

APPENDIX VII**Part 1****REVISION OF THE CLASSIFICATION OF FOODS AND ANIMAL FEEDS (CXA4 – 1989)****CLASS C – PRIMARY FEED COMMODITIES****TYPE 11 – PRIMARY FEED COMMODITIES OF PLANT ORIGIN****(at Step 5/8)****(for adoption by CAC)**

Type	No.	Group	Group Letter Code
11	Primary feed commodities of plant origin		
	050	Legume feed products	
		Subgroup 050A: Products of legume feeds with high water (≥20%) content (forage and silage)	AL
		Subgroup 050B: Products of legume feeds with low water (<20%) content (hay)	AL
		Subgroup 050C: Processed products of legume feeds (such as meal, hulls)	AL
	051	Cereal grains (including pseudocereals) and grass feed products	
		Subgroup 051A: Cereal grains (including pseudocereals) feed products with high water (≥20%) content (forage and silage)	AS
		Subgroup 051B: Cereal grains (including pseudocereals) feed products with low water (<20%) content (hay, straw)	AS
		Subgroup 051C: Cereal grains (including pseudocereals) processed products (such as bran, hulls)	AS
		Subgroup 051D: Grasses for Animal Feed	AS
	052	Miscellaneous feed products	
		Subgroup 052A: Miscellaneous feed products with high water (≥20%) content (forage, beet tops)	AM
		Subgroup 052B: Miscellaneous feed products with low water (<20%) content (hay)	AM
		Subgroup 052C: Miscellaneous processed products (such as meal, hulls, dried pulp)	AM

CLASS C PRIMARY FEED COMMODITIES

For the purpose of the Codex Alimentarius the term “primary feed commodity” means the product in or nearly in its natural state intended for sale to:

- (a) the stock farmer as feed which is used without further processing for livestock animals or after silaging or similar farm processes.
- (b) to the animal feed industry as a raw material for preparing compounded feeds.

Legume feeds

Class C

Type 11 Primary feed commodities of plant origin Group 050 Group Letter Code AL

Group 050. Legume animal feeds include various species of leguminous plants used for animal forage, grazing, hay or silage, with or without seed and processed products. Several species are grown exclusively for animal feeding purposes, whereas some others are grown primarily as food crops. The “waste” parts of the latter crops are often used as animal feed, either in the fresh form or as hay.

The entire commodity may be consumed by livestock animals.

Portion of the commodity to which the MRL applies (and which is analyzed): **Whole commodity as presented for wholesale or retail distribution.**

In view of the wide range of moisture contents in most animal feeds, except straws, moving in commerce, the MRLs should preferably be set and expressed on a “dry-weight” basis.

A “dry-weight” basis implies that the commodity is analyzed for pesticide residues as received, that the moisture content is determined, preferably by a standard method for use on the relevant commodity, and the residue content is then calculated as if it were wholly contained in the dry matter.

The residues are expressed on a dry-weight basis if not otherwise stated. To avoid confusion caused by the not always consistent commodity description, the “dry-weight” basis, will be indicated, if relevant, with the designation “dry-weight” after the residue figure e.g.

pea vines (green)	;	x mg/kg dry weight
pea hay	;	x mg/kg dry weight

This Group is divided into 3 subgroups:

	Code
Subgroup 050A: Products of legume feeds with high water (≥20%) content (forage and silage)	AL
Subgroup 050B: Products of legume feeds with low water(<20%) content (hay)	AL
Subgroup 050C: Processed products of legume feeds (such as meal, hulls)	AL

Group 050 LEGUME FEED PRODUCTSAL 0157 **Group of Legume animal feeds****Subgroup 050A, Products of legume feeds with high water (≥20%) content (forage and silage)**

