), feed (poultry), feed ec (poultry), feed  
(poultry, pig), feed ec (rabbit), feed (trout),  
grain, mixed feed, grains, mixed, grains  
(heated), hay, horse bean, maize, maize feed,  
milo, maize gluten, maize meal, maize, white,  
*Makhana (Euryale ferox* Salisb) puffs, milk  
production mixed feed, millet, oat and barley  
(hammer-milled), oats, palm products,  
peanut cake, peas, peas and beans, pet food,  
pig feedstuffs, pig grower diet, pig meal,  
piglet diet, poultry feedstuffs, rice bran, rice  
germ, rice germ cake, rye, sorghum, soybean  
groats, sunflower, sunflower seeds, extracted,  
tapioca, triticale, *Vicia faba*, wheat, wheat and  
barley, wheat bran, wheat hay, wheat, oats

## T-2 TOXIN

incidence: 2/2, conc. range: 4100–5800 µg/kg,  
Ø conc.: 4950 µg/kg, country: Hungary<sup>50</sup>

incidence: 1/1\*, conc.: 490 µg/kg, country:  
Finland<sup>62</sup>, \*imported ?

see also alfalfa, barley, bran, diet (grower),  
diet (poultry), feed, feed components, feed,  
layer, feed, mixed, feed (dog), feed (fish),  
feed (mink), feed (poultry), feedstuff, forage  
grass, grain, mixed feed, grains (no  
specification), hay, maize, maize germ/bran,  
maize gluten, maize meal, maize screenings,  
maize stalks (pith), oat and barley  
(hammer-milled), oats, peanuts, pig grower  
diet, piglet diet, rye, sorghum, triticale, wheat

## ZEARALENONE

incidence: 15/15, conc. range: tr–109 µg/kg,  
country: USA<sup>119</sup>

incidence: 2/4, conc. range: 243–300 µg/kg,  
Ø conc.: 271.5 µg/kg, country: Taiwan<sup>221</sup>

see also alfalfa, barley, barley, husked, barley,  
unhusked (naked), barley and feed, bone  
meal, bran, broilers feed, *Carthamus* cake,  
chick pea, concentrate, mixed, corn cob mix  
silage, cotton cake, cottonseed, cottonseed  
cake, diet (dairy cow), diet (poultry), diets  
(mixed), feed, feed components, feed, mixed,  
feed, mixed (primarily maize also maize, oats,  
wheat), feed (bran), feed (broiler chicken),  
feed (cattle), feed (chicken), feed (dairy), feed  
(developing pig), feed (mill run, from  
wheat), feed (miscellaneous), feed (poultry),  
feed (poultry, pig), feed (starter chicken),  
feedstuff, fish meal, forage grass, grain,  
bruised, grain, mixed feed, grains (no  
specification), hay, maize, maize ears, maize  
flakes, maize germ, maize germ/bran, maize  
gluten, maize kernels, maize meal, maize oil  
cake, maize screenings, maize stalks (pith),  
maize, “Baby”, maize, hybrid, maize, shelled,  
maize, unshelled, maize, white, maize grain,  
artificially dried, maize grain, crib dried,  
maize grain, ensiled, milk production mixed  
feed, oats, *Paspalum palidosum*, straw, peanut  
hulls/skins, rice bran, rice germ, rice germ  
cake, rye, silage, sorghum, soybeans,  
soybeans, extracted, sunflower cake, tapioca,

triticale, wheat, wheat bran, wheat bran and chana testa, wheat soya meal

**Feed ec (pig)** composition: corn, sunflower pellets or soy pellets, vitamins or growth regulators, essential amino acids (lysine, methionine), coccidiostats may contain the following mycotoxins:

**OCHRATOXIN A**

incidence: 5/40, conc. range: 34 µg/kg, country: Argentina<sup>1</sup>  
see also alfalfa, barley, barley, oats, barley (high moisture), barley-soybean diet, bird food, domestic, bird food, wild, broilers feed, cereal grains, citrus pulp, coconut, expeller, corn cob mix silage, diet (dairy cow), diet (poultry), diet (starter), dog food, eat, egg production mixed feed, feed, feed wheat, oat and barley, feed, commercial mix, feed, mixed, feed, mixed (pelleted), feed (broilers), feed (cat), feed (cattle), feed (cereals), feed (pig), feed (poultry), feed ec (poultry), feed (poultry, pig), feed ec (rabbit), feed (trout), grain, mixed feed, grains, mixed, grains (heated), hay, horse bean, maize, maize feed, milo, maize gluten, maize meal, maize, white, *Makhana (Euryale ferox* Salisb) puffs, milk production mixed feed, millet, oat and barley (hammer-milled), oats, palm products, peanut cake, peas, peas and beans, pet food, pig feedstuffs, pig grower diet, pig meal, piglet diet, poultry feedstuffs, rice bran, rice germ, rice germ cake, rye, sorghum, soybean groats, sunflower, sunflower seeds, extracted, tapioca, triticale, *Vicia faba*, wheat, wheat and barley, wheat bran, wheat hay, wheat, oats

**Feed (poultry)** may contain the following mycotoxins:

**3-ACETYLDEOXYNIVALENOL**

incidence: 3/50, conc. range: 207–1497 µg/kg, Ø conc.: 858.3 µg/kg, country: Slovak Republic<sup>420</sup>  
see also barley, feed components, feeds, grain, feeds, industrial, feedstuffs (rapeseed, turnip, fish meal, concentrates), maize, maize ears, maize gluten, maize kernels, maize meal, maize screenings, oats, wheat

**15-ACETYLDEOXYNIVALENOL**

incidence: 2/50, conc. range: 130–229 µg/kg, Ø conc.: 179.5 µg/kg, country: Slovak Republic<sup>420</sup>

see also barley, feed components, feeds, grain, feeds, industrial, feedstuffs (rapeseed, turnip, fish meal, concentrates), maize, maize ears, maize gluten, maize kernels, maize meal, maize screenings, oats, wheat

**AFLATOXIN B<sub>1</sub>**

incidence: 8/202, conc. range: <10–20 µg/kg, country: UK<sup>30</sup>

incidence: 63/130, conc. range: 10–123 µg/kg, Ø conc.: 27.3 µg/kg, country: Argentina<sup>78</sup>

incidence: 50/144, conc. range:

<5–100 µg/kg, country: South Africa<sup>79</sup>

incidence: 14/14, conc. range:

0.38–108.61 µg/kg, Ø conc.: 37.88 µg/kg,

country: India<sup>98</sup>

incidence: 12/30, conc. range: 1.5–23.2 µg/kg,

Ø conc.: 6.9 µg/kg, country: Colombia<sup>125</sup>

incidence: 41/300, conc. range: 17–197 µg/kg, country: Argentina<sup>243</sup>

incidence: 1108/1368, conc. range: ≤25 µg/kg

(371 sa), 26–50 µg/kg (212 sa), 51–100 µg/kg

(224 sa), 101–200 µg/kg (134 sa),

201–500 µg/kg (112 sa), 501–1000 µg/kg

(45 sa), 1001–1500 µg/kg (7 sa),

1501–2000 µg/kg (1 sa), 2001–3000 µg/kg

(2 sa), Ø conc.: 110.4 µg/kg, country: India<sup>247</sup>

incidence: 14/20, conc. range:

46.1–259.1 µg/kg, Ø conc.: 118.3 µg/kg,

country: India<sup>253</sup>

incidence: 8/127, conc. range: <5 µg/kg

(1 sa), 6–20 µg/kg (6 sa), 21–50 µg/kg (1 sa),

country: UK<sup>267</sup>

incidence: 1/3, conc.: 640 µg/kg, country:

India<sup>321</sup>

incidence: 1/10, conc.: 1.4 µg/kg, country:

Morocco<sup>423</sup>

incidence: 50/101, conc. range: ≤160 µg/kg,

Ø conc.: 14.9 µg/kg, country: Bangladesh<sup>428</sup>

incidence: 8/216\*, conc. range: 20–110 µg/kg,

country: Morocco<sup>429</sup>, \*feed and ingredients

incidence: 17/99\*, conc. range: 20–50 µg/kg

(8 sa), 51–200 µg/kg (4 sa), ≤5625 µg/kg

(4 sa), country: Morocco<sup>429</sup>, \*from bins, sacs

and troughs

see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cyad meal, dairy cattle feed, dairy cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60 % maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing),

rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

#### AFLATOXIN B<sub>2</sub>

incidence: 1/30, conc.: 2 µg/kg, country:

Colombia<sup>125</sup>

incidence: 894/1368, conc. range: nc, Ø conc.:

16.6 µg/kg, country: India<sup>247</sup>

incidence: 5/20, conc. range:

46.1–259.1 µg/kg, Ø conc.: 99.3 µg/kg,

country: India<sup>253</sup>

see also animal feedstuffs (dairy cake), bird food, bird food, wild, biri testa, blackgram, blackgram husk, cottonseed, cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meats, dog food, egg production mixed feed, feed, compound, feed (cat), feed (cattle), feed (dog), feed (pig), feed (rabbit), feed (sheep), fish meal, horsegram, maize, maize gluten, maize husk, maize, ground, maize, preharvest, mung testa, mustard cake, niger cake, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanuts, peanut, kernels, redgram husk, rice bran, rice bran (deoiled), rice chaff, rice meal, rice (polish), sal seed cake, sesame cake, sorghum, soybean meal, soybeans, wheat, wheat bran

#### AFLATOXIN B

incidence: 34/60, conc. range:

≥25–>100 µg/kg, country: France<sup>46</sup>

see also barley, cocoa (oil cake), cottonseed cake, feed, feed (cattle), feed (maize, gluten), feed (pig), flour (wheat), lucern (dried), maize, maize gluten, maize grains, oats, peanut (oil cake), rice, broken, sorghum, soybean (oil cake), sunflower (oilcake), wheat

#### AFLATOXIN

incidence: 1108/1368, conc. range:

2–2410 µg/kg, country: India<sup>247</sup>

incidence: 4/10, conc. range: 11–30 µg/kg

(3 sa), 31–100 µg/kg (1 sa), country: India<sup>311</sup>

incidence: 23/23, conc. range: <30 µg/kg (4 sa), >30 µg/kg (3 sa), >200 µg/kg (10 sa), >600 µg/kg (5 sa), >1750 µg/kg (1 sa), country: India<sup>380</sup>

incidence: 361/1174, conc. range: 50 µg/kg (197 sa), 51–200 µg/kg (96 sa), 201–2000 µg/kg (67 sa), country: Egypt, USA<sup>415</sup>

incidence: 110/190, conc. range: 0–3.26 µg/kg, country: Kuwait<sup>421</sup>  
see also blackgram husk, bread crumbs, broiler finisher, broiler starter, cotton cake, cottonseed, cottonseed cake, cottonseed extract, cottonseed meal, feed, feed (cattle), feed (cow), feed (dog), feed (horse), feed (maize, gluten), feed (pig), feed (rabbit), feed (rat/mice), feed (sheep), feeds, grain, fish meal, flour (wheat), groundnut cake, grower's mash, horsegram, layer's mash, maize, maize gluten, maize, white, milo, peanut cake, peanut cake (deoiled), peanut, kernels, peanut (oil cake), pearl millet, pig breeder's mash, pig finisher, pig starter, pod with haulms, poultry breeder's mash, rabbit pellets, redgram husk, rice, rice bran (deoiled), rice, broken, rice (polish), sesame cake, silk worm pupae, sorghum, soybean cake, soybean meal, wheat, wheat bran

AFLATOXIN B<sub>1</sub> + B<sub>2</sub> + G<sub>1</sub> + G<sub>2</sub>

incidence: 2/54, conc. range: <50 µg/kg, country: Poland<sup>84</sup>  
see also feed (cattle), feed (pig)

AFLATOXIN B<sub>1</sub> + B<sub>2</sub>

incidence: 3/3, conc. range: 6–20 µg/kg, (1 sa), >50 µg/kg, (2 sa, with a maximum of 71 µg/kg), country: Guatemala<sup>375</sup>  
see also cottonseed, maize, sorghum

AFLATOXIN G<sub>1</sub> + G<sub>2</sub>

incidence: 30/300, conc. range: nc, country: Argentina<sup>243</sup>

AFLATOXIN B + G

incidence: 4/15, conc. range: 2–10 µg/kg, Ø conc.: 4 µg/kg, country: France<sup>45</sup>  
see also feed (cattle), feed (pig), feed (rabbit), feed (rat), mice feed, peanut (oil cake)

AFLATOXINS

incidence: 8/93, conc. range: 5–≤2000 µg/kg, country: Australia<sup>21</sup>

incidence: 2/4, conc. range: 210–310 µg/kg, Ø conc.: 260 µg/kg, country: USA<sup>208</sup>

see also animal feed (maize), animal feed (mixed), barley, copra meal, cottonseed, cottonseed fines, cottonseed meal, cottonseed meats, feed, feed ingredients (miscellaneous), feed, mixed, feed (excluding peanuts, suspect), feed (goat), feed (pig), feedstuff, grain, grain, mixed feed, maize, maize, shelled, millet, peanut cake, peanut meal, peanut meal and by-products, peanuts, protein concentrates, rice, rice bran, sorghum, soybean meal, sunflower

DEOXYNIVALENOL

incidence: 25/300, conc. range: 240–410 µg/kg, country: Argentina<sup>243</sup>

incidence: 49/277, conc. range: <2–500 µg/kg, Ø conc.: 211.2 µg/kg, country: Saudi Arabia<sup>389</sup>

incidence: 28/50, conc. range: 64–1230 µg/kg, Ø conc.: 303 µg/kg, country: Slovak Republic<sup>420</sup>

incidence: 105/120, conc. range:

0–1500 µg/kg, country: Kuwait<sup>421</sup>  
see also barley, barley, husked, barley, unhusked (naked), barley (pressed), bone meal, bran, broilers feed, calf fattening mixed feed, coconut, expeller, corn cob mix silage, cottonseed, cottonseed cake, dairy cattle feed, egg production mixed feed, feed, feed components, feed, commercial mix, feed, mixed, feed, mixed (primarily maize), feed (barley), feed (cattle), feed (chicken), feed (dog), feed (fish), feed (mill run, from wheat), feed (mink), feed (pig), feed (reindeer), feeds, grain, feeds, industrial, feedstuff, feedstuffs (rapeseed, turnip, fish meal, concentrates), fish meal, grain, mixed feed, grains, mixed, grains (no specification), maize, maize ears, maize fibre, maize germ, maize germ/bran, maize germ meal, maize gluten, maize kernels, maize meal, maize powder, maize screenings, maize stalks (pith), maize, "Baby", maize, hybrid, maize, white, oats, rice bran, rice germ cake, rye, silage,



sorghum, soybeans, triticale, wheat, wheat and barley, wheat, red hard winter, wheat, soft white winter, wheat, spring, wheat, winter

#### DIACETOXYSCIRPENOL

incidence: 10/50, conc. range: 3–5 µg/kg,  
 Ø conc.: 4 µg/kg, country: Slovak Republic<sup>420</sup>  
 see also alfalfa, barley, feed, feed components, feed (dog), feed (fish), feed (mink), feed (pig), feed (reindeer), feeds, grain, feedstuff, forage grass, grain, mixed feed, grains (no specification), maize, maize gluten, oat and barley (hammer-milled), oats, peanuts, soybeans, wheat

#### FUMONISIN B<sub>1</sub>

incidence: 27/32, conc. range:  
 200–<1000 µg/kg, country: South Africa<sup>44</sup>  
 incidence: 6/22, conc. range: ≤500 µg/kg,  
 country: Switzerland<sup>89</sup>  
 incidence: 5/14, conc. range: 20–260 µg/kg,  
 Ø conc.: 100 µg/kg, country: India<sup>98</sup>  
 incidence: 6/22, conc. range: 0–480 µg/kg,  
 Ø conc.: 240 µg/kg\*, country: Switzerland<sup>148</sup>  
 incidence: 2/2, conc. range: 1100–1400 µg/kg,  
 Ø conc.: 1300 µg/kg, country: Spain<sup>155</sup>  
 incidence: 42/50, conc. range: <1000 µg/kg  
 (11 sa), 1000–10,000 µg/kg (18 sa),  
 11,000–20,000 µg/kg (10 sa),  
 21,000–30,000 µg/kg (3 sa, with a maximum  
 of 28,000 µg/kg), country: India<sup>391</sup>  
 incidence: 49/50, conc. range: 43–798 µg/kg,  
 Ø conc.: 235 µg/kg, country: Slovak  
 Republic<sup>430</sup>  
 see also barley, bird food, wild, dog food,  
 feed, feed, complete ration, feed, general,  
 feed, layer, feed, maize-based, feed, mixed,  
 feed, pelleted ration, feed, screenings, feed,  
 sweet, feed (broilers), feed (cat), feed  
 (chicken), feed (dog), feed (gluten), feed  
 (horse), feed (maize), feed (pig), feed (rat),  
 feed (rodent), forage grass, maize, maize and  
 maize screenings, maize bran, maize ears,  
 maize fine fractions, maize flakes, maize  
 germ, maize germ/bran, maize germ meal,  
 maize gluten, maize grits, maize kernels,  
 maize meal, maize powder, maize screenings,  
 maize, “Baby”, maize, ground, maize,

preharvest, maize, sweet feed, maize/oats mix,  
 rat chow, silage, sorghum, soybeans, wheat

#### FUMONISIN B<sub>2</sub>

incidence: 2/22, conc. range: 0–115 µg/kg,  
 Ø conc.: 90 µg/kg, country: Switzerland<sup>148</sup>  
 incidence: 42/50, conc. range: 26–362 µg/kg,  
 Ø conc.: 87 µg/kg, country: Slovak  
 Republic<sup>430</sup>  
 see also barley, bird food, wild, dog food,  
 feed, feed, maize-based, feed, mixed, feed  
 (cat), feed (dog), feed (gluten), feed (horse),  
 feed (maize), feed (rodent), maize, maize  
 bran, maize fine fractions, maize flakes,  
 maize germ, maize germ/bran, maize germ  
 meal, maize gluten, maize grits, maize  
 kernels, maize meal, maize powder, maize  
 screenings, maize, “Baby”, maize, ground,  
 maize, preharvest, rat chow, wheat

#### FUMONISIN

incidence: 120/127, conc. range:  
 0–6000 µg/kg, country: Kuwait<sup>421</sup>

#### FUSARENONE-X

incidence: 1/277, conc.: 500 µg/kg, country:  
 Saudi Arabia<sup>389</sup>  
 see also barley, feed components, maize,  
 maize ears, maize germ/bran, maize gluten,  
 maize kernels, maize meal, maize screenings,  
 oats, wheat

#### HT-2 TOXIN

incidence: 1/277, conc.: 18.8 µg/kg, country:  
 Saudi Arabia<sup>389</sup>  
 incidence: 38/50, conc. range: 3–173 µg/kg,  
 Ø conc.: 18 µg/kg, country: Slovak  
 Republic<sup>420</sup>

see also barley, feed components, feed (dog),  
 feed (fish), feed (pig), feed (reindeer), grains,  
 mixed, grains, mixed feed, grains (no  
 specification), maize, maize germ/bran, maize  
 gluten, maize meal, maize screenings, oats,  
 rye, silage, wheat

#### MONILIFORMIN

incidence: 26/50, conc. range: 42–1214 µg/kg,  
 Ø conc.: 217 µg/kg, country: Slovak  
 Republic<sup>430</sup>  
 see also barley, feed, mixed, maize, maize  
 flakes, maize germ, maize germ/bran, maize

gluten, maize meal, maize screenings, maize, "Baby", oats, rice bran, triticale, wheat, wheat, summer, wheat, winter

#### NEOSOLANOL

incidence: 1/277, conc.: 100 µg/kg, country: Saudi Arabia<sup>389</sup>  
see also feed, feed components, feed, mixed, peanut cake, wheat

#### NIVALENOL

incidence: 1/277, conc.: 3.1 µg/kg, country: Saudi Arabia<sup>389</sup>  
see also barley, barley, husked, barley, unhusked (naked), barley (pressed), bran, feed, feed components, feed (cattle), feed (reindeer), feeds, industrial, maize, maize ears, maize germ, maize germ/bran, maize gluten, maize kernels, maize meal, maize powder, maize screenings, maize, "Baby", oats, silage, rye, triticale, wheat

#### OCHRATOXIN A

incidence: 6/203, conc. range: <25–150 µg/kg, country: UK<sup>30</sup>  
incidence: 1/54, conc.: 10–50 µg/kg, country: Poland<sup>84</sup>  
incidence: 109/120, conc. range: 0–40 µg/kg, country: Kuwait<sup>421</sup>  
see also alfalfa, barley, barley, oats, barley (high moisture), barley-soybean diet, bird food, domestic, bird food, wild, broilers feed, cereal grains, citrus pulp, coconut, expeller, corn cob mix silage, diet (dairy cow), diet (poultry), diet (starter), dog food, eat, egg production mixed feed, feed, feed wheat, oat and barley, feed, commercial mix, feed, mixed, feed, mixed (pelleted), feed (broilers), feed (cat), feed (cattle), feed (cereals), feed (pig), feed ec (pig), feed ec (poultry), feed (poultry, pig), feed (rabbit), feed (trout), grain, mixed feed, grains, mixed, grains (heated), hay, horse bean, maize, maize feed, milo, maize gluten, maize meal, maize, white, *Makhana* (*Euryale ferox* Salisb) puffs, milk production mixed feed, millet, oat and barley (hammer-milled), oats, palm products, peanut cake, peas, peas and beans, pet food, pig feedstuffs, pig grower diet, pig meal, piglet diet, poultry feedstuffs, rice bran, rice

germ, rice germ cake, rye, sorghum, soybean groats, sunflower, sunflower seeds, extracted, tapioca, triticale, *Vicia faba*, wheat, wheat and barley, wheat bran, wheat hay, wheat, oats

#### T-2 TOXIN

incidence: 45/50, conc. range: 1–130 µg/kg, Ø conc.: 13 µg/kg, country: Slovak Republic<sup>420</sup>

see also alfalfa, barley, bran, diet (grower), diet (poultry), feed, feed components, feed, layer, feed, mixed, feed (dog), feed (fish), feed (mink), feed (pig), feedstuff, forage grass, grain, mixed feed, grains (no specification), hay, maize, maize germ/bran, maize gluten, maize meal, maize screenings, maize stalks (pith), oat and barley (hammer-milled), oats, peanuts, pig grower diet, piglet diet, rye, sorghum, triticale, wheat

#### ZEARALENONE

incidence: 22/130, conc. range: 327–5850 µg/kg, Ø conc.: 2544.3 µg/kg, country: Argentina<sup>78</sup>  
incidence: 3/300, conc. range: 30–280 µg/kg, Ø conc.: 143.3 µg/kg, country: Argentina<sup>243</sup>  
incidence: 44/50, conc. range: 3–86 µg/kg, Ø conc.: 21 µg/kg, country: Slovak Republic<sup>420</sup>  
incidence: 113/120, conc. range: 0–400 µg/kg, country: Kuwait<sup>421</sup>  
see also alfalfa, barley, barley, husked, barley, unhusked (naked), barley and feed, bone meal, bran, broilers feed, *Carthamus* cake, chick pea, concentrate, mixed, corn cob mix silage, cotton cake, cottonseed, cottonseed cake, diet (dairy cow), diet (poultry), diets (mixed), feed, feed components, feed, mixed, feed, mixed (primarily maize also maize, oats, wheat), feed (bran), feed (broiler chicken), feed (cattle), feed (chicken), feed (dairy), feed (developing pig), feed (mill run, from wheat), feed (miscellaneous), feed (pig), feed (poultry, pig), feed (starter chicken), feedstuff, fish meal, forage grass, grain, bruised, grain, mixed feed, grains (no specification), hay, maize, maize ears, maize flakes, maize germ, maize germ/bran, maize gluten, maize kernels, maize meal, maize oil

cake, maize screenings, maize stalks (pith), maize, "Baby", maize, hybrid, maize, shelled, maize, unshelled, maize, white, maize grain, artificially dried, maize grain, crib dried, maize grain, ensiled, milk production mixed feed, oats, *Paspalum palidosum*, straw, peanut hulls/skins, rice bran, rice germ, rice germ cake, rye, silage, sorghum, soybeans, soybeans, extracted, sunflower cake, tapioca, triticale, wheat, wheat bran, wheat bran and chana testa, wheat soya meal

**Feed ec (poultry)** composition: corn, sunflower pellets or soy pellets, vitamins or growth regulators, essential amino acids (lysine, methionine), coccidiostats may contain the following mycotoxins:

#### OCHRATOXIN A

incidence: 15/40, conc. range: 25–30 µg/kg, country: Argentina<sup>1</sup>

see also alfalfa, barley, barley, oats, barley (high moisture), barley-soybean diet, bird food, domestic, bird food, wild, broilers feed, cereal grains, citrus pulp, coconut, expeller, corn cob mix silage, diet (dairy cow), diet (poultry), diet (starter), dog food, eat, egg production mixed feed, feed, feed wheat, oat and barley, feed, commercial mix, feed, mixed, feed, mixed (pelleted), feed (broilers), feed (cat), feed (cattle), feed (cereals), feed (pig), feed ec (pig), feed (poultry), feed (poultry, pig), feed ec (rabbit), feed (trout), grain, mixed feed, grains, mixed, grains (heated), hay, horse bean, maize, maize feed, milo, maize gluten, maize meal, maize, white, *Makhana* (*Euryale ferox* Salisb) puffs, milk production mixed feed, millet, oat and barley (hammer-milled), oats, palm products, peanut cake, peas, peas and beans, pet food, pig feedstuffs, pig grower diet, pig meal, piglet diet, poultry feedstuffs, rice bran, rice germ, rice germ cake, rye, sorghum, soybean groats, sunflower, sunflower seeds, extracted, tapioca, triticale, *Vicia faba*, wheat, wheat and barley, wheat bran, wheat hay, wheat, oats

**Feed (poultry, pig)** may contain the following mycotoxins:

#### AFLATOXIN B<sub>1</sub>

incidence: 2/75, conc. range: ≤10 µg/kg, country: France<sup>77</sup>

see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (rabbit), feed (sheep), feed (50–60 % maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal,

peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

#### OCHRATOXIN A

incidence: 2/75, conc. range:  $\leq 10 \mu\text{g}/\text{kg}$ ,

country: France<sup>77</sup>

see also alfalfa, barley, barley, oats, barley (high moisture), barley-soybean diet, bird food, domestic, bird food, wild, broilers feed, cereal grains, citrus pulp, coconut, expeller, corn cob mix silage, diet (dairy cow), diet (poultry), diet (starter), dog food, eat, egg production mixed feed, feed, feed wheat, oat and barley, feed, commercial mix, feed, mixed, feed, mixed (pelleted), feed (broilers), feed (cat), feed (cattle), feed (cereals), feed (pig), feed ec (pig), feed (poultry), feed ec (poultry), feed ec (rabbit), feed (trout), grain, mixed feed, grains, mixed, grains (heated), hay, horse bean, maize, maize feed, milo, maize gluten, maize meal, maize, white, *Makhana* (*Euryale ferox* Salisb) puffs, milk production mixed feed, millet, oat and barley (hammer-milled), oats, palm products, peanut cake, peas, peas and beans, pet food, pig feedstuffs, pig grower diet, pig meal, piglet diet, poultry feedstuffs, rice bran, rice germ, rice germ cake, rye, sorghum, soybean groats, sunflower, sunflower seeds, extracted, tapioca, triticale, *Vicia faba*, wheat, wheat and barley, wheat bran, wheat hay, wheat, oats

#### ZEARALENONE

incidence: 62/75, conc. range:

$\leq 170,000 \mu\text{g}/\text{kg}$ , country: France<sup>77</sup>

see also alfalfa, barley, barley, husked, barley, unhusked (naked), barley and feed, bone meal, bran, broilers feed, *Carthamus* cake, chick pea, concentrate, mixed, corn cob mix silage, cotton cake, cottonseed, cottonseed

cake, diet (dairy cow), diet (poultry), diets (mixed), feed, feed components, feed, mixed, feed, mixed (primarily maize also maize, oats, wheat), feed (bran), feed (broiler chicken), feed (cattle), feed (chicken), feed (dairy), feed (developing pig), feed (mill run, from wheat), feed (miscellaneous), feed (pig), feed (poultry), feed (starter chicken), feedstuff, fish meal, forage grass, grain, bruised, grain, mixed feed, grains (no specification), hay, maize, maize ears, maize flakes, maize germ, maize germ/bran, maize gluten, maize kernels, maize meal, maize oil cake, maize screenings, maize stalks (pith), maize, "Baby", maize, hybrid, maize, shelled, maize, unshelled, maize, white, maize grain, artificially dried, maize grain, crib dried, maize grain, ensiled, milk production mixed feed, oats, *Paspalum palidosum*, straw, peanut hulls/skins, rice bran, rice germ, rice germ cake, rye, silage, sorghum, soybeans, soybeans, extracted, sunflower cake, tapioca, triticale, wheat, wheat bran, wheat bran and chana testa, wheat soya meal

**Feed (rabbit)** may contain the following mycotoxins:

#### AFLATOXIN B<sub>1</sub>

incidence: 3/4, conc. range: 26–50  $\mu\text{g}/\text{kg}$

(2 sa), 201–500  $\mu\text{g}/\text{kg}$  (1 sa), Ø conc.:

122.7  $\mu\text{g}/\text{kg}$ , country: India<sup>247</sup>

see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5 % peanut

products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (sheep), feed (50–60 % maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm products, palm kernels, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

#### AFLATOXIN B<sub>2</sub>

incidence: 3/4, Ø conc.: 32.4 µg/kg, country: India<sup>247</sup>

see also animal feedstuffs (dairy cake), bird food, bird food, wild, biri testa, blackgram, blackgram husk, cottonseed, cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed

meats, dog food, egg production mixed feed, feed, compound, feed (cat), feed (cattle), feed (dog), feed (pig), feed (poultry), feed (sheep), fish meal, horsegram, maize, maize gluten, maize husk, maize, ground, maize, preharvest, mung testa, mustard cake, niger cake, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanuts, peanut, kernels, redgram husk, rice bran, rice bran (deoiled), rice chaff, rice meal, rice (polish), sal seed cake, sesame cake, sorghum, soybean meal, soybeans, wheat, wheat bran

#### AFLATOXIN

incidence: 3/4, conc. range: 37–381 µg/kg, country: India<sup>247</sup>

see also blackgram husk, bread crumbs, broiler finisher, broiler starter, cotton cake, cottonseed, cottonseed cake, cottonseed extract, cottonseed meal, feed, feed (cattle), feed (cow), feed (dog), feed (horse), feed (maize, gluten), feed (pig), feed (poultry), feed (rat/mice), feed (sheep), feeds, grain, fish meal, flour (wheat), groundnut cake, grower's mash, horsegram, layer's mash, maize, maize gluten, maize, white, milo, peanut cake, peanut cake (deoiled), peanut, kernels, peanut (oil cake), pearl millet, pig breeder's mash, pig finisher, pig starter, pod with haulms, poultry breeder's mash, rabbit pellets, redgram husk, rice, rice bran (deoiled), rice, broken, rice (polish), sesame cake, silk worm pupae, sorghum, soybean cake, soybean meal, wheat, wheat bran

#### AFLATOXIN B + G

incidence: 9/18, conc. range: 9–1500 µg/kg, Ø conc.: 220 µg/kg, country: France<sup>45</sup>  
see also feed (cattle), feed (pig), feed (poultry), feed (rat), mice feed, peanut (oil cake)

**Feed ec (rabbit)** composition: alfalfa, sunflower pellets or soy pellets, vitamins or growth regulators, essential amino acids (lysine, methionine), coccidiostats may contain the following mycotoxins:

**OCHRATOXIN A**

incidence: 10/40, conc. range: 18.5–25 µg/kg, country: Argentina<sup>1</sup>

see also alfalfa, barley, barley, oats, barley (high moisture), barley-soybean diet, bird food, domestic, bird food, wild, broilers feed, cereal grains, citrus pulp, coconut, expeller, corn cob mix silage, diet (dairy cow), diet (poultry), diet (starter), dog food, eat, egg production mixed feed, feed, feed wheat, oat and barley, feed, commercial mix, feed, mixed, feed, mixed (pelleted), feed (broilers), feed (cat), feed (cattle), feed (cereals), feed (pig), feed ec (pig), feed (poultry), feed ec (poultry), feed (poultry, pig), feed (trout), grain, mixed feed, grains, mixed, grains (heated), hay, horse bean, maize, maize feed, milo, maize gluten, maize meal, maize, white, *Makhana (Euryale ferox* Salisb) puffs, milk production mixed feed, millet, oat and barley (hammer-milled), oats, palm products, peanut cake, peas, peas and beans, pet food, pig feedstuffs, pig grower diet, pig meal, piglet diet, poultry feedstuffs, rice bran, rice germ, rice germ cake, rye, sorghum, soybean groats, sunflower, sunflower seeds, extracted, tapioca, triticale, *Vicia faba*, wheat, wheat and barley, wheat bran, wheat hay, wheat, oats

**Feed (rat)** may contain the following mycotoxins:

**AFLATOXIN B + G**

incidence: 7/20, conc. range: 5–650 µg/kg, Ø conc.: 65 µg/kg, country: France<sup>45</sup>

see also feed (cattle), feed (pig), feed (poultry), feed (rabbit), mice feed, peanut (oil cake)

**FUMONISIN B<sub>1</sub>**

incidence: ?/5, conc. range: 100–2000 µg/kg, country: USA<sup>158</sup>

see also barley, bird food, wild, dog food, feed, feed, complete ration, feed, general, feed, layer, feed, maize-based, feed, mixed, feed, pelleted ration, feed, screenings, feed, sweet, feed (broilers), feed (cat), feed (chicken), feed (dog), feed (gluten), feed (horse), feed (maize), feed (pig), feed

(poultry), feed (rodent), forage grass, maize, maize and maize screenings, maize bran, maize ears, maize fine fractions, maize flakes, maize germ, maize germ/bran, maize germ meal, maize gluten, maize grits, maize kernels, maize meal, maize powder, maize screenings, maize, “Baby”, maize, ground, maize, preharvest, maize, sweet feed, maize/oats mix, rat chow, silage, sorghum, soybeans, wheat

**Feed (rat/mice)** may contain the following mycotoxins:

**AFLATOXIN**

incidence: 2/2, conc. range: >200 µg/kg (2 sa), country: India<sup>380</sup>

see also blackgram husk, bread crumbs, broiler finisher, broiler starter, cotton cake, cottonseed, cottonseed cake, cottonseed extract, cottonseed meal, feed, feed (cattle), feed (cow), feed (dog), feed (horse), feed (maize, gluten), feed (pig), feed (poultry), feed (rabbit), feed (sheep), feeds, grain, fish meal, flour (wheat), groundnut cake, grower’s mash, horsegram, layer’s mash, maize, maize gluten, maize, white, milo, peanut cake, peanut cake (deoiled), peanut, kernels, peanut (oil cake), pearl millet, pig breeder’s mash, pig finisher, pig starter, pod with haulms, poultry breeder’s mash, rabbit pellets, redgram husk, rice, rice bran (deoiled), rice, broken, rice (polish), sesame cake, silk worm pupae, sorghum, soybean cake, soybean meal, wheat, wheat bran

**Feed (reindeer)** may contain the following mycotoxins:

**DEOXYNIVALENOL**

incidence: 1/1\*, conc.: 59 µg/kg, country: Finland<sup>62</sup>, \*imported ?

see also barley, barley, husked, barley, unhusked (naked), barley (pressed), bone meal, bran, broilers feed, calf fattening mixed feed, coconut, expeller, corn cob mix silage, cottonseed, cottonseed cake, dairy cattle feed, egg production mixed feed, feed, feed components, feed, commercial mix, feed,

mixed, feed, mixed (primarily maize), feed (barley), feed (cattle), feed (chicken), feed (dog), feed (fish), feed (mill run, from wheat), feed (mink), feed (pig), feed (poultry), feeds, grain, feeds, industrial, feedstuff, feedstuffs (rapeseed, turnip, fish meal, concentrates), fish meal, grain, mixed feed, grains, mixed, grains (no specification), maize, maize ears, maize fibre, maize germ, maize germ/bran, maize germ meal, maize gluten, maize kernels, maize meal, maize powder, maize screenings, maize stalks (pith), maize, "Baby", maize, hybrid, maize, white, oats, rice bran, rice germ cake, rye, silage, sorghum, soybeans, triticale, wheat, wheat and barley, wheat, red hard winter, wheat, soft white winter, wheat, spring, wheat, winter

#### DIACETOXYSCIRPENOL

incidence: 1/1\*, conc.: 766 µg/kg, country: Finland<sup>62</sup>, \*imported ?

see also alfalfa, barley, feed, feed components, feed (dog), feed (fish), feed (mink), feed (pig), feed (poultry), feeds, grain, feedstuff, forage grass, grain, mixed feed, grains (no specification), maize, maize gluten, oat and barley (hammer-milled), oats, peanuts, soybeans, wheat

#### HT-2 TOXIN

incidence: 1/1\*, conc.: 23 µg/kg, country: Finland<sup>62</sup>, \*imported ?

see also barley, feed components, feed (dog), feed (fish), feed (pig), feed (poultry), grain, mixed feed, grains, mixed, grains (no specification), maize, maize germ/bran, maize gluten, maize meal, maize screenings, oats, rye, silage, wheat

#### NIVALENOL

incidence: 1/1\*, conc.: 10 µg/kg, country: Finland<sup>62</sup>, \*imported ?

see also barley, barley, husked, barley, unhusked (naked), barley (pressed), bran, feed components, feed (cattle), feed (poultry), feeds, industrial, maize, maize ears, maize germ, maize germ/bran, maize gluten, maize kernels, maize meal, maize powder, maize screenings, maize, "Baby", oats, rye, silage, triticale, wheat

**Feed (rodent)** may contain the following mycotoxins:

#### FUMONISIN B<sub>1</sub>

incidence: 12/12, conc. range:

32.3–663.7 µg/kg, Ø conc.: 221.6 µg/kg,

country: USA<sup>99</sup>

see also barley, bird food, wild, dog food, feed, feed, complete ration, feed, general, feed, layer, feed, maize-based, feed, mixed, feed, pelleted ration, feed, screenings, feed, sweet, feed (broilers), feed (cat), feed (chicken), feed (dog), feed (gluten), feed (horse), feed (maize), feed (pig), feed (poultry), feed (rat), forage grass, maize, maize and maize screenings, maize bran, maize ears, maize fine fractions, maize flakes, maize germ, maize germ/bran, maize germ meal, maize gluten, maize grits, maize kernels, maize meal, maize powder, maize screenings, maize, "Baby", maize, ground, maize, preharvest, maize, sweet feed, maize/oats mix, rat chow, silage, sorghum, soybeans, wheat

#### FUMONISIN B<sub>2</sub>

incidence: 12/12, conc. range:

11.2–204.2 µg/kg, Ø conc.: 73.4 µg/kg,

country: USA<sup>99</sup>

see also barley, bird food, wild, dog food, feed, feed, maize-based, feed, mixed, feed (cat), feed (dog), feed (gluten), feed (horse), feed (maize), feed (poultry), maize, maize bran, maize fine fractions, maize flakes, maize germ, maize germ/bran, maize germ meal, maize gluten, maize grits, maize kernels, maize meal, maize powder, maize screenings, maize, "Baby", maize, ground, maize, preharvest, rat chow, wheat

#### FUMONISIN B<sub>3</sub>

incidence: 11/12, conc. range: 2.6–54.7 µg/kg,

Ø conc.: 20 µg/kg, country: USA<sup>99</sup>

see also feed, feed (maize), maize, maize bran, maize fine fractions, maize germ meal, maize kernels, maize powder, maize screenings

**Feed (sheep)** may contain the following mycotoxins:

AFLATOXIN B<sub>1</sub>

incidence: 2/3, conc. range: 101–200 µg/kg (1 sa), 201–500 µg/kg (1 sa), Ø conc.:

222.7 µg/kg, country: India<sup>247</sup>

incidence: 1/1, conc.: 8400 µg/kg, country: India<sup>321</sup>

see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (50–60 % maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake,

niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

AFLATOXIN B<sub>2</sub>

incidence: 2/3, Ø conc.: 19.6 µg/kg, country: India<sup>247</sup>

see also animal feedstuffs (dairy cake), bird food, bird food, wild, biri testa, blackgram, blackgram husk, cottonseed, cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meats, dog food, egg production mixed feed, feed, compound, feed (cat), feed (cattle), feed (dog), feed (pig), feed (poultry), feed (rabbit), fish meal, horsegram, maize, maize gluten, maize husk, maize, ground, maize, preharvest, mung testa, mustard cake, niger cake, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanuts, peanut, kernels, redgram husk, rice bran, rice bran (deoiled), rice chaff, rice meal, rice (polish), sal seed cake, sesame cake, sorghum, soybean meal, soybeans, wheat, wheat bran

## AFLATOXIN

incidence: 2/3, conc. range:

200.1–245.2 µg/kg, country: India<sup>247</sup>

see also blackgram husk, bread crumbs, broiler finisher, broiler starter, cotton cake, cottonseed, cottonseed cake, cottonseed extract, cottonseed meal, feed, feed (cattle), feed (cow), feed (dog), feed (horse), feed (maize, gluten), feed (pig), feed (poultry), feed (rabbit), feed (rat/mice), feeds, grain, fish meal, flour (wheat), groundnut cake,



grower's mash, horsegram, layer's mash, maize, maize gluten, maize, white, milo, peanut cake, peanut cake (deoiled), peanut, kernels, peanut (oil cake), pearl millet, pig breeder's mash, pig finisher, pig starter, pod with haulms, poultry breeder's mash, rabbit pellets, redgram husk, rice, rice bran (deoiled), rice, broken, rice (polish), sesame cake, silk worm pupae, sorghum, soybean cake, soybean meal, wheat, wheat bran

**Feed (starter chicken)** may contain the following mycotoxins:

**ZEARALENONE**

incidence: 4/26, conc. range: 354–1973  $\mu\text{g}/\text{kg}$ , country: Taiwan<sup>221</sup>

incidence: 14/96, conc. range:

11.5–287  $\mu\text{g}/\text{kg}$ , country: Brazil<sup>409</sup>

see also alfalfa, barley, barley, husked, barley, unhusked (naked), barley and feed, bone meal, bran, broilers feed, *Carthamus* cake, chick pea, concentrate, mixed, corn cob mix silage, cotton cake, cottonseed, cottonseed cake, diet (dairy cow), diet (poultry), diets (mixed), feed, feed components, feed, mixed, feed, mixed (primarily maize also maize, oats, wheat), feed (bran), feed (broiler chicken), feed (cattle), feed (chicken), feed (dairy), feed (developing pig), feed (mill run, from wheat), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feedstuff, fish meal, forage grass, grain, bruised, grain, mixed feed, grains (no specification), hay, maize, maize ears, maize flakes, maize germ, maize germ/bran, maize gluten, maize kernels, maize meal, maize oil cake, maize screenings, maize stalks (pith), maize, "Baby", maize, hybrid, maize, shelled, maize, unshelled, maize, white, maize grain, artificially dried, maize grain, crib dried, maize grain, ensiled, milk production mixed feed, oats, *Paspalum palidosum*, straw, peanut hulls/skins, rice bran, rice germ, rice germ cake, rye, silage, sorghum, soybeans, soybeans, extracted, sunflower cake, tapioca, triticale, wheat, wheat bran, wheat bran and chana testa, wheat soya meal

**Feed (trout)** may contain the following mycotoxins:

**OCHRATOXIN A**

incidence: 4/13, conc. range: 0.4–1.9  $\mu\text{g}/\text{kg}$ ,

$\emptyset$  conc.: 0.93  $\mu\text{g}/\text{kg}$ , country: Italy<sup>14</sup>

see also alfalfa, barley, barley, oats, barley (high moisture), barley-soybean diet, bird food, domestic, bird food, wild, broilers feed, cereal grains, citrus pulp, coconut, expeller, corn cob mix silage, diet (dairy cow), diet (poultry), diet (starter), dog food, eat, egg production mixed feed, feed, feed wheat, oat and barley, feed, commercial mix, feed, mixed, feed, mixed (pelleted), feed (broilers), feed (cat), feed (cattle), feed (cereals), feed (pig), feed ec (pig), feed (poultry), feed ec (poultry), feed (poultry, pig), feed ec (rabbit), grain, mixed feed, grains, mixed, grains (heated), hay, horse bean, maize, maize feed, milo, maize gluten, maize meal, maize, white, *Makhana* (*Euryale ferox* Salisb) puffs, milk production mixed feed, millet, oat and barley (hammer-milled), oats, palm products, peanut cake, peas, peas and beans, pet food, pig feedstuffs, pig grower diet, pig meal, piglet diet, poultry feedstuffs, rice bran, rice germ, rice germ cake, rye, sorghum, soybean groats, sunflower, sunflower seeds, extracted, tapioca, triticale, *Vicia faba*, wheat, wheat and barley, wheat bran, wheat hay, wheat, oats

**Feed (50–60 % maize)** may contain the following mycotoxins:

**AFLATOXIN B<sub>1</sub>**

incidence: 94/278, conc. range:

60–15,000  $\mu\text{g}/\text{kg}$ , country: USA<sup>166</sup>

see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake,

cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meals, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

**Feeds, grain** may contain the following mycotoxins:

### 3-ACETYLDEOXYNIVALENOL

incidence: 169/281, max. conc.: 570 µg/kg, Ø conc.: 23 µg/kg, country: Finland<sup>11</sup>  
see also barley, feed components, feed (poultry), feeds, industrial, feedstuffs (rapeseed, turnip, fish meal, concentrates), maize, maize ears, maize gluten, maize kernels, maize meal, maize screenings, oats, wheat

### AFLATOXIN

incidence: 95/172, conc. range: 1–350 µg/kg, country: UK<sup>37</sup>  
incidence: 45/105, conc. range: 1–300 µg/kg, country: UK<sup>37</sup>, from Germany  
see also blackgram husk, bread crumbs, broiler finisher, broiler starter, cotton cake, cottonseed, cottonseed cake, cottonseed extract, cottonseed meal, feed, feed (cattle), feed (cow), feed (dog), feed (horse), feed (maize, gluten), feed (pig), feed (poultry), feed (rabbit), feed (rat/mice), feed (sheep), fish meal, flour (wheat), groundnut cake, grower's mash, horsegram, layer's mash, maize, maize gluten, maize, white, milo, peanut cake, peanut cake (deoiled), peanut, kernels, peanut (oil cake), pearl millet, pig breeder's mash, pig finisher, pig starter, pod with haulms, poultry breeder's mash, rabbit pellets, redgram husk, rice, rice bran (deoiled), rice, broken, rice (polish), sesame cake, silk worm pupae, sorghum, soybean cake, soybean meal, wheat, wheat bran

### DEOXYNIVALENOL

incidence: 350/363, conc. range: ≤ 16,000 µg/kg, Ø conc.: 160 µg/kg, country: Finland<sup>11</sup>  
see also barley, barley, husked, barley, unhusked (naked), barley (pressed), bone meal, bran, broilers feed, calf fattening mixed feed, coconut, expeller, corn cob mix silage, cottonseed, cottonseed cake, dairy cattle feed, egg production mixed feed, feed, feed components, feed, commercial mix, feed, mixed, feed, mixed (primarily maize), feed (barley), feed (cattle), feed (chicken), feed (dog), feed (fish), feed (mill run, from wheat), feed (mink), feed (pig), feed

(poultry), feed (reindeer), feeds, industrial, feedstuff, feedstuffs (rapeseed, turnip, fish meal, concentrates), fish meal, grain, mixed feed, grains, mixed, grains (no specification), maize, maize ears, maize fibre, maize germ, maize germ/bran, maize kernels, maize germ meal, maize gluten, maize meal, maize powder, maize screenings, maize stalks (pith), maize, "Baby", maize, hybrid, maize, white, oats, rice bran, rice germ cake, rye, silage, sorghum, soybeans, triticale, wheat, wheat and barley, wheat, red hard winter, wheat, soft white winter, wheat, spring, wheat, winter

#### DIACETOXYSCIRPENOL

incidence: 42/363, max. conc.: 1680 µg/kg, Ø conc.: 220 µg/kg, country: Finland<sup>11</sup>  
see also alfalfa, barley, feed, feed components, feed (dog), feed (fish), feed (mink), feed (pig), feed (poultry), feed (reindeer), feedstuff, forage grass, grain, mixed feed, grains (no specification), maize, maize gluten, oat and barley (hammer-milled), oats, peanuts, soybeans, wheat

**Feeds, industrial** may contain the following mycotoxins:

#### 3-ACETYLDEOXYNIVALENOL

incidence: 21/68\*, conc. range: 5–87 µg/kg, Ø conc.: 35 µg/kg, country: Finland<sup>9</sup>, \*imported ?

see also barley, feed components, feed (poultry), feeds, grain, feedstuffs (rapeseed, turnip, fish meal, concentrates), maize, maize ears, maize gluten, maize kernels, maize meal, maize screenings, oats, wheat

#### DEOXYNIVALENOL

incidence: 66/68\*, conc. range: 14–1216 µg/kg, Ø conc.: 148 µg/kg, country: Finland<sup>9</sup>, \*imported ?

see also barley, barley, husked, barley, unhusked (naked), barley (pressed), bone meal, bran, broilers feed, calf fattening mixed feed, coconut, expeller, corn cob mix silage, cottonseed, cottonseed cake, dairy cattle feed, egg production mixed feed, feed, feed

components, feed, commercial mix, feed, mixed, feed, mixed (primarily maize), feed (barley), feed (cattle), feed (chicken), feed (dog), feed (fish), feed (mill run, from wheat), feed (mink), feed (pig), feed (poultry), feed (reindeer), feeds, grain, feedstuff, feedstuffs (rapeseed, turnip, fish meal, concentrates), fish meal, grain, mixed feed, grains, mixed, grains (no specification), maize, maize ears, maize fibre, maize germ, maize germ/bran, maize germ meal, maize gluten, maize kernels, maize meal, maize powder, maize screenings, maize stalks (pith), maize, "Baby", maize, hybrid, maize, white, oats, rice bran, rice germ cake, rye, silage, sorghum, soybeans, triticale, wheat, wheat and barley, wheat, red hard winter, wheat, soft white winter, wheat, spring, wheat, winter

#### NIVALENOL

incidence: 3/68\*, conc. range: 15–67 µg/kg, Ø conc.: 38 µg/kg, country: Finland<sup>9</sup>, \*imported ?

see also barley, barley, husked, barley, unhusked (naked), barley (pressed), bran, feed, feed components, feed (cattle), feed (poultry), feed (reindeer), maize, maize ears, maize germ, maize germ/bran, maize gluten, maize kernels, maize meal, maize powder, maize screenings, maize, "Baby", oats, rye, silage, triticale, wheat

**Feedstuff** may contain the following mycotoxins:

#### AFLATOXINS

incidence: 5/2022, conc. range: ≤800 µg/kg, country: Canada<sup>135</sup>

see also animal feed (maize), animal feed (mixed), barley, copra meal, cottonseed, cottonseed fines, cottonseed meal, cottonseed meats, feed, feed ingredients (miscellaneous), feed, mixed, feed (excluding peanuts, suspect), feed (goat), feed (pig), feed (poultry), grain, grain, mixed feed, maize, maize, shelled, millet, peanut cake, peanut meal, peanut meal and by-products, peanuts, protein concentrates, rice, rice bran, sorghum, soybean meal, sunflower

## DEOXYNIVALENOL

incidence: 13/over 200, conc. range: 25–7400 µg/kg, Ø conc.: 1216.9 µg/kg, country: USA, South Africa, Zambia<sup>260</sup>  
 see also barley, barley, husked, barley, unhusked (naked), barley (pressed), bone meal, bran, broilers feed, calf fattening mixed feed, coconut, expeller, corn cob mix silage, cottonseed, cottonseed cake, dairy cattle feed, egg production mixed feed, feed, feed components, feed, commercial mix, feed, mixed, feed, mixed (primarily maize), feed (barley), feed (cattle), feed (chicken), feed (dog), feed (fish), feed (mill run, from wheat), feed (mink), feed (pig), feed (poultry), feed (reindeer), feeds, grain, feeds, industrial, feedstuffs (rapeseed, turnip, fish meal, concentrates), fish meal, grain, mixed feed, grains, mixed, grains (no specification), maize, maize ears, maize fibre, maize germ, maize germ/bran, maize germ meal, maize gluten, maize kernels, maize meal, maize powder, maize screenings, maize stalks (pith), maize, “Baby”, maize, hybrid, maize, white, oats, rice bran, rice germ cake, rye, silage, sorghum, soybeans, triticale, wheat, wheat and barley, wheat, red hard winter, wheat, soft white winter, wheat, spring, wheat, winter

## DIACETOXYSCIRPENOL

incidence: 2/over 200, conc. range: 380–500 µg/kg, Ø conc.: 440 µg/kg, country: USA<sup>260</sup>  
 see also alfalfa, barley, feed, feed components, feed (dog), feed (fish), feed (mink), feed (pig), feed (poultry), feed (reindeer), feeds, grain, forage grass, grain, mixed feed, grains (no specification), maize, maize gluten, oat and barley (hammer-milled), oats, peanuts, soybeans, wheat

## ERGOT ALKALOIDS

incidence: 1/2022, conc.: nc, country: Canada<sup>135</sup>  
 see also feed, grain, grain diets, tall fescue grass (*Festuga arundinacea* Scrb)

## OCHRATOXINS

incidence: 3/2022, conc. range: nc, country: Canada<sup>135</sup>

## T-2 TOXIN

incidence: 1/2022, conc.: nc, country: Canada<sup>135</sup>  
 incidence: 1/over 200, conc.: 76 µg/kg, country: USA<sup>260</sup>  
 see also alfalfa, barley, bran, diet (grower), diet (poultry), feed, feed components, feed, layer, feed, mixed, feed (dog), feed (fish), feed (mink), feed (pig), feed (poultry), forage grass, grain, mixed feed, grains (no specification), hay, maize, maize germ/bran, maize gluten, maize meal, maize screenings, maize stalks (pith), oat and barley (hammer-milled), oats, peanuts, pig grower diet, piglet diet, rye, sorghum, triticale, wheat

## ZEARALENONE

incidence: 28/65, conc. range: 100–2,909,000 µg/kg, country: USA<sup>88</sup>  
 incidence: 266/2022, conc. range: tr–141,000 µg/kg, Ø conc.: 3850 µg/kg, country: Canada<sup>135</sup>  
 see also alfalfa, barley, barley, husked, barley, unhusked (naked), barley and feed, bone meal, bran, broilers feed, *Carthamus* cake, chick pea, concentrate, mixed, corn cob mix silage, cotton cake, cottonseed, cottonseed cake, diet (dairy cow), diet (poultry), diets (mixed), feed, feed components, feed, mixed, feed, mixed (primarily maize also maize, oats, wheat), feed (bran), feed (broiler chicken), feed (cattle), feed (chicken), feed (dairy), feed (developing pig), feed (mill run, from wheat), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (starter chicken), fish meal, forage grass, grain, bruised, grain, mixed feed, grains (no specification), hay, maize, maize ears, maize flakes, maize germ, maize germ/bran, maize gluten, maize kernels, maize meal, maize oil cake, maize screenings, maize stalks (pith), maize, “Baby”, maize, hybrid, maize, shelled, maize, unshelled, maize, white, maize grain, artificially dried, maize grain, crib dried, maize grain, ensiled, milk production mixed

feed, oats, *Paspalum palidosum*, straw, peanut hulls/skins, rice bran, rice germ, rice germ cake, rye, silage, sorghum, soybeans, soybeans, extracted, sunflower cake, tapioca, triticale, wheat, wheat bran, wheat bran and chana testa, wheat soya meal

**Feedstuff (barley)** may contain the following mycotoxins:

**FUSARIC ACID**

incidence: 2/2\*, conc. range: 11,200–13,250 µg/kg, Ø conc.: 12,230 µg/kg, country: Canada<sup>66</sup>, \*mainly see also feed, feedstuff (dry corn), feedstuff (high-moisture corn), feedstuff (wheat), feedstuff (whole feeds)

**Feedstuff (dry corn)** may contain the following mycotoxins:

**FUSARIC ACID**

incidence: 14/16\*, conc. range: 3010–28,770 µg/kg, Ø conc.: 11,750 µg/kg, country: Canada<sup>66</sup>, \*mainly see also feed, feedstuff (barley), feedstuff (high-moisture corn), feedstuff (wheat), feedstuff (whole feeds)

**Feedstuff (high-moisture corn)** may contain the following mycotoxins:

**FUSARIC ACID**

incidence: 11/14\*, conc. range: 5470–135,640 µg/kg, Ø conc.: 26,370 µg/kg, country: Canada<sup>66</sup>, \*mainly see also feed, feedstuff (barley), feedstuff (dry corn), feedstuff (wheat), feedstuff (whole feeds)

**Feedstuff (wheat)** may contain the following mycotoxins:

**FUSARIC ACID**

incidence: 7/8\*, conc. range: 1400–30,400 µg/kg, Ø conc.: 11,610 µg/kg, country: Canada<sup>66</sup>, \*mainly see also feed, feedstuff (barley), feedstuff (dry corn), feedstuff (high-moisture corn), feedstuff (whole feeds)

**Feedstuff (whole seeds)** may contain the following mycotoxins:

**FUSARIC ACID**

incidence: 7/8\*, conc. range: 9740–125,740 µg/kg, Ø conc.: 35,760 µg/kg, country: Canada<sup>66</sup>, \*mainly see also feed, feedstuff (barley), feedstuff (dry corn), feedstuff (high-moisture corn), feedstuff (wheat)

**Feedstuffs (rapeseed, turnip, fish meal, concentrates)** may contain the following mycotoxins:

**3-ACETYLDEOXYNIVALENOL**

incidence: 2/20\*, conc. range: 5–20 µg/kg, Ø conc.: 13 µg/kg, country: Finland<sup>9</sup>, \*imported ? see also barley, feed components, feed (poultry), feeds, grain, feeds, industrial, maize, maize ears, maize gluten, maize kernels, maize meal, maize screenings, oats, wheat

**DEOXYNIVALENOL**

incidence: 13/20\*, conc. range: 11–151 µg/kg, Ø conc.: 37 µg/kg, country: Finland<sup>9</sup>, \*imported ? see also barley, barley, husked, barley, unhusked (naked), barley (pressed), bone meal, bran, broilers feed, calf fattening mixed feed, coconut, expeller, corn cob mix silage, cottonseed, cottonseed cake, dairy cattle feed, egg production mixed feed, feed, feed components, feed, commercial mix, feed, mixed, feed, mixed (primarily maize), feed (barley), feed (cattle), feed (chicken), feed (dog), feed (fish), feed (mill run, from wheat), feed (mink), feed (pig), feed (poultry), feed (reindeer), feeds, grain, feeds, industrial, feedstuff, fish meal, grain, mixed feed, grains, mixed, grains (no specification), maize, maize ears, maize fibre, maize germ, maize germ/bran, maize germ meal, maize gluten, maize kernels, maize meal, maize powder, maize screenings, maize stalks (pith), maize, “Baby”, maize, hybrid, maize, white, oats, rice bran, rice germ cake, rye, silage,

sorghum, soybeans, triticale, wheat, wheat and barley, wheat, red hard winter, wheat, soft white winter, wheat, spring, wheat, winter

**Fish meal** may contain the following mycotoxins:

**AFLATOXIN B<sub>1</sub>**

incidence: 18/257, conc. range:  $\leq 25$   $\mu\text{g}/\text{kg}$  (6 sa), 26–50  $\mu\text{g}/\text{kg}$  (4 sa), 51–100  $\mu\text{g}/\text{kg}$  (4 sa), 101–200  $\mu\text{g}/\text{kg}$  (3 sa), 201–500  $\mu\text{g}/\text{kg}$  (1 sa),  $\emptyset$  conc.: 63.1  $\mu\text{g}/\text{kg}$ , country: India<sup>247</sup>  
see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60 % maize), grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal,

maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

**AFLATOXIN B<sub>2</sub>**

incidence: 2/257, conc. range: nc,  $\emptyset$  conc.: 28  $\mu\text{g}/\text{kg}$ , country: India<sup>247</sup>  
see also animal feedstuffs (dairy cake), bird food, bird food, wild, biri testa, blackgram, blackgram husk, cottonseed, cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meats, dog food, egg production mixed feed, feed, compound, feed (cat), feed (cattle), feed (dog), feed (pig), feed (poultry), feed (rabbit), feed (sheep), horsegram, maize, maize gluten, maize husk, maize, ground, maize, preharvest, mung testa, mustard cake, niger cake, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanuts, peanut, kernels, redgram husk, rice bran, rice bran (deoiled), rice chaff, rice meal, rice (polish), sal seed cake, sesame cake, sorghum, soybean meal, soybeans, wheat, wheat bran

**AFLATOXIN**

incidence: 4/15, conc. range: 0–137  $\mu\text{g}/\text{kg}$ , country: Nigeria<sup>109</sup>  
incidence: 18/257, conc. range: 6–276  $\mu\text{g}/\text{kg}$ , country: India<sup>247</sup>

incidence: 5/5, conc. range: <30 µg/kg (3 sa), >30 µg/kg (2 sa), country: India<sup>380</sup>  
 see also blackgram husk, bread crumbs, broiler finisher, broiler starter, cotton cake, cottonseed, cottonseed cake, cottonseed extract, cottonseed meal, feed, feed (cattle), feed (cow), feed (dog), feed (horse), feed (maize, gluten), feed (pig), feed (poultry), feed (rabbit), feed (rat/mice), feed (sheep), feeds, grain, flour (wheat), groundnut cake, grower's mash, horsegram, layer's mash, maize, maize gluten, maize, white, milo, peanut cake, peanut cake (deoiled), peanut, kernels, peanut (oil cake), pearl millet, pig breeder's mash, pig finisher, pig starter, pod with haulms, poultry breeder's mash, rabbit pellets, redgram husk, rice, rice bran (deoiled), rice, broken, rice (polish), sesame cake, silk worm pupae, sorghum, soybean cake, soybean meal, wheat, wheat bran

#### CITRININ

incidence: 2/4, conc. range: 40–70 µg/kg, Ø conc.: 55 µg/kg, country: Egypt<sup>16</sup>  
 see also barley, barley, oats, barley-soybean diet, cottonseed cake, feed, feed, mixed, feed (cattle), feed (pig), hay, maize, maize, white, *Makhana* (*Euryale ferox* Salisb) puffs, oats, palm products, peas and beans, rice bran, rice germ, wheat, wheat and other grains (moldy), wheat bran

#### DEOXYNIVALENOL

incidence: 4/4, conc. range: 521–3986 µg/kg, Ø conc.: 2124 µg/kg, country: Egypt<sup>16</sup>  
 see also barley, barley, husked, barley, unhusked (naked), barley (pressed), bone meal, bran, broilers feed, calf fattening mixed feed, coconut, expeller, corn cob mix silage, cottonseed, cottonseed cake, dairy cattle feed, egg production mixed feed, feed, feed components, feed, commercial mix, feed, mixed, feed, mixed (primarily maize), feed (barley), feed (cattle), feed (chicken), feed (dog), feed (fish), feed (mill run, from wheat), feed (mink), feed (pig), feed (poultry), feed (reindeer), feeds, grain, feeds, industrial, feedstuff, feedstuffs (rapeseed), turnip, fish meal, concentrates, grain, mixed

feed, grains, mixed, grains (no specification), maize, maize ears, maize fibre, maize germ, maize germ/bran, maize germ meal, maize gluten, maize kernels, maize meal, maize powder, maize screenings, maize stalks (pith), maize, "Baby", maize, hybrid, maize, white, oats, rice bran, rice germ cake, rye, silage, sorghum, soybeans, triticale, wheat, wheat and barley, wheat, red hard winter, wheat, soft white winter, wheat, spring, wheat, winter

#### ZEARALENONE

incidence: 4/4, conc. range: 77–152 µg/kg, Ø conc.: 107 µg/kg, country: Egypt<sup>16</sup>  
 see also alfalfa, barley, barley, husked, barley, unhusked (naked), barley and feed, bone meal, bran, broilers feed, *Carthamus* cake, chick pea, concentrate, mixed, corn cob mix silage, cotton cake, cottonseed, cottonseed cake, diet (dairy cow), diet (poultry), diets (mixed), feed, feed components, feed, mixed, feed, mixed (primarily maize also maize, oats, wheat), feed (bran), feed (broiler chicken), feed (cattle), feed (chicken), feed (dairy), feed (developing pig), feed (mill run, from wheat), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (starter chicken), feedstuff, forage grass, grain, bruised, grain, mixed feed, grains (no specification), hay, maize, maize ears, maize flakes, maize germ, maize germ/bran, maize gluten, maize kernels, maize meal, maize oil cake, maize screenings, maize stalks (pith), maize, "Baby", maize, hybrid, maize, shelled, maize, unshelled, maize, white, maize grain, artificially dried, maize grain, crib dried, maize grain, ensiled, milk production mixed feed, oats, *Paspalum palidosum*, straw, peanut hulls/skins, rice bran, rice germ, rice germ cake, rye, silage, sorghum, soybeans, soybeans, extracted, sunflower cake, tapioca, triticale, wheat, wheat bran, wheat bran and chana testa, wheat soya meal

**Flour (wheat)** for feed may contain the following mycotoxins:

#### AFLATOXIN B

incidence: 18/25, conc. range: ≥25–>100 µg/kg, country: France<sup>46</sup>

see also barley, cocoa (oil cake), cottonseed cake, feed, feed (cattle), feed (maize, gluten), feed (pig), feed (poultry), lucern (dried), maize, maize gluten, maize grains, oats, peanut (oil cake), rice, broken, sorghum, soybean (oil cake), sunflower (oil cake), wheat

#### AFLATOXIN

incidence: 1/1, conc. range: <30 µg/kg (1 sa), country: India<sup>380</sup>

see also blackgram husk, bread crumbs, broiler finisher, broiler starter, cotton cake, cottonseed, cottonseed cake, cottonseed extract, cottonseed meal, feed, feed (cattle), feed (cow), feed (dog), feed (horse), feed (maize, gluten), feed (pig), feed (poultry), feed (rabbit), feed (rat/mice), feed (sheep), feeds, grain, fish meal, groundnut cake, grower's mash, horsegram, layer's mash, maize, maize gluten, maize, white, milo, peanut cake, peanut cake (deoiled), peanut, kernels, peanut (oil cake), pearl millet, pig breeder's mash, pig finisher, pig starter, pod with haulms, poultry breeder's mash, rabbit pellets, redgram husk, rice, rice bran (deoiled), rice, broken, rice (polish), sesame cake, silk worm pupae, sorghum, soybean cake, soybean meal, wheat, wheat bran

**Forage grass** may contain the following mycotoxins:

#### DIACETOXYSCIRPENOL

incidence: 180/832, conc. range: 3–60 µg/kg, country: Germany<sup>372</sup>

see also alfalfa, barley, feed, feed components, feeds, grain, feed (dog), feed (fish), feed (mink), feed (pig), feed (poultry), feed (reindeer), feedstuff, grain, mixed feed, grains (no specification), maize, maize gluten, oat and barley (hammer-milled), oats, peanuts, soybeans, wheat

#### FUMONISIN B<sub>1</sub>

incidence: 4/40, conc. range: 1000–9000 µg/kg, Ø conc.: 5000 µg/kg, country: New Zealand<sup>156</sup>

see also barley, bird food, wild, dog food, feed, feed, complete ration, feed, general,

feed, layer, feed, maize-based, feed, mixed, feed, pelleted ration, feed, screenings, feed, sweet, feed (broilers), feed (cat), feed (chicken), feed (dog), feed (gluten), feed (horse), feed (maize), feed (pig), feed (poultry), feed (rat), feed (rodent), maize, maize and maize screenings, maize bran, maize ears, maize fine fractions, maize flakes, maize germ, maize germ/bran, maize germ meal, maize gluten, maize grits, maize kernels, maize meal, maize powder, maize screenings, maize, "Baby", maize, ground, maize, preharvest, maize, sweet feed, maize/oats mix, rat chow, silage, sorghum, soybeans, wheat

#### FUMONISIN B<sub>1</sub> METHYL ESTER

incidence: 4/40, conc. range: 500–4000 µg/kg, Ø conc.: 1750 µg/kg, country: New Zealand<sup>156</sup>

#### T-2 TOXIN

incidence: 208/832, conc. range: 40–2780 µg/kg, country: Germany<sup>372</sup>  
see also alfalfa, barley, bran, diet (grower), diet (poultry), feed, feed components, feed, layer, feed, mixed, feed (dog), feed (fish), feed (mink), feed (pig), feed (poultry), feedstuff, grain, mixed feed, grains (no specification), hay, maize, maize germ/bran, maize gluten, maize meal, maize screenings, maize stalks (pith), oat and barley (hammer-milled), oats, peanuts, pig grower diet, piglet diet, rye, sorghum, triticale, wheat

#### ZEARALENONE

incidence: 557/832, conc. range: 10–4750 µg/kg, country: Germany<sup>372</sup>  
see also alfalfa, barley, barley, husked, barley, unhusked (naked), barley and feed, bone meal, bran, broilers feed, *Carthamus* cake, chick pea, concentrate, mixed, corn cob mix silage, cotton cake, cottonseed, cottonseed cake, diet (dairy cow), diet (poultry), diets (mixed), feed, feed components, feed, mixed, feed, mixed (primarily maize also maize, oats, wheat), feed (bran), feed (broiler chicken), feed (cattle), feed (chicken), feed (dairy), feed (developing pig), feed (mill run, from wheat), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (starter



chicken), feedstuff, fish meal, grain, bruised, grain, mixed feed, grains (no specification), hay, maize, maize ears, maize flakes, maize germ, maize germ/bran, maize gluten, maize kernels, maize meal, maize oil cake, maize screenings, maize stalks (pith), maize, "Baby", maize, hybrid, maize, shelled, maize, unshelled, maize, white, milk production mixed feed, oats, *Paspalum palidosum*, straw, peanut hulls/skins, rice bran, maize grain, artificially dried, maize grain, crib dried, maize grain, ensiled, rice germ, rice germ cake, rye, silage, sorghum, soybeans, soybeans, extracted, sunflower cake, tapioca, triticale, wheat, wheat bran, wheat bran and chana testa, wheat soya meal

**Grain** Grain for feed may contain the following mycotoxins:

#### AFLATOXINS

incidence: 22/55, conc. range:

0.5–>400 µg/kg\*, country: Sweden<sup>333</sup>,

\*formic acid-treated (700 g litre<sup>-1</sup>)

incidence: 20/52, conc. range:

0.5–>400 µg/kg\*, country: Sweden<sup>333</sup>,

\*formic acid-treated (850 g litre<sup>-1</sup>)

incidence: 2/37, conc. range: 5–400 µg/kg\*,

country: Sweden<sup>333</sup>, \*propionic acid-treated

see also animal feed (maize), animal feed (mixed), barley, copra meal, cottonseed, cottonseed fines, cottonseed meal, cottonseed meats, feed, feed ingredients (miscellaneous), feed, mixed, feed (excluding peanuts, suspect), feed (goat), feed (pig), feed (poultry), feedstuff, grain, mixed feed, maize, maize, shelled, millet, peanut cake, peanut meal, peanut meal and by-products, peanuts, protein concentrates, rice, rice bran, sorghum, soybean meal, sunflower

#### ERGOT ALKALOID

incidence: 8/8, conc. range:

<100–50,000 µg/kg\*, country: Australia<sup>331</sup>

incidence: 4/4, conc. range:

4000–30,000 µg/kg\*, country: Australia<sup>331</sup>,

\*>90 % dihydroergosine

see also feed, feedstuff, grain diets, tall fescue grass (*Festuca arundinacea* Scrib)

**Grain by-products** may contain the following mycotoxins:

#### AFLATOXIN B<sub>1</sub>

incidence: 44/85, conc. range: 1–20 µg/kg

(39 sa), 21–100 µg/kg (4 sa), 101–300 µg/kg

(1 sa), country: USA<sup>370</sup>

see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60 % maize), fish meal, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake,

niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

**Grain diets** may contain the following mycotoxins:

**ERGOT ALKALOID**

incidence: 2/2, conc. range: 40,000 µg/kg\*, Ø conc.: 40,000 µg/kg, country: Australia<sup>331</sup>, \* >90 % dihydroergosine  
see also feed, feedstuff, grain, tall fescue grass (*Festuca arundinacea* Scrib)

**Grain, bruised** may contain the following mycotoxins:

**ZEARALENONE**

incidence: 1/5, conc.: 26.9 µg/kg, country: Germany<sup>107</sup>  
see also alfalfa, barley, barley, husked, barley, unhusked (naked), barley and feed, bone meal, bran, broilers feed, *Carthamus* cake, chick pea, concentrate, mixed, corn cob mix silage, cotton cake, cottonseed, cottonseed cake, diet (dairy cow), diet (poultry), diets (mixed), feed, feed components, feed, mixed, feed, mixed (primarily maize also maize, oats, wheat), feed (bran), feed (broiler chicken), feed (cattle), feed (chicken), feed (dairy), feed (developing pig), feed (mill run, from wheat), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (starter chicken), feedstuff, fish meal, forage grass, grain, mixed feed, grains (no specification), hay, maize, maize ears, maize flakes, maize germ, maize germ/bran, maize gluten, maize

kernels, maize meal, maize oil cake, maize screenings, maize stalks (pith), maize, "Baby", maize, hybrid, maize, shelled, maize, unshelled, maize, white, milk production mixed feed, oats, *Paspalum palidosum*, straw, peanut hulls/skins, rice bran, maize grain, artificially dried, maize grain, crib dried, maize grain, ensiled, rice germ, rice germ cake, rye, silage, sorghum, soybeans, soybeans, extracted, sunflower cake, tapioca, triticale, wheat, wheat bran, wheat bran and chana testa, wheat soya meal

**Grain, mixed feed** may contain the following mycotoxins:

**AFLATOXINS**

incidence: 1/65, conc.: 2600 µg/kg\*, country: Sweden<sup>25</sup>, \* surface of stored grain  
see also animal feed (maize), animal feed (mixed), barley, copra meal, cottonseed, cottonseed fines, cottonseed meal, cottonseed meats, feed, feed ingredients (miscellaneous), feed, mixed, feed (excluding peanuts, suspect), feed (goat), feed (pig), feed (poultry), feedstuff, grain, maize, maize, shelled, millet, peanut cake, peanut meal, peanut meal and by-products, peanuts, protein concentrates, rice, rice bran, sorghum, soybean meal, sunflower