<u>Code No.</u>	<u>Commodity</u>
AL 3300	Subgroup of Products of legume feeds with high water (≥20%) content (forage and silage) (includes all commodities in this subgroup)
AL 1021	Alfalfa, forage <i>Medicago sativa</i> L., subsp. <i>sativa</i> L.
AL 3493	Alfalfa, silage <i>Medicago sativa</i> L., subsp. <i>sativa</i> L.
AL 3494	Anil indigo, forage <i>Indigofera suffruticosa</i> Mill.
AL 1030	Bean, forage <i>Phaseolus</i> spp.
AL 3495	Bean, forage <i>Vigna</i> spp.
-	Bean, Adzuki, forage, see Bean, forage, AL 3495 <i>Vigna angularis</i> (Willd.) Ohwi & H. Ohashi var. <i>angularis</i>
AL 3496	Berlandier acacia, forage <i>Senegalia berlandieri</i> (Benth.) Britton & Rose
AL 3497	Black medic, forage <i>Medicago lupulina</i> L.
AL 3498	Black wattle, forage <i>Acacia mearnsii</i> DeWild.
AL 3499	Brazilian stylo, forage <i>Stylosanthes guianensis</i> (Aubl.) Sw. <i>Stylosanthes hamata</i> (L.) Taub.
AL 3500	Burclover, forage <i>Medicago</i> spp.; Burclover, California, <i>Medicago polymorpha</i> L.; Burclover, spotted, <i>Medicago arabica</i> (L.) Huds.
AL 3501	Butterfly pea, forage <i>Centrosema pubescens</i> Benth.
-	Chickling vetch, forage, see Vetch, forage, AL 1029
AL 3502	Chick-pea, forage <i>Cicer arietinum</i> L.

AL 1023	Clover, forage <i>Trifolium</i> spp. and <i>Melilotus</i> spp.; Clover, alsike, <i>Trifolium hybridum</i> L.; Clover, alyce, <i>Alysicarpus vaginalis</i> (L.) DC.; Clover, arrowleaf, <i>Trifolium vesiculosum</i> Savi; Clover, ball, <i>Trifolium nigrescens</i> Viv.; Clover, Beirut, <i>Trifolium berytheum</i> Boiss. & Blanche; Clover, berseem, <i>Trifolium alexandrinum</i> L.; Clover, bigflower, <i>Trifolium michelianum</i> Savi; Clover, clustrer, <i>Trifolium glomeratum</i> L.; Clover, crimson, <i>Trifolium incarnatum</i> L.; Clover, Egyptian, <i>Trifolium alexandrinum</i> L.; Clover, hop, <i>Trifolium campestre</i> Schreb.; Clover, Kura, <i>Trifolium ambiguum</i> M. Bieb.; Clover, lappa, <i>Trifolium lappaceum</i> L.; Clover, large hop, <i>Trifolium aureum</i> Pollich; Clover, Persian, <i>Trifolium resupinatum</i> L.; Clover, red, <i>Trifolium pratense</i> L.; Clover, rose, <i>Trifolium hirtum</i> All.; Clover, Rueppell's, <i>Trifolium rueppellianum</i> Fresen.; Clover, sea, <i>Trifolium squamosum</i> L.; Clover seaside, <i>Trifolium wormskioldii</i> Lehm.; Clover, small hop, <i>Trifolium dubium</i> Sibth.; Clover, sour, <i>Melilotus indicus</i> (L.) All.; Clover, strawberry, <i>Trifolium fragiferum</i> L.; Clover striate, <i>Trifolium striatum</i> L.; Clover sub, <i>Trifolium subterraneum</i> L.; Clover, tall yellow sweet, <i>Melilotus altissimus</i> Thuill.; Clover, tomcat, <i>Trifolium willdenovii</i> Spreng.; Clover, white, <i>Trifolium repens</i> L.; Clover, white sweet, <i>Melilotus albus</i> Medik.; Clover, whitetip, <i>Trifolium variegatum</i> Nutt.; Clover, yellow sweet, <i>Melilotus officinalis</i> Lam.; Clover, zigzag, <i>Trifolium medium</i> L.; Spärrklöver, <i>Trifolium squarrosum</i> L.
AL 3503	Clover, silage <i>Trifolium</i> spp. and <i>Melilotus</i> spp. (see AL 1023, Clover, forage for included species)
-	Cowpea, forage , see Bean, forage, AL 3495 <i>Vigna unguiculata</i> (L.) Walp.
AL 3504	Gliricidia, forage <i>Gliricidia sepium</i> (Jacq.) Kunth
-	Grass pea, forage , see Vetch, forage, AL 1029
AL 3505	Horse bean, forage <i>Vicia faba</i> L. var. <i>equina</i> St.-Amans
AL 3506	Huisache, forage <i>Vachellia farnesiana</i> (L.) Wight & Arn.
AL 1024	Kudzu, forage <i>Pueraria montana</i> (Lour.) Merr. var. <i>lobata</i> (Willd.) Maesen & S. M. Almeida ex Sanjappa & Predeep
-	Kudzu, Tropical, forage , see Kudzu, forage, AL 1024 <i>Neustanthus phaseoloides</i> (Roxb.) Benth.
AL 3507	Leadplant, forage <i>Amorpha canescens</i> Pursh
AL 3508	Lentil, forage <i>Lens culinaris</i> Medik. subsp. <i>culinaris</i>
AL 1025	Lespedeza, forage <i>Lespedeza</i> spp. and <i>Kummerowia</i> spp.; Lespedeza, Korean, <i>Kummerowia stipulacea</i> (Maxim.) Makino; Lespedeza, sericea, <i>Lespedeza cuneata</i> (Dum. Cours.) G. Don; Lespedeza, striate, <i>Kummerowia striata</i> (Thunb.) Schindl.
AL 3509	Leucaena, forage <i>Leucaena leucocephala</i> (Lam.) deWit, <i>Acaciella glauca</i> (L.) L. Rico
AL 3510	Leucaena, silage <i>Leucaena leucocephala</i> (Lam.) deWit, <i>Acaciella glauca</i> (L.) L. Rico

AL 0545	Lupin, forage <i>Lupinus</i> spp.; Lupin, blue, <i>Lupinus albus</i> L.; Lupin, pearl, <i>Lupinus mutabilis</i> Sweet; Lupin, white, <i>Lupinus albus</i> L. var. <i>albus</i> ; Lupin, yellow, <i>Lupinus luteus</i> L.
-	Melilot, forage, see Clover, forage, AL 1023 <i>Melilotus</i> spp.
AL 3511	Pea, silage <i>Pisum</i> spp.
AL 0528	Pea, vines (green) <i>Pisum</i> spp.
AL 1270	Peanut, forage (green) <i>Arachis hypogaea</i> L.
AL 0537	Pea, pigeon, forage <i>Cajanus cajan</i> (L.) Huth
-	Puero, forage see Kudzu, forage, AL 1024 <i>Pueraria phaseoloides</i> (Roxb.) Benth.
AL 3512	Purple prairie clover, forage <i>Dalea purpurea</i> Vent.
AL 3513	Roundleaf cassia, forage <i>Chamaecrista rotundifolia</i> (Pers.) Greene
AL 1027	Sainfoin, forage <i>Onobrychis viciifolia</i> Scop. syn: <i>O. sativa</i> Lamk.
AL 3514	Sainfoin, silage <i>Onobrychis viciifolia</i> Scop.
AL 3515	Sensitive partridge pea, forage <i>Chamaecrista nictitans</i> (L.) Moench
-	Sericea, forage, see Lespedeza, forage, AL 1025
AL 3516	Sesbania, forage <i>Sesbania exaltata</i> (Raf.) Rydb.
AL 1265	Soya bean, forage <i>Glycine max</i> (L.) Merr;
AL 3517	Soya bean, silage <i>Glycine max</i> (L.) Merr;
AL 3518	Thorn mimosa, forage <i>Vachellia nilotica</i> (L.) P. J. H. Hurter & Mabb. subsp. <i>Nilotica</i>
AL 3519	Tick clover, forage <i>Desmodium</i> spp.