**DEOXYNIVALENOL**

incidence: 2/9, conc. range: 20–139 µg/kg, Ø conc.: 79.5 µg/kg, country: Germany<sup>68</sup>  
see also barley, barley, husked, barley, unhusked (naked), barley (pressed), bone meal, bran, broilers feed, calf fattening mixed feed, coconut, expeller, corn cob mix silage, cottonseed, cottonseed cake, dairy cattle feed, egg production mixed feed, feed, feed components, feed, commercial mix, feed, mixed, feed, mixed (primarily maize), feed (barley), feed (cattle), feed (chicken), feed (dog), feed (fish), feed (mill run, from wheat), feed (mink), feed (pig), feed (poultry), feed (reindeer), feeds, grain, feeds, industrial, feedstuff, feedstuffs (rapeseed, turnip, fish meal, concentrates), fish meal, grains, mixed, grains (no specification),

maize, maize ears, maize fibre, maize germ, maize germ/bran, maize germ meal, maize gluten, maize kernels, maize meal, maize powder, maize screenings, maize stalks (pith), maize, "Baby", maize, hybrid, maize, white, oats, rice bran, rice germ cake, rye, silage, sorghum, soybeans, triticale, wheat, wheat and barley, wheat, red hard winter, wheat, soft white winter, wheat, spring, wheat, winter

#### DIACETOXYSCIRPENOL

incidence: 2/38, conc. range:

300–19,000 µg/kg, Ø conc.: 9650 µg/kg,

country: Germany<sup>68</sup>

see also alfalfa, barley, feed, feed components, feed (dog), feed (fish), feed (mink), feed (pig), feed (poultry), feed (reindeer), feeds, grain, feedstuff, forage grass, grains (no specification), maize, maize gluten, oat and barley (hammer-milled), oats, peanuts, soybeans, wheat

#### HT-2 TOXIN

incidence: 3/9, conc. range: 200–400 µg/kg,

country: Germany<sup>68</sup>

see also barley, feed components, feed (dog), feed (fish), feed (pig), feed (poultry), feed (reindeer), grains, mixed, grains (no specification), maize, maize germ/bran, maize gluten, maize meal, maize screenings, oats, rye, silage, wheat

#### OCHRATOXIN A

incidence: 60/88, conc. range: 40–1690 µg/kg, country: Sweden<sup>25</sup>

see also alfalfa, barley, barley, oats, barley (high moisture), barley-soybean diet, bird food, domestic, bird food, wild, broilers feed, cereal grains, citrus pulp, coconut, expeller, corn cob mix silage, diet (dairy cow), diet (poultry), diet (starter), dog food, eat, egg production mixed feed, feed, feed wheat, oat and barley, feed, commercial mix, feed, mixed, feed, mixed (pelleted), feed (broilers), feed (cat), feed (cattle), feed (cereals), feed (pig), feed ec (pig), feed (poultry), feed ec (poultry), feed (poultry, pig), feed ec (rabbit), feed (trout), grains, mixed, grains (heated), horse bean, maize, maize feed,

miló, maize gluten, maize meal, maize, white, *Makhana* (*Euryale ferox* Salisb) puffs, milk production mixed feed, millet, oat and barley (hammer-milled), oats, palm products, peanut cake, peas, peas and beans, pet food, pig feedstuffs, pig grower diet, pig meal, piglet diet, poultry feedstuffs, rice bran, rice germ, rice germ cake, rye, sorghum, soybean groats, sunflower, sunflower seeds, extracted, tapioca, triticale, *Vicia faba*, wheat, wheat and barley, wheat bran, wheat hay, wheat, oats

#### T-2 TOXIN

incidence: 1/10, conc.: 20 µg/kg, country:

Germany<sup>68</sup>

see also alfalfa, barley, bran, diet (grower), diet (poultry), feed, feed components, feed, layer, feed, mixed, feed (dog), feed (fish), feed (mink), feed (pig), feed (poultry), feedstuff, forage grass, grains (no specification), hay, maize, maize germ/bran, maize gluten, maize meal, maize screenings, maize stalks (pith), oat and barley (hammer-milled), oats, peanuts, pig grower diet, piglet diet, rye, sorghum, triticale, wheat

#### T-2 TRIOL

incidence: 1/9, conc.: 400 µg/kg, country:

Germany<sup>68</sup>

see also barley, feed components, grains (no specification), maize, oats, wheat

#### ZEARALENONE

incidence: 2/68, conc. range: 100–1200 µg/kg,

Ø conc.: 650 µg/kg, country: Sweden<sup>25</sup>

incidence: 17/41, conc. range: 10–500 µg/kg, country: Germany<sup>68</sup>

incidence: 1/10, conc.: 300 µg/kg, country: Germany<sup>68</sup>

see also alfalfa, barley, barley, husked, barley, unhusked (naked), barley and feed, bone meal, bran, broilers feed, *Carthamus* cake, chick pea, concentrate, mixed, corn cob mix silage, cotton cake, cottonseed, cottonseed cake, diet (dairy cow), diet (poultry), diets (mixed), feed, feed components, feed, mixed, feed, mixed (primarily maize also maize, oats, wheat), feed (bran), feed (broiler chicken), feed (cattle), feed (chicken), feed (dairy), feed (developing pig), feed (mill run, from

wheat), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (starter chicken), feedstuff, fish meal, forage grass, grain, bruised, grains (no specification), hay, maize, maize ears, maize flakes, maize germ, maize germ/bran, maize gluten, maize kernels, maize meal, maize oil cake, maize screenings, maize stalks (pith), maize, "Baby", maize, hybrid, maize, shelled, maize, unshelled, maize, white, maize grain, artificially dried, maize grain, crib dried, maize grain, ensiled, milk production mixed feed, oats, *Paspalum palidosum*, straw, peanut hulls/skins, rice bran, rice germ, rice germ cake, rye, silage, sorghum, soybeans, soybeans, extracted, sunflower cake, tapioca, triticale, wheat, wheat bran, wheat bran and chana testa, wheat soya meal

**Grains (no specification)** Grains for feed may contain the following mycotoxins:

#### AFATOXIN B<sub>1</sub>

incidence: 4/47, conc. range: 1–20 µg/kg (3 sa), 101–300 µg/kg (1 sa), country: USA<sup>370</sup>  
see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meals, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer,

feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60 % maize), fish meal, grain by-products, greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

#### DEOXYNIVALENOL

incidence: 4/102, conc. range: 1000–2000 µg/kg, country: Germany<sup>68</sup>  
incidence: 31/297, conc. range: 10–500 µg/kg, country: Germany<sup>68</sup>  
see also barley, barley, husked, barley, unhusked (naked), barley (pressed), bone meal, bran, broilers feed, calf fattening mixed feed, coconut, expeller, corn cob mix silage, cottonseed, cottonseed cake, dairy cattle feed, egg production mixed feed, feed, feed components, feed, commercial mix, feed, mixed, feed, mixed (primarily maize), feed (barley), feed (cattle), feed (chicken), feed (dog), feed (fish), feed (mill run, from wheat), feed (mink), feed (pig), feed

(poultry), feed (reindeer), feeds, grain, feeds, industrial, feedstuff, feedstuffs (rapeseed, turnip, fish meal, concentrates), fish meal, grain, mixed feed, grains, mixed, maize, maize ears, maize fibre, maize germ, maize germ/bran, maize germ meal, maize gluten, maize kernels, maize meal, maize powder, maize screenings, maize stalks (pith), maize, “Baby”, maize, hybrid, maize, white, oats, rice bran, rice germ cake, rye, silage, sorghum, soybeans, triticale, wheat, wheat and barley, wheat, red hard winter, wheat, soft white winter, wheat, spring, wheat, winter

#### DIACETOXYSCIRPENOL

incidence: 14/188, conc. range:  
300–19,000 µg/kg, country: Germany<sup>68</sup>  
incidence: 11/288, conc. range:  
200–700 µg/kg, country: Germany<sup>68</sup>  
incidence: 2/55, conc.: 110 µg/kg, country:  
Canada<sup>432</sup>

see also alfalfa, barley, feed, feed components, feed (dog), feed (fish), feed (mink), feed (pig), feed (poultry), feed (reindeer), feeds, grain, feedstuff, forage grass, grain, mixed feed, maize, maize gluten, oat and barley (hammer-milled), oats, peanuts, soybeans, wheat

#### HT-2 TOXIN

incidence: 2/89, conc. range:  
600–10,000 µg/kg, Ø conc.: 5300 µg/kg,  
country: Germany<sup>68</sup>  
incidence: 59/273, conc. range:  
100–700 µg/kg, country: Germany<sup>68</sup>  
incidence: 2/55, conc. range: 120–440 µg/kg,  
country: Canada<sup>432</sup>  
see also barley, feed components, feed (dog), feed (fish), feed (pig), feed (poultry), feed (reindeer), grain, mixed feed, grains, mixed, maize, maize germ/bran, maize gluten, maize meal, maize screenings, oats, rye, silage, wheat

#### T-2 TOXIN

incidence: 4/198, conc. range:  
300–14,000 µg/kg, country: Germany<sup>68</sup>  
incidence: 37/298, conc. range:  
200–700 µg/kg, country: Germany<sup>68</sup>  
incidence: 5/55, conc. range: 160–310 µg/kg,  
country: Canada<sup>432</sup>

see also alfalfa, barley, bran, diet (grower), diet (poultry), feed, feed components, feed, layer, feed, mixed, feed (dog), feed (fish), feed (mink), feed (pig), feed (poultry), feedstuff, forage grass, grain, mixed feed, hay, maize, maize germ/bran, maize gluten, maize meal, maize screenings, maize stalks (pith), oat and barley (hammer-milled), oats, peanuts, pig grower diet, piglet diet, rye, sorghum, triticale, wheat

#### T-2 TRIOL

incidence: 2/88, conc. range: 300 µg/kg,  
country: Germany<sup>68</sup>  
incidence: 7/281, conc. range: 100–700 µg/kg,  
country: Germany<sup>68</sup>  
see also barley, feed components, grain,  
mixed feed, maize, oats, wheat

#### ZEARALENOL

incidence: 1/248, conc.: 150 µg/kg, country:  
Germany<sup>68</sup>  
see also maize, shelled, maize, unshelled, oats

#### ZEARALENONE

incidence: 56/227, conc. range: 10–700 µg/kg,  
country: Germany<sup>68</sup>  
incidence: 21/298, conc. range:  
10–2000 µg/kg, country: Germany<sup>68</sup>  
see also alfalfa, barley, barley, husked, barley, unhusked (naked), barley and feed, bone meal, bran, broilers feed, *Carthamus* cake, chick pea, concentrate, mixed, corn cob mix silage, cotton cake, cottonseed, cottonseed cake, diet (dairy cow), diet (poultry), diets (mixed), feed, feed components, feed, mixed, feed, mixed (primarily maize also maize, oats, wheat), feed (bran), feed (broiler chicken), feed (cattle), feed (chicken), feed (dairy), feed (developing pig), feed (mill run, from wheat), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (starter chicken), feedstuff, fish meal, forage grass, grain, bruised, grain, mixed feed, hay, maize, maize ears, maize flakes, maize germ, maize germ/bran, maize gluten, maize kernels, maize meal, maize oil cake, maize screenings, maize stalks (pith), maize, “Baby”, maize, hybrid, maize, shelled, maize, unshelled, maize, white, maize grain, artificially dried, maize grain, crib dried, maize

grain, ensiled, milk production mixed feed, oats, *Paspalum palidosum*, straw, peanut hulls/skins, rice bran, rice germ, rice germ cake, rye, silage, sorghum, soybeans, soybeans, extracted, sunflower cake, tapioca, triticale, wheat, wheat bran, wheat bran and chana testa, wheat soya meal

**Grains, mixed** for feed may contain the following mycotoxins:

#### DEOXYNIVALENOL

incidence: 4/11, conc. range: 90–200 µg/kg, Ø conc.: 145 µg/kg, country: Sweden<sup>197</sup>  
see also barley, barley, husked, barley, unhusked (naked), barley (pressed), bone meal, bran, broilers feed, calf fattening mixed feed, coconut, expeller, corn cob mix silage, cottonseed, cottonseed cake, dairy cattle feed, egg production mixed feed, feed, feed components, feed, commercial mix, feed, mixed, feed, mixed (primarily maize), feed (barley), feed (cattle), feed (chicken), feed (dog), feed (fish), feed (mill run, from wheat), feed (mink), feed (pig), feed (poultry), feed (reindeer), feeds, grain, feeds, industrial, feedstuff, feedstuffs (rapeseed, turnip, fish meal, concentrates), fish meal, grain, mixed feed, grains (no specification), maize, maize ears, maize fibre, maize germ, maize germ/bran, maize germ meal, maize gluten, maize kernels, maize meal, maize powder, maize screenings, maize stalks (pith), maize, “Baby”, maize, hybrid, maize, white, oats, rice bran, rice germ cake, rye, silage, sorghum, soybeans, triticale, wheat, wheat and barley, wheat, red hard winter, wheat, soft white winter, wheat, spring, wheat, winter

#### HT-2 TOXIN

incidence: 1/94, conc.: 66 µg/kg, country: Canada<sup>240</sup>  
see also barley, feed components, feed (dog), feed (fish), feed (pig), feed (poultry), feed (reindeer), grain, mixed feed, grains (no specification), maize, maize germ/bran, maize gluten, maize meal, maize screenings, oats, rye, silage, wheat

#### OCHRATOXIN A

incidence: 1/94, conc.: 1600 µg/kg, country: Canada<sup>240</sup>

see also alfalfa, barley, barley, oats, barley (high moisture), barley-soybean diet, bird food, domestic, bird food, wild, broilers feed, cereal grains, citrus pulp, coconut, expeller, corn cob mix silage, diet (dairy cow), diet (poultry), diet (starter), dog food, eat, egg production mixed feed, feed, feed wheat, oat and barley, feed, commercial mix, feed, mixed, feed, mixed (pelleted), feed (broilers), feed (cat), feed (cattle), feed (cereals), feed (pig), feed ec (pig), feed (poultry), feed ec (poultry), feed (poultry, pig), feed ec (rabbit), feed (trout), grain, mixed feed, grains (heated), hay, horse bean, maize, maize feed, milo, maize gluten, maize meal, maize, white, *Makhana (Euryale ferox Salisb)* puffs, milk production mixed feed, millet, oat and barley (hammer-milled), oats, palm products, peanut cake, peas, peas and beans, pet food, pig feedstuffs, pig grower diet, pig meal, piglet diet, poultry feedstuffs, rice bran, rice germ, rice germ cake, rye, sorghum, soybean groats, sunflower, sunflower seeds, extracted, tapioca, triticale, *Vicia faba*, wheat, wheat and barley, wheat bran, wheat hay, wheat, oats

**Grains (heated)** Grains for feed may contain the following mycotoxins:

#### OCHRATOXIN A

incidence: 4/4, conc. range: 20–100 µg/kg, country: Canada<sup>172</sup>

see also alfalfa, barley, barley, oats, barley (high moisture), barley-soybean diet, bird food, domestic, bird food, wild, broilers feed, cereal grains, citrus pulp, coconut, expeller, corn cob mix silage, diet (dairy cow), diet (poultry), diet (starter), dog food, eat, egg production mixed feed, feed, feed wheat, oat and barley, feed, commercial mix, feed, mixed, feed, mixed (pelleted), feed (broilers), feed (cat), feed (cattle), feed (cereals), feed (pig), feed ec (pig), feed (poultry), feed ec (poultry), feed (poultry, pig), feed ec (rabbit), feed (trout), grain, mixed feed, grains, mixed, hay, horse bean, maize, maize

feed, milo, maize gluten, maize meal, maize, white, *Makhana* (*Euryale ferox* Salisb) puffs, milk production mixed feed, millet, oat and barley (hammer-milled), oats, palm products, peanut cake, peas, peas and beans, pet food, pig feedstuffs, pig grower diet, pig meal, piglet diet, poultry feedstuffs, rice bran, rice germ, rice germ cake, rye, sorghum, soybean groats, sunflower, sunflower seeds, extracted, tapioca, triticale, *Vicia faba*, wheat, wheat and barley, wheat bran, wheat hay, wheat, oats

**Greengram** Greengram for feed may contain the following mycotoxins:

**AFLATOXIN B<sub>1</sub>**

incidence: 6/10, conc. range: tr–20 µg/kg, country: India<sup>183</sup>

see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60 % maize), fish meal,

grain by-products, grains (no specification), hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

**GROUNDNUT OIL CAKE**

see Peanut cake and Peanut (oil cake)

**Groundnut cake** may contain the following mycotoxins:

**AFLATOXIN**

incidence: 20/23, conc. range: 0–1862 µg/kg, country: Nigeria<sup>109</sup>

incidence: 17/17, conc. range: 11–30 µg/kg (2 sa), 31–100 µg/kg (2 sa), >100 µg/kg (≤1007 µg/kg) (13 sa), country: India<sup>311</sup>

incidence: 55/56, conc. range: 10–30 µg/kg (10 sa), 101–500 µg/kg (43 sa), >500 µg/kg (2 sa), country: India<sup>311</sup>

see also blackgram husk, bread crumbs, broiler finisher, broiler starter, cotton cake, cottonseed, cottonseed cake, cottonseed extract, cottonseed meal, feed, feed (cattle), feed (cow), feed (dog), feed (horse), feed (maize, gluten), feed (pig), feed (poultry), feed (rabbit), feed (rat/mice), feed (sheep),

feeds, grain, fish meal, flour (wheat), grower's mash, horsegram, layer's mash, maize, maize gluten, maize, white, milo, peanut cake, peanut cake (deoiled), peanut, kernels, peanut (oil cake), pearl millet, pig breeder's mash, pig finisher, pig starter, pod with haulms, poultry breeder's mash, rabbit pellets, redgram husk, rice, rice bran (deoiled), rice, broken, rice (polish), sesame cake, silk worm pupae, sorghum, soybean cake, soybean meal, wheat, wheat bran

#### CYCLOPIAZONIC ACID

incidence: 2/8, conc. range:

5000–10,000 µg/kg (estimated), Ø conc.:

7500 µg/kg, country: India<sup>33</sup>

see also chick mash, feed, maize, millet, little, peanuts, rice bran, wheat

#### GROUNDNUT KERNELS

see Peanut, kernels

**Grower's mash** may contain the following mycotoxins:

#### AFLATOXIN

incidence: 3/8, conc. range: 0–46 µg/kg,

country: Nigeria<sup>109</sup>

see also blackgram husk, bread crumbs, broiler finisher, broiler starter, cotton cake, cottonseed, cottonseed cake, cottonseed extract, cottonseed meal, feed, feed (cattle), feed (cow), feed (dog), feed (horse), feed (maize, gluten), feed (pig), feed (poultry), feed (rabbit), feed (rat/mice), feed (sheep), feeds, grain, fish meal, flour (wheat), groundnut cake, horsegram, layer's mash, maize, maize gluten, maize, white, milo, peanut cake, peanut cake (deoiled), peanut, kernels, peanut (oil cake), pearl millet, pig breeder's mash, pig finisher, pig starter, pod with haulms, poultry breeder's mash, rabbit pellets, redgram husk, rice, rice bran (deoiled), rice, broken, rice (polish), sesame cake, silk worm pupae, sorghum, soybean cake, soybean meal, wheat, wheat bran

**Hay** may contain the following mycotoxins:

#### CITRININ

incidence: 1/7345, conc.: nc, country: Hungary<sup>209</sup>

see also barley, barley, oats, barley-soybean diet, cottonseed cake, feed, mixed, feed (cattle), feed (pig), fish meal, maize, maize, white, *Makhana* (*Euryale ferox* Salisb) puffs, oats, palm products, peas and beans, rice bran, rice germ, wheat, wheat and other grains (moldy), wheat bran

#### OCHRATOXIN A

incidence: 1/7345, conc.: nc, country:

Hungary<sup>209</sup>

see also alfalfa, barley, barley, oats, barley (high moisture), barley-soybean diet, bird food, domestic, bird food, wild, broilers feed, cereal grains, citrus pulp, coconut, expeller, corn cob mix silage, diet (dairy cow), diet (poultry), diet (starter), dog food, eat, egg production mixed feed, feed, feed wheat, oat and barley, feed, commercial mix, feed, mixed, feed, mixed (pelleted), feed (broilers), feed (cat), feed (cattle), feed (cereals), feed (pig), feed ec (pig), feed (poultry), feed ec (poultry), feed (poultry, pig), feed ec (rabbit), feed (trout), grain, mixed feed, grains, mixed, grains (heated), horse bean, maize, maize feed, milo, maize gluten, maize meal, maize, white, *Makhana* (*Euryale ferox* Salisb) puffs, milk production mixed feed, millet, oat and barley (hammer-milled), oats, palm products, peanut cake, peas, peas and beans, pet food, pig feedstuffs, pig grower diet, pig meal, piglet diet, poultry feedstuffs, rice bran, rice germ, rice germ cake, rye, sorghum, soybean groats, sunflower, sunflower seeds, extracted, tapioca, triticale, *Vicia faba*, wheat, wheat and barley, wheat bran, wheat hay, wheat, oats

#### PATULIN

incidence: 1/7345, conc.: nc, country:

Hungary<sup>209</sup>

see also diet (grower), maize meal, piglet diet, wheat

#### T-2 TOXIN

incidence: 2/7345, conc. range: nc, country:

Hungary<sup>209</sup>



see also alfalfa, barley, bran, diet (grower), diet (poultry), feed, feed components, feed, layer, feed, mixed, feed (dog), feed (fish), feed (mink), feed (pig), feed (poultry), feedstuff, forage grass, grain, mixed feed, grains (no specification), maize, maize germ/bran, maize gluten, maize meal, maize screenings, maize stalks (pith), oat and barley (hammer-milled), oats, peanuts, pig grower diet, piglet diet, rye, sorghum, triticale, wheat

#### ZEARALENONE

incidence: 1/1, conc.: 14,000 µg/kg, country: USA<sup>177</sup>

incidence: 3/7345, conc. range: nc, country: Hungary<sup>209</sup>

see also alfalfa, barley, barley, husked, barley, unhusked (naked), barley and feed, bone meal, bran, broilers feed, *Carthamus* cake, chick pea, concentrate, mixed, corn cob mix silage, cotton cake, cottonseed, cottonseed cake, diet (dairy cow), diet (poultry), diets (mixed), feed, feed components, feed, mixed, feed, mixed (primarily maize also maize, oats, wheat), feed (bran), feed (broiler chicken), feed (cattle), feed (chicken), feed (dairy), feed (developing pig), feed (mill run, from wheat), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (starter chicken), feedstuff, fish meal, forage grass, grain, bruised, grain, mixed feed, grains (no specification), maize, maize ears, maize flakes, maize germ, maize germ/bran, maize gluten, maize kernels, maize meal, maize oil cake, maize screenings, maize stalks (pith), maize, "Baby", maize, hybrid, maize, shelled, maize, unshelled, maize, white, maize grain, artificially dried, maize grain, crib dried, maize grain, ensiled, milk production mixed feed, oats, *Paspalum palidosum*, straw, peanut hulls/skins, rice bran, rice germ, rice germ cake, rye, silage, sorghum, soybeans, soybeans, extracted, sunflower cake, tapioca, triticale, wheat, wheat bran, wheat bran and chana testa, wheat soya meal

**Hay/silage** may contain the following mycotoxins:

#### AFLATOXIN B<sub>1</sub>

incidence: 3/47, conc. range: 1–20 µg/kg (3 sa), country: USA<sup>370</sup>

see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60 % maize), fish meal, grain by-products, grains (no specification), greengram, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller,

peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

**Horse bean** Horse bean for feed may contain the following mycotoxins:

#### OCHRATOXIN A

incidence: 1/3, conc.: 12 µg/kg, country: Egypt<sup>16</sup>

see also alfalfa, barley, barley, oats, barley (high moisture), barley-soybean diet, bird food, domestic, bird food, wild, broilers feed, cereal grains, citrus pulp, coconut, expeller, corn cob mix silage, diet (dairy cow), diet (poultry), diet (starter), dog food, eat, egg production mixed feed, feed, feed wheat, oat and barley, feed, commercial mix, feed, mixed, feed, mixed (pelleted), feed (broilers), feed (cat), feed (cattle), feed (cereals), feed (pig), feed ec (pig), feed (poultry), feed ec (poultry), feed (poultry, pig), feed ec (rabbit), feed (trout), grain, mixed feed, grains, mixed, grains (heated), hay, maize, maize feed, milo, maize gluten, maize meal, maize, white, *Makhana* (*Euryale ferox* Salisb) puffs, milk production mixed feed, millet, oat and barley (hammer-milled), oats, palm products, peanut cake, peas, peas and beans, pet food, pig feedstuffs, pig grower diet, pig meal, piglet diet, poultry feedstuffs, rice bran, rice germ, rice germ cake, rye, sorghum, soybean groats, sunflower, sunflower seeds, extracted, tapioca, triticale, *Vicia faba*, wheat, wheat and barley, wheat bran, wheat hay, wheat, oats

**Horsegram** Horsegram for feed may contain the following mycotoxins:

#### AFLATOXIN B<sub>1</sub>

incidence: 16/35, conc. range: ≤25 µg/kg (8 sa), 26–50 µg/kg (2 sa), 51–100 µg/kg (5 sa), 101–200 µg/kg (1 sa), Ø conc.: 36.6 µg/kg, country: India<sup>247</sup>

see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60 % maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake,

palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

#### AFLATOXIN B<sub>2</sub>

incidence: 1/35, conc.: 9 µg/kg, country: India<sup>247</sup>

see also animal feedstuffs (dairy cake), bird food, bird food, wild, biri testa, blackgram, blackgram husk, cottonseed, cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meats, dog food, egg production mixed feed, feed, compound, feed (cat), feed (cattle), feed (dog), feed (pig), feed (poultry), feed (rabbit), feed (sheep), fish meal, maize, maize gluten, maize husk, maize, ground, maize, preharvest, mung testa, mustard cake, niger cake, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanuts, peanut, kernels, redgram husk, rice bran, rice bran (deoiled), rice chaff, rice meal, rice (polish), sal seed cake, sesame cake, sorghum, soybean meal, soybeans, wheat, wheat bran

#### AFLATOXIN

incidence: 16/35, conc. range: nd–107 µg/kg, country: India<sup>247</sup>

see also blackgram husk, bread crumbs, broiler finisher, broiler starter, cotton cake, cottonseed, cottonseed cake, cottonseed extract, cottonseed meal, feed, feed (cattle), feed (cow), feed (dog), feed (horse), feed (maize, gluten), feed (pig), feed (poultry), feed (rabbit), feed (rat/mice), feed (sheep), feeds, grain, fish meal, flour (wheat), groundnut cake, grower's mash, layer's mash,

maize, maize gluten, maize, white, milo, peanut cake, peanut cake (deoiled), peanut, kernels, peanut (oil cake), pearl millet, pig breeder's mash, pig finisher, pig starter, pod with haulms, poultry breeder's mash, rabbit pellets, redgram husk, rice, rice bran (deoiled), rice, broken, rice (polish), sesame cake, silk worm pupae, sorghum, soybean cake, soybean meal, wheat, wheat bran

#### HORSE FEED

see Feed (horse)

**Husk** may contain the following mycotoxins:

#### AFLATOXIN B<sub>1</sub>

incidence: 2/10, conc. range: 10–20 µg/kg, Ø conc.: 15 µg/kg, country: India<sup>183</sup>

see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60 % maize), fish meal,

grain by-products, grains (no specification), greengram, hay/silage, horsegram, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

***Jagni* cake** may contain the following mycotoxins:

AFLATOXIN B<sub>1</sub>

incidence: 5/6, conc. range: 72.7–140.6 µg/kg, Ø conc.: 110.7 µg/kg, country: India<sup>253</sup>

see also alfalfa *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy

cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60 % maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

**Layer's mash** may contain the following mycotoxins:

AFLATOXIN

incidence: 7/20, conc. range: 0–260 µg/kg, country: Nigeria<sup>109</sup>

see also blackgram husk, bread crumbs, broiler finisher, broiler starter, cotton cake, cottonseed, cottonseed cake, cottonseed extract, cottonseed meal, feed, feed (cattle), feed (cow), feed (dog), feed (horse), feed (maize, gluten), feed (pig), feed (poultry), feed (rabbit), feed (rat/mice), feed (sheep), feeds, grain, fish meal, flour (wheat), groundnut cake, grower's mash, horsegram, maize, maize gluten, maize, white, milo, peanut cake, peanut cake (deoiled), peanut, kernels, peanut (oil cake), pearl millet, pig breeder's mash, pig finisher, pig starter, pod with haulms, poultry breeder's mash, rabbit pellets, redgram husk, rice, rice bran (deoiled), rice, broken, rice (polish), sesame cake, silk worm pupae, sorghum, soybean cake, soybean meal, wheat, wheat bran

**Legume mixture** may contain the following mycotoxins:

**AFLATOXIN B<sub>1</sub>**

incidence: ?/10, conc. range: 20–40 µg/kg, country: India<sup>183</sup>

see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20% peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cyad meal, dairy cattle feed, dairy cattle feed (containing 2–5% peanut products), dairy cattle feed (containing 6–10% peanut products), dairy cattle feed (containing 6–12% peanut products), dairy cattle feed (containing more than 20% peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer,

feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60% maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

**PENICILLIC ACID**

incidence: ?/10, conc.: 20 µg/kg, country: India<sup>183</sup>

**Linseed** Linseed for feed may contain the following mycotoxins:

**AFLATOXIN B<sub>1</sub>**

incidence: 6/21, conc. range: 5–10 µg/kg, Ø conc.: 9 µg/kg, country: investigated in Germany<sup>298</sup>

see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed,

calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60 % maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame,

sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

**Linseed cake** may contain the following mycotoxins:

AFLATOXIN B<sub>1</sub>

incidence: 10/23, conc. range:

44.5–153.1 µg/kg, Ø conc.: 94.7 µg/kg,

country: India<sup>253</sup>

see also alfalfa *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60 % maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize

screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

**Livol** may contain the following mycotoxins:

AFLATOXIN B<sub>1</sub>

incidence: 1/1, conc.: 18 µg/kg, country:

India<sup>247</sup>

see also alfalfa *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and

ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60 % maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

**Lucern (dried)** may contain the following mycotoxins:

AFLATOXIN B

incidence: 11/19, conc. range:

≥25–>100 µg/kg, country: France<sup>46</sup>

see also barley, cocoa (oil cake), cottonseed cake, feed, feed (cattle), feed (maize, gluten), feed (pig), feed (poultry), flour (wheat), maize, maize gluten, maize grains, oats, peanut (oil cake), rice, broken, sorghum, soybean (oil cake), sunflower (oil cake), wheat

**Lupin seeds** may contain the following mycotoxins:

PHOMOPSIN A

incidence: ?/?, conc. range:  $\leq 1,460,000 \mu\text{g}/\text{kg}$ ?

$\emptyset$  conc.: 236,000  $\mu\text{g}/\text{kg}$ ? country:

Australia<sup>194</sup>

**Mahua cake** may contain the following mycotoxins:

AFLATOXIN B<sub>1</sub>

incidence: 4/16, conc. range:

72.7–343.17  $\mu\text{g}/\text{kg}$ ,  $\emptyset$  conc.: 200.9  $\mu\text{g}/\text{kg}$ ,

country: India<sup>253</sup>

see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60 % maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake,

livol, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

**Maize** Maize for feed may contain the following mycotoxins:

3-ACETYLDEOXYNIVALENOL

incidence: 8/30, conc. range:  $\leq 7900 \mu\text{g}/\text{kg}$ ,

$\emptyset$  conc.: 1200  $\mu\text{g}/\text{kg}$ , country: Romania<sup>54</sup>

incidence: 3/85, conc. range:  $\leq 113 \mu\text{g}/\text{kg}$ ,

$\emptyset$  conc.: 107  $\mu\text{g}/\text{kg}$ , country: Austria<sup>239</sup>

incidence: 2/60, conc. range: 140–180  $\mu\text{g}/\text{kg}$ ,

$\emptyset$  conc.: 160  $\mu\text{g}/\text{kg}$ , country: Canada<sup>346</sup>

incidence: 6/152, conc. range: 60–130  $\mu\text{g}/\text{kg}$ ,

$\emptyset$  conc.: 90  $\mu\text{g}/\text{kg}$ , country: Austria<sup>363</sup>

incidence: 11/24, conc. range: 14–137  $\mu\text{g}/\text{kg}$ ,

$\emptyset$  conc.: 43  $\mu\text{g}/\text{kg}$ , country: Germany<sup>366</sup>

incidence: 1/9\*, conc.: 51  $\mu\text{g}/\text{kg}$ , country:

Germany<sup>366</sup>, \*wp

see also barley, feed components, feed (poultry), feeds, grain, feeds, industrial, feedstuffs (rapeseed, turnip, fish meal, concentrates), maize ears, maize gluten, maize kernels, maize meal, maize screenings, oats, wheat

15-ACETYLDEOXYNIVALENOL

incidence: 7/20, conc. range: 900–7900  $\mu\text{g}/\text{kg}$ ,

$\emptyset$  conc.: 4100  $\mu\text{g}/\text{kg}$ , country: USA<sup>48</sup>



incidence: 11/30, conc. range:  $\leq 42,000$   $\mu\text{g}/\text{kg}$ ,  
 $\emptyset$  conc.: 4500  $\mu\text{g}/\text{kg}$ , country: Romania<sup>54</sup>  
 incidence: 46/85, conc. range:  $\leq 1112$   $\mu\text{g}/\text{kg}$ ,  
 $\emptyset$  conc.: 284  $\mu\text{g}/\text{kg}$ , country: Austria<sup>239</sup>  
 incidence: 2/94, conc. range: 16–80  $\mu\text{g}/\text{kg}$ ,  
 $\emptyset$  conc.: 48  $\mu\text{g}/\text{kg}$ , country: Canada<sup>240</sup>  
 incidence: 15/60, conc. range: 100–320  $\mu\text{g}/\text{kg}$ ,  
 country: Canada<sup>346</sup>  
 incidence: 65/152, conc. range: 50–980  $\mu\text{g}/\text{kg}$ ,  
 $\emptyset$  conc.: 188.3  $\mu\text{g}/\text{kg}$ , country: Austria<sup>363</sup>  
 incidence: 24/24, conc. range: 28–800  $\mu\text{g}/\text{kg}$ ,  
 $\emptyset$  conc.: 175  $\mu\text{g}/\text{kg}$ , country: Germany<sup>366</sup>  
 incidence: 9/9\*, conc. range: 40–484  $\mu\text{g}/\text{kg}$ ,  
 $\emptyset$  conc.: 136  $\mu\text{g}/\text{kg}$ , country: Germany<sup>366</sup>,

\*wp

see also barley, feed components, feed,  
 commercial mix, feed (poultry), maize ears,  
 maize germ, maize germ/bran, maize gluten,  
 maize kernels, maize meal, maize screenings,  
 maize, “Baby”, oats, silage, wheat

#### AFLATOXIN B<sub>1</sub>

incidence: 187/238, conc. range: 1–19  $\mu\text{g}/\text{kg}$   
 (48 sa), 20–49  $\mu\text{g}/\text{kg}$  (44 sa), 50–99  $\mu\text{g}/\text{kg}$   
 (36 sa), 100–249  $\mu\text{g}/\text{kg}$  (37 sa), 250–499  $\mu\text{g}/\text{kg}$   
 (10 sa), 500–1000  $\mu\text{g}/\text{kg}$  (9 sa), >1000  $\mu\text{g}/\text{kg}$   
 (3 sa), country: USA<sup>38</sup>  
 incidence: 3/3, conc. range: 30–1477  $\mu\text{g}/\text{kg}$ ,  
 $\emptyset$  conc.: 545.7  $\mu\text{g}/\text{kg}$ , country: Canada<sup>39</sup>  
 incidence: 19/111, conc. range: 5–5000  $\mu\text{g}/\text{kg}$ ,  
 country: USA<sup>40</sup>  
 incidence: 37/40\*, conc. range:  
 0.1–203.3  $\mu\text{g}/\text{kg}$ ,  $\emptyset$  conc.: 36.8  $\mu\text{g}/\text{kg}$ ,  
 country: USA<sup>47</sup>, \*ncac  
 incidence: 4/111, conc. range: 19–24  $\mu\text{g}/\text{kg}$ ,  
 country: Poland<sup>84</sup>  
 incidence: 5/5, conc. range: 73–709  $\mu\text{g}/\text{kg}$ ,  
 $\emptyset$  conc.: 424.2  $\mu\text{g}/\text{kg}$ , country: USA<sup>90</sup>  
 incidence: 29/97\*, conc. range: 0.1–5.8  $\mu\text{g}/\text{kg}$ ,  
 country: UK<sup>97</sup>, \*imported from France  
 incidence: 16/37\*, conc. range:  
 0.1–16.4  $\mu\text{g}/\text{kg}$ , country: UK<sup>97</sup>, \*imported  
 from Argentina  
 incidence: 3/5\*, conc. range: 0.1–3.7  $\mu\text{g}/\text{kg}$ ,  
 country: UK<sup>97</sup>, \*imported  
 incidence: 14/15, conc. range: 9.4–96  $\mu\text{g}/\text{kg}$ ,  
 $\emptyset$  conc.: 28.4  $\mu\text{g}/\text{kg}$ , country: Vietnam<sup>104</sup>  
 incidence: 25/26, conc. range: tr–9220  $\mu\text{g}/\text{kg}$ ,  
 $\emptyset$  conc.: 119  $\mu\text{g}/\text{kg}$ , country: Indonesia<sup>105</sup>

incidence: 3/3, conc. range: 11–606  $\mu\text{g}/\text{kg}$ ,  
 $\emptyset$  conc.: 313.3  $\mu\text{g}/\text{kg}$ , country: Thailand<sup>117</sup>

incidence: 1/2, conc.: 1  $\mu\text{g}/\text{kg}$ , country:  
 Thailand<sup>117</sup>

incidence: 50/52, conc. range:  
 1–20,000  $\mu\text{g}/\text{kg}$ , country: Indonesia<sup>118</sup>

incidence: 1/3, conc.: 70  $\mu\text{g}/\text{kg}$ , country:  
 Australia<sup>121</sup>

incidence: 3/3\*, conc. range: 9.25–41.5  $\mu\text{g}/\text{kg}$ ,  
 $\emptyset$  conc.: 22.9  $\mu\text{g}/\text{kg}$ , country: UK<sup>122</sup>, \*ncac

incidence: 4/33, conc. range: 3.9–66.1  $\mu\text{g}/\text{kg}$ ,  
 $\emptyset$  conc.: 20.7  $\mu\text{g}/\text{kg}$ , country: Colombia<sup>125</sup>

incidence: 10/10, conc. range: 7–422  $\mu\text{g}/\text{kg}$ ,  
 $\emptyset$  conc.: 156.9  $\mu\text{g}/\text{kg}$ , country: USA<sup>136</sup>

incidence: 1/2, conc.: 70  $\mu\text{g}/\text{kg}$ , country:  
 Australia<sup>181</sup>

incidence: ?/10, conc. range: 10–20  $\mu\text{g}/\text{kg}$ ,  
 country: India<sup>183</sup>

incidence: 98/98\*, conc. range: <2  $\mu\text{g}/\text{kg}$   
 (86 sa), 2–20  $\mu\text{g}/\text{kg}$  (11 sa), 109  $\mu\text{g}/\text{kg}$  (1 sa),  
 $\emptyset$  conc.: 1.9  $\mu\text{g}/\text{kg}$ , country: Italy<sup>206</sup>, \*ncac

incidence: 104/104\*, conc. range: <2  $\mu\text{g}/\text{kg}$   
 (101 sa), 2–20  $\mu\text{g}/\text{kg}$  (3 sa),  $\emptyset$  conc.:

0.3  $\mu\text{g}/\text{kg}$ , country: Italy<sup>206</sup>, \*ncac

incidence: 94/94\*, conc. range: <2  $\mu\text{g}/\text{kg}$   
 (77 sa), 2–20  $\mu\text{g}/\text{kg}$  (15 sa), >20  $\mu\text{g}/\text{kg}$  (2 sa),  
 $\emptyset$  conc.: 1.5  $\mu\text{g}/\text{kg}$ , country: Italy<sup>206</sup>, \*ncac

incidence: 114/114\*, conc. range: <2  $\mu\text{g}/\text{kg}$   
 (89 sa), 2–20  $\mu\text{g}/\text{kg}$  (24 sa), 28  $\mu\text{g}/\text{kg}$  (1 sa),  
 $\emptyset$  conc.: 1.5  $\mu\text{g}/\text{kg}$ , country: Italy<sup>206</sup>, \*ncac

incidence: 93/93\*, conc. range: <2  $\mu\text{g}/\text{kg}$   
 (81 sa), 2–20  $\mu\text{g}/\text{kg}$  (9 sa), >20  $\mu\text{g}/\text{kg}$  (3 sa),  
 $\emptyset$  conc.: 1.5  $\mu\text{g}/\text{kg}$ , country: Italy<sup>206</sup>, \*ncac

incidence: 563/862, conc. range:  $\leq 25$   $\mu\text{g}/\text{kg}$   
 (213 sa), 26–50  $\mu\text{g}/\text{kg}$  (84 sa), 51–100  $\mu\text{g}/\text{kg}$   
 (83 sa), 101–200  $\mu\text{g}/\text{kg}$  (63 sa), 201–500  $\mu\text{g}/\text{kg}$   
 (59 sa), 501–1000  $\mu\text{g}/\text{kg}$  (39 sa),

1001–1500  $\mu\text{g}/\text{kg}$  (3 sa), 1501–2000  $\mu\text{g}/\text{kg}$   
 (6 sa), 2001–3000  $\mu\text{g}/\text{kg}$  (4 sa),

3001–4000  $\mu\text{g}/\text{kg}$  (4 sa), 4001–5000  $\mu\text{g}/\text{kg}$   
 (4 sa), >5000  $\mu\text{g}/\text{kg}$  (1 sa),  $\emptyset$  conc.:

226.3  $\mu\text{g}/\text{kg}$ , country: India<sup>247</sup>

incidence: 1/4, conc.: 112.6  $\mu\text{g}/\text{kg}$ , country:  
 India<sup>253</sup>

incidence: 1/461, conc.: 42  $\mu\text{g}/\text{kg}$ , country:  
 France<sup>262</sup>

incidence: 4/30, conc. range: <20  $\mu\text{g}/\text{kg}$   
 (3 sa), 101–1000  $\mu\text{g}/\text{kg}$  (1 sa), country: UK<sup>267</sup>

incidence: 30/165\*, conc. range: 5–900 µg/kg, Ø conc.: 78.5 µg/kg, country: Brazil<sup>271</sup>, \*ncac  
 incidence: 14/163\*, conc. range: 5–148 µg/kg, Ø conc.: 34.9 µg/kg, country: Brazil<sup>271</sup>, \*ncac  
 incidence: 37/214, conc. range: <5–56 µg/kg, country: USA<sup>277</sup>  
 incidence: 152/297\*, conc. range: <0.6–25.6 µg/kg, country: USA<sup>286</sup>, \*ncac  
 incidence: 3/30\*, conc. range: 22–50 µg/kg, Ø conc.: 34 µg/kg, country: Argentina<sup>222</sup>, \*ncac  
 incidence: 1/1, conc.: 114 µg/kg\*, country: USA<sup>368</sup>, \*e  
 incidence: 316/644, conc. range: 1–20 µg/kg (224 sa), 21–100 µg/kg (69 sa), 101–300 µg/kg (13 sa), >300 µg/kg (10 sa), country: USA<sup>370</sup>  
 incidence: 1/1\*, conc.: 13.8 µg/kg, country: USA<sup>378</sup>, \*ncac  
 incidence: 30/1311, conc. range: 3–19 µg/kg, country: USA<sup>381</sup>  
 incidence: 34/35\*, conc. range: 0.11–4030 µg/kg, country: India<sup>386</sup>, \*ncac  
 incidence: 19/19\*, conc. range: 5–126 µg/kg, country: India<sup>386</sup>, \*ncac, rain-affected  
 incidence: 3/3\*, conc. range: 11.5–72.5 µg/kg, Ø conc.: 34.2 µg/kg, country: USA<sup>387</sup>, \*ncac  
 incidence: 4/36\*, conc. range: 6–27 µg/kg, Ø conc.: 12.8 µg/kg, country: Brazil<sup>394</sup>, \*ncac  
 incidence: 20/36\*, conc. range: 25–289 µg/kg, Ø conc.: 152 µg/kg, country: Brazil<sup>394</sup>, \*ncac  
 incidence: 33/38\*, conc. range: 18–1600 µg/kg, Ø conc.: 451.6 µg/kg, country: Brazil<sup>394</sup>, \*ncac  
 incidence: 13/15, conc. range: 30–200 µg/kg, Ø conc.: 107.7 µg/kg, country: Egypt<sup>397</sup>  
 incidence: 10/10, conc. range: 25–160 µg/kg, Ø conc.: 76.5 µg/kg, country: Egypt<sup>397</sup>  
 incidence: 12/12, conc. range: 5–200 µg/kg, Ø conc.: 81.7 µg/kg, country: Egypt<sup>397</sup>  
 incidence: 18/20, conc. range: 15–160 µg/kg, Ø conc.: 63.6 µg/kg, country: Egypt<sup>397</sup>  
 incidence: 82/214\*, conc. range: 0.2–129 µg/kg, Ø conc.: 9.4 µg/kg, country: Brazil<sup>403</sup>, \*ncac  
 incidence: 8/23\*, conc. range: 12–878 µg/kg, Ø conc.: 166.5 µg/kg, country: Brazil<sup>419</sup>, \*ncac  
 incidence: 31/34, conc. range: 22–4074 µg/kg, country: Indonesia<sup>426</sup>

incidence: 41/61\*, conc. range: ≤245 µg/kg, Ø conc.: 49.2 µg/kg, country: Bangladesh<sup>428</sup>, \*ncac

see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60 % maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller,

peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

#### AFLATOXIN B<sub>2</sub>

incidence: 3/3, conc. range: 3.2–70 µg/kg, Ø conc.: 29.4 µg/kg, country: Canada<sup>39</sup>  
 incidence: 4/111, conc. range: 1–2 µg/kg, country: Poland<sup>84</sup>  
 incidence: 5/5, conc. range: 24–120 µg/kg, Ø conc.: 65.2 µg/kg, country: USA<sup>90</sup>  
 incidence: 20/26, conc. range: tr–158 µg/kg, Ø conc.: 13.7 µg/kg, country: Indonesia<sup>105</sup>  
 incidence: 3/3, conc. range: 3–73 µg/kg, Ø conc.: 41.3 µg/kg, country: Thailand<sup>117</sup>  
 incidence: 3/3\*, conc. range: 1.05–40 µg/kg, Ø conc.: 14.1 µg/kg, country: UK<sup>122</sup>, \*ncac  
 incidence: 1/33, conc.: 10.4 µg/kg, country: Colombia<sup>125</sup>  
 incidence: 245/862, conc. range: nc, Ø conc.: 37.4 µg/kg, country: India<sup>247</sup>  
 incidence: 1/461, conc.: 6 µg/kg, country: France<sup>262</sup>  
 incidence: 2/30\*, conc. range: tr–3 µg/kg, country: Argentina<sup>322</sup>, \*ncac  
 incidence: 1/1, conc.: 10 µg/kg\*, country: USA<sup>368</sup>, \*e  
 incidence: 3/36\*, conc. range: 1.9–6 µg/kg, Ø conc.: 3.3 µg/kg, country: Brazil<sup>394</sup>, \*ncac  
 incidence: 20/36\*, conc. range: 7–55 µg/kg, Ø conc.: 22.1 µg/kg, country: Brazil<sup>394</sup>, \*ncac  
 incidence: 32/38\*, conc. range: 6–192 µg/kg, Ø conc.: 38.9 µg/kg, country: Brazil<sup>394</sup>, \*ncac  
 incidence: 43/214\*, conc. range: 0.1–32 µg/kg, Ø conc.: 2.1 µg/kg, country: Brazil<sup>403</sup>, \*ncac  
 incidence: 3/23\*, conc. range: 7–180 µg/kg, Ø conc.: 78.3 µg/kg, country: Brazil<sup>419</sup>, \*ncac  
 incidence: 24/34, conc. range: 11–3021 µg/kg, country: Indonesia<sup>426</sup>

see also animal feedstuffs (dairy cake), bird food, bird food, wild, biri testa, blackgram, blackgram husk, cottonseed, cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meats, dog food, egg production mixed feed, feed, compound, feed (cat), feed (cattle), feed (dog), feed (pig), feed (poultry), feed (rabbit), feed (sheep), fish meal, horsegram, maize gluten, maize husk, maize, ground, maize, preharvest, mung testa, mustard cake, niger cake, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanuts, peanut, kernels, redgram husk, rice bran, rice bran (deoiled), rice chaff, rice meal, rice (polish), sal seed cake, sesame cake, sorghum, soybean meal, soybeans, wheat, wheat bran

#### AFLATOXIN B<sub>1</sub> + B<sub>2</sub>

incidence: 8/8\*, conc. range: 7–360 µg/kg, Ø conc.: 147.4 µg/kg, country: USA<sup>326</sup>, \*ncac  
 see also cottonseed, feed (poultry), sorghum

#### AFLATOXIN B

incidence: 25/34, conc. range: ≥25–>100 µg/kg, country: France<sup>46</sup>  
 see also barley, cocoa (oil cake), cottonseed cake, feed, feed (cattle), feed (maize, gluten), feed (pig), feed (poultry), flour (wheat), lucern (dried), maize gluten, maize grains, oats, peanut (oil cake), rice, broken, sorghum, soybean (oil cake), sunflower (oil cake), wheat

#### AFLATOXIN G<sub>1</sub>

incidence: 32/238, conc. range: 1–19 µg/kg (14 sa), 20–49 µg/kg (4 sa), 50–99 µg/kg (5 sa), 100–249 µg/kg (5 sa), 250–499 µg/kg (2 sa), 500–1000 µg/kg (1 sa), >1000 µg/kg (1 sa), country: USA<sup>38</sup>  
 incidence: 1/3, conc.: 74 µg/kg, country: Canada<sup>39</sup>  
 incidence: 20/26, conc. range: tr–158 µg/kg, Ø conc.: 13.7 µg/kg, country: Indonesia<sup>105</sup>  
 incidence: 2/3\*, conc. range: 0.5–96.5 µg/kg, Ø conc.: 48.5 µg/kg, country: UK<sup>122</sup>, \*ncac  
 incidence: 1/461, conc.: 4 µg/kg, country: France<sup>262</sup>

incidence: 5/1311, conc. range: 2–8 µg/kg, country: USA<sup>381</sup>  
 incidence: 2/36\*, conc. range: 39–254 µg/kg, Ø conc.: 146.5 µg/kg, country: Brazil<sup>394</sup>, \*ncac  
 incidence: 9/36\*, conc. range: 25–112 µg/kg, Ø conc.: 53.8 µg/kg, country: Brazil<sup>394</sup>, \*ncac  
 incidence: 11/214\*, conc. range: 0.2–12 µg/kg, Ø conc.: 1.9 µg/kg, country: Brazil<sup>403</sup>, \*ncac  
 incidence: 2/23\*, conc. range: 28 µg/kg, Ø conc.: 28 µg/kg, country: Brazil<sup>419</sup>, \*ncac  
 incidence: 2/34, conc. range: 101–528 µg/kg, Ø conc.: 314.5 µg/kg, country: Indonesia<sup>426</sup>  
 see also animal feedstuffs (dairy cake), bird food, bird food, wild, concentrate, mixed, cottonseed, cottonseed cake, feed (cat), feed (chicken), feed (dog), maize, ground, maize, preharvest, meat meal, milk production mixed feed, murkool, peanut cake, peanut expeller, peanut hay, peanut meal, peanuts, rice bran, rice germ, sorghum, soybeans, wheat, wheat bran, wheat bran and chana testa

#### AFLATOXIN G<sub>2</sub>

incidence: 3/26, conc. range: tr–1 µg/kg, country: Indonesia<sup>105</sup>  
 incidence: 1/3\*, conc.: 38.5 µg/kg, country: UK<sup>122</sup>, \*ncac  
 incidence: 2/36\*, conc. range: 26–58 µg/kg, Ø conc.: 42 µg/kg, country: Brazil<sup>394</sup>, \*ncac  
 incidence: 5/36\*, conc. range: 7–26 µg/kg, Ø conc.: 14.8 µg/kg, country: Brazil<sup>394</sup>, \*ncac  
 incidence: 2/214\*, conc. range: 0.4–4 µg/kg, Ø conc.: 2.2 µg/kg, country: Brazil<sup>403</sup>, \*ncac  
 incidence: 2/23\*, conc. range: 6–11 µg/kg, Ø conc.: 8.5 µg/kg, country: Brazil<sup>419</sup>, \*ncac  
 incidence: 1/34, conc.: 144 µg/kg, country: Indonesia<sup>426</sup>  
 see also animal feedstuffs (dairy cake), bird food, feed (cat), feed (dog), maize, preharvest, peanut expeller, peanut hay, peanut meal, peanuts, soybeans

#### AFLATOXIN M<sub>1</sub>

incidence: 1/1, conc.: 6 µg/kg\*, country: USA<sup>368</sup>, \*e  
 see also feed (cat), feed (dog), maize, ground

#### AFLATOXIN

incidence: 563/862, conc. range: 3–8260 µg/kg, country: India<sup>247</sup>  
 incidence: ?/23, conc. range: ≤416 µg/kg, Ø conc.: 71 µg/kg, country: India<sup>250</sup>  
 incidence: 8/8\*, conc. range: 7.5–1100 µg/kg, Ø conc.: 413 µg/kg, country: USA<sup>296</sup>, \*ncac  
 incidence: 45/45\*, conc. range: 0–19 µg/kg (23 sa), 20–99 µg/kg (15 sa), 100–399 µg/kg (5 sa), 400–799 µg/kg (2 sa), country: USA<sup>303</sup>, \*ncac  
 incidence: 45/45\*, conc. range: 0–19 µg/kg (33 sa), 20–99 µg/kg (7 sa), 100–399 µg/kg (2 sa), 400–799 µg/kg (3 sa), country: USA<sup>303</sup>, \*ncac  
 incidence: 33/76\*, conc. range: 11–30 µg/kg (14 sa), 31–100 µg/kg (12 sa), >100 µg/kg (≤806 µg/kg) (7 sa), country: India<sup>311</sup>, \*ncac  
 incidence: 113/250\*, conc. range: 46–8665 µg/kg, country: USA<sup>320</sup>, \*ncac  
 incidence: 90/7937\*, conc. range: ≤396 µg/kg, country: USA<sup>328</sup>, \*ncac  
 incidence: 235/17,245\*, conc. range: nc µg/kg, country: USA<sup>328</sup>, \*ncac  
 incidence: 7/7, conc. range: <30 µg/kg (3 sa), >30 µg/kg (1 sa), >200 µg/kg (2 sa), >600 µg/kg (1 sa), country: India<sup>380</sup>  
 incidence: 6/923\*, conc. range: 13–151 µg/kg, Ø conc.: 45 µg/kg, country: USA<sup>385</sup>, \*ncac  
 incidence: 3/31\*, conc. range: 0–380 µg/kg, country: USA<sup>405</sup>, \*wild turkey feed  
 incidence: 20/39, conc. range: tr–750 µg/kg, country: USA<sup>427</sup>  
 see also blackgram husk, bread crumbs, broiler finisher, broiler starter, cotton cake, cottonseed, cottonseed cake, cottonseed extract, cottonseed meal, feed, feed (cattle), feed (cow), feed (dog), feed (horse), feed (maize, gluten), feed (pig), feed (poultry), feed (rabbit), feed (rat/mice), feed (sheep), feeds, grain, fish meal, flour (wheat), groundnut cake, grower's mash, horsegram, layer's mash, maize gluten, maize, white, milo, peanut cake, peanut cake (deoiled), peanut, kernels, peanut (oil cake), pearl millet, pig breeder's mash, pig finisher, pig starter, pod with haulms, poultry breeder's mash, rabbit pellets, redgram husk, rice, rice bran

(deoiled), rice, broken, rice (polish), sesame cake, silk worm pupae, sorghum, soybean cake, soybean meal, wheat, wheat bran

#### AFLATOXINS

incidence: 4/13, conc. range: 5–500 µg/kg, country: Australia<sup>21</sup>

incidence: 16/97\*, conc. range: 0.4–6 µg/kg, country: UK<sup>97</sup>, \*imported from France

incidence: 12/37\*, conc. range: 0.4–29.1 µg/kg, country: UK<sup>97</sup>, \*imported from Argentina

incidence: 3/5\*, conc. range: 0.4–3.8 µg/kg, country: UK<sup>97</sup>, \*imported

incidence: 17/150, conc. range: 38–460 µg/kg, Ø conc.: 191 µg/kg, country: Brazil<sup>111</sup>

incidence: 77/99\*, conc. range: 1–19 µg/kg (40 sa), 20–49 µg/kg (15 sa), 50–99 µg/kg (11 sa), 100–499 µg/kg (10 sa), ≥500 µg/kg (1 sa), country: USA<sup>302</sup>, \*ncac

incidence: 215/253\*, conc. range: 1–19 µg/kg (70 sa), 20–49 µg/kg (72 sa), 50–99 µg/kg (37 sa), 100–499 µg/kg (31 sa), ≥500 µg/kg (5 sa), country: USA<sup>302</sup>, \*ncac

incidence: 41/95, conc. range: 10–300 µg/kg, country: India<sup>349</sup>

see also animal feed (maize), animal feed (mixed), barley, copra meal, cottonseed, cottonseed fines, cottonseed meats, cottonseed meal, feed, feed ingredients (miscellaneous), feed, mixed, feed (excluding peanuts, suspect), feed (goat), feed (pig), feed (poultry), feedstuff, grain, grain, mixed feed, maize, shelled, millet, peanut cake, peanut meal, peanut meal and by-products, peanuts, protein concentrates, rice, rice bran, sorghum, soybean meal, sunflower

#### BEAUVERICIN

incidence: 4/6, conc. range: 5000–10,000 µg/kg, Ø conc.: 7500 µg/kg, country: Italy<sup>52</sup>, ncac

incidence: 5/8, conc. range: 100–3000 µg/kg, country: USA<sup>113</sup>

incidence: 12/12, conc. range: 1800–36,890 µg/kg, Ø conc.: 15,197.5 µg/kg, country: Poland<sup>259</sup>

incidence: 8/9\*, conc. range: nd–60,000 µg/kg, Ø conc.: 18,888 µg/kg, country: Poland<sup>269</sup>, \*ncac

incidence: 5/5\*, conc. range: 5000–30,000 µg/kg, Ø conc.: 15,000 µg/kg, country: Poland<sup>269</sup>, \*ncac

incidence: 4\*/42, conc. range: 4000–40,000 µg/kg, Ø conc.: 21,000 µg/kg, country: Italy<sup>275</sup>, \*s

incidence: 18/105\*, conc. range: 13–1846 µg/kg, Ø conc.: 393 µg/kg, country: Croatia<sup>318</sup>, \*ncac

incidence: 1/104\*, conc.: 696 µg/kg, country: Croatia<sup>318</sup>, \*ncac

see also barley, oats, wheat, wheat, summer, wheat, winter

#### CITREOVIRIDIN

incidence: 5/8\*, conc. range: 19–2790 µg/kg, Ø conc.: 1230.6 µg/kg, country: USA<sup>326</sup>, \*ncac

#### CITRININ

incidence: 1/30, conc.: ≤580 µg/kg, country: Romania<sup>54</sup>

incidence: 1/1, conc.: 450 µg/kg, country: UK<sup>93</sup>

see also barley, barley, oats, barley-soybean diet, feed, feed, mixed, feed (cattle), feed (pig), fish meal, hay, maize, white, *Makhana* (*Euryale ferox* Salisb) puffs, oats, palm products, peas and beans, rice bran, rice germ, wheat, wheat and other grains (moldy), wheat bran

#### CYCLOPIAZONIC ACID

incidence: 10/26, conc. range: 400–5000 µg/kg (estimated), country: India<sup>33</sup>

incidence: 21/26, conc. range: ≤9000 µg/kg, country: Indonesia<sup>34</sup>

incidence: 19/26, conc. range: 30–9220 µg/kg, Ø conc.: 2117 µg/kg, country: Indonesia<sup>105</sup>

see also chick mash, feed, groundnut cake, millet, little, peanuts, rice bran, wheat

#### DEOXYNIVALENOL

incidence: 83/760, conc. range: 50–870 µg/kg, Ø conc.: 191 µg/kg, country: Hungary<sup>6</sup>

incidence: 17/20, conc. range: 400–65,800 µg/kg, Ø conc.: 20,300 µg/kg, country: USA<sup>48</sup>

incidence: 1/11, conc.: 200 µg/kg, country: Hungary<sup>50</sup>

incidence: 3/6, conc. range:

550–50,500 µg/kg, Ø conc.: 17,350 µg/kg,  
country: Austria<sup>51</sup>, ncac

incidence: 8/8, conc. range: 18–668 µg/kg,  
Ø conc.: 188.75 µg/kg, country: Italy<sup>53</sup>

incidence: 14/30, conc. range:  
≤160,000 µg/kg, Ø conc.: 13,000 µg/kg,  
country: Romania<sup>54</sup>

incidence: 2/3, conc. range: 140–600 µg/kg,  
Ø conc.: 370 µg/kg, country: France<sup>61</sup>

incidence: 3/12, conc. range:  
4000–18,800 µg/kg, Ø conc.: 10,100 µg/kg,  
country: Nigeria<sup>64</sup>

incidence: 6/28, conc. range: 30–120 µg/kg,  
country: Germany<sup>68</sup>

incidence: 3/6, conc. range: 100–190 µg/kg,  
Ø conc.: 140 µg/kg, country: The  
Netherlands<sup>103</sup>

incidence: 3/8, conc. range: 500–5000 µg/kg,  
Ø conc.: 2000 µg/kg, country: Zambia<sup>114</sup>

incidence: 1/11, conc.: 4000 µg/kg, country:  
Zambia<sup>114</sup>

incidence: 12/14, conc. range:  
500–16,000 µg/kg, Ø conc.: 6600 µg/kg,  
country: Zambia<sup>114</sup>

incidence: 3/6 \* \*\*, conc. range:  
200–300 µg/kg, Ø conc.: 233.3 µg/kg,  
country: New Zealand<sup>131</sup>, \*field maize, \*\*ncac

incidence: 2/7 \* \*\*, conc. range: 30–90 µg/kg,  
Ø conc.: 60 µg/kg, country: New Zealand<sup>131</sup>,  
\*harvest maize, \*\*ncac

incidence: 4/5, conc. range: 20–100 µg/kg,  
Ø conc.: 62.5 µg/kg, country: New Zealand<sup>131</sup>

incidence: 926/926, conc. range: <100 µg/kg  
(531 sa), 100–500 µg/kg (202 sa),  
500–1000 µg/kg (103 sa), 1000–2000 µg/kg  
(68 sa), 2000–5000 µg/kg (19 sa),  
>5000 µg/kg (3 sa), country: Austria<sup>182</sup>

incidence: 98/98\*, conc. range: <500 µg/kg  
(95 sa), 500–1000 µg/kg (3 sa), Ø conc.:  
194 µg/kg, country: Italy<sup>206</sup>, \*ncac

incidence: 104/104\*, conc. range: <500 µg/kg  
(8 sa), 500–1000 µg/kg (17 sa), >1000 µg/kg  
(79 sa), Ø conc.: 2716 µg/kg, country: Italy<sup>206</sup>,  
\*ncac

incidence: 94/94\*, conc. range: <500 µg/kg  
(44 sa), 500–1000 µg/kg (20 sa), >1000 µg/kg  
(33 sa), Ø conc.: 802 µg/kg, country: Italy<sup>206</sup>,  
\*ncac

incidence: 114/114\*, conc. range: <500 µg/kg  
(96 sa), 500–1000 µg/kg (13 sa), >1000 µg/kg  
(5 sa), Ø conc.: 298 µg/kg, country: Italy<sup>206</sup>,  
\*ncac

incidence: 93/93\*, conc. range: <500 µg/kg  
(74 sa), 500–1000 µg/kg (15 sa), >1000 µg/kg  
(4 sa), Ø conc.: 290 µg/kg, country: Italy<sup>206</sup>,  
\*ncac

incidence: 2/7345, conc. range: nc, country:  
Hungary<sup>209</sup>

incidence: 116/144, conc. range:  
60–9200 µg/kg, Ø conc.: 932 µg/kg, country:  
Austria<sup>223</sup>

incidence: 2/2, conc. range: 2500–7400 µg/kg,  
Ø conc.: 4950 µg/kg, country: Africa<sup>228</sup>

incidence: 3/3\*, conc. range: 24–36 µg/kg,  
Ø conc.: 30.7 µg/kg, country: unknown<sup>232</sup>,  
\*ncac

incidence: 129/342, conc. range:  
230–41,600 µg/kg, Ø conc.: 3100 µg/kg,  
country: USA<sup>237</sup>

incidence: 81/85, conc. range: ≤2435 µg/kg,  
Ø conc.: 728 µg/kg, country: Austria<sup>239</sup>

incidence: 3/94, conc. range: 20–105 µg/kg,  
Ø conc.: 52.7 µg/kg, country: Canada<sup>240</sup>

incidence: 2/86\*, conc. range:  
410–2020 µg/kg, Ø conc.: 1215 µg/kg,  
country: India<sup>241</sup>, \*ncac

incidence: 9/154, conc. range: 43–315 µg/kg,  
country: Spain<sup>242</sup>

incidence: 9/223\*, conc. range:  
15,000–28,000 µg/kg, Ø conc.: 22,250 µg/kg,  
country: USA<sup>251</sup>, \*is

incidence: 24/52, conc. range:  
500–10,700 µg/kg, Ø conc.: 4991.7 µg/kg,  
country: USA<sup>255</sup>

incidence: 1/7, conc.: 1900 µg/kg, country:  
Poland<sup>345</sup>

incidence: 600/673, conc. range:  
≤17,500 µg/kg, Ø conc.: 530 µg/kg, country:  
Canada<sup>346</sup>

incidence: 15/45\*, conc. range:  
100–1500 µg/kg, Ø conc.: 140 µg/kg, country:  
USA<sup>352</sup>, \*ncac

incidence: 115/152, conc. range:  
50–2810 µg/kg, Ø conc.: 388.3 µg/kg,  
country: Austria<sup>363</sup>

incidence: 24/24, conc. range: 14–4700 µg/kg,  
Ø conc.: 1101 µg/kg, country: Germany<sup>366</sup>

incidence: 9/9\*, conc. range: 215–728 µg/kg, Ø conc.: 540 µg/kg, country: Germany<sup>366</sup>, \*wp  
 incidence: 15/18\*, conc. range: tr–2800 µg/kg, Ø conc.: 400 µg/kg, country: France<sup>404</sup>, \*ncac  
 incidence: 14/21\*, conc. range: tr–558 µg/kg, Ø conc.: 70 µg/kg, country: France<sup>404</sup>, \*ncac  
 incidence: 5/9\*, conc. range: 100–500 µg/kg, Ø conc.: 200 µg/kg, country: Cameroon<sup>416</sup>, \*ncac  
 incidence: 9/9\*, conc. range: 100–1300 µg/kg, Ø conc.: 433 µg/kg, country: Cameroon<sup>416</sup>, \*ncac  
 incidence: 10/61\*, conc. range: ≤337 µg/kg, Ø conc.: 22 µg/kg, country: Bangladesh<sup>428</sup>, \*ncac  
 see also barley, barley, husked, barley, unhusked (naked), barley (pressed), bone meal, bran, broilers feed, calf fattening mixed feed, coconut, expeller, corn cob mix silage, cottonseed, cottonseed cake, dairy cattle feed, egg production mixed feed, feed, feed components, feed, commercial mix, feed, mixed, feed, mixed (primarily maize), feed (barley), feed (cattle), feed (chicken), feed (dog), feed (fish), feed (mill run, from wheat), feed (mink), feed (pig), feed (poultry), feed (reindeer), feeds, grain, feeds, industrial, feedstuff, feedstuffs (rapeseed, turnip, fish meal, concentrates), fish meal, grain, mixed feed, grains, mixed, grains (no specification), maize ears, maize fibre, maize germ, maize germ/bran, maize germ meal, maize gluten, maize kernels, maize meal, maize powder, maize screenings, maize stalks (pith), maize, “Baby”, maize, hybrid, maize, white, oats, rice bran, rice germ cake, rye, silage, sorghum, soybeans, triticale, wheat, wheat and barley, wheat, red hard winter, wheat, soft white winter, wheat, spring, wheat, winter

#### DIACETOXYSCIRPENOL

incidence: 6/11, conc. range: 500–2100 µg/kg, Ø conc.: 1233 µg/kg, country: Hungary<sup>50</sup>  
 incidence: 1/6\*, conc.: 400 µg/kg, country: Austria<sup>51</sup>, \*ncac  
 incidence: 1/30, conc.: 2.6 µg/kg, country: Romania<sup>54</sup>

incidence: 4/6 \* \*\*, conc. range: 10–900 µg/kg, Ø conc.: 477.5 µg/kg, country: New Zealand<sup>131</sup>, \*field maize, \*\*ncac  
 incidence: 1/7 \* \*\*, conc.: 30 µg/kg, country: New Zealand<sup>131</sup>, \*harvest maize, \*\*ncac  
 incidence: 1/94, conc.: 19 µg/kg, country: Canada<sup>240</sup>  
 incidence: 3/60, conc. range: 490–1000 µg/kg, country: Canada<sup>346</sup>  
 incidence: 1/24, conc.: 210 µg/kg, country: Germany<sup>366</sup>  
 see also alfalfa, barley, feed, feed components, feed (dog), feed (fish), feed (mink), feed (pig), feed (poultry), feed (reindeer), feeds, grain, feedstuff, forage grass, grain, mixed feed, grains (no specification), maize gluten, oat and barley (hammer-milled), oats, peanuts, soybeans, wheat

#### FUMONISIN B<sub>1</sub>

incidence: 24/24, conc. range: 68–6555 µg/kg, country: Honduras<sup>3</sup>  
 incidence: 11/11, conc. range: 1270–3980 µg/kg, Ø conc.: 2269 µg/kg, country: Iran<sup>22</sup>  
 incidence: 6/6, conc. range: 125,000–250,000 µg/kg, Ø conc.: 187,500 µg/kg, country: Italy<sup>52</sup>, ncac  
 incidence: 1/30, conc.: 140 µg/kg, country: Romania<sup>54</sup>  
 incidence: 3/3, conc. range: 37,000–122,000 µg/kg, Ø conc.: 72,000 µg/kg, country: USA<sup>56</sup>  
 incidence: 14/14, conc. range: 1300–27,000 µg/kg, country: USA<sup>57</sup>  
 incidence: 15/16, conc. range: 2000–195,000 µg/kg, Ø conc.: 45,500 µg/kg, country: USA<sup>58</sup>  
 incidence: 1/2, conc.: 4000 µg/kg, country: USA<sup>58</sup>  
 incidence: 5/5, conc. range: 2000–27,000 µg/kg, Ø conc.: 15,400 µg/kg, country: USA<sup>58</sup>  
 incidence: 1/1, conc.: 3000 µg/kg, country: USA<sup>58</sup>  
 incidence: 3/3, conc. range: 4000–33,000 µg/kg, Ø conc.: 22,000 µg/kg, country: USA<sup>58</sup>  
 incidence: 1/1, conc.: 4000 µg/kg, country: USA<sup>58</sup>