AL 1028	<p>Trefoil, forage</p> <p><i>Lotus</i> spp.; Trefoil, big, <i>Lotus uliginosus</i> Schkuhr; Trefoil, birdsfoot, <i>Lotus corniculatus</i>, L.; Trefoil, narrowleaf, <i>Lotus tenuis</i> Waldst. & Kit. ex Willd.; Bigleaf trefoil, <i>Lotus uliginosus</i> Schkuhr</p> <p>- Tropical kudzu, see Kudzu, forage, AL 1024</p> <p>- Vetch, Chickling, forage, see Vetch, forage, AL 1029</p> <p><i>Lathyrus sativus</i> L.</p> <p>- Vetch, Chickling, silage, see Vetch, silage, AL 3520</p> <p><i>Lathyrus sativus</i> L.</p> <p>- Vetch, Crown, forage, see Vetch, forage, AL 1029</p> <p><i>Coronilla varia</i> L.</p> <p>- Vetch, Crown, silage, see Vetch, silage, AL 3520</p> <p><i>Coronilla varia</i> L.</p>
AL 1029	<p>Vetch, forage</p> <p><i>Vicia</i> spp.; Vetch, bard, <i>Vicia monantha</i> Retz. Vetch, common, <i>Vicia sativa</i> L. spp. <i>sativa</i>; Vetch, crown, <i>Securigera varia</i> (L.) Lassen; Vetch, hairy, <i>Vicia villosa</i> Roth ssp. <i>villosa</i>; Vetch, Hungarian, <i>Vicia pannonica</i> Crantz; Vetch, kidney, <i>Anthyllis vulneraria</i> L.; Vetch, milk, <i>Astragalus cicer</i> L.; Vetch, monantha, <i>Vicia articulata</i> Hornem.; Vetch, narrowleaf, <i>Vicia sativa</i> ssp. <i>nigra</i> (L.) Ehrh.; Vetch, purple, <i>Vicia benghalensis</i> L.</p> <p>- Vetch, Milk, forage, see Vetch, forage, AL 1029</p> <p><i>Astragalus</i> spp.</p> <p>- Vetch, Milk, silage, see Vetch, silage, AL 3520</p> <p><i>Astragalus</i> spp.</p>
AL 3520	<p>Vetch, silage</p> <p><i>Vicia</i> spp.; Vetch, bard, <i>Vicia monantha</i> Retz. Vetch, common, <i>Vicia sativa</i> L. spp. <i>sativa</i>; Vetch, crown, <i>Securigera varia</i> (L.) Lassen; Vetch, hairy, <i>Vicia villosa</i> Roth ssp. <i>villosa</i>; Vetch, Hungarian, <i>Vicia pannonica</i> Crantz; Vetch, kidney, <i>Anthyllis vulneraria</i> L.; Vetch, milk, <i>Astragalus cicer</i> L.; Vetch, monantha, <i>Vicia articulata</i> Hornem.; Vetch, narrowleaf, <i>Vicia sativa</i> ssp. <i>nigra</i> (L.) Ehrh.; Vetch, purple, <i>Vicia benghalensis</i> L.</p>

Subgroup 050B, Products of legume feeds with low water (<20%) content (hay)

<u>Code No.</u>	<u>Commodity</u>
AL 3301	Subgroup of Products of legume feeds with low water (<20%) content (hay) (includes all commodities in this subgroup)
AL 1020	Alfalfa, hay and/or straw <i>Medicago sativa</i> L., subsp. <i>sativa</i> L.
AL 0061	Bean, hay and/or straw <i>Phaseolus</i> spp.
AL 3521	Bean, hay and/or straw <i>Vigna</i> spp.
-	Bean, Adzuki, hay and/or straw , see Bean, hay and/or straw, AL 3521 <i>Vigna angularis</i> (Willd.) Ohwi & H. Ohashi var. <i>angularis</i>
-	Bean, Broad, hay and/or straw , See Bean, hay and/or straw, AL 0061 <i>Vicia faba</i> L. subsp. <i>faba</i> var. <i>faba</i>
-	Bean, goa, hay and/or straw , See Bean, hay and/or straw, AL 0061 <i>Psophocarpus tetragonolobus</i> (L.) DC.
-	Bean, lablab, hay and/or straw , See Bean, hay and/or straw, AL 0061 <i>Lablab purpureus</i> (L.) Sweet ssp. <i>purpureus</i>
-	Bean, mung, hay and/or straw , See Bean, hay and/or straw, AL 3521 <i>Vigna radiata</i> (L.) Wilczek var. <i>radiata</i>
-	Bean, rice, hay and/or straw , See Bean, hay and/or straw, AL 3521 <i>Vigna umbellata</i> (Thunb.) Ohwi & H. Ohashi
-	Bean, runner, hay and/or straw , See Bean, hay and/or straw, AL 0061 <i>Phaseolus coccineus</i> L.
-	Bean, tepary, hay and/or straw , See Bean, hay and/or AL 0061 <i>Phaseolus acutifolius</i> A. Gray var. <i>acutifolius</i>
-	Bean, urd, hay and/or straw , See Bean, hay and/or straw, AL 3521 <i>Vigna mungo</i> (L.) Hepper var. <i>mungo</i>
-	Bean, yardlong, hay and/or straw , See Bean, hay and/or AL 3521 <i>Vigna unguiculata</i> (L.) Walp. subsp. <i>unguiculata</i> group <i>sesquipedalis</i>
AL 1022	Bean, velvet, hay and/or straw <i>Mucuna pruriens</i> (L.) DC. var. <i>utilis</i> (Wall. ex Wight) Baker ex Burck
AL 3522	Brazilian stylo, hay and/or straw <i>Stylosanthes guianensis</i> (Aubl.) Sw. <i>Stylosanthes hamata</i> (L.) Taub.
-	Catjang, hay and/or straw , See Bean, hay and/or straw, AL 3521 <i>Vigna unguiculata</i> (L.) Walp. subsp. <i>unguiculata</i> group <i>biflora</i>
AL 3523	Centurion, hay and/or straw <i>Centrosema pascuorum</i> Murt. Ex Benth.

AL 0524	Chick-pea, hay and/or straw <i>Cicer arietinum</i> L.
AL 1031	Clover, hay and/or straw <i>Trifolium</i> spp. and <i>Melilotus</i> spp.
-	Cowpea, hay and/or straw , see Bean, hay and/or straw, AL 3521 <i>Vigna unguiculata</i> (L.) Walp.
AL 3524	Crotalaria, hay and/or straw <i>Crotalaria</i> spp.; <i>Crotalaria</i> , lance-leaf, <i>Crotalaria lanceolata</i> E. Mey.; <i>Crotalaria</i> , showy, <i>Crotalaria spectabilis</i> Roth; <i>Crotalaria</i> , slenderleaf, <i>Crotalaria brevidens</i> Benth.; <i>Crotalaria</i> , striped, <i>Crotalaria pallida</i> Aiton; <i>Sunn-hemp</i> , <i>Crotalaria juncea</i> L.
AL 4425	Guar, hay and/or straw <i>Cyamopsis tetragonoloba</i> (L.) Taub.
AL 0562	Horse gram, hay and/or straw <i>Macrotyloma uniflorum</i> (Lam.) Verde.
AL 0532	Jack bean, hay and/or straw <i>Canavalia ensiformis</i> (L.) DC.
AL 3525	Lespedeza, hay and/or straw <i>Lespedeza</i> spp. and <i>Kummerowia</i> spp.; <i>Lespedeza</i> , Korean, <i>Kummerowia stipulacea</i> (Maxim.) Makino; <i>Lespedeza</i> , sericea, <i>Lespedeza cuneata</i> (Dum. Cours.) G. Don; <i>Lespedeza</i> , striate, <i>Kummerowia striata</i> (Thunb.) Schindl.
AL 3526	Leucaena, hay and/or straw <i>Leucaena leucocephala</i> (Lam.) de Wit, <i>Acaciella glauca</i> (L.) L. Rico
AL 0072	Pea, hay and/or straw <i>Pisum</i> spp.
-	Pea, pigeon, hay and/or straw , see Pea, hay and/or straw, AL 0072 <i>Cajanus cajan</i> (L.) Huth
-	Pea, southern, hay and/or straw , see Bean, hay and/or straw, AL 3521 <i>Vigna unguiculata</i> (L.) Walp. subsp. <i>unguiculata</i> group <i>unguiculata</i>
AL 0697	Peanut, hay and/or straw <i>Arachis hypogaea</i> L.
AL 3527	Perennial peanut, hay and/or straw <i>Arachis glabrata</i> Benth. var. <i>glabrata</i> ; Pinto peanut, <i>Arachis pinto</i> Krapov. & W.C. Greg
AL 3528	Purple prairie-clover, hay and/or straw <i>Dalea purpurea</i> Vent.
AL 3529	Sainfoin, hay and/or straw <i>Onobrychis viciifolia</i> Scop.
AL 0541	Soya bean, hay and/or straw <i>Glycine max</i> (L.) Merr;