- incidence: 1/1, conc.: 19,000 µg/kg, country: USA<sup>58</sup>
- incidence: 2/2, conc. range: 20,000–150,000 µg/kg, Ø conc.: 85,000 µg/kg, country: USA<sup>59</sup>
- incidence: 23/25, conc. range: 10–8400 µg/kg, country: Italy<sup>60</sup>
- incidence: 92/97\*, conc. range: 30–1557 µg/kg, country: UK<sup>97</sup>, \*imported from France
- incidence: 37/37\*, conc. range: 501–3406 µg/kg, country: UK<sup>97</sup>, \*imported from Argentina
- incidence: 5/5\*, conc. range: 30–528 µg/kg, country: UK<sup>97</sup>, \*imported
- incidence: 8/15, conc. range: 271–3447 µg/kg, Ø conc.: 1101 µg/kg, country: Vietnam<sup>104</sup>
- incidence: 8/8, conc. range: 300–9500 µg/kg, country: USA<sup>113</sup>
- incidence: 3/3, conc. range: 63–464 µg/kg, Ø conc.: 217.3 µg/kg, country: Thailand<sup>117</sup>
- incidence: 1/2, conc.: 453 µg/kg, country: Thailand<sup>117</sup>
- incidence: 1/1, conc.: 86,000 µg/kg, country: USA<sup>139</sup>
- incidence: 5/12, conc. range: 53–1327 µg/kg, Ø conc.: 506 µg/kg, country: Korea<sup>145</sup>
- incidence: 5/22, conc. range: <50–1590 µg/kg, Ø conc.: 810 µg/kg, country: Thailand<sup>149</sup>
- incidence: 48/55, conc. range: 200–19,200 µg/kg, Ø conc.: 4800 µg/kg, country: Spain<sup>155</sup>
- incidence: 214/214\*, conc. range: ≥200–≤1000 µg/kg (42 sa), >1000–≤3000 µg/kg (124 sa), >3000–≤6000 µg/kg (48 sa), country: Brazil<sup>157</sup>, \*ncac
- incidence: 12/17, conc. range: 0–2200 µg/kg, Ø conc.: 588 µg/kg, country: Spain<sup>159</sup>
- incidence: 38/44, conc. range: 100–160,000 µg/kg, Ø conc.: 18,500 µg/kg, country: Korea<sup>160</sup>
- incidence: 1/1, conc.: 1848 µg/kg, country: USA<sup>161</sup>
- incidence: 98/98\*, conc. range: <1000 µg/kg (34 sa), 1000–5000 µg/kg (47 sa), >5000 µg/kg (17 sa), Ø conc.: 3347 µg/kg, country: Italy<sup>206</sup>, \*ncac
- incidence: 104/104\*, conc. range: <1000 µg/kg (47 sa), 1000–5000 µg/kg (55 sa), >5000 µg/kg (2 sa), Ø conc.: 1324 µg/kg, country: Italy<sup>206</sup>, \*ncac
- incidence: 94/94\*, conc. range: <1000 µg/kg (25 sa), 1000–5000 µg/kg (60 sa), >5000 µg/kg (9 sa), Ø conc.: 3103 µg/kg, country: Italy<sup>206</sup>, \*ncac
- incidence: 114/114\*, conc. range: <1000 µg/kg (32 sa), 1000–5000 µg/kg (67 sa), >5000 µg/kg (15 sa), Ø conc.: 2655 µg/kg, country: Italy<sup>206</sup>, \*ncac
- incidence: 93/93\*, conc. range: <1000 µg/kg (15 sa), 1000–5000 µg/kg (36 sa), >5000 µg/kg (42 sa), Ø conc.: 2655 µg/kg, country: Italy<sup>206</sup>, \*ncac
- incidence: 20/20\*, conc. range: <50–4100 µg/kg, country: USA<sup>220</sup>, \*food and feed
- incidence: 5/141, conc. range: 7–33 µg/kg, country: Germany<sup>248</sup>
- incidence: 81/121, conc. range: 0–5420 µg/kg, Ø conc.: 480.6 µg/kg, country: South Africa<sup>258</sup>, ncac
- incidence: 106/128, conc. range: 0–5030 µg/kg, Ø conc.: 332.2 µg/kg, country: South Africa<sup>258</sup>, ncac
- incidence: 20/56, conc. range: 50–33,400 µg/kg, Ø conc.: 2175 µg/kg, country: Hungary<sup>266</sup>
- incidence: 4\*/42, conc. range: 150,000–250,000 µg/kg, Ø conc.: 202,500 µg/kg, country: Italy<sup>275</sup>, \*s
- incidence: 56/92, conc. range: 50–75,100 µg/kg, country: Hungary<sup>289</sup>
- incidence: 35/35\*, conc. range: 4–16,000 µg/kg, Ø conc.: 2500 µg/kg, country: Costa Rica<sup>308</sup>, \*ncac
- incidence: 8/8, conc. range: 4900–18,520 µg/kg, Ø conc.: 10,590 µg/kg, country: Brazil<sup>309</sup>
- incidence: 1/1, conc.: 5830 µg/kg, country: Brazil<sup>309</sup>
- incidence: 27/27, conc. range: 1660–12,550 µg/kg, Ø conc.: 4790 µg/kg, country: Brazil<sup>309</sup>
- incidence: 8/8, conc. range: 600–6930 µg/kg, Ø conc.: 3250 µg/kg, country: Brazil<sup>309</sup>



incidence: 3/3, conc. range: 2960–3890 µg/kg, Ø conc.: 3300 µg/kg, country: Brazil<sup>309</sup>  
 incidence: 1/1, conc.: 5450 µg/kg, country: Brazil<sup>309</sup>  
 incidence: 176/195\*, conc. range: 870–49,310 µg/kg, country: Brazil<sup>335</sup>, \*ncac  
 incidence: 4/78\*, conc. range: ≤1614 µg/kg, Ø conc.: 619 µg/kg, country: Taiwan<sup>337</sup>, \*imported from USA  
 incidence: 2/20\*, conc. range: 281.4–334 µg/kg, Ø conc.: 307.7 µg/kg, country: Taiwan<sup>337</sup>, \*imported from Thailand  
 incidence: 2/10\*, conc. range: 187–477 µg/kg, Ø conc.: 332 µg/kg, country: Taiwan<sup>337</sup>, \*imported from Australia  
 incidence: 20/20, conc. range: 580–7660 µg/kg, Ø conc.: 3180 µg/kg, country: Iran<sup>338</sup>  
 incidence: 19/25, conc. range: 136.4–8757 µg/kg, Ø conc.: 1709.7 µg/kg, country: Spain<sup>347</sup>  
 incidence: 23/26, conc. range: 90–10,870 µg/kg, country: Brazil<sup>351</sup>  
 incidence: 29/31, conc. range: 110–17,690 µg/kg, country: Brazil<sup>351</sup>  
 incidence: 45/45\*, conc. range: tr–30,000 µg/kg, Ø conc.: 9500 µg/kg, country: USA<sup>352</sup>, \*ncac  
 incidence: 10/152, conc. range: 60–1750 µg/kg, Ø conc.: 483.3 µg/kg, country: Austria<sup>363</sup>  
 incidence: 23/23, conc. range: 1630–25,690 µg/kg, Ø conc.: 5610 µg/kg, country: Brazil<sup>365</sup>  
 incidence: 50/50\*, conc. range: 185–27,050 µg/kg, Ø conc.: 2229 µg/kg, country: Argentina<sup>382</sup>, \*ncac  
 incidence: 26/35\*, conc. range: 10–4700 µg/kg, country: India<sup>386</sup>, \*ncac  
 incidence: 19/19\*, conc. range: 40–64,700 µg/kg, country: India<sup>386</sup>, \*ncac, rain-affected  
 incidence: 26/27\*, conc. range: 70–2520 µg/kg, Ø conc.: 580 µg/kg, country: Brazil<sup>390</sup>, \*ncac  
 incidence: 86/86\*, conc. range: 90–10,690 µg/kg, Ø conc.: 2390 µg/kg, country: Brazil<sup>390</sup>, \*ncac

incidence: 37/37\*, conc. range: 370–13,460 µg/kg, Ø conc.: 4560 µg/kg, country: Brazil<sup>390</sup>, \*ncac  
 incidence: 91/100, conc. range: <1000 µg/kg (14 sa), 1000–20,000 µg/kg (15 sa), 21,000–40,000 µg/kg (19 sa), 41,000–60,000 µg/kg (27 sa), 61,000–80,000 µg/kg (14 sa), 81,000–100,000 µg/kg (2 sa, with a maximum of 87,000 µg/kg), country: India<sup>391</sup>  
 incidence: 1/1\*, conc.: 33,103 µg/kg, country: Denmark<sup>402</sup>, \*from Ghana  
 incidence: 212/214\*, conc. range: 200–6100 µg/kg, Ø conc.: 2200 µg/kg, country: Brazil<sup>403</sup>, \*ncac  
 incidence: 9/9\*, conc. range: 1900–26,000 µg/kg, Ø conc.: 7477 µg/kg, country: Cameroon<sup>416</sup>, \*ncac  
 incidence: 7/9\*, conc. range: 300–2000 µg/kg, Ø conc.: 1214 µg/kg, country: Cameroon<sup>416</sup>, \*ncac  
 incidence: 49/49\*, conc. range: 142.2–1377.6 µg/kg, Ø conc.: 459.8 µg/kg, country: Croatia<sup>417</sup>, \*ncac  
 incidence: 30/30\*, conc. range: 460–9950 µg/kg, Ø conc.: 3939 µg/kg, country: Argentina<sup>422</sup>, \*ncac  
 incidence: 6/61\*, conc. range: ≤600 µg/kg, Ø conc.: 35 µg/kg, country: Bangladesh<sup>428</sup>, \*ncac  
 incidence: 5/5, conc. range: 765–6202.9 µg/kg, Ø conc.: 2241.41 µg/kg, country: USA<sup>431</sup>  
 see also barley, bird food, wild, dog food, feed, feed, complete ration, feed, general, feed, layer, feed, maize-based, feed, mixed, feed, pelleted ration, feed, screenings, feed, sweet, feed (broilers), feed (cat), feed (chicken), feed (dog), feed (gluten), feed (horse), feed (maize), feed (pig), feed (poultry), feed (rat), feed (rodent), forage grass, maize and maize screenings, maize bran, maize ears, maize fine fractions, maize flakes, maize germ, maize germ/bran, maize germ meal, maize gluten, maize grits, maize kernels, maize meal, maize powder, maize screenings, maize, “Baby”, maize, ground, maize, preharvest, maize, sweet feed, maize/oats mix, rat chow, silage, sorghum, soybeans, wheat

FUMONISIN B<sub>2</sub>

incidence: 11/11, conc. range:  
190–1175 µg/kg, Ø conc.: 512 µg/kg, country:  
Iran<sup>22</sup>  
incidence: 3/3, conc. range:  
2000–23,000 µg/kg, Ø conc.: 12,000 µg/kg,  
country: USA<sup>56</sup>  
incidence: 14/14, conc. range:  
100–12,600 µg/kg, country: USA<sup>57</sup>  
incidence: 13/25, conc. range: 10–1330 µg/kg,  
country: Italy<sup>60</sup>  
incidence: 4/15, conc. range: 178–560 µg/kg,  
Ø conc.: 276 µg/kg, country: Vietnam<sup>104</sup>  
incidence: 7/8, conc. range: 800–4000 µg/kg,  
country: USA<sup>113</sup>  
incidence: 1/1, conc.: 55,000 µg/kg, country:  
USA<sup>139</sup>  
incidence: 4/12, conc. range: 69–680 µg/kg,  
Ø conc.: 288 µg/kg, country: Korea<sup>145</sup>  
incidence: 5/22, conc. range:  
<100–350 µg/kg, Ø conc.: 230 µg/kg,  
country: Thailand<sup>149</sup>  
incidence: 22/55, conc. range:  
200–5900 µg/kg, Ø conc.: 1900 µg/kg,  
country: Spain<sup>155</sup>  
incidence: 5/17, conc. range: 0–700 µg/kg,  
Ø conc.: 338 µg/kg, country: Spain<sup>159</sup>  
incidence: 34/44, conc. range:  
900–46,000 µg/kg, Ø conc.: 5600 µg/kg,  
country: Korea<sup>160</sup>  
incidence: 1/1, conc.: 1092 µg/kg, country:  
USA<sup>161</sup>  
incidence: 20/20\*, conc. range:  
<50–1050 µg/kg, country: USA<sup>220</sup>, \*food and  
feed  
incidence: 49/121\*, conc. range:  
0–1600 µg/kg, Ø conc.: 253.8 µg/kg, country:  
South Africa<sup>258</sup>, \*ncac  
incidence: 65/128\*, conc. range:  
0–1670 µg/kg, Ø conc.: 216.6 µg/kg, country:  
South Africa<sup>258</sup>, \*ncac  
incidence: 8/8, conc. range:  
3620–19,130 µg/kg, Ø conc.: 10,310 µg/kg,  
country: Brazil<sup>309</sup>  
incidence: 1/1, conc.: 3620 µg/kg, country:  
Brazil<sup>309</sup>  
incidence: 27/27, conc. range:  
1200–10,240 µg/kg, Ø conc.: 3950 µg/kg,  
country: Brazil<sup>309</sup>

incidence: 8/8, conc. range: 0–4790 µg/kg,  
Ø conc.: 2340 µg/kg, country: Brazil<sup>309</sup>  
incidence: 3/3, conc. range: 2170–2780 µg/kg,  
Ø conc.: 2520 µg/kg, country: Brazil<sup>309</sup>  
incidence: 1/1, conc.: 5090 µg/kg, country:  
Brazil<sup>309</sup>  
incidence: 190/195\*, conc. range:  
1960–29,160 µg/kg, country: Brazil<sup>335</sup>, \*ncac  
incidence: 14/26, conc. range: 50–520 µg/kg,  
country: Brazil<sup>351</sup>  
incidence: 19/31, conc. range: 50–5240 µg/kg,  
country: Brazil<sup>351</sup>  
incidence: 10/45\*, conc. range:  
tr–10,700 µg/kg, Ø conc.: 1700 µg/kg,  
country: USA<sup>352</sup>, \*ncac  
incidence: 3/152, conc. range: 250–390 µg/kg,  
Ø conc.: 290 µg/kg, country: Austria<sup>363</sup>  
incidence: 23/23, conc. range:  
380–8600 µg/kg, Ø conc.: 1860 µg/kg,  
country: Brazil<sup>365</sup>  
incidence: 50/50\*, conc. range:  
40–9950 µg/kg, Ø conc.: 812 µg/kg, country:  
Argentina<sup>382</sup>, \*ncac  
incidence: 17/27\*, conc. range:  
110–1140 µg/kg, Ø conc.: 200 µg/kg, country:  
Brazil<sup>390</sup>, \*ncac  
incidence: 84/86\*, conc. range:  
80–5170 µg/kg, Ø conc.: 1090 µg/kg, country:  
Brazil<sup>390</sup>, \*ncac  
incidence: 37/37\*, conc. range:  
200–6920 µg/kg, Ø conc.: 2200 µg/kg,  
country: Brazil<sup>390</sup>, \*ncac  
incidence: 1/1, conc.: 12,318 µg/kg, country:  
Ghana<sup>402</sup>  
incidence: 3/49\*, conc. range:  
68.4–3084 µg/kg, Ø conc.: 1087.2 µg/kg,  
country: Croatia<sup>417</sup>, \*ncac  
incidence: 29/30\*, conc. range:  
140–3060 µg/kg, Ø conc.: 1144 µg/kg,  
country: Argentina<sup>422</sup>, \*ncac  
incidence: 2/5, conc. range:  
2357.23–9953.15 µg/kg, Ø conc.:  
6155.19 µg/kg, country: USA<sup>431</sup>  
see also barley, bird food, wild, dog food,  
feed, feed, maize-based, feed, mixed, feed  
(cat), feed (dog), feed (gluten), feed (horse),  
feed (maize), feed (poultry), feed (rodent),  
maize bran, maize fine fractions, maize

flakes, maize germ, maize germ/bran, maize germ meal, maize gluten, maize grits, maize kernels, maize meal, maize powder, maize screenings, maize, “Baby”, maize, ground, maize, preharvest, rat chow, wheat

#### FUMONISIN B<sub>3</sub>

incidence: 11/11, conc. range: 155–960 µg/kg, Ø conc.: 361 µg/kg, country: Iran<sup>22</sup>

incidence: 3/15, conc. range: 118–432 µg/kg, Ø conc.: 232 µg/kg, country: Vietnam<sup>104</sup>

incidence: 2/3, conc. range: 75–224 µg/kg, Ø conc.: 149.5 µg/kg, country: Thailand<sup>117</sup>

incidence: 1/2, conc.: 50 µg/kg, country: Thailand<sup>117</sup>

incidence: 32/44, conc. range:

50–31,000 µg/kg, Ø conc.: 2500 µg/kg, country: Korea<sup>160</sup>

incidence: 20/20\*, conc. range:

<50–420 µg/kg, country: USA,<sup>220</sup> \*food and feed

incidence: 47/128\*, conc. range: 0–400 µg/kg, Ø conc.: 82.6 µg/kg, country: South Africa<sup>258</sup>,

\*ncac

incidence: 1/1, conc.: 7249 µg/kg, country: Ghana<sup>402</sup>

incidence: 28/30\*, conc. range:

90–1070 µg/kg, Ø conc.: 432 µg/kg, country: Argentina<sup>422</sup>, \*ncac

incidence: 2/5, conc. range:

2261.21–8000.84 µg/kg, Ø conc.:

5131.03 µg/kg, country: USA<sup>431</sup>

see also feed, feed (maize), feed (rodent), maize bran, maize fine fractions, maize germ meal, maize kernels, maize powder, maize screenings

#### FUMONISIN B<sub>4</sub>

incidence: 23/44, conc. range:

80–11,000 µg/kg, Ø conc.: 1600 µg/kg, country: Korea<sup>160</sup>

#### FUMONISIN B<sub>1</sub> + B<sub>2</sub>

incidence: 21\*/21\*\*, conc. range:

14–1036 µg/kg, country: Germany<sup>248</sup>, \*also contaminated with fumonisin B<sub>3</sub>, \*\*imported from Argentina

incidence: 102/105\*, conc. range:

12–11,661 µg/kg, Ø conc.: 645 µg/kg, country: Croatia<sup>318</sup>, \*ncac

incidence: 97/104\*, conc. range:

12–2524 µg/kg, Ø conc.: 134 µg/kg, country: Croatia<sup>318</sup>, \*ncac

see also feed (pig), maize and feed samples

#### FUMONISIN B<sub>1</sub> + B<sub>2</sub> + B<sub>3</sub>

incidence: 85/317, conc. range: 6–7132 µg/kg, country: Germany<sup>248</sup>

#### FUMONISIN C<sub>1</sub>

incidence: 31/44, conc. range:

60–11,000 µg/kg, Ø conc.: 1900 µg/kg, country: Korea<sup>160</sup>

#### FUMONISIN C<sub>3</sub>

incidence: 5/44, conc. range:

100–12,000 µg/kg, Ø conc.: 1700 µg/kg, country: Korea<sup>160</sup>

#### FUMONISIN C<sub>4</sub>

incidence: 18/44, conc. range: 50–3300 µg/kg, Ø conc.: 500 µg/kg, country: Korea<sup>160</sup>

#### FUMONISIN

incidence: 233/234, conc. range:

≤5000–25,000 µg/kg, country: USA<sup>147</sup>

incidence: 248/250, conc. range:

≤5000–>25,000 µg/kg, country: USA<sup>147</sup>

incidence: 134/461, conc. range: ≤1710 µg/kg, Ø conc.: 310 µg/kg, country: Canada<sup>346</sup>

incidence: 13/99, conc. range:

1200–3200 µg/kg, Ø conc.: 2400 µg/kg, country: USA<sup>370</sup>

see also maize screenings, maize, shelled

#### FUMONISINS

incidence: 92/97\*, conc. range:

30–2123 µg/kg, country: UK<sup>97</sup>, \*imported from France

incidence: 37/37\*, conc. range:

1001–5007 µg/kg, country: UK<sup>97</sup>, \*imported from Argentina

incidence: 5/5\*, conc. range: 30–771 µg/kg, country: UK<sup>97</sup>, \*imported

incidence: 147/150, conc. range:

96–22,600 µg/kg, Ø conc.: 5356.7 µg/kg, country: Brazil<sup>111</sup>

incidence: 36/36, conc. range:

810–23,700 µg/kg, Ø conc.: 9900 µg/kg, country: Brazil<sup>336</sup>

see also feed (cattle and dairy), feed (chicken), feed (dairy), feed (horse), maize germ, maize gluten, maize meal, maize screenings

#### FUSAPROLIFERIN

incidence: 4/8, conc. range: 100–30,000 µg/kg, country: USA<sup>113</sup>

#### FUSARENONE-X

incidence: 4/12, conc. range: 3000–15,000 µg/kg, Ø conc.: 7500 µg/kg, country: Nigeria<sup>64</sup>  
 incidence: 4/24, conc. range: 16–94 µg/kg, Ø conc.: 55 µg/kg, country: Germany<sup>366</sup>  
 see also barley, feed components, feed (poultry), maize ears, maize germ/bran, maize gluten, maize kernels, maize meal, maize screenings, oats, wheat

#### GRISEOFULVIN

incidence: 2/7345, conc. range: nc, country: Hungary<sup>209</sup>

#### HT-2 TOXIN

incidence: 2/11, conc. range: 500–700 µg/kg, Ø conc.: 600 µg/kg, country: Hungary<sup>50</sup>  
 incidence: 1/12, conc.: 3000 µg/kg, country: Nigeria<sup>64</sup>  
 incidence: 1/28, conc.: 600 µg/kg, country: Germany<sup>68</sup>  
 incidence: 1/94, conc.: 1 µg/kg, country: Canada<sup>240</sup>  
 incidence: 14/60, conc. range: 110–1000 µg/kg, country: Canada<sup>346</sup>  
 incidence: 3/152, conc. range: 80–120 µg/kg, Ø conc.: 105 µg/kg, country: Austria<sup>363</sup>  
 incidence: 17/24, conc. range: 5–41 µg/kg, Ø conc.: 18 µg/kg, country: Germany<sup>366</sup>  
 incidence: 8/9\*, conc. range: 7–1307 µg/kg, Ø conc.: 183 µg/kg, country: Germany<sup>366</sup>, \*wp  
 see also barley, feed components, feed (dog), feed (fish), feed (pig), feed (poultry), feed (reindeer), grains, mixed, grains (no specification), maize germ/bran, maize gluten, maize meal, maize screenings, oats, rye, silage, wheat

#### MONILIFORMIN

incidence: 6/12, conc. range: 450–8530 µg/kg, Ø conc.: 3767.5 µg/kg, country: Poland<sup>259</sup>  
 incidence: 8/9\*, conc. range: 17,000–425,000 µg/kg, Ø conc.: 133,750 µg/kg, country: Poland<sup>269</sup>, \*nc  
 incidence: 1\*/42, conc.: nd–200,000 µg/kg, country: Italy<sup>275</sup>, \*s  
 incidence: 23/152, conc. range: 50–800 µg/kg, Ø conc.: 216.6 µg/kg, country: Austria<sup>363</sup>  
 see also barley, feed, mixed, feed (poultry), maize flakes, maize germ, maize germ/bran, maize gluten, maize meal, maize screenings, maize, “Baby”, oats, rice bran, triticale, wheat, wheat, summer, wheat, winter

#### MONOACETOXYSCIRPENOL

incidence: 5/24, conc. range: 5–51 µg/kg, Ø conc.: 37 µg/kg, country: Germany<sup>366</sup>  
 incidence: 6/9\*, conc. range: 9–78 µg/kg, Ø conc.: 26 µg/kg, country: Germany<sup>366</sup>, \*wp  
 see also feed components, maize gluten, maize meal, maize screenings, silage, wheat

#### NIVALENOL

incidence: 3/760, conc. range: 130–260 µg/kg, Ø conc.: 186.7 µg/kg, country: Hungary<sup>6</sup>  
 incidence: 2/3, conc. range: 1180–4280 µg/kg, Ø conc.: 2730 µg/kg, country: France<sup>61</sup>  
 incidence: 3/12, conc. range: 800–1000 µg/kg, Ø conc.: 933.3 µg/kg, country: Nigeria<sup>64</sup>  
 incidence: 2/15, conc. range: 501–1251 µg/kg, Ø conc.: 858 µg/kg, country: Vietnam<sup>104</sup>  
 incidence: 4/85, conc. range: ≤133 µg/kg, Ø conc.: 89 µg/kg, country: Austria<sup>239</sup>  
 incidence: 1/94, conc.: 311 µg/kg, country: Canada<sup>240</sup>  
 incidence: 6/7, conc. range: 1800–32,500 µg/kg, Ø conc.: 8900 µg/kg, country: Poland<sup>345</sup>  
 incidence: 2/60, conc. range: 120 µg/kg, Ø conc.: 120 µg/kg, country: Canada<sup>346</sup>  
 incidence: 11/152, conc. range: 60–330 µg/kg, Ø conc.: 110 µg/kg, country: Austria<sup>363</sup>  
 incidence: 20/24, conc. range: 21–1388 µg/kg, Ø conc.: 406 µg/kg, country: Germany<sup>366</sup>  
 incidence: 9/9\*, conc. range: 116–5910 µg/kg, Ø conc.: 1087 µg/kg, country: Germany<sup>366</sup>, \*wp

see also barley, barley, husked, barley, unhusked (naked), barley (pressed), bran, feed, feed components, feed (cattle), feed (poultry), feed (reindeer), feeds, industrial, maize ears, maize germ, maize germ/bran, maize gluten, maize kernels, maize meal, maize powder, maize screenings, maize, "Baby", oats, rye, silage, triticale, wheat

#### OCHRATOXIN A

incidence: 71/760, conc. range: 60–1850 µg/kg, Ø conc.: 320 µg/kg, country: Hungary<sup>6</sup>  
 incidence: 3/40\*, conc. range: 1.7–82 µg/kg, Ø conc.: 80.3 µg/kg, country: Germany<sup>13</sup>, \*ncac  
 incidence: 50/191, conc. range: 45–5125 µg/kg, Ø conc.: 490 µg/kg, country: Yugoslavia<sup>75</sup>  
 incidence: 12/97\*, conc. range: 0.1–1.4 µg/kg, country: UK<sup>97</sup>, \*imported from France  
 incidence: 1/37\*, conc.: 0.3 µg/kg, country: UK<sup>97</sup>, \*imported from Argentina  
 incidence: 1/5\*, conc.: 1.5 µg/kg, country: UK<sup>97</sup>, \*imported  
 incidence: 1/6, conc.: 73 µg/kg, country: The Netherlands<sup>103</sup>  
 incidence: 1/26, conc.: 3 µg/kg, country: Indonesia<sup>105</sup>  
 incidence: ?/7, conc. range: ≤16,000 µg/kg, country: USA<sup>171</sup>  
 incidence: 3/7345, conc. range: nc, country: Hungary<sup>209</sup>  
 incidence: 1/283, conc.: 110–150 µg/kg, country: USA<sup>217</sup>  
 incidence: 3/293, conc. range: 83–166 µg/kg, country: USA<sup>218</sup>  
 incidence: 12/463, conc. range: 20–200 µg/kg, Ø conc.: 74.6 µg/kg, country: France<sup>262</sup>  
 incidence: 6/461, conc. range: 20–200 µg/kg, Ø conc.: 52.5 µg/kg, country: France<sup>262</sup>  
 incidence: 1/1\*, conc. range: ≈110–150 µg/kg, country: USA<sup>292</sup>, \*ncac  
 incidence: 10/105\*, conc. range: 0.36–224 µg/kg, Ø conc.: 37.87 µg/kg, country: Croatia<sup>318</sup>, \*ncac  
 incidence: 36/104\*, conc. range: 0.26–614 µg/kg, Ø conc.: 57.13 µg/kg, country: Croatia<sup>318</sup>, \*ncac

incidence: 4/60, conc. range: 10–22 µg/kg, country: Canada<sup>346</sup>  
 incidence: 17/51\*, conc. range: 0.02–40 µg/kg, country: Croatia<sup>371</sup>, \*ncac  
 incidence: 2/36\*, conc. range: 128–206 µg/kg, Ø conc.: 167 µg/kg, country: Brazil<sup>394</sup>, \*ncac  
 incidence: 19/49\*, conc. range: 0.9–2.54 µg/kg, Ø conc.: 1.47 µg/kg, country: Croatia<sup>417</sup>, \*ncac

incidence: 4/61\*, conc. range: ≤114 µg/kg, Ø conc.: 4.5 µg/kg, country: Bangladesh<sup>428</sup>, \*ncac

see also alfalfa, barley, barley, oats, barley (high moisture), barley-soybean diet, bird food, domestic, bird food, wild, broilers feed, cereal grains, citrus pulp, coconut, expeller, corn cob mix silage, diet (dairy cow), diet (poultry), diet (starter), dog food, eat, egg production mixed feed, feed, feed wheat, oat and barley, feed, commercial mix, feed, mixed, feed, mixed (pelleted), feed (broilers), feed (cat), feed (cattle), feed (cereals), feed (pig), feed ec (pig), feed (poultry), feed ec (poultry), feed (poultry, pig), feed ec (rabbit), feed (trout), grain, mixed feed, grains, mixed, grains (heated), hay, horse bean, maize feed, milo, maize gluten, maize meal, maize, white, *Makhana* (*Euryale ferox* Salisb) puffs, milk production mixed feed, millet, oat and barley (hammer-milled), oats, palm products, peanut cake, peas, peas and beans, pet food, pig feedstuffs, pig grower diet, pig meal, piglet diet, poultry feedstuffs, rice bran, rice germ, rice germ cake, rye, sorghum, soybean groats, sunflower, sunflower seeds, extracted, tapioca, triticale, *Vicia faba*, wheat, wheat and barley, wheat bran, wheat hay, wheat, oats

#### T-2 TETRAOL

incidence: 3/9\*, conc. range: 20–703 µg/kg, Ø conc.: 267 µg/kg, country: Germany<sup>366</sup>, \*wp

see also barley, feed components, silage, wheat

#### T-2 TOXIN

incidence: 214/760, conc. range: 50–980 µg/kg, Ø conc.: 225.2 µg/kg, country: Hungary<sup>6</sup>

incidence: 8/11, conc. range: 700–7500 µg/kg, Ø conc.: 2663 µg/kg, country: Hungary<sup>50</sup>

incidence: 1/30, conc.: 63 µg/kg, country: Romania<sup>54</sup>

incidence: 1/3, conc.: 20 µg/kg, country: France<sup>61</sup>

incidence: 4/28, conc. range: 100–200 µg/kg, country: Germany<sup>68</sup>

incidence: 4/6 \* \*\*, conc. range: 7–200 µg/kg, Ø conc.: 106.8 µg/kg, country: New Zealand<sup>131</sup>, \*field maize, \*\*ncac

incidence: 5/7 \* \*\*, conc. range: 5–200 µg/kg, Ø conc.: 73 µg/kg, country: New Zealand<sup>131</sup>, \*harvest maize, \*\*ncac

incidence: 4/5, conc. range: 14–60 µg/kg, Ø conc.: 43.5 µg/kg, country: New Zealand<sup>131</sup>

incidence: 1/7345, conc.: nc, country: Hungary<sup>209</sup>

incidence: 8/86\*, conc. range: 550–2920 µg/kg, country: India<sup>241</sup>, \*ncac

incidence: 12/60, conc. range: 100–1000 µg/kg, country: Canada<sup>346</sup>

incidence: 3/152, conc. range: 130–260 µg/kg, Ø conc.: 200 µg/kg, country: Austria<sup>363</sup>

incidence: 6/24, conc. range: 6–8 µg/kg, Ø conc.: 7 µg/kg, country: Germany<sup>366</sup>

incidence: 6/9\*, conc. range: 6–323 µg/kg, Ø conc.: 62 µg/kg, country: Germany<sup>366</sup>, \*wp

incidence: 9/61\*, conc. range: ≤1093 µg/kg, Ø conc.: 96 µg/kg, country: Bangladesh<sup>428</sup>, \*ncac

see also alfalfa, barley, bran, diet (grower), diet (poultry), feed, feed components, feed, layer, feed, mixed, feed (dog), feed (fish), feed (mink), feed (pig), feed (poultry), feedstuff, forage grass, grain, mixed feed, grains (no specification), hay, maize germ/bran, maize gluten, maize meal, maize screenings, maize stalks (pith), oat and barley (hammer-milled), oats, peanuts, pig grower diet, piglet diet, rye, sorghum, triticale, wheat

#### T-2 TRIOL

incidence: 2/28, conc. range: 300 µg/kg, country: Germany<sup>68</sup>

incidence: 1/9\*, conc.: 68 µg/kg, country: Germany<sup>366</sup>, \*wp

see also barley, feed components, grain, mixed feed, grains (no specification), oats, wheat

#### ZEARALENOLS (ALPHA- AND BETA-ZEARANELOL)

incidence: 8/8, conc. range: 7–86 µg/kg, Ø conc.: 36.5 µg/kg, country: Italy<sup>53</sup>

#### ZEARALENONE

incidence: 140/760, conc. range: 60–1350 µg/kg, Ø conc.: 228.9 µg/kg, country: Hungary<sup>6</sup>

incidence: 17/20, conc. range: 200–13,200 µg/kg, Ø conc.: 3100 µg/kg, country: USA<sup>48</sup>

incidence: 8/11, conc. range: 100–5800 µg/kg, Ø conc.: 3575 µg/kg, country: Hungary<sup>50</sup>

incidence: 3/6, conc. range: 420–1000 µg/kg, Ø conc.: 740 µg/kg, country: Austria<sup>51</sup>, ncac

incidence: 8/8, conc. range: 156–7433 µg/kg, Ø conc.: 2667 µg/kg, country: Italy<sup>53</sup>

incidence: 4/30, conc. range: ≤1200 µg/kg, Ø conc.: 420 µg/kg, country: Romania<sup>54</sup>

incidence: 2/3, conc. range: 2500–10,000 µg/kg, Ø conc.: 6250 µg/kg, country: France<sup>61</sup>

incidence: 19/67, conc. range: 10–700 µg/kg, country: Germany<sup>68</sup>

incidence: 2/28, conc. range: 20–30 µg/kg, Ø conc.: 25 µg/kg, country: Germany<sup>68</sup>

incidence: 5/191, conc. range: 43–10,000 µg/kg, Ø conc.: 5100 µg/kg, country: Yugoslavia<sup>75</sup>

incidence: 93/97\*, conc. range: 4–584 µg/kg, country: UK<sup>97</sup>, \*imported from France

incidence: 37/37\*, conc. range: 21–357 µg/kg, country: UK<sup>97</sup>, \*imported from Argentina

incidence: 5/5\*, conc. range: 4–34 µg/kg, country: UK<sup>97</sup>, \*imported

incidence: 2/6, conc. range: 17–150 µg/kg, Ø conc.: 84 µg/kg, country: The Netherlands<sup>103</sup>

incidence: 7/26, conc. range: 1–14 µg/kg, Ø conc.: 6.3 µg/kg, country: Indonesia<sup>105</sup>

incidence: 6/7, conc. range: 4.9–35 µg/kg, Ø conc.: 12.2 µg/kg, country: Germany<sup>107</sup>

incidence: 7/8, conc. range: 400–1600 µg/kg, Ø conc.: 730 µg/kg, country: Zambia<sup>114</sup>

incidence: 3/11, conc. range: 80–160 µg/kg, Ø conc.: 110 µg/kg, country: Zambia<sup>114</sup>

incidence: 9/14, conc. range: 80–6000 µg/kg, Ø conc.: 1710 µg/kg, country: Zambia<sup>114</sup>

incidence: 663/2311, conc. range:  
5–17,350 µg/kg, country: Austria<sup>115</sup>  
incidence: 249/293, conc. range: ≤1510 µg/kg,  
Ø conc.: 225 µg/kg, country: Australia<sup>116</sup>  
incidence: 11/52, conc. range:  
1–13,500 µg/kg, country: Indonesia<sup>118</sup>  
incidence: 4/4, conc. range:  
~100–2500 µg/kg, country: Germany<sup>124</sup>  
incidence: 6/6 \* \*\*, conc. range:  
300–2200 µg/kg, Ø conc.: 783 µg/kg, country:  
New Zealand<sup>131</sup>, \*field maize, \*\*ncac  
incidence: 3/7 \* \*\*, conc. range:  
200–16,000 µg/kg, Ø conc.: 6366.7 µg/kg,  
country: New Zealand<sup>131</sup>, \*harvest maize,  
\*\*ncac  
incidence: 3/5, conc. range: 40–100 µg/kg,  
Ø conc.: 80 µg/kg, country: New Zealand<sup>131</sup>  
incidence: 1/? , conc.: 2000 µg/kg, country:  
USA<sup>179</sup>  
incidence: 937/937, conc. range: <10 µg/kg  
(574 sa), 10–50 µg/kg (195 sa), 50–200 µg/kg  
(124 sa), 200–500 µg/kg (29 sa),  
500–1000 µg/kg (11 sa), >1000 µg/kg (4 sa)  
country: Austria<sup>182</sup>  
incidence: ?/10, conc. range: 20 µg/kg,  
country: India<sup>183</sup>  
incidence: 98/98\*, conc. range: <20 µg/kg  
(89 sa), 20–100 µg/kg (9 sa), Ø conc.:  
79 µg/kg, country: Italy<sup>206</sup>, \*ncac  
incidence: 104/104\*, conc. range: <20 µg/kg  
(48 sa), 20–100 µg/kg (41 sa), >100 µg/kg  
(15 sa), Ø conc.: 453 µg/kg, country: Italy<sup>206</sup>,  
\*ncac  
incidence: 94/94\*, conc. range: <20 µg/kg  
(91 sa), 20–100 µg/kg (3 sa), Ø conc.:  
49 µg/kg, country: Italy<sup>206</sup>, \*ncac  
incidence: 114/114\*, conc. range: <20 µg/kg  
(113 sa), 20–100 µg/kg (1 sa), Ø conc.:  
13 µg/kg, country: Italy<sup>206</sup>, \*ncac  
incidence: 93/93\*, conc. range: <20 µg/kg  
(92 sa), 20–100 µg/kg (1 sa), Ø conc.:  
27 µg/kg, country: Italy<sup>206</sup>, \*ncac  
incidence: 4/7345, conc. range: nc, country:  
Hungary<sup>209</sup>  
incidence: 28/65, conc. range:  
100–2909 µg/kg, country: USA<sup>215</sup>  
incidence: 38/223, conc. range:  
100–5000 µg/kg, country: USA<sup>216</sup>

incidence: 68/144, conc. range: 5–5670 µg/kg,  
Ø conc.: 310 µg/kg, country: Austria<sup>223</sup>  
incidence: 2/2, conc. range:  
6400–12,800 µg/kg, Ø conc.: 9600 µg/kg,  
country: Africa<sup>228</sup>  
incidence: 60/85, conc. range: ≤751 µg/kg,  
Ø conc.: 126 µg/kg, country: Austria<sup>239</sup>  
incidence: 9/86\*, conc. range:  
760–1500 µg/kg, country: India<sup>241</sup>, \*ncac  
incidence: 18/154, conc. range:  
800–9600 µg/kg, country: Spain<sup>242</sup>  
incidence: 6/223\*, conc. range:  
200–5000 µg/kg, Ø conc.: 1750 µg/kg,  
country: USA<sup>251</sup>, \*is  
incidence: 27/31, conc. range:  
100–10,000 µg/kg, country: USA<sup>254</sup>  
incidence: 5/6, conc. range: 60–32,000 µg/kg,  
Ø conc.: 8634 µg/kg, country: South Africa<sup>263</sup>  
incidence: 9/165\*, conc. range:  
260–2937 µg/kg, Ø conc.: 1079 µg/kg,  
country: Brazil<sup>271</sup>, \*ncac  
incidence: 7/163\*, conc. range:  
260–9830 µg/kg, Ø conc.: 2980 µg/kg,  
country: Brazil<sup>271</sup>, \*ncac  
incidence: 167/671, conc. range: ≤1000 µg/kg,  
Ø conc.: 80 µg/kg, country: Canada<sup>346</sup>  
incidence: 4/4\*, conc. range: 7–2910 µg/kg, Ø  
conc.: 830.3 µg/kg, country: USA<sup>354</sup>, \*ncac  
incidence: 55/152, conc. range: 10–340 µg/kg,  
Ø conc.: 63.3 µg/kg, country: Austria<sup>363</sup>  
incidence: 4/18\*, conc. range: 3.4–5.8 µg/kg,  
Ø conc.: 5 µg/kg, country: Korea<sup>364</sup>, \*ncac  
incidence: 23/24, conc. range: 2–310 µg/kg,  
Ø conc.: 42 µg/kg, country: Germany<sup>366</sup>  
incidence: 9/9\*, conc. range: 7–492 µg/kg,  
Ø conc.: 131 µg/kg, country: Germany<sup>366</sup>,  
\*wp  
incidence: 38/70, conc. range: 4–2250 µg/kg,  
Ø conc.: 326 µg/kg, country: Romania<sup>367</sup>  
incidence: 5/75, conc. range: 70–150 µg/kg  
(5 sa), country: USA<sup>370</sup>  
incidence: 1/36\*, conc.: 4640 µg/kg, country:  
Brazil<sup>394</sup>, \*ncac  
incidence: 30/380\*, conc. range: <54.2 µg/kg  
(1 sa), 54.2–100 µg/kg (4 sa), 100–500 µg/kg  
(23 sa), >500 µg/kg (2 sa), country: Brazil<sup>398</sup>,  
\*ncac

incidence: 65/214\*, conc. range: 36.8–719 µg/kg, Ø conc.: 155 µg/kg, country: Brazil<sup>403</sup>, \*ncac

incidence: 2/15\*, conc. range: 4–140 µg/kg, Ø conc.: 48.8 µg/kg, country: Italy<sup>408</sup>, \*ncac

incidence: 6/9\*, conc. range: <50–50 µg/kg, country: Cameroon<sup>416</sup>, \*ncac

incidence: 9/9\*, conc. range: <50–1100 µg/kg, country: Cameroon<sup>416</sup>, \*ncac

incidence: 41/49\*, conc. range: 0.43–39.12 µg/kg, Ø conc.: 3.84 µg/kg, country: Croatia<sup>417</sup>, \*ncac

incidence: 30/30\*, conc. range: 3000–7000 µg/kg, Ø conc.: 5480 µg/kg, country: Argentina<sup>422</sup>, \*ncac

incidence: 6/61\*, conc. range: ≤30 µg/kg, Ø conc.: 1.5 µg/kg, country: Bangladesh<sup>428</sup>, \*ncac

see also alfalfa, barley, barley, husked, barley, unhusked (naked), barley and feed, bone meal, bran, broilers feed, *Carthamus* cake, chick pea, concentrate, mixed, corn cob mix silage, cotton cake, cottonseed, cottonseed cake, diet (dairy cow), diet (poultry), diets (mixed), feed, feed components, feed, mixed, feed, mixed (primarily maize also maize, oats, wheat), feed (bran), feed (broiler chicken), feed (cattle), feed (chicken), feed (dairy), feed (developing pig), feed (mill run, from wheat), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (starter chicken), feedstuff, fish meal, forage grass, grain, bruised, grain, mixed feed, grains (no specification), hay, maize ears, maize flakes, maize germ, maize germ/bran, maize gluten, maize kernels, maize meal, maize oil cake, maize screenings, maize stalks (pith), maize, “Baby”, maize, hybrid, maize, shelled, maize, unshelled, maize, white, maize grain, artificially dried, maize grain, crib dried, maize grain, ensiled, milk production mixed feed, oats, *Paspalum palidosum*, straw, peanut hulls/skins, rice bran, rice germ, rice germ cake, rye, silage, sorghum, soybeans, soybeans, extracted, sunflower cake, tapioca, triticale, wheat, wheat bran, wheat bran and chana testa, wheat soya meal

**Maize and feed samples** may contain the following mycotoxins:

FUMONISIN B<sub>1</sub> + B<sub>2</sub>

incidence: 252/291, conc. range: 100–5000 µg/kg (156 sa), 5100–10,000 µg/kg (48 sa), 10,100–50,000 µg/kg (41 sa), >50,000 µg/kg (7 sa), country: USA<sup>301</sup>  
see also feed (pig), maize

**Maize and maize screenings** may contain the following mycotoxins:

FUMONISIN B<sub>1</sub>

incidence: 29/29, conc. range: 2000–330,000 µg/kg, Ø conc.: 76,000 µg/kg, country: USA<sup>142</sup>  
see also barley, bird food, wild, dog food, feed, feed, complete ration, feed, general, feed, layer, feed, maize-based, feed, mixed, feed, pelleted ration, feed, screenings, feed, sweet, feed (broilers), feed (cat), feed (chicken), feed (dog), feed (gluten), feed (horse), feed (maize), feed (pig), feed (poultry), feed (rat), feed (rodent), forage grass, maize, maize bran, maize ears, maize fine fractions, maize flakes, maize germ, maize germ/bran, maize germ meal, maize gluten, maize grits, maize kernels, maize meal, maize powder, maize screenings, maize, “Baby”, maize, ground, maize, preharvest, maize, sweet feed, maize/oats mix, rat chow, silage, sorghum, soybeans, wheat

**Maize bran** may contain the following mycotoxins:

FUMONISIN B<sub>1</sub>

incidence: ?/23, conc. range: 0–4480 µg/kg, Ø conc.: 900 µg/kg\*, country: South Africa<sup>146</sup>, \*mean of all samples  
incidence: 4/4, conc. range: 230–600 µg/kg, Ø conc.: 420 µg/kg\*, country: South Africa<sup>147</sup>, \*mean of all samples  
incidence: ?/85, conc. range: 0–3540 µg/kg, Ø conc.: 410 µg/kg\*, country: South Africa<sup>147</sup>, \*mean of all samples  
see also barley, bird food, wild, dog food, feed, feed, complete ration, feed, general,



feed, layer, feed, maize-based, feed, mixed, feed, pelleted ration, feed, screenings, feed, sweet, feed (broilers), feed (cat), feed (chicken), feed (dog), feed (gluten), feed (horse), feed (maize), feed (pig), feed (poultry), feed (rat), feed (rodent), forage grass, maize, maize and maize screenings, maize ears, maize fine fractions, maize flakes, maize germ, maize germ/bran, maize germ meal, maize gluten, maize grits, maize kernels, maize meal, maize powder, maize screenings, maize, "Baby", maize, ground, maize, preharvest, maize, sweet feed, maize/oats mix, rat chow, silage, sorghum, soybeans, wheat

#### FUMONISIN B<sub>2</sub>

incidence: ?/23, conc. range: 0–1790 µg/kg, Ø conc.: 260 µg/kg\*, country: South Africa<sup>146</sup>, \*mean of all samples

incidence: 4/4, conc. range: 0–130 µg/kg, Ø conc.: 30 µg/kg\*, country: South Africa<sup>147</sup>, \*mean of all samples

incidence: ?/85, conc. range: 0–1270 µg/kg, Ø conc.: 120 µg/kg\*, country: South Africa<sup>147</sup>, \*mean of all samples

see also barley, bird food, wild, dog food, feed, feed, maize-based, feed, mixed, feed (cat), feed (dog), feed (gluten), feed (horse), feed (maize), feed (poultry), feed (rodent), maize, maize fine fractions, maize flakes, maize germ, maize germ/bran, maize germ meal, maize gluten, maize kernels, maize meal, maize powder, maize screenings, maize, "Baby", maize, ground, maize, preharvest, rat chow, wheat

#### FUMONISIN B<sub>3</sub>

incidence: 4/4, conc. range: 0–50 µg/kg, Ø conc.: 10 µg/kg\*, country: South Africa<sup>147</sup>, \*mean of all samples

incidence: 85, conc. range: 0–1030 µg/kg, Ø conc.: 40 µg/kg\*, country: South Africa<sup>147</sup>, \*mean of all samples

see also feed, feed (maize), feed (rodent), maize, maize fine fractions, maize germ meal, maize kernels, maize powder, maize screenings

**Maize ears** may contain the following mycotoxins:

#### 3-ACETYLDEOXYNIVALENOL

incidence: 2/5\*, conc. range: 900–5900 µg/kg, Ø conc.: 3400 µg/kg, country: Poland<sup>348</sup>, \*ncac

see also barley, feed components, feed (poultry), feeds, grain, feeds, industrial, feedstuffs (rapeseed, turnip, fish meal, concentrates), maize, maize gluten, maize kernels, maize meal, maize screenings, oats, wheat

#### 15-ACETYLDEOXYNIVALENOL

incidence: 2/5\*, conc. range: 5800–8800 µg/kg, Ø conc.: 7300 µg/kg, country: Poland<sup>348</sup> \*ncac

see also barley, feed components, feed, commercial mix, feed (poultry), maize, maize germ, maize germ/bran, maize gluten, maize kernels, maize meal, maize screenings, maize, "Baby", oats, silage, wheat

#### DEOXYNIVALENOL

incidence: 3/5\*, conc. range:

26700–208,300 µg/kg, Ø conc.:

123,933 µg/kg, country: Poland<sup>348</sup> \*ncac

see also barley, barley, husked, barley, unhusked (naked), barley (pressed), bone meal, bran, broilers feed, calf fattening mixed feed, coconut, expeller, corn cob mix silage, cottonseed, cottonseed cake, dairy cattle feed, egg production mixed feed, feed, feed components, feed, commercial mix, feed, mixed, feed, mixed (primarily maize), feed (barley), feed (cattle), feed (chicken), feed (dog), feed (fish), feed (mill run, from wheat), feed (mink), feed (pig), feed (poultry), feed (reindeer), feeds, grain, feeds, industrial, feedstuff, feedstuffs (rapeseed, turnip, fish meal, concentrates), fish meal, grain, mixed feed, grains, mixed, grains (no specification), maize, maize fibre, maize germ, maize germ/bran, maize germ meal, maize gluten, maize kernels, maize meal, maize powder, maize screenings, maize stalks (pith), maize, "Baby", maize, hybrid, maize, white, oats, rice bran, rice germ cake, rye, silage, sorghum, soybeans, triticale, wheat,

wheat and barley, wheat, red hard winter, wheat, soft white winter, wheat, spring, wheat, winter

#### FUMONISIN B<sub>1</sub>

incidence: 8/8\*, conc. range:  $\leq 300,000 \mu\text{g}/\text{kg}$ , country: Italy<sup>369</sup> \*ncac

see also barley, bird food, wild, dog food, feed, feed, complete ration, feed, general, feed, layer, feed, maize-based, feed, mixed, feed, pelleted ration, feed, screenings, feed, sweet, feed (broilers), feed (cat), feed (chicken), feed (dog), feed (gluten), feed (horse), feed (maize), feed (pig), feed (poultry), feed (rat), feed (rodent), forage grass, maize, maize and maize screenings, maize bran, maize fine fractions, maize flakes, maize germ, maize germ/bran, maize germ meal, maize gluten, maize grits, maize kernels, maize meal, maize powder, maize screenings, maize, "Baby", maize, ground, maize, preharvest, maize, sweet feed, maize/oats mix, rat chow, silage, sorghum, soybeans, wheat

#### FUSARENONE-X

incidence: 2/5\*, conc. range: 3600–20,000  $\mu\text{g}/\text{kg}$ , Ø conc.: 11,800  $\mu\text{g}/\text{kg}$ , country: Poland<sup>348</sup> \*ncac

see also barley, feed components, feed (poultry), maize, maize germ/bran, maize gluten, maize kernels, maize meal, maize screenings, oats, wheat

#### NIVALENOL

incidence: 2/5\*, conc. range: 54,300–56,200  $\mu\text{g}/\text{kg}$ , Ø conc.: 55,250  $\mu\text{g}/\text{kg}$ , country: Poland<sup>348</sup> \*ncac

see also barley, barley, husked, barley, unhusked (naked), barley (pressed), bran, feed, feed components, feed (cattle), feed (poultry), feed (reindeer), feeds, industrial, maize, maize germ, maize germ/bran, maize gluten, maize kernels, maize meal, maize powder, maize screenings, maize, "Baby", oats, rye, silage, triticale, wheat

#### ZEARALENONE

incidence: 5/5\*, conc. range: 1600–350,000  $\mu\text{g}/\text{kg}$ , Ø conc.: 76,200  $\mu\text{g}/\text{kg}$ , country: Poland<sup>348</sup> \*ncac

see also alfalfa, barley, barley, husked, barley, unhusked (naked), barley and feed, bone meal, bran, broilers feed, *Carthamus* cake, chick pea, concentrate, mixed, corn cob mix silage, cotton cake, cottonseed, cottonseed cake, diet (dairy cow), diet (poultry), diets (mixed), feed, feed components, feed, mixed, feed, mixed (primarily maize also maize, oats, wheat), feed (bran), feed (broiler chicken), feed (cattle), feed (chicken), feed (dairy), feed (developing pig), feed (mill run, from wheat), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (starter chicken), feedstuff, fish meal, forage grass, grain, bruised, grain, mixed feed, grains (no specification), hay, maize, maize flakes, maize germ, maize germ/bran, maize gluten, maize kernels, maize meal, maize oil cake, maize screenings, maize stalks (pith), maize, "Baby", maize, hybrid, maize, shelled, maize, unshelled, maize grain, artificially dried, maize grain, crib dried, maize grain, ensiled, milk production mixed feed, oats, *Paspalum palidosum*, straw, peanut hulls/skins, rice bran, rice germ, rice germ cake, rye, silage, sorghum, soybeans, soybeans, extracted, sunflower cake, tapioca, triticale, wheat, wheat bran, wheat bran and chana testa, wheat soya meal

**Maize feed, milo** may contain the following mycotoxins:

#### OCHRATOXIN A

incidence: 2/2, conc. range: 7–12  $\mu\text{g}/\text{kg}$ , Ø conc.: 10  $\mu\text{g}/\text{kg}$ , country: The Netherlands<sup>103</sup>

see also alfalfa, barley, barley, oats, barley (high moisture), barley-soybean diet, bird food, domestic, bird food, wild, broilers feed, cereal grains, citrus pulp, coconut, expeller, corn cob mix silage, diet (dairy cow), diet (poultry), diet (starter), dog food, eat, egg production mixed feed, feed, feed wheat, oat and barley, feed, commercial mix, feed, mixed, feed, mixed (pelleted), feed (broilers), feed (cat), feed (cattle), feed (cereals), feed (pig), feed ec (pig), feed (poultry), feed ec (poultry), feed (poultry, pig), feed ec

(rabbit), feed (trout), grains, mixed, grains, mixed feed, grains (heated), hay, horse bean, maize, maize gluten, maize meal, maize, white, *Makhana (Euryale ferox* Salisb) puffs, milk production mixed feed, millet, oat and barley (hammer-milled), oats, palm products, peas, peas and beans, pet food, pig feedstuffs, pig grower diet, pig meal, piglet diet, poultry feedstuffs, rice bran, rice germ, rice germ cake, rye, sorghum, soybean groats, sunflower, sunflower seeds, extracted, tapioca, triticale, *Vicia faba*, wheat, wheat and barley, wheat bran, wheat hay, wheat, oats

**Maize fibre** may contain the following mycotoxins:

#### DEOXYNIVALENOL

incidence: 2/2, conc. range: 50–110 µg/kg, Ø conc.: 80 µg/kg, country: UK<sup>36</sup>  
see also barley, barley, husked, barley, unhusked (naked), barley (pressed), bone meal, bran, broilers feed, calf fattening mixed feed, coconut, expeller, corn cob mix silage, cottonseed, cottonseed cake, dairy cattle feed, egg production mixed feed, feed, feed components, feed, commercial mix, feed, mixed, feed, mixed (primarily maize), feed (barley), feed (cattle), feed (chicken), feed (dog), feed (fish), feed (mill run, from wheat), feed (mink), feed (pig), feed (poultry), feed (reindeer), feeds, grain, feeds, industrial, feedstuff, feedstuffs (rapeseed, turnip, fish meal, concentrates), fish meal, grain, mixed feed, grains, mixed, grains (no specification), maize, maize ears, maize germ, maize germ/bran, maize germ meal, maize gluten, maize kernels, maize powder, maize screenings, maize stalks (pith), maize, “Baby”, maize, hybrid, maize, white, oats, rice bran, rice germ cake, rye, silage, sorghum, soybeans, triticale, wheat, wheat and barley, wheat, red hard winter, wheat, soft white winter, wheat, spring, wheat, winter

**Maize fine fractions** may contain the following mycotoxins:

#### FUMONISIN B<sub>1</sub>

incidence: 10/10\* \*\*, conc. range: 8660–21,350 µg/kg, Ø conc.: 13,390 µg/kg, country: South Africa<sup>190</sup>, \*imported, \*\*ncac  
see also barley, bird food, wild, dog food, feed, feed, complete ration, feed, general, feed, layer, feed, maize-based, feed, mixed, feed, pelleted ration, feed, screenings, feed, sweet, feed (broilers), feed (cat), feed (chicken), feed (dog), feed (gluten), feed (horse), feed (maize), feed (pig), feed (poultry), feed (rat), feed (rodent), forage grass, maize, maize and maize screenings, maize bran, maize ears, maize flakes, maize germ, maize germ/bran, maize germ meal, maize gluten, maize grits, maize kernels, maize meal, maize powder, maize screenings, maize, “Baby”, maize, ground, maize, preharvest, maize, sweet feed, maize/oats mix, rat chow, silage, sorghum, soybeans, wheat

#### FUMONISIN B<sub>2</sub>

incidence: 10/10\* \*\*, conc. range: 2720–6320 µg/kg, Ø conc.: 3993 µg/kg, country: South Africa<sup>190</sup>, \*imported, \*\*ncac  
see also barley, bird food, wild, dog food, feed, feed, maize-based, feed, mixed, feed (cat), feed (dog), feed (gluten), feed (horse), feed (maize), feed (poultry), feed (rodent), maize, maize bran, maize flakes, maize germ, maize germ/bran, maize germ meal, maize gluten, maize kernels, maize meal, maize powder, maize screenings, maize, “Baby”, maize, ground, maize, preharvest, rat chow, wheat

#### FUMONISIN B<sub>3</sub>

incidence: 10/10\* \*\*, conc. range: 960–2450 µg/kg, Ø conc.: 1671 µg/kg, country: South Africa<sup>190</sup>, \*imported, \*\*ncac  
see also feed, feed (maize), feed (rodent), maize, maize bran, maize germ meal, maize kernels, maize powder, maize screenings

**Maize flakes** Maize flakes for feed may contain the following mycotoxins:

#### FUMONISIN B<sub>1</sub>

incidence: 2/3, conc. range: 190–280 µg/kg, Ø conc.: 235 µg/kg, country: UK<sup>95</sup>

see also barley, bird food, wild, dog food, feed, feed, complete ration, feed, general, feed, maize-based, feed, mixed, feed, pelleted ration, feed, screenings, feed, sweet, feed (cat), feed (chicken), feed (dog), feed (gluten), feed (horse), feed (maize), feed (pig), feed (poultry), feed (rat), feed (rodent), forage grass, maize, maize and maize screenings, maize bran, maize ears, maize fine fractions, maize germ, maize germ/bran, maize germ meal, maize gluten, maize grits, maize kernels, maize meal, maize powder, maize screenings, maize, "Baby", maize, ground, maize, preharvest, maize, sweet feed, maize/oats mix, rat chow, silage, sorghum, soybeans, wheat

#### FUMONISIN B<sub>2</sub>

incidence: 1/3, conc.: 50 µg/kg, country: UK<sup>95</sup>

see also barley, bird food, wild, dog food, feed, feed, maize-based, feed, mixed, feed (cat), feed (dog), feed (gluten), feed (horse), feed (maize), feed (poultry), feed (rodent), maize, maize bran, maize fine fractions, maize germ, maize germ/bran, maize germ meal, maize gluten, maize kernels, maize meal, maize powder, maize screenings, maize, "Baby", maize, ground, maize, preharvest, rat chow, wheat

#### MONILIFORMIN

incidence: 3/3, conc. range: 90–130 µg/kg,

Ø conc.: 110 µg/kg, country: UK<sup>95</sup>

see also barley, feed, mixed, feed (poultry), maize, maize germ, maize germ/bran, maize gluten, maize meal, maize screenings, maize, "Baby", oats, rice bran, triticale, wheat, wheat, summer, wheat, winter

#### ZEARALENONE

incidence: 6/9\*, conc. range: 5–150 µg/kg, country: UK<sup>94</sup>, \*imported?

incidence: 3/3, conc. range: 80–110 µg/kg, country: UK<sup>95</sup>

see also alfalfa, barley, barley, husked, barley, unhusked (naked), barley and feed, bone meal, bran, broilers feed, *Carthamus* cake, chick pea, concentrate, mixed, corn cob mix silage, cotton cake, cottonseed, cottonseed cake, diet (dairy cow), diet (poultry), diets (mixed), feed, feed components, feed, mixed,

feed, mixed (primarily maize also maize, oats, wheat), feed (bran), feed (broiler chicken), feed (cattle), feed (chicken), feed (dairy), feed (developing pig), feed (mill run, from wheat), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (starter chicken), feedstuff, fish meal, forage grass, grain, bruised, grain, mixed feed, grains (no specification), hay, maize, maize ears, maize germ, maize germ/bran, maize gluten, maize kernels, maize meal, maize oil cake, maize screenings, maize stalks (pith), maize, "Baby", maize, hybrid, maize, shelled, maize, unshelled, maize, white, maize grain, artificially dried, maize grain, crib dried, maize grain, ensiled, milk production mixed feed, oats, *Paspalum palidosum*, straw, peanut hulls/skins, rice bran, rice germ, rice germ cake, rye, silage, sorghum, soybeans, soybeans, extracted, sunflower cake, tapioca, triticale, wheat, wheat bran, wheat bran and chana testa, wheat soya meal

**Maize germ** may contain the following mycotoxins:

#### 15-ACETYLDEOXYNIVALENOL

incidence: 4/7, conc. range: 15–40 µg/kg,

Ø conc.: 31.3 µg/kg, country: UK<sup>95</sup>

see also barley, feed components, feed, commercial mix, feed (poultry), maize, maize ears, maize germ/bran, maize gluten, maize kernels, maize meal, maize screenings, maize, "Baby", oats, silage, wheat

#### AFLATOXIN B<sub>1</sub>

incidence: 4/5\*, conc. range: 1–17 µg/kg,

country: UK<sup>94</sup>, \*imported?

see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake,

cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60 % maize), fish meal, grains (no specification), grain by-products, greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

#### AFLATOXINS (TOTAL)

incidence: 4/5\*, conc. range: 1–18 µg/kg, country: UK<sup>94</sup>, \*imported?

see also cottonseed, maize gluten, maize (dark grains), palm products, rice bran, soybeans, sunflower

#### DEOXYNIVALENOL

incidence: 7/7, conc. range: 25–360 µg/kg,

Ø conc.: 145 µg/kg, country: UK<sup>95</sup>

see also barley, barley, husked, barley, unhusked (naked), barley (pressed), bone meal, bran, broilers feed, calf fattening mixed feed, coconut, expeller, corn cob mix silage, cottonseed, cottonseed cake, dairy cattle feed, egg production mixed feed, feed, feed components, feed, commercial mix, feed, mixed, feed, mixed (primarily maize), feed (barley), feed (cattle), feed (chicken), feed (dog), feed (fish), feed (mill run, from wheat), feed (mink), feed (pig), feed (poultry), feed (reindeer), feeds, grain, feeds, industrial, feedstuff, feedstuffs (rapeseed, turnip, fish meal, concentrates), fish meal, grain, mixed feed, grains, mixed, grains (no specification), maize, maize ears, maize fibre, maize germ/bran, maize germ meal, maize gluten, maize kernels, maize powder, maize screenings, maize stalks (pith), maize, “Baby”, maize, hybrid, maize, white, oats, rice bran, rice germ cake, rye, silage, sorghum, soybeans, triticale, wheat, wheat and barley, wheat, red hard winter, wheat, soft white winter, wheat, spring, wheat, winter

#### FUMONISIN B<sub>1</sub>

incidence: 7/7, conc. range: 4200–7400 µg/kg,

Ø conc.: 5728.6 µg/kg, country: UK<sup>95</sup>

see also barley, bird food, wild, dog food, feed, feed, complete ration, feed, general, feed, layer, feed, maize-based, feed, mixed, feed, pelleted ration, feed, screenings, feed, sweet, feed (broilers), feed (cat), feed (chicken), feed (dog), feed (gluten), feed (horse), feed (maize), feed (pig), feed (poultry), feed (rat), feed (rodent), forage grass, maize, maize and maize screenings, maize bran, maize ears, maize fine fractions, maize flakes, maize germ/bran, maize germ meal, maize gluten, maize grits, maize kernels, maize meal, maize powder, maize screenings, maize, “Baby”, maize, ground,

maize, preharvest, maize, sweet feed, maize/oats mix, rat chow, silage, sorghum, soybeans, wheat

#### FUMONISIN B<sub>2</sub>

incidence: 7/7, conc. range: 580–1100 µg/kg,

Ø conc.: 768.6 µg/kg, country: UK<sup>95</sup>

see also barley, bird food, wild, dog food, feed, feed, maize-based, feed, mixed, feed (cat), feed (dog), feed (gluten), feed (horse), feed (maize), feed (poultry), feed (rodent), maize, maize bran, maize fine fractions, maize flakes, maize germ/bran, maize germ meal, maize gluten, maize kernels, maize meal, maize powder, maize screenings, maize, “Baby”, maize, ground, maize, preharvest, rat chow, wheat

#### FUMONISINS

incidence: 4/5\*, conc. range: 100–1060 µg/kg,

country: UK<sup>94</sup>, \*imported?

see also feed (cattle and dairy), feed (chicken), feed (dairy), feed (horse), maize, maize gluten, maize meal, maize screenings

#### MONILIFORMIN

incidence: 7/7, conc. range: 660–1100 µg/kg,

Ø conc.: 778.6 µg/kg, country: UK<sup>95</sup>

see also barley, feed, mixed, feed (poultry), maize, maize flakes, maize germ/bran, maize gluten, maize meal, maize screenings, maize, “Baby”, oats, rice bran, triticale, wheat, wheat, summer, wheat, winter

#### NIVALENOL

incidence: 1/7, conc.: 35 µg/kg, country: UK<sup>95</sup>

see also barley, barley, husked, barley, unhusked (naked), barley (pressed), bran, feed, feed components, feed (cattle), feed (poultry), feed (reindeer), feeds, industrial, maize, maize ears, maize germ/bran, maize gluten, maize kernels, maize meal, maize powder, maize screenings, maize, “Baby”, oats, rye, silage, triticale, wheat

#### ZEARALENONE

incidence: 1/5, conc.: 15 µg/kg, country:

UK<sup>94</sup>, \*imported?

incidence: 7/7, conc. range: 50–80 µg/kg,

Ø conc.: 67.1 µg/kg, country: UK<sup>95</sup>

see also alfalfa, barley, barley, husked, barley, unhusked (naked), barley and feed, bone meal, bran, broilers feed, *Carthamus* cake, chick pea, concentrate, mixed, corn cob mix silage, cotton cake, cottonseed, cottonseed cake, diet (dairy cow), diet (poultry), diets (mixed), feed, feed components, feed, mixed, feed, mixed (primarily maize also maize, oats, wheat), feed (bran), feed (broiler chicken), feed (cattle), feed (chicken), feed (dairy), feed (developing pig), feed (mill run, from wheat), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (starter chicken), feedstuff, fish meal, forage grass, grain, bruised, grain, mixed feed, grains (no specification), hay, maize, maize ears, maize flakes, maize germ/bran, maize gluten, maize kernels, maize meal, maize oil cake, maize screenings, maize stalks (pith), maize, “Baby”, maize, hybrid, maize, shelled, maize, unshelled, maize, white, maize grain, artificially dried, maize grain, crib dried, maize grain, ensiled, milk production mixed feed, oats, *Paspalum palidosum*, straw, peanut hulls/skins, rice bran, rice germ, rice germ cake, rye, silage, sorghum, soybeans, soybeans, extracted, sunflower cake, tapioca, triticale, wheat, wheat bran, wheat bran and chana testa, wheat soya meal

**Maize germ/bran** may contain the following mycotoxins:

#### 15-ACETYLDEOXYNIVALENOL

incidence: 6/6, conc. range: 50–170 µg/kg,

Ø conc.: 107.2 µg/kg, country: UK<sup>95</sup>

see also barley, feed components, feed, commercial mix, feed (poultry), maize, maize ears, maize germ, maize gluten, maize kernels, maize meal, maize screenings, maize, “Baby”, oats, silage, wheat

#### DEOXYNIVALENOL

incidence: 6/6, conc. range: 230–1000 µg/kg,

Ø conc.: 731.7 µg/kg, country: UK<sup>95</sup>

see also barley, barley, husked, barley, unhusked (naked), barley (pressed), bone meal, bran, broilers feed, calf fattening mixed feed, coconut, expeller, corn cob mix silage,

cottonseed, cottonseed cake, dairy cattle feed, egg production mixed feed, feed, feed components, feed, commercial mix, feed, mixed, feed, mixed (primarily maize), feed (barley), feed (cattle), feed (chicken), feed (dog), feed (fish), feed (mill run, from wheat), feed (mink), feed (pig), feed (poultry), feed (reindeer), feeds, grain, feeds, industrial, feedstuff, feedstuffs (rapeseed, turnip, fish meal, concentrates), fish meal, grain, mixed feed, grains, mixed, grains (no specification), maize, maize ears, maize fibre, maize germ, maize germ meal, maize gluten, maize kernels, maize powder, maize screenings, maize stalks (pith), maize, "Baby", maize, hybrid, maize, white, oats, rice bran, rice germ cake, rye, silage, sorghum, soybeans, triticale, wheat, wheat and barley, wheat, red hard winter, wheat, soft white winter, wheat, spring, wheat, winter

#### FUMONISIN B<sub>1</sub>

incidence: 6/6, conc. range: 390–1500 µg/kg, Ø conc.: 1083.3 µg/kg, country: UK<sup>95</sup>  
 see also barley, bird food, wild, dog food, feed, feed, complete ration, feed, general, feed, layer, feed, maize-based, feed, mixed, feed, pelleted ration, feed, screenings, feed, sweet, feed (broilers), feed (cat), feed (chicken), feed (dog), feed (gluten), feed (horse), feed (maize), feed (pig), feed (poultry), feed (rat), feed (rodent), forage grass, maize, maize and maize screenings, maize bran, maize ears, maize fine fractions, maize flakes, maize germ, maize germ meal, maize gluten, maize grits, maize kernels, maize meal, maize powder, maize screenings, maize, "Baby", maize, ground, maize, preharvest, maize, sweet feed, maize/oats mix, rat chow, silage, sorghum, soybeans, wheat

#### FUMONISIN B<sub>2</sub>

incidence: 6/6, conc. range: 110–250 µg/kg, Ø conc.: 190 µg/kg, country: UK<sup>95</sup>  
 see also barley, bird food, wild, dog food, feed, feed, maize-based, feed, mixed, feed (cat), feed (dog), feed (gluten), feed (horse), feed (maize), feed (poultry), feed (rodent), maize, maize bran, maize fine fractions, maize flakes, maize

germ, maize germ meal, maize gluten, maize kernels, maize meal, maize powder, maize screenings, maize, "Baby", maize, ground, maize, preharvest, rat chow, wheat

#### FUSARENONE-X

incidence: 4/6, conc. range: 15–30 µg/kg, Ø conc.: 20 µg/kg, country: UK<sup>95</sup>  
 see also barley, feed components, feed (poultry), maize, maize ears, maize gluten, maize kernels, maize meal, maize screenings, oats, wheat

#### HT-2 TOXIN

incidence: 6/6, conc. range: 10–35 µg/kg, Ø conc.: 20.8 µg/kg, country: UK<sup>95</sup>  
 see also barley, feed components, feed (dog), feed (fish), feed (pig), feed (poultry), feed (reindeer), grain, mixed feed, grains, mixed, grains (no specification), maize, maize gluten, maize meal, maize screenings, oats, rye, silage, wheat

#### MONILIFORMIN

incidence: 6/6, conc. range: 270–570 µg/kg, Ø conc.: 426.7 µg/kg, country: UK<sup>95</sup>  
 see also barley, feed, mixed, feed (poultry), maize, maize flakes, maize germ, maize gluten, maize meal, maize screenings, maize, "Baby", oats, rice bran, triticale, wheat, wheat, summer, wheat, winter

#### NIVALENOL

incidence: 6/6, conc. range: 80–400 µg/kg, Ø conc.: 196.7 µg/kg, country: UK<sup>95</sup>  
 see also barley, barley, husked, barley, unhusked (naked), barley (pressed), bran, feed, feed components, feed (cattle), feed (poultry), feed (reindeer), feeds, industrial, maize, maize ears, maize germ, maize gluten, maize kernels, maize meal, maize powder, maize screenings, maize, "Baby", oats, rye, silage, triticale, wheat

#### T-2 TOXIN

incidence: 4/6, conc. range: 10–20 µg/kg, Ø conc.: 15 µg/kg, country: UK<sup>95</sup>  
 see also alfalfa, barley, bran, diet (grower), diet (poultry), feed, feed components, feed, layer, feed, mixed, feed (dog), feed (fish), feed (mink), feed (pig), feed (poultry),

feedstuff, forage grass, grain, mixed feed, grains (no specification), hay, maize, maize gluten, maize meal, maize screenings, maize stalks (pith), oat and barley (hammer-milled), oats, peanuts, pig grower diet, piglet diet, rye, sorghum, triticale, wheat

#### ZEARALENONE

incidence: 6/6, conc. range: 160–540 µg/kg,

Ø conc.: 330 µg/kg, country: UK<sup>95</sup>

see also alfalfa, barley, barley, husked, barley, unhusked (naked), barley and feed, bone meal, bran, broilers feed, *Carthamus* cake, chick pea, concentrate, mixed, corn cob mix silage, cotton cake, cottonseed, cottonseed cake, diet (dairy cow), diet (poultry), diets (mixed), feed, feed components, feed, mixed, feed, mixed (primarily maize also maize, oats, wheat), feed (bran), feed (broiler chicken), feed (cattle), feed (chicken), feed (dairy), feed (developing pig), feed (mill run, from wheat), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (starter chicken), feedstuff, fish meal, forage grass, grain, bruised, grain, mixed feed, grains (no specification), hay, maize, maize ears, maize flakes, maize germ, maize gluten, maize kernels, maize meal, maize oil cake, maize screenings, maize stalks (pith), maize, “Baby”, maize, hybrid, maize, shelled, maize, unshelled, maize, white, maize grain, artificially dried, maize grain, crib dried, maize grain, ensiled, milk production mixed feed, oats, *Paspalum palidosum*, straw, peanut hulls/skins, rice bran, rice germ, rice germ cake, rye, silage, sorghum, soybeans, soybeans, extracted, sunflower cake, tapioca, triticale, wheat, wheat bran, wheat bran and chana testa, wheat soya meal

**Maize germ meal** Maize germ meal for feed may contain the following mycotoxins:

#### DEOXYNIVALENOL

incidence: 2/2, conc. range: 430–1300 µg/kg,

Ø conc.: 865 µg/kg, country: UK<sup>36</sup>

see also barley, barley, husked, barley, unhusked (naked), barley (pressed), bone meal, bran, broilers feed, calf fattening mixed

feed, coconut, expeller, corn cob mix silage, cottonseed, cottonseed cake, dairy cattle feed, egg production mixed feed, feed, feed components, feed, commercial mix, feed, mixed, feed, mixed (primarily maize), feed (barley), feed (cattle), feed (chicken), feed (dog), feed (fish), feed (mill run, from wheat), feed (mink), feed (pig), feed (poultry), feed (reindeer), feeds, grain, feeds, industrial, feedstuff, feedstuffs (rapeseed, turnip, fish meal, concentrates), fish meal, grain, mixed feed, grains, mixed, grains (no specification), maize, maize ears, maize fibre, maize germ, maize germ/bran, maize gluten, maize kernels, maize powder, maize screenings, maize stalks (pith), maize, “Baby”, maize, hybrid, maize, white, oats, rice bran, rice germ cake, rye, silage, sorghum, soybeans, triticale, wheat, wheat and barley, wheat, red hard winter, wheat, soft white winter, wheat, spring, wheat, winter

#### FUMONISIN B<sub>1</sub>

incidence: 2/2, conc. range: 480–2180 µg/kg,

Ø conc.: 1330 µg/kg\*, country: South Africa<sup>147</sup>, \*mean of all samples

incidence: 21/21, conc. range: 50–1010 µg/kg,

Ø conc.: 290 µg/kg\*, country: South Africa<sup>147</sup>,

\*mean of all samples

see also barley, bird food, wild, dog food, feed, feed, complete ration, feed, general, feed, layer, feed, maize-based, feed, mixed, feed, pelleted ration, feed, screenings, feed, sweet, feed (broilers), feed (cat), feed (chicken), feed (dog), feed (gluten), feed (horse), feed (maize), feed (pig), feed (poultry), feed (rat), feed (rodent), forage grass, maize, maize and maize screenings, maize bran, maize ears, maize fine fractions, maize flakes, maize germ, maize germ/bran, maize gluten, maize grits, maize kernels, maize meal, maize powder, maize screenings, maize, “Baby”, maize, ground, maize, preharvest, maize, sweet feed, maize/oats mix, rat chow, silage, sorghum, soybeans, wheat

#### FUMONISIN B<sub>2</sub>

incidence: 2/2, conc. range: 0–1550 µg/kg,

Ø conc.: 770 µg/kg\*, country: South Africa<sup>147</sup>,

\*mean of all samples



incidence: 21/21, conc. range: 0–420 µg/kg, Ø conc.: 80 µg/kg\*, country: South Africa<sup>147</sup>, \*mean of all samples

see also barley, bird food, wild, dog food, feed, feed, maize-based, feed, mixed, feed (cat), feed (dog), feed (gluten), feed (horse), feed (maize), feed (poultry), feed (rodent), maize, maize bran, maize fine fractions, maize flakes, maize germ, maize germ/bran, maize gluten, maize kernels, maize meal, maize powder, maize screenings, maize, “Baby”, maize, ground, maize, preharvest, rat chow, wheat

#### FUMONISIN B<sub>3</sub>

incidence: 2/2, conc. range: 50–900 µg/kg, Ø conc.: 480 µg/kg\*, country: South Africa<sup>147</sup>, \*mean of all samples

incidence: 21/21, conc. range: 0–100 µg/kg, Ø conc.: 10 µg/kg\*, country: South Africa<sup>147</sup>, \*mean of all samples

see also feed, feed (maize), feed (rodent), maize, maize bran, maize fine fractions, maize kernels, maize powder, maize screenings

**Maize gluten** may contain the following mycotoxins:

#### 3-ACETYLDIOXYNIVALENOL

incidence: 3/40, conc. range: 10–30 µg/kg, Ø conc.: 20 µg/kg, country: UK<sup>95</sup>

incidence: 5/11, conc. range: 14–78 µg/kg, Ø conc.: 40 µg/kg, country: Germany<sup>366</sup>

see also barley, feed components, feed (poultry), feeds, grain, feeds, industrial, feedstuffs (rapeseed, turnip, fish meal, concentrates), maize, maize ears, maize kernels, maize meal, maize screenings, oats, wheat

#### 15-ACETYLDIOXYNIVALENOL

incidence: 38/40, conc. range: 10–400 µg/kg, Ø conc.: 135 µg/kg, country: UK<sup>95</sup>

incidence: 9/11, conc. range: 112–565 µg/kg, Ø conc.: 325 µg/kg, country: Germany<sup>366</sup>

see also barley, feed components, feed, commercial mix, feed (poultry), maize, maize ears, maize germ, maize germ/bran, maize

kernels, maize meal, maize screenings, maize, “Baby”, oats, silage, wheat

#### AFLATOXIN B<sub>1</sub>

incidence: 18/32\*, conc. range: 1–41 µg/kg, country: UK<sup>94</sup>, \*imported?

incidence: 6/7, conc. range: 26–50 µg/kg (3 sa), 51–100 µg/kg (3 sa), Ø conc.:

54.1 µg/kg, country: India<sup>247</sup>

incidence: 10/34, conc. range: 5–90 µg/kg,

Ø conc.: 50.5 µg/kg, country: Egypt<sup>397</sup>

incidence: 5/18, conc. range: 15–150 µg/kg,

Ø conc.: 63 µg/kg, country: Egypt<sup>397</sup>

incidence: 15/27, conc. range: 5–200 µg/kg,

Ø conc.: 63.4 µg/kg, country: Egypt<sup>397</sup>

incidence: 3/15, conc. range: 5–25 µg/kg,

Ø conc.: 18.3 µg/kg, country: Egypt<sup>397</sup>

see also alfalfa, *Ambadi* cake, animal feedstuffs

(dairy cake), bagasse, barley, bengalgram

husk, bird food, bird food, wild, biri testa,

blackgram, blackgram husk, bran, broiler

mixed feed, calf fattening mixed feed, calf

fattening mixed feed (containing 4–20 %

peanut products), *Carthamus* cake, castor

cake, cereals, cereal products, chick pea,

coconut cake, cocos, concentrate, mixed,

concentrates, cotton cake, cottonseed,

cottonseed (dehulled), cottonseed cake,

cottonseed extract, cottonseed meal,

cottonseed meal (ammoniated), cottonseed

meal (decorticated), cottonseed meats,

cottonseed products, crumbles, crumbles,

grower, cycad meal, dairy cattle feed, dairy

cattle feed (containing 2–5 % peanut

products), dairy cattle feed (containing

6–10 % peanut products), dairy cattle feed

(containing 6–12 % peanut products), dairy

cattle feed (containing more than 20 %

peanut products), diets, mixed, dog food, egg

production mixed feed, feed, feed and

ingredients, feed, compound, feed, layer, feed,

mixed, feed (beef), feed (broilers), feed (calf),

feed (cat), feed (cattle), feed (chicken), feed

(dairy), feed (dog), feed (dug), feed (fish),

feed (gluten), feed (horse), feed (miscell-

aneous), feed (pig), feed (poultry), feed

(poultry, pig), feed (rabbit), feed (sheep),

feed (50–60 % maize), fish meal, grain

by-products, grains (no specification),

greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, maize, *Mahua* cake, maize germ, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

#### AFLATOXIN B<sub>2</sub>

incidence: 5/7, conc. range: nc, Ø conc.: 14 µg/kg, country: India<sup>247</sup>  
 see also animal feedstuffs (dairy cake), bird food, bird food, wild, biri testa, blackgram, blackgram husk, cottonseed, cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meats, dog food, egg production mixed feed, feed, compound, feed (cat), feed (cattle), feed (dog), feed (pig), feed (poultry), feed (rabbit), feed (sheep), fish meal, horsegram, maize, maize husk, maize, ground, maize, preharvest, mung testa, mustard cake, niger cake, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanuts, peanut, kernels, redgram husk, rice bran, rice bran (deoiled), rice chaff, rice meal, rice (polish), sal seed cake, sesame cake, sorghum, soybean meal, soybeans, wheat, wheat bran

#### AFLATOXIN B

incidence: 3/11, conc. range: 6–57 µg/kg, Ø conc.: 24.3 µg/kg, country: Pakistan<sup>412</sup>

see also barley, cocoa (oil cake), cottonseed cake, feed, feed (cattle), feed (maize, gluten), feed (pig), feed (poultry), flour (wheat), lucern (dried), maize, maize grains, oats, peanut (oil cake), rice, broken, sorghum, soybean (oil cake), sunflower (oil cake), wheat

#### AFLATOXIN G

incidence: 3/11, conc. range: 0–22 µg/kg, Ø conc.: 7.3 µg/kg, country: Pakistan<sup>412</sup>  
 see also cottonseed cake, feed (maize, gluten), maize grains, rice, broken

#### AFLATOXIN

incidence: 6/7, conc. range: 35.7–103 µg/kg, country: India<sup>247</sup>  
 see also blackgram husk, bread crumbs, broiler finisher, broiler starter, cotton cake, cottonseed, cottonseed cake, cottonseed extract, cottonseed meal, feed, feed (cattle), feed (cow), feed (dog), feed (horse), feed (maize, gluten), feed (pig), feed (poultry), feed (rabbit), feed (rat/mice), feed (sheep), feeds, grain, fish meal, flour (wheat), groundnut cake, grower's mash, horsegram, layer's mash, maize, maize, white, milo, peanut cake, peanut cake (deoiled), peanut, kernels, peanut (oil cake), pearl millet, pig breeder's mash, pig finisher, pig starter, pod with haulms, poultry breeder's mash, rabbit pellets, redgram husk, rice, rice bran (deoiled), rice, broken, rice (polish), sesame cake, silk worm pupae, sorghum, soybean cake, soybean meal, wheat, wheat bran

#### AFLATOXINS (TOTAL)

incidence: 19/32\*, conc. range: 1–47 µg/kg, country: UK<sup>94</sup>, \*imported?  
 see also cottonseed, maize germ, maize (dark grains), palm products, rice bran, soybeans, sunflower

#### DEOXYNIVALENOL

incidence: 2/2, conc. range: 300–890 µg/kg, Ø conc.: 595 µg/kg, country: UK<sup>36</sup>  
 incidence: 39/40, conc. range: 50–5000 µg/kg, Ø conc.: 545.4 µg/kg, country: UK<sup>95</sup>  
 incidence: 6/6, conc. range: 220–1900 µg/kg, Ø conc.: 1000 µg/kg, country: The Netherlands<sup>103</sup>

incidence: 11/11, conc. range: 86–2455 µg/kg, Ø conc.: 1166 µg/kg, country: Germany<sup>366</sup>  
 see also barley, barley, husked, barley, unhusked (naked), barley (pressed), bone meal, bran, broilers feed, calf fattening mixed feed, coconut, expeller, corn cob mix silage, cottonseed, cottonseed cake, dairy cattle feed, egg production mixed feed, feed, feed components, feed, commercial mix, feed, mixed, feed, mixed (primarily maize), feed (barley), feed (cattle), feed (chicken), feed (dog), feed (fish), feed (mill run, from wheat), feed (mink), feed (pig), feed (poultry), feed (reindeer), feeds, grain, feeds, industrial, feedstuff, feedstuffs (rapeseed, turnip, fish meal, concentrates), fish meal, grain, mixed feed, grains, mixed, grains (no specification), maize, maize ears, maize fibre, maize germ, maize germ/bran, maize germ meal, maize kernels, maize powder, maize screenings, maize stalks (pith), maize, “Baby”, maize, hybrid, maize, white, oats, rice bran, rice germ cake, rye, silage, sorghum, soybeans, triticale, wheat, wheat and barley, wheat, red hard winter, wheat, soft white winter, wheat, spring, wheat, winter

#### DIACETOXYSCIRPENOL

incidence: 2/40, conc. range: 70–200 µg/kg, Ø conc.: 135 µg/kg, country: UK<sup>95</sup>  
 see also alfalfa, barley, feed, feed components, feed (dog), feed (fish), feed (mink), feed (pig), feed (poultry), feed (reindeer), feeds, grain, feedstuff, forage grass, grain, mixed feed, grains (no specification), maize, oat and barley (hammer-milled), oats, peanuts, soybeans, wheat

#### FUMONISIN B<sub>1</sub>

incidence: 39/40, conc. range: 40–4800 µg/kg, Ø conc.: 556.7 µg/kg, country: UK<sup>95</sup>  
 incidence: 24/29\*, conc. range: <50–4550 µg/kg, Ø conc.: 1040 µg/kg, country: UK<sup>150</sup>, \*imported  
 see also barley, bird food, wild, dog food, feed, feed, complete ration, feed, general, feed, layer, feed, maize-based, feed, mixed, feed, pelleted ration, feed, screenings, feed, sweet, feed (broilers), feed (cat), feed

(chicken), feed (dog), feed (gluten), feed (horse), feed (maize), feed (pig), feed (poultry), feed (rat), feed (rodent), forage grass, maize, maize and maize screenings, maize bran, maize ears, maize fine fractions, maize flakes, maize germ, maize germ/bran, maize germ meal, maize grits, maize kernels, maize meal, maize powder, maize screenings, maize, “Baby”, maize, ground, maize, preharvest, maize, sweet feed, maize/oats mix, rat chow, silage, sorghum, soybeans, wheat

#### FUMONISIN B<sub>2</sub>

incidence: 23/40, conc. range: 25–400 µg/kg, Ø conc.: 92 µg/kg, country: UK<sup>95</sup>  
 incidence: 24/29\*, conc. range: <50–70 µg/kg, Ø conc.: 50 µg/kg, country: UK<sup>150</sup>, \*imported  
 see also barley, bird food, wild, dog food, feed, feed, maize-based, feed, mixed, feed (cat), feed (dog), feed (gluten), feed (horse), feed (maize), feed (poultry), feed (rodent), maize, maize bran, maize fine fractions, maize flakes, maize germ, maize germ/bran, maize germ meal, maize kernels, maize meal, maize powder, maize screenings, maize, “Baby”, maize, ground, maize, preharvest, rat chow, wheat

#### FUMONISIN

incidence: 27/32\*, conc. range: 100–4550 µg/kg, country: UK<sup>94</sup>, \*imported?  
 see also feed (cattle and dairy), feed (chicken), feed (dairy), feed (horse), maize, maize germ, maize meal, maize screenings

#### FUSARENONE-X

incidence: 3/40, conc. range: 30–80 µg/kg, Ø conc.: 53.3 µg/kg, country: UK<sup>95</sup>  
 see also barley, feed components, feed (poultry), maize, maize ears, maize germ/bran, maize kernels, maize meal, maize screenings, oats, wheat

#### HT-2 TOXIN

incidence: 3/40, conc. range: 10–30 µg/kg, Ø conc.: 20 µg/kg, country: UK<sup>95</sup>  
 incidence: 9/11, conc. range: 17–90 µg/kg, Ø conc.: 42 µg/kg, country: Germany<sup>366</sup>  
 see also barley, feed components, feed (dog), feed (fish), feed (pig), feed (poultry), feed

(reindeer), grain, mixed feed, grains, mixed, grains (no specification), maize, maize germ/bran, maize meal, maize screenings, oats, rye, silage, wheat

#### MONILIFORMIN

incidence: 17/40, conc. range: 50–320 µg/kg, Ø conc.: 113.5 µg/kg, country: UK<sup>95</sup>  
see also barley, feed, mixed, feed (poultry), maize, maize flakes, maize germ, maize germ/bran, maize meal, maize screenings, maize, “Baby”, oats, rice bran, triticale, wheat, wheat, summer, wheat, winter

#### MONOACETOXYSCIRPENOL

incidence: 1/40, conc.: 10 µg/kg, country: UK<sup>95</sup>  
see also feed components, maize, maize meal, maize screenings, silage, wheat

#### NIVALENOL

incidence: 2/40, conc. range: 600–1400 µg/kg, Ø conc.: 1000 µg/kg, country: UK<sup>95</sup>  
incidence: 4/11, conc. range: 82–268 µg/kg, Ø conc.: 144 µg/kg, country: Germany<sup>366</sup>  
see also barley, barley, husked, barley, unhusked (naked), barley (pressed), bran, feed, feed components, feed (cattle), feed (poultry), feed (reindeer), feeds, industrial, maize, maize ears, maize germ, maize germ/bran, maize kernels, maize meal, maize powder, maize screenings, maize, “Baby”, oats, rye, silage, triticale, wheat

#### OCHRATOXIN A

incidence: 2/40, conc. range: 2–22 µg/kg, Ø conc.: 12 µg/kg, country: UK<sup>95</sup>  
see also alfalfa, barley, barley, oats, barley (high moisture), barley-soybean diet, bird food, domestic, bird food, wild, broilers feed, cereal grains, citrus pulp, coconut, expeller, corn cob mix silage, diet (dairy cow), diet (poultry), diet (starter), dog food, eat, egg production mixed feed, feed, feed wheat, oat and barley, feed, commercial mix, feed, mixed, feed, mixed (pelleted), feed (broilers), feed (cat), feed (cattle), feed (cereals), feed (pig), feed ec (pig), feed (poultry), feed ec (poultry), feed (poultry, pig), feed ec (rabbit), feed (trout), grain, mixed feed, grains, mixed,

grains (heated), hay, horse bean, maize, maize feed, milo, maize meal, maize, white, *Makhana* (*Euryale ferox* Salisb) puffs, milk production mixed feed, millet, oat and barley (hammer-milled), oats, palm products, peanut cake, peas, peas and beans, pet food, pig feedstuffs, pig grower diet, pig meal, piglet diet, poultry feedstuffs, rice bran, rice germ, rice germ cake, rye, sorghum, soybean groats, sunflower, sunflower seeds, extracted, tapioca, triticale, *Vicia faba*, wheat, wheat and barley, wheat bran, wheat hay, wheat, oats

#### T-2 TOXIN

incidence: 2/40, conc. range: 10–100 µg/kg, Ø conc.: 55 µg/kg, country: UK<sup>95</sup>  
incidence: 7/11, conc. range: 6–40 µg/kg, Ø conc.: 17 µg/kg, country: Germany<sup>366</sup>  
see also alfalfa, barley, bran, diet (grower), diet (poultry), feed, feed components, feed, layer, feed, mixed, feed (dog), feed (fish), feed (mink), feed (pig), feed (poultry), feedstuff, forage grass, grain, mixed feed, grains (no specification), hay, maize, maize germ/bran, maize meal, maize screenings, maize stalks (pith), oat and barley (hammer-milled), oats, peanuts, pig grower diet, piglet diet, rye, sorghum, triticale, wheat

#### ZEARALENONE

incidence: 3/32\*, conc. range: 20–440 µg/kg, country: UK<sup>94</sup>, \*imported?  
incidence: 8/40, conc. range: 80–480 µg/kg, Ø conc.: 270 µg/kg, country: UK<sup>95</sup>  
incidence: 6/6, conc. range: 14–61 µg/kg, Ø conc.: 42 µg/kg, country: The Netherlands<sup>103</sup>  
incidence: 9/11, conc. range: 3–350 µg/kg, Ø conc.: 60 µg/kg, country: Germany<sup>366</sup>  
see also alfalfa, barley, barley, husked, barley, unhusked (naked), barley and feed, bone meal, bran, broilers feed, *Carthamus* cake, chick pea, concentrate, mixed, corn cob mix silage, cotton cake, cottonseed, cottonseed cake, diet (dairy cow), diet (poultry), diets (mixed), feed, feed components, feed, mixed, feed, mixed (primarily maize also maize, oats, wheat), feed (bran), feed (broiler chicken), feed (cattle), feed (chicken), feed (dairy), feed

(developing pig), feed (mill run, from wheat), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (starter chicken), feedstuff, fish meal, forage grass, grain, bruised, grain, mixed feed, grains (no specification), hay, maize, maize ears, maize flakes, maize germ, maize germ/bran, maize kernels, maize meal, maize oil cake, maize screenings, maize stalks (pith), maize, “Baby”, maize, hybrid, maize, shelled, maize, unshelled, maize, white, maize grain, artificially dried, maize grain, crib dried, maize grain, ensiled, milk production mixed feed, oats, *Paspalum palidosum*, straw, peanut hulls/skins, rice bran, rice germ, rice germ cake, rye, silage, sorghum, soybeans, soybeans, extracted, sunflower cake, tapioca, triticale, wheat, wheat bran, wheat bran and chana testa, wheat soya meal

**Maize grains** Maize grains for feed may contain the following mycotoxins:

**AFATOXIN B**

incidence: ?/8, conc. range: 6–11 µg/kg, Ø conc.: 8.5 µg/kg, country: Pakistan<sup>162</sup>  
see also barley, cocoa (oilcake), cottonseed cake, feed, feed (cattle), feed (maize, gluten), feed (pig), feed (poultry), flour (wheat), lucern (dried), maize, maize gluten, oats, peanut (oil cake), rice, broken, sorghum, soybean (oil cake), sunflower (oilcake), wheat

**AFATOXIN G**

incidence: ?/8, conc. range: 4–5 µg/kg, Ø conc.: 4.5 µg/kg, country: Pakistan<sup>162</sup>  
see also cottonseed cake, feed (maize, gluten), maize gluten, rice, broken

**Maize grain, artificially dried** for feed may contain the following mycotoxins:

**ZEARALENONE**

incidence: 5/20, conc. range: 300–1200 µg/kg (4 sa), 1300–4000 µg/kg (1 sa), country: Yugoslavia<sup>314</sup>  
see also alfalfa, barley, barley, husked, barley, unhusked (naked), barley and feed, bone meal, bran, broilers feed, *Carthamus* cake,

chick pea, concentrate, mixed, corn cob mix silage, cotton cake, cottonseed, cottonseed cake, diet (dairy cow), diet (poultry), diets (mixed), feed, feed components, feed, mixed, feed, mixed (primarily maize also maize, oats, wheat), feed (bran), feed (broiler chicken), feed (cattle), feed (chicken), feed (dairy), feed (developing pig), feed (mill run, from wheat), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (starter chicken), feedstuff, fish meal, forage grass, grain, bruised, grain, mixed feed, grains (no specification), hay, maize, maize ears, maize flakes, maize germ, maize germ/bran, maize gluten, maize kernels, maize meal, maize oil cake, maize screenings, maize stalks (pith), maize, “Baby”, maize, hybrid, maize, shelled, maize, unshelled, maize grain, crib dried, maize grain, ensiled, milk production mixed feed, oats, *Paspalum palidosum*, straw, peanut hulls/skins, rice bran, rice germ, rice germ cake, rye, silage, sorghum, soybeans, soybeans, extracted, sunflower cake, tapioca, triticale, wheat, wheat bran, wheat bran and chana testa, wheat soya meal

**Maize grain, crib dried** may contain the following mycotoxins:

**ZEARALENONE**

incidence: 10/20, conc. range: 300–1200 (1 sa) µg/kg, 1300–4000 (5 sa) µg/kg, 4100–8500 (4 sa) µg/kg, country: Yugoslavia<sup>314</sup>  
see also alfalfa, barley, barley, husked, barley, unhusked (naked), barley and feed, bone meal, bran, broilers feed, *Carthamus* cake, chick pea, concentrate, mixed, corn cob mix silage, cotton cake, cottonseed, cottonseed cake, diet (dairy cow), diet (poultry), diets (mixed), feed, feed components, feed, mixed, feed, mixed (primarily maize also maize, oats, wheat), feed (bran), feed (broiler chicken), feed (cattle), feed (chicken), feed (dairy), feed (developing pig), feed (mill run, from wheat), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (starter chicken), feedstuff, fish meal, forage grass, grain, bruised, grain, mixed feed, grains (no specification), hay, maize, maize ears, maize

flakes, maize germ, maize germ/bran, maize gluten, maize kernels, maize meal, maize oil cake, maize screenings, maize stalks (pith), maize, "Baby", maize, hybrid, maize, shelled, maize, unshelled, maize grain, artificially dried, maize grain, ensiled, milk production mixed feed, oats, *Paspalum palidosum*, straw, peanut hulls/skins, rice bran, rice germ, rice germ cake, rye, silage, sorghum, soybeans, soybeans, extracted, sunflower cake, tapioca, triticale, wheat, wheat bran, wheat bran and chana testa, wheat soya meal

**Maize grain, ensiled** may contain the following mycotoxins:

#### ZEARALENONE

incidence: 8/20, conc. range: 300–1200 µg/kg (2 sa), 1300–4000 µg/kg (4 sa), 4100–8500 µg/kg (2 sa), country:

Yugoslavia<sup>314</sup>

see also alfalfa, barley, barley, husked, barley, unhusked (naked), barley and feed, bone meal, bran, broilers feed, *Carthamus* cake, chick pea, concentrate, mixed, corn cob mix silage, cotton cake, cottonseed, cottonseed cake, diet (dairy cow), diet (poultry), diets (mixed), feed, feed components, feed, mixed, feed, mixed (primarily maize also maize, oats, wheat), feed (bran), feed (broiler chicken), feed (cattle), feed (chicken), feed (dairy), feed (developing pig), feed (mill run, from wheat), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (starter chicken), feedstuff, fish meal, forage grass, grain, bruised, grain, mixed feed, grains (no specification), hay, maize, maize ears, maize flakes, maize germ, maize germ/bran, maize gluten, maize kernels, maize meal, maize oil cake, maize screenings, maize stalks (pith), maize, "Baby", maize, hybrid, maize, shelled, maize, unshelled, maize grain, artificially dried, maize grain, crib dried, milk production mixed feed, oats, *Paspalum palidosum*, straw, peanut hulls/skins, rice bran, rice germ, rice germ cake, rye, silage, sorghum, soybeans, soybeans, extracted, sunflower cake, tapioca, triticale, wheat,

wheat bran, wheat bran and chana testa, wheat soya meal

**Maize grits** Maize grits for feed may contain the following mycotoxins:

#### AFLATOXIN B<sub>1</sub>

incidence: 1/1, conc.: 2 µg/kg, country: Thailand<sup>117</sup>

see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60 % maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, maize, *Mahua* cake, maize germ, maize gluten, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk

production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

#### FUMONISIN B<sub>1</sub>

incidence: 1/1, conc.: 217 µg/kg, country: Thailand<sup>117</sup>

see also barley, bird food, wild, dog food, feed, feed, complete ration, feed, general, feed, layer, feed, maize-based, feed, mixed, feed, pelleted ration, feed, screenings, feed, sweet, feed (broilers), feed (cat), feed (chicken), feed (dog), feed (gluten), feed (horse), feed (maize), feed (pig), feed (poultry), feed (rat), feed (rodent), forage grass, maize, maize and maize screenings, maize bran, maize ears, maize fine fractions, maize flakes, maize germ, maize germ/bran, maize germ meal, maize gluten, maize kernels, maize meal, maize powder, maize screenings, maize, "Baby", maize, ground, maize, preharvest, maize, sweet feed, maize/oats mix, rat chow, silage, sorghum, soybeans, wheat

**Maize husk** may contain the following mycotoxins:

#### AFLATOXIN B<sub>1</sub>

incidence: 1/1, conc.: 76 µg/kg, country: India<sup>247</sup>

see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf

fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60 % maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, maize, *Mahua* cake, maize germ, maize gluten, maize grits, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum,

soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

#### AFLATOXIN B<sub>2</sub>

incidence: 1/1, conc.: 23 µg/kg, country: India<sup>247</sup>

see also animal feedstuffs (dairy cake), bird food, bird food, wild, biri testa, blackgram, blackgram husk, cottonseed, cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meats, dog food, egg production mixed feed, feed, compound, feed (cat), feed (cattle), feed (dog), feed (pig), feed (poultry), feed (rabbit), feed (sheep), fish meal, horsegram, maize, maize gluten, maize, ground, maize, preharvest, mung testa, niger cake, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanuts, peanut, kernels, redgram husk, rice bran, rice bran (deoiled), rice chaff, rice meal, rice (polish), sal seed cake, sesame cake, sorghum, soybean meal, soybeans, wheat, wheat bran

**Maize kernels** Maize kernels for feed may contain the following mycotoxins:

#### 3-ACETYLDEOXYNIVALENOL

incidence: 2/5\*, conc. range: 2400–7500 µg/kg, Ø conc.: 4950 µg/kg, country: Poland<sup>348</sup> \*ncac

see also barley, feed components, feed (poultry), feeds, grain, feeds, industrial, feedstuffs (rapeseed, turnip, fish meal, concentrates), maize, maize ears, maize gluten, maize meal, maize screenings, oats, wheat

#### 15-ACETYLDEOXYNIVALENOL

incidence: 2/5\*, conc. range: 500–600 µg/kg, Ø conc.: 550 µg/kg, country: Poland<sup>348</sup> \*ncac  
see also barley, feed components, feed, commercial mix, feed (poultry), maize, maize ears, maize germ, maize germ/bran, maize gluten, maize meal, maize screenings, maize, “Baby”, oats, silage, wheat

#### DEOXYNIVALENOL

incidence: 3/5\*, conc. range: 12500–175,200 µg/kg, Ø conc.: 88,633 µg/kg, country: Poland<sup>348</sup> ncac

see also barley, barley, husked, barley, unhusked (naked), barley (pressed), bone meal, bran, broilers feed, calf fattening mixed feed, coconut, expeller, corn cob mix silage, cottonseed, cottonseed cake, dairy cattle feed, egg production mixed feed, feed, feed components, feed, commercial mix, feed, mixed, feed, mixed (primarily maize), feed (barley), feed (cattle), feed (chicken), feed (dog), feed (fish), feed (mill run, from wheat), feed (mink), feed (pig), feed (poultry), feed (reindeer), feeds, grain, feeds, industrial, feedstuff, feedstuffs (rapeseed, turnip, fish meal, concentrates), fish meal, grain, mixed feed, grains, mixed, grains (no specification), maize, maize ears, maize fibre, maize germ, maize germ/bran, maize germ meal, maize gluten, maize meal, maize powder, maize screenings, maize stalks (pith), maize, “Baby”, maize, hybrid, maize, white, oats, rice bran, rice germ cake, rye, silage, sorghum, soybeans, triticale, wheat, wheat and barley, wheat, red hard winter, wheat, soft white winter, wheat, spring, wheat, winter

#### FUMONISIN B<sub>1</sub>

incidence: 10/10\* \*\*, conc. range: 360–1270 µg/kg, Ø conc.: 807 µg/kg, country: South Africa<sup>190</sup>, \*imported, \*\*ncac

see also barley, bird food, wild, dog food, feed, feed, complete ration, feed, general, feed, layer, feed, maize-based, feed, mixed, feed, pelleted ration, feed, screenings, feed, sweet, feed (broilers), feed (cat), feed (chicken), feed (dog), feed (gluten), feed (horse), feed (maize), feed (pig), feed (poultry), feed (rat), feed (rodent), forage grass, maize, maize and maize screenings, maize bran, maize ears, maize fine fractions, maize flakes, maize germ, maize germ/bran, maize germ meal, maize gluten, maize grits, maize meal, maize powder, maize screenings, maize, “Baby”, maize, ground, maize,



preharvest, maize, sweet feed, maize/oats mix, rat chow, silage, sorghum, soybeans, wheat

#### FUMONISIN B<sub>2</sub>

incidence: 10/10\* \*\*, conc. range: 120–430 µg/kg, Ø conc.: 269 µg/kg, country: South Africa<sup>190</sup>, \*imported, \*\*ncac  
see also barley, bird food, wild, dog food, feed, feed, maize-based, feed, mixed, feed (cat), feed (dog), feed (gluten), feed (horse), feed (maize), feed (poultry), feed (rodent), maize, maize bran, maize fine fractions, maize flakes, maize germ, maize germ/bran, maize germ meal, maize gluten, maize meal, maize powder, maize screenings, maize, “Baby”, maize, ground, maize, preharvest, rat chow, wheat

#### FUMONISIN B<sub>3</sub>

incidence: 10/10\* \*\*, conc. range: 50–210 µg/kg, Ø conc.: 102 µg/kg, country: South Africa<sup>190</sup>, \*imported, \*\*ncac  
see also feed, feed (maize), feed (rodent), maize, maize bran, maize fine fractions, maize germ meal, maize powder, maize screenings

#### FUSARENONE-X

incidence: 2/5\*, conc. range: 600–1800 µg/kg, Ø conc.: 1200 µg/kg, country: Poland<sup>348</sup> \*ncac  
see also barley, feed components, feed (poultry), maize, maize ears, maize germ/bran, maize gluten, maize meal, maize screenings, oats, wheat

#### NIVALENOL

incidence: 2/5\*, conc. range: 33200–42,500 µg/kg, Ø conc.: 37,850 µg/kg, country: Poland<sup>348</sup> \*ncac  
see also barley, barley, husked, barley, unhusked (naked), barley (pressed), bran, feed, feed components, feed (cattle), feed (poultry), feed (reindeer), feeds, industrial, maize, maize ears, maize germ, maize germ/bran, maize gluten, maize meal, maize powder, maize screenings, maize, “Baby”, oats, rye, silage, triticale, wheat

#### ZEARALENONE

incidence: 5/5\*, conc. range: 700–10,000 µg/kg, Ø conc.: 4140 µg/kg, country: Poland<sup>348</sup>; \*ncac  
see also alfalfa, barley, barley, husked, barley, unhusked (naked), barley and feed, bone meal, bran, broilers feed, *Carthamus* cake, chick pea, concentrate, mixed, corn cob mix silage, cotton cake, cottonseed, cottonseed cake, diet (dairy cow), diet (poultry), diets (mixed), feed, feed components, feed, mixed, feed, mixed (primarily maize also maize, oats, wheat), feed (bran), feed (broiler chicken), feed (cattle), feed (chicken), feed (dairy), feed (developing pig), feed (mill run, from wheat), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (starter chicken), feedstuff, fish meal, forage grass, grain, bruised, grain, mixed feed, grains (no specification), hay, maize, maize ears, maize flakes, maize germ, maize germ/bran, maize gluten, maize meal, maize oil cake, maize screenings, maize stalks (pith), maize, “Baby”, maize, hybrid, maize, shelled, maize, unshelled, maize grain, artificially dried, maize grain, crib dried, maize grain, ensiled, milk production mixed feed, oats, *Paspalum palidosum*, straw, peanut hulls/skins, rice bran, rice germ, rice germ cake, rye, silage, sorghum, soybeans, soybeans, extracted, sunflower cake, tapioca, triticale, wheat, wheat bran, wheat bran and chana testa, wheat soya meal

**Maize meal** Maize meal for feed may contain the following mycotoxins:

#### 3-ACETYLDEOXYNIVALENOL

incidence: 3/3, conc. range: 60–90 µg/kg, Ø conc.: 73.3 µg/kg, country: UK<sup>95</sup>  
see also barley, feed components, feed (poultry), feeds, grain, feeds, industrial, feedstuffs (rapeseed, turnip, fish meal, concentrates), maize, maize ears, maize gluten, maize kernels, maize screenings, oats, wheat

#### 15-ACETYLDEOXYNIVALENOL

incidence: 3/3, conc. range: 470–680 µg/kg, Ø conc.: 576.7 µg/kg, country: UK<sup>95</sup>

see also barley, feed components, feed, commercial mix, feed (poultry), maize, maize ears, maize germ, maize germ/bran, maize gluten, maize kernels, maize screenings, maize, "Baby", oats, silage, wheat

#### AFLATOXIN B<sub>1</sub>

incidence: ?/10, conc. range: 10–20 µg/kg, country: India<sup>183</sup>

see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20% peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5% peanut products), dairy cattle feed (containing 6–10% peanut products), dairy cattle feed (containing 6–12% peanut products), dairy cattle feed (containing more than 20% peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60% maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk

production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

#### DEOXYNIVALENOL

incidence: 3/3, conc. range: 3500–4900 µg/kg, Ø conc.: 4433.3 µg/kg, country: UK<sup>95</sup>

incidence: 5/6, conc. range: 140–1000 µg/kg, Ø conc.: 670 µg/kg, country: The Netherlands<sup>103</sup>

see also barley, barley, husked, barley, unhusked (naked), barley (pressed), bone meal, bran, broilers feed, calf fattening mixed feed, coconut, expeller, corn cob mix silage, cottonseed, cottonseed cake, dairy cattle feed, egg production mixed feed, feed, feed components, feed, commercial mix, feed, mixed, feed, mixed (primarily maize), feed (barley), feed (cattle), feed (chicken), feed (dog), feed (fish), feed (mill run, from wheat), feed (mink), feed (pig), feed (poultry), feed (reindeer), feeds, grain, feeds, industrial, feedstuff, feedstuffs (rapeseed, turnip, fish meal, concentrates), fish meal, grain, mixed feed, grains, mixed, grains (no specification), maize, maize ears, maize fibre, maize germ, maize germ/bran, maize germ meal, maize gluten, maize kernels, maize powder, maize screenings, maize stalks (pith), maize, "Baby", maize, hybrid, maize, white, oats, rice bran, rice germ cake, rye, silage, sorghum, soybeans, triticale, wheat, wheat and barley, wheat, red hard winter, wheat, soft white winter, wheat, spring, wheat, winter

**FUMONISIN B<sub>1</sub>**

incidence: 3/3, conc. range:

4900–12,000 µg/kg, Ø conc.: 8133.3 µg/kg,  
country: UK<sup>95</sup>

incidence: 10/10, conc. range:

380–2800 µg/kg, Ø conc.: 1220 µg/kg,  
country: USA<sup>257</sup>

incidence: 8/8, conc. range: 1723–5964 µg/kg,  
Ø conc.: 2899.5 µg/kg, country: Spain<sup>347</sup>

see also barley, bird food, wild, dog food, feed, feed, complete ration, feed, general, feed, layer, feed, maize-based, feed, mixed, feed, pelleted ration, feed, screenings, feed, sweet, feed (broilers), feed (cat), feed (chicken), feed (dog), feed (gluten), feed (horse), feed (maize), feed (pig), feed (poultry), feed (rat), feed (rodent), forage grass, maize, maize and maize screenings, maize bran, maize ears, maize fine fractions, maize flakes, maize germ, maize germ/bran, maize germ meal, maize gluten, maize grits, maize kernels, maize powder, maize screenings, maize, “Baby”, maize, ground, maize, preharvest, maize, sweet feed, maize/oats mix, rat chow, silage, sorghum, soybeans, wheat

**FUMONISIN B<sub>2</sub>**

incidence: 3/3, conc. range: 700–1300 µg/kg,  
Ø conc.: 1000 µg/kg, country: UK<sup>95</sup>

see also barley, bird food, wild, dog food, feed, feed, maize-based, feed, mixed, feed (cat), feed (dog), feed (gluten), feed (horse), feed (maize), feed (poultry), feed (rodent), maize, maize bran, maize fine fractions, maize flakes, maize germ, maize germ/bran, maize germ meal, maize gluten, maize kernels, maize powder, maize screenings, maize, “Baby”, maize, ground, maize, preharvest, rat chow, wheat

**FUMONISINS**

incidence: 5/9\*, conc. range: 20–1030 µg/kg,  
country: UK<sup>94</sup>, \*imported?

see also feed (cattle and dairy), feed (chicken), feed (dairy), feed (horse), maize, maize germ, maize gluten, maize screenings

**FUSARENONE-X**

incidence: 3/3, conc. range: 35–100 µg/kg,  
Ø conc.: 67 µg/kg, country: UK<sup>95</sup>

see also barley, feed components, feed (poultry), maize, maize ears, maize germ/bran, maize gluten, maize kernels, maize screenings, oats, wheat

**HT-2 TOXIN**

incidence: 3/3, conc. range: 125–210 µg/kg,  
Ø conc.: 161.7 µg/kg, country: UK<sup>95</sup>

see also barley, feed components, feed (dog), feed (fish), feed (pig), feed (poultry), feed (reindeer), grain, mixed feed, grains, mixed, grains (no specification), maize, maize germ/bran, maize gluten, maize screenings, oats, rye, silage, wheat

**MONILIFORMIN**

incidence: 3/3, conc. range: 1200–3200 µg/kg,  
Ø conc.: 1966.7 µg/kg, country: UK<sup>95</sup>

see also barley, feed, mixed, feed (poultry), maize, maize flakes, maize germ, maize germ/bran, maize gluten, maize screenings, maize, “Baby”, oats, rice bran, triticale, wheat, wheat, summer, wheat, winter

**MONOACETOXYSCIRPENOL**

incidence: 3/3, conc. range: 10–15 µg/kg,  
Ø conc.: 11.7 µg/kg, country: UK<sup>95</sup>

see also feed components, maize, maize gluten, maize screenings, silage, wheat

**NIVALENOL**

incidence: 3/3, conc. range: 470–1600 µg/kg,  
Ø conc.: 930 µg/kg, country: UK<sup>95</sup>

see also barley, barley, husked, barley, unhusked (naked), barley (pressed), bran, feed, feed components, feed (cattle), feed (poultry), feed (reindeer), feeds, industrial, maize, maize ears, maize germ, maize germ/bran, maize gluten, maize kernels, maize powder, maize screenings, maize, “Baby”, oats, rye, silage, triticale, wheat

**OCHRATOXIN A**

incidence: 1/6, conc.: 3 µg/kg, country: The Netherlands<sup>103</sup>

see also alfalfa, barley, barley, oats, barley (high moisture), barley-soybean diet, bird food, domestic, bird food, wild, broilers feed, cereal grains, citrus pulp, coconut, expeller, corn cob mix silage, diet (dairy cow), diet (poultry), diet (starter), dog food, eat, egg

production mixed feed, feed, feed wheat, oat and barley, feed, commercial mix, feed, mixed, feed, mixed (pelleted), feed (broilers), feed (cat), feed (cattle), feed (cereals), feed (pig), feed ec (pig), feed (poultry), feed ec (poultry), feed (poultry, pig), feed ec (rabbit), feed (trout), grain, mixed feed, grains, mixed, grains (heated), hay, horse bean, maize, maize feed, milo, maize gluten, maize, white, *Makhana (Euryale ferox* Salisb) puffs, milk production mixed feed, millet, oat and barley (hammer-milled), oats, palm products, peanut cake, peas, peas and beans, pet food, pig feedstuffs, pig grower diet, pig meal, piglet diet, poultry feedstuffs, rice bran, rice germ, rice germ cake, rye, sorghum, soybean groats, sunflower, sunflower seeds, extracted, tapioca, triticale, *Vicia faba*, wheat, wheat and barley, wheat bran, wheat hay, wheat, oats

#### PATULIN

incidence: ?/10, conc.: 20 µg/kg, country: India<sup>183</sup>

see also diet (grower), hay, piglet diet, wheat

#### T-2 TOXIN

incidence: 3/3, conc. range: 80–170 µg/kg,

Ø conc.: 120 µg/kg, country: UK<sup>95</sup>

see also alfalfa, barley, bran, diet (grower), diet (poultry), feed, feed components, feed, layer, feed, mixed, feed (dog), feed (fish), feed (mink), feed (pig), feed (poultry), feedstuff, forage grass, grain, mixed feed, grains (no specification), hay, maize, maize germ/bran, maize gluten, maize screenings, maize stalks (pith), oat and barley (hammer-milled), oats, peanuts, pig grower diet, piglet diet, rye, sorghum, triticale, wheat

#### ZEARALENONE

incidence: 3/3, conc. range: 640–1500 µg/kg,

Ø conc.: 1080 µg/kg, country: UK<sup>95</sup>

incidence: 5/6, conc. range: 20–240 µg/kg,

Ø conc.: 150 µg/kg, country: The Netherlands<sup>103</sup>

incidence: ?/10, conc. range: 20 µg/kg,

country: India<sup>183</sup>

incidence: 9/11, conc. range: 12–69 µg/kg,

country: USA<sup>293</sup>

see also alfalfa, barley, barley, husked, barley, unhusked (naked), barley and feed, bone meal, bran, broilers feed, *Carthamus* cake, chick pea, concentrate, mixed, corn cob mix silage, cotton cake, cottonseed, cottonseed cake, diet (dairy cow), diet (poultry), diets (mixed), feed, feed components, feed, mixed, feed, mixed (primarily maize also maize, oats, wheat), feed (bran), feed (broiler chicken), feed (cattle), feed (chicken), feed (dairy), feed (developing pig), feed (mill run, from wheat), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (starter chicken), feedstuff, fish meal, forage grass, grain, bruised, grain, mixed feed, grains (no specification), hay, maize, maize ears, maize flakes, maize germ, maize germ/bran, maize gluten, maize kernels, maize oil cake, maize screenings, maize stalks (pith), maize, “Baby”, maize, hybrid, maize, shelled, maize, unshelled, maize, white, maize grain, artificially dried, maize grain, crib dried, maize grain, ensiled, milk production mixed feed, oats, *Paspalum palidosum*, straw, peanut hulls/skins, rice bran, rice germ, rice germ cake, rye, silage, sorghum, soybeans, soybeans, extracted, sunflower cake, tapioca, triticale, wheat, wheat bran, wheat bran and chana testa, wheat soya meal

**Maize oil cake** may contain the following mycotoxins:

#### AFLATOXIN B<sub>1</sub>

incidence: ?/10, conc. range: 10–20 µg/kg,

country: India<sup>183</sup>

see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20% peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed

meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cydad meal, dairy cattle feed, dairy cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60 % maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

#### ZEARALENONE

incidence: ?/10, conc. range: 20 µg/kg,

country: India<sup>183</sup>

see also alfalfa, barley, barley, husked, barley, unhusked (naked), barley and feed, bone

meal, bran, broilers feed, *Carthamus* cake, chick pea, concentrate, mixed, corn cob mix silage, cotton cake, cottonseed, cottonseed cake, diet (dairy cow), diet (poultry), diets (mixed), feed, feed components, feed, mixed, feed, mixed (primarily maize also maize, oats, wheat), feed (bran), feed (broiler chicken), feed (cattle), feed (chicken), feed (dairy), feed (developing pig), feed (mill run, from wheat), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (starter chicken), feedstuff, fish meal, forage grass, grain, bruised, grain, mixed feed, grains (no specification), hay, maize, maize ears, maize flakes, maize germ, maize germ/bran, maize gluten, maize kernels, maize meal, maize screenings, maize stalks (pith), maize, “Baby”, maize, hybrid, maize, shelled, maize, unshelled, maize, white, maize grain, artificially dried, maize grain, crib dried, maize grain, ensiled, milk production mixed feed, oats, *Paspalum palidosum*, straw, peanut hulls/skins, rice bran, rice germ, rice germ cake, rye, silage, sorghum, soybeans, soybeans, extracted, sunflower cake, tapioca, triticale, wheat, wheat bran, wheat bran and chana testa, wheat soya meal

**Maize powder** may contain the following mycotoxins:

#### AFLATOXIN B<sub>1</sub>

incidence: 13/17, conc. range: 8.6–75 µg/kg,

Ø conc.: 30.1 µg/kg, country: Vietnam<sup>104</sup>

see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles,

grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60 % maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

#### DEOXYNIVALENOL

incidence: 4/17, conc. range:

1530–6510 µg/kg, Ø conc.: 3170 µg/kg,

country: Vietnam<sup>104</sup>

see also barley, barley, husked, barley, unhusked (naked), barley (pressed), bone meal, bran, broilers feed, calf fattening mixed

feed, coconut, expeller, corn cob mix silage, cottonseed, cottonseed cake, dairy cattle feed, egg production mixed feed, feed, feed components, feed, commercial mix, feed, mixed, feed, mixed (primarily maize), feed (barley), feed (cattle), feed (chicken), feed (dog), feed (fish), feed (mill run, from wheat), feed (mink), feed (pig), feed (poultry), feed (reindeer), feeds, grain, feeds, industrial, feedstuff, feedstuffs (rapeseed, turnip, fish meal, concentrates), fish meal, grain, mixed feed, grains, mixed, grains (no specification), maize, maize ears, maize fibre, maize germ, maize germ/bran, maize germ meal, maize gluten, maize kernels, maize meal, maize screenings, maize stalks (pith), maize, “Baby”, maize, hybrid, maize, white, oats, rice bran, rice germ cake, rye, silage, sorghum, soybeans, triticale, wheat, wheat and barley, wheat, red hard winter, wheat, soft white winter, wheat, spring, wheat, winter

#### FUMONISIN B<sub>1</sub>

incidence: 15/17, conc. range:

268–1516 µg/kg, Ø conc.: 780 µg/kg, country: Vietnam<sup>104</sup>

see also barley, bird food, wild, dog food, feed, feed, complete ration, feed, general, feed, layer, feed, maize-based, feed, mixed, feed, pelleted ration, feed, screenings, feed, sweet, feed (broilers), feed (cat), feed (chicken), feed (dog), feed (gluten), feed (horse), feed (maize), feed (pig), feed (poultry), feed (rat), feed (rodent), forage grass, maize, maize and maize screenings, maize bran, maize ears, maize fine fractions, maize flakes, maize germ, maize germ/bran, maize germ meal, maize gluten, maize grits, maize kernels, maize meal, maize screenings, maize, “Baby”, maize, ground, maize, preharvest, maize, sweet feed, maize/oats mix, rat chow, silage, sorghum, soybeans, wheat

#### FUMONISIN B<sub>2</sub>

incidence: 12/17, conc. range: 155–401 µg/kg,

Ø conc.: 289 µg/kg, country: Vietnam<sup>104</sup>

see also barley, bird food, wild, dog food, feed, feed, maize-based, feed, mixed, feed

(cat), feed (dog), feed (gluten), feed (horse), feed (maize), feed (poultry), feed (rodent), maize, maize bran, maize fine fractions, maize flakes, maize germ, maize germ/bran, maize germ meal, maize gluten, maize kernels, maize meal, maize screenings, maize, “Baby”, maize, ground, maize, preharvest, rat chow, wheat

#### FUMONISIN B<sub>3</sub>

incidence: 10/17, conc. range: 101–268 µg/kg, Ø conc.: 176 µg/kg, country: Vietnam<sup>104</sup>  
see also feed, feed (maize), feed (rodent), maize, maize bran, maize fine fractions, maize germ meal, maize kernels, maize screenings

#### NIVALENOL

incidence: 2/17, conc. range: 780–1950 µg/kg, Ø conc.: 1365 µg/kg, country: Vietnam<sup>104</sup>  
see also barley, barley, husked, barley, unhusked (naked), barley (pressed), bran, feed, feed components, feed (cattle), feed (poultry), feed (reindeer), feeds, industrial, maize, maize ears, maize germ, maize germ/bran, maize gluten, maize kernels, maize meal, maize screenings, maize, “Baby”, oats, rye, silage, triticale, wheat

**Maize screenings** may contain the following mycotoxins:

#### 3-ACETYLDEOXYNIVALENOL

incidence: 3/4, conc. range: 40–110 µg/kg, Ø conc.: 66.7 µg/kg, country: UK<sup>95</sup>  
see also barley, feed components, feed (poultry), feeds, grain, feeds, industrial, feedstuffs (rapeseed, turnip, fish meal, concentrates), maize, maize ears, maize gluten, maize kernels, maize meal, oats, wheat

#### 15-ACETYLDEOXYNIVALENOL

incidence: 4/4, conc. range: 250–590 µg/kg, Ø conc.: 375 µg/kg, country: UK<sup>95</sup>  
see also barley, feed components, feed, commercial mix, feed (poultry), maize, maize ears, maize germ, maize germ/bran, maize gluten, maize kernels, maize meal, maize, “Baby”, oats, silage, wheat

#### AFLATOXIN B<sub>1</sub>

incidence: 1/1, conc.: 20 µg/kg, country: USA<sup>191</sup>

see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60 % maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal,

peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

#### DEOXYNIVALENOL

incidence: 4/4, conc. range: 2500–4400 µg/kg, Ø conc.: 3575 µg/kg, country: UK<sup>95</sup>  
 incidence: 1/1, conc.: 0.3 µg/kg, country: USA<sup>191</sup>

see also barley, barley, husked, barley, unhusked (naked), barley (pressed), bone meal, bran, broilers feed, calf fattening mixed feed, coconut, expeller, corn cob mix silage, cottonseed, cottonseed cake, dairy cattle feed, egg production mixed feed, feed, feed components, feed, commercial mix, feed, mixed, feed, mixed (primarily maize), feed (barley), feed (cattle), feed (chicken), feed (dog), feed (fish), feed (mill run, from wheat), feed (mink), feed (pig), feed (poultry), feed (reindeer), feeds, grain, feeds, industrial, feedstuff, feedstuffs (rapeseed, turnip, fish meal, concentrates), fish meal, grain, mixed feed, grains, mixed, grains (no specification), maize, maize ears, maize fibre, maize germ, maize germ/bran, maize germ meal, maize gluten, maize kernels, maize meal, maize powder, maize stalks (pith), maize, “Baby”, maize, hybrid, maize, white, oats, rice bran, rice germ cake, rye, silage, sorghum, soybeans, triticale, wheat, wheat and barley, wheat, red hard winter, wheat, soft white winter, wheat, spring, wheat, winter

#### FUMONISIN B<sub>1</sub>

incidence: 2/2, conc. range:  
 105,000–155,000 µg/kg, Ø conc.:  
 130,000 µg/kg, country: USA<sup>58</sup>  
 incidence: 5/7, conc. range:  
 3600–330,000 µg/kg, Ø conc.: 120,000 µg/kg,  
 country: USA<sup>58</sup>

incidence: 1/1, conc.: 2000 µg/kg, country:  
 USA<sup>58</sup>

incidence: 1/1, conc.: 119,000 µg/kg, country:  
 USA<sup>58</sup>

incidence: 1/1, conc.: 125,000 µg/kg, country:  
 USA<sup>58</sup>

incidence: 4/4, conc. range:

21,000–27,000 µg/kg, Ø conc.: 23,750 µg/kg,  
 country: UK<sup>95</sup>

incidence: 1/1, conc.: 60,000 µg/kg, country:  
 Italy<sup>138</sup>

incidence: 15/15, conc. range:

470–4340 µg/kg, Ø conc.: 2100 µg/kg\*,  
 country: South Africa<sup>146</sup>, \*mean of all samples

incidence: 24/24, conc. range:

230–3780 µg/kg, Ø conc.: 1150 µg/kg\*,  
 country: South Africa<sup>147</sup>, \*mean of all samples

incidence: 37/37, conc. range:

50–44,750 µg/kg, Ø conc.: 5010 µg/kg\*,  
 country: South Africa<sup>147</sup>, \*mean of all samples

incidence: ?/180, conc. range:

100–239,000 µg/kg, country: USA<sup>151</sup>

incidence: 6/6, conc. range:

1740–196,500 µg/kg, Ø conc.: 55,400 µg/kg,  
 country: USA<sup>153</sup>

incidence: 14/15, conc. range: 0–1500 µg/kg,  
 Ø conc.: 417 µg/kg, country: Spain<sup>159</sup>

incidence: 4/4, conc. range:

23,000–46,000 µg/kg, Ø conc.: 30,250 µg/kg,  
 country: USA<sup>189</sup>

incidence: 1/1, conc.: 166,000 µg/kg,  
 country: USA<sup>191</sup>

incidence: ?/17, conc. range:

61,000–160,000 µg/kg, country: USA<sup>319</sup>

incidence: 12/12, conc. range:

772.4–5462 µg/kg, Ø conc.: 2152.7 µg/kg,  
 country: Spain<sup>347</sup>

see also barley, bird food, wild, dog food, feed, feed, complete ration, feed, general, feed, layer, feed, maize-based, feed, mixed, feed, pelleted ration, feed, screenings, feed, sweet, feed (broilers), feed (cat), feed (chicken), feed (dog), feed (gluten), feed (horse), feed (maize), feed (pig), feed (poultry), feed (rat), feed (rodent), forage grass, maize, maize and maize screenings, maize bran, maize ears, maize fine fractions, maize flakes, maize germ, maize germ/bran,



maize germ meal, maize gluten, maize grits, maize kernels, maize meal, maize powder, maize, "Baby", maize, ground, maize, preharvest, maize, sweet feed, maize/oats mix, rat chow, silage, sorghum, soybeans, wheat

#### FUMONISIN B<sub>2</sub>

incidence: 4/4, conc. range: 2800–3500 µg/kg, Ø conc.: 3225 µg/kg, country: UK<sup>95</sup>

incidence: 1/1, conc.: 15,000 µg/kg, country: Italy<sup>138</sup>

incidence: 15/15, conc. range:

100–2600 µg/kg, Ø conc.: 970 µg/kg\*,

country: South Africa<sup>146</sup>, \*mean of all samples

incidence: 24/24, conc. range: 0–1420 µg/kg,

Ø conc.: 400 µg/kg\*, country: South Africa<sup>147</sup>, \*mean of all samples

incidence: 37/37, conc. range: 0–26,890 µg/kg,

Ø conc.: 2360 µg/kg\*, country: South

Africa<sup>147</sup>, \*mean of all samples

incidence: 6/6, conc. range: 590–42,840 µg/kg,

Ø conc.: 15,080 µg/kg, country: USA<sup>153</sup>

incidence: 7/15, conc. range: 0–500 µg/kg,

Ø conc.: 236 µg/kg, country: Spain<sup>159</sup>

incidence: 1/1, conc.: 48,000 µg/kg, country: USA<sup>191</sup>

incidence: 3/17, conc. range:

19,000–49,000 µg/kg, country: USA<sup>319</sup>

see also barley, bird food, wild, dog food, feed, feed, maize-based, feed, mixed, feed (cat), feed (dog), feed (gluten), feed (horse), feed (maize), feed (poultry), feed (rodent), maize, maize bran, maize fine fractions, maize flakes, maize germ, maize germ/bran, maize germ meal, maize gluten, maize kernels, maize meal, maize powder, maize, "Baby", maize, ground, maize, preharvest, rat chow, wheat

#### FUMONISIN B<sub>3</sub>

incidence: 24/24, conc. range: 0–550 µg/kg, Ø conc.: 160 µg/kg\*, country: South Africa<sup>147</sup>,

\*mean of all samples

incidence: 37/37, conc. range:

0–12,180 µg/kg, Ø conc.: 840 µg/kg\*, country:

South Africa<sup>147</sup>, \*mean of all samples

see also feed, feed (maize), feed (rodent),

maize, maize bran, maize fine fractions,

maize germ meal, maize kernels, maize

powder

#### FUMONISIN

incidence: 85/85, conc. range:

2600–32,000 µg/kg, Ø conc.: 12,100 µg/kg,

country: USA<sup>370</sup>

see also maize, maize, shelled

#### FUMONISINS

incidence: 4/4\*, conc. range: 100–2700 µg/kg, country: UK<sup>94</sup>, \*imported?

incidence: 55/55, conc. range:

≤5000–>25,000 µg/kg, country: USA<sup>147</sup>

incidence: 9/9, conc. range:

≤5000–>25,000 µg/kg, country: USA<sup>147</sup>

see also feed (cattle and dairy), feed (chicken), feed (dairy), feed (horse), maize, maize germ, maize gluten, maize meal

#### FUSARENONE-X

incidence: 4/4, conc. range: 35–90 µg/kg,

Ø conc.: 71.3 µg/kg, country: UK<sup>95</sup>

see also barley, feed components, feed

(poultry), maize, maize ears, maize

germ/bran, maize gluten, maize kernels,

maize meal, oats, wheat

#### FUSARIN-C

incidence: 1/1, conc.: 390 µg/kg,

country: USA<sup>69</sup>

#### HT-2 TOXIN

incidence: 4/4, conc. range: 60–250 µg/kg,

Ø conc.: 150 µg/kg, country: UK<sup>95</sup>

see also barley, feed components, feed (dog),

feed (fish), feed (pig), feed (poultry), feed

(reindeer), grain, mixed feed, grains, mixed,

grains (no specification), maize, maize

germ/bran, maize gluten, maize meal, oats,

rye, silage, wheat

#### MONILIFORMIN

incidence: 1/1, conc.: 2820 µg/kg,

country: USA<sup>69</sup>

incidence: 4/4, conc. range: 2200–4600 µg/kg,

Ø conc.: 3150 µg/kg, country: UK<sup>95</sup>

see also barley, feed, mixed, feed (poultry),

maize, maize flakes, maize germ, maize

germ/bran, maize gluten, maize meal, maize,

"Baby", oats, rice bran, triticale, wheat,

wheat, summer, wheat, winter

**MONOACETOXYSCIRPENOL**

incidence: 3/4, conc. range: 10–20 µg/kg,  
 Ø conc.: 15 µg/kg, country: UK<sup>95</sup>  
 see also feed components, maize, maize  
 gluten, maize meal, silage, wheat

**NIVALENOL**

incidence: 4/4, conc. range: 590–2300 µg/kg,  
 Ø conc.: 1322.5 µg/kg, country: UK<sup>95</sup>  
 see also barley, barley, husked, barley,  
 unhusked (naked), barley (pressed), bran,  
 feed, feed components, feed (cattle), feed  
 (poultry), feed (reindeer), feeds, industrial,  
 maize, maize ears, maize germ, maize  
 germ/bran, maize gluten, maize kernels,  
 maize meal, maize powder, maize, “Baby”,  
 oats, rye, silage, triticale, wheat

**T-2 TOXIN**

incidence: 4/4, conc. range: 40–130 µg/kg,  
 Ø conc.: 102.5 µg/kg, country: UK<sup>95</sup>  
 see also alfalfa, barley, bran, diet (grower),  
 diet (poultry), feed, feed components, feed,  
 layer, feed, mixed, feed (dog), feed (fish),  
 feed (mink), feed (pig), feed (poultry),  
 feedstuff, forage grass, grain, mixed feed,  
 grains (no specification), hay, maize, maize  
 germ/bran, maize gluten, maize meal, maize  
 stalks (pith), oat and barley  
 (hammer-milled), oats, peanuts, pig grower  
 diet, piglet diet, rye, sorghum, triticale, wheat

**ZEARALENONE**

incidence: 3/4\*, conc. range: 20–510 µg/kg,  
 country: UK<sup>94</sup>, \*imported?  
 incidence: 4/4, conc. range: 1300–1800 µg/kg,  
 Ø conc.: 1450 µg/kg, country: UK<sup>95</sup>  
 see also alfalfa, barley, barley, husked, barley,  
 unhusked (naked), barley and feed, bone  
 meal, bran, broilers feed, *Carthamus* cake,  
 chick pea, concentrate, mixed, corn cob mix  
 silage, cotton cake, cottonseed, cottonseed  
 cake, diet (dairy cow), diet (poultry), diets  
 (mixed), feed, feed components, feed, mixed,  
 feed, mixed (primarily maize also maize, oats,  
 wheat), feed (bran), feed (broiler chicken),  
 feed (cattle), feed (chicken), feed (dairy), feed  
 (developing pig), feed (mill run, from  
 wheat), feed (miscellaneous), feed (pig), feed  
 (poultry), feed (poultry, pig), feed (starter

chicken), feedstuff, fish meal, forage grass,  
 grain, bruised, grain, mixed feed, grains (no  
 specification), hay, maize, maize ears, maize  
 flakes, maize germ, maize germ/bran, maize  
 gluten, maize kernels, maize meal, maize oil  
 cake, maize stalks (pith), maize, “Baby”,  
 maize, hybrid, maize, shelled, maize,  
 unshelled, maize, white, maize grain,  
 artificially dried, maize grain, crib dried,  
 maize grain, ensiled, milk production mixed  
 feed, oats, *Paspalum palidosum*, straw, peanut  
 hulls/skins, rice bran, rice germ, rice germ  
 cake, rye, silage, sorghum, soybeans,  
 soybeans, extracted, sunflower cake, tapioca,  
 triticale, wheat, wheat bran, wheat bran and  
 chana testa, wheat soya meal

**Maize stalks (pith)** may contain the following  
 mycotoxins:

**DEOXYNIVALENOL**

incidence: ?/50, conc. range: 1500 µg/kg,  
 country: USA<sup>220</sup>  
 see also barley, barley, husked, barley,  
 unhusked (naked), barley (pressed), bone  
 meal, bran, broilers feed, calf fattening mixed  
 feed, coconut, expeller, corn cob mix silage,  
 cottonseed, cottonseed cake, dairy cattle feed,  
 egg production mixed feed, feed, feed  
 components, feed, commercial mix, feed,  
 mixed, feed, mixed (primarily maize), feed  
 (barley), feed (cattle), feed (chicken), feed  
 (dog), feed (fish), feed (mill run, from  
 wheat), feed (mink), feed (pig), feed  
 (poultry), feed (reindeer), feeds, grain, feeds,  
 industrial, feedstuff, feedstuffs (rapeseed,  
 turnip, fish meal, concentrates), fish meal,  
 grain, mixed feed, grains, mixed, grains (no  
 specification), maize, maize ears, maize fibre,  
 maize germ, maize germ/bran, maize germ  
 meal, maize gluten, maize kernels, maize  
 meal, maize powder, maize screenings, maize,  
 “Baby”, maize, hybrid, maize, white, oats, rice  
 bran, rice germ cake, rye, silage, sorghum,  
 soybeans, triticale, wheat, wheat and barley,  
 wheat, red hard winter, wheat, soft white  
 winter, wheat, spring, wheat, winter

## T-2 TOXIN

incidence: ?/50, conc.: 110 µg/kg,

country: USA<sup>220</sup>

see also alfalfa, barley, bran, diet (grower), diet (poultry), feed, feed components, feed, layer, feed, mixed, feed (dog), feed (fish), feed (mink), feed (pig), feed (poultry), feedstuff, forage grass, grain, mixed feed, grains (no specification), hay, maize, maize germ/bran, maize gluten, maize meal, maize screenings, oat and barley (hammer-milled), oats, peanuts, pig grower diet, piglet diet, rye, sorghum, triticale, wheat

## ZEARALENONE

incidence: ?/50, conc.: 2800 µg/kg,

country: USA<sup>220</sup>

see also alfalfa, barley, barley, husked, barley, unhusked (naked), barley and feed, bone meal, bran, broilers feed, *Carthamus* cake, chick pea, concentrate, mixed, corn cob mix silage, cotton cake, cottonseed, cottonseed cake, diet (dairy cow), diet (poultry), diets (mixed), feed, feed components, feed, mixed, feed, mixed (primarily maize also maize, oats, wheat), feed (bran), feed (broiler chicken), feed (cattle), feed (chicken), feed (dairy), feed (developing pig), feed (mill run, from wheat), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (starter chicken), feedstuff, fish meal, forage grass, grain, bruised, grain, mixed feed, grains (no specification), hay, maize, maize ears, maize flakes, maize germ, maize germ/bran, maize gluten, maize kernels, maize meal, maize oil cake, maize screenings, maize, "Baby", maize, hybrid, maize, shelled, maize, unshelled, maize, white, maize grain, artificially dried, maize grain, crib dried, maize grain, ensiled, milk production mixed feed, oats, *Paspalum palidusum*, straw, peanut hulls/skins, rice bran, rice germ, rice germ cake, rye, silage, sorghum, soybeans, soybeans, extracted, sunflower cake, tapioca, triticale, wheat, wheat bran, wheat bran and chana testa, wheat soya meal

**Maize, "Baby"** may contain the following mycotoxins:

## 15-ACETYLDEOXYNIVALENOL

incidence: 4/4, conc. range: 30–90 µg/kg,

Ø conc.: 52.5 µg/kg, country: UK<sup>95</sup>

see also barley, feed components, feed, commercial mix, feed (poultry), maize, maize ears, maize germ, maize germ/bran, maize gluten, maize kernels, maize meal, maize screenings, oats, silage, wheat

## DEOXYNIVALENOL

incidence: 4/4, conc. range: 100–340 µg/kg,

Ø conc.: 192.5 µg/kg, country: UK<sup>95</sup>

see also barley, barley, husked, barley, unhusked (naked), barley (pressed), bone meal, bran, broilers feed, calf fattening mixed feed, coconut, expeller, corn cob mix silage, cottonseed, cottonseed cake, dairy cattle feed, egg production mixed feed, feed, feed components, feed, commercial mix, feed, mixed, feed, mixed (primarily maize), feed (barley), feed (cattle), feed (chicken), feed (dog), feed (fish), feed (mill run, from wheat), feed (mink), feed (pig), feed (poultry), feed (reindeer), feeds, grain, feeds, industrial, feedstuff, feedstuffs (rapeseed, turnip, fish meal, concentrates), fish meal, grain, mixed feed, grains, mixed, grains (no specification), maize, maize ears, maize fibre, maize germ, maize germ/bran, maize germ meal, maize gluten, maize kernels, maize meal, maize powder, maize screenings, maize stalks (pith), maize, hybrid, maize, white, oats, rice bran, rice germ cake, rye, silage, sorghum, soybeans, triticale, wheat, wheat and barley, wheat, red hard winter, wheat, soft white winter, wheat, spring, wheat, winter

FUMONISIN B<sub>1</sub>

incidence: 4/4, conc. range: 45–570 µg/kg,

Ø conc.: 296.3 µg/kg, country: UK<sup>95</sup>

see also barley, bird food, wild, dog food, feed, feed, complete ration, feed, general, feed, layer, feed, maize-based, feed, mixed, feed, pelleted ration, feed, screenings, feed, sweet, feed (broilers), feed (cat), feed (chicken), feed (dog), feed (gluten), feed (horse), feed (maize), feed (pig), feed (poultry), feed (rat), feed (rodent), forage

grass, maize, maize and maize screenings, maize bran, maize ears, maize fine fractions, maize flakes, maize germ, maize germ/bran, maize germ meal, maize gluten, maize grits, maize kernels, maize meal, maize powder, maize screenings, maize, ground, maize, preharvest, maize, sweet feed, maize/oats mix, rat chow, silage, sorghum, soybeans, wheat

#### FUMONISIN B<sub>2</sub>

incidence: 3/4, conc. range: 40–85 µg/kg,

Ø conc.: 70 µg/kg, country: UK<sup>95</sup>

see also barley, bird food, wild, dog food, feed, feed, maize-based, feed, mixed, feed (cat), feed (dog), feed (gluten), feed (horse), feed (maize), feed (poultry), feed (rodent), maize, maize bran, maize fine fractions, maize flakes, maize germ, maize germ/bran, maize germ meal, maize gluten, maize kernels, maize meal, maize powder, maize screenings, maize, ground, maize, preharvest, rat chow, wheat

#### MONILIFORMIN

incidence: 1/4, conc.: 70 µg/kg, country: UK<sup>95</sup>

see also barley, feed, mixed, feed (poultry), maize, maize flakes, maize germ, maize germ/bran, maize gluten, maize meal, maize screenings, oats, rice bran, triticale, wheat, wheat, summer, wheat, winter

#### NIVALENOL

incidence: 4/4, conc. range: 25–50 µg/kg,

Ø conc.: 35 µg/kg, country: UK<sup>95</sup>

see also barley, barley, husked, barley, unhusked (naked), barley (pressed), bran, feed, feed components, feed (cattle), feed (poultry), feed (reindeer), feeds, industrial, maize, maize ears, maize germ, maize germ/bran, maize gluten, maize kernels, maize meal, maize powder, maize screenings, oats, rye, silage, triticale, wheat

#### ZEARALENONE

incidence: 4/4, conc. range: 40–80 µg/kg,

Ø conc.: 55 µg/kg, country: UK<sup>95</sup>

see also alfalfa, barley, barley, husked, barley, unhusked (naked), barley and feed, bone meal, bran, broilers feed, *Carthamus* cake, chick pea, concentrate, mixed, corn cob mix silage,

cotton cake, cottonseed, cottonseed cake, diet (dairy cow), diet (poultry), diets (mixed), feed, feed components, feed, mixed, feed, mixed (primarily maize also maize, oats, wheat), feed (bran), feed (broiler chicken), feed (cattle), feed (chicken), feed (dairy), feed (developing pig), feed (mill run, from wheat), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (starter chicken), feedstuff, fish meal, forage grass, grain, bruised, grain, mixed feed, grains (no specification), hay, maize, maize ears, maize flakes, maize germ, maize germ/bran, maize gluten, maize kernels, maize meal, maize oil cake, maize screenings, maize stalks (pith), maize, hybrid, maize, shelled, maize, unshelled, maize, white, maize grain, artificially dried, maize grain, crib dried, maize grain, ensiled, milk production mixed feed, oats, *Paspalum palidosum*, straw, peanut hulls/skins, rice bran, rice germ, rice germ cake, rye, silage, sorghum, soybeans, soybeans, extracted, sunflower cake, tapioca, triticale, wheat, wheat bran, wheat bran and chana testa, wheat soya meal

**Maize, ground** may contain the following mycotoxins:

#### AFLATOXIN B<sub>1</sub>

incidence: 7/7, conc. range: 1–84 µg/kg,

Ø conc.: 18 µg/kg, country: Thailand<sup>117</sup>

incidence: 8/8\*, conc. range: 210–3200 µg/kg,

Ø conc.: 891.25 µg/kg, country: USA<sup>299</sup>, \*ncac

see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy

cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60 % maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

#### AFLATOXIN B<sub>2</sub>

incidence: 6/7, conc. range: 1–15 µg/kg, Ø conc.: 4.7 µg/kg, country: Thailand<sup>117</sup>  
 incidence: 8/8\*, conc. range: 15–290 µg/kg, Ø conc.: 100.25 µg/kg, country: USA<sup>299</sup>, \*ncac  
 see also animal feedstuffs (dairy cake), bird food, bird food, wild, biri testa, blackgram, blackgram husk, cottonseed, cottonseed cake,

cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meats, dog food, egg production mixed feed, feed, compound, feed (cat), feed (cattle), feed (dog), feed (pig), feed (poultry), feed (rabbit), feed (sheep), fish meal, horsegram, maize, maize gluten, maize husk, maize, preharvest, mung testa, mustard cake, niger cake, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanuts, peanut, kernels, redgram husk, rice bran, rice bran (deoiled), rice chaff, rice meal, rice (polish), sal seed cake, sesame cake, sorghum, soybean meal, soybeans, wheat, wheat bran

#### AFLATOXIN G<sub>1</sub>

incidence: 3/7, conc. range: 2–7 µg/kg, Ø conc.: 4.7 µg/kg, country: Thailand<sup>117</sup>  
 see also animal feedstuffs (dairy cake), bird food, bird food, wild, concentrate, mixed, cottonseed, cottonseed cake, feed (cat), feed (chicken), feed (dog), maize, maize, preharvest, meat meal, milk production mixed feed, murkool, peanut cake, peanut expeller, peanut hay, peanut meal, peanuts, rice bran, rice germ, sorghum, soybeans, wheat, wheat bran, wheat bran and chana testa

#### AFLATOXIN M<sub>1</sub>

incidence: 8/8\*, conc. range: 1–35 µg/kg, Ø conc.: 6.75 µg/kg, country: USA<sup>299</sup>, \*ncac  
 see also feed (cat), feed (dog), maize

#### FUMONISIN B<sub>1</sub>

incidence: 7/7, conc. range: 65–1450 µg/kg, Ø conc.: 842.4 µg/kg, country: Thailand<sup>117</sup>  
 see also barley, bird food, wild, dog food, feed, feed, complete ration, feed, general, feed, layer, feed, maize-based, feed, mixed, feed, pelleted ration, feed, screenings, feed, sweet, feed (broilers), feed (cat), feed (chicken), feed (dog), feed (gluten), feed (horse), feed (maize), feed (pig), feed (poultry), feed (rat), feed (rodent), forage grass, maize, maize and maize screenings, maize bran, maize ears, maize fine fractions, maize flakes, maize germ, maize germ/bran, maize germ meal, maize gluten, maize grits,

maize kernels, maize meal, maize powder, maize screenings, maize, "Baby", maize, preharvest, maize, sweet feed, maize/oats mix, rat chow, silage, sorghum, soybeans, wheat

#### FUMONISIN B<sub>2</sub>

incidence: 6/7, conc. range: 80–191 µg/kg, Ø conc.: 128.2 µg/kg, country: Thailand<sup>117</sup>  
see also barley, bird food, wild, dog food, feed, feed, maize-based, feed, mixed, feed (cat), feed (dog), feed (gluten), feed (horse), feed (maize), feed (poultry), feed (rodent), maize, maize bran, maize fine fractions, maize flakes, maize germ, maize germ/bran, maize germ meal, maize gluten, maize kernels, maize meal, maize powder, maize screenings, maize, "Baby", maize, preharvest, rat chow, wheat

**Maize, hybrid** for feed may contain the following mycotoxins:

#### AFATOXIN B<sub>1</sub>

incidence: 3/5, Ø conc.: 30 µg/kg, country: Egypt<sup>16</sup>  
see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meals, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed,

mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60 % maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

#### DEOXYNIVALENOL

incidence: 4/4, conc. range: 100–222 µg/kg, Ø conc.: 178 µg/kg, country: Egypt<sup>16</sup>  
see also barley, barley, husked, barley, unhusked (naked), barley (pressed), bone meal, bran, broilers feed, calf fattening mixed feed, coconut, expeller, corn cob mix silage, cottonseed, cottonseed cake, dairy cattle feed, egg production mixed feed, feed, feed components, feed, commercial mix, feed, mixed, feed, mixed (primarily maize), feed (barley), feed (cattle), feed (chicken), feed (dog), feed (fish), feed (mill run, from wheat), feed (mink), feed (pig), feed (poultry), feed (reindeer), feeds, grain, feeds, industrial, feedstuff, feedstuffs (rapeseed,

turnip, fish meal, concentrates), fish meal, grain, mixed feed, grains, mixed, grains (no specification), maize, maize ears, maize fibre, maize germ, maize germ/bran, maize germ meal, maize gluten, maize kernels, maize meal, maize powder, maize screenings, maize stalks (pith), maize, "Baby", maize, white, oats, rice bran, rice germ cake, rye, silage, sorghum, soybeans, triticale, wheat, wheat and barley, wheat, red hard winter, wheat, soft white winter, wheat, spring, wheat, winter

#### ZEARALENONE

incidence: 4/4, conc. range: 2–79 µg/kg, Ø conc.: 42 µg/kg, country: Egypt<sup>16</sup>  
see also alfalfa, barley, barley, husked, barley, unhusked (naked), barley and feed, bone meal, bran, broilers feed, *Carthamus* cake, chick pea, concentrate, mixed, corn cob mix silage, cotton cake, cottonseed, cottonseed cake, diet (dairy cow), diet (poultry), diets (mixed), feed, feed components, feed, mixed, feed, mixed (primarily maize also maize, oats, wheat), feed (bran), feed (broiler chicken), feed (cattle), feed (chicken), feed (dairy), feed (developing pig), feed (mill run, from wheat), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (starter chicken), feedstuff, fish meal, forage grass, grain, bruised, grain, mixed feed, grains (no specification), hay, maize, maize ears, maize flakes, maize germ, maize germ/bran, maize gluten, maize kernels, maize meal, maize oil cake, maize screenings, maize stalks (pith), maize, "Baby", maize, shelled, maize, unshelled, maize, white, maize grain, artificially dried, maize grain, crib dried, maize grain, ensiled, milk production mixed feed, oats, *Paspalum palidosum*, straw, peanut hulls/skins, rice bran, rice germ, rice germ cake, rye, silage, sorghum, soybeans, soybeans, extracted, sunflower cake, tapioca, triticale, wheat, wheat bran, wheat bran and chana testa, wheat soya meal