- AL 3530 **Trefoil, hay and/or straw**
- Lotus* spp.; Trefoil, big, *Lotus uliginosus* Schkuhr; Trefoil, birdsfoot, *Lotus corniculatus*, L.; Trefoil, narrowleaf, *Lotus tenuis* Waldst. & Kit. ex Willd.; Bigleaf trefoil, *Lotus uliginosus* Schkuhr
- **Velvet bean, hay and/or straw**, see Bean, Velvet, hay and/or straw, AL 1022
- Mucuna pruriens* (L.) DC. var. *utilis* (Wall. ex Wight) Baker ex Burck
- AL 3531 **Vetch, hay and/or straw**
- Vicia* spp.; Vetch, bard, *Vicia monantha* Retz. Vetch, common, *Vicia sativa* L. spp. *sativa*; Vetch, crown, *Securigera varia* (L.) Lassen; Vetch, hairy, *Vicia villosa* Roth ssp. *villosa*; Vetch, Hungarian, *Vicia pannonica* Crantz; Vetch, kidney, *Anthyllis vulneraria* L.; Vetch, milk, *Astragalus cicer* L.; Vetch, monantha, *Vicia articulata* Hornem.; Vetch, narrowleaf, *Vicia sativa* ssp. *nigra* (L.) Ehrh.; Vetch, purple, *Vicia benghalensis* L.
- **Vetch, Chickling, hay and/or straw**, see Vetch, hay and/or straw, AL 3531
- Lathyrus sativus* L.
- **Vetch, Crown, hay and/or straw**, see Vetch, hay and/or straw, AL 3531
- Coronilla varia* L.
- **Vetch, Milk, hay and/or straw**, see Vetch, hay and/or straw, AL 3531
- Astragalus* spp.

Subgroup 050C Processed products of legume feeds (such as meal, hulls)

<u>Code No.</u>	<u>Commodity</u>
AL 3302	Subgroup of Processed products of legume feeds (like meal, hulls) (includes all commodities in this subgroup)
AL 3532	Alfalfa, cubes <i>Medicago sativa</i> L., subsp. <i>sativa</i> L.
AL 3533	Alfalfa, meal <i>Medicago sativa</i> L., subsp. <i>sativa</i> L.
AL 3534	Leucaena, leaf meal <i>Leucaena leucocephala</i> (Lam.) de Wit, <i>Acaciella glauca</i> (L.) L. Rico
AL 3535	Lupin, meal <i>Lupinus</i> spp., varieties and cultivars
AL 3536	Pea, hulls <i>Pisum</i> spp.
AL 3537	Pea, meal <i>Pisum</i> spp.
AL 3538	Soya bean, hulls <i>Glycine max</i> (L.) Merr;
AL 3539	Soya bean, meal <i>Glycine max</i> (L.) Merr;

Group 051 CEREAL GRAINS (INCLUDING PSEUDOCEREALS) AND GRASS FEED PRODUCTS

Class C

Type 11 Primary feed commodities of plant origin

Group 051 Group Letter Code AS (forage, straws and hay)

The forage, hay and straw of cereal grains, grasses and processed products are derived from various plants of the grass family (Poaceae (alt. Gramineae)).

Cereal grains are grown to a limited extent as a forage crop. The immature crop is fed to livestock animals as succulent forage or as silage.

The cereal grain crops are mainly grown for human food or raw material for preparing food products. The “waste” parts remaining after harvest of the grain kernels (stems, stalks, leaves and empty ears) are extensively used and distributed for animal feeding purposes, in the form of hay or straw.