**Maize, preharvest** may contain the following mycotoxins:

#### AFLATOXIN B<sub>1</sub>

incidence: 19/103\*, conc. range: 3–130 µg/kg, Ø conc.: 22 µg/kg, country: Nigeria<sup>207</sup>, \*ncac  
see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60 % maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal,

peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

#### AFLATOXIN B<sub>2</sub>

incidence: 8/103\*, conc. range: 4–26 µg/kg, Ø conc.: 10 µg/kg, country: Nigeria<sup>207</sup>, \*ncac  
see also animal feedstuffs (dairy cake), bird food, bird food, wild, biri testa, blackgram, blackgram husk, cottonseed, cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meats, dog food, egg production mixed feed, feed, compound, feed (cat), feed (cattle), feed (dog), feed (pig), feed (poultry), feed (rabbit), feed (sheep), fish meal, horsegram, maize, maize gluten, maize husk, maize, ground, mung testa, mustard cake, niger cake, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanuts, peanut, kernels, redgram husk, rice bran, rice bran (deoiled), rice chaff, rice meal, rice (polish), sal seed cake, sesame cake, sorghum, soybean meal, soybeans, wheat, wheat bran

#### AFLATOXIN G<sub>1</sub>

incidence: 3/103\*, conc. range: 5–11 µg/kg, Ø conc.: 8 µg/kg, country: Nigeria<sup>207</sup>, \*ncac  
see also animal feedstuffs (dairy cake), bird food, bird food, wild, concentrate, mixed, cottonseed, cottonseed cake, feed (cat), feed (chicken), feed (dog), maize, maize, ground, meat meal, milk production mixed feed, murkool, peanut cake, peanut expeller, peanut hay, peanut meal, peanuts, rice bran, rice germ, sorghum, soybeans, wheat, wheat bran, wheat bran and chana testa

#### AFLATOXIN G<sub>2</sub>

incidence: 1/103\*, conc.: 7 µg/kg, country: Nigeria<sup>207</sup>, \*ncac

see also animal feedstuffs (dairy cake), bird food, feed (cat), feed (dog), maize, peanut expeller, peanut hay, peanut meal, peanuts, soybeans

#### FUMONISIN B<sub>1</sub>

incidence: 81/103\*, conc. range: 70–1780 µg/kg, Ø conc.: 495 µg/kg, country: Nigeria<sup>207</sup>, \*ncac

see also barley, bird food, wild, dog food, feed, feed, complete ration, feed, general, feed, layer, feed, maize-based, feed, mixed, feed, pelleted ration, feed, screenings, feed, sweet, feed (broilers), feed (cat), feed (chicken), feed (dog), feed (gluten), feed (horse), feed (maize), feed (pig), feed (poultry), feed (rat), feed (rodent), forage grass, maize, maize and maize screenings, maize bran, maize ears, maize fine fractions, maize flakes, maize germ, maize germ/bran, maize germ meal, maize gluten, maize grits, maize kernels, maize meal, maize powder, maize screenings, maize, “Baby”, maize, ground, maize, sweet feed, maize/oats mix, rat chow, silage, sorghum, soybeans, wheat

#### FUMONISIN B<sub>2</sub>

incidence: 68/103\*, conc. range: 53–230 µg/kg, Ø conc.: 114 µg/kg, country: Nigeria<sup>207</sup>, \*ncac

see also barley, bird food, wild, dog food, feed, feed, maize-based, feed, mixed, feed (cat), feed (dog), feed (gluten), feed (horse), feed (maize), feed (poultry), feed (rodent), maize, maize bran, maize fine fractions, maize flakes, maize germ, maize germ/bran, maize germ meal, maize gluten, maize kernels, maize meal, maize powder, maize screenings, maize, “Baby”, maize, ground, rat chow, wheat

**Maize, shelled** for feed may contain the following mycotoxins:

#### AFLATOXINS

incidence: 146/1012, conc. range: <20 µg/kg (100 sa), <100 µg/kg (32 sa), <200 µg/kg (10 sa), <300 µg/kg (2 sa), >300 µg/kg (2 sa), country: USA<sup>195</sup>

incidence: 70/173, conc. range: <20 µg/kg (61 sa), <100 µg/kg (5 sa), <200 µg/kg (1 sa),



<300 µg/kg (1 sa), >300 µg/kg (2 sa),  
country: USA<sup>195</sup>  
incidence: 71/123, conc. range: <20 µg/kg  
(29 sa), <100 µg/kg (28 sa), <200 µg/kg  
(7 sa), <300 µg/kg (2 sa), >300 µg/kg (5 sa),  
country: USA<sup>195</sup>  
see also animal feed (maize), animal feed  
(mixed), barley, copra meal, cottonseed,  
cottonseed fines, cottonseed meal, cottonseed  
meats, feed, feed ingredients (miscellaneous),  
feed, mixed, feed (excluding peanuts,  
suspect), feed (goat), feed (pig), feed  
(poultry), feedstuff, grain, grain, mixed feed,  
maize, millet, peanut cake, peanut meal,  
peanut meal and by-products, peanuts,  
protein concentrates, rice, rice bran,  
sorghum, soybean meal, sunflower

#### FUMONISIN

incidence: 22/22, conc. range:  
≤5000–10,000 µg/kg, country: USA<sup>147</sup>  
incidence: 36/36, conc. range: ≤5000 µg/kg,  
country: USA<sup>147</sup>  
see also maize, maize screenings

#### ZEARALENOL

incidence: 1/31, conc.: 19 µg/kg, country:  
USA<sup>119</sup>  
see also grains (no specification), maize,  
unshelled, oats

#### ZEARALENONE

incidence: 31/31, conc. range: tr–480 µg/kg,  
country: USA<sup>119</sup>  
see also alfalfa, barley, barley, husked, barley,  
unhusked (naked), barley and feed, bone  
meal, bran, broilers feed, *Carthamus* cake,  
chick pea, concentrate, mixed, corn cob mix  
silage, cotton cake, cottonseed, cottonseed  
cake, diet (dairy cow), diet (poultry), diets  
(mixed), feed, feed components, feed, mixed,  
feed, mixed (primarily maize also maize, oats,  
wheat), feed (bran), feed (broiler chicken),  
feed (cattle), feed (chicken), feed (dairy), feed  
(developing pig), feed (mill run, from  
wheat), feed (miscellaneous), feed (pig), feed  
(poultry), feed (poultry, pig), feed (starter  
chicken), feedstuff, fish meal, forage grass,  
grain, bruised, grain, mixed feed, grains (no  
specification), hay, maize, maize ears, maize

flakes, maize germ, maize germ/bran, maize  
gluten, maize kernels, maize meal, maize oil  
cake, maize screenings, maize stalks (pith),  
maize, “Baby”, maize, hybrid, maize,  
unshelled, maize, white, maize grain,  
artificially dried, maize grain, crib dried,  
maize grain, ensiled, milk production mixed  
feed, oats, *Paspalum palidosum*, straw, peanut  
hulls/skins, rice bran, rice germ, rice germ  
cake, rye, silage, sorghum, soybeans,  
soybeans, extracted, sunflower cake, tapioca,  
triticale, wheat, wheat bran, wheat bran and  
chana testa, wheat soya meal

**Maize, sweet feed** may contain the following  
mycotoxins:

#### FUMONISIN B<sub>1</sub>

incidence: 2/2, conc. range:  
27,000–94,000 µg/kg, Ø conc.: 60,500 µg/kg,  
country: USA<sup>58</sup>  
incidence: 1/1, conc.: 18,000 µg/kg, country:  
USA<sup>58</sup>

see also barley, bird food, wild, dog food,  
feed, feed, complete ration, feed, general,  
feed, layer, feed, maize-based, feed, mixed,  
feed, pelleted ration, feed, screenings, feed,  
sweet, feed (broilers), feed (cat), feed  
(chicken), feed (dog), feed (gluten), feed  
(horse), feed (maize), feed (pig), feed  
(poultry), feed (rat), feed (rodent), forage  
grass, maize, maize and maize screenings,  
maize bran, maize ears, maize fine fractions,  
maize flakes, maize germ, maize germ/bran,  
maize germ meal, maize gluten, maize grits,  
maize kernels, maize meal, maize powder,  
maize screenings, maize, “Baby”, maize,  
ground, maize, preharvest, maize/oats mix,  
rat chow, silage, sorghum, soybeans,  
wheat

**Maize, unshelled** for feed may contain the  
following mycotoxins:

#### ZEARALENOL

incidence: 3/7, conc. range: 14–106 µg/kg,  
Ø conc.: 49.3 µg/kg, country: USA<sup>119</sup>  
see also grains (no specification), maize,  
shelled, oats

**ZEARALENONE**

incidence: 7/7, conc. range: tr–3656 µg/kg, country: USA<sup>119</sup>

see also alfalfa, barley, barley, husked, barley, unhusked (naked), barley and feed, bone meal, bran, broilers feed, *Carthamus* cake, chick pea, concentrate, mixed, corn cob mix silage, cotton cake, cottonseed, cottonseed cake, diet (dairy cow), diet (poultry), diets (mixed), feed, feed components, feed, mixed, feed, mixed (primarily maize also maize, oats, wheat), feed (bran), feed (broiler chicken), feed (cattle), feed (chicken), feed (dairy), feed (developing pig), feed (mill run, from wheat), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (starter chicken), feedstuff, fish meal, forage grass, grain, bruised, grain, mixed feed, grains (no specification), hay, maize, maize ears, maize flakes, maize germ, maize germ/bran, maize gluten, maize kernels, maize meal, maize oil cake, maize screenings, maize stalks (pith), maize, “Baby”, maize, hybrid, maize, shelled, maize, white, maize grain, artificially dried, maize grain, crib dried, maize grain, ensiled, milk production mixed feed, oats, *Paspalum palidosum*, straw, peanut hulls/skins, rice bran, rice germ, rice germ cake, rye, silage, sorghum, soybeans, soybeans, extracted, sunflower cake, tapioca, triticale, wheat, wheat bran, wheat bran and chana testa, wheat soya meal

**Maize, white** for feed may contain the following mycotoxins:

**AFLATOXIN**

incidence: 394/1283\*, conc. range: <10 µg/kg (136 sa), 10–19 µg/kg (93 sa), 20–29 µg/kg (45 sa), 30–100 µg/kg (91 sa), ≤306 µg/kg (29 sa), country: USA<sup>278</sup>, \*ncac

see also blackgram husk, bread crumbs, broiler finisher, broiler starter, cotton cake, cottonseed, cottonseed cake, cottonseed extract, cottonseed meal, feed, feed (cattle), feed (cow), feed (dog), feed (horse), feed (maize, gluten), feed (pig), feed (poultry), feed (rabbit), feed (rat/mice), feed (sheep), feeds, grain, fish meal, flour (wheat),

groundnut cake, grower’s mash, horsegram, layer’s mash, maize, maize gluten, milo, peanut cake, peanut cake (deoiled), peanut, kernels, peanut (oil cake), pearl millet, pig breeder’s mash, pig finisher, pig starter, pod with haulms, poultry breeder’s mash, rabbit pellets, redgram husk, rice, rice bran (deoiled), rice, broken, rice (polish), sesame cake, silk worm pupae, sorghum, soybean cake, soybean meal, wheat, wheat bran

**CITRININ**

incidence: 2/4, conc. range: 10 µg/kg, Ø conc.: 10 µg/kg, country: Egypt<sup>16</sup>

see also barley, barley, oats, barley-soybean diet, feed, feed, mixed, feed (cattle), feed (pig), fish meal, hay, maize, *Makhana* (*Euryale ferox* Salisb) puffs, oats, palm products, peas and beans, rice bran, rice germ, wheat, wheat and other grains (moldy), wheat bran

**DEOXYNIVALENOL**

incidence: 4/4, conc. range: 70–700 µg/kg,

Ø conc.: 345 µg/kg, country: Egypt<sup>16</sup>

see also barley, barley, husked, barley, unhusked (naked), barley (pressed), bone meal, bran, broilers feed, calf fattening mixed feed, coconut, expeller, corn cob mix silage, cottonseed, cottonseed cake, dairy cattle feed, egg production mixed feed, feed, feed components, feed, commercial mix, feed, mixed, feed, mixed (primarily maize), feed (barley), feed (cattle), feed (chicken), feed (dog), feed (fish), feed (mill run, from wheat), feed (mink), feed (pig), feed (poultry), feed (reindeer), feeds, grain, feeds, industrial, feedstuff, feedstuffs (rapeseed, turnip, fish meal, concentrates), fish meal, grain, mixed feed, grains, mixed, grains (no specification), maize, maize ears, maize fibre, maize germ, maize germ/bran, maize germ meal, maize gluten, maize kernels, maize meal, maize powder, maize screenings, maize stalks (pith), maize, “Baby”, maize, hybrid, oats, rice bran, rice germ cake, rye, silage, sorghum, soybeans, triticale, wheat, wheat and barley, wheat, red hard winter, wheat, soft white winter, wheat, spring, wheat, winter

**OCHRATOXIN A**

incidence: 1/3, conc.: 12 µg/kg, country: Egypt<sup>16</sup>

see also alfalfa, barley, barley, oats, barley (high moisture), barley-soybean diet, bird food, domestic, bird food, wild, broilers feed, cereal grains, citrus pulp, coconut, expeller, corn cob mix silage, diet (dairy cow), diet (poultry), diet (starter), dog food, eat, egg production mixed feed, feed, feed wheat, oat and barley, feed, commercial mix, feed, mixed, feed, mixed (pelleted), feed (broilers), feed (cat), feed (cattle), feed (cereals), feed (pig), feed ec (pig), feed (poultry), feed ec (poultry), feed (poultry, pig), feed ec (rabbit), feed (trout), grain, mixed feed, grains, mixed, grains (heated), hay, horse bean, maize, maize feed, milo, maize gluten, maize meal, *Makhana (Euryale ferox Salisb)* puffs, milk production mixed feed, millet, oat and barley (hammer-milled), oats, palm products, peanut cake, peas, peas and beans, pet food, pig feedstuffs, pig grower diet, pig meal, piglet diet, poultry feedstuffs, rice bran, rice germ, rice germ cake, rye, sorghum, soybean groats, sunflower, sunflower seeds, extracted, tapioca, triticale, *Vicia faba*, wheat, wheat and barley, wheat bran, wheat hay, wheat, oats

**ZEARALENONE**

incidence: 4/4, conc. range: 4–30 µg/kg, Ø conc.: 16 µg/kg, country: Egypt<sup>16</sup>

see also alfalfa, barley, barley, husked, barley, unhusked (naked), barley and feed, bone meal, bran, broilers feed, *Carthamus* cake, chick pea, concentrate, mixed, corn cob mix silage, cotton cake, cottonseed, cottonseed cake, diet (dairy cow), diet (poultry), diets (mixed), feed, feed components, feed, mixed, feed, mixed (primarily maize also maize, oats, wheat), feed (bran), feed (broiler chicken), feed (cattle), feed (chicken), feed (dairy), feed (developing pig), feed (mill run, from wheat), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (starter chicken), feedstuff, fish meal, forage grass, grain, bruised, grain, mixed feed, grains (no specification), hay, maize, maize ears, maize

flakes, maize germ, maize germ/bran, maize gluten, maize kernels, maize meal, maize oil cake, maize screenings, maize stalks (pith), maize, “Baby”, maize, hybrid, maize, shelled, maize, unshelled, maize grain, artificially dried, maize grain, crib dried, maize grain, ensiled, milk production mixed feed, oats, *Paspalum palidosum*, straw, peanut hulls/skins, rice bran, rice germ, rice germ cake, rye, silage, sorghum, soybeans, soybeans, extracted, sunflower cake, tapioca, triticale, wheat, wheat bran, wheat bran and chana testa, wheat soya meal

**Maize, yellow** for feed may contain the following mycotoxins:

**AFLATOXIN B<sub>1</sub>**

incidence: 72/210, conc. range: 5–200 µg/kg,

Ø conc.: 48.3 µg/kg, country: Egypt<sup>397</sup>

incidence: 44/205, conc. range: 5–190 µg/kg,

Ø conc.: 54.6 µg/kg, country: Egypt<sup>397</sup>

incidence: 85/228, conc. range: 5–190 µg/kg,

Ø conc.: 43.8 µg/kg, country: Egypt<sup>397</sup>

incidence: 66/190, conc. range: 15–190 µg/kg,

Ø conc.: 47.6 µg/kg, country: Egypt<sup>397</sup>

see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and

ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60 % maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

**Maize (dark grains)** may contain the following mycotoxins:

**AFATOXIN B<sub>1</sub>**

incidence: 3/9\*, conc. range: 1–2.6 µg/kg,

country: UK<sup>94</sup>, imported?

see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea,

coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60 % maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

**AFLATOXINS (TOTAL)**

incidence: 3/9\*, conc. range: 1–2.9 µg/kg, country: UK<sup>94</sup>, \*imported?

see also cottonseed, maize gluten, maize germ, palm products, rice bran, soybeans, sunflower

**Maize/oats mix** may contain the following mycotoxins:

**FUMONISIN B<sub>1</sub>**

incidence: 1/1, conc.: 24 µg/kg, country: USA<sup>58</sup>

see also barley, bird food, wild, dog food, feed, feed, complete ration, feed, general, feed, layer, feed, maize-based, feed, mixed, feed, pelleted ration, feed, screenings, feed, sweet, feed (broilers), feed (cat), feed (chicken), feed (dog), feed (gluten), feed (horse), feed (maize), feed (pig), feed (poultry), feed (rat), feed (rodent), forage grass, maize, maize and maize screenings, maize bran, maize ears, maize fine fractions, maize flakes, maize germ, maize germ/bran, maize germ meal, maize gluten, maize grits, maize kernels, maize meal, maize powder, maize screenings, maize, "Baby", maize, ground, maize, preharvest, maize, sweet feed, rat chow, silage, sorghum, soybeans, wheat

**Makhana (*Euryale ferox* Salisb) puffs** may contain the following mycotoxins:

**AFLATOXIN B<sub>1</sub>**

incidence: 7/39, conc. range: 100–2140 µg/kg, country: India<sup>356</sup>

see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed

meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60 % maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

**CITRININ**

incidence: 2/39, conc. range: 100–500 µg/kg, Ø conc.: 300 µg/kg, country: India<sup>356</sup>

see also barley, barley, oats, barley-soybean diet, feed, feed, mixed, feed (cattle), feed

(pig), fish meal, hay, maize, maize, white, oats, palm products, peas and beans, rice bran, rice germ, wheat, wheat and other grains (moldy), wheat bran

#### OCHRATOXIN A

incidence: 3/39, conc. range: 100–600 µg/kg, country: India<sup>356</sup>

see also alfalfa, barley, barley, oats, barley (high moisture), barley-soybean diet, bird food, domestic, bird food, wild, broilers feed, cereal grains, citrus pulp, coconut, expeller, corn cob mix silage, diet (dairy cow), diet (poultry), diet (starter), dog food, eat, egg production mixed feed, feed, feed wheat, oat and barley, feed, commercial mix, feed, mixed, feed, mixed (pelleted), feed (broilers), feed (cat), feed (cattle), feed (cereals), feed (pig), feed ec (pig), feed (poultry), feed ec (poultry), feed (poultry, pig), feed ec (rabbit), feed (trout), grain, mixed feed, grains, mixed, grains (heated), hay, horse bean, maize, maize feed, milo, maize gluten, maize meal, maize, white, milk production mixed feed, millet, oat and barley (hammer-milled), oats, palm products, peanut cake, peas, peas and beans, pet food, pig feedstuffs, pig grower diet, pig meal, piglet diet, poultry feedstuffs, rice bran, rice germ, rice germ cake, rye, sorghum, soybean groats, sunflower, sunflower seeds, extracted, tapioca, triticale, *Vicia faba*, wheat, wheat and barley, wheat bran, wheat hay, wheat, oats

**Manioc** Manioc for feed may contain the following mycotoxins:

#### AFLATOXIN B<sub>1</sub>

incidence: 5/18\* (containing aflatoxins), conc. range: tr µg/kg, country: UK<sup>36</sup>, \*imported?

see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20% peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed,

concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5% peanut products), dairy cattle feed (containing 6–10% peanut products), dairy cattle feed (containing 6–12% peanut products), dairy cattle feed (containing more than 20% peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60% maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

**Meat meal** may contain the following mycotoxins:

**AFLATOXIN G<sub>1</sub>**

incidence: 1/4, conc. range: 6–20 µg/kg, (1 sa with a maximum of 13 µg/kg), country: Guatemala<sup>375</sup>

see also animal feedstuffs (dairy cake), bird food, bird food, wild, concentrate, mixed, cottonseed, cottonseed cake, feed (cat), feed (chicken), feed (dog), maize, maize, ground, maize, preharvest, milk production mixed feed, murkool, peanut cake, peanut expeller, peanut hay, peanut meal, peanuts, rice bran, rice germ, sorghum, soybeans, wheat, wheat bran, wheat bran and chana testa

**Mice feed** may contain the following mycotoxins:

**AFLATOXIN B + G**

incidence: 2/12, conc. range: 1–20 µg/kg, Ø conc.: 3 µg/kg, country: France<sup>45</sup>  
see also feed (cattle), feed (pig), feed (poultry), feed (rabbit), feed (rat), peanut (oil cake)

**Milk production mixed feed** may contain the following mycotoxins:

**AFLATOXIN B<sub>1</sub>**

incidence: 2/5, Ø conc.: 50 µg/kg, country: Egypt<sup>16</sup>

see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy

cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60 % maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

**AFLATOXIN G<sub>1</sub>**

incidence: 2/5, Ø conc.: 50 µg/kg, country: Egypt<sup>16</sup>

see also animal feedstuffs (dairy cake), bird food, bird food, wild, concentrate, mixed, cottonseed, cottonseed cake, feed (cat), feed (chicken), feed (dog), maize, maize, ground, maize, preharvest, meat meal, murkool,

peanut cake, peanut expeller, peanut hay, peanut meal, peanuts, rice bran, rice germ, sorghum, soybeans, wheat, wheat bran, wheat bran and chana testa

#### OCHRATOXIN A

incidence: 2/3, Ø conc.: 19 µg/kg, country:

Egypt<sup>16</sup>

see also alfalfa, barley, barley (high moisture), barley, oats, barley-soybean diet, bird food, domestic, bird food, wild, broilers feed, cereal grains, citrus pulp, coconut, expeller, corn cob mix silage, diet (dairy cow), diet (poultry), diet (starter), dog food, eat, egg production mixed feed, feed, feed wheat, oat and barley, feed, commercial mix, feed, mixed, feed, mixed (pelleted), feed (broilers), feed (cat), feed (cattle), feed (cereals), feed (pig), feed ec (pig), feed (poultry), feed ec (poultry), feed (poultry, pig), feed ec (rabbit), feed (trout), grain, mixed feed, grains, mixed, grains (heated), hay, horse bean, maize, maize feed, milo, maize gluten, maize meal, maize, white, *Makhana* (*Euryale ferox* Salisb) puffs, millet, oat and barley (hammer-milled), oats, palm products, peanut cake, peas, peas and beans, pet food, pig feedstuffs, pig grower diet, pig meal, piglet diet, poultry feedstuffs, rice bran, rice germ, rice germ cake, rye, sorghum, soybean groats, sunflower, sunflower seeds, extracted, tapioca, triticale, *Vicia faba*, wheat, wheat and barley, wheat bran, wheat hay, wheat, oats

#### ZEARALENONE

incidence: 4/4, conc. range: 5–20 µg/kg,

Ø conc.: 11 µg/kg, country: Egypt<sup>16</sup>

see also alfalfa, barley, barley, husked, barley, unhusked (naked), barley and feed, bone meal, bran, broilers feed, *Carthamus* cake, chick pea, concentrate, mixed, corn cob mix silage, cotton cake, cottonseed, cottonseed cake, diet (dairy cow), diet (poultry), diets (mixed), feed, feed components, feed, mixed, feed, mixed (primarily maize also maize, oats, wheat), feed (bran), feed (broiler chicken), feed (cattle), feed (chicken), feed (developing pig), feed (mill run, from wheat), feed (miscellaneous), feed (pig), feed (poultry),

feed (poultry, pig), feed (starter chicken), feedstuff, fish meal, forage grass, grain, bruised, grain, mixed feed, grains (no specification), hay, maize, maize ears, maize flakes, maize germ, maize germ/bran, maize gluten, maize kernels, maize meal, maize oil cake, maize screenings, maize stalks (pith), maize, “Baby”, maize, hybrid, maize, shelled, maize, unshelled, maize, white, maize grain, artificially dried, maize grain, crib dried, maize grain, ensiled, oats, *Paspalum palidosum*, straw, peanut hulls/skins, rice bran, rice germ, rice germ cake, rye, silage, sorghum, soybeans, soybeans, extracted, sunflower cake, tapioca, triticale, wheat, wheat bran, wheat bran and chana testa, wheat soya meal

**Millet** Millet for feed may contain the following mycotoxins:

#### AFLATOXINS

incidence: 1/4, conc.: 51–500 µg/kg, country:

Australia<sup>21</sup>

incidence: 1/8, conc.: 10–29 µg/kg (1 sa),

country: India<sup>349</sup>

see also animal feed (maize), animal feed (mixed), barley, copra meal, cottonseed, cottonseed fines, cottonseed meal, cottonseed meats, feed, feed ingredients (miscellaneous), feed, mixed, feed (excluding peanuts, suspect), feed (goat), feed (pig), feed (poultry), feedstuff, grain, grain, mixed feed, maize, maize, shelled, peanut cake, peanut meal, peanut meal and by-products, peanuts, protein concentrates, rice, rice bran, sorghum, soybean meal, sunflower

#### OCHRATOXIN A

incidence: 2/8, conc. range: ≤145 µg/kg,

country: India<sup>349</sup>

see also alfalfa, barley, barley, oats, barley (high moisture), barley-soybean diet, bird food, domestic, bird food, wild, broilers feed, cereal grains, citrus pulp, coconut, expeller, corn cob mix silage, diet (dairy cow), diet (poultry), diet (starter), dog food, eat, egg production mixed feed, feed, feed wheat, oat and barley, feed, commercial mix, feed,



mixed, feed, mixed (pelleted), feed (broilers), feed (cat), feed (cattle), feed (cereals), feed (pig), feed ec (pig), feed (poultry), feed ec (poultry), feed (poultry, pig), feed ec (rabbit), feed (trout), grain, mixed feed, grains, mixed, grains (heated), hay, horse bean, maize, maize feed, milo, maize gluten, maize meal, maize, white, *Makhana* (*Euryale ferox* Salisb) puffs, milk production mixed feed, oat and barley (hammer-milled), oats, palm products, peanut cake, peas, peas and beans, pet food, pig feedstuffs, pig grower diet, pig meal, piglet diet, poultry feedstuffs, rice bran, rice germ, rice germ cake, rye, sorghum, soybean groats, sunflower, sunflower seeds, extracted, tapioca, triticale, *Vicia faba*, wheat, wheat and barley, wheat bran, wheat hay, wheat, oats

**Millet, little** for feed may contain the following mycotoxins:

**CYCLOPIAZONIC ACID**

incidence: 1/1, conc.: 10,000 µg/kg

(estimated), country: India<sup>33</sup>

see also chick mash, feed, groundnut cake, maize, peanuts, rice bran, wheat

**Milo** may contain the following mycotoxins:

**AFLATOXIN**

incidence: 1/1, conc. range: >30 µg/kg (1 sa), country: India<sup>380</sup>

see also blackgram husk, bread crumbs, broiler finisher, broiler starter, cotton cake, cottonseed, cottonseed cake, cottonseed extract, cottonseed meal, feed, feed (cattle), feed (cow), feed (dog), feed (horse), feed (maize, gluten), feed (pig), feed (poultry), feed (rabbit), feed (rat/mice), feed (sheep), feeds, grain, fish meal, flour (wheat), groundnut cake, grower's mash, horsegram, layer's mash, maize, maize gluten, maize, white, peanut cake, peanut cake (deoiled), peanut, kernels, peanut (oil cake), pearl millet, pig breeder's mash, pig finisher, pig starter, pod with haulms, poultry breeder's mash, rabbit pellets, redgram husk, rice, rice bran (deoiled), rice, broken, rice (polish), sesame cake, silk worm pupae, sorghum, soybean cake, soybean meal, wheat, wheat bran

**Mung testa** may contain the following mycotoxins:

**AFLATOXIN B<sub>1</sub>**

incidence: 1/1, conc.: 4 µg/kg, country:

India<sup>129</sup>

see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60 % maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm

products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

#### AFATOXIN B<sub>2</sub>

incidence: 1/1, conc.: 3 µg/kg, country:

India<sup>129</sup>

see also animal feedstuffs (dairy cake), bird food, bird food, wild, biri testa, blackgram, blackgram husk, cottonseed, cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meats, dog food, egg production mixed feed, feed, compound, feed (cat), feed (cattle), feed (dog), feed (pig), feed (poultry), feed (rabbit), feed (sheep), fish meal, horsegram, maize, maize gluten, maize husk, maize, ground, maize, preharvest, mustard cake, niger cake, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanuts, peanut, kernels, redgram husk, rice bran, rice bran (deoiled), rice chaff, rice meal, rice (polish), sal seed cake, sesame cake, sorghum, soybean meal, soybeans, wheat, wheat bran

**Murkool** may contain the following mycotoxins:

#### AFATOXIN B<sub>1</sub>

incidence: ?/10, conc. range: 10–40 µg/kg,

country: India<sup>183</sup>

see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea,

coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60 % maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

**AFLATOXIN G<sub>1</sub>**

incidence: ?/10, conc. range: tr µg/kg,

country: India<sup>183</sup>

see also animal feedstuffs (dairy cake), bird food, bird food, wild, concentrate, mixed, cottonseed, cottonseed cake, feed (cat), feed (chicken), feed (dog), maize, maize, ground, maize, preharvest, meat meal, milk production mixed feed, peanut cake, peanut expeller, peanut hay, peanut meal, peanuts, rice bran, rice germ, sorghum, soybeans, wheat, wheat bran, wheat bran and chana testa

**Mustard cake** may contain the following mycotoxins:

**AFLATOXIN B<sub>1</sub>**

incidence: 9/25, conc. range:

71.7–275.3 µg/kg, Ø conc.: 138 µg/kg,

country: India<sup>253</sup>

see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed

(miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60 % maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

**AFLATOXIN B<sub>2</sub>**

incidence: 4/25, conc. range: 44.5–85.2 µg/kg,

Ø conc.: 64.9 µg/kg, country: India<sup>253</sup>

see also animal feedstuffs (dairy cake), bird food, bird food, wild, biri testa, blackgram, blackgram husk, cottonseed, cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meats, dog food, egg production mixed feed, feed, compound, feed (cat), feed (cattle), feed (dog), feed (pig), feed (poultry), feed (rabbit), feed (sheep), fish meal, horsegram, maize, maize gluten, maize husk, maize, ground, maize, preharvest, mung testa, niger cake, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanuts, peanut, kernels, redgram husk, rice bran, rice bran (deoiled), rice chaff, rice meal, rice (polish), sal seed cake, sesame cake, sorghum, soybean meal, soybeans, wheat, wheat bran

**Neem cake** may contain the following mycotoxins:

AFLATOXIN B<sub>1</sub>

incidence: 3/10, conc. range:

59.4–165.9 µg/kg, Ø conc.: 126 µg/kg,

country: India<sup>253</sup>

see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60 % maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, niger cake,

oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

**Niger cake** may contain the following mycotoxins:

AFLATOXIN B<sub>1</sub>

incidence: 15/20, conc. range:

58.1–641.7 µg/kg, Ø conc.: 184.3 µg/kg,

country: India<sup>253</sup>

see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken),

feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60 % maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

#### AFATOXIN B<sub>2</sub>

incidence: 9/20, conc. range: 44.5–98.8 µg/kg, Ø conc.: 77.7 µg/kg, country: India<sup>253</sup>  
see also animal feedstuffs (dairy cake), bird food, bird food, wild, biri testa, blackgram, blackgram husk, cottonseed, cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meats, dog food, egg production mixed feed, feed, compound, feed (cat), feed (cattle), feed (dog), feed (pig), feed (poultry), feed (rabbit), feed (sheep), fish meal, horsegram, maize, maize gluten, maize husk, maize, ground, maize, preharvest, mung testa, mustard cake, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanuts, peanut, kernels, redgram husk, rice bran, rice bran (deoiled), rice chaff, rice meal, rice

(polish), sal seed cake, sesame cake, sorghum, soybean meal, soybeans, wheat, wheat bran

**Oat and barley (hammer-milled)** Oat and barley for feed may contain the following mycotoxins:

#### DIACETOXYSCIRPENOL

incidence: 1/51, conc.: 800 µg/kg, country: Canada<sup>133</sup>

see also alfalfa, barley, feed, feed components, feed (dog), feed (fish), feed (mink), feed (pig), feed (poultry), feed (reindeer), feeds, grain, feedstuff, forage grass, grain, mixed feed, grains (no specification), maize, maize gluten, oats, peanuts, soybeans, wheat

#### OCHRATOXIN A

incidence: 1/51, conc.: 880 µg/kg, country: Canada<sup>133</sup>

see also alfalfa, barley, barley, oats, barley (high moisture), barley-soybean diet, bird food, domestic, bird food, wild, broilers feed, cereal grains, citrus pulp, coconut, expeller, corn cob mix silage, diet (dairy cow), diet (poultry), diet (starter), dog food, eat, egg production mixed feed, feed, feed wheat, oat and barley, feed, commercial mix, feed, mixed, feed, mixed (pelleted), feed (broilers), feed (cat), feed (cattle), feed (cereals), feed (pig), feed ec (pig), feed (poultry), feed ec (poultry), feed (poultry, pig), feed ec (rabbit), feed (trout), grain, mixed feed, grains, mixed, grains (heated), hay, horse bean, maize, maize feed, milo, maize gluten, maize meal, maize, white, *Makhana* (*Euryale ferox* Salisb) puffs, milk production mixed feed, millet, oats, palm products, peanut cake, peas, peas and beans, pet food, pig feedstuffs, pig grower diet, pig meal, piglet diet, poultry feedstuffs, rice bran, rice germ, rice germ cake, rye, sorghum, soybean groats, sunflower, sunflower seeds, extracted, tapioca, triticale, *Vicia faba*, wheat, wheat and barley, wheat bran, wheat hay, wheat, oats

#### T-2 TOXIN

incidence: 1/51, conc.: 2500 µg/kg, country: Canada<sup>133</sup>

see also alfalfa, barley, bran, diet (grower), diet (poultry), feed, feed components, feed, layer, feed, mixed, feed (dog), feed (fish), feed (mink), feed (pig), feed (poultry), feedstuff, forage grass, grain, mixed feed, grains (no specification), hay, maize, maize germ/bran, maize gluten, maize meal, maize screenings, maize stalks (pith), oats, peanuts, pig grower diet, piglet diet, rye, sorghum, triticale, wheat

#### OAT/BARLEY

see Barley, Oats

**Oats** Oats for feed may contain the following mycotoxins:

#### 3-ACETYLDEOXYNIVALENOL

incidence: 23/36\*, conc. range: 20–553 µg/kg,

Ø conc.: 119 µg/kg, country: Finland<sup>9</sup>,

\*imported?

incidence: 24/272, conc. range: 3–115 µg/kg,

Ø conc.: 25.1 µg/kg, country: Germany<sup>41</sup>

incidence: 1/1, conc.: 1500 µg/kg, country:

Norway<sup>276</sup>

incidence: 1/7\*, conc.: 700 µg/kg, country:

Finland<sup>281</sup>, \*1 na

see also barley, feed components, feed (poultry), feeds, grain, feeds, industrial, feedstuffs (rapeseed, turnip, fish meal, concentrates), maize, maize ears, maize gluten, maize kernels, maize meal, maize screenings, wheat

#### 15-ACETYLDEOXYNIVALENOL

incidence: 7/162, conc. range: 2–25 µg/kg,

Ø conc.: 13.1 µg/kg, country: Germany<sup>41</sup>

see also barley, feed components, feed, commercial mix, feed (poultry), maize, maize ears, maize germ, maize germ/bran, maize gluten, maize kernels, maize meal, maize screenings, maize, “Baby”, silage, wheat

#### AFLATOXIN B<sub>1</sub>

incidence: 2/5, conc. range: 20–40 µg/kg,

Ø conc.: 30 µg/kg, country: Australia<sup>121</sup>

incidence: 2/3, conc. range: 20–40 µg/kg,

Ø conc.: 30 µg/kg, country: Australia<sup>181</sup>

incidence: 1/1, conc.: 2600 µg/kg, country:

Sweden<sup>244</sup>

incidence: 3/304, conc. range: 6 µg/kg,

country: USA<sup>384</sup>

see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meals, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60 % maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing),

rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

#### AFLOATOXIN B

incidence: 11/19, conc. range:  $\geq 25$ – $> 100$   $\mu\text{g}/\text{kg}$ , country: France<sup>46</sup>  
see also barley, cocoa (oilcake), cottonseed cake, feed, feed (cattle), feed (maize, gluten), feed (pig), feed (poultry), flour (wheat), lucern (dried), maize, maize gluten, maize grains, peanut (oil cake), rice, broken, sorghum, soybean (oil cake), sunflower (oilcake), wheat

#### ALTERNARIOL METHYL ETHER

incidence: 4/11, conc. range: 10–42  $\mu\text{g}/\text{kg}$ , country: Germany<sup>294</sup>  
see also barley, barley, oats, cereals, mixture, sunflower, wheat, wheat, oats

#### BEAUVERICIN

incidence: 1/1\*, conc.: tr  $\mu\text{g}/\text{kg}$ , country: Finland<sup>205</sup>, \*ncac  
see also barley, maize, wheat, wheat, summer, wheat, winter

#### CITRININ

incidence: 7/9, conc. range:  $< 5$   $\mu\text{g}/\text{kg}$ , country: Bulgaria<sup>8</sup>  
see also barley, barley, oats, barley-soybean diet, cottonseed cake, feed, feed, mixed, feed (cattle), feed (pig), fish meal, hay, maize, maize, white, *Makhana (Euryale ferox Salisb)* puffs, palm products, peas and beans, rice bran, rice germ, wheat, wheat and other grains (moldy), wheat bran

#### DEOXYNIVALENOL

incidence: 28/45, conc. range: 50–870  $\mu\text{g}/\text{kg}$ ,  $\emptyset$  conc.: 188.6  $\mu\text{g}/\text{kg}$ , country: Hungary<sup>6</sup>  
incidence: 36/36\*, conc. range: 22–2581  $\mu\text{g}/\text{kg}$ ,  $\emptyset$  conc.: 296  $\mu\text{g}/\text{kg}$ , country: Finland<sup>9</sup>, \*imported?  
incidence: 2/24, conc. range:  $< 100$ –2000  $\mu\text{g}/\text{kg}$ , country: Sweden<sup>25</sup>

incidence: 181/272, conc. range: 3–1480  $\mu\text{g}/\text{kg}$ ,  $\emptyset$  conc.: 167.5  $\mu\text{g}/\text{kg}$ , country: Germany<sup>41</sup>  
incidence: 2/2, conc. range: 6–8  $\mu\text{g}/\text{kg}$ ,  $\emptyset$  conc.: 7  $\mu\text{g}/\text{kg}$ , country: Finland<sup>62</sup>  
incidence: 11/67, conc. range: 20–500  $\mu\text{g}/\text{kg}$ , country: Germany<sup>68</sup>  
incidence: 2/7, conc. range: 10–20  $\mu\text{g}/\text{kg}$ , country: Finland<sup>112</sup>  
incidence: 2/2, conc. range: 300–1500  $\mu\text{g}/\text{kg}$ ,  $\emptyset$  conc.: 900  $\mu\text{g}/\text{kg}$ , country: Germany<sup>124</sup>  
incidence: 3/6, conc. range: 420–520  $\mu\text{g}/\text{kg}$ ,  $\emptyset$  conc.: 470  $\mu\text{g}/\text{kg}$ , country: Sweden<sup>197</sup>  
incidence: 11/32, conc. range: 40–260  $\mu\text{g}/\text{kg}$ ,  $\emptyset$  conc.: 140  $\mu\text{g}/\text{kg}$ , country: Sweden<sup>197</sup>  
incidence: 7/10, conc. range: 20–99  $\mu\text{g}/\text{kg}$  (6 sa), 108  $\mu\text{g}/\text{kg}$  (1 sa), country: UK<sup>203</sup>  
incidence: 870/982\*, conc. range: 30–62,050  $\mu\text{g}/\text{kg}$ , country: Norway<sup>224</sup>, \*ncac  
incidence: 4/4\*, conc. range: 270–4200  $\mu\text{g}/\text{kg}$ ,  $\emptyset$  conc.: 1892.5  $\mu\text{g}/\text{kg}$ , country: Norway<sup>235</sup>, \*ncac  
incidence: 5/5\*, conc. range:  $< 30$ –30  $\mu\text{g}/\text{kg}$ , country: Norway<sup>235</sup>, \*ncac  
incidence: 7/342, conc. range: 220–13,500  $\mu\text{g}/\text{kg}$ ,  $\emptyset$  conc.: 3800  $\mu\text{g}/\text{kg}$ , country: USA<sup>237</sup>  
incidence: 1/1, conc.: 12,400  $\mu\text{g}/\text{kg}$ , country: Norway<sup>276</sup>  
incidence: 6/7\*, conc. range: 28–11,000  $\mu\text{g}/\text{kg}$ ,  $\emptyset$  conc.: 2259  $\mu\text{g}/\text{kg}$ , country: Finland<sup>281</sup>, \*1 na  
incidence: 29/73?,  $\emptyset$  conc.: 330  $\mu\text{g}/\text{kg}$ , country: Canada<sup>346</sup>  
incidence: 34/73, conc. range:  $\leq 1200$   $\mu\text{g}/\text{kg}$ ,  $\emptyset$  conc.: 330  $\mu\text{g}/\text{kg}$ , country: Canada<sup>410</sup>  
see also barley, barley, husked, barley, unhusked (naked), barley (pressed), bone meal, bran, broilers feed, calf fattening mixed feed, coconut, expeller, corn cob mix silage, cottonseed, cottonseed cake, dairy cattle feed, egg production mixed feed, feed, feed components, feed, commercial mix, feed, mixed, feed, mixed (primarily maize), feed (barley), feed (cattle), feed (chicken), feed (dog), feed (fish), feed (mill run, from wheat), feed (mink), feed (pig), feed (poultry), feed (reindeer), feeds, grain, feeds, industrial, feedstuff, feedstuffs (rapeseed,

turnip, fish meal, concentrates), fish meal, grain, mixed feed, grains, mixed, grains (no specification), maize, maize ears, maize fibre, maize germ, maize germ/bran, maize germ meal, maize gluten, maize kernels, maize meal, maize powder, maize screenings, maize stalks (pith), maize, "Baby", maize, hybrid, maize, white, rice bran, rice germ cake, rye, silage, sorghum, soybeans, triticale, wheat, wheat and barley, wheat, red hard winter, wheat, soft white winter, wheat, spring, wheat, winter

#### DIACETOXYSCIRPENOL

incidence: 1/14, conc.: 9000 µg/kg, country: Germany<sup>68</sup>  
 incidence: 12/99\*, conc. range: 10–118 µg/kg, Ø conc.: 23 µg/kg, country: Poland<sup>342</sup>; \*ncac  
 see also alfalfa, barley, feed, feed components, feed (dog), feed (fish), feed (mink), feed (pig), feed (poultry), feed (reindeer), feeds, grain, feedstuff, forage grass, grain, mixed feed, grains (no specification), maize, maize gluten, oat and barley (hammer-milled), peanuts, soybeans, wheat

#### ENNIATIN A<sub>1</sub>

incidence: 1/1\*, conc.: tr µg/kg, country: Finland<sup>205</sup>, \*ncac  
 see also barley, rye, wheat, wheat, summer, wheat, winter

#### ENNIATIN B

incidence: 1/1\*, conc.: 23 µg/kg, country: Finland<sup>205</sup>, \*ncac  
 see also barley, rye, wheat, wheat, summer, wheat, winter

#### ENNIATIN B<sub>1</sub>

incidence: 1/1\*, conc.: tr µg/kg, country: Finland<sup>205</sup>, \*ncac  
 see also barley, rye, wheat, wheat, summer, wheat, winter

#### FUSARENONE-X

incidence: 14/982\*, conc. range: 100–700 µg/kg, Ø conc.: 300 µg/kg, country: Norway<sup>224</sup>, \*ncac  
 see also barley, feed components, feed (poultry), maize, maize ears, maize germ/bran, maize gluten, maize kernels, maize meal, maize screenings, wheat

#### HT-2 TOXIN

incidence: 20/272, conc. range: 10–2018 µg/kg, Ø conc.: 250.5 µg/kg, country: Germany<sup>41</sup>  
 incidence: 24/99\*, conc. range: 10–47 µg/kg, Ø conc.: 21 µg/kg, country: Poland<sup>342</sup>, \*ncac  
 see also barley, feed components, feed (dog), feed (fish), feed (pig), feed (poultry), feed (reindeer), grain, mixed feed, grains, mixed, grains (no specification), maize, maize germ/bran, maize gluten, maize meal, maize screenings, rye, silage, wheat

#### MONILIFORMIN

incidence: 8/21\*, conc. range: tr–70 µg/kg, Ø conc.: <40 µg/kg, country: Norway<sup>204</sup>, \*ncac  
 incidence: 6/26\*, conc. range: tr–88 µg/kg, Ø conc.: <40 µg/kg, country: Norway<sup>204</sup>, \*ncac  
 incidence: 24/26\*, conc. range: tr–210 µg/kg, Ø conc.: 73 µg/kg, country: Norway<sup>204</sup>, \*ncac  
 incidence: 1/1\*, conc.: 84 µg/kg, country: Finland<sup>205</sup>, \*ncac  
 see also barley, feed, mixed, feed (poultry), maize, maize flakes, maize germ, maize germ/bran, maize gluten, maize meal, maize screenings, maize, "Baby", rice bran, triticale, wheat, wheat, summer, wheat, winter

#### NIVALENOL

incidence: 6/45, conc. range: 50–180 µg/kg, Ø conc.: 110 µg/kg, country: Hungary<sup>6</sup>  
 incidence: 2/36\*, conc. range: 26–29 µg/kg, Ø conc.: 28 µg/kg, country: Finland<sup>9</sup>, \*imported?  
 incidence: 116/272, conc. range: 2–628 µg/kg, Ø conc.: 79.7 µg/kg, country: Germany<sup>41</sup>  
 incidence: 8/18, conc. range: ≥50–300 µg/kg, Ø conc.: 194 µg/kg, country: Sweden<sup>65</sup>  
 incidence: 2/52, conc. range: ≥50–150 µg/kg, Ø conc.: 52 µg/kg, country: Sweden<sup>65</sup>  
 incidence: 12/46, conc. range: ≥50–4700 µg/kg, Ø conc.: 1094 µg/kg, country: Sweden<sup>65</sup>  
 incidence: 45/71, conc. range: ≥50–360 µg/kg, Ø conc.: 147 µg/kg, country: Sweden<sup>65</sup>  
 incidence: 18/59, conc. range: 100–700 µg/kg, country: Germany<sup>68</sup>  
 incidence: 81/982\*, conc. range: 50–667 µg/kg, Ø conc.: 130 µg/kg, country: Norway<sup>224</sup>, \*ncac



incidence: 1/7\*, conc.: 28 µg/kg, country: Finland<sup>281</sup>, \*1 na

incidence: 4/26, conc. range: 130–750 µg/kg, country: Canada<sup>410</sup>

see also barley, barley, husked, barley, unhusked (naked), barley (pressed), bran, feed, feed components, feed (cattle), feed (poultry), feed (reindeer), feeds, industrial, maize, maize ears, maize germ, maize germ/bran, maize gluten, maize kernels, maize meal, maize powder, maize screenings, maize, “Baby”, silage, rye, triticale, wheat

#### OCHRATOXIN A

incidence: 5/60, conc. range: 80–200 µg/kg,

Ø conc.: 100 µg/kg, country: Hungary<sup>6</sup>

incidence: 7/9, conc. range: 1.44–112.5 µg/kg,

Ø conc.: 18.85 µg/kg, country: Bulgaria<sup>8</sup>

incidence: 12/93\*, conc. range:

0.1–58.8 µg/kg, Ø conc.: 9.5 µg/kg, country:

Germany<sup>13</sup>, \*ncac

incidence: 6/21, conc. range: ≤2 µg/kg,

Ø conc.: 0.53 µg/kg, country: UK<sup>15</sup>

incidence: 1/1, conc.: 28 µg/kg, country:

Denmark<sup>85</sup>

incidence: 2/72, conc. range: 16–51 µg/kg,

Ø conc.: 33.5 µg/kg, country: Canada<sup>410</sup>

see also alfalfa, barley, barley (high moisture), barley, oats, barley-soybean diet, bird food, domestic, bird food, wild, broilers feed, cereal grains, citrus pulp, coconut, expeller, corn cob mix silage, diet (dairy cow), diet (poultry), diet (starter), dog food, eat, egg production mixed feed, feed, feed wheat, oat and barley, feed, commercial mix, feed, mixed, feed, mixed (pelleted), feed (broilers), feed (cat), feed (cattle), feed (cereals), feed (pig), feed ec (pig), feed (poultry), feed ec (poultry), feed (poultry, pig), feed ec (rabbit), feed (trout), grain, mixed feed, grains, mixed, grains (heated), hay, horse bean, maize, maize feed, milo, maize gluten, maize meal, maize, white, *Makhana* (*Euryale ferox* Salisb) puffs, milk production mixed feed, millet, oat and barley (hammer-milled), palm products, peanut cake, peas, peas and beans, pet food, pig feedstuffs, pig grower diet, pig meal, piglet diet, poultry feedstuffs, rice bran, rice germ, rice germ cake, rye, sorghum, soybean

groats, sunflower, sunflower seeds, extracted, tapioca, triticale, *Vicia faba*, wheat, wheat and barley, wheat bran, wheat hay, wheat, oats

#### T-2 TOXIN

incidence: 4/45, conc. range: 120–360 µg/kg,

Ø conc.: 292.5 µg/kg, country: Hungary<sup>6</sup>

incidence: 107/272, conc. range:

2–1686 µg/kg, Ø conc.: 74.1 µg/kg, country:

Germany<sup>41</sup>

incidence: 6/21, conc. range: ≤2.2 µg/kg,

Ø conc.: 0.53 µg/kg, country: UK<sup>45</sup>

incidence: 1/2, conc.: 50 µg/kg, country:

Finland<sup>62</sup>

incidence: 1/14, conc.: 100 µg/kg, country:

Germany<sup>68</sup>

incidence: 14/68, conc. range: 100–700 µg/kg,

country: Germany<sup>68</sup>

incidence: 1/7\*, conc.: 18 µg/kg, country:

Finland<sup>281</sup>, \*1 na

incidence: 15/99\*, conc. range: 10–703 µg/kg,

Ø conc.: 60 µg/kg, country: Poland<sup>342</sup>; \*ncac

incidence: 1/73, conc.: 1000 µg/kg, country:

Canada<sup>410</sup>

see also alfalfa, barley, bran, diet (grower), diet (poultry), feed, feed components, feed, layer, feed, mixed, feed (dog), feed (fish), feed (mink), feed (pig), feed (poultry), feedstuff, forage grass, grain, mixed feed, grains (no specification), hay, maize, maize germ/bran, maize gluten, maize meal, maize screenings, maize stalks (pith), oat and barley (hammer-milled), peanuts, pig grower diet, piglet diet, rye, sorghum, triticale, wheat

#### T-2 TRIOL

incidence: 3/66, conc. range: 100–300 µg/kg,

country: Germany<sup>68</sup>

see also barley, feed components, grain,

mixed feed, grains (no specification), maize,

wheat

#### ZEARALENOL

incidence: 1/57, conc.: 150 µg/kg, country:

Germany<sup>68</sup>

see also grains (no specification), maize,

shelled, maize, unshelled

**ZEARALENONE**

incidence: 17/60, conc. range: 50–290 µg/kg,

Ø conc.: 101.5 µg/kg, country: Hungary<sup>6</sup>

incidence: 70/272, conc. range: 1–223 µg/kg,

Ø conc.: 15.7 µg/kg, country: Germany<sup>41</sup>

incidence: 6/12, conc. range: 20–400 µg/kg,

country: Germany<sup>68</sup>

incidence: 11/68, conc. range: 10–80 µg/kg,

country: Germany<sup>68</sup>

incidence: 2/7, conc. range: 8.2–11 µg/kg,

Ø conc.: 9.6 µg/kg, country: Germany<sup>107</sup>

incidence: 1/2, conc.: 100 µg/kg, country:

Germany<sup>124</sup>

incidence: 1/1, conc.: 750 µg/kg, country:

Norway<sup>276</sup>

incidence: 1/73, conc.: 300 µg/kg, country:

Canada<sup>410</sup>

see also alfalfa, barley, barley, husked, barley, unhusked (naked), barley and feed, bone meal, bran, broilers feed, *Carthamus* cake, chick pea, concentrate, mixed, corn cob mix silage, cotton cake, cottonseed, cottonseed cake, diet (dairy cow), diet (poultry), diets (mixed), feed, feed components, feed, mixed, feed, mixed (primarily maize also maize, oats, wheat), feed (bran), feed (broiler chicken), feed (cattle), feed (chicken), feed (dairy), feed (developing pig), feed (mill run, from wheat), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (starter chicken), feedstuff, fish meal, forage grass, grain, bruised, grain, mixed feed, grains (no specification), hay, maize, maize ears, maize flakes, maize germ, maize germ/bran, maize gluten, maize kernels, maize meal, maize oil cake, maize screenings, maize stalks (pith), maize, “Baby”, maize, hybrid, maize, shelled, maize, unshelled, maize, white, maize grain, artificially dried, maize grain, crib dried, maize grain, ensiled, milk production mixed feed, *Paspalum palidosum*, straw, peanut hulls/skins, rice bran, rice germ, rice germ cake, rye, silage, sorghum, soybeans, soybeans, extracted, sunflower cake, tapioca, triticale, wheat, wheat bran, wheat bran and chana testa, wheat soya meal

**Oilseed rape meal** may contain the following mycotoxins:

**ALTERNARIOL**

incidence: 2/30, conc. range: ≤81 µg/kg,

Ø conc.: 68 µg/kg, country: UK<sup>187</sup>

see also cereals, mixture, sunflower, sunflower seed meal, sunflower seeds, ensiling

**ALTERNARIOL MONOMETHYL ETHER**

incidence: 2/30, conc. range: ≤60 µg/kg,

Ø conc.: 55 µg/kg, country: UK<sup>187</sup>

see also sunflower seed meal, sunflower seeds, ensiling

**TENUAZONIC ACID**

incidence: 9/30, conc. range: ≤970 µg/kg,

Ø conc.: 730 µg/kg, country: UK<sup>187</sup>

see also feed, feed (GP No. 1), sunflower seed meal, sunflower seeds, ensiling

**Palm kernel expeller cake** may contain the following mycotoxins:

**AFLATOXIN B<sub>1</sub>**

incidence: 98/98\* (containing aflatoxins),

conc. range: 10–400 µg/kg, country: UK<sup>36</sup>,

\*imported?

see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cyad meal, dairy cattle feed, dairy cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed

(calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60 % maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

**Palm kernels** may contain the following mycotoxins:

**AFLATOXIN B<sub>1</sub>**

incidence: 6/7, conc. range: 21–50 µg/kg (5 sa), 51–100 µg/kg (1 sa), country: UK<sup>267</sup>

incidence: 21/27, conc. range: 10–660 µg/kg, Ø conc.: 91 µg/kg, country: investigated in Germany<sup>298</sup>

see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor

cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60 % maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat,

wheat bran, wheat bran and chana testa

**Palm products** may contain the following mycotoxins:

**AFLATOXIN B<sub>1</sub>**

incidence: 11/15\*, conc. range: 1–11 µg/kg, country: UK<sup>94</sup>, \*imported?  
see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20% peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5% peanut products), dairy cattle feed (containing 6–10% peanut products), dairy cattle feed (containing 6–12% peanut products), dairy cattle feed (containing more than 20% peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60% maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs,

manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

**AFLATOXINS (TOTAL)**

incidence: 14/15\*, conc. range: 1–22 µg/kg, country: UK<sup>94</sup>, \*imported?  
see also cottonseed, maize germ, maize gluten, maize (dark grains), rice bran, soybeans, sunflower

**CITRININ**

incidence: 1/15\*, conc.: 7 µg/kg, country: UK<sup>94</sup>, \*imported?  
see also barley, barley, oats, barley-soybean diet, cottonseed cake, feed, feed, mixed, feed (cattle), feed (pig), fish meal, hay, maize, maize, white, *Makhana* (*Euryale ferox* Salisb) puffs, oats, peas and beans, rice bran, rice germ, wheat, wheat and other grains (moldy), wheat bran

**OCHRATOXIN A**

incidence: 2/15\*, conc. range: 1–6 µg/kg, country: UK<sup>94</sup>, \*imported?  
see also alfalfa, barley, barley, oats, barley (high moisture), barley-soybean diet, bird food, domestic, bird food, wild, broilers feed, cereal grains, citrus pulp, coconut, expeller, corn cob mix silage, diet (dairy cow), diet (poultry), diet (starter), dog food, eat, egg production mixed feed, feed, feed wheat, oat and barley, feed, commercial mix, feed, mixed, feed, mixed (pelleted), feed (broilers), feed (cat), feed (cattle), feed (cereals), feed (pig), feed ec (pig), feed (poultry), feed ec (poultry), feed (poultry, pig), feed ec (rabbit),

feed (trout), grain, mixed feed, grains, mixed, grains (heated), hay, horse bean, maize, maize feed, milo, maize gluten, maize meal, maize, white, *Makhana* (*Euryale ferox* Salisb) puffs, milk production mixed feed, millet, oat and barley (hammer-milled), oats, peanut cake, peas, peas and beans, pet food, pig feedstuffs, pig grower diet, pig meal, piglet diet, poultry feedstuffs, rice bran, rice germ, rice germ cake, rye, sorghum, soybean groats, sunflower, sunflower seeds, extracted, tapioca, triticale, *Vicia faba*, wheat, wheat and barley, wheat bran, wheat hay, wheat, oats

***Paspalum palidosum*, straw** may contain the following mycotoxins:

**ZEARALENONE**

incidence: 1/1, conc.: 422 µg/kg, country: India<sup>129</sup>

see also alfalfa, barley, barley, husked, barley, unhusked (naked), barley and feed, bone meal, bran, broilers feed, *Carthamus* cake, chick pea, concentrate, mixed, corn cob mix silage, cotton cake, cottonseed, cottonseed cake, diet (dairy cow), diet (poultry), diets (mixed), feed, feed components, feed, mixed, feed, mixed (primarily maize also maize, oats, wheat), feed (bran), feed (broiler chicken), feed (cattle), feed (chicken), feed (dairy), feed (developing pig), feed (mill run, from wheat), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (starter chicken), feedstuff, fish meal, forage grass, grain, bruised, grain, mixed feed, grains (no specification), hay, maize, maize ears, maize flakes, maize germ, maize germ/bran, maize gluten, maize kernels, maize meal, maize oil cake, maize screenings, maize stalks (pith), maize, "Baby", maize, hybrid, maize, shelled, maize, unshelled, maize, white, maize grain, artificially dried, maize grain, crib dried, maize grain, ensiled, milk production mixed feed, oats, peanut hulls/skins, rice bran, rice germ, rice germ cake, rye, silage, sorghum, soybeans, soybeans, extracted, sunflower cake, tapioca, triticale, wheat, wheat bran, wheat bran and chana testa, wheat soya meal

**Peanut cake** may contain the following mycotoxins:

**AFLATOXIN B<sub>1</sub>**

incidence: 7/10, conc. range: 113.5–2250 µg/kg, country: India<sup>85</sup>

incidence: 1/1, conc.: 3182 µg/kg, country: India<sup>129</sup>

incidence: ?/10, conc. range: 80–120 µg/kg, country: India<sup>183</sup>

incidence: ?/10, conc. range: 40–80 µg/kg, country: India<sup>183</sup>

incidence: ?/10, conc. range: 40–60 µg/kg, country: India<sup>183</sup>

incidence: 291/301, conc. range: ≤25 µg/kg

(27 sa), 26–50 µg/kg (32 sa), 51–100 µg/kg

(44 sa), 101–200 µg/kg (49 sa), 201–500 µg/kg

(67 sa), 501–1000 µg/kg (40 sa),

1001–1500 µg/kg (13 sa), 1501–2000 µg/kg

(4 sa), 2001–3000 µg/kg (7 sa),

3001–4000 µg/kg (3 sa), 4001–5000 µg/kg

(1 sa), >5000 µg/kg (4 sa), Ø conc.:

450 µg/kg, country: India<sup>247</sup>

incidence: 159/248, conc. range:

tr–515.6 µg/kg, Ø conc.: 157.8 µg/kg,

country: India<sup>253</sup>

incidence: 4/12, conc. range: 80–290 µg/kg,

Ø conc.: 180 µg/kg, country: Taiwan<sup>306</sup>

incidence: 1/1\*, conc.: 300 µg/kg, country:

Denmark<sup>316</sup>, \*imported from Congo

incidence: 7/7, conc. range: 200–26,700 µg/kg,

Ø conc.: 10,180 µg/kg, country: India<sup>321</sup>

incidence: 31/32\*, conc. range: 19–455 µg/kg,

Ø conc.: 137.4 µg/kg, country: Nigeria<sup>330</sup>,

\*ncac

incidence: 13/26, conc. range: 16–2000 µg/kg,

country: India<sup>358</sup>

incidence: 10/10, conc. range: tr–3000 µg/kg,

country: India<sup>383</sup>

see also alfalfa, *Ambadi* cake, animal feedstuffs

(dairy cake), bagasse, barley, bengalgram

husk, bird food, bird food, wild, biri testa,

blackgram, blackgram husk, bran, broiler

mixed feed, calf fattening mixed feed, calf

fattening mixed feed (containing 4–20 %

peanut products), *Carthamus* cake, castor

cake, cereals, cereal products, chick pea,

coconut cake, cocos, concentrate, mixed,

concentrates, cotton cake, cottonseed,

cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60 % maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

#### AFLATOXIN B<sub>2</sub>

incidence: 1/1, conc.: 487 µg/kg, country: India<sup>129</sup>

incidence: ?/10, conc. range: tr–10 µg/kg, country: India<sup>183</sup>

incidence: ?/10, conc. range: tr–20 µg/kg, country: India<sup>183</sup>

incidence: ?/10, conc.: 40 µg/kg, country: India<sup>183</sup>

incidence: 142/301, conc. range: nc, Ø conc.: 80.4 µg/kg, country: India<sup>247</sup>

incidence: 1/1\*, conc.: 40 µg/kg, country: Denmark<sup>316</sup>, \*imported from Congo

incidence: 2/26, conc. range: <1 µg/kg, country: India<sup>358</sup>

see also animal feedstuff (dairy cake), bird food, bird food, wild, biri testa, blackgram, blackgram husk, cottonseed, cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meats, dog food, egg production mixed feed, feed, compound, feed (cat), feed (cattle), feed (dog), feed (pig), feed (poultry), feed (rabbit), feed (sheep), fish meal, horsegram, maize, maize gluten, maize husk, maize, ground, maize, preharvest, mung testa, mustard cake, niger cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanuts, redgram husk, rice bran, rice bran (deoiled), rice chaff, rice meal, rice (polish), sal seed cake, sesame cake, sorghum, soybean meal, soybeans, wheat, wheat bran

#### AFLATOXIN G<sub>1</sub>

incidence: ?/10, conc. range: tr µg/kg, country: India<sup>183</sup>

incidence: 1/1\*, conc.: 60 µg/kg, country: Denmark<sup>316</sup>, \*imported from Congo

incidence: 9/26, conc. range: <1 µg/kg, country: India<sup>358</sup>

see also animal feedstuffs (dairy cake), bird food, bird food, wild, concentrate, mixed, cottonseed, cottonseed cake, feed (cat), feed (chicken), feed (dog), maize, maize, ground, maize, preharvest, meat meal, milk production mixed feed, murkool, peanut expeller, peanut hay, peanut meal, peanuts, rice bran, rice germ, sorghum, soybeans, wheat, wheat bran, wheat bran and chana testa

## AFLATOXIN

incidence: 291/301, conc. range: 8–6280  $\mu\text{g}/\text{kg}$ , country: India<sup>247</sup>  
 incidence: ?/55, conc. range:  $\leq 1875 \mu\text{g}/\text{kg}$ ,  
 $\emptyset$  conc.: 587  $\mu\text{g}/\text{kg}$ , country: India<sup>250</sup>  
 see also blackgram husk, bread crumbs, broiler finisher, broiler starter, cotton cake, cottonseed, cottonseed cake, cottonseed extract, cottonseed meal, feed, feed (cattle), feed (cow), feed (dog), feed (horse), feed (maize, gluten), feed (pig), feed (poultry), feed (rabbit), feed (rat/mice), feed (sheep), feeds, grain, fish meal, flour (wheat), groundnut cake, grower's mash, horsegram, layer's mash, maize, maize gluten, maize, white, milo, peanut cake (deoiled), peanut, kernels, peanut (oil cake), pearl millet, pig breeder's mash, pig finisher, pig starter, pod with haulms, poultry breeder's mash, rabbit pellets, redgram husk, rice, rice bran (deoiled), rice, broken, rice (polish), sesame cake, silk worm pupae, sorghum, soybean cake, soybean meal, wheat, wheat bran

## AFLATOXINS

incidence: 10/27, conc. range: 10–29  $\mu\text{g}/\text{kg}$  (2 sa), 31–49  $\mu\text{g}/\text{kg}$  (1 sa), 50–100  $\mu\text{g}/\text{kg}$  (3 sa), >100  $\mu\text{g}/\text{kg}$  (4 sa), country: India<sup>349</sup>  
 see also animal feed (maize), animal feed (mixed), barley, copra meal, cottonseed, cottonseed fines, cottonseed meal, cottonseed meats, feed, feed ingredients (miscellaneous), feed, mixed, feed (excluding peanuts, suspect), feed (goat), feed (pig), feed (poultry), feedstuff, grain, grain, mixed feed, maize, maize, shelled, millet, peanut meal, peanut meal and by-products, peanuts, protein concentrates, rice, rice bran, sorghum, soybean meal, sunflower

## NEOSOLANIOL

incidence: ?/10, conc.: 10  $\mu\text{g}/\text{kg}$ , country: India<sup>183</sup>  
 see also feed, feed components, feed, mixed, feed (poultry), wheat

## OCHRATOXIN A

incidence: 1/27, conc. range: 50–100  $\mu\text{g}/\text{kg}$ , country: India<sup>349</sup>

see also alfalfa, barley, barley, oats, barley (high moisture), barley-soybean diet, bird food, domestic, bird food, wild, broilers feed, cereal grains, citrus pulp, coconut, expeller, corn cob mix silage, diet (dairy cow), diet (poultry), diet (starter), dog food, eat, egg production mixed feed, feed, feed wheat, oat and barley, feed, commercial mix, feed, mixed, feed, mixed (pelleted), feed (broilers), feed (cat), feed (cattle), feed (cereals), feed (pig), feed ec (pig), feed (poultry), feed ec (poultry), feed (poultry, pig), feed ec (rabbit), feed (trout), grain, mixed feed, grains, mixed, grains (heated), hay, horse bean, maize, maize feed, milo, maize gluten, maize meal, maize, white, *Makhana* (*Euryale ferox* Salisb) puffs, milk production mixed feed, millet, oat and barley (hammer-milled), oats, palm products, peas, peas and beans, pet food, pig feedstuffs, pig grower diet, pig meal, piglet diet, poultry feedstuffs, rice bran, rice germ, rice germ cake, rye, sorghum, soybean groats, sunflower, sunflower seeds, extracted, tapioca, triticale, *Vicia faba*, wheat, wheat and barley, wheat bran, wheat hay, wheat, oats  
 see also Groundnut cake

**Peanut cake (deoiled)** may contain the following mycotoxins:

AFLATOXIN B<sub>1</sub>

incidence: 76/79, conc. range:  $\leq 25 \mu\text{g}/\text{kg}$  (12 sa), 26–50  $\mu\text{g}/\text{kg}$  (10 sa), 51–100  $\mu\text{g}/\text{kg}$  (17 sa), 101–200  $\mu\text{g}/\text{kg}$  (15 sa), 201–500  $\mu\text{g}/\text{kg}$  (10 sa), 501–1000  $\mu\text{g}/\text{kg}$  (7 sa), 1001–1500  $\mu\text{g}/\text{kg}$  (5 sa),  $\emptyset$  conc.: 239.6  $\mu\text{g}/\text{kg}$ , country: India<sup>247</sup>  
 see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal,

cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5% peanut products), dairy cattle feed (containing 6–10% peanut products), dairy cattle feed (containing 6–12% peanut products), dairy cattle feed (containing more than 20% peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60% maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

#### AFLATOXIN B<sub>2</sub>

incidence: 39/79, conc. range: nc, Ø conc.: 49.3 µg/kg, country: India<sup>247</sup>

see also animal feedstuff (dairy cake), bird food, bird food, wild, biri testa, blackgram, blackgram husk, cottonseed, cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meats, dog food, egg production mixed feed, feed, compound, feed (cat), feed (cattle), feed (dog), feed (pig), feed (poultry), feed (rabbit), feed (sheep), fish meal, horsegram, maize, maize gluten, maize husk, maize, ground, maize, preharvest, mung testa, mustard cake, niger cake, peanut cake, peanut expeller, peanut hay, peanut meal, peanut, kernels, peanuts, redgram husk, rice bran, rice bran (deoiled), rice chaff, rice meal, rice (polish), sal seed cake, sesame cake, sorghum, soybean meal, soybeans, wheat, wheat bran

#### AFLATOXIN

incidence: 76/79, conc. range: 9–1623 µg/kg, country: India<sup>247</sup>

see also blackgram husk, bread crumbs, broiler finisher, broiler starter, cotton cake, cottonseed, cottonseed cake, cottonseed extract, cottonseed meal, feed, feed (cattle), feed (cow), feed (dog), feed (horse), feed (maize, gluten), feed (pig), feed (poultry), feed (rabbit), feed (rat/mice), feed (sheep), feeds, grain, fish meal, flour (wheat), groundnut cake, grower's mash, horsegram, layer's mash, maize, maize gluten, maize, white, milo, peanut cake, peanut, kernels, peanut (oil cake), pearl millet, pig breeder's mash, pig finisher, pig starter, pod with haulms, poultry breeder's mash, rabbit pellets, redgram husk, rice, rice bran (deoiled), rice, broken, rice (polish), sesame cake, silk worm pupae, sorghum, soybean cake, soybean meal, wheat, wheat bran

**Peanut expeller** may contain the following mycotoxins:

#### AFLATOXIN B<sub>1</sub>

incidence: 23/28\*, conc. range: 30–1385 µg/kg, Ø conc.: 347.74 µg/kg, country: Denmark<sup>316</sup>, \*imported from Argentina, Brazil, Ghana, Senegal, Indonesia, Kenya, Nigeria, Sudan, Uganda



see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cyad meal, dairy cattle feed, dairy cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60 % maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing),

rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

#### AFLATOXIN B<sub>2</sub>

incidence: 17/28\*, conc. range: 56–694 µg/kg, Ø conc.: 224.18 µg/kg, country: Denmark<sup>316</sup>, \*imported from Argentina, Brazil, Ghana, Senegal, Indonesia, Kenya, Nigeria, Sudan, Uganda

see also animal feedstuff (dairy cake), bird food, bird food, wild, biri testa, blackgram, blackgram husk, cottonseed, cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meats, dog food, egg production mixed feed, feed, compound, feed (cat), feed (cattle), feed (dog), feed (pig), feed (poultry), feed (rabbit), feed (sheep), fish meal, horsegram, maize, maize gluten, maize husk, maize, ground, maize, preharvest, mung testa, mustard cake, niger cake, peanut cake, peanut cake (deoiled), peanut hay, peanut meal, peanut, kernels, peanuts, redgram husk, rice bran, rice bran (deoiled), rice chaff, rice meal, rice (polish), sal seed cake, sesame cake, sorghum, soybean meal, soybeans, wheat, wheat bran

#### AFLATOXIN G<sub>1</sub>

incidence: 14/28\*, conc. range: 28–694 µg/kg, Ø conc.: 187.21 µg/kg, country: Denmark<sup>316</sup>, \*imported from Argentina, Brazil, Ghana, Senegal, Indonesia, Kenya, Nigeria, Sudan, Uganda

see also animal feedstuffs (dairy cake), bird food, bird food, wild, concentrate, mixed, cottonseed, cottonseed cake, feed (cat), feed (chicken), feed (dog), maize, maize, ground, maize, preharvest, meat meal, milk production mixed feed, murkool, peanut cake, peanut hay, peanut meal, peanuts, rice bran, rice germ, sorghum, soybeans, wheat, wheat bran, wheat bran and chana testa

**AFLATOXIN G<sub>2</sub>**

incidence: 6/28\*, conc. range: 27–556 µg/kg, Ø conc.: 171.17 µg/kg, country: Denmark<sup>316</sup>,

\*imported from Argentina, Brazil, Ghana, Senegal, Indonesia, Kenya, Nigeria, Sudan, Uganda

see also animal feedstuffs (dairy cake), bird food, feed (cat), feed (dog), maize, maize, preharvest, peanut hay, peanut meal, peanuts, soybeans

**Peanut hay** may contain the following mycotoxins:

**AFLATOXIN B<sub>1</sub>**

incidence: 1/1, conc.: 200 µg/kg, country: Australia<sup>325</sup>

see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60 % maize), fish meal, grain by-products, grains (no specification),

greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

**AFLATOXIN B<sub>2</sub>**

incidence: 1/1, conc.: 4 µg/kg, country: Australia<sup>325</sup>

see also animal feedstuff (dairy cake), bird food, bird food, wild, biri testa, blackgram, blackgram husk, cottonseed, cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meats, dog food, egg production mixed feed, feed, compound, feed (cat), feed (cattle), feed (dog), feed (pig), feed (poultry), feed (rabbit), feed (sheep), fish meal, horsegram, maize, maize gluten, maize husk, maize, ground, maize, preharvest, mung testa, mustard cake, niger cake, peanut cake, peanut cake (deoiled), peanut expeller, peanut meal, peanut, kernels, peanuts, redgram husk, rice bran, rice bran (deoiled), rice chaff, rice meal, rice (polish), sal seed cake, sesame cake, sorghum, soybean meal, soybeans, wheat, wheat bran

**AFLATOXIN G<sub>1</sub>**

incidence: 1/1, conc.: 200 µg/kg, country: Australia<sup>325</sup>

see also animal feedstuffs (dairy cake), bird food, bird food, wild, concentrate, mixed, cottonseed, cottonseed cake, feed (cat), feed (chicken), feed (dog), maize, maize, ground, maize, preharvest, meat meal, milk production mixed feed, murkool, peanut cake, peanut expeller, peanut meal, peanuts, rice bran, rice germ, sorghum, soybeans, wheat, wheat bran, wheat bran and chana testa

**AFLATOXIN G<sub>2</sub>**

incidence: 1/1, conc.: 20 µg/kg, country: Australia<sup>325</sup>

see also animal feedstuffs (dairy cake), bird food, feed (cat), feed (dog), maize, maize, preharvest, peanut expeller, peanut meal, peanuts, soybeans

**Peanut hulls/skins** may contain the following mycotoxins:

**ZEARALENONE**

incidence: 2/12, conc. range: 70–150 µg/kg (2 sa), country: USA<sup>370</sup>

see also alfalfa, barley, barley, husked, barley, unhusked (naked), barley and feed, bone meal, bran, broilers feed, *Carthamus* cake, chick pea, concentrate, mixed, corn cob mix silage, cotton cake, cottonseed, cottonseed cake, diet (dairy cow), diet (poultry), diets (mixed), feed, feed components, feed, mixed, feed, mixed (primarily maize also maize, oats, wheat), feed (bran), feed (broiler chicken), feed (cattle), feed (chicken), feed (dairy), feed (developing pig), feed (mill run, from wheat), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (starter chicken), feedstuff, fish meal, forage grass, grain, bruised, grain, mixed feed, grains (no specification), hay, maize, maize ears, maize flakes, maize germ, maize germ/bran, maize gluten, maize kernels, maize meal, maize oil cake, maize screenings, maize stalks (pith), maize, “Baby”, maize, hybrid, maize, shelled, maize, unshelled, maize, white, maize grain,

artificially dried, maize grain, crib dried, maize grain, ensiled, milk production mixed feed, oats, *Paspalum palidosum*, straw, rice bran, rice germ, rice germ cake, rye, silage, sorghum, soybeans, soybeans, extracted, sunflower cake, tapioca, triticale, wheat, wheat bran, wheat bran and chana testa, wheat soya meal

**Peanut meal** Peanut meal for feed may contain the following mycotoxins:

**AFLATOXIN B<sub>1</sub>**

incidence: 366/366\*, conc. range: 10–750 µg/kg, Ø conc.: 71 µg/kg, country: Poland<sup>76</sup>, \*imported

incidence: 1/2, conc.: 500 µg/kg, country: Australia<sup>121</sup>

incidence: 3/4, conc. range: 112–6500 µg/kg, country: USA<sup>245</sup>

incidence: 1/1, conc.: 11 µg/kg, country: USA<sup>272</sup>

incidence: 13/16, conc. range: 60–300 µg/kg, Ø conc.: 140 µg/kg, country: Ireland<sup>279</sup>

incidence: 16/18\*, conc. range:

<20–1120 µg/kg, country: Indonesia, USA, Brazil, India<sup>305</sup>, \*ncac

incidence: 20/22\*, conc. range:

54–2520 µg/kg, Ø conc.: 701.75 µg/kg, country: Denmark<sup>316</sup>, \*imported from

Argentina, Brazil, Nigeria, Senegal  
incidence: 1/1\* \*\*, conc.: 269 µg/kg, country: USA<sup>378</sup>, \*ncac, \*\*de-oiled

incidence: 1/1\*, conc.: 35.7 µg/kg, country: USA<sup>378</sup>, \*ncac

incidence: ?/35, conc. range: <10–2400 µg/kg, country: The Netherlands<sup>379</sup>

incidence: 2/2\*, conc. range: 164–3527 µg/kg, Ø conc.: 1845.5 µg/kg, country: UK<sup>407</sup>,

\*imported from Argentina and India

see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20% peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed,

concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60 % maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

#### AFLATOXIN B<sub>2</sub>

incidence: 366/366\*, conc. range: 2–200 µg/kg, Ø conc.: 16 µg/kg, country: Poland<sup>76</sup>,

\*imported

incidence: 1/1, conc.: 3 µg/kg, country:

USA<sup>272</sup>

incidence: 10/16, conc. range: 20–90 µg/kg,

Ø conc.: 40 µg/kg, country: Ireland<sup>279</sup>

incidence: 16/18\*, conc. range:

<20–600 µg/kg, country: Indonesia, USA,

Brazil, India<sup>305</sup>, \*ncac

incidence: 15/22\*, conc. range: 30–556 µg/kg,

Ø conc.: 301.73 µg/kg, country: Denmark<sup>316</sup>,

\*imported from Argentina, Brazil, Nigeria, Senegal

see also animal feedstuff (dairy cake), bird food, bird food, wild, biri testa, blackgram, blackgram husk, cottonseed, cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meats, dog food, egg production mixed feed, feed, compound, feed (cat), feed (cattle), feed (dog), feed (pig), feed (poultry), feed (rabbit), feed (sheep), fish meal, horsegram, maize, maize gluten, maize husk, maize, ground, maize, preharvest, mung testa, mustard cake, niger cake, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut, kernels, peanuts, redgram husk, rice bran, rice bran (deoiled), rice chaff, rice meal, rice (polish), sal seed cake, sesame cake, sorghum, soybean meal, soybeans, wheat, wheat bran

#### AFLATOXIN G<sub>1</sub>

incidence: 1/1, conc.: 11 µg/kg, country:

USA<sup>272</sup>

incidence: 7/16, conc. range: 40–150 µg/kg,

Ø conc.: 70 µg/kg, country: Ireland<sup>279</sup>

incidence: 16/18\*, conc. range:

<20–450 µg/kg, country: Indonesia, USA,

Brazil, India<sup>305</sup>, \*ncac

incidence: 16/22\*, conc. range: 20–694 µg/kg,

Ø conc.: 272.06 µg/kg, country: Denmark<sup>316</sup>,

\*imported from Argentina, Brazil, Nigeria, Senegal

see also animal feedstuffs (dairy cake), bird food, bird food, wild, concentrate, mixed, cottonseed, cottonseed cake, feed (cat),

feed (chicken), feed (dog), maize, maize, ground, maize, preharvest, meat meal, milk production mixed feed, murkool, peanut cake, peanut expeller, peanut hay, peanuts, rice bran, rice germ, sorghum, soybeans, wheat, wheat bran, wheat bran and chana testa

#### AFLATOXIN G<sub>2</sub>

incidence: 1/1, conc.: 5 µg/kg, country: USA<sup>272</sup>

incidence: 3/16, conc. range: 30–50 µg/kg,

Ø conc.: 40 µg/kg, country: Ireland<sup>279</sup>

incidence: 16/18\*, conc. range:

<20–90 µg/kg, country: Indonesia, USA, Brazil, India<sup>305</sup>, \*ncac

incidence: 11/22\*, conc. range: 28–111 µg/kg,

Ø conc.: 82.36 µg/kg, country: Denmark<sup>316</sup>,

\*imported from Argentina, Brazil, Nigeria, Senegal

incidence: 2/2, conc. range: 27–601 µg/kg,

Ø conc.: 314 µg/kg, country: UK<sup>407</sup>, imported from Argentina and India

see also animal feedstuffs (dairy cake), bird food, feed (cat), feed (dog), maize, maize, preharvest, peanut expeller, peanut hay, peanuts, soybeans

#### AFLATOXINS

incidence: 1/1, conc.: 72 µg/kg, country:

USA<sup>280</sup>

see also animal feed (maize), animal feed (mixed), barley, copra meal, cottonseed, cottonseed fines, cottonseed meats, cottonseed meal, feed, feed ingredients (miscellaneous), feed, mixed, feed (excluding peanuts, suspect), feed (goat), feed (pig), feed (poultry), feedstuff, grain, grain, mixed feed, maize, maize, shelled, peanut cake, peanut meal and by-products, peanuts, protein concentrates, rice, rice bran, sorghum, soybean meal, sunflower

**Peanut meal and by-products** may contain the following mycotoxins:

#### AFLATOXINS

incidence: 45/82, conc. range:

5–>2000 µg/kg, country: Australia<sup>21</sup>

see also animal feed (maize), animal feed (mixed), barley, copra meal, cottonseed, cottonseed fines, cottonseed meal, cottonseed meats, feed, feed ingredients (miscellaneous), feed, mixed, feed (excluding peanuts, suspect), feed (goat), feed (pig), feed (poultry), feedstuff, grain, grain, mixed feed, maize, maize, shelled, peanut cake, peanut meal, peanuts, protein concentrates, rice, rice bran, sorghum, soybean meal, sunflower

**Peanut, kernels** Peanut kernels for feed may contain the following mycotoxins:

#### AFLATOXIN B<sub>1</sub>

incidence: 3/20, Ø conc.: 30 µg/kg, country: Egypt<sup>16</sup>

see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed, and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60 % maize), fish meal,

grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

#### AFLATOXIN B<sub>2</sub>

incidence: 3/20, Ø conc.: 15 µg/kg, country: Egypt<sup>16</sup>

see also animal feedstuff (dairy cake), bird food, bird food, wild, biri testa, blackgram, blackgram husk, cottonseed, cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meats, dog food, egg production mixed feed, feed, compound, feed (cat), feed (cattle), feed (dog), feed (pig), feed (poultry), feed (rabbit), feed (sheep), fish meal, horsegram, maize, maize gluten, maize husk, maize, ground, maize, preharvest, mung testa, mustard cake, niger cake, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanuts, redgram husk, rice bran, rice bran (deoiled), rice chaff, rice meal, rice (polish), sal seed cake, sesame cake, sorghum, soybean meal, soybeans, wheat, wheat bran

#### AFLATOXIN

incidence: 24/77\*, conc. range: 11–30 µg/kg (6 sa), 31–100 µg/kg (6 sa), ≤1776 µg/kg (12 sa), country: India<sup>311</sup>, \*ncac  
 incidence: 47/150\*, conc. range: 6–10 µg/kg (22 sa), 14–20 µg/kg (12 sa), 25–30 µg/kg (5 sa), 40–50 µg/kg (3 sa), 60–125 µg/kg (5 sa), country: Israel<sup>360</sup>, \*ncac  
 see also blackgram husk, bread crumbs, broiler finisher, broiler starter, cotton cake, cottonseed, cottonseed cake, cottonseed extract, cottonseed meal, feed, feed (cattle), feed (cow), feed (dog), feed (horse), feed (maize, gluten), feed (pig), feed (poultry), feed (rabbit), feed (rat/mice), feed (sheep), feeds, grain, fish meal, flour (wheat), groundnut cake, grower's mash, horsegram, layer's mash, maize, maize gluten, maize, white, milo, peanut cake, peanut cake (deoiled), peanut (oil cake), pearl millet, pig breeder's mash, pig finisher, pig starter, pod with haulms, poultry breeder's mash, rabbit pellets, redgram husk, rice, rice bran (deoiled), rice, broken, rice (polish), sesame cake, silk worm pupae, sorghum, soybean cake, soybean meal, wheat, wheat bran

**Peanut, shells** may contain the following mycotoxins:

#### AFLATOXIN B<sub>1</sub>

incidence: 4/20, Ø conc.: 400 µg/kg, country: Egypt<sup>16</sup>

see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20% peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy

cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60 % maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

#### AFLATOXIN B<sub>1</sub> + B<sub>2</sub> + G<sub>1</sub>

incidence: 1/2, conc. range: 21–50 µg/kg, (1 sa with a maximum of 48 µg/kg), country: Guatemala<sup>375</sup>

**Peanut (oil cake)** may contain the following mycotoxins:

#### AFLATOXIN B

incidence: 4/12, conc. range: ≥25–>100 µg/kg, country: France<sup>46</sup>  
see also barley, cocoa (oilcake), cottonseed cake, feed, feed (cattle), feed (maize, gluten), feed (pig), feed (poultry), flour (wheat), lucern (dried), maize, maize gluten, maize grains, oats, rice, broken, sorghum, soybean (oil cake), sunflower (oilcake), wheat

#### AFLATOXIN B + G

incidence: 19/25, conc. range: 10–4500 µg/kg, Ø conc.: 330 µg/kg, country: France<sup>45</sup>  
incidence: 8/12, conc. range: ≤4000 µg/kg or more, country: Malaya<sup>388</sup>  
see also feed (cattle), feed (pig), feed (poultry), feed (rabbit), feed (rat), mice feed

#### AFLATOXIN

incidence: 7/7, conc. range: <30 µg/kg (3 sa), >30 µg/kg (1 sa), >200 µg/kg (2 sa), >600 µg/kg (1 sa), country: India<sup>380</sup>  
see also blackgram husk, bread crumbs, broiler finisher, broiler starter, cotton cake, cottonseed, cottonseed cake, cottonseed extract, cottonseed meal, feed, feed (cattle), feed (cow), feed (dog), feed (horse), feed (maize, gluten), feed (pig), feed (poultry), feed (rabbit), feed (rat/mice), feed (sheep), feeds, grain, fish meal, flour (wheat), groundnut cake, grower's mash, horsegram, layer's mash, maize, maize gluten, maize, white, peanut cake, peanut cake (deoiled), peanut, kernels, pearl millet, pig breeder's mash, pig finisher, pig starter, pod with haulms, poultry breeder's mash, rabbit pellets, redgram husk, rice, rice bran (deoiled), rice, broken, rice (polish), sesame cake, sorghum, soybean cake, soybean meal, wheat, wheat bran

**Peanuts** Peanuts for feed may contain the following mycotoxins:

#### AFLATOXIN B<sub>1</sub>

incidence: 10/10\*, conc. range: tr µg/kg (9 sa), 17 µg/kg (1 sa) country: UK<sup>36</sup>, \*imported?  
incidence: 2/2\*, conc. range: 43.5–432 µg/kg,

Ø conc.: 237.8 µg/kg, country: UK<sup>122</sup>, \*ncac incidence: 1/1, conc.: 500 µg/kg, country: Australia<sup>181</sup>  
 incidence: 22/37, conc. range: <20 µg/kg (1 sa), 21–50 µg/kg (1 sa), 51–100 µg/kg (3 sa), 101–1000 µg/kg (9 sa), >1000 µg/kg (8 sa), country: UK<sup>267</sup>  
 incidence: 37/37, conc. range: 10–3300 µg/kg, Ø conc.: 890 µg/kg, country: investigated in Germany<sup>298</sup>  
 incidence: 1/1\*, conc.: 56 µg/kg, country: Denmark<sup>316</sup>, \*imported from Congo  
 incidence: 20/28\*, conc. range: 1–20 µg/kg (8 sa), 21–100 µg/kg (10 sa), 101–300 µg/kg (2 sa), country: USA<sup>370</sup>, \*includes 15 peanut hulls, 7 peanut skin, and 6 peanut meal sa see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60 % maize), fish meal,

grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

#### AFLATOXIN B<sub>2</sub>

incidence: 2/2\*, conc. range: 10.5–74 µg/kg, Ø conc.: 42.3 µg/kg, country: UK<sup>122</sup>, \*ncac see also animal feedstuff (dairy cake), bird food, bird food, wild, biri testa, blackgram, blackgram husk, cottonseed, cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meats, dog food, egg production mixed feed, feed, compound, feed (cat), feed (cattle), feed (dog), feed (pig), feed (poultry), feed (rabbit), feed (sheep), fish meal, horsegram, maize, maize gluten, maize husk, maize, ground, maize, preharvest, mung testa, mustard cake, niger cake, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, redgram husk, rice bran, rice bran (deoiled), rice chaff, rice meal, rice (polish), sal seed cake, sesame cake, sorghum, soybean meal, soybeans, wheat, wheat bran



**AFLATOXIN G<sub>1</sub>**

incidence: 2/2\*, conc. range:

93.5–115.5 µg/kg, Ø conc.: 104.5 µg/kg,

country: UK<sup>122</sup>, \*ncac

incidence: 1/1\*, conc.: 56 µg/kg, country:

Denmark<sup>316</sup>, \*imported from Congo

see also animal feedstuffs (dairy cake), bird food, bird food, wild, concentrate, mixed, cottonseed, cottonseed cake, feed (cat), feed (chicken), feed (dog), maize, maize, ground, maize, preharvest, meat meal, milk production mixed feed, murkool, peanut cake, peanut expeller, peanut hay, peanut meal, rice bran, rice germ, sorghum, soybeans, wheat, wheat bran, wheat bran and chana testa

**AFLATOXIN G<sub>2</sub>**

incidence: 2/2\*, conc. range: 23–33 µg/kg,

Ø conc.: 28 µg/kg, country: UK<sup>122</sup>, \*ncac

see also animal feedstuffs (dairy cake), bird food, feed (cat), feed (dog), maize, maize, preharvest, peanut expeller, peanut hay, peanut meal, soybeans

**AFLATOXINS**

incidence: 50/50, conc. range: 3–22,000 µg/kg, Ø conc.: 1685 µg/kg, country: USA<sup>35</sup>

incidence: 9/56\*, conc. range: <2–57 µg/kg,

Ø conc.: 17 µg/kg, country: USA<sup>329</sup>, \*ncac

incidence: 18/79\*, conc. range: <2–154 µg/kg,

Ø conc.: 25 µg/kg, country: USA<sup>329</sup>, \*ncac

incidence: 16/17\*, conc. range: <2–311 µg/kg, Ø conc.: 33 µg/kg, country: USA<sup>329</sup>, \*ncac

see also animal feed (maize), animal feed (mixed), barley, copra meal, cottonseed, cottonseed fines, cottonseed meal, cottonseed meats, feed, feed ingredients (miscellaneous), feed, mixed, feed (excluding peanuts, suspect), feed (goat), feed (pig), feed (poultry), feedstuff, grain, grain, mixed feed, maize, maize, shelled, peanut cake, peanut meal, peanut meal and by-products, protein concentrates, rice, rice bran, sorghum, soybean meal, sunflower

**CYCLOPIAZONIC ACID**

incidence: 45/50, conc. range:

<50–2900 µg/kg, Ø conc.: 460 µg/kg,

country: USA<sup>35</sup>

see also chick mash, feed, groundnut cake, maize, millet, little, rice bran, wheat

**DIACETOXYSCIRPENOL**

incidence: 2/25\*, conc. range:

410–2030 µg/kg, Ø conc.: 1220 µg/kg,

country: India<sup>199</sup>, \*ncac

see also alfalfa, barley, feed, feed components, feed (dog), feed (fish), feed (mink), feed (pig), feed (poultry), feed (reindeer), feeds, grain, feedstuff, forage grass, grain, mixed feed, grains (no specification), maize, maize gluten, oat and barley (hammer-milled), oats, soybeans, wheat

**T-2 TOXIN**

incidence: 3/31\*, conc. range:

170–38,890 µg/kg, Ø conc.: 25,270 µg/kg,

country: India<sup>199</sup>, \*ncac

incidence: 3/25\*, conc. range:

630–1460 µg/kg, Ø conc.: 1043.3 µg/kg,

country: India<sup>199</sup>, \*ncac

see also alfalfa, barley, bran, diet (grower), diet (poultry), feed, feed components, feed, layer, feed, mixed, feed (dog), feed (fish), feed (mink), feed (pig), feed (poultry), feedstuff, forage grass, grain, mixed feed, grains (no specification), hay, maize, maize germ/bran, maize gluten, maize meal, maize screenings, maize stalks (pith), oat and barley (hammer-milled), oats, pig grower diet, piglet diet, rye, sorghum, triticale, wheat

**Pearlmillet** Pearlmillet for feed may contain the following mycotoxins:

**AFLATOXIN**

incidence: ?/16, conc. range: ≤416 µg/kg,

country: India<sup>250</sup>

see also blackgram husk, bread crumbs, broiler finisher, broiler starter, cotton cake, cottonseed, cottonseed cake, cottonseed extract, cottonseed meal, feed, feed (cattle), feed (cow), feed (dog), feed (horse), feed (maize, gluten), feed (pig), feed (poultry), feed (rabbit), feed (rat/mice), feed (sheep), feeds, grain, fish meal, flour (wheat), groundnut cake, grower's mash, horsegram, layer's mash, maize, maize gluten, maize,

white, milo, peanut cake, peanut cake (deoiled), peanut, kernels, peanut (oil cake), pig breeder's mash, pig finisher, pig starter, pod with haulms, poultry breeder's mash, rabbit pellets, redgram husk, rice, rice bran (deoiled), rice, broken, rice (polish), sesame cake, silk worm pupae, sorghum, soybean cake, soybean meal, wheat, wheat bran

**Peas** Peas for feed may contain the following mycotoxins:

#### OCHRATOXIN A

incidence: 1/6, conc.: 4 µg/kg, country: The Netherlands<sup>103</sup>

see also alfalfa, barley, barley, oats, barley (high moisture), barley-soybean diet, bird food, domestic, bird food, wild, broilers feed, cereal grains, citrus pulp, coconut, expeller, corn cob mix silage, diet (dairy cow), diet (poultry), diet (starter), dog food, eat, egg production mixed feed, feed, feed wheat, oat and barley, feed, commercial mix, feed, mixed, feed, mixed (pelleted), feed (broilers), feed (cat), feed (cattle), feed (cereals), feed (pig), feed ec (pig), feed (poultry), feed ec (poultry), feed (poultry, pig), feed ec (rabbit), feed (trout), grain, mixed feed, grains, mixed, grains (heated), hay, horse bean, maize, maize feed, milo, maize gluten, maize meal, maize, white, *Makhana (Euryale ferox)* Salisb) puffs, milk production mixed feed, millet, oat and barley (hammer-milled), oats, palm products, peanut cake, peas and beans, pet food, pig feedstuffs, pig grower diet, pig meal, piglet diet, poultry feedstuffs, rice bran, rice germ, rice germ cake, rye, sorghum, soybean groats, sunflower, sunflower seeds, extracted, tapioca, triticale, *Vicia faba*, wheat, wheat and barley, wheat bran, wheat hay, wheat, oats

**Peas and beans** Peas and beans for feed may contain the following mycotoxins:

#### CITRININ

incidence: 1/15\*, conc.: 9 µg/kg, country: UK<sup>94</sup>, \*imported?

see also barley, barley, oats, barley-soybean diet, cottonseed cake, feed, feed, mixed, feed

(cattle), feed (pig), fish meal, hay, maize, maize, white, *Makhana (Euryale ferox)* Salisb) puffs, oats, palm products, rice bran, rice germ, wheat, wheat and other grains (moldy), wheat bran

#### OCHRATOXIN A

incidence: 7/15, conc. range: ≤33 µg/kg, country: UK<sup>12</sup>

incidence: 1/15\*, conc.: 33 µg/kg, country: UK<sup>94</sup>, \*imported?

see also alfalfa, barley, barley, oats, barley (high moisture), barley-soybean diet, bird food, domestic, bird food, wild, broilers feed, cereal grains, citrus pulp, coconut, expeller, corn cob mix silage, diet (dairy cow), diet (poultry), diet (starter), dog food, eat, egg production mixed feed, feed, feed wheat, oat and barley, feed, commercial mix, feed, mixed, feed, mixed (pelleted), feed (broilers), feed (cat), feed (cattle), feed (cereals), feed (pig), feed ec (pig), feed (poultry), feed ec (poultry), feed (poultry, pig), feed ec (rabbit), feed (trout), grain, mixed feed, grains, mixed, grains (heated), hay, horse bean, maize, maize feed, milo, maize gluten, maize meal, maize, white, *Makhana (Euryale ferox)* Salisb) puffs, milk production mixed feed, millet, oat and barley (hammer-milled), oats, palm products, peanut cake, peas, pet food, pig feedstuffs, pig grower diet, pig meal, piglet diet, poultry feedstuffs, rice bran, rice germ, rice germ cake, rye, sorghum, soybean groats, sunflower, sunflower seeds, extracted, tapioca, triticale, *Vicia faba*, wheat, wheat and barley, wheat bran, wheat hay, wheat, oats

**Pet food** may contain the following mycotoxins:

#### OCHRATOXIN A

incidence: 19/40, conc. range: 0.21–13.1 µg/kg, country: Austria, Poland<sup>350</sup>

see also alfalfa, barley, barley, oats, barley (high moisture), barley-soybean diet, bird food, domestic, bird food, wild, broilers feed, cereal grains, citrus pulp, coconut, expeller, corn cob mix silage, diet (dairy cow), diet (poultry), diet (starter), dog food, eat, egg

production mixed feed, feed, feed wheat, oat and barley, feed, commercial mix, feed, mixed, feed, mixed (pelleted), feed (broilers), feed (cat), feed (cattle), feed (cereals), feed (pig), feed ec (pig), feed (poultry), feed ec (poultry), feed (poultry, pig), feed ec (rabbit), feed (trout), grain, mixed feed, grains, mixed, grains (heated), hay, horse bean, maize, maize feed, milo, maize gluten, maize meal, maize, white, *Makhana (Euryale ferox* Salisb) puffs, milk production mixed feed, millet, oat and barley (hammer-milled), oats, palm products, peanut cake, peas, peas and beans, pig feedstuffs, pig grower diet, pig meal, piglet diet, poultry feedstuffs, rice bran, rice germ, rice germ cake, rye, sorghum, soybean groats, sunflower, sunflower seeds, extracted, tapioca, triticale, *Vicia faba*, wheat, wheat and barley, wheat bran, wheat hay, wheat, oats

**Pellets, finisher** may contain the following mycotoxins:

AFLATOXIN B<sub>1</sub>

incidence: 1/1, conc.: 20 µg/kg, country:

Australia<sup>121</sup>

see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and

ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60 % maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana (Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

**Pig breeder's mash** may contain the following mycotoxins:

AFLATOXIN

incidence: 3/6, conc. range: 0–260 µg/kg,

country: Nigeria<sup>109</sup>

see also blackgram husk, bread crumbs, broiler finisher, broiler starter, cotton cake, cottonseed, cottonseed cake, cottonseed extract, cottonseed meal, feed, feed (cattle), feed (cow), feed (dog), feed (horse), feed (maize, gluten), feed (pig), feed (poultry), feed (rabbit), feed (rat/mice), feed (sheep), feeds, grain, fish meal, flour (wheat),

groundnut cake, grower's mash, horsegram, layer's mash, maize, maize gluten, maize, white, milo, peanut cake, peanut cake (deoiled), peanut, kernels, peanut (oil cake), pearl millet, pig finisher, pig starter, pod with haulms, poultry breeder's mash, rabbit pellets, redgram husk, rice, rice bran (deoiled), rice, broken, rice (polish), sesame cake, silk worm pupae, sorghum, soybean cake, soybean meal, wheat, wheat bran

**Pig diet, fattening** may contain the following mycotoxins:

**RUBRATOXIN B**

incidence: 1/7345, conc.: nc, country:

Hungary<sup>209</sup>

see also diet (grower), diet (poultry), diet (starter), pig grower diet, soybean groats, wheat

**PIG FEED**

see Feed (pig)

**Pig feedstuffs** may contain the following mycotoxins:

**OCHRATOXIN A**

incidence: 27/39, conc. range: 1–>20 µg/kg, country: Czechoslovakia<sup>110</sup>

see also alfalfa, barley, barley, oats, barley (high moisture), barley-soybean diet, bird food, domestic, bird food, wild, broilers feed, cereal grains, citrus pulp, coconut, expeller, corn cob mix silage, diet (dairy cow), diet (poultry), diet (starter), dog food, eat, egg production mixed feed, feed, feed wheat, oat and barley, feed, commercial mix, feed, mixed, feed, mixed (pelleted), feed (broilers), feed (cat), feed (cattle), feed (cereals), feed (pig), feed ec (pig), feed (poultry), feed ec (poultry), feed (poultry, pig), feed ec (rabbit), feed (trout), grain, mixed feed, grains, mixed, grains (heated), hay, horse bean, maize, maize feed, milo, maize gluten, maize meal, maize, white, *Makhana* (*Euryale ferox* Salisb) puffs, milk production mixed feed, millet, oat and barley (hammer-milled), oats, palm products, peanut cake, peas, peas and beans,

pet food, pig grower diet, pig meal, piglet diet, poultry feedstuffs, rice bran, rice germ, rice germ cake, rye, sorghum, soybean groats, sunflower, sunflower seeds, extracted, tapioca, triticale, *Vicia faba*, wheat, wheat and barley, wheat bran, wheat hay, wheat, oats

**Pig finisher** may contain the following mycotoxins:

**AFLATOXIN**

incidence: 1/5, conc.: 260 µg/kg, country: Nigeria<sup>109</sup>

see also blackgram husk, bread crumbs, broiler finisher, broiler starter, cotton cake, cottonseed, cottonseed cake, cottonseed extract, cottonseed meal, feed, feed (cattle), feed (cow), feed (dog), feed (horse), feed (maize, gluten), feed (pig), feed (poultry), feed (rabbit), feed (rat/mice), feed (sheep), feeds, grain, fish meal, flour (wheat), groundnut cake, grower's mash, horsegram, layer's mash, maize, maize gluten, maize, white, milo, peanut cake, peanut cake (deoiled), peanut, kernels, peanut (oil cake), pearl millet, pig breeder's mash, pig starter, pod with haulms, poultry breeder's mash, rabbit pellets, redgram husk, rice bran (deoiled), rice, broken, rice (polish), sesame cake, silk worm pupae, sorghum, soybean cake, soybean meal, wheat, wheat bran

**Pig grower diet** may contain the following mycotoxins:

**OCHRATOXIN A**

incidence: 1/7345, conc.: nc, country: Hungary<sup>209</sup>

see also alfalfa, barley, barley, oats, barley (high moisture), barley-soybean diet, bird food, domestic, bird food, wild, broilers feed, cereal grains, citrus pulp, coconut, expeller, corn cob mix silage, diet (dairy cow), diet (poultry), diet (starter), dog food, eat, egg production mixed feed, feed, feed wheat, oat and barley, feed, commercial mix, feed, mixed, feed, mixed (pelleted), feed (broilers), feed (cat), feed (cattle), feed (cereals), feed (pig), feed ec (pig), feed (poultry), feed ec

(poultry), feed (poultry, pig), feed ec (rabbit), feed (trout), grain, mixed feed, grains, mixed, grains (heated), hay, horse bean, maize, maize feed, milo, maize gluten, maize meal, maize, white, *Makhana (Euryale ferox* Salisb) puffs, milk production mixed feed, millet, oat and barley (hammer-milled), oats, palm products, peanut cake, peas, peas and beans, pet food, pig feedstuffs, pig meal, piglet diet, poultry feedstuffs, rice bran, rice germ, rice germ cake, rye, sorghum, soybean groats, sunflower, sunflower seeds, extracted, tapioca, triticale, *Vicia faba*, wheat, wheat and barley, wheat bran, wheat hay, wheat, oats

#### RUBRATOXIN B

incidence: 1/7345, conc. range: nc, country: Hungary<sup>209</sup>

see also diet (grower), diet (poultry), diet (starter), pig diet, fattening, soybean groats, wheat

#### T-2 TOXIN

incidence: 1/7345, conc.: nc, country: Hungary<sup>209</sup>

see also alfalfa, barley, bran, diet (grower), diet (poultry), feed, feed components, feed, layer, feed, mixed, feed (dog), feed (fish), feed (mink), feed (pig), feed (poultry), feedstuff, forage grass, grain, mixed feed, grains (no specification), hay, maize, maize germ/bran, maize gluten, maize meal, maize screenings, maize stalks (pith), oat and barley (hammer-milled), oats, peanuts, piglet diet, rye, sorghum, triticale, wheat

**Pig meal** may contain the following mycotoxins:

#### OCHRATOXIN A

incidence: 12/96, conc. range: <25–250 µg/kg, country: UK<sup>30</sup>

see also alfalfa, barley, barley, oats, barley (high moisture), barley-soybean diet, bird food, domestic, bird food, wild, broilers feed, cereal grains, citrus pulp, coconut, expeller, corn cob mix silage, diet (dairy cow), diet (poultry), diet (starter), dog food, eat, egg production mixed feed, feed, feed wheat, oat

and barley, feed, commercial mix, feed, mixed, feed, mixed (pelleted), feed (broilers), feed (cat), feed (cattle), feed (cereals), feed (pig), feed ec (pig), feed (poultry), feed ec (poultry), feed (poultry, pig), feed ec (rabbit), feed (trout), grain, mixed feed, grains, mixed, grains (heated), hay, horse bean, maize, maize feed, milo, maize gluten, maize meal, maize, white, *Makhana (Euryale ferox* Salisb) puffs, milk production mixed feed, millet, oat and barley (hammer-milled), oats, palm products, peanut cake, peas, peas and beans, pet food, pig feedstuffs, pig grower diet, piglet diet, poultry feedstuffs, rice bran, rice germ, rice germ cake, rye, sorghum, soybean groats, sunflower, sunflower seeds, extracted, tapioca, triticale, *Vicia faba*, wheat, wheat and barley, wheat bran, wheat hay, wheat, oats

**Pig meal and pellets** may contain the following mycotoxins:

#### AFLATOXIN B<sub>1</sub>

incidence: 13/291, conc. range: <10–375 µg/kg, country: UK<sup>30</sup>

see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20% peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meals, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5% peanut products), dairy cattle feed (containing 6–10% peanut products), dairy cattle feed (containing 6–12% peanut products), dairy cattle feed (containing more than 20% peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer,

feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60 % maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

**Pig starter** may contain the following mycotoxins:

#### AFLATOXIN

incidence: 3/5, conc. range: 0–260 µg/kg, country: Nigeria<sup>109</sup>

see also blackgram husk, bread crumbs, broiler finisher, broiler starter, cotton cake, cottonseed, cottonseed cake, cottonseed extract, cottonseed meal, feed, feed (cattle), feed (cow), feed (dog), feed (horse), feed (maize, gluten), feed (pig), feed (poultry), feed (rabbit), feed (rat/mice), feed (sheep), feeds, grain, fish meal, flour (wheat), groundnut cake, grower's mash, horsegram,

layer's mash, maize, maize gluten, maize, white, milo, peanut cake, peanut cake (deoiled), peanut, kernels, peanut (oil cake), pearl millet, pig breeder's mash, pig finisher, pod with haulms, poultry breeder's mash, rabbit pellets, redgram husk, rice, rice bran (deoiled), rice, broken, rice (polish), sesame cake, silk worm pupae, sorghum, soybean cake, soybean meal, wheat, wheat bran

**Pigeon pea** Pigeon pea for feed may contain the following mycotoxins:

#### AFLATOXIN B<sub>1</sub>

incidence: 3/10, conc. range: 10–60 µg/kg, country: India<sup>183</sup>

incidence: 5/10, conc. range: tr–10 µg/kg, country: India<sup>183</sup>

see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60 % maize), fish meal,

grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

**Piglet diet** may contain the following mycotoxins:

**OCHRATOXIN A**

incidence: 2/7345, conc. range: nc, country: Hungary<sup>209</sup>

see also alfalfa, barley, barley, oats, barley (high moisture), barley-soybean diet, bird food, domestic, bird food, wild, broilers feed, cereal grains, citrus pulp, coconut, expeller, corn cob mix silage, diet (dairy cow), diet (poultry), diet (starter), dog food, eat, egg production mixed feed, feed, feed wheat, oat and barley, feed, commercial mix, feed, mixed, feed, mixed (pelleted), feed (broilers), feed (cat), feed (cattle), feed (cereals), feed (pig), feed ec (pig), feed (poultry), feed ec (poultry), feed (poultry, pig), feed ec (rabbit), feed (trout), grain, mixed feed, grains, mixed, grains (heated), hay, horse bean, maize, maize feed, milo, maize gluten, maize meal, maize, white, *Makhana* (*Euryale ferox* Salisb)

puffs, milk production mixed feed, millet, oat and barley (hammer-milled), oats, palm products, peanut cake, peas, peas and beans, pet food, pig feedstuffs, pig grower diet, pig meal, poultry feedstuffs, rice bran, rice germ, rice germ cake, rye, sorghum, soybean groats, sunflower, sunflower seeds, extracted, tapioca, triticale, *Vicia faba*, wheat, wheat and barley, wheat bran, wheat hay, wheat, oats

**PATULIN**

incidence: 1/7345, conc.: nc, country: Hungary<sup>209</sup>

see also diet (grower), hay, maize meal, wheat

**T-2 TOXIN**

incidence: 2/7345, conc. range: nc, country: Hungary<sup>209</sup>

see also alfalfa, barley, bran, diet (grower), diet (poultry), feed, feed components, feed, layer, feed, mixed, feed (dog), feed (fish), feed (mink), feed (pig), feed (poultry), feedstuff, forage grass, grain, mixed feed, grains (no specification), hay, maize, maize germ/bran, maize gluten, maize meal, maize screenings, maize stalks (pith), oat and barley (hammer-milled), oats, peanuts, pig grower diet, rye, sorghum, triticale, wheat

**Pod with haulms** may contain the following mycotoxins:

**AFLATOXIN**

incidence: 24/80, conc. range: 10–30 µg/kg (15 sa), 31–100 µg/kg (7 sa), > 500 µg/kg (2 sa), country: India<sup>311</sup>

see also blackgram husk, bread crumbs, broiler finisher, broiler starter, cotton cake, cottonseed, cottonseed cake, cottonseed extract, cottonseed meal, feed, feed (cattle), feed (cow), feed (dog), feed (horse), feed (maize, gluten), feed (pig), feed (poultry), feed (rabbit), feed (rat/mice), feed (sheep), feeds, grain, fish meal, flour (wheat), groundnut cake, grower's mash, horsegram, layer's mash, maize, maize gluten, maize, white, milo, peanut cake, peanut cake (deoiled), peanut, kernels, peanut (oil cake), pearl millet, pig breeder's mash, pig finisher,

pig starter, poultry breeder's mash, rabbit pellets, redgram husk, rice, rice bran (deoiled), rice, broken, rice (polish), sesame cake, silk worm pupae, sorghum, soybean cake, soybean meal, wheat, wheat bran

**Poultry breeder's mash** may contain the following mycotoxins:

**AFLATOXIN**

incidence: 7/8, conc. range: 0–231 µg/kg, country: Nigeria<sup>109</sup>

see also blackgram husk, bread crumbs, broiler finisher, broiler starter, cotton cake, cottonseed, cottonseed cake, cottonseed extract, cottonseed meal, feed, feed (cattle), feed (cow), feed (dog), feed (horse), feed (maize, gluten), feed (pig), feed (poultry), feed (rabbit), feed (rat/mice), feed (sheep), feeds, grain, fish meal, flour (wheat), groundnut cake, grower's mash, horsegram, layer's mash, maize, maize gluten, maize, white, milo, peanut cake, peanut cake (deoiled), peanut, kernels, peanut (oil cake), pearl millet, pig breeder's mash, pig finisher, pig starter, pod with haulms, rabbit pellets, redgram husk, rice, rice bran (deoiled), rice, broken, rice (polish), sesame cake, silk worm pupae, sorghum, soybean cake, soybean meal, wheat, wheat bran

**POULTRY FEED**

see Feed (poultry)

**Poultry feedstuffs** may contain the following mycotoxins:

**OCHRATOXIN A**

incidence: 31/47, conc. range: 1–>20 µg/kg, country: Czechoslovakia<sup>110</sup>

see also alfalfa, barley, barley, oats, barley (high moisture), barley-soybean diet, bird food, domestic, bird food, wild, broilers feed, cereal grains, citrus pulp, coconut, expeller, corn cob mix silage, diet (dairy cow), diet (poultry), diet (starter), dog food, eat, egg production mixed feed, feed, feed wheat, oat and barley, feed, commercial mix, feed, mixed, feed, mixed (pelleted), feed (broilers),

feed (cat), feed (cattle), feed (cereals), feed (pig), feed ec (pig), feed (poultry), feed ec (poultry), feed (poultry, pig), feed ec (rabbit), feed (trout), grain, mixed feed, grains, mixed, grains (heated), hay, horse bean, maize, maize feed, milo, maize gluten, maize meal, maize, white, *Makhana* (*Euryale ferox* Salisb) puffs, milk production mixed feed, millet, oat and barley (hammer-milled), oats, palm products, peanut cake, peas, peas and beans, pet food, pig feedstuffs, pig grower diet, pig meal, piglet diet, rice bran, rice germ, rice germ cake, rye, sorghum, soybean groats, sunflower, sunflower seeds, extracted, tapioca, triticale, *Vicia faba*, wheat, wheat and barley, wheat bran, wheat hay, wheat, oats

**Poultry feeds (peanut containing)** may contain the following mycotoxins:

**AFLATOXIN B<sub>1</sub>**

incidence: 2/11, conc.: 20 µg/kg, Ø conc.: 20 µg/kg, country: Ireland<sup>279</sup>

see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cypad meal, dairy cattle feed, dairy cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken),



feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60 % maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

**Protein concentrates** may contain the following mycotoxins:

#### AFLATOXINS

incidence: 19/31, conc. range: 5–≤500 µg/kg, country: Poland<sup>84</sup>

see also animal feed (maize), animal feed (mixed), barley, copra meal, cottonseed, cottonseed fines, cottonseed meal, cottonseed meats, feed, feed ingredients (miscellaneous), feed, mixed, feed (excluding peanuts, suspect), feed (goat), feed (pig), feed (poultry), feedstuff, grain, grain, mixed feed, maize, maize, shelled, millet, peanut cake, peanut meal, peanut meal and by-products, peanuts, rice, rice bran, sorghum, soybean meal, sunflower

**Rabbit pellets** may contain the following mycotoxins:

#### AFLATOXIN

incidence: 6/9, conc. range: 0–231 µg/kg, country: Nigeria<sup>109</sup>

see also blackgram husk, bread crumbs, broiler finisher, broiler starter, cotton cake, cottonseed, cottonseed cake, cottonseed extract, cottonseed meal, feed, feed (cattle), feed (cow), feed (dog), feed (horse), feed (maize, gluten), feed (pig), feed (poultry), feed (rabbit), feed (rat/mice), feed (sheep), feeds, grain, fish meal, flour (wheat), groundnut cake, grower's mash, horsegram, layer's mash, maize, maize gluten, maize, white, milo, peanut cake, peanut cake (deoiled), peanut, kernels, peanut (oil cake), pearl millet, pig breeder's mash, pig finisher, pig starter, pod with haulms, poultry breeder's mash, redgram husk, rice, rice bran (deoiled), rice, broken, rice (polish), sesame cake, silk worm pupae, sorghum, soybean cake, soybean meal, wheat, wheat bran

**Rapeseed cake** may contain the following mycotoxins:

#### AFLATOXIN B<sub>1</sub>

incidence: 1/4, conc.: 22 µg/kg, country: India<sup>247</sup>

see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut

products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60 % maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize (dark grains), maize, yellow, *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

**Rat chow** may contain the following mycotoxins:

**FUMONISIN B<sub>1</sub>**

incidence: 1/1, conc.: 220 µg/kg, country: USA<sup>154</sup>

see also barley, bird food, wild, dog food, feed, feed, complete ration, feed, general, feed, layer, feed, maize-based, feed, mixed,

feed, pelleted ration, feed, screenings, feed, sweet, feed (broilers), feed (cat), feed (chicken), feed (dog), feed (gluten), feed (horse), feed (maize), feed (pig), feed (poultry), feed (rat), feed (rodent), forage grass, maize, maize and maize screenings, maize bran, maize ears, maize fine fractions, maize flakes, maize germ, maize germ/bran, maize germ meal, maize gluten, maize grits, maize kernels, maize meal, maize powder, maize screenings, maize, “Baby”, maize, ground, maize, preharvest, maize, sweet feed, maize/oats mix, silage, sorghum, soybeans, wheat

**FUMONISIN B<sub>2</sub>**

incidence: 1/1, conc.: 20 µg/kg, country: USA<sup>154</sup>

see also barley, bird food, wild, dog food, feed, feed, maize-based, feed, mixed, feed (cat), feed (dog), feed (gluten), feed (horse), feed (maize), feed (poultry), feed (rodent), maize, maize bran, maize fine fractions, maize flakes, maize germ, maize germ/bran, maize germ meal, maize gluten, maize grits, maize kernels, maize meal, maize powder, maize screenings, maize, “Baby”, maize, ground, maize, preharvest, wheat

**Redgram husk** may contain the following mycotoxins:

**AFLATOXIN B<sub>1</sub>**

incidence: 3/16, conc. range: ≤25 µg/kg (2 sa), 26–50 µg/kg (1 sa), Ø conc.: 22.7 µg/kg, country: India<sup>247</sup>

see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal

(ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60 % maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

#### AFLATOXIN B<sub>2</sub>

incidence: 2/16, conc. range: nc, Ø conc.: 6.5 µg/kg, country: India<sup>247</sup>

see also animal feedstuffs (dairy cake), bird food, bird food, wild, biri testa, blackgram, blackgram husk, cottonseed, cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meats, dog food, egg production mixed feed, feed, compound, feed (cat), feed (cattle), feed (dog), feed (pig), feed (poultry), feed (rabbit), feed (sheep), fish meal, horsegram, maize, maize gluten, maize husk, maize, ground, maize, preharvest, mung testa, mustard cake, niger cake, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanuts, peanut, kernels, rice bran, rice bran (deoiled), rice chaff, rice meal, rice (polish), sal seed cake, sesame cake, sorghum, soybean meal, soybeans, wheat, wheat bran

#### AFLATOXIN

incidence: 3/16, conc. range: 6–46 µg/kg, country: India<sup>247</sup>

see also blackgram husk, bread crumbs, broiler finisher, broiler starter, cotton cake, cottonseed, cottonseed cake, cottonseed extract, cottonseed meal, feed, feed (cattle), feed (cow), feed (dog), feed (horse), feed (maize, gluten), feed (pig), feed (poultry), feed (rabbit), feed (rat/mice), feed (sheep), feeds, grain, fish meal, flour (wheat), groundnut cake, grower's mash, horsegram, layer's mash, maize, maize gluten, maize, white, milo, peanut cake, peanut cake (deoiled), peanut, kernels, peanut (oil cake), pearl millet, pig breeder's mash, pig finisher, pig starter, pod with haulms, poultry breeder's mash, rabbit pellets, rice, rice bran (deoiled), rice, broken, rice (polish), sesame cake, silk worm pupae, sorghum, soybean cake, soybean meal, wheat, wheat bran

**Rice** Rice for feed may contain the following mycotoxins:

#### AFLATOXIN B<sub>1</sub>

incidence: 1/4, conc.: 86 µg/kg, country: India<sup>253</sup>

see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram

husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20% peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5% peanut products), dairy cattle feed (containing 6–10% peanut products), dairy cattle feed (containing 6–12% peanut products), dairy cattle feed (containing more than 20% peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60% maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice bran, rice bran (deoiled), rice

chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa  
Redgram huskRice

#### AFLATOXIN

incidence: 7/7, conc. range: <30 µg/kg (3 sa), >30 µg/kg (1 sa), >200 µg/kg (2 sa), >600 µg/kg (1 sa), country: India<sup>380</sup>  
see also blackgram husk, bread crumbs, broiler finisher, broiler starter, cotton cake, cottonseed, cottonseed cake, cottonseed extract, cottonseed meal, feed, feed (cattle), feed (cow), feed (dog), feed (horse), feed (maize, gluten), feed (pig), feed (poultry), feed (rabbit), feed (rat/mice), feed (sheep), feeds, grain, fish meal, flour (wheat), groundnut cake, grower's mash, horsegram, layer's mash, maize, maize gluten, maize, white, milo, peanut cake, peanut cake (deoiled), peanut, kernels, peanut (oil cake), pearl millet, pig breeder's mash, pig finisher, pig starter, pod with haulms, poultry breeder's mash, rabbit pellets, redgram husk, rice bran (deoiled), rice, broken, rice (polish), sesame cake, silk worm pupae, sorghum, soybean cake, soybean meal, wheat, wheat bran

#### AFLATOXINS

incidence: 24/157\*, conc. range: <2–52 µg/kg, Ø conc.: 11 µg/kg, country: USA<sup>329</sup>, \*ncac  
incidence: 23/134\*, conc. range: <2–282 µg/kg, Ø conc.: 52 µg/kg, country: USA<sup>329</sup>, \*ncac  
see also animal feed (maize), animal feed (mixed), barley, copra meal, cottonseed, cottonseed fines, cottonseed meal, cottonseed meats, feed, feed ingredients (miscellaneous), feed, mixed, feed (excluding peanuts, suspect), feed (goat), feed (pig), feed (poultry), feedstuff, grain, grain, mixed feed, maize, maize, shelled, millet, peanut cake, peanut meal, peanut meal and by-products, peanuts, protein concentrates, rice bran, sorghum, soybean meal, sunflower

**Rice bran** Rice bran for feed may contain the following mycotoxins:

**AFLATOXIN B<sub>1</sub>**

incidence: 1/5, conc.: 30 µg/kg, country:

Egypt<sup>16</sup>

incidence: 35/40\*, conc. range: 1–13 µg/kg, country: UK<sup>94</sup>, \*imported?

incidence: 29/40, conc. range: 1–21 µg/kg,

Ø conc.: 6.8 µg/kg, country: UK<sup>96</sup>

incidence: 9/9, conc. range: 36–71 µg/kg,

country: Indonesia<sup>426</sup>

see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60 % maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize

screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

**AFLATOXIN B<sub>2</sub>**

incidence: 9/40, conc. range: 1–2 µg/kg,

Ø conc.: 1.2 µg/kg, country: UK<sup>96</sup>

see also animal feedstuffs (dairy cake), bird food, bird food, wild, biri testa, blackgram, blackgram husk, cottonseed, cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meats, dog food, egg production mixed feed, feed, compound, feed (cat), feed (cattle), feed (dog), feed (pig), feed (poultry), feed (rabbit), feed (sheep), fish meal, horsegram, maize, maize gluten, maize husk, maize, ground, maize, preharvest, mung testa, mustard cake, niger cake, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanuts, peanut, kernels, redgram husk, rice bran (deoiled), rice chaff, rice meal, rice (polish), sal seed cake, sesame cake, sorghum, soybean meal, soybeans, wheat, wheat bran

**AFLATOXIN G<sub>1</sub>**

incidence: 1/5, conc.: 20 µg/kg, country:

Egypt<sup>16</sup>

incidence: 5/40, conc. range: 2–3 µg/kg,

Ø conc.: 1.4 µg/kg, country: UK<sup>96</sup>

see also animal feedstuffs (dairy cake), bird food, bird food, wild, concentrate, mixed,

cottonseed, cottonseed cake, feed (cat), feed (chicken), feed (dog), maize, maize, ground, maize, preharvest, meat meal, milk production mixed feed, murkool, peanut cake, peanut expeller, peanut hay, peanut meal, peanuts, rice germ, sorghum, soybeans, wheat, wheat bran, wheat bran and chana testa

#### AFLATOXINS (TOTAL)

incidence: 30/40\*, conc. range: 1–19 µg/kg, country: UK<sup>94</sup>, \*imported?

see also cottonseed, maize germ, maize gluten, maize (dark grains), palm products, soybeans, sunflower

#### AFLATOXINS

incidence: 3/14, conc. range: 10–100 µg/kg, country: India<sup>349</sup>

see also animal feed (maize), animal feed (mixed), barley, copra meal, cottonseed, cottonseed fines, cottonseed meal, cottonseed meats, feed, feed ingredients (miscellaneous), feed, mixed, feed (excluding peanuts, suspect), feed (goat), feed (pig), feed (poultry), feedstuff, grain, grain, mixed feed, maize, maize, shelled, millet, peanut cake, peanut meal, peanut meal and by-products, peanuts, protein concentrates, rice, sorghum, soybean meal, sunflower

#### CITRININ

incidence: 1/4, conc.: 20 µg/kg, country: Egypt<sup>16</sup>

see also barley, barley, oats, barley-soybean diet, cottonseed cake, feed, feed, mixed, feed (cattle), feed (pig), fish meal, hay, maize, maize, white, *Makhana (Euryale ferox* Salisb) puffs, oats, palm products, peas and beans, rice germ, wheat, wheat and other grains (moldy), wheat bran

#### CYCLOPIAZONIC ACID

incidence: 6\*/40, conc. range: 100–220 µg/kg, Ø conc.: 151.7 µg/kg, country: UK<sup>96</sup>,

\*mycotoxin suspected but identity of peak not unequivocally confirmed

see also chick mash, feed, groundnut cake, maize, millet, little, peanuts, wheat

#### DEOXYNIVALENOL

incidence: 1/4, conc.: 88 µg/kg, country: Egypt<sup>16</sup>

see also barley, barley, husked, barley, unhusked (naked), barley (pressed), bone meal, bran, broilers feed, calf fattening mixed feed, coconut, expeller, corn cob mix silage, cottonseed, cottonseed cake, dairy cattle feed, egg production mixed feed, feed, feed components, feed, commercial mix, feed, mixed, feed, mixed (primarily maize), feed (barley), feed (cattle), feed (chicken), feed (dog), feed (fish), feed (mill run, from wheat), feed (mink), feed (pig), feed (poultry), feed (reindeer), feeds, grain, feeds, industrial, feedstuff, feedstuffs (rapeseed, turnip, fish meal, concentrates), fish meal, grain, mixed feed, grains, mixed, grains (no specification), maize, maize ears, maize fibre, maize germ, maize germ/bran, maize germ meal, maize gluten, maize kernels, maize meal, maize powder, maize screenings, maize stalks (pith), maize, “Baby”, maize, hybrid, maize, white, oats, rice germ cake, rye, silage, sorghum, soybeans, triticale, wheat, wheat and barley, wheat, red hard winter, wheat, soft white winter, wheat, spring, wheat, winter

#### MONILIFORMIN

incidence: 1\*/40, conc.: 70 µg/kg, country: UK<sup>96</sup>, \*mycotoxin suspected but identity of peak not unequivocally confirmed

see also barley, feed, mixed, feed (poultry), maize, maize flakes, maize germ, maize germ/bran, maize gluten, maize meal, maize screenings, maize, “Baby”, oats, triticale, wheat, wheat, summer, wheat, winter

#### OCHRATOXIN A

incidence: 7/40, conc. range: ≤ 6 µg/kg, country: UK<sup>12</sup>

incidence: 2/3, Ø conc.: 9 µg/kg, country: Egypt<sup>16</sup>

incidence: 3/40\*, conc. range: 1–6 µg/kg, country: UK<sup>94</sup>, \*imported?

incidence: 38\*/40, conc. range: 1–12 µg/kg, Ø conc.: 3.1 µg/kg, country: UK<sup>96</sup>,

\*mycotoxin suspected but identity of peak not unequivocally confirmed

incidence: 1/14, conc. range: 10–29 µg/kg, country: India<sup>349</sup>

see also alfalfa, barley, barley, oats, barley (high moisture), barley-soybean diet, bird food, domestic, bird food, wild, broilers feed, cereal grains, citrus pulp, coconut, expeller, corn cob mix silage, diet (dairy cow), diet (poultry), diet (starter), dog food, eat, egg production mixed feed, feed, feed wheat, oat and barley, feed, commercial mix, feed, mixed, feed, mixed (pelleted), feed (broilers), feed (cat), feed (cattle), feed (cereals), feed (pig), feed ec (pig), feed (poultry), feed ec (poultry), feed (poultry, pig), feed ec (rabbit), feed (trout), grain, mixed feed, grains, mixed, grains (heated), hay, horse bean, maize, maize feed, milo, maize gluten, maize meal, maize, white, *Makhana (Euryale ferox* Salisb) puffs, milk production mixed feed, millet, oat and barley (hammer-milled), oats, palm products, peanut cake, peas, peas and beans, pet food, pig feedstuffs, pig grower diet, pig meal, piglet diet, poultry feedstuffs, rice germ, rice germ cake, rye, sorghum, soybean groats, sunflower, sunflower seeds, extracted, tapioca, triticale, *Vicia faba*, wheat, wheat and barley, wheat bran, wheat hay, wheat, oats

#### ZEARALENONE

incidence: 1/40\*, conc.: 44 µg/kg, country: UK<sup>94</sup>, \*imported?

see also alfalfa, barley, barley, husked, barley, unhusked (naked), barley and feed, bone meal, bran, broilers feed, *Carthamus* cake, chick pea, concentrate, mixed, corn cob mix silage, cotton cake, cottonseed, cottonseed cake, diet (dairy cow), diet (poultry), diets (mixed), feed, feed components, feed, mixed, feed, mixed (primarily maize also maize, oats, wheat), feed (bran), feed (broiler chicken), feed (cattle), feed (chicken), feed (dairy), feed (developing pig), feed (mill run, from wheat), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (starter chicken), feedstuff, fish meal, forage grass, grain, bruised, grain, mixed feed, grains (no specification), hay, maize, maize ears, maize flakes, maize germ, maize germ/bran, maize gluten, maize kernels, maize meal, maize oil

cake, maize screenings, maize stalks (pith), maize, “Baby”, maize, hybrid, maize, shelled, maize, unshelled, maize, white, maize grain, artificially dried, maize grain, crib dried, maize grain, ensiled, milk production mixed feed, oats, *Paspalum palidosum*, straw, peanut hulls/skins, rice germ, rice germ cake, rye, silage, sorghum, soybeans, soybeans, extracted, sunflower cake, tapioca, triticale, wheat, wheat bran, wheat bran and chana testa, wheat soya meal

**Rice bran (deoiled)** may contain the following mycotoxins:

#### AFLATOXIN B<sub>1</sub>

incidence: 48/143, conc. range: ≤25 µg/kg (36 sa), 26–50 µg/kg (5 sa), 51–100 µg/kg (4 sa), 101–200 µg/kg (2 sa), 201–500 µg/kg (1 sa), Ø conc.: 31.1 µg/kg, country: India<sup>247</sup>  
see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry),

feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60 % maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

#### AFLATOXIN B<sub>2</sub>

incidence: 13/143, conc. range: nc, Ø conc.: 10.6 µg/kg, country: India<sup>247</sup>  
 see also animal feedstuffs (dairy cake), bird food, bird food, wild, biri testa, blackgram, blackgram husk, cottonseed, cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meats, dog food, egg production mixed feed, feed, compound, feed (cat), feed (cattle), feed (dog), feed (pig), feed (poultry), feed (rabbit), feed (sheep), fish meal, horsegram, maize, maize gluten, maize husk, maize, ground, maize, preharvest, mung testa, mustard cake, niger cake, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanuts, peanut, kernels, redgram husk, rice bran, rice chaff, rice meal, rice (polish), sal seed cake, sesame

cake, sorghum, soybean meal, soybeans, wheat, wheat bran

#### AFLATOXIN

incidence: 48/143, conc. range: 2–421 µg/kg, country: India<sup>247</sup>

see also blackgram husk, bread crumbs, broiler finisher, broiler starter, cotton cake, cottonseed, cottonseed cake, cottonseed extract, cottonseed meal, feed, feed (cattle), feed (cow), feed (dog), feed (horse), feed (maize, gluten), feed (pig), feed (poultry), feed (rabbit), feed (rat/mice), feed (sheep), feeds, grain, fish meal, flour (wheat), groundnut cake, grower's mash, horsegram, layer's mash, maize, maize gluten, maize, white, milo, peanut cake, peanut cake (deoiled), peanut, kernels, peanut (oil cake), pearl millet, pig breeder's mash, pig finisher, pig starter, pod with haulms, poultry breeder's mash, rabbit pellets, redgram husk, rice, rice, broken, rice (polish), sesame cake, silk worm pupae, sorghum, soybean cake, soybean meal, wheat, wheat bran

**Rice chaff** may contain the following mycotoxins:

#### AFLATOXIN B<sub>1</sub>

incidence: 1/1, conc.: 16 µg/kg, country: India<sup>129</sup>

see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing



6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60 % maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

#### AFLATOXIN B<sub>2</sub>

incidence: 1/1, conc.: 3 µg/kg, country: India<sup>129</sup>  
see also animal feedstuffs (dairy cake), bird food, bird food, wild, biri testa, blackgram, blackgram husk, cottonseed, cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meats, dog food, egg production mixed feed, feed, compound, feed (cat), feed (cattle), feed

(dog), feed (pig), feed (poultry), feed (rabbit), feed (sheep), fish meal, horsegram, maize, maize gluten, maize husk, maize, ground, maize, preharvest, mung testa, mustard cake, niger cake, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanuts, peanut, kernels, redgram husk, rice bran, rice bran (deoiled), rice meal, rice (polish), sal seed cake, sesame cake, sorghum, soybean meal, soybeans, wheat, wheat bran

**Rice crack** may contain the following mycotoxins:

#### AFLATOXIN B<sub>1</sub>

incidence: 3/5, Ø conc.: 10 µg/kg, country: Egypt<sup>16</sup>

see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60 % maize), fish meal,

grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

**Rice germ** may contain the following mycotoxins:

**AFLATOXIN B<sub>1</sub>**

incidence: 3/5, Ø conc.: 10 µg/kg, country: Egypt<sup>16</sup>

see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy

cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60 % maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

**AFLATOXIN G<sub>1</sub>**

incidence: 3/5, Ø conc.: 10 µg/kg, country: Egypt<sup>16</sup>

see also animal feedstuffs (dairy cake), bird food, bird food, wild, concentrate, mixed, cottonseed, cottonseed cake, feed (cat), feed (chicken), feed (dog), maize, maize, ground,

maize, preharvest, meat meal, milk production mixed feed, murkool, peanut cake, peanut expeller, peanut hay, peanut meal, peanuts, rice bran, sorghum, soybeans, wheat, wheat bran, wheat bran and chana testa

#### CITRININ

incidence: 1/4, conc.: 4 µg/kg, country: Egypt<sup>16</sup>

see also barley, barley, oats, barley-soybean diet, cottonseed cake, feed, feed, mixed, feed (cattle), feed (pig), fish meal, hay, maize, maize, white, *Makhana (Euryale ferox* Salisb) puffs, oats, palm products, peas and beans, rice bran, wheat, wheat and other grains (moldy), wheat bran

#### OCHRATOXIN A

incidence: 1/3, Ø conc.: 577 µg/kg, country: Egypt<sup>16</sup>

see also alfalfa, barley, barley, oats, barley (high moisture), barley-soybean diet, bird food, domestic, bird food, wild, broilers feed, cereal grains, citrus pulp, coconut, expeller, corn cob mix silage, diet (dairy cow), diet (poultry), diet (starter), dog food, eat, egg production mixed feed, feed, feed wheat, oat and barley, feed, commercial mix, feed, mixed, feed, mixed (pelleted), feed (broilers), feed (cat), feed (cattle), feed (cereals), feed (pig), feed ec (pig), feed (poultry), feed ec (poultry), feed (poultry, pig), feed ec (rabbit), feed (trout), grain, mixed feed, grains, mixed, grains (heated), hay, horse bean, maize, maize feed, milo, maize gluten, maize meal, maize, white, *Makhana (Euryale ferox* Salisb) puffs, milk production mixed feed, millet, oat and barley (hammer-milled), oats, palm products, peanut cake, peas, peas and beans, pet food, pig feedstuffs, pig grower diet, pig meal, piglet diet, poultry feedstuffs, rice bran, rice germ cake, rye, sorghum, soybean groats, sunflower, sunflower seeds, extracted, tapioca, triticale, *Vicia faba*, wheat, wheat and barley, wheat bran, wheat hay, wheat, oats

#### ZEARALENONE

incidence: 2/4, conc. range: 24–38 µg/kg, Ø conc.: 31 µg/kg, country: Egypt<sup>16</sup>

see also alfalfa, barley, barley, husked, barley, unhusked (naked), barley and feed, bone meal, bran, broilers feed, *Carthamus* cake, chick pea, concentrate, mixed, corn cob mix silage, cotton cake, cottonseed, cottonseed cake, diet (dairy cow), diet (poultry), diets (mixed), feed, feed components, feed, mixed, feed, mixed (primarily maize also maize, oats, wheat), feed (bran), feed (broiler chicken), feed (cattle), feed (chicken), feed (dairy), feed (developing pig), feed (mill run, from wheat), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (starter chicken), feedstuff, fish meal, forage grass, grain, bruised, grain, mixed feed, grains (no specification), hay, maize, maize ears, maize flakes, maize germ, maize germ/bran, maize gluten, maize kernels, maize meal, maize oil cake, maize screenings, maize stalks (pith), maize, “Baby”, maize, hybrid, maize, shelled, maize, unshelled, maize, white, maize grain, artificially dried, maize grain, crib dried, maize grain, ensiled, milk production mixed feed, oats, *Paspalum palidosum*, straw, peanut hulls/skins, rice bran, rye, silage, sorghum, soybeans, soybeans, extracted, sunflower cake, tapioca, triticale, wheat, wheat bran, wheat bran and chana testa, wheat soya meal

**Rice germ cake** may contain the following mycotoxins:

#### AFLATOXIN B<sub>1</sub>

incidence: 3/5, Ø conc.: 25 µg/kg, country: Egypt<sup>16</sup>

see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed

products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60 % maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

#### DEOXYNIVALENOL

incidence: 2/4, conc. range: 200–264 µg/kg, Ø conc.: 232 µg/kg, country: Egypt<sup>16</sup> see also barley, barley, husked, barley, unhusked (naked), barley (pressed), bone meal, bran, broilers feed, calf fattening mixed

feed, coconut, expeller, corn cob mix silage, cottonseed, cottonseed cake, dairy cattle feed, egg production mixed feed, feed, feed components, feed, commercial mix, feed, mixed, feed, mixed (primarily maize), feed (barley), feed (cattle), feed (chicken), feed (dog), feed (fish), feed (mill run, from wheat), feed (mink), feed (pig), feed (poultry), feed (reindeer), feeds, grain, feeds, industrial, feedstuff, feedstuffs (rapeseed, turnip, fish meal, concentrates), fish meal, grain, mixed feed, grains, mixed, grains (no specification), maize, maize ears, maize fibre, maize germ, maize germ/bran, maize germ meal, maize gluten, maize kernels, maize meal, maize powder, maize screenings, maize stalks (pith), maize, “Baby”, maize, hybrid, maize, white, oats, rice bran, rye, silage, sorghum, soybeans, triticale, wheat, wheat and barley, wheat, red hard winter, wheat, soft white winter, wheat, spring, wheat, winter

#### OCHRATOXIN A

incidence: 1/3\*, Ø conc.: 4 µg/kg, country: Egypt<sup>16</sup>, \*suspected but identity of peak not unequivocally confirmed see also alfalfa, barley, barley, oats, barley (high moisture), barley-soybean diet, bird food, domestic, bird food, wild, broilers feed, cereal grains, citrus pulp, coconut, expeller, corn cob mix silage, diet (dairy cow), diet (poultry), diet (starter), dog food, eat, egg production mixed feed, feed wheat, oat and barley, feed, commercial mix, feed, mixed, feed, mixed (pelleted), feed (broilers), feed (cat), feed (cattle), feed (cereals), feed (pig), feed ec (pig), feed (poultry), feed ec (poultry), feed (poultry, pig), feed ec (rabbit), feed (trout), grain, mixed feed, grains, mixed, grains (heated), hay, horse bean, maize, maize feed, milo, maize gluten, maize meal, maize, white, *Makhana* (*Euryale ferox* Salisb) puffs, milk production mixed feed, millet, oat and barley (hammer-milled), oats, palm products, peanut cake, peas, peas and beans, pet food, pig feedstuffs, pig grower diet, pig meal, piglet diet, poultry feedstuffs, rice bran, rice germ, rye, sorghum, soybean groats,

sunflower, sunflower seeds, extracted, tapioca, triticale, *Vicia faba*, wheat, wheat and barley, wheat bran, wheat hay, wheat, oats

**Rice meal** Rice meal for feed may contain the following mycotoxins:

**AFLATOXIN B<sub>1</sub>**

incidence: 8/22, conc. range: 1–52.8 µg/kg, Ø conc.: 20.5 µg/kg, country: Colombia<sup>125</sup>  
see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20% peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5% peanut products), dairy cattle feed (containing 6–10% peanut products), dairy cattle feed (containing 6–12% peanut products), dairy cattle feed (containing more than 20% peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60% maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark

grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

**AFLATOXIN B<sub>2</sub>**

incidence: 4/22, conc. range: 1.1–3.3 µg/kg, Ø conc.: 2.4 µg/kg, country: Colombia<sup>125</sup>  
see also animal feedstuffs (dairy cake), bird food, bird food, wild, biri testa, blackgram, blackgram husk, cottonseed, cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meats, dog food, egg production mixed feed, feed, compound, feed (cat), feed (cattle), feed (dog), feed (pig), feed (poultry), feed (rabbit), feed (sheep), fish meal, horsegram, maize, maize gluten, maize husk, maize, ground, maize, preharvest, mung testa, mustard cake, niger cake, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanuts, peanut, kernels, redgram husk, rice bran, rice bran (deoiled), rice chaff, rice (polish), sal seed cake, sesame cake, sorghum, soybean meal, soybeans, wheat, wheat bran

**Rice straw** may contain the following mycotoxins:

**AFLATOXIN B<sub>1</sub>**

incidence: 3/35, conc. range: 3–4 µg/kg, country: India, Bangladesh<sup>129</sup>  
see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram

husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20% peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5% peanut products), dairy cattle feed (containing 6–10% peanut products), dairy cattle feed (containing 6–12% peanut products), dairy cattle feed (containing more than 20% peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60% maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice

chaff, rice crack, rice germ, rice germ cake, rice meal, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

**Rice, broken** may contain the following mycotoxins:

#### AFLATOXIN B

incidence: ?/5, conc. range: 14–20 µg/kg, Ø conc.: 17.7 µg/kg, country: Pakistan<sup>162</sup>  
see also barley, cocoa (oilcake), cottonseed cake, feed, feed (cattle), feed (maize, gluten), feed (pig), feed (poultry), flour (wheat), lucern (dried), maize, maize gluten, maize grains, oats, peanut (oil cake), sorghum, soybean (oil cake), sunflower (oilcake), wheat

#### AFLATOXIN G

incidence: ?/5, conc. range: 5–25 µg/kg, Ø conc.: 17.3 µg/kg, country: Pakistan<sup>162</sup>  
see also cottonseed cake, feed (maize, gluten), maize gluten, maize grains

#### AFLATOXIN

incidence: 2/6, conc. range: ≤125 µg/kg, country: India<sup>250</sup>  
see also blackgram husk, bread crumbs, broiler finisher, broiler starter, cotton cake, cottonseed, cottonseed cake, cottonseed extract, cottonseed meal, feed, feed (cattle), feed (cow), feed (dog), feed (horse), feed (maize, gluten), feed (pig), feed (poultry), feed (rabbit), feed (rat/mice), feed (sheep), feeds, grain, fish meal, flour (wheat), groundnut cake, grower's mash, horsegram, layer's mash, maize, maize gluten, maize, white, milo, peanut cake, peanut cake (deoiled), peanut, kernels, peanut (oil cake), pearl millet, pig breeder's mash, pig finisher, pig starter, pod with haulms, poultry breeder's mash, rabbit pellets, redgram husk, rice, rice bran (deoiled), rice (polish), sesame cake, silk worm pupae, sorghum, soybean cake, soybean meal, wheat, wheat bran

**Rice (damaged)** may contain the following mycotoxins:

**AFLATOXIN B<sub>1</sub>**

incidence: 2/5, conc. range: 7–107 µg/kg, Ø conc.: 57 µg/kg, country: India<sup>247</sup>  
 see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60 % maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake,

palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

**Rice (polish)** for feed may contain the following mycotoxins:

**AFLATOXIN B<sub>1</sub>**

incidence: 41/168, conc. range: ≤25 µg/kg (25 sa), 26–50 µg/kg (7 sa), 51–100 µg/kg (3 sa), 101–200 µg/kg (3 sa), 201–500 µg/kg (2 sa), 501–1000 µg/kg (1 sa), Ø conc.: 58.9 µg/kg, country: India<sup>247</sup>  
 incidence: 1/?\*, conc.: 8 µg/kg, country: Japan<sup>313</sup>, \*from Egypt  
 see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and

ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60 % maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

#### AFLATOXIN B<sub>2</sub>

incidence: 9/168, conc. range: nc, Ø conc.: 44.5 µg/kg, country: India<sup>247</sup>

incidence: 1/?\*, conc.: 2 µg/kg, country: Japan<sup>313</sup>, \*from Egypt

see also animal feedstuffs (dairy cake), bird food, bird food, wild, biri testa, blackgram, blackgram husk, cottonseed, cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meats, dog food, egg production mixed feed, feed, compound, feed (cat), feed (cattle), feed (dog), feed (pig), feed (poultry), feed (rabbit), feed (sheep), fish meal, horsegram,

maize, maize gluten, maize husk, maize, ground, maize, preharvest, mung testa, mustard cake, niger cake, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanuts, peanut, kernels, redgram husk, rice bran, rice bran (deoiled), rice chaff, rice meal, sal seed cake, sesame cake, sorghum, soybean meal, soybeans, wheat, wheat bran

#### AFLATOXIN

incidence: 41/168, conc. range: 3–782 µg/kg, country: India<sup>247</sup>

incidence: ?/12, conc. range: ≤200 µg/kg, Ø conc.: 23 µg/kg, country: India<sup>250</sup>

see also blackgram husk, bread crumbs, broiler finisher, broiler starter, cotton cake, cottonseed, cottonseed cake, cottonseed extract, cottonseed meal, feed, feed (cattle), feed (cow), feed (dog), feed (horse), feed (maize, gluten), feed (pig), feed (poultry), feed (rabbit), feed (rat/mice), feed (sheep), feeds, grain, fish meal, flour (wheat), groundnut cake, grower's mash, horsegram, layer's mash, maize, maize gluten, maize, white, milo, peanut cake, peanut cake (deoiled), peanut, kernels, peanut (oil cake), pearl millet, pig breeder's mash, pig finisher, pig starter, pod with haulms, poultry breeder's mash, rabbit pellets, redgram husk, rice, rice bran (deoiled), rice, broken, sesame cake, silk worm pupae, sorghum, soybean cake, soybean meal, wheat, wheat bran

**Rye** Rye for feed may contain the following mycotoxins:

#### DEOXYNIVALENOL

incidence: 31/31\*, conc. range:

<10–≤10,000 µg/kg, country: Germany<sup>192</sup>, \*ncac

incidence: 17/50\* \*\*, conc. range:

≤3090 µg/kg, Ø conc.: 490 µg/kg, country: Germany<sup>355</sup>, \*ncac, \*\*cg

incidence: 2/19\* \*\*, conc. range:

120–130 µg/kg, Ø conc.: 125 µg/kg, country: Germany<sup>355</sup>, \*ncac, \*\*og

incidence: 14/46\*, conc. range: ≤102 µg/kg, Ø conc.: 54 µg/kg, country: Lithuania<sup>399</sup>,

\*ncac



see also barley, barley, husked, barley, unhusked (naked), barley (pressed), bone meal, bran, broilers feed, calf fattening mixed feed, coconut, expeller, corn cob mix silage, cottonseed, cottonseed cake, dairy cattle feed, egg production mixed feed, feed, feed components, feed, commercial mix, feed, mixed, feed, mixed (primarily maize), feed (barley), feed (cattle), feed (chicken), feed (dog), feed (fish), feed (mill run, from wheat), feed (mink), feed (pig), feed (poultry), feed (reindeer), feeds, grain, feeds, industrial, feedstuff, feedstuffs (rapeseed, turnip, fish meal, concentrates), fish meal, grain, mixed feed, grains, mixed, grains (no specification), maize, maize ears, maize fibre, maize germ, maize germ/bran, maize germ meal, maize gluten, maize kernels, maize meal, maize powder, maize screenings, maize stalks (pith), maize, "Baby", maize, hybrid, maize, white, oats, rice bran, rice germ cake, silage, sorghum, soybeans, triticale, wheat, wheat and barley, wheat, red hard winter, wheat, soft white winter, wheat, spring, wheat, winter

#### ENNIATIN A<sub>1</sub>

incidence: 1/1\*, conc.: tr µg/kg, country:

Finland<sup>205</sup>, \*ncac

see also barley, oats, wheat, wheat, summer, wheat, winter

#### ENNIATIN B

incidence: 1/1\*, conc.: 47 µg/kg, country:

Finland<sup>205</sup>, \*ncac

see also barley, oats, wheat, wheat, summer, wheat, winter

#### ENNIATIN B<sub>1</sub>

incidence: 1/1\*, conc.: tr µg/kg, country:

Finland<sup>205</sup>, \*ncac

see also barley, oats, wheat, wheat, summer, wheat, winter

#### HT-2 TOXIN

incidence: 12/46\*, conc. range: ≤353 µg/kg, Ø

conc.: 61 µg/kg, country: Lithuania<sup>399</sup>, \*ncac

see also barley, feed components, feed (dog), feed (fish), feed (pig), feed (poultry), feed (reindeer), grain, mixed feed, grains, mixed,

grains (no specification), maize, maize germ/bran, maize gluten, maize meal, maize screenings, oats, silage, wheat

#### NIVALENOL

incidence: 1/46\*, conc. range: ≤20 µg/kg,

Ø conc.: 20 µg/kg, country: Lithuania<sup>399</sup>,

\*ncac

see also barley, barley, husked, barley, unhusked (naked), barley (pressed), bran, feed, feed components, feed (cattle), feed (poultry), feed (reindeer), feeds, industrial, maize, maize ears, maize germ, maize germ/bran, maize gluten, maize kernels, maize meal, maize powder, maize screenings, maize, "Baby", oats, silage, triticale, wheat

#### OCHRATOXIN A

incidence: 4/37\* \*\*, conc. range:

4.7–8.8 µg/kg, Ø conc.: 6.8 µg/kg, country:

Poland<sup>1339</sup>, \*ncac, \*\*cg

incidence: 5/46\* \*\*, conc. range:

2–35.3 µg/kg, Ø conc.: 14.5 µg/kg, country:

Poland<sup>339</sup>, \*ncac, \*\*eg

incidence: 3/52\* \*\*, conc. range:

0.8–2.6 µg/kg, Ø conc.: 1.4 µg/kg, country:

Poland<sup>1341</sup>, \*ncac, \*\*cg

incidence: 18/48\* \*\*, conc. range:

0.2–10 µg/kg, Ø conc.: 3.2 µg/kg, country:

Poland<sup>1341</sup>, \*ncac, \*\*eg

see also alfalfa, barley, barley, oats, barley (high moisture), barley-soybean diet, bird food, domestic, bird food, wild, broilers feed, cereal grains, citrus pulp, coconut, expeller, corn cob mix silage, diet (dairy cow), diet (poultry), diet (starter), dog food, eat, egg production mixed feed, feed, feed wheat, oat and barley, feed, commercial mix, feed, mixed, feed, mixed (pelleted), feed (broilers), feed (cat), feed (cattle), feed (cereals), feed (pig), feed ec (pig), feed (poultry), feed ec (poultry), feed (poultry, pig), feed ec (rabbit), feed (trout), grain, mixed feed, grains, mixed, grains (heated), hay, horse bean, maize, maize feed, milo, maize gluten, maize meal, maize, white, *Makhana (Euryale ferox* Salisb) puffs, milk production mixed feed, millet, oat and barley (hammer-milled), oats, palm products, peanut cake, peas, peas and beans,

pet food, pig feedstuffs, pig grower diet, pig meal, piglet diet, poultry feedstuffs, rice bran, rice germ, rice germ cake, sorghum, soybean groats, sunflower, sunflower seeds, extracted, tapioca, triticale, *Vicia faba*, wheat, wheat and barley, wheat bran, wheat hay, wheat, oats

#### T-2 TOXIN

incidence: 1/7345, conc.: nc, country: Hungary<sup>209</sup>

incidence: 1/46\*, conc. range:  $\leq 52 \mu\text{g}/\text{kg}$ ,  
 $\emptyset$  conc.:  $34 \mu\text{g}/\text{kg}$ , country: Lithuania<sup>399</sup>,  
 \*ncac

see also alfalfa, barley, bran, diet (grower), diet (poultry), feed, feed components, feed, layer, feed, mixed, feed (dog), feed (fish), feed (mink), feed (pig), feed (poultry), feedstuff, forage grass, grain, mixed feed, grains (no specification), hay, maize, maize germ/bran, maize gluten, maize meal, maize screenings, maize stalks (pith), oat and barley (hammer-milled), oats, peanuts, pig grower diet, piglet diet, sorghum, triticale, wheat

#### ZEARALENONE

incidence: 2/6, conc. range:  $7.2\text{--}9.3 \mu\text{g}/\text{kg}$ ,  
 $\emptyset$  conc.:  $8.2 \mu\text{g}/\text{kg}$ , country: Germany<sup>107</sup>

see also alfalfa, barley, barley, husked, barley, unhusked (naked), barley and feed, bone meal, bran, broilers feed, *Carthamus* cake, chick pea, concentrate, mixed, corn cob mix silage, cotton cake, cottonseed, cottonseed cake, diet (dairy cow), diet (poultry), diets (mixed), feed, feed components, feed, mixed, feed, mixed (primarily maize also maize, oats, wheat), feed (bran), feed (broiler chicken), feed (cattle), feed (chicken), feed (dairy), feed (developing pig), feed (mill run, from wheat), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (starter chicken), feedstuff, fish meal, forage grass, grain, bruised, grain, mixed feed, grains (no specification), hay, maize, maize ears, maize flakes, maize germ, maize germ/bran, maize gluten, maize kernels, maize meal, maize oil cake, maize screenings, maize stalks (pith), maize, "Baby", maize, hybrid, maize, shelled, maize, unshelled, maize, white, maize grain, artificially dried, maize grain, crib dried,

maize grain, ensiled, milk production mixed feed, oats, *Paspalum palidosum*, straw, peanut hulls/skins, rice bran, rice germ, rice germ cake, silage, sorghum, soybeans, soybeans, extracted, sunflower cake, tapioca, triticale, wheat, wheat bran, wheat bran and chana testa, wheat soya meal

**Safflower cake** may contain the following mycotoxins:

#### AFLATOXIN B<sub>1</sub>

incidence: 7/8, conc. range: tr- $167.4 \mu\text{g}/\text{kg}$ ,  
 $\emptyset$  conc.:  $118.4 \mu\text{g}/\text{kg}$ , country: India<sup>253</sup>

see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4-20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2-5 % peanut products), dairy cattle feed (containing 6-10 % peanut products), dairy cattle feed (containing 6-12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50-60 % maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagari* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal,

maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

**Sal seed cake** may contain the following mycotoxins:

**AFLATOXIN B<sub>1</sub>**

incidence: 13/21, conc. range:

71.7–180.2 µg/kg, Ø conc.: 105.1 µg/kg,

country: India<sup>253</sup>

see also alfalfa, *Ambadi* cake, animal feed-stuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 %

peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60 % maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

**AFLATOXIN B<sub>2</sub>**

incidence: 5/21, conc. range: 44.5–71.7 µg/kg,

Ø conc.: 58.1 µg/kg, country: India<sup>253</sup>

see also animal feedstuffs (dairy cake), bird food, bird food, wild, biri testa, blackgram, blackgram husk, cottonseed, cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meats, dog food, egg production mixed feed, feed, compound, feed (cat), feed (cattle), feed (dog), feed (pig), feed (poultry), feed (rabbit), feed (sheep), fish meal, horsegram,

maize, maize gluten, maize husk, maize, ground, maize, preharvest, mung testa, mustard cake, niger cake, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanuts, peanut, kernels, redgram husk, rice bran, rice bran (deoiled), rice chaff, rice meal, rice (polish), sesame cake, sorghum, soybean meal, soybeans, wheat, wheat bran

**Sesame** Sesame for feed may contain the following mycotoxins:

**AFLATOXIN B<sub>1</sub>**

incidence: 2/3, conc. range: 10 µg/kg,

Ø conc.range: 10 µg/kg, country: investigated in Germany<sup>298</sup>

see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60 % maize), fish meal, grain by-products, grains (no specification),

greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

**Sesame cake** may contain the following mycotoxins:

**AFLATOXIN B<sub>1</sub>**

incidence: 52/107, conc. range: ≤25 µg/kg

(24 sa), 26–50 µg/kg (16 sa), 51–100 µg/kg

(5 sa), 101–200 µg/kg (5 sa), 201–500 µg/kg

(1 sa), 501–1000 µg/kg (1 sa), Ø conc.:

51.2 µg/kg, country: India<sup>247</sup>

incidence: 5/8, conc. range: 59.4–113.8 µg/kg,

Ø conc.: 78.3 µg/kg, country: India<sup>253</sup>

see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal,

cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cyad meal, dairy cattle feed, dairy cattle feed (containing 2–5% peanut products), dairy cattle feed (containing 6–10% peanut products), dairy cattle feed (containing 6–12% peanut products), dairy cattle feed (containing more than 20% peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60% maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sesame, sal seed cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

#### AFLATOXIN B<sub>2</sub>

incidence: 8/107, conc. range: nc, Ø conc.: 16.2 µg/kg, country: India<sup>247</sup>

see also animal feedstuffs (dairy cake), bird food, bird food, wild, biri testa, blackgram, blackgram husk, cottonseed, cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meats, dog food, egg production mixed feed, feed, compound, feed (cat), feed (cattle), feed (dog), feed (pig), feed (poultry), feed (rabbit), feed (sheep), fish meal, horsegram, maize, maize gluten, maize husk, maize, ground, maize, preharvest, mung testa, mustard cake, niger cake, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanuts, peanut, kernels, redgram husk, rice bran, rice bran (deoiled), rice chaff, rice meal, rice (polish), sal seed cake, sorghum, soybean meal, soybeans, wheat, wheat bran

#### AFLATOXIN

incidence: 52/107, conc. range: 2–527 µg/kg, country: India<sup>247</sup>

see also blackgram husk, bread crumbs, broiler finisher, broiler starter, cotton cake, cottonseed, cottonseed cake, cottonseed extract, cottonseed meal, feed, feed (cattle), feed (cow), feed (dog), feed (horse), feed (maize, gluten), feed (pig), feed (poultry), feed (rabbit), feed (rat/mice), feed (sheep), feeds, grain, fish meal, flour (wheat), groundnut cake, grower's mash, horsegram, layer's mash, maize, maize gluten, maize, white, milo, peanut cake, peanut cake (deoiled), peanut, kernels, peanut (oil cake), pearl millet, pig breeder's mash, pig finisher, pig starter, pod with haulms, poultry breeder's mash, rabbit pellets, redgram husk, rice, rice bran (deoiled), rice, broken, rice (polish), silk worm pupae, sorghum, soybean cake, soybean meal, wheat, wheat bran

#### SHEEP FEED

see Feed (sheep)

**Silage** may contain the following mycotoxins:

#### 15-ACETYLDEOXYNIVALENOL

incidence: 17/18, conc. range: 20–347 µg/kg, Ø conc.: 84 µg/kg, country: Germany<sup>366</sup>

see also barley, feed components, feed, commercial mix, feed (poultry), maize, maize ears, maize germ, maize germ/bran, maize gluten, maize kernels, maize meal, maize screenings, maize, "Baby", oats, wheat

#### DEOXYNIVALENOL

incidence: 18/18, conc. range:

323–3510 µg/kg, Ø conc.: 1426 µg/kg,

country: Germany<sup>366</sup>

see also barley, barley, husked, barley, unhusked (naked), barley (pressed), bone meal, bran, broilers feed, calf fattening mixed feed, coconut, expeller, corn cob mix silage, cottonseed, cottonseed cake, dairy cattle feed, egg production mixed feed, feed, feed components, feed, commercial mix, feed, mixed, feed, mixed (primarily maize), feed (barley), feed (cattle), feed (chicken), feed (dog), feed (fish), feed (mill run, from wheat), feed (mink), feed (pig), feed (poultry), feed (reindeer), feeds, grain, feeds, industrial, feedstuff, feedstuffs (rapeseed, turnip, fish meal, concentrates), fish meal, grain, mixed feed, grains, mixed, grains (no specification), maize, maize ears, maize fibre, maize germ, maize germ/bran, maize germ meal, maize gluten, maize kernels, maize meal, maize powder, maize screenings, maize stalks (pith), maize, "Baby", maize, hybrid, maize, white, oats, rice bran, rice germ cake, rye, sorghum, soybeans, triticale, wheat, wheat and barley, wheat, red hard winter, wheat, soft white winter, wheat, spring, wheat, winter

#### DIACETOXYSCIRPENOL

incidence: 1/18, conc.: 64 µg/kg, country: Germany<sup>366</sup>

see also alfalfa, barley, feed, feed (dog), feed (fish), feed (mink), feed (pig), feed (reindeer), feeds, grain, feedstuff, grain, mixed feed, grains (no specification), maize, maize gluten, oat and barley (hammer-milled), oats, peanuts, soybeans, wheat

#### FUMONISIN B<sub>1</sub>

incidence: 1/1, conc.: 13 µg/kg, country: USA<sup>58</sup>

see also barley, bird food, wild, dog food, feed, feed, complete ration, feed, general, feed, layer, feed, maize-based, feed, mixed, feed, pelleted ration, feed, screenings, feed, sweet, feed (broilers), feed (cat), feed (chicken), feed (dog), feed (gluten), feed (horse), feed (maize), feed (pig), feed (poultry), feed (rat), feed (rodent), forage grass, maize, maize and maize screenings, maize bran, maize ears, maize fine fractions, maize flakes, maize germ, maize germ/bran, maize germ meal, maize gluten, maize grits, maize kernels, maize meal, maize powder, maize screenings, maize, "Baby", maize, ground, maize, preharvest, maize, sweet feed, maize/oats mix, rat chow, sorghum, soybeans, wheat

#### HT-2 TOXIN

incidence: 16/18, conc. range: 5–47 µg/kg,

Ø conc.: 21 µg/kg, country: Germany<sup>366</sup>

see also barley, feed components, feed (dog), feed (fish), feed (pig), feed (poultry), feed (reindeer), grain, mixed feed, grains, mixed, grains (no specification), maize, maize germ/bran, maize gluten, maize meal, maize screenings, oats, rye, wheat

#### MONOACETOXYSCIRPENOL

incidence: 8/18, conc. range: 14–51 µg/kg,

Ø conc.: 32 µg/kg, country: Germany<sup>366</sup>

see also feed components, maize, maize gluten, maize meal, maize screenings, wheat

#### MYCOPHENOLIC ACID

incidence: 74/233, conc. range:

20–35,000 µg/kg, Ø conc.: 1400 µg/kg,

country: Germany<sup>393</sup>

#### NIVALENOL

incidence: 15/18, conc. range:

113–2750 µg/kg, Ø conc.: 1049 µg/kg,

country: Germany<sup>366</sup>

see also barley, barley, husked, barley, unhusked (naked), barley (pressed), bran, feed, feed components, feed (cattle), feed (poultry), feed (reindeer), feeds, industrial, maize, maize ears, maize germ, maize germ/bran, maize gluten, maize kernels, maize meal, maize powder, maize screenings, maize, "Baby", oats, rye, triticale, wheat

**T-2 TETRAOL**

incidence: 1/18, conc.: 79 µg/kg, country: Germany<sup>366</sup>

see also barley, feed components, maize, wheat

**ZEARALENONE**

incidence: 18/18, conc. range: 2–1593 µg/kg, Ø conc.: 116 µg/kg, country: Germany<sup>366</sup>

see also alfalfa, barley, barley, husked, barley, unhusked (naked), barley and feed, bone meal, bran, broilers feed, *Carthamus* cake, chick pea, concentrate, mixed, corn cob mix silage, cotton cake, cottonseed, cottonseed cake, diet (dairy cow), diet (poultry), diets (mixed), feed, feed components, feed, mixed, feed, mixed (primarily maize also maize, oats, wheat), feed (bran), feed (broiler chicken), feed (cattle), feed (chicken), feed (dairy), feed (developing pig), feed (mill run, from wheat), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (starter chicken), feedstuff, fish meal, forage grass, grain, bruised, grain, mixed feed, grains (no specification), hay, maize, maize ears, maize flakes, maize germ, maize germ/bran, maize gluten, maize kernels, maize meal, maize oil cake, maize screenings, maize stalks (pith), maize, “Baby”, maize, hybrid, maize, shelled, maize, unshelled, maize, white, maize grain, artificially dried, maize grain, crib dried, maize grain, ensiled, milk production mixed feed, oats, *Paspalum palidosum*, straw, peanut hulls/skins, rice bran, rice germ, rice germ cake, rye, sorghum, soybeans, soybeans, extracted, sunflower cake, tapioca, triticale, wheat, wheat bran, wheat bran and chana testa, wheat soya meal

**Silage (grass)** may contain the following mycotoxins:

**ROQUEFORTINE C**

incidence: 9/12\*, conc. range:

200–15,000 µg/kg, Ø conc.: 5633 µg/kg,

country: Germany<sup>74</sup>, \*molded

incidence: 5/12, conc. range: 100–300 µg/kg,

Ø conc.: 160 µg/kg, country: Germany<sup>74</sup>

see also silage (maize)

**Silage (maize)** may contain the following mycotoxins:

**ROQUEFORTINE C**

incidence: 12/12\*, conc. range:

700–36,000 µg/kg, Ø conc.: 17,058 µg/kg,

country: Germany<sup>74</sup>, \*molded

incidence: 1/12, conc.: 200 µg/kg, country: Germany<sup>74</sup>

see also silage (grass)

**Silk worm pupae** may contain the following mycotoxins:

**AFLATOXIN**

incidence: 14/14, conc. range: <30 µg/kg (4 sa), >30 µg/kg (6 sa), >200 µg/kg (2 sa), >1750 µg/kg (2 sa), country: India<sup>380</sup>

see also blackgram husk, bread crumbs, broiler finisher, broiler starter, cotton cake, cottonseed, cottonseed cake, cottonseed extract, cottonseed meal, feed, feed (cattle), feed (cow), feed (dog), feed (horse), feed (maize, gluten), feed (pig), feed (poultry), feed (rabbit), feed (rat/mice), feed (sheep), feeds, grain, fish meal, flour (wheat), groundnut cake, grower’s mash, horsegram, layer’s mash, maize, maize gluten, maize, white, milo, peanut cake, peanut cake (deoiled), peanut, kernels, peanut (oil cake), pearl millet, pig breeder’s mash, pig finisher, pig starter, pod with haulms, poultry breeder’s mash, rabbit pellets, redgram husk, rice, rice bran (deoiled), rice, broken, rice (polish), sesame cake, sorghum, soybean cake, soybean meal, wheat, wheat bran

**Sorghum** Sorghum for feed may contain the following mycotoxins:

**AFLATOXIN B<sub>1</sub>**

incidence: 5/6, conc. range:

>100–2000 µg/kg, country: Cuba<sup>106</sup>

incidence: 1/4, conc.: 30 µg/kg, country:

Australia<sup>121</sup>

incidence: 11/45, conc. range: 1.4–42.6 µg/kg,

Ø conc.: 10.6 µg/kg, country: Colombia<sup>125</sup>

incidence: 4/7, conc. range: 3–6 µg/kg,

Ø conc.: 3.8 µg/kg, country: USA<sup>134</sup>

incidence: 4/17, conc. range: 1 µg/kg, country: USA<sup>134</sup>

incidence: 1/1, conc.: 30 µg/kg, country: Australia<sup>181</sup>

incidence: ?/10, conc. range: 10–20 µg/kg, country: India<sup>183</sup>

incidence: 12/30, conc. range: ≤25 µg/kg (7 sa), 26–50 µg/kg (3 sa), 51–100 µg/kg (1 sa), 101–200 µg/kg (1 sa), Ø conc.:

33.8 µg/kg, country: India<sup>247</sup>

incidence: 8/11, conc. range:

72.7–165.9 µg/kg, Ø conc.: 106 µg/kg,

country: India<sup>253</sup>

incidence: 4/197\*, conc. range: 6–45 µg/kg,

Ø conc.: 17 µg/kg, country: USA<sup>327</sup>, \*ncac

incidence: 6/533, conc. range: 3–19 µg/kg,

country: USA<sup>384</sup>

incidence: 9/44\*, conc. range:

0.18–30.3 µg/kg, country: India<sup>386</sup>, \*ncac

incidence: 24/25\*, conc. range: 2–830 µg/kg,

country: India<sup>386</sup>, \*ncac, rain-affected

see also alfalfa, *Ambadi* cake, animal feed-

stuffs (dairy cake), bagasse, barley, bengal-

gram husk, bird food, bird food, wild, biri

testa, blackgram, blackgram husk, bran,

broiler mixed feed, calf fattening mixed feed,

calf fattening mixed feed (containing 4–20 %

peanut products), *Carthamus* cake, castor

cake, cereals, cereal products, chick pea,

coconut cake, cocos, concentrate, mixed,

concentrates, cotton cake, cottonseed,

cottonseed (dehulled), cottonseed cake,

cottonseed extract, cottonseed meal,

cottonseed meal (ammoniated), cottonseed

meal (decorticated), cottonseed meats,

cottonseed products, crumbles, crumbles,

grower, cycad meal, dairy cattle feed, dairy

cattle feed (containing 2–5 % peanut

products), dairy cattle feed (containing

6–10 % peanut products), dairy cattle feed

(containing 6–12 % peanut products), dairy

cattle feed (containing more than 20 %

peanut products), diets, mixed, dog food, egg

production mixed feed, feed, feed and

ingredients, feed, compound, feed, layer,

feed, mixed, feed (beef), feed (broilers), feed

(calf), feed (cat), feed (cattle), feed (chicken),

feed (dairy), feed (dog), feed (dug), feed

(fish), feed (gluten), feed (horse), feed

(miscellaneous), feed (pig), feed (poultry),

feed (poultry, pig), feed (rabbit), feed

(sheep), feed (50–60 % maize), fish meal,

grain by-products, grains (no specification),

greengram, hay/silage, horsegram, husk, *Jagni*

cake, legume mixture, linseed, linseed cake,

livol, *Mahua* cake, maize, maize germ, maize

gluten, maize grits, maize husk, maize meal,

maize oil cake, maize powder, maize

screenings, maize, ground, maize, hybrid,

maize, preharvest, maize, yellow, maize (dark

grains), *Makhana* (*Euryale ferox* Salisb) puffs,

manioc, milk production mixed feed, mung

testa, murkool, mustard cake, neem cake,

niger cake, oats, palm kernel expeller cake,

palm kernels, palm products, peanut cake,

peanut cake (deoiled), peanut expeller,

peanut hay, peanut meal, peanut, kernels,

peanut, shells, peanuts, pellets, finisher, pig

meal and pellets, pigeon pea, poultry feeds

(peanut containing), rapeseed cake, redgram

husk, rice, rice bran, rice bran (deoiled), rice

chaff, rice crack, rice germ, rice germ cake,

rice meal, rice straw, rice (damaged), rice

(polish), safflower cake, sal seed cake, sesame,

sesame cake, soybean meal, soybeans,

sunflower, sunflower cake, sunflower flour,

tapioca, wheat, wheat bran, wheat bran and

chana testa

#### AFLATOXIN B<sub>2</sub>

incidence: 2/45, conc. range: 1.1–3.7 µg/kg,

Ø conc.: 2.4 µg/kg, country: Colombia<sup>125</sup>

incidence: 3/30, conc. range: nc µg/kg,

Ø conc.: 15.4 µg/kg, country: India<sup>247</sup>

incidence: 4/11, conc. range: 72.7–99.3 µg/kg,

Ø conc.: 86 µg/kg, country: India<sup>253</sup>

incidence: 1/197\*, conc.: 9 µg/kg, country:

USA<sup>327</sup>, \*ncac

see also animal feedstuffs (dairy cake), bird

food, bird food, wild, biri testa, blackgram,

blackgram husk, cottonseed, cottonseed cake,

cottonseed extract, cottonseed meal,

cottonseed meal (ammoniated), cottonseed

meats, dog food, egg production mixed feed,

feed, compound, feed (cat), feed (cattle), feed

(dog), feed (pig), feed (poultry), feed (rabbit),

feed (sheep), fish meal, horsegram, maize,



maize gluten, maize husk, maize, ground, maize, preharvest, mung testa, mustard cake, niger cake, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanuts, peanut, kernels, redgram husk, rice bran, rice bran (deoiled), rice chaff, rice meal, rice (polish), sal seed cake, sesame cake, soybean meal, soybeans, wheat, wheat bran

#### AFLATOXIN B<sub>1</sub> + B<sub>2</sub>

incidence: 5/5, conc. range: 1–4 µg/kg,

Ø conc.: 3 µg/kg, country: USA<sup>134</sup>

see also cottonseed, feed (poultry), maize

#### AFLATOXIN B

incidence: 9/12, conc. range:

≥25–>100 µg/kg, country: France<sup>46</sup>

see also barley, cocoa (oilcake), cottonseed cake, feed, feed (cattle), feed (maize, gluten), feed (pig), feed (poultry), flour (wheat), lucern (dried), maize, maize gluten, maize grains, oats, peanut (oil cake), rice, broken, soybean (oil cake), sunflower (oilcake), wheat

#### AFLATOXIN G<sub>1</sub>

incidence: 3/533, conc. range: 3–19 µg/kg,

country: USA<sup>384</sup>

see also animal feedstuffs (dairy cake), bird food, bird food, wild, concentrate, mixed, cottonseed, cottonseed cake, feed (cat), feed (chicken), feed (dog), maize, maize, ground, maize, preharvest, meat meal, milk production mixed feed, murkool, peanut cake, peanut expeller, peanut hay, peanut meal, peanuts, rice bran, rice germ, soybeans, wheat, wheat bran, wheat bran and chana testa

#### AFLATOXIN

incidence: 4/4, conc. range: 2–5 µg/kg,

Ø conc.: 3 µg/kg, country: USA<sup>134</sup>

incidence: 12/30, conc. range: 6–145 µg/kg, country: India<sup>247</sup>

see also blackgram husk, bread crumbs, broiler finisher, broiler starter, cotton cake, cottonseed, cottonseed cake, cottonseed extract, cottonseed meal, feed, feed (cattle), feed (cow), feed (dog), feed (horse), feed (maize, gluten), feed (pig), feed (poultry), feed (rabbit), feed (rat/mice), feed (sheep),

feeds, grain, fish meal, flour (wheat), groundnut cake, grower's mash, horsegram, layer's mash, maize, maize gluten, maize, white, milo, peanut cake, peanut cake (deoiled), peanut, kernels, peanut (oil cake), pearl millet, pig breeder's mash, pig finisher, pig starter, pod with haulms, poultry breeder's mash, rabbit pellets, redgram husk, rice, rice bran (deoiled), rice, broken, rice (polish), sesame cake, silk worm pupae, soybean cake, soybean meal, wheat, wheat bran

#### AFLATOXINS

incidence: 4/50, conc. range: 5–500 µg/kg, country: Australia<sup>21</sup>

incidence: 2/12, conc. range: 12–60 µg/kg,

Ø conc.: 36 µg/kg, country: USA<sup>280</sup>

incidence: 2/2\*, conc. range: 87–1873 µg/kg,

Ø conc.: 980 µg/kg, country: USA<sup>280</sup>,

\*imported

incidence: 7/114\*, conc. range: 3–20 µg/kg, Ø conc.: 10 µg/kg, country: USA<sup>329</sup>, \*ncac

incidence: 4/25\*, conc. range: 4–9 µg/kg,

Ø conc.: 6 µg/kg, country: USA<sup>329</sup>, \*ncac

incidence: 6/29, conc. range: 10–29 µg/kg (2 sa), 31–49 µg/kg (2 sa), >100 µg/kg (2 sa), country: India<sup>349</sup>

see also animal feed (maize), animal feed (mixed), barley, copra meal, cottonseed, cottonseed fines, cottonseed meal, cottonseed meats, feed, feed ingredients (miscellaneous), feed, mixed, feed (excluding peanuts, suspect), feed (goat), feed (pig), feed (poultry), feedstuff, grain, grain, mixed feed, maize, maize, shelled, millet, peanut cake, peanut meal, peanut meal and by-products, peanuts, protein concentrates, rice, rice bran, soybean meal, sunflower

#### DEOXYNIVALENOL

incidence: 6/7, conc. range: 35–258 µg/kg,

Ø conc.: 126.5 µg/kg, country: USA<sup>134</sup>

incidence: 5/5, conc. range: 6–103 µg/kg,

Ø conc.: 34.8 µg/kg, country: USA<sup>134</sup>

incidence: 4/4, conc. range: 7–227 µg/kg,

Ø conc.: 100 µg/kg, country: USA<sup>134</sup>

incidence: 4/4, conc. range: 21–1540 µg/kg,

Ø conc.: 368.3 µg/kg, country: USA<sup>134</sup>

incidence: 5/17, conc. range: 20–558 µg/kg, Ø conc.: 182.2 µg/kg, country: USA<sup>134</sup>  
 see also barley, barley, husked, barley, unhusked (naked), barley (pressed), bone meal, bran, broilers feed, calf fattening mixed feed, coconut, expeller, corn cob mix silage, cottonseed, cottonseed cake, dairy cattle feed, egg production mixed feed, feed, feed components, feed, commercial mix, feed, mixed, feed, mixed (primarily maize), feed (barley), feed (cattle), feed (chicken), feed (dog), feed (fish), feed (mill run, from wheat), feed (mink), feed (pig), feed (poultry), feed (reindeer), feeds, grain, feeds, industrial, feedstuffs (rapeseed, turnip, fish meal, concentrates), fish meal, grain, mixed feed, grains, mixed, grains (no specification), maize, maize ears, maize fibre, maize germ, maize germ/bran, maize germ meal, maize gluten, maize kernels, maize meal, maize powder, maize screenings, maize stalks (pith), maize, “Baby”, maize, hybrid, maize, white, oats, rice bran, rice germ cake, rye, silage, soybeans, triticale, wheat, wheat and barley, wheat, red hard winter, wheat, soft white winter, wheat, spring, wheat, winter

#### FUMONISIN B<sub>1</sub>

incidence: 2/44\*, conc. range: 150–500 µg/kg, Ø conc.: 325 µg/kg, country: India<sup>386</sup>, \*ncac  
 incidence: 25/25\*, conc. range: 70–7800 µg/kg, country: India<sup>386</sup>, \*ncac, rain-affected  
 see also barley, bird food, wild, dog food, feed, feed, complete ration, feed, general, feed, layer, feed, maize-based, feed, mixed, feed, pelleted ration, feed, screenings, feed, sweet, feed (broilers), feed (cat), feed (chicken), feed (dog), feed (gluten), feed (horse), feed (maize), feed (pig), feed (poultry), feed (rat), feed (rodent), forage grass, maize, maize and maize screenings, maize bran, maize ears, maize fine fractions, maize flakes, maize germ, maize germ/bran, maize germ meal, maize gluten, maize grits, maize kernels, maize meal, maize powder, maize screenings, maize, “Baby”, maize, ground, maize, preharvest, maize, sweet feed,

maize/oats mix, rat chow, silage, soybeans, wheat

#### OCHRATOXIN A

incidence: 9/29, conc. range: 10–29 µg/kg (2 sa), 30–49 µg/kg (1 sa), 50–100 µg/kg (1 sa), 100–≤400 µg/kg (5 sa), country: India<sup>349</sup>  
 see also alfalfa, barley, barley, oats, barley (high moisture), barley-soybean diet, bird food, domestic, bird food, wild, broilers feed, cereal grains, citrus pulp, coconut, expeller, corn cob mix silage, diet (dairy cow), diet (poultry), diet (starter), dog food, eat, egg production mixed feed, feed, feed wheat, oat and barley, feed, commercial mix, feed, mixed, feed, mixed (pelleted), feed (broilers), feed (cat), feed (cattle), feed (cereals), feed (pig), feed ec (pig), feed (poultry), feed ec (poultry), feed (poultry, pig), feed ec (rabbit), feed (trout), grain, mixed feed, grains, mixed, grains (heated), hay, horse bean, maize, maize feed, milo, maize gluten, maize meal, maize, white, *Makhana* (*Euryale ferox* Salisb) puffs, milk production mixed feed, millet, oat and barley (hammer-milled), oats, palm products, peanut cake, peas, peas and beans, pet food, pig feedstuffs, pig grower diet, pig meal, piglet diet, poultry feedstuffs, rice bran, rice germ, rice germ cake, rye, soybean groats, sunflower, sunflower seeds, extracted, tapioca, triticale, *Vicia faba*, wheat, wheat and barley, wheat bran, wheat hay, wheat, oats

#### T-2 TOXIN

incidence: 3/31\*, conc. range: 1670–14,960 µg/kg, Ø conc.: 9987 µg/kg, country: India<sup>199</sup>, \*ncac  
 incidence: 1/25\*, conc. range: 15,000 µg/kg, country: India<sup>199</sup>, \*ncac  
 see also alfalfa, barley, bran, diet (grower), diet (poultry), feed, feed components, feed, layer, feed, mixed, feed (dog), feed (fish), feed (mink), feed (pig), feed (poultry), feedstuff, forage grass, grain, mixed feed, grains (no specification), hay, maize, maize germ/bran, maize gluten, maize meal, maize screenings, maize stalks (pith), oat and barley (hammer-milled), oats, peanuts, pig grower diet, piglet diet, rye, triticale, wheat

**ZEARALENONE**

incidence: 7/7, conc. range: 140–1643 µg/kg, Ø conc.: 530.1 µg/kg, country: USA<sup>134</sup>  
 incidence: 5/5, conc. range: 112–339 µg/kg, Ø conc.: 197.2 µg/kg, country: USA<sup>134</sup>  
 incidence: 4/4, conc. range: 26–95 µg/kg, Ø conc.: 49.5 µg/kg, country: USA<sup>134</sup>  
 incidence: 4/4, conc. range: 80–3099 µg/kg, Ø conc.: 579.3 µg/kg, country: USA<sup>134</sup>  
 incidence: 17/17, conc. range: 7–2024 µg/kg, Ø conc.: 443 µg/kg, country: USA<sup>134</sup>  
 incidence: 1/1, conc.: 12,000 µg/kg, country: USA<sup>173</sup>  
 incidence: ?/10, conc. range: 20–40 µg/kg, country: India<sup>183</sup>  
 incidence: 56/197\*, conc. range: 200–6900 µg/kg, country: USA<sup>327</sup>, \*ncac  
 see also alfalfa, barley, barley, husked, barley, unhusked (naked), barley and feed, bone meal, bran, broilers feed, *Carthamus* cake, chick pea, concentrate, mixed, corn cob mix silage, cotton cake, cottonseed, cottonseed cake, diet (dairy cow), diet (poultry), diets (mixed), feed, feed components, feed, mixed, feed, mixed (primarily maize also maize, oats, wheat), feed (bran), feed (broiler chicken), feed (cattle), feed (chicken), feed (dairy), feed (developing pig), feed (mill run, from wheat), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (starter chicken), feedstuff, fish meal, forage grass, grain, bruised, grain, mixed feed, grains (no specification), hay, maize, maize ears, maize flakes, maize germ, maize germ/bran, maize gluten, maize kernels, maize meal, maize oil cake, maize screenings, maize stalks (pith), maize, “Baby”, maize, hybrid, maize, shelled, maize, unshelled, maize, white, maize grain, artificially dried, maize grain, crib dried, maize grain, ensiled, milk production mixed feed, oats, *Paspalum palidosum*, straw, peanut hulls/skins, rice bran, rice germ, rice germ cake, rye, silage, soybeans, soybeans, extracted, sunflower cake, tapioca, triticale, wheat, wheat bran, wheat bran and chana testa, wheat soya meal

**Soybean cake** may contain the following mycotoxins:

**AFLATOXIN**

incidence: 1/8, conc.: 140 µg/kg, country: Nigeria<sup>109</sup>  
 incidence: 17/19\*, conc. range: 11–30 µg/kg (11 sa), 31–100 µg/kg (6 sa), country: India<sup>311</sup>, \*ncac  
 see also blackgram husk, bread crumbs, broiler finisher, broiler starter, cotton cake, cottonseed, cottonseed cake, cottonseed extract, cottonseed meal, feed, feed (cattle), feed (cow), feed (dog), feed (horse), feed (maize, gluten), feed (pig), feed (poultry), feed (rabbit), feed (rat/mice), feed (sheep), feeds, grain, fish meal, flour (wheat), groundnut cake, grower’s mash, horsegram, layer’s mash, maize, maize gluten, maize, white, milo, peanut cake, peanut cake (deoiled), peanut, kernels, peanut (oil cake), pearl millet, pig breeder’s mash, pig finisher, pig starter, pod with haulms, poultry breeder’s mash, rabbit pellets, redgram husk, rice, rice bran (deoiled), rice, broken, rice (polish), sesame cake, silk worm pupae, sorghum, soybean meal, wheat, wheat bran

**Soybean groats** may contain the following mycotoxins:

**OCHRATOXIN A**

incidence: 1/7345, conc.: nc, country: Hungary<sup>209</sup>  
 see also alfalfa, barley, barley, oats, barley (high moisture), barley-soybean diet, bird food, domestic, bird food, wild, broilers feed, cereal grains, citrus pulp, coconut, expeller, corn cob mix silage, diet (dairy cow), diet (poultry), diet (starter), dog food, eat, egg production mixed feed, feed, feed wheat, oat and barley, feed, commercial mix, feed, mixed, feed, mixed (pelleted), feed (broilers), feed (cat), feed (cattle), feed (cereals), feed (pig), feed ec (pig), feed (poultry), feed ec (poultry), feed (poultry, pig), feed ec (rabbit), feed (trout), grain, mixed feed, grains, mixed, grains (heated), hay, horse bean, maize, maize feed, milo, maize gluten, maize meal, maize, white, *Makhana* (*Euryale ferox* Salisb) puffs, milk production mixed feed, millet, oat and barley (hammer-milled), oats, palm

products, peanut cake, peas, peas and beans, pet food, pig feedstuffs, pig grower diet, pig meal, piglet diet, poultry feedstuffs, rice bran, rice germ, rice germ cake, rye, sorghum, sunflower, sunflower seeds, extracted, tapioca, triticale, *Vicia faba*, wheat, wheat and barley, wheat bran, wheat hay, wheat, oats

#### RUBRATOXIN B

incidence: 4/7345, conc. range: nc, country: Hungary<sup>209</sup>

see also diet (grower), diet (poultry), diet (starter), pig diet (fattening), pig grower diet, wheat

**Soybean meal** Soybean meal for feed may contain the following mycotoxins:

#### AFLATOXIN B<sub>1</sub>

incidence: 36/250, conc. range:  $\leq 25$   $\mu\text{g}/\text{kg}$  (28 sa), 26–50  $\mu\text{g}/\text{kg}$  (3 sa), 51–100  $\mu\text{g}/\text{kg}$  (3 sa), 101–200  $\mu\text{g}/\text{kg}$  (1 sa), 201–500  $\mu\text{g}/\text{kg}$  (1 sa),  $\emptyset$  conc.: 26.7  $\mu\text{g}/\text{kg}$ , country: India<sup>247</sup>

incidence: 3/118, conc. range: 5–25  $\mu\text{g}/\text{kg}$ ,  $\emptyset$  conc.: 18.3  $\mu\text{g}/\text{kg}$ , country: Egypt<sup>397</sup>

incidence: 7/120, conc. range: 5–15  $\mu\text{g}/\text{kg}$ ,  $\emptyset$  conc.: 10.7  $\mu\text{g}/\text{kg}$ , country: Egypt<sup>397</sup>

incidence: 2/75, conc. range: 5–25  $\mu\text{g}/\text{kg}$ ,  $\emptyset$  conc.: 15  $\mu\text{g}/\text{kg}$ , country: Egypt<sup>397</sup>

see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing

more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60 % maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

#### AFLATOXIN B<sub>2</sub>

incidence: 11/107, conc. range: nc  $\emptyset$  conc.: 9.2  $\mu\text{g}/\text{kg}$ , country: India<sup>247</sup>

see also animal feedstuffs (dairy cake), bird food, bird food, wild, biri testa, blackgram, blackgram husk, cottonseed, cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meats, dog food, egg production mixed feed, feed, compound, feed (cat), feed (cattle), feed (dog), feed (pig), feed (poultry), feed (rabbit), feed (sheep), fish meal, horsegram,

maize, maize gluten, maize husk, maize, ground, maize, preharvest, mung testa, mustard cake, niger cake, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanuts, peanut, kernels, redgram husk, rice bran, rice bran (deoiled), rice chaff, rice meal, rice (polish), sal seed cake, sesame cake, sorghum, soybeans, wheat, wheat bran

#### AFLATOXIN

incidence: 36/250, conc. range: nd–256 µg/kg, country: India<sup>247</sup>

see also blackgram husk, bread crumbs, broiler finisher, broiler starter, cotton cake, cottonseed, cottonseed cake, cottonseed extract, cottonseed meal, feed, feed (cattle), feed (cow), feed (dog), feed (horse), feed (maize, gluten), feed (pig), feed (poultry), feed (rabbit), feed (rat/mice), feed (sheep), feeds, grain, fish meal, flour (wheat), groundnut cake, grower's mash, horsegram, layer's mash, maize, maize gluten, maize, white, milo, peanut cake, peanut cake (deoiled), peanut, kernels, peanut (oil cake), pearl millet, pig breeder's mash, pig finisher, pig starter, pod with haulms, poultry breeder's mash, rabbit pellets, redgram husk, rice, rice bran (deoiled), rice, broken, rice (polish), sesame cake, silk worm pupae, sorghum, soybean cake, wheat, wheat bran

#### AFLATOXINS

incidence: 1/16, conc.: 5–50 µg/kg, country: Australia<sup>21</sup>

see also animal feed (maize), animal feed (mixed), barley, copra meal, cottonseed, cottonseed fines, cottonseed meal, cottonseed meats, feed, feed ingredients (miscellaneous), feed, mixed, feed (excluding peanuts, suspect), feed (goat), feed (pig), feed (poultry), feedstuff, grain, grain, mixed feed, maize, maize, shelled, millet, peanut cake, peanut meal, peanut meal and by-products, peanuts, protein concentrates, rice, rice bran, sorghum, sunflower

**Soybean (oil cake)** may contain the following mycotoxins:

#### AFLATOXIN B

incidence: 24/51, conc. range:

≥25–>100 µg/kg, country: France<sup>46</sup>

see also barley, cocoa (oilcake), cottonseed cake, feed, feed (cattle), feed (maize, gluten), feed (pig), feed (poultry), flour (wheat), lucern (dried), maize, maize gluten, maize grains, oats, peanut (oil cake), rice, broken, sorghum, sunflower (oilcake), wheat

**Soybeans** Soybeans for feed may contain the following mycotoxins:

#### AFLATOXIN B<sub>1</sub>

incidence: 4/5, Ø conc.: 5 µg/kg, country:

Egypt<sup>16</sup>

incidence: 1/20\*, conc.: 4 µg/kg, country:

UK<sup>94</sup>, \*imported?

incidence: 1/1\*, conc.: 77.5 µg/kg, country:

UK<sup>122</sup>, \*ncac

incidence: 2/866, conc. range: 7–10 µg/kg,

Ø conc.: 8.5 µg/kg, country: USA<sup>381</sup>

see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed

(fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60% maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

#### AFLATOXIN B<sub>2</sub>

incidence: 1/1\*, conc.: 16 µg/kg, country: UK<sup>122</sup>, \*ncac

see also animal feedstuffs (dairy cake), bird food, bird food, wild, biri testa, blackgram, blackgram husk, cottonseed, cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meats, dog food, egg production mixed feed, feed, compound, feed (cat), feed (cattle), feed (dog), feed (pig), feed (poultry), feed (rabbit), feed (sheep), fish meal, horsegram, maize, maize gluten, maize husk, maize, ground, maize, preharvest, mung testa, mustard cake, niger cake, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanuts, peanut, kernels, redgram husk, rice bran, rice bran

(deoiled), rice chaff, rice meal, rice (polish), sal seed cake, sesame cake, sorghum, soybean meal, wheat, wheat bran

#### AFLATOXIN G<sub>1</sub>

incidence: 1/1\*, conc.: 8.1 µg/kg, country: UK<sup>122</sup>, \*ncac

incidence: 1/866, conc.: 4 µg/kg, country: USA<sup>381</sup>

see also animal feedstuffs (dairy cake), bird food, bird food, wild, concentrate, mixed, cottonseed, cottonseed cake, feed (cat), feed (chicken), feed (dog), maize, maize, ground, maize, preharvest, meat meal, milk production mixed feed, murkool, peanut cake, peanut expeller, peanut hay, peanut meal, peanuts, rice bran, rice germ, sorghum, wheat, wheat bran, wheat bran and chana testa

#### AFLATOXIN G<sub>2</sub>

incidence: 1/1\*, conc.: 2.8 µg/kg, country: UK<sup>122</sup>, \*ncac

see also animal feedstuffs (dairy cake), bird food, feed (cat), feed (dog), maize, maize, preharvest, peanut expeller, peanut hay, peanut meal, peanuts

#### AFLATOXINS (TOTAL)

incidence: 1/20\*, conc.: 6 µg/kg, country: UK<sup>94</sup>, \*imported?

see also cottonseed, maize germ, maize gluten, maize (dark grains), palm products, rice bran, sunflower

#### DEOXYNIVALENOL

incidence: 8/24, conc. range: 50–490 µg/kg,

Ø conc.: 161.3 µg/kg, country: USA<sup>83</sup>

incidence: 1/2, conc.: 580 µg/kg, country: The Netherlands<sup>103</sup>

see also barley, barley, husked, barley, unhusked (naked), barley (pressed), bone meal, bran, broilers feed, calf fattening mixed feed, coconut, expeller, corn cob mix silage, cottonseed, cottonseed cake, dairy cattle feed, egg production mixed feed, feed, feed components, feed, commercial mix, feed, mixed, feed, mixed (primarily maize), feed (barley), feed (cattle), feed (chicken), feed (dog), feed (fish), feed (mill run, from

wheat), feed (mink), feed (pig), feed (poultry), feed (reindeer), feeds, grain, feeds, industrial, feedstuff, feedstuffs (rapeseed, turnip, fish meal, concentrates), fish meal, grain, mixed feed, grains, mixed, grains (no specification), maize, maize ears, maize fibre, maize germ, maize germ/bran, maize germ meal, maize gluten, maize kernels, maize meal, maize powder, maize screenings, maize stalks (pith), maize, "Baby", maize, hybrid, maize, white, oats, rice bran, rice germ cake, rye, silage, sorghum, triticale, wheat, wheat and barley, wheat, red hard winter, wheat, soft white winter, wheat, spring, wheat, winter

#### DIACETOXYSCIRPENOL

incidence: 5/24, conc. range: 15–230 µg/kg, Ø conc.: 77 µg/kg, country: USA<sup>83</sup>  
see also alfalfa, barley, feed, feed components, feed (dog), feed (fish), feed (mink), feed (pig), feed (poultry), feed (reindeer), feeds, grain, feedstuff, forage grass, grain, mixed feed, grains (no specification), maize, maize gluten, oat and barley (hammer-milled), oats, peanuts, wheat

#### FUMONISIN B<sub>1</sub>

incidence: 1/1, conc.: 8700 µg/kg, country: Spain<sup>155</sup>  
see also barley, bird food, wild, dog food, feed, feed, complete ration, feed, general, feed, layer, feed, maize-based, feed, mixed, feed, pelleted ration, feed, screenings, feed, sweet, feed (broilers), feed (cat), feed (chicken), feed (dog), feed (gluten), feed (horse), feed (maize), feed (pig), feed (poultry), feed (rat), feed (rodent), forage grass, maize, maize and maize screenings, maize bran, maize ears, maize fine fractions, maize flakes, maize germ, maize germ/bran, maize germ meal, maize gluten, maize grits, maize kernels, maize meal, maize powder, maize screenings, maize, "Baby", maize, ground, maize, preharvest, maize, sweet feed, maize/oats mix, rat chow, silage, sorghum, wheat

#### T-2 TOXIN EQUIVALENTS

incidence: 9/24, conc. range: 20–1070 µg/kg, Ø conc.: 203.7 µg/kg, country: USA<sup>83</sup>

#### ZEARALENONE

incidence: 8/24, conc. range: 50–490 µg/kg, Ø conc.: 161.3 µg/kg, country: USA<sup>83</sup>  
incidence: 1/15\*, conc. range: 160–500 µg/kg (1 sa), country: USA<sup>370</sup>, \*includes 7 soybean and 8 soybean meal sa  
see also alfalfa, barley, barley, husked, barley, unhusked (naked), barley and feed, bone meal, bran, broilers feed, *Carthamus* cake, chick pea, concentrate, mixed, corn cob mix silage, cotton cake, cottonseed, cottonseed cake, diet (dairy cow), diet (poultry), diets (mixed), feed, feed components, feed, mixed, feed, mixed (primarily maize also maize, oats, wheat), feed (bran), feed (broiler chicken), feed (cattle), feed (chicken), feed (dairy), feed (developing pig), feed (mill run, from wheat), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (starter chicken), feedstuff, fish meal, forage grass, grain, bruised, grain, mixed feed, grains (no specification), hay, maize, maize ears, maize flakes, maize germ, maize germ/bran, maize gluten, maize kernels, maize meal, maize oil cake, maize screenings, maize stalks (pith), maize, "Baby", maize, hybrid, maize, shelled, maize, unshelled, maize, white, maize grain, artificially dried, maize grain, crib dried, maize grain, ensiled, milk production mixed feed, oats, *Paspalum palidosum*, straw, peanut hulls/skins, rice bran, rice germ, rice germ cake, rye, silage, sorghum, soybeans, extracted, sunflower cake, tapioca, triticale, wheat, wheat bran, wheat bran and chana testa, wheat soya meal

**Soybeans, extracted** may contain the following mycotoxins:

#### ZEARALENONE

incidence: 1/7\*, conc.: 11 µg/kg, country: The Netherlands<sup>103</sup>, \*imported?  
see also alfalfa, barley, barley, husked, barley, unhusked (naked), barley and feed, bone meal, bran, broilers feed, *Carthamus* cake,

chick pea, concentrate, mixed, corn cob mix silage, cotton cake, cottonseed, cottonseed cake, diet (dairy cow), diet (poultry), diets (mixed), feed, feed components, feed, mixed, feed, mixed (primarily maize also maize, oats, wheat), feed (bran), feed (broiler chicken), feed (cattle), feed (chicken), feed (dairy), feed (developing pig), feed (mill run, from wheat), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (starter chicken), feedstuff, fish meal, forage grass, grain, bruised, grain, mixed feed, grains (no specification), hay, maize, maize ears, maize flakes, maize germ, maize germ/bran, maize gluten, maize kernels, maize meal, maize oil cake, maize screenings, maize stalks (pith), maize, "Baby", maize, hybrid, maize, shelled, maize, unshelled, maize, white, maize grain, artificially dried, maize grain, crib dried, maize grain, ensiled, milk production mixed feed, oats, *Paspalum palidosum*, straw, peanut hulls/skins, rice bran, rice germ, rice germ cake, rye, silage, sorghum, soybeans, sunflower cake, tapioca, triticale, wheat, wheat bran, wheat bran and chana testa, wheat soya meal

**Sunflower** Sunflower for feed may contain the following mycotoxins:

**AFLATOXIN B<sub>1</sub>**

incidence: 3/20\*, conc. range: 1–15 µg/kg, country: UK<sup>94</sup>, \*imported?

see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy

cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60 % maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower cake, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

**AFLATOXINS (TOTAL)**

incidence: 3/20\*, conc. range: 1–17 µg/kg, country: UK<sup>94</sup>, \*imported?

see also cottonseed, maize germ, maize gluten, maize (dark grains), palm products, rice bran, soybeans



**AFLATOXINS**

incidence: 5/10, conc. range: 30–49 µg/kg (5 sa), country: India<sup>349</sup>  
 see also animal feed (maize), animal feed (mixed), barley, copra meal, cottonseed, cottonseed fines, cottonseed meal, cottonseed meats, feed, feed, mixed, feed ingredients (miscellaneous), feed (excluding peanuts, suspect), feed (goat), feed (pig), feed (poultry), feedstuff, grain, grain, mixed feed, maize, maize, shelled, millet, peanut cake, peanut meal, peanut meal and by-products, peanuts, protein concentrates, rice, rice bran, sorghum, soybean meal

**ALTERNARIOL**

incidence: 2/2\*, conc. range: 357–1840 µg/kg, Ø conc.: 1098.5 µg/kg, country: Italy<sup>317</sup>, \*ncac  
 see also cereals, mixture, oilseed rape meal, sunflower seed meal, sunflower seeds, ensiling

**ALTERNARIOL METHYL ETHER**

incidence: 1/2\*, conc.: 129 µg/kg, country: Italy<sup>317</sup>, \*ncac  
 see also barley, barley, oats, cereals, mixture, oats, wheat, wheat, oats

**OCHRATOXIN A**

incidence: 1/10, conc. range: 30–49 µg/kg, country: India<sup>349</sup>  
 see also alfalfa, barley, barley, oats, barley (high moisture), barley-soybean diet, bird food, domestic, bird food, wild, broilers feed, cereal grains, citrus pulp, coconut, expeller, corn cob mix silage, diet (dairy cow), diet (poultry), diet (starter), dog food, eat, egg production mixed feed, feed, feed wheat, oat and barley, feed, commercial mix, feed, mixed, feed, mixed (pelleted), feed (broilers), feed (cat), feed (cattle), feed (cereals), feed (pig), feed ec (pig), feed (poultry), feed ec (poultry), feed (poultry, pig), feed ec (rabbit), feed (trout), grain, mixed feed, grains, mixed, grains (heated), hay, horse bean, maize, maize feed, milo, maize gluten, maize meal, maize, white, *Makhana* (*Euryale ferox* Salisb) puffs, milk production mixed feed, millet, oat and barley (hammer-milled), oats, palm products, peanut cake, peas, peas and beans, pet food, pig feedstuffs, pig grower diet, pig

meal, piglet diet, poultry feedstuffs, rice bran, rice germ, rice germ cake, rye, sorghum, soybean groats, sunflower seeds, extracted, tapioca, triticale, *Vicia faba*, wheat, wheat and barley, wheat bran, wheat hay, wheat, oats

**Sunflower cake** may contain the following mycotoxins:

**AFLATOXIN B<sub>1</sub>**

incidence: ?/10, conc. range: tr–20 µg/kg, country: India<sup>183</sup>  
 incidence: 3/4, conc. range: 6.3–45 µg/kg, Ø conc.: 31.5 µg/kg, country: India<sup>247</sup>  
 see also alfalfa, *Ambadi* cake, animal feed-stuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60 % maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize

gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower flour, tapioca, wheat, wheat bran, wheat bran and chana testa

#### ZEARALENONE

incidence: ?/10, conc. range: tr  $\mu\text{g}/\text{kg}$ , country: India<sup>183</sup>  
 incidence: 3/4, conc. range: 59.4–245.8  $\mu\text{g}/\text{kg}$ ,  $\emptyset$  conc.: 165.9  $\mu\text{g}/\text{kg}$ , country: India<sup>253</sup>  
 see also alfalfa, barley, barley, husked, barley, unhusked (naked), barley and feed, bone meal, bran, broilers feed, *Carthamus* cake, chick pea, concentrate, mixed, corn cob mix silage, cotton cake, cottonseed, cottonseed cake, diet (dairy cow), diet (poultry), diet (mixed), feed, feed components, feed, mixed, feed, mixed (primarily maize also maize, oats, wheat), feed (bran), feed (broiler chicken), feed (cattle), feed (chicken), feed (dairy), feed (developing pig), feed (mill run, from wheat), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (starter chicken), feedstuff, fish meal, forage grass, grain, bruised, grain, mixed feed, grains (no specification), hay, maize, maize ears, maize flakes, maize germ, maize germ/bran, maize gluten, maize kernels, maize meal, maize oil cake, maize screenings, maize stalks (pith), maize, “Baby”, maize, hybrid, maize, shelled, maize, unshelled, maize, white, maize grain,

artificially dried, maize grain, crib dried, maize grain, ensiled, milk production mixed feed, oats, *Paspalum palidosum*, straw, peanut hulls/skins, rice bran, rice germ, rice germ cake, rye, silage, sorghum, soybeans, soybeans, extracted, tapioca, triticale, wheat, wheat bran, wheat bran and chana testa, wheat soya meal

**Sunflower flour** Sunflower flour for feed may contain the following mycotoxins:

#### AFLATOXIN B<sub>1</sub>

incidence: 10/15, conc. range: >10–100  $\mu\text{g}/\text{kg}$ , country: Cuba<sup>106</sup>  
 see also alfalfa, *Ambadi* cake, animal feed-stuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60 % maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake,

livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, tapioca, wheat, wheat bran, wheat bran and chana testa

**Sunflower seed meal** may contain the following mycotoxins:

**ALTERNARIOL**

incidence: 18/22\*, conc. range: 50–570 µg/kg, Ø conc.: 180 µg/kg, country: Argentina, India<sup>187</sup>, \*ec  
see also cereals, mixture, oilseed rape meal, sunflower, sunflower seeds, ensiling

**ALTERNARIOL MONOMETHYL ETHER**

incidence: 16/22\*, conc. range: 45–270 µg/kg, Ø conc.: 100 µg/kg, country: Argentina, India<sup>187</sup>, \*ec  
see also oilseed rape meal, sunflower seeds, ensiling

**TENUAZONIC ACID**

incidence: 22/22\*, conc. range: 510–5600 µg/kg, Ø conc.: 1900 µg/kg, country: Argentina, India<sup>187</sup>, \*ec  
see also feed, feed (GP No. 1), oilseed rape meal, sunflower seeds, ensiling

**Sunflower (oil cake)** may contain the following mycotoxins:

**AFLATOXIN B**

incidence: 11/15, conc. range: ≥25–>100 µg/kg, country: France<sup>46</sup>  
see also barley, cocoa (oilcake), cottonseed cake, feed, feed (cattle), feed (maize, gluten), feed (pig), feed (poultry), flour (wheat), lucern (dried), maize, maize gluten, maize grains, oats, peanut (oil cake), rice, broken, sorghum, soybean (oil cake), wheat

**Sunflower seeds, ensiling** may contain the following mycotoxins:

**ALTERNARIOL**

incidence: 20/20, conc. range: 250–980 µg/kg, Ø conc.: 661 µg/kg, country: Argentina<sup>307</sup>  
incidence: 17/20, conc. range: 60–800 µg/kg, Ø conc.: 360 µg/kg, country: Argentina<sup>307</sup>  
incidence: 4/20, conc. range: 800–1600 µg/kg, Ø conc.: 1070 µg/kg, country: Argentina<sup>307</sup>  
see also cereals, mixture, oilseed rape meal, sunflower, sunflower seed meal

**ALTERNARIOL MONOMETHYL ETHER**

incidence: 1/20, conc.: 600 µg/kg, country: Argentina<sup>307</sup>  
incidence: 1/20, conc.: 800 µg/kg, country: Argentina<sup>307</sup>  
see also oilseed rape meal, sunflower seed meal

**TENUAZONIC ACID**

incidence: 16/20, conc. range: 3900–31,600 µg/kg, Ø conc.: 15,894 µg/kg, country: Argentina<sup>307</sup>  
incidence: 13/20, conc. range: 3600–15,800 µg/kg, Ø conc.: 8000 µg/kg, country: Argentina<sup>307</sup>  
incidence: 9/20, conc. range: 3120–6240 µg/kg, Ø conc.: 4500 µg/kg, country: Argentina<sup>307</sup>  
see also feed, feed (GP No. 1), oilseed rape meal, sunflower seed meal

**Sunflower seeds, extracted** may contain the following mycotoxins:

## OCHRATOXIN A

incidence: 3/3, conc. range: 9–37 µg/kg,

Ø conc.: 27 µg/kg, country: The Netherlands<sup>103</sup>

see also alfalfa, barley, barley, oats, barley (high moisture), barley-soybean diet, bird food, domestic, bird food, wild, broilers feed, cereal grains, citrus pulp, coconut, expeller, corn cob mix silage, diet (dairy cow), diet (poultry), diet (starter), dog food, eat, egg production mixed feed, feed wheat, oat and barley, feed, commercial mix, feed, mixed, feed, mixed (pelleted), feed (broilers), feed (cat), feed (cattle), feed (cereals), feed (pig), feedec (pig), feed (poultry), feed ec (poultry), feed (poultry, pig), feed ec (rabbit), feed (trout), grain, mixed feed, grains, mixed, grains (heated), hay, horse bean, maize, maize feed, milo, maize gluten, maize meal, maize, white, *Makhana* (*Euryale ferox* Salisb) puffs, milk production mixed feed, millet, oat and barley (hammer-milled), oats, palm products, peanut cake, peas, peas and beans, pet food, pig feedstuffs, pig grower diet, pig meal, piglet diet, poultry feedstuffs, rice bran, rice germ, rice germ cake, rye, sorghum, soybean groats, sunflower, tapioca, triticale, *Vicia faba*, wheat, wheat and barley, wheat bran, wheat hay, wheat, oats

## SWINE

see Pork

**Tall fescue grass (*Festuca arundinacea* Scrb)**

may contain the following mycotoxins:

## ERGOPEPTIDE ALKALOIDS

incidence: 9/11\*, conc. range:

100–300 µg\*\*/kg\*\*\*, country: USA<sup>200</sup>, \*leaf blades, \*\*ergovaline, \*\*\* dry weight

incidence: 9/11\*, conc. range:

300–2800 µg\*\*/kg\*\*\*, Ø conc.: 1167 µg/kg, country: USA<sup>200</sup>, \*leaf sheaths, \*\*ergovaline, \*\*\* dry weight

## ERGOT ALKALOIDS

incidence: 9/11\*, conc. range:

400–1500 µg\*\*/kg, Ø conc.: 956 µg/kg, country: USA<sup>200</sup>, \*leaf blades, \*\*ergonovine

incidence: 9/11\*, conc. range:

700–13,800 µg\*\*/kg, Ø conc.: 4133 µg/kg, country: USA<sup>200</sup>, \*leaf sheaths, \*\*ergonovine

incidence: 3/3\*, conc. range:

3729.3–9440.8 µg/kg\*\*, Ø conc.: 6469.2 µg/kg,

country: USA<sup>400</sup>, \*seed, \*\*dry weight

incidence: 4/4\*, conc. range:

907.9–1405.9 µg/kg\*\*, Ø conc.: 1188.4 µg/kg,

country: USA<sup>400</sup>, \*culm, \*\*dry weight

incidence: 4/4\*, conc. range:

237.5–706.3 µg/kg\*\*, Ø conc.: 495 µg/kg,

country: USA<sup>400</sup>, \*plant, \*\*dry weight

see also feed, feedstuff, grain, grain diets

## ERGOVALINE

incidence: 9/11, conc. range: 20–4620 µg/kg,

Ø conc.: 2100 µg/kg, country: Spain<sup>396</sup>

incidence: 8/8\*, conc. range: 166–340 µg/kg,

Ø conc.: 231.5 µg/kg, country: USA<sup>401</sup>,

\*samples were taken in spring

incidence: 8/8\*, conc. range: 314–839 µg/kg,

Ø conc.: 554.4 µg/kg, country: USA<sup>401</sup>,

\*samples were taken in fall

**Tapioca** Tapioca for feed may contain the following mycotoxins:

AFLATOXIN B<sub>1</sub>

incidence: 1/1, conc.: 270 µg/kg, country:

India<sup>247</sup>

see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20% peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5% peanut products), dairy cattle feed (containing 6–10% peanut products), dairy cattle feed

(containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60 % maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, wheat, wheat bran, wheat bran and chana testa

#### OCHRATOXIN A

incidence: 3/6\*, conc. range: 2–4 µg/kg, Ø conc.: 3 µg/kg, country: The Netherlands<sup>103</sup>, \*imported?  
see also alfalfa, barley, barley, oats, barley (high moisture), barley-soybean diet, bird food, domestic, bird food, wild, broilers feed, cereal grains, citrus pulp, coconut, expeller, corn cob mix silage, diet (dairy cow), diet (poultry), diet (starter), dog food, eat, egg

production mixed feed, feed, feed wheat, oat and barley, feed, commercial mix, feed, mixed, feed, mixed (pelleted), feed (broilers), feed (cat), feed (cattle), feed (cereals), feed (pig), feed ec (pig), feed (poultry), feed ec (poultry), feed (poultry, pig), feed ec (rabbit), feed (trout), grain, mixed feed, grains, mixed, grains (heated), hay, horse bean, maize, maize feed, milo, maize gluten, maize meal, maize, white, *Makhana* (*Euryale ferox* Salisb) puffs, milk production mixed feed, millet, oat and barley (hammer-milled), oats, palm products, peanut cake, peas, peas and beans, pet food, pig feedstuffs, pig grower diet, pig meal, piglet diet, poultry feedstuffs, rice bran, rice germ, rice germ cake, rye, sorghum, soybean groats, sunflower, sunflower seeds, extracted, triticale, *Vicia faba*, wheat, wheat and barley, wheat bran, wheat hay, wheat, oats

#### ZEARALENONE

incidence: 6/6\*, conc. range: 17–86 µg/kg, Ø conc.: 32 µg/kg, country: The Netherlands<sup>103</sup>, \*imported?  
see also alfalfa, barley, barley, husked, barley, unhusked (naked), barley and feed, bone meal, bran, broilers feed, *Carthamus* cake, chick pea, concentrate, mixed, corn cob mix silage, cotton cake, cottonseed, cottonseed cake, diet (dairy cow), diet (poultry), diets (mixed), feed, feed components, feed, mixed, feed, mixed (primarily maize also maize, oats, wheat), feed (bran), feed (broiler chicken), feed (cattle), feed (chicken), feed (dairy), feed (developing pig), feed (mill run, from wheat), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (starter chicken), feedstuff, fish meal, grain, bruised, grain, mixed feed, grains (no specification), hay, maize, maize ears, maize flakes, maize germ, maize germ/bran, maize gluten, maize kernels, maize meal, maize oil cake, maize screenings, maize stalks (pith), maize, “Baby”, maize, hybrid, maize, shelled, maize, unshelled, maize, white, maize grain, artificially dried, maize grain, crib dried, maize grain, ensiled, milk production mixed feed, oats, *Paspalum palidosum*, straw, peanut hulls/skins, rice bran, rice germ, rice germ

cake, rye, silage, sorghum, soybeans, soybeans, extracted, sunflower cake, triticale, wheat, wheat bran, wheat bran and chana testa, wheat soya meal

**Triticale** Triticale for feed may contain the following mycotoxins:

**DEOXYNIVALENOL**

incidence: 26/32, conc. range: 50–580 µg/kg, Ø conc.: 256.5 µg/kg, country: Hungary<sup>6</sup>

incidence: 3/3, conc. range:

1100–11,200 µg/kg, Ø conc.: 7100 µg/kg, country: Australia<sup>256</sup>

incidence: ?/10\*, conc. range:

1300–16,400 µg/kg, Ø conc.: 7990 µg/kg, country: Poland<sup>290</sup>, \*ncac

see also barley, husked, barley, unhusked (naked), barley (pressed), bone meal, bran, broilers feed, calf fattening mixed feed, coconut, expeller, corn cob mix silage, cottonseed, cottonseed cake, dairy cattle feed, egg production mixed feed, feed, feed components, feed, commercial mix, feed, mixed, feed, mixed (primarily maize), feed (barley), feed (cattle), feed (chicken), feed (dog), feed (fish), feed (mill run, from wheat), feed (mink), feed (pig), feed (poultry), feed (reindeer), feeds, grain, feeds, industrial, feedstuff, feedstuffs (rapeseed, turnip, fish meal, concentrates), fish meal, grain, mixed feed, grains, mixed, grains (no specification), maize, maize ears, maize fibre, maize germ, maize germ/bran, maize germ meal, maize gluten, maize kernels, maize meal, maize powder, maize screenings, maize stalks (pith), maize, “Baby”, maize, hybrid, maize, white, oats, rice bran, rice germ cake, rye, silage, sorghum, soybeans, wheat, wheat and barley, wheat, red hard winter, wheat, soft white winter, wheat, spring, wheat, winter

**MONILIFORMIN**

incidence: ?/?\* \*\*, conc. range:

2400–15,700 µg/kg, Ø conc.: 6100 µg/kg, country: Poland<sup>222</sup>, \*ncac, \*\*Fdk

incidence: ?/?\* \*\*, conc. range: 250 µg/kg, Ø conc.: 250 µg/kg, country: Poland<sup>222</sup>,

\*ncac, \*\*hlc

see also barley, feed, mixed, feed (poultry), maize, maize flakes, maize germ, maize germ/bran, maize gluten, maize meal, maize screenings, maize, “Baby”, oats, rice bran, wheat, wheat, summer, wheat, winter

**NIVALENOL**

incidence: 1/32, conc.: 100 µg/kg, country: Hungary<sup>6</sup>

see also barley, barley, husked, barley, unhusked (naked), barley (pressed), bran, feed, feed components, feed (cattle), feed (poultry), feed (reindeer), feeds, industrial, maize, maize ears, maize germ, maize germ/bran, maize gluten, maize kernels, maize meal, maize powder, maize screenings, maize, “Baby”, oats, silage, rye, wheat

**OCHRATOXIN A**

incidence: 1/32, conc.: 120 µg/kg, country: Hungary<sup>6</sup>

see also alfalfa, barley, barley, oats, barley (high moisture), barley-soybean diet, bird food, domestic, bird food, wild, broilers feed, cereal grains, citrus pulp, coconut, expeller, corn cob mix silage, diet (dairy cow), diet (poultry), diet (starter), dog food, eat, egg production mixed feed, feed, feed wheat, oat and barley, feed, commercial mix, feed, mixed, feed, mixed (pelleted), feed (broilers), feed (cat), feed (cattle), feed (cereals), feed (pig), feed ec (pig), feed (poultry), feed ec (poultry), feed (poultry, pig), feed ec (rabbit), feed (trout), grain, mixed feed, grains, mixed, grains (heated), hay, horse bean, maize, maize feed, milo, maize gluten, maize meal, maize, white, *Makhana (Euryale ferox* Salisb) puffs, milk production mixed feed, millet, oat and barley (hammer-milled), oats, palm products, peanut cake, peas, peas and beans, pet food, pig feedstuffs, pig grower diet, pig meal, piglet diet, poultry feedstuffs, rice bran, rice germ, rice germ cake, rye, sorghum, soybean groats, sunflower, sunflower seeds, extracted, tapioca, *Vicia faba*, wheat, wheat and barley, wheat bran, wheat hay, wheat, oats

**T-2 TOXIN**

incidence: 1/32, conc.: 160 µg/kg, country: Hungary<sup>6</sup>

see also alfalfa, barley, bran, diet (grower), diet (poultry), feed, feed components, feed, layer, feed, mixed, feed (dog), feed (fish), feed (mink), feed (pig), feed (poultry), feedstuff, forage grass, grain, mixed feed, grains (no specification), hay, maize, maize germ/bran, maize gluten, maize meal, maize screenings, maize stalks (pith), oat and barley (hammer-milled), oats, peanuts, pig grower diet, piglet diet, rye, sorghum, wheat

#### ZEARALENONE

incidence: 21/32, conc. range: 50–580 µg/kg, Ø conc.: 216.2 µg/kg, country: Hungary<sup>6</sup>  
 see also alfalfa, barley, barley, husked, barley, unhusked (naked), barley and feed, bone meal, bran, broilers feed, *Carthamus* cake, chick pea, concentrate, mixed, corn cob mix silage, cotton cake, cottonseed, cottonseed cake, diet (dairy cow), diet (poultry), diets (mixed), feed, feed components, feed, mixed, feed, mixed (primarily maize also maize, oats, wheat), feed (bran), feed (broiler chicken), feed (cattle), feed (chicken), feed (dairy), feed (developing pig), feed (mill run, from wheat), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (starter chicken), feedstuff, fish meal, grain, bruised, grain, mixed feed, grains (no specification), hay, maize, maize ears, maize flakes, maize germ, maize germ/bran, maize gluten, maize kernels, maize meal, maize oil cake, maize screenings, maize stalks (pith), maize, “Baby”, maize, hybrid, maize, shelled, maize, unshelled, maize, white, maize grain, artificially dried, maize grain, crib dried, maize grain, ensiled, milk production mixed feed, oats, *Paspalum palidosum*, straw, peanut hulls/skins, rice bran, rice germ, rice germ cake, rye, silage, sorghum, soybeans, soybeans, extracted, sunflower cake, tapioca, wheat, wheat bran, wheat bran and chana testa, wheat soya meal

**Vicia faba** *Vicia faba* for feed may contain the following mycotoxins:

#### OCHRATOXIN A

incidence: 1/6, conc.: 4 µg/kg, country: The Netherlands<sup>103</sup>

see also alfalfa, barley, barley, oats, barley (high moisture), barley-soybean diet, bird food, domestic, bird food, wild, broilers feed, cereal grains, citrus pulp, coconut, expeller, corn cob mix silage, diet (dairy cow), diet (poultry), diet (starter), dog food, eat, egg production mixed feed, feed, feed wheat, oat and barley, feed, commercial mix, feed, mixed, feed, mixed (pelleted), feed (broilers), feed (cat), feed (cattle), feed (cereals), feed (pig), feed ec (pig), feed (poultry), feed ec (poultry), feed (poultry, pig), feed ec (rabbit), feed (trout), grain, mixed feed, grains, mixed, grains (heated), hay, horse bean, maize, maize feed, milo, maize gluten, maize meal, maize, white, *Makhana* (*Euryale ferox* Salisb) puffs, milk production mixed feed, millet, oat and barley (hammer-milled), oats, palm products, peanut cake, peas, peas and beans, pet food, pig feedstuffs, pig grower diet, pig meal, piglet diet, poultry feedstuffs, rice bran, rice germ, rice germ cake, rye, sorghum, soybean groats, sunflower, sunflower seeds, extracted, tapioca, triticale, wheat, wheat and barley, wheat bran, wheat hay, wheat, oats

**Wheat** Wheat for feed may contain the following mycotoxins:

#### 3-ACETYLDEOXYNIVALENOL

incidence: 4/7\*, conc. range: 35–106 µg/kg, Ø conc.: 57 µg/kg, country: Finland<sup>9</sup>,

\*imported ?

incidence: 12/25, conc.: ≤250 µg/kg, Ø conc.: 93 µg/kg, country: Romania<sup>54</sup>

incidence: 50/84, conc. range: 3–18 µg/kg, Ø conc.: 6.7 µg/kg, country: Germany<sup>63</sup>

incidence: 24/78, conc. range: 3–12 µg/kg, Ø conc.: 7 µg/kg, country: Germany<sup>63</sup>

incidence: 20/80, conc. range: 2–25 µg/kg, Ø conc.: 11.9 µg/kg, country: Germany<sup>63</sup>

incidence: 17/80, conc. range: 13–120 µg/kg, Ø conc.: 49.5 µg/kg, country: Germany<sup>63</sup>

incidence: 13/78, conc. range: 10–44 µg/kg, Ø conc.: 20.2 µg/kg, country: Germany<sup>63</sup>

incidence: 28/45, conc. range: 10–1902 µg/kg, Ø conc.: 209.2 µg/kg, country: Germany<sup>63</sup>

incidence: 657/821\* \*\*, conc. range: 50–29,540 µg/kg, country: Poland<sup>252</sup>, \*wheat heads, \*\*ncac

incidence: 1/97, conc.: 100–1000 µg/kg (1 sa), country: UK<sup>268</sup>

incidence: 9/13\*, conc. range: 300–3000 µg/kg, Ø conc.: 1740 µg/kg, country: Poland<sup>315</sup>, \*Fdk

incidence: 67/276, conc. range: 2–1886 µg/kg, Ø conc.: 207 µg/kg, country: Germany<sup>362</sup>

see also barley, feed components, feed (poultry), feeds, grain, feeds, industrial, feedstuffs (rapeseed, turnip, fish meal, concentrates), maize, maize ears, maize gluten, maize kernels, maize meal, maize screenings, oats