Several other species of the grass family are exclusively grown as forages crops. These crops are either used for grazing or are prepared for wholesale or retail distribution in the form of grass silage (in general one or more cuttings from immature plants), as artificially dried grass or as hay. The entire commodity may be consumed by livestock animals.

Portion of the commodity to which the MRL applies (and which is analysed): **Whole commodity, as presented for wholesale or retail distribution.**

In view of the range of moisture contents in the animal feeds of this Group, moving in commerce, the MRLs should preferably be set and expressed on a “dry-weight” basis.

A “dry-weight” basis implies that the commodity is analysed for pesticide residues as received, that the moisture content is determined, preferably by a standard method for use on the relevant commodity, and that the residue content is then calculated as if it were wholly contained in the dry matter. **See explanation in Group 050 Legume animal feeds**

The residues on the dry commodities of this Group, e.g. straws and hays, are expressed on the commodity as such.

Forage: Crops grown exclusively for animal feed. These crops are either used for grazing or are prepared as silage or as hay. Maize forage: whole green plant, prior to maturity (including the immature or nearly mature cobs).

Hay and Straw:

Coarse feed for livestock animals, especially cattle, horses and sheep, such as straw, hay, maize, stalks (stover) etc. e.g.

Maize hay: stover or whole stalks (with ears removed) remaining after the harvest of the mature and sun-dried cobs.

Silage: Finely chopped feed that is packed tight, and allowed to ferment in an air-tight environment until it reaches a pH of 4-5.

Group 051 Cereal grains and grasses (including pseudocereals) feed products

This Group is divided into 4 subgroups:

	Code
Subgroup 051A: Cereal grains (including pseudocereals) feed products with high water (≥20%) content (forage and silage)	AS
Subgroup 051B: Cereal grains (including pseudocereals) feed products with low water (<20%) content (hay, straw)	AS
Subgroup 051C: Cereal grains (including pseudocereals) processed products (such as bran, hulls)	AS
Subgroup 051D: Grasses for Animal Feed	AS

Group 051 CEREAL GRAINS (INCLUDING PSEUDOCEREALS) FEED PRODUCTS

Subgroup 051A, Cereal grains (including pseudocereals) feed products with high water (≥20%) content (forage and silage)

Code No.	Commodity
AS 3303	Subgroup of Cereal grains (including pseudocereals) feed products with high water (≥20%) content (forage and silage) (Includes all commodities in this subgroup) (see Group 020 Cereal grains (code GC 0080) for commodities included in cereal grains)
AS 0460	Amaranth, forage <i>Amaranthus</i> spp.; Amaranth, purple, <i>Amaranthus cruentus</i> L.; Princess-feather, Princess-feather, Amaranthaceae, <i>Amaranthus hypochondriacus</i> L.; Inca wheat, <i>Amaranthus caudatus</i> L.
AS 3540	Barley, forage <i>Hordeum vulgare</i> L. subsp. <i>Vulgare</i>
AS 3541	Barley, silage <i>Hordeum vulgare</i> L. subsp. <i>vulgare</i>
AS 3542	Buckwheat, forage <i>Fagopyrum esculentum</i> Moench
AS 3543	Canarygrass, annual, forage <i>Phalaris canariensis</i> L.
-	Corn, forage , see Maize forage, AS 0645
-	Corn, silage , See Maize silage, AS 3544 <i>Zea mays</i> L.
-	Field corn, forage , see Maize forage, AS 0645
-	Field corn, silage , See Maize silage, AS 3544 <i>Zea mays</i> L.
AS 0643	Hungry rice, forage <i>Digitaria iburua</i> Stapf; Fonio, white, <i>Digitaria exilis</i> (Kippist) Stapf
AS 0645	Maize, forage <i>Zea mays</i> L.
AS 3544	Maize, silage <i>Zea mays</i> L.
AS 3545	Millet, forage Millet, barnyard, <i>Echinochloa frumentacea</i> Link; Millet, finger, <i>Eleusine coracana</i> (L.) Gaertn.; Millet, foxtail, <i>Setaria italica</i> (L.) P. Beauv. subsp. <i>italica</i> ; Millet, little, <i>Panicum sumatrense</i> Roth; Millet, proso, <i>Panicum miliaceum</i> L. subsp. <i>miliaceum</i> ; Millet, pearl, <i>Pennisetum glaucum</i> (L.) R. Br.
AS 0647	Oat, forage (green) <i>Avena</i> spp.; Oat, common, <i>Avena sativa</i> L.; Oat, Abyssiniam, <i>Avena abyssinica</i> Hochst. ex A. Rich.; Oat, naked, <i>Avena nuda</i> L.; Oat, sand, <i>Avena strigosa</i> Schreb.
AS 3546	Oat, silage <i>Avena</i> spp.; Oat, common, <i>Avena sativa</i> L.; Oat, Abyssiniam, <i>Avena abyssinica</i> Hochst. ex A. Rich.; Oat, naked, <i>Avena nuda</i> L.; Oat, sand, <i>Avena strigosa</i> Schreb.