#### 15-ACETYLDEOXYNIVALENOL

incidence: 8/25, conc. range: ≤380 µg/kg, Ø conc.: 150 µg/kg, country: Romania<sup>54</sup>

incidence: 13/84, conc. range: 1–15 µg/kg, Ø conc.: 5 µg/kg, country: Germany<sup>63</sup>

incidence: 10/80, conc. range: 5–150 µg/kg, Ø conc.: 41.9 µg/kg, country: Germany<sup>63</sup>

incidence: 2/78, conc. range: 6–116 µg/kg, Ø conc.: 61 µg/kg, country: Germany<sup>63</sup>

incidence: 3/45, conc. range: 7–181 µg/kg, Ø conc.: 71 µg/kg, country: Germany<sup>63</sup>

incidence: 1/13\*, conc.: 130 µg/kg, country: Japan<sup>67</sup>, \*ncac

incidence: 2/283, conc. range: ≤22 µg/kg, Ø conc.: 18 µg/kg, country: UK<sup>310</sup>

incidence: 7/169, conc. range: 3–54 µg/kg, Ø conc.: 15.6 µg/kg, country: Germany<sup>362</sup>

see also barley, feed components, feed, commercial mix, feed (poultry), maize, maize ears, maize germ, maize germ/bran, maize gluten, maize kernels, maize meal, maize screenings, maize, “Baby”, oats, silage

#### ACETYLDEOXYNIVALENOL

incidence: 12/25\*, conc. range: ≤38 µg/kg, Ø conc.: 16 µg/kg, country: Poland<sup>392</sup>, \*ncac

#### AFLATOXIN B<sub>1</sub>

incidence: 21/50\*, conc. range: ≤100 µg/kg, (1 sa), 101–250 µg/kg (9 sa), 251–500 µg/kg (4 sa), 501–1000 µg/kg (5 sa), >1000 µg/kg (2 sa, with a maximum of 1248 µg/kg), country: India<sup>28</sup>, \*ncac

incidence: 7/13, conc. range: 10–700 µg/kg, Ø conc.: 201.4 µg/kg, country: Australia<sup>121</sup>

incidence: 5/5, conc. range: 20–700 µg/kg, Ø conc.: 182 µg/kg, country: Australia<sup>181</sup>

incidence: 16/244, conc. range: ≤25 µg/kg (14 sa), 51–100 µg/kg (2 sa, Ø conc.: 17.4 µg/kg) country: India<sup>247</sup>

incidence: 4/4, conc. range: 59.4–112.6 µg/kg, Ø conc.: 92.7 µg/kg, country: India<sup>253</sup>

incidence: 12/122, conc. range: 3–40 µg/kg, Ø conc.: 12 µg/kg, country: Australia<sup>270</sup>

incidence: 7/20, conc. range: 3–18 µg/kg, Ø conc.: 6.5 µg/kg, country: Australia<sup>270</sup>

incidence: 10/30, conc. range: 3–500 µg/kg, Ø conc.: 64 µg/kg, country: Australia<sup>270</sup>

incidence: 2/531, conc. range: 7 µg/kg, country: USA<sup>384</sup>

see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60 % maize), fish meal,



grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat bran, wheat bran and chana testa

#### AFLATOXIN B<sub>2</sub>

incidence: 4/244, conc. range: nc, Ø conc.: 4.9 µg/kg, country: India<sup>247</sup>

incidence: 4/122, conc. range: 1–4 µg/kg, country: Australia<sup>270</sup>

incidence: 9/30, conc. range: 1–150 µg/kg, country: Australia<sup>270</sup>

see also animal feedstuff (dairy cake), bird food, bird food, wild, biri testa, blackgram, blackgram husk, cottonseed, cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meats, dog food, egg production mixed feed, feed, compound, feed (cat), feed (cattle), feed (dog), feed (pig), feed (poultry), feed (rabbit), feed (sheep), fish meal, horsegram, maize, maize gluten, maize husk, maize, ground, maize, preharvest, mung testa, mustard cake, niger cake, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanuts, peanut, kernels, redgram husk, rice bran, rice bran

(deoiled), rice chaff, rice meal, rice (polish), sal seed cake, sesame cake, sorghum, soybean meal, soybeans, wheat bran

#### AFLATOXIN B

incidence: 17/32, conc. range:

≥25–>100 µg/kg, country: France<sup>46</sup>

see also barley, cocoa (oil cake), cottonseed cake, feed, feed (cattle), feed (maize, gluten), feed (pig), feed (poultry), flour (wheat), lucern (dried), maize, maize gluten, maize grains, oats, peanut (oil cake), rice, broken, sorghum, soybean (oil cake), sunflower (oil cake)

#### AFLATOXIN G<sub>1</sub>

incidence: 2/531, conc.: 2 µg/kg, country: USA<sup>384</sup>

see also animal feedstuffs (dairy cake), bird food, bird food, wild, concentrate, mixed, cottonseed, cottonseed cake, feed (cat), feed (chicken), feed (dog), maize, maize, ground, maize, preharvest, meat meal, milk production mixed feed, murkool, peanut cake, peanut expeller, peanut hay, peanut meal, peanuts, rice bran, rice germ, sorghum, soybeans, wheat bran, wheat bran and chana testa

#### AFLATOXIN

incidence: 16/244, conc. range: 1–79 µg/kg, country: India<sup>247</sup>

incidence: 14/14, conc. range: <30 µg/kg (4 sa), >30 µg/kg (6 sa), >200 µg/kg (2 sa), >1750 µg/kg (2 sa), country: India<sup>380</sup>

see also blackgram husk, bread crumbs, broiler finisher, broiler starter, cotton cake, cottonseed, cottonseed cake, cottonseed extract, cottonseed meal, feed, feed (cattle), feed (cow), feed (dog), feed (horse), feed (maize, gluten), feed (pig), feed (poultry), feed (rabbit), feed (rat/mice), feed (sheep), feeds, grain, fish meal, flour (wheat), groundnut cake, grower's mash, horsegram, layer's mash, maize, maize gluten, maize, white, milo, peanut cake, peanut cake (deoiled), peanut, kernels, peanut (oil cake), pearl millet, pig breeder's mash, pig finisher, pig starter, pod with haulms, poultry breeder's mash, rabbit pellets, redgram husk,

rice, rice bran (deoiled), rice, broken, rice (polish), sesame cake, silk worm pupae, sorghum, soybean cake, soybean meal, wheat bran

#### ALTERNARIOL METHYL ETHER

incidence: 3/17, conc. range: 4–8 µg/kg, country: Germany<sup>294</sup>  
see also barley, barley, oats, cereals, mixture, oats, sunflower, wheat, oats

#### BEAUVERICIN

incidence: 13/13\*, conc. range: 640–3500 µg/kg, country: Finland<sup>234</sup>, \*ncac  
see also barley, maize, oats, wheat, summer, wheat, winter

#### CITRININ

incidence: 15/50\*, conc. range: 1–10 µg/kg, country: UK<sup>94</sup>, \*imported?  
incidence: 1/94, conc.: 4400 µg/kg, country: Australia<sup>240</sup>  
see also barley, barley, oats, barley-soybean diet, cottonseed cake, feed, feed, mixed, feed (cattle), feed (pig), fish meal, hay, maize, maize, white, *Makhana (Euryale ferox Salisb)* puffs, oats, palm products, peas and beans, rice bran, rice germ, wheat and other grains (moldy), wheat bran

#### CYCLOPIAZONIC ACID

incidence: 1/1, conc. range: 20,000 µg/kg (estimated), country: India<sup>33</sup>  
see also chick mash, feed, groundnut cake, maize, millet, little, peanuts, rice bran

#### DEOXYNIVALENOL

incidence: 47/47\*, conc. range: 40–415 µg/kg, Ø conc.: 111 µg/kg, country: Germany<sup>5</sup>, \*ncac  
incidence: 58/58\*, conc. range: 67–1020 µg/kg, Ø conc.: 280 µg/kg, country: Germany<sup>5</sup>, \*ncac  
incidence: 287/367, conc. range: 70–1560 µg/kg, Ø conc.: 298.9 µg/kg, country: Hungary<sup>6</sup>  
incidence: 7/7\*, conc. range: 68–700 µg/kg, Ø conc.: 170 µg/kg, country: Finland<sup>9</sup>, \*imported?  
incidence: 40/53, conc. range: 50–3650 µg/kg, Ø conc.: 434.8 µg/kg, country: Canada<sup>49</sup>

incidence: 1/2, conc.: 500 µg/kg, country: Hungary<sup>50</sup>  
incidence: 25/25, conc. range: ≤5600 µg/kg, Ø conc.: 1500 µg/kg, country: Romania<sup>54</sup>  
incidence: 81/84, conc. range: 4–20,538 µg/kg, Ø conc.: 1691.6 µg/kg, country: Germany<sup>63</sup>  
incidence: 54/78, conc. range: 3–1187 µg/kg, Ø conc.: 152.1 µg/kg, country: Germany<sup>63</sup>  
incidence: 77/80, conc. range: 8–8969 µg/kg, Ø conc.: 595 µg/kg, country: Germany<sup>63</sup>  
incidence: 77/80, conc. range: 4–4627 µg/kg, Ø conc.: 359.1 µg/kg, country: Germany<sup>63</sup>  
incidence: 74/78, conc. range: 18–5412 µg/kg, Ø conc.: 334.8 µg/kg, country: Germany<sup>63</sup>  
incidence: 43/45, conc. range: 19–6165 µg/kg, Ø conc.: 391.2 µg/kg, country: Germany<sup>63</sup>  
incidence: 9/13\*, conc. range: 30–1280 µg/kg, Ø conc.: 522.2 µg/kg, country: Japan<sup>67</sup>, \*ncac  
incidence: 5/80, conc. range: 10–1300 µg/kg, country: Germany<sup>68</sup>  
incidence: 1/3, conc.: 400 µg/kg, country: Brazil<sup>80</sup>  
incidence: 3/15, conc. range: 560–590 µg/kg, Ø conc.: 576.7 µg/kg, country: Brazil<sup>81</sup>  
incidence: 1/15, conc.: 470 µg/kg, country: Brazil<sup>81</sup>  
incidence: 2/7, conc. range: 110–270 µg/kg, Ø conc.: 190 µg/kg, country: The Netherlands<sup>103</sup>  
incidence: 5/9, conc. range: 6–173 µg/kg, Ø conc.: 23 µg/kg, country: Korea<sup>108</sup>  
incidence: ?/81\*, conc. range: 41–9330 µg/kg, Ø conc.: 1570 µg/kg, country: USA<sup>126</sup>, \*ncac, ncaps  
incidence: 20/40\*, conc. range: 8–1571 µg/kg, Ø conc.: 238.8 µg/kg, country: Norway<sup>132</sup>, \*probably feed  
incidence: 13/13\*, conc. range: 8–3193 µg/kg, Ø conc.: 419.9 µg/kg, country: Norway<sup>132</sup>, \*probably feed  
incidence: 24/1291, conc. range: tr–1700 µg/kg, country: Australia<sup>137</sup>  
incidence: 4/60, conc. range: tr–70 µg/kg, country: Australia<sup>137</sup>  
incidence: 6/80, conc. range: 20–780 µg/kg, country: Australia<sup>137</sup>  
incidence: 19/22\* \*\*, conc. range: 76–1654 µg/kg, Ø conc.: 452.8 µg/kg,

country: Germany<sup>152</sup>, \* and from different countries, \*\*ncac  
 incidence: 94/94\*, conc. range: <10->10,000 µg/kg, country: Germany<sup>192</sup>, \*ncac  
 incidence: 8/14, conc. range: 110–1180 µg/kg, Ø conc.: 400 µg/kg, country: Sweden<sup>197</sup>  
 incidence: 23/29, conc. range: 60–360 µg/kg, Ø conc.: 190 µg/kg, country: Sweden<sup>197</sup>  
 incidence: 115/117, conc. range: 20–99 µg/kg (79 sa), 100–499 µg/kg (35 sa), 600 µg/kg (1 sa), country: UK<sup>203</sup>  
 incidence: 4/12, conc. range: 1500–10,800 µg/kg, country: New Zealand<sup>211</sup>  
 incidence: 3/3, conc. range: 3750–14,360 µg/kg, Ø conc.: 8700 µg/kg, country: South Africa<sup>212</sup>  
 incidence: 13/42\*, conc. range: 7–309 µg/kg, Ø conc.: 94.7 µg/kg, country: Poland<sup>214</sup>, \*ncac  
 incidence: 9/15\*, conc. range: 9–1285 µg/kg, Ø conc.: 335 µg/kg, country: Europe<sup>214</sup>, \*ncac  
 incidence: 501/737\*, conc. range: 30–4300 µg/kg, country: Norway<sup>224</sup>, \*ncac  
 incidence: 2/3\*, conc. range: 66–740 µg/kg, Ø conc.: 403 µg/kg, country: Japan<sup>230</sup>, \*ncac  
 incidence: 1/4\*, conc.: 91 µg/kg, country: Japan<sup>230</sup>, \*ncac  
 incidence: 15/18\*, conc. range: tr–4700 µg/kg, Ø conc.: 1000 µg/kg, country: Japan<sup>231</sup>, \*ncac  
 incidence: 2/2\*, conc. range: 540–1100 µg/kg, Ø conc.: 829 µg/kg, country: Norway<sup>235</sup>, \*ncac  
 incidence: 2/2\*, conc. range: <30 µg/kg, country: Norway<sup>235</sup>, \*ncac  
 incidence: 37–40%/61\*, conc. range: 10–15,300 µg/kg, country: Poland<sup>236</sup>, \*ncac  
 incidence: 61–65%/68\*, conc. range: 30–24,290 µg/kg, country: Poland<sup>236</sup>, \*ncac  
 incidence: 4/342, conc. range: 140–36,700 µg/kg, Ø conc.: 18,600 µg/kg, country: USA<sup>237</sup>  
 incidence: 2/94, conc. range: 20–200 µg/kg, Ø conc.: 110 µg/kg, country: Australia<sup>240</sup>  
 incidence: 1/1, conc.: 6900 µg/kg, country: Canada<sup>249</sup>  
 incidence: 821/821\* \*\*, conc. range: 210–30,400 µg/kg, country: Poland<sup>252</sup>, \*wheat heads, \*\*ncac

incidence: 7/12, conc. range: ≤6700 µg/kg, Ø conc.: 1800 µg/kg, country: Australia<sup>256</sup>  
 incidence: 39/78, conc. range: nd–102 µg/kg, Ø conc.: 21 µg/kg, country: Poland<sup>264</sup>  
 incidence: 82/151\*, conc. range: 5–1620 µg/kg, Ø conc.: 162 µg/kg, country: Japan<sup>265</sup>, \*ncac  
 incidence: 8/97, conc. range: <100 µg/kg (6 sa), 100–1000 µg/kg (1 sa), >1000 µg/kg (1 sa), country: UK<sup>268</sup>  
 incidence: ?/33\*, conc. range: 2400–35,000 µg/kg, country: Poland<sup>290</sup>, \*ncac  
 incidence: 226/283, conc. range: ≤5175 µg/kg, Ø conc.: 100 µg/kg, country: UK<sup>310</sup>  
 incidence: 11/13\*, conc. range: 15,900–39,600 µg/kg, Ø conc.: 28,190 µg/kg, country: Poland<sup>315</sup>, \*Fdk  
 incidence: 10/13\*, conc. range: 400–3600 µg/kg, Ø conc.: 1700 µg/kg, country: Poland<sup>315</sup>, \*hlk  
 incidence: 79/99, conc. range: ≤9160 µg/kg, Ø conc.: 1500 µg/kg, country: Canada<sup>346</sup>  
 incidence: 104/150\*\*\*, conc. range: ≤11,660 µg/kg, Ø conc.: 1540 µg/kg, country: Germany<sup>355</sup>, \*ncac, \*\*cg  
 incidence: 25/46\*\*\*, conc. range: ≤4220 µg/kg, Ø conc.: 760 µg/kg, country: Germany<sup>355</sup>, \*ncac, \*\*og  
 incidence: 236/276, conc. range: 4–15,869 µg/kg, Ø conc.: 320.7 µg/kg, country: Germany<sup>362</sup>  
 incidence: 24/25\*, conc. range: ≤371 µg/kg, Ø conc.: 104 µg/kg, country: Poland<sup>392</sup>, \*ncac  
 incidence: 53/84\*, conc. range: ≤202 µg/kg, Ø conc.: 64 µg/kg, country: Lithuania<sup>399</sup>, \*ncac  
 incidence: 28/46\*, conc. range: tr–580 µg/kg, Ø conc.: 30 µg/kg, country: France<sup>404</sup>, \*ncac  
 incidence: 62/69\*, conc. range: tr–650 µg/kg, Ø conc.: 80 µg/kg, country: France<sup>404</sup>, \*ncac  
 incidence: 87/99, conc. range: <50–4300 µg/kg, Ø conc.: 1152 µg/kg, country: Hungary<sup>411</sup>  
 see also barley, barley, husked, barley, unhusked (naked), barley (pressed), bone meal, bran, broilers feed, calf fattening mixed feed, coconut, expeller, corn cob mix silage, cottonseed, cottonseed cake, dairy cattle feed,

egg production mixed feed, feed, feed components, feed, commercial mix, feed, mixed, feed, mixed (primarily maize), feed (barley), feed (cattle), feed (chicken), feed (dog), feed (fish), feed (mill run, from wheat), feed (mink), feed (pig), feed (poultry), feed (reindeer), feeds, grain, feeds, industrial, feedstuff, feedstuffs (rapeseed, turnip, fish meal, concentrates), fish meal, grain, mixed feed, grains, mixed, grains (no specification), maize, maize ears, maize fibre, maize germ, maize germ/bran, maize germ meal, maize gluten, maize kernels, maize meal, maize powder, maize screenings, maize stalks (pith), maize, "Baby", maize, hybrid, maize, white, oats, rice bran, rice germ cake, rye, silage, sorghum, soybeans, triticale, wheat and barley, wheat, red hard winter, wheat, soft white winter, wheat, spring, wheat, winter

#### DIACETOXYSCIRPENOL

incidence: 5/59, conc. range: 300–2000 µg/kg, country: Germany<sup>68</sup>

incidence: 2/4, conc.: 300 µg/kg, country: Argentina<sup>80</sup>

incidence: 1/15, conc.: 600 µg/kg, country: Brazil<sup>81</sup>

incidence: 1/97, conc.: <100 µg/kg (1 sa), country: UK<sup>268</sup>

see also alfalfa, barley, feed, feed components, feed (dog), feed (fish), feed (mink), feed (pig), feed (poultry), feed (reindeer), feeds, grain, feedstuff, forage grass, grain, mixed feed, grains (no specification), maize, maize gluten, oat and barley (hammer-milled), oats, peanuts, soybeans

#### ENNIATIN A<sub>1</sub>

incidence: 10/13\*, conc. range: tr–6900 µg/kg, country: Finland<sup>234</sup>, \*ncac

see also barley, oats, rye, wheat, summer, wheat, winter

#### ENNIATIN B

incidence: 8/13\*, conc. range: tr–1900 µg/kg, country: Finland<sup>234</sup>, \*ncac

see also barley, oats, rye, wheat, summer, wheat, winter

#### ENNIATIN B<sub>1</sub>

incidence: 12/13\*, conc. range: tr–4800 µg/kg, country: Finland<sup>234</sup>, \*ncac

see also barley, oats, rye, wheat, summer, wheat, winter

#### FUMONISIN B<sub>1</sub>

incidence: 8/17, conc. range: 200–8800 µg/kg, Ø conc.: 4800 µg/kg, country: Spain<sup>155</sup>

see also barley, bird food, wild, dog food, feed, feed, complete ration, feed, general, feed, layer, feed, maize-based, feed, mixed, feed, pelleted ration, feed, screenings, feed, sweet, feed (broilers), feed (cat), feed (chicken), feed (dog), feed (gluten), feed (horse), feed (maize), feed (pig), feed (poultry), feed (rat), feed (rodent), forage grass, maize, maize and maize screenings, maize bran, maize ears, maize fine fractions, maize flakes, maize germ, maize germ/bran, maize germ meal, maize gluten, maize grits, maize kernels, maize meal, maize powder, maize screenings, maize, "Baby", maize, ground, maize, preharvest, maize, sweet feed, maize/oats mix, rat chow, silage, sorghum, soybeans

#### FUMONISIN B<sub>2</sub>

incidence: 1/17, conc.: 200 µg/kg, country: Spain<sup>155</sup>

see also barley, bird food, wild, dog food, feed, feed, maize-based, feed, mixed, feed (cat), feed (dog), feed (gluten), feed (horse), feed (maize), feed (poultry), feed (rodent), maize, maize bran, maize fine fractions, maize flakes, maize germ, maize germ/bran, maize germ meal, maize gluten, maize grits, maize kernels, maize meal, maize powder, maize screenings, maize, "Baby", maize, ground, maize, preharvest, rat chow

#### FUSARENONE-X

incidence: 3/13\*, conc. range: 20 µg/kg, Ø conc.: 20 µg/kg, country: Japan<sup>67</sup>, \*ncac

see also barley, feed components, feed (poultry), maize, maize ears, maize germ/bran, maize gluten, maize kernels, maize meal, maize screenings, oats

## HT-2 TOXIN

incidence: 1/2, conc.: 200 µg/kg, country: Hungary<sup>50</sup>

incidence: 6/84, conc. range: 2–20 µg/kg, Ø conc.: 8.8 µg/kg, country: Germany<sup>63</sup>

incidence: 6/78, conc. range: 12–22 µg/kg, Ø conc.: 17.2 µg/kg, country: Germany<sup>63</sup>

incidence: 1/80, conc.: 17 µg/kg, country: Germany<sup>63</sup>

incidence: 7/78, conc. range: 8–150 µg/kg, Ø conc.: 50.8 µg/kg, country: Germany<sup>63</sup>

incidence: 1/80, conc.: 100 µg/kg, country: Germany<sup>68</sup>

incidence: 3/97, conc. range: <100 µg/kg (3 sa), country: UK<sup>268</sup>

incidence: 82/283, conc. range: ≤193 µg/kg, Ø conc.: 25 µg/kg, country: UK<sup>310</sup>

incidence: 1/?, conc.: 1000 µg/kg, country: Canada<sup>346</sup>

incidence: 7/276, conc. range: 5–59 µg/kg, Ø conc.: 25 µg/kg, country: Germany<sup>362</sup>

incidence: 20/84\*, conc. range: ≤110 µg/kg, Ø conc.: 34 µg/kg, country: Lithuania<sup>399</sup>, \*ncac

see also barley, feed components, feed (dog), feed (fish), feed (pig), feed (poultry), feed (reindeer), grain, mixed feed, grains, mixed, grains (no specification), maize, maize germ/bran, maize gluten, maize meal, maize screenings, oats, rye, silage

## MONILIFORMIN

incidence: 8/13\*, conc. range: tr–87 µg/kg, Ø conc.: <40 µg/kg, country: Norway<sup>204</sup>, \*ncac

incidence: 33/35\*, conc. range: tr–420 µg/kg, Ø conc.: 92 µg/kg, country: Norway<sup>204</sup>, \*ncac

incidence: 35/35\*, conc. range: tr–950 µg/kg, Ø conc.: 210 µg/kg, country: Norway<sup>204</sup>, \*ncac

incidence: ?/?\* \*\*, conc. range: 7200–25,200 µg/kg, Ø conc.: 15,900 µg/kg, country: Poland<sup>222</sup>, \*ncac, \*\*Fdk

incidence: ?/?\* \*\*, conc. range: 250–700 µg/kg, Ø conc.: 420 µg/kg, country: Poland<sup>222</sup>, \*ncac, \*\*hlc

incidence: 60–65%/61\*, conc. range: 10–720 µg/kg, country: Poland<sup>236</sup>, \*ncac

incidence: 89–95%/68\*, conc. range: 10–1720 µg/kg, country: Poland<sup>236</sup>, \*ncac

incidence: 48/78, conc. range: nd–495 µg/kg, Ø conc.: 182 µg/kg, country: Poland<sup>264</sup>

incidence: 7/25\*, conc. range: ≤198 µg/kg, Ø conc.: 63 µg/kg, country: Poland<sup>392</sup>, \*ncac

see also barley, feed, mixed, feed (poultry), maize, maize flakes, maize germ, maize germ/bran, maize gluten, maize meal, maize screenings, maize, “Baby”, oats, rice bran, triticale, wheat, summer, wheat, winter

## MONOACETOXYSCIRPENOL

incidence: 2/97, conc. range: <100 µg/kg (2 sa), country: UK<sup>268</sup>

see also feed components, maize, maize gluten, maize meal, maize screenings, silage

## NEOSOLANIOL

incidence: 27/35\*, conc. range: 144.6–853.7 µg/kg, Ø conc.: 476.2 µg/kg, country: Iran<sup>238</sup>, \*ncac

see also feed, feed components, feed, mixed, feed (poultry), peanut cake

## NIVALENOL

incidence: 33/367, conc. range: 50–590 µg/kg, Ø conc.: 177.3 µg/kg, country: Hungary<sup>6</sup>

incidence: 21/84, conc. range: 3–32 µg/kg, Ø conc.: 9 µg/kg, country: Germany<sup>63</sup>

incidence: 33/78, conc. range: 3–58 µg/kg, Ø conc.: 19.5 µg/kg, country: Germany<sup>63</sup>

incidence: 31/80, conc. range: 4–218 µg/kg, Ø conc.: 42.8 µg/kg, country: Germany<sup>63</sup>

incidence: 47/80, conc. range: 1–188 µg/kg, Ø conc.: 22.1 µg/kg, country: Germany<sup>63</sup>

incidence: 50/78, conc. range: 3–219 µg/kg, Ø conc.: 33.3 µg/kg, country: Germany<sup>63</sup>

incidence: 15/45, conc. range: 5–47 µg/kg, Ø conc.: 15.7 µg/kg, country: Germany<sup>63</sup>

incidence: 10/42, conc. range: ≥50–140 µg/kg, Ø conc.: 85 µg/kg, country: Sweden<sup>65</sup>

incidence: 1/42, conc.: 60 µg/kg, country: Sweden<sup>65</sup>

incidence: 1/96, conc.: 75 µg/kg, country: Sweden<sup>65</sup>

incidence: 2/13\*, conc. range: 40–1220 µg/kg, Ø conc.: 630 µg/kg, country: Japan<sup>67</sup>, \*ncac

incidence: 2/15, conc. range: 200–400 µg/kg, Ø conc.: 300 µg/kg, country: Brazil<sup>81</sup>

incidence: 1/15, conc.: 160 µg/kg, country: Brazil<sup>81</sup>

incidence: 9/9, conc. range: 82–3169 µg/kg, Ø conc.: 535 µg/kg, country: Korea<sup>108</sup>  
 incidence: 40/40\*, conc. range: 15–887 µg/kg, Ø conc.: 59.7 µg/kg, country: Norway<sup>132</sup>, \*probably feed  
 incidence: 13/13\*, conc. range: 30–150 µg/kg, Ø conc.: 57.5 µg/kg, country: Norway<sup>132</sup>, \*probably feed  
 incidence: 4/12, conc. range: 20–770 µg/kg, country: New Zealand<sup>211</sup>  
 incidence: 37/42\*, conc. range: 3–350 µg/kg, Ø conc.: 47.9 µg/kg, country: Poland<sup>214</sup>, \*ncac  
 incidence: 9/15\*, conc. range: 2–60 µg/kg, Ø conc.: 23 µg/kg, country: Europe<sup>214</sup>, \*ncac  
 incidence: 3/737\*, conc. range: 50–54 µg/kg, Ø conc.: 54 µg/kg, country: Norway<sup>224</sup>, \*ncac  
 incidence: 2/3\*, conc. range: 260–1630 µg/kg, Ø conc.: 945 µg/kg, country: Japan<sup>230</sup>, \*ncac  
 incidence: 15/18\*, conc. range: tr–7800 µg/kg, Ø conc.: 1500 µg/kg, country: Japan<sup>231</sup>, \*ncac  
 incidence: 60–65%/61\*, conc. range: 10–14,200 µg/kg, country: Poland<sup>236</sup>, \*ncac  
 incidence: 89–95%/68\*, conc. range: 20–320 µg/kg, country: Poland<sup>236</sup>, \*ncac  
 incidence: 34/35\*, conc. range: 49.1–1119.1 µg/kg, Ø conc.: 577.6 µg/kg, country: Iran<sup>238</sup>, \*ncac  
 incidence: 23/78, conc. range: nd–99 µg/kg, Ø conc.: 34 µg/kg, country: Poland<sup>264</sup>  
 incidence: 100/151\*, conc. range: 5–4390 µg/kg, Ø conc.: 136 µg/kg, country: Japan<sup>265</sup>, \*ncac  
 incidence: 21/97, conc. range: <100 µg/kg (14 sa), 100–1000 µg/kg (5 sa), >1000 µg/kg (2 sa), country: UK<sup>268</sup>  
 incidence: 226/283, conc. range: ≤428 µg/kg, Ø conc.: 42 µg/kg, country: UK<sup>310</sup>  
 incidence: 104/276, conc. range: 2–145 µg/kg, Ø conc.: 36.3 µg/kg, country: Germany<sup>362</sup>  
 incidence: 19/25\*, conc. range: ≤453 µg/kg, Ø conc.: 97 µg/kg, country: Poland<sup>392</sup>, \*ncac  
 see also barley, barley, husked, barley, unhusked (naked), barley (pressed), bran, feed, feed components, feed (cattle), feed (poultry), feed (reindeer), feeds, industrial, maize, maize ears, maize germ, maize germ/bran, maize gluten, maize kernels, maize meal, maize powder, maize screenings, maize, “Baby”, oats, rye, silage, triticale

#### OCHRATOXIN A

incidence: 2/14\*, conc. range: 0.6–0.7 µg/kg, Ø conc.: 0.7 µg/kg, country: Germany<sup>5</sup>, \*ncac  
 incidence: 7/29\*, conc. range: 0.6–0.8 µg/kg, Ø conc.: 0.6 µg/kg, country: Germany<sup>5</sup>, \*ncac  
 incidence: 9/367, conc. range: 90–320 µg/kg, Ø conc.: 207.8 µg/kg, country: Hungary<sup>6</sup>  
 incidence: 8/64\*, conc. range: 0.1–137.3 µg/kg, Ø conc.: 17.9 µg/kg, country: Germany<sup>13</sup>, \*ncac  
 incidence: 1/3, conc.: 10 µg/kg, country: Egypt<sup>16</sup>  
 incidence: 6/95, conc. range: 30–6000 µg/kg, country: Canada<sup>17</sup>  
 incidence: 11/64, conc. range: ≤9.2 µg/kg, Ø conc.: 1.65 µg/kg, country: UK<sup>43</sup>  
 incidence: 1/25, conc.: 37 µg/kg, country: Romania<sup>54</sup>  
 incidence: 1/4, conc.: 40 µg/kg, country: Brazil<sup>80</sup>  
 incidence: 15/125, conc. range: 5–100 µg/kg, country: Poland<sup>84</sup>  
 incidence: 10/50\*, conc. range: 1–17 µg/kg, country: UK<sup>94</sup>, \*imported?  
 incidence: 22/117, conc. range: 0.3–9.9 µg/kg (17 sa), 10–99.9 µg/kg (4 sa), 231 µg/kg (1 sa), country: UK<sup>203</sup>  
 incidence: 2/7345, conc. range: nc, country: Hungary<sup>209</sup>  
 incidence: 2/94, conc. range: 900–1100 µg/kg, Ø conc.: 1000 µg/kg, country: Canada<sup>240</sup>  
 incidence: 1/1, conc.: 13.7 µg/kg, country: UK<sup>282</sup>  
 incidence: 18/37\*\*\*, conc. range: 0.6–1024 µg/kg, Ø conc.: 267 µg/kg, country: Poland<sup>339</sup>, \*ncac, \*\*cg  
 incidence: 8/34\*\*\*, conc. range: 0.8–1.6 µg/kg, Ø conc.: 1.2 µg/kg, country: Poland<sup>339</sup>, \*ncac, \*\*eg  
 incidence: 3/39\*\*\*, conc. range: 0.5–1.2 µg/kg, Ø conc.: 0.8 µg/kg, country: Poland<sup>341</sup>, \*ncac, \*\*eg  
 incidence: 1/?, conc.: 17 µg/kg, country: Canada<sup>346</sup>  
 incidence: 74/92\*, conc. range: 0.02–160 µg/kg, country: Croatia<sup>371</sup>, \*ncac  
 see also alfalfa, barley, barley (high moisture), barley, oats, barley-soybean diet, bird food,

domestic, bird food, wild, broilers feed, cereal grains, citrus pulp, coconut, expeller, corn cob mix silage, diet (dairy cow), diet (poultry), diet (starter), dog food, eat, egg production mixed feed, feed, feed wheat, oat and barley, feed, commercial mix, feed, mixed, feed, mixed (pelleted), feed (broilers), feed (cat), feed (cattle), feed (cereals), feed (pig), feed ec (pig), feed (poultry), feed ec (poultry), feed (poultry, pig), feed ec (rabbit), feed (trout), grain, mixed feed, grains, mixed, grains (heated), hay, horse bean, maize, maize feed, milo, maize gluten, maize meal, maize, white, *Makhana (Euryale ferox Salisb)* puffs, milk production mixed feed, millet, oat and barley (hammer-milled), oats, palm products, peanut cake, peas, peas and beans, pet food, pig feedstuffs, pig grower diet, pig meal, piglet diet, poultry feedstuffs, rice bran, rice germ, rice germ cake, rye, sorghum, soybean groats, sunflower, sunflower seeds, extracted, tapioca, triticale, wheat and barley, wheat bran, wheat hay, wheat, oats

#### PATULIN

incidence: 1/7345, conc.: nc, country: Hungary<sup>209</sup>

see also diet (grower), hay, maize meal, piglet diet

#### RUBRATOXIN B

incidence: 1/7345, conc.: nc, country: Hungary<sup>209</sup>

see also diet (grower), diet (poultry), diet (starter), pig diet (fattening), pig grower diet, soybean groats

#### STERIGMATOCYSTIN

incidence: 1/1, conc.: 300 µg/kg, country: Canada<sup>92</sup>

incidence: 1/50\*, conc.: 18 µg/kg, country: UK<sup>94</sup>, \*imported?

see also feed, mixed (crumbled), feed (excluding peanut meal, suspect)

#### T-2 TETRAOL

incidence: 1/4, conc.: 1680 µg/kg, country: Argentina<sup>80</sup>

see also barley, feed components, maize, silage

#### T-2 TOXIN

incidence: 24/367, conc. range: 80–370 µg/kg, Ø conc.: 193.8 µg/kg, country: Hungary<sup>6</sup>

incidence: 2/2, conc. range: 200–1900 µg/kg, Ø conc.: 1000.5 µg/kg, country: Hungary<sup>50</sup>

incidence: 6/25, conc. range: ≤63 µg/kg, Ø conc.: 26 µg/kg, country: Romania<sup>54</sup>

incidence: 22/84, conc. range: 3–249 µg/kg, Ø conc.: 82.5 µg/kg, country: Germany<sup>63</sup>

incidence: 5/78, conc. range: 10–12 µg/kg, Ø conc.: 11 µg/kg, country: Germany<sup>63</sup>

incidence: 9/80, conc. range: 10–136 µg/kg, Ø conc.: 51.7 µg/kg, country: Germany<sup>63</sup>

incidence: 3/80, conc. range: 4–16 µg/kg, Ø conc.: 10 µg/kg, country: Germany<sup>63</sup>

incidence: 18/45, conc. range: 3–94 µg/kg, Ø conc.: 20.1 µg/kg, country: Germany<sup>63</sup>

incidence: 1/59, conc.: 300 µg/kg, country: Germany<sup>68</sup>

incidence: 4/81, conc. range: 200–500 µg/kg, country: Germany<sup>68</sup>

incidence: 2/4, conc. range: 350–360 µg/kg, Ø conc.: 355 µg/kg, country: Argentina<sup>80</sup>

incidence: 1/15, conc.: 400 µg/kg, country: Brazil<sup>81</sup>

incidence: 1/15, conc.: 800 µg/kg, country: Brazil<sup>81</sup>

incidence: 6/283, conc. range: ≤21 µg/kg, Ø conc.: 16 µg/kg, country: UK<sup>310</sup>

incidence: 16/276, conc. range: 4–235 µg/kg, Ø conc.: 31 µg/kg, country: Germany<sup>362</sup>

incidence: 8/84\*, conc. range: ≤58 µg/kg, Ø conc.: 33 µg/kg, country: Lithuania<sup>399</sup>,

\*ncac

see also alfalfa, barley, bran, diet (grower), diet (poultry), feed, feed components, feed, layer, feed, mixed, feed (dog), feed (fish), feed (mink), feed (pig), feed (poultry), feedstuff, forage grass, grain, mixed feed, grains (no specification), hay, maize, maize germ/bran, maize gluten, maize meal, maize screenings, maize stalks (pith), oat and barley (hammer-milled), oats, peanuts, pig grower diet, piglet diet, rye, sorghum, triticale

#### T-2 TRIOL

incidence: 11/80, conc. range: 100–700 µg/kg, country: Germany<sup>68</sup>

incidence: 2/283, conc. range:  $\leq 15$   $\mu\text{g}/\text{kg}$ ,  
 $\emptyset$  conc.: 14  $\mu\text{g}/\text{kg}$ , country: UK<sup>310</sup>  
 see also barley, feed components, grain,  
 mixed feed, grains (no specification),  
 maize, oats

#### $\alpha$ -ZEARALENOL

incidence: 1/45, conc.: 8  $\mu\text{g}/\text{kg}$ , country:  
 Germany<sup>63</sup>

#### $\beta$ -ZEARALENOL

incidence: 1/84, conc.: 12  $\mu\text{g}/\text{kg}$ , country:  
 Germany<sup>63</sup>

#### ZEARALENONE

incidence: 215/367, conc. range:  
 50–890  $\mu\text{g}/\text{kg}$ ,  $\emptyset$  conc.: 210.3  $\mu\text{g}/\text{kg}$ , country:  
 Hungary<sup>6</sup>

incidence: 1/2, conc.: 200  $\mu\text{g}/\text{kg}$ , country:  
 Hungary<sup>50</sup>

incidence: 25/25, conc. range:  $\leq 170$   $\mu\text{g}/\text{kg}$ ,  
 $\emptyset$  conc.: 23  $\mu\text{g}/\text{kg}$ , country: Romania<sup>54</sup>

incidence: 67/84, conc. range: 1–8036  $\mu\text{g}/\text{kg}$ ,  
 $\emptyset$  conc.: 178  $\mu\text{g}/\text{kg}$ , country: Germany<sup>63</sup>

incidence: 11/78, conc. range: 1–6  $\mu\text{g}/\text{kg}$ ,  
 $\emptyset$  conc.: 3.2  $\mu\text{g}/\text{kg}$ , country: Germany<sup>63</sup>

incidence: 9/80, conc. range: 1–15  $\mu\text{g}/\text{kg}$ ,  
 $\emptyset$  conc.: 5.1  $\mu\text{g}/\text{kg}$ , country: Germany<sup>63</sup>

incidence: 10/80, conc. range: 1–109  $\mu\text{g}/\text{kg}$ ,  
 $\emptyset$  conc.: 20.3  $\mu\text{g}/\text{kg}$ , country: Germany<sup>63</sup>

incidence: 15/78, conc. range: 1–20  $\mu\text{g}/\text{kg}$ ,  
 $\emptyset$  conc.: 4.3  $\mu\text{g}/\text{kg}$ , country: Germany<sup>63</sup>

incidence: 28/45, conc. range: 2–52  $\mu\text{g}/\text{kg}$ ,  
 $\emptyset$  conc.: 11.1  $\mu\text{g}/\text{kg}$ , country: Germany<sup>63</sup>

incidence: 6/13\*, conc. range: 2–25  $\mu\text{g}/\text{kg}$ ,  
 $\emptyset$  conc.: 12.5  $\mu\text{g}/\text{kg}$ , country: Japan<sup>67</sup>, \*ncac

incidence: 6/59, conc. range: 10–200  $\mu\text{g}/\text{kg}$ ,  
 country: Germany<sup>68</sup>

incidence: 7/81, conc. range: 20–2000  $\mu\text{g}/\text{kg}$ ,  
 country: Germany<sup>68</sup>

incidence: 1/15, conc.: 400  $\mu\text{g}/\text{kg}$ , country:  
 Brazil<sup>81</sup>

incidence: 2/15, conc. range: 130–210  $\mu\text{g}/\text{kg}$ ,  
 $\emptyset$  conc.: 170  $\mu\text{g}/\text{kg}$ , country: Brazil<sup>81</sup>

incidence: 1/7, conc.: 14  $\mu\text{g}/\text{kg}$ , country: The  
 Netherlands<sup>103</sup>

incidence: 7/21, conc. range: 4.7–63.6  $\mu\text{g}/\text{kg}$ ,  
 $\emptyset$  conc.: 26.9  $\mu\text{g}/\text{kg}$ , country: Germany<sup>107</sup>

incidence: 5/9, conc. range: 3–1254  $\mu\text{g}/\text{kg}$ ,  
 $\emptyset$  conc.: 141  $\mu\text{g}/\text{kg}$ , country: Korea<sup>108</sup>

incidence: 1/40\*, conc.: 23  $\mu\text{g}/\text{kg}$ , country:  
 Norway<sup>132</sup>, \*probably feed

incidence: 2/13\*, conc. range: 2–4  $\mu\text{g}/\text{kg}$ ,  
 $\emptyset$  conc.: 3  $\mu\text{g}/\text{kg}$ , country: Norway<sup>132</sup>,  
 \*probably feed

incidence: 1/1291, conc.: 40  $\mu\text{g}/\text{kg}$ , country:  
 Australia<sup>137</sup>

incidence: 3/80, conc. range: 10–100  $\mu\text{g}/\text{kg}$ ,  
 $\emptyset$  conc.: 46.7  $\mu\text{g}/\text{kg}$ , country: Australia<sup>137</sup>

incidence: ?/10, conc. range: 10–40  $\mu\text{g}/\text{kg}$ ,  
 country: India<sup>183</sup>

incidence: 1/7345, conc.: nc, country:  
 Hungary<sup>209</sup>

incidence: 12/12, conc. range: 40–350  $\mu\text{g}/\text{kg}$ ,  
 country: New Zealand<sup>211</sup>

incidence: 1/42\*, conc.: 76  $\mu\text{g}/\text{kg}$ , country:  
 Poland<sup>214</sup>, \*ncac

incidence: 35/35\*, conc. range:  
 1266.3–5487.5  $\mu\text{g}/\text{kg}$ ,  $\emptyset$  conc.: 3464.3  $\mu\text{g}/\text{kg}$ ,  
 country: Iran<sup>238</sup>, \*ncac

incidence: 1/97, conc.: <100  $\mu\text{g}/\text{kg}$  (1 sa),  
 country: UK<sup>268</sup>

incidence: 19/42\*, conc. range:  
 360–11,050  $\mu\text{g}/\text{kg}$ , country: USA<sup>273</sup>, \*ncac

incidence: 19/102\*, conc. range:  
 364–11,054  $\mu\text{g}/\text{kg}$ ,  $\emptyset$  conc.: 2721.6  $\mu\text{g}/\text{kg}$ ,  
 country: USA<sup>300</sup>, \*ncac

incidence: 17/283, conc. range:  $\leq 188$   $\mu\text{g}/\text{kg}$ ,  
 $\emptyset$  conc.: 35  $\mu\text{g}/\text{kg}$ , country: UK<sup>310</sup>

incidence: 5/13\*, conc. range:  
 100–1800  $\mu\text{g}/\text{kg}$ ,  $\emptyset$  conc.: 760  $\mu\text{g}/\text{kg}$ , country:  
 Poland<sup>315</sup>, \*Fdk

incidence: 16/?, conc. range:  $\leq 110$   $\mu\text{g}/\text{kg}$ ,  
 country: Canada<sup>346</sup>

incidence: 10/135\* \*\*, conc. range:  
 $\leq 250$   $\mu\text{g}/\text{kg}$ ,  $\emptyset$  conc.: 74  $\mu\text{g}/\text{kg}$ , country:  
 Germany<sup>355</sup>, \*ncac, \*\*cg

incidence: 2/46\* \*\*, conc. range:  $\leq 55$   $\mu\text{g}/\text{kg}$ ,  
 $\emptyset$  conc.: 47  $\mu\text{g}/\text{kg}$ , country: Germany<sup>355</sup>,  
 \*ncac, \*\*cg

incidence: 55/276, conc. range: 1–123  $\mu\text{g}/\text{kg}$ ,  
 $\emptyset$  conc.: 8.1  $\mu\text{g}/\text{kg}$ , country: Germany<sup>362</sup>

see also alfalfa, barley, barley, husked, barley,  
 unhusked (naked), barley and feed, bone  
 meal, bran, broilers feed, *Carthamus* cake,  
 chick pea, concentrate, mixed, corn cob mix  
 silage, cotton cake, cottonseed, cottonseed  
 cake, diet (dairy cow), diet (poultry), diets



(mixed), feed, feed components, feed, mixed, feed, mixed (primarily maize also maize, oats, wheat), feed (bran), feed (broiler chicken), feed (cattle), feed (chicken), feed (dairy), feed (developing pig), feed (mill run, from wheat), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (starter chicken), feedstuff, fish meal, forage grass, grain, bruised, grain, mixed feed, grains (no specification), hay, maize, maize ears, maize flakes, maize germ, maize germ/bran, maize gluten, maize kernels, maize meal, maize oil cake, maize screenings, maize stalks (pith), maize, “Baby”, maize, hybrid, maize, shelled, maize, unshelled, maize, white, maize grain, artificially dried, maize grain, crib dried, maize grain, ensiled, milk production mixed feed, oats, *Paspalum palidosum*, straw, peanut hulls/skins, rice bran, rice germ, rice germ cake, rye, silage, sorghum, soybeans, soybeans, extracted, sunflower cake, tapioca, triticale, wheat bran, wheat bran and chana testa, wheat soya meal

**Wheat and barley** Wheat and barley for feed may contain the following mycotoxins:

#### DEOXYNIVALENOL

incidence: 1/94, conc.: 95 µg/kg, country: USA<sup>240</sup>

see also barley, barley, husked, barley, unhusked (naked), barley (pressed), bone meal, bran, broilers feed, calf fattening mixed feed, coconut, expeller, corn cob mix silage, cottonseed, cottonseed cake, dairy cattle feed, egg production mixed feed, feed, feed components, feed, commercial mix, feed, mixed, feed, mixed (primarily maize), feed (barley), feed (cattle), feed (chicken), feed (dog), feed (fish), feed (mill run, from wheat), feed (mink), feed (pig), feed (poultry), feed (reindeer), feeds, grain, feeds, industrial, feedstuff, feedstuffs (rapeseed, turnip, fish meal, concentrates), fish meal, grain, mixed feed, grains, mixed, grains (no specification), maize, maize ears, maize fibre, maize germ, maize germ/bran, maize germ meal, maize gluten, maize kernels, maize meal, maize powder, maize screenings, maize

stalks (pith), maize, “Baby”, maize, hybrid, maize, white, oats, rice bran, rice germ cake, rye, silage, sorghum, soybeans, triticale, wheat, wheat, red hard winter, wheat, soft white winter, wheat, spring, wheat, winter

#### OCHRATOXIN A

incidence: 23/95, conc. range: ≤102 µg/kg, country: UK<sup>12</sup>

see also alfalfa, barley, barley, oats, barley (high moisture), barley-soybean diet, bird food, domestic, bird food, wild, broilers feed, cereal grains, citrus pulp, coconut, expeller, corn cob mix silage, diet (dairy cow), diet (poultry), diet (starter), dog food, eat, egg production mixed feed, feed, feed wheat, oat and barley, feed, commercial mix, feed, mixed, feed, mixed (pelleted), feed (broilers), feed (cat), feed (cattle), feed (cereals), feed (pig), feed ec (pig), feed (poultry), feed ec (poultry), feed (poultry, pig), feed ec (rabbit), feed (trout), grain, mixed feed, grains, mixed, grains (heated), hay, horse bean, maize, maize feed, milo, maize gluten, maize meal, maize, white, *Makhana (Euryale ferox)* Salisb) puffs, milk production mixed feed, millet, oat and barley (hammer-milled), oats, palm products, peanut cake, peas, peas and beans, pet food, pig feedstuffs, pig grower diet, pig meal, piglet diet, poultry feedstuffs, rice bran, rice germ, rice germ cake, rye, sorghum, soybean groats, sunflower, sunflower seeds, extracted, tapioca, triticale, wheat, wheat bran, wheat hay, wheat, oats

**Wheat and other grains (moldy)** may contain the following mycotoxins:

#### CITRININ

incidence: 13/18, conc. range:

70–80,000 µg/kg, country: Canada<sup>92</sup>

see also barley, barley, oats, barley-soybean diet, cottonseed cake, feed, feed, mixed, feed (cattle), feed (pig), fish meal, hay, maize, maize, white, *Makhana (Euryale ferox)* Salisb) puffs, oats, palm products, peas and beans, rice bran, rice germ, wheat, wheat bran

**Wheat bran** Wheat bran for feed may contain the following mycotoxins:

AFLATOXIN B<sub>1</sub>

incidence: 3/5, Ø conc.: 50 µg/kg, country: Egypt<sup>16</sup>

incidence: 1/1, conc.: 3 µg/kg, country: India<sup>129</sup>

incidence: 20/108, conc. range: ≤25 µg/kg (10 sa), 26–50 µg/kg (7 sa), 51–100 µg/kg (3 sa), Ø conc.: 26.1 µg/kg, country: India<sup>247</sup>  
 see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60 % maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs,

manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran and chana testa

AFLATOXIN B<sub>2</sub>

incidence: 1/108, conc.: 3 µg/kg, country: India<sup>247</sup>

see also animal feedstuff (dairy cake), bird food, bird food, wild, biri testa, blackgram, blackgram husk, cottonseed, cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meats, dog food, egg production mixed feed, feed, compound, feed (cat), feed (cattle), feed (dog), feed (pig), feed (poultry), feed (rabbit), feed (sheep), fish meal, horsegram, maize, maize gluten, maize husk, maize, ground, maize, preharvest, mung testa, mustard cake, niger cake, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanuts, peanut, kernels, redgram husk, rice bran, rice bran (deoiled), rice chaff, rice meal, rice (polish), sal seed cake, sesame cake, sorghum, soybean meal, soybeans, wheat

AFLATOXIN G<sub>1</sub>

incidence: 1/1, conc.: 3 µg/kg, country: India<sup>129</sup>

see also animal feedstuffs (dairy cake), bird food, bird food, wild, concentrate, mixed, cottonseed, cottonseed cake, feed (cat), feed (chicken), feed (dog), maize, maize, ground, maize, preharvest, meat meal, milk production mixed feed, murkool, peanut

cake, peanut expeller, peanut hay, peanut meal, peanuts, rice bran, rice germ, sorghum, soybeans, wheat, wheat bran and chana testa

#### AFLATOXIN

incidence: 20/108, conc. range: 5–67 µg/kg, country: India<sup>247</sup>

see also blackgram husk, bread crumbs, broiler finisher, broiler starter, cotton cake, cottonseed, cottonseed cake, cottonseed extract, cottonseed meal, feed, feed (cattle), feed (cow), feed (dog), feed (horse), feed (maize, gluten), feed (pig), feed (poultry), feed (rabbit), feed (rat/mice), feed (sheep), feeds, grain, fish meal, flour (wheat), groundnut cake, grower's mash, horsegram, layer's mash, maize, maize gluten, maize, white, milo, peanut cake, peanut cake (deoiled), peanut, kernels, peanut (oil cake), pearl millet, pig breeder's mash, pig finisher, pig starter, pod with haulms, poultry breeder's mash, rabbit pellets, redgram husk, rice, rice bran (deoiled), rice, broken, rice (polish), sesame cake, silk worm pupae, sorghum, soybean cake, soybean meal, wheat

#### CITRININ

incidence: 17/24, conc. range:

<0.5–230 µg/kg, country: Bulgaria<sup>8</sup>

see also barley, barley, oats, barley-soybean diet, cottonseed cake, feed, feed, mixed, feed (cattle), feed (pig), fish meal, hay, maize, maize, white, *Makhana (Euryale ferox* Salisb) puffs, oats, palm products, peas and beans, rice bran, rice germ, wheat, wheat and other grains (moldy)

#### OCHRATOXIN A

incidence: 17/24, conc. range: 0.5–2.8 µg/kg,

Ø conc.: 1.37 µg/kg, country: Bulgaria<sup>8</sup>

incidence: 1/3, Ø conc.: 6 µg/kg, country: Egypt<sup>16</sup>

incidence: 3/4, conc. range: 2–6 µg/kg,

Ø conc.: 4 µg/kg, country: The Netherlands<sup>103</sup>

see also alfalfa, barley, barley, oats, barley (high moisture), barley-soybean diet, bird food, domestic, bird food, wild, broilers feed, cereal grains, citrus pulp, coconut, expeller, corn cob mix silage, diet (dairy cow), diet (poultry), diet (starter), dog food, eat, egg

production mixed feed, feed, feed wheat, oat and barley, feed, commercial mix, feed, mixed, feed, mixed (pelleted), feed (broilers), feed (cat), feed (cattle), feed (cereals), feed (pig), feed ec (pig), feed (poultry), feed ec (poultry), feed (poultry, pig), feed ec (rabbit), feed (trout), grain, mixed feed, grains, mixed, grains (heated), hay, horse bean, maize, maize feed, milo, maize gluten, maize meal, maize, white, *Makhana (Euryale ferox* Salisb) puffs, milk production mixed feed, millet, oat and barley (hammer-milled), oats, palm products, peanut cake, peas, peas and beans, pet food, pig feedstuffs, pig grower diet, pig meal, piglet diet, poultry feedstuffs, rice bran, rice germ, rice germ cake, rye, sorghum, soybean groats, sunflower, sunflower seeds, extracted, tapioca, triticale, *Vicia faba*, wheat, wheat and barley, wheat hay, wheat, oats

#### ZEARALENONE

incidence: 2/4, conc. range: 43–67 µg/kg,

Ø conc.: 55 µg/kg, country: Egypt<sup>16</sup>

incidence: 1/4, conc.: 22 µg/kg, country: The Netherlands<sup>103</sup>

see also alfalfa, barley, barley, husked, barley, unhusked (naked), barley and feed, bone meal, bran, broilers feed, *Carthamus* cake, chick pea, concentrate, mixed, corn cob mix silage, cotton cake, cottonseed, cottonseed cake, diet (dairy cow), diet (poultry), diets (mixed), feed, feed components, feed, mixed, feed, mixed (primarily maize also maize, oats, wheat), feed (bran), feed (broiler chicken), feed (cattle), feed (chicken), feed (dairy), feed (developing pig), feed (mill run, from wheat), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (starter chicken), feedstuff, fish meal, forage grass, grain, bruised, grain, mixed feed, grains (no specification), hay, maize, maize ears, maize flakes, maize germ, maize germ/bran, maize gluten, maize kernels, maize meal, maize oil cake, maize screenings, maize stalks (pith), maize, "Baby", maize, hybrid, maize, shelled, maize, unshelled, maize, white, maize grain, artificially dried, maize grain, crib dried, maize grain, ensiled, milk production mixed feed, oats, *Paspalum palidosum*, straw, peanut

hulls/skins, rice bran, rice germ, rice germ cake, rye, silage, sorghum, soybeans, soybeans, extracted, sunflower cake, tapioca, triticale, wheat, wheat bran and chana testa, wheat soya meal

**Wheat bran and chana testa** may contain the following mycotoxins:

**AFLATOXIN B<sub>1</sub>**

incidence: 2/3, conc. range: 3–4 µg/kg, Ø conc.: 3.5 µg/kg, country: India<sup>129</sup>  
 see also alfalfa, *Ambadi* cake, animal feedstuffs (dairy cake), bagasse, barley, bengalgram husk, bird food, bird food, wild, biri testa, blackgram, blackgram husk, bran, broiler mixed feed, calf fattening mixed feed, calf fattening mixed feed (containing 4–20 % peanut products), *Carthamus* cake, castor cake, cereals, cereal products, chick pea, coconut cake, cocos, concentrate, mixed, concentrates, cotton cake, cottonseed, cottonseed (dehulled), cottonseed cake, cottonseed extract, cottonseed meal, cottonseed meal (ammoniated), cottonseed meal (decorticated), cottonseed meats, cottonseed products, crumbles, crumbles, grower, cycad meal, dairy cattle feed, dairy cattle feed (containing 2–5 % peanut products), dairy cattle feed (containing 6–10 % peanut products), dairy cattle feed (containing 6–12 % peanut products), dairy cattle feed (containing more than 20 % peanut products), diets, mixed, dog food, egg production mixed feed, feed, feed and ingredients, feed, compound, feed, layer, feed, mixed, feed (beef), feed (broilers), feed (calf), feed (cat), feed (cattle), feed (chicken), feed (dairy), feed (dog), feed (dug), feed (fish), feed (gluten), feed (horse), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (rabbit), feed (sheep), feed (50–60 % maize), fish meal, grain by-products, grains (no specification), greengram, hay/silage, horsegram, husk, *Jagni* cake, legume mixture, linseed, linseed cake, livol, *Mahua* cake, maize, maize germ, maize gluten, maize grits, maize husk, maize meal, maize oil cake, maize powder, maize

screenings, maize, ground, maize, hybrid, maize, preharvest, maize, yellow, maize (dark grains), *Makhana* (*Euryale ferox* Salisb) puffs, manioc, milk production mixed feed, mung testa, murkool, mustard cake, neem cake, niger cake, oats, palm kernel expeller cake, palm kernels, palm products, peanut cake, peanut cake (deoiled), peanut expeller, peanut hay, peanut meal, peanut, kernels, peanut, shells, peanuts, pellets, finisher, pig meal and pellets, pigeon pea, poultry feeds (peanut containing), rapeseed cake, redgram husk, rice, rice bran, rice bran (deoiled), rice chaff, rice crack, rice germ, rice germ cake, rice meal, rice straw, rice (damaged), rice (polish), safflower cake, sal seed cake, sesame, sesame cake, sorghum, soybean meal, soybeans, sunflower, sunflower cake, sunflower flour, tapioca, wheat, wheat bran

**AFLATOXIN G<sub>1</sub>**

incidence: 2/3, conc. range: 3 µg/kg, Ø conc.: 3 µg/kg, country: India<sup>129</sup>  
 see also animal feedstuffs (dairy cake), bird food, bird food, wild, concentrate, mixed, cottonseed, cottonseed cake, feed (cat), feed (chicken), feed (dog), maize, maize, ground, maize, preharvest, meat meal, milk production mixed feed, murkool, peanut cake, peanut expeller, peanut hay, peanut meal, peanuts, rice bran, rice germ, sorghum, soybeans, wheat, wheat bran

**ZEARALENONE**

incidence: 1/3, conc.: 316 µg/kg, country: India<sup>129</sup>  
 see also alfalfa, barley, barley, husked, barley, unhusked (naked), barley and feed, bone meal, bran, broilers feed, *Carthamus* cake, chick pea, concentrate, mixed, corn cob mix silage, cotton cake, cottonseed, cottonseed cake, diet (dairy cow), diet (poultry), diets (mixed), feed, feed components, feed, mixed, feed, mixed (primarily maize also maize, oats, wheat), feed (bran), feed (broiler chicken), feed (cattle), feed (chicken), feed (dairy), feed (developing pig), feed (mill run, from wheat), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (starter

chicken), feedstuff, fish meal, forage grass, grain, bruised, grain, mixed feed, grains (no specification), hay, maize, maize ears, maize flakes, maize germ, maize germ/bran, maize gluten, maize kernels, maize meal, maize oil cake, maize screenings, maize stalks (pith), maize, “Baby”, maize, hybrid, maize, shelled, maize, unshelled, maize, white, maize grain, artificially dried, maize grain, crib dried, maize grain, ensiled, milk production mixed feed, oats, *Paspalum palidosum*, straw, peanut hulls/skins, rice bran, rice germ, rice germ cake, rye, silage, sorghum, soybeans, soybeans, extracted, sunflower cake, tapioca, triticale, wheat, wheat bran, wheat soya meal

#### WHEAT FLOUR

see Flour (wheat)

**Wheat hay** may contain the following mycotoxins:

#### OCHRATOXIN A

incidence: 1/95, conc. 30 µg/kg, country: Canada<sup>17</sup>

see also alfalfa, barley, barley, oats, barley (high moisture), barley-soybean diet, bird food, domestic, bird food, wild, broilers feed, cereal grains, citrus pulp, coconut, expeller, corn cob mix silage, diet (dairy cow), diet (poultry), diet (starter), dog food, eat, egg production mixed feed, feed, feed wheat, oat and barley, feed, commercial mix, feed, mixed, feed, mixed (pelleted), feed (broilers), feed (cat), feed (cattle), feed (cereals), feed (pig), feed ec (pig), feed (poultry), feed ec (poultry), feed (poultry, pig), feed ec (rabbit), feed (trout), grain, mixed feed, grains, mixed, grains (heated), hay, horse bean, maize, maize feed, milo, maize gluten, maize meal, maize, white, *Makhana (Euryale ferox* Salisb) puffs, milk production mixed feed, millet, oat and barley (hammer-milled), oats, palm products, peanut cake, peas, peas and beans, pet food, pig feedstuffs, pig grower diet, pig meal, piglet diet, poultry feedstuffs, rice bran, rice germ, rice germ cake, rye, sorghum, soybean groats, sunflower, sunflower seeds, extracted, tapioca, triticale, *Vicia faba*, wheat, wheat and barley, wheat bran, wheat, oats

**Wheat soya meal** may contain the following mycotoxins:

#### ZEARALENONE

incidence: 2/4, conc. range: 20–36 µg/kg,

Ø conc.: 28 µg/kg, country: Egypt<sup>16</sup>

see also alfalfa, barley, barley, husked, barley, unhusked (naked), barley and feed, bone meal, bran, broilers feed, *Carthamus* cake, chick pea, concentrate, mixed, corn cob mix silage, cotton cake, cottonseed, cottonseed cake, diet (dairy cow), diet (poultry), diets (mixed), feed, feed components, feed, mixed, feed, mixed (primarily maize also maize, oats, wheat), feed (bran), feed (broiler chicken), feed (cattle), feed (chicken), feed (dairy), feed (developing pig), feed (mill run, from wheat), feed (miscellaneous), feed (pig), feed (poultry), feed (poultry, pig), feed (starter chicken), feedstuff, fish meal, forage grass, grain, bruised, grain, mixed feed, grains (no specification), hay, maize, maize ears, maize flakes, maize germ, maize germ/bran, maize gluten, maize kernels, maize meal, maize oil cake, maize screenings, maize stalks (pith), maize, “Baby”, maize, hybrid, maize, shelled, maize, unshelled, maize, white, maize grain, artificially dried, maize grain, crib dried, maize grain, ensiled, milk production mixed feed, oats, *Paspalum palidosum*, straw, peanut hulls/skins, rice bran, rice germ, rice germ cake, rye, silage, sorghum, soybeans, soybeans, extracted, sunflower cake, tapioca, triticale, wheat, wheat bran, wheat bran and chana testa

**Wheat, oats** Wheat and oats for feed may contain the following mycotoxins:

#### ALTERNARIOL METHYL ETHER

incidence: 1/2, conc.: 14 µg/kg, country:

Germany<sup>294</sup>

see also barley, barley, oats, cereals, mixture, oats, sunflower, wheat

#### OCHRATOXIN A

incidence: 18/32, conc. range:

30–27,000 µg/kg, country: Canada<sup>18</sup>

see also alfalfa, barley, barley, oats, barley (high moisture), barley-soybean diet, bird

food, domestic, bird food, wild, broilers feed, cereal grains, citrus pulp, coconut, expeller, corn cob mix silage, diet (dairy cow), diet (poultry), diet (starter), dog food, eat, egg production mixed feed, feed, feed wheat, oat and barley, feed, commercial mix, feed, mixed, feed, mixed (pelleted), feed (broilers), feed (cat), feed (cattle), feed (cereals), feed (pig), feed ec (pig), feed (poultry), feed ec (poultry), feed (poultry, pig), feed ec (rabbit), feed (trout), grain, mixed feed, grains, mixed, grains (heated), hay, horse bean, maize, maize feed, milo, maize gluten, maize meal, maize, white, *Makhana (Euryale ferox* Salisb) puffs, milk production mixed feed, millet, oat and barley (hammer-milled), oats, palm products, peanut cake, peas, peas and beans, pet food, pig feedstuffs, pig grower diet, pig meal, piglet diet, poultry feedstuffs, rice bran, rice germ, rice germ cake, rye, sorghum, soybean groats, sunflower, sunflower seeds, extracted, tapioca, triticale, *Vicia faba*, wheat, wheat and barley, wheat bran, wheat hay

**Wheat, red hard winter** for feed may contain the following mycotoxins:

#### DEOXYNIVALENOL

incidence: 157/157\*, conc. range:  $\leq 100 \mu\text{g/kg}$  (12 sa),  $> 100\text{--}2000 \mu\text{g/kg}$  (95 sa),  $> 2000\text{--}4000 \mu\text{g/kg}$  (35 sa),  $> 4000\text{--}8000 \mu\text{g/kg}$  (15 sa),  $\emptyset$  conc.:  $1700 \mu\text{g/kg}$ , country: USA<sup>201</sup>, \*ncac  
see also barley, barley, husked, barley, unhusked (naked), barley (pressed), bone meal, bran, broilers feed, calf fattening mixed feed, coconut, expeller, corn cob mix silage, cottonseed, cottonseed cake, dairy cattle feed, egg production mixed feed, feed, feed components, feed, commercial mix, feed, mixed, feed, mixed (primarily maize), feed (barley), feed (cattle), feed (chicken), feed (dog), feed (fish), feed (mill run, from wheat), feed (mink), feed (pig), feed (poultry), feed (reindeer), feeds, grain, feeds, industrial, feedstuff, feedstuffs (rapeseed, turnip, fish meal, concentrates), fish meal, grain, mixed feed, grains, mixed, grains (no specification), maize, maize ears, maize fibre,

maize germ, maize germ/bran, maize germ meal, maize gluten, maize kernels, maize meal, maize powder, maize screenings, maize stalks (pith), maize, "Baby", maize, hybrid, maize, white, oats, rice bran, rice germ cake, rye, silage, sorghum, soybeans, triticale, wheat, wheat and barley, wheat, soft white winter, wheat, spring, wheat, winter

**Wheat, soft white winter** for feed may contain the following mycotoxins:

#### DEOXYNIVALENOL

incidence: 8/8, conc. range:  $90\text{--}450 \mu\text{g/kg}$ ,  $\emptyset$  conc.:  $218.8 \mu\text{g/kg}$ , country: Canada<sup>198</sup>  
see also barley, barley, husked, barley, unhusked (naked), barley (pressed), bone meal, bran, broilers feed, calf fattening mixed feed, coconut, expeller, corn cob mix silage, cottonseed, cottonseed cake, dairy cattle feed, egg production mixed feed, feed, feed components, feed, commercial mix, feed, mixed, feed, mixed (primarily maize), feed (barley), feed (cattle), feed (chicken), feed (dog), feed (fish), feed (mill run, from wheat), feed (mink), feed (pig), feed (poultry), feed (reindeer), feeds, grain, feeds, industrial, feedstuff, feedstuffs (rapeseed, turnip, fish meal, concentrates), fish meal, grain, mixed feed, grains, mixed, grains (no specification), maize, maize ears, maize fibre, maize germ, maize germ/bran, maize germ meal, maize gluten, maize kernels, maize meal, maize powder, maize screenings, maize stalks (pith), maize, "Baby", maize, hybrid, maize, white, oats, rice bran, rice germ cake, rye, silage, sorghum, soybeans, triticale, wheat, wheat and barley, wheat, red hard winter, wheat, spring, wheat, winter

**Wheat, spring** for feed may contain the following mycotoxins:

#### DEOXYNIVALENOL

incidence: 120/206, conc. range:  $900\text{--}7600 \mu\text{g/kg}$ ,  $\emptyset$  conc.:  $900 \mu\text{g/kg}$ , country: USA<sup>370</sup>  
see also barley, barley, husked, barley, unhusked (naked), barley (pressed), bone

meal, bran, broilers feed, calf fattening mixed feed, coconut, expeller, corn cob mix silage, cottonseed, cottonseed cake, dairy cattle feed, egg production mixed feed, feed, feed components, feed, commercial mix, feed, mixed, feed, mixed (primarily maize), feed (barley), feed (cattle), feed (chicken), feed (dog), feed (fish), feed (mill run, from wheat), feed (mink), feed (pig), feed (poultry), feed (reindeer), feeds, grain, feeds, industrial, feedstuff, feedstuffs (rapeseed, turnip, fish meal, concentrates, fish meal, grain, mixed feed, grains, mixed, grains (no specification), maize, maize ears, maize fibre, maize germ, maize germ/bran, maize germ meal, maize gluten, maize kernels, maize meal, maize powder, maize screenings, maize stalks (pith), maize, "Baby", maize, hybrid, maize, white, oats, rice bran, rice germ cake, rye, silage, sorghum, soybeans, triticale, wheat, wheat and barley, wheat, red hard winter, wheat, soft white winter, wheat, winter

**Wheat, summer** for feed may contain the following mycotoxins:

**BEAUVERICIN**

incidence: 4/4\*, conc. range: tr µg/kg, country: Finland<sup>205</sup>, \*ncac  
 incidence: 7/7\*, conc. range: tr µg/kg, country: Finland<sup>205</sup>, \*ncac  
 see also barley, maize, oats, wheat, wheat, winter

**ENNIATIN A**

incidence: 4/4\*, conc. range: 3–490 µg/kg, Ø conc.: 128.5 µg/kg, country: Finland<sup>205</sup>, \*ncac  
 incidence: 7/7\*, conc. range: tr–5 µg/kg, country: Finland<sup>205</sup>, \*ncac  
 see also barley

**ENNIATIN A<sub>1</sub>**

incidence: 4/4\*, conc. range: tr–940 µg/kg, country: Finland<sup>205</sup>, \*ncac  
 incidence: 7/7\*, conc. range: tr–15 µg/kg, country: Finland<sup>205</sup>, \*ncac  
 see also barley, oats, rye, wheat, wheat, winter

**ENNIATIN B**

incidence: 4/4\*, conc. range: 120–18,300 µg/kg, Ø conc.: 5372.5 µg/kg, country: Finland<sup>205</sup>, \*ncac  
 incidence: 7/7\*, conc. range: 31–160 µg/kg, Ø conc.: 94.29 µg/kg, country: Finland<sup>205</sup>, \*ncac  
 see also barley, oats, rye, wheat, wheat, winter

**ENNIATIN B<sub>1</sub>**

incidence: 4/4\*, conc. range: 27–5100 µg/kg, Ø conc.: 1449.3 µg/kg, country: Finland<sup>205</sup>, \*ncac  
 incidence: 7/7\*, conc. range: tr–67 µg/kg, country: Finland<sup>205</sup>, \*ncac  
 see also barley, oats, rye, wheat, wheat, winter

**MONILIFORMIN**

incidence: 3/4\*, conc. range: 58–810 µg/kg, Ø conc.: 372.7 µg/kg, country: Finland<sup>205</sup>, \*ncac  
 incidence: 6/7\*, conc. range: 30–96 µg/kg, Ø conc.: 71.5 µg/kg, country: Finland<sup>205</sup>, \*ncac  
 incidence: 3/4\*, conc. range: 58–810 µg/kg, Ø conc.: 373 µg/kg, country: Finland<sup>312</sup>, \*ncac  
 see also barley, feed, mixed, feed (poultry), maize, maize flakes, maize germ, maize germ/bran, maize gluten, maize meal, maize screenings, maize, "Baby", oats, rice bran, triticale, wheat, wheat, winter

**Wheat, winter** for feed may contain the following mycotoxins:

**BEAUVERICIN**

incidence: 2/3\*, conc. range: tr µg/kg, country: Finland<sup>205</sup>, \*ncac  
 see also barley, maize, oats, wheat, wheat, summer

**DEOXYNIVALENOL**

incidence: 54/57\*, conc. range: 200–9000 µg/kg, Ø conc.: 3600 µg/kg, country: USA<sup>226</sup>, \*ncac  
 incidence: 15/28, conc. range: 320–8530 µg/kg, country: Canada<sup>233</sup>  
 incidence: 201/207, conc. range: 400–40,000 µg/kg, Ø conc.: 2400 µg/kg, country: USA<sup>370</sup>

see also barley, barley, husked, barley, unhusked (naked), barley (pressed), bone meal, bran, broilers feed, calf fattening mixed feed, coconut, expeller, corn cob mix silage, cottonseed, cottonseed cake, dairy cattle feed, egg production mixed feed, feed, feed components, feed, commercial mix, feed, mixed, feed, mixed (primarily maize), feed (barley), feed (cattle), feed (chicken), feed (dog), feed (fish), feed (mill run, from wheat), feed (mink), feed (pig), feed (poultry), feed (reindeer), feeds, grain, feeds, industrial, feedstuff, feedstuffs (rapeseed, turnip, fish meal, concentrates), fish meal, grain, mixed feed, grains, mixed, grains (no specification), maize, maize ears, maize fibre, maize germ, maize germ/bran, maize germ meal, maize gluten, maize kernels, maize meal, maize powder, maize screenings, maize stalks (pith), maize, "Baby", maize, hybrid, maize, white, oats, rice bran, rice germ cake, rye, silage, sorghum, soybeans, triticale, wheat, wheat and barley, wheat, red hard winter, wheat, soft white winter, wheat, spring

ENNIATIN A<sub>1</sub>

incidence: 1/3\*, conc.: 6 µg/kg, country: Finland<sup>205</sup>, \*ncac

see also barley, oats, rye, wheat, wheat, summer

## ENNIATIN B

incidence: 3/3\*, conc. range: tr–170 µg/kg, country: Finland<sup>205</sup>, \*ncac

see also barley, oats, rye, wheat, wheat, summer

ENNIATIN B<sub>1</sub>

incidence: 3/3\*, conc. range: tr–39 µg/kg, country: Finland<sup>205</sup>, \*ncac

see also barley, oats, rye, wheat, wheat, summer

## MONILIFORMIN

incidence: 1/3\*, conc.: tr µg/kg, country: Finland<sup>205</sup>, \*ncac

incidence: 1/3\*, conc.: <20 µg/kg, country: Finland<sup>312</sup>, \*ncac

see also barley, feed, mixed, feed (poultry), maize, maize flakes, maize germ, maize germ/bran, maize gluten, maize meal, maize screenings, maize, "Baby", oats, rice bran, triticale, wheat, wheat, summer





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