AS 3547	Rice, forage <i>Oryza sativa</i> L.; Rice, African, <i>Oryza glaberrima</i> Steud.; Wild rice, <i>Zizania palustris</i> L.; Wild rice, Eastern, <i>Zizania aquatica</i> L.
AS 3548	Rice, silage <i>Oryza sativa</i> L.; Rice, African, <i>Oryza glaberrima</i> Steud.; Wild rice, <i>Zizania palustris</i> L.; Wild rice, Eastern, <i>Zizania aquatica</i> L.
AS 0650	Rye, forage <i>Secale cereale</i> L.
AS 3549	Rye, silage <i>Secale cereale</i> L.
AS 0651	Sorghum, forage (green) <i>Sorghum bicolor</i> (L.) Moench; other <i>Sorghum</i> spp.
AS 3550	Sorghum, silage <i>Sorghum bicolor</i> (L.) Moench; other <i>Sorghum</i> spp.
AS 0447	Sweet corn, forage <i>Zea mays</i> L. subsp. <i>mays</i>
AS 0653	Triticale, forage x <i>Triticosecale</i> sp.
AS 3551	Triticale, silage x <i>Triticosecale</i> sp.
AS 3552	Wheat, forage <i>Triticum aestivum</i> L. subsp. <i>aestivum</i>
AS 3553	Wheat, silage <i>Triticum aestivum</i> L. subsp. <i>aestivum</i>

Subgroup 051B Cereal grains (including pseudocereals) feed products with low water (<20%) content (hay, straw)

Code No.	Commodity
AS 3304	Subgroup of Cereal grains (including pseudocereals) feed products with low water (<20%) content (hay and/or straw) (includes all commodities in this subgroup)
AS 0081	Straw and hay of cereal grains (see Group 020 Cereal grains (code GC 0081) for commodities included in cereal grains except pseudocereals)
AS 0080	Straw and hay of cereal grains (including pseudocereals) (see Group 020 Cereal grains (code GC 0080) for commodities included in cereal grains)
AS 3554	Amaranth, hay and/or straw <i>Amaranthus</i> spp.; Amaranth, purple, <i>Amaranthus cruentus</i> L.; Princess-feather, Princess-feather, Amaranthaceae, <i>Amaranthus hypochondriacus</i> L.; Inca wheat, <i>Amaranthus caudatus</i> L.
AS 0640	Barley, hay and/or straw <i>Hordeum vulgare</i> L. subsp. <i>vulgare</i>
AS 0641	Buckwheat, hay and/or straw <i>Fagopyrum esculentum</i> Moench; Buckwheat, Tartary, <i>Fagopyrum tataricum</i> (L.) Gaertn.
AS 3555	Canarygrass, annual, hay and/or straw <i>Phalaris canariensis</i> L.
-	Corn, hay and/or straw , see Maize hay and/or straw, AS 3557
-	Field corn, hay and/or straw , see Maize hay and/or straw, AS 3557
-	Field corn, stover , see Maize stover, AS 3558 <i>Zea mays</i> L.
AS 3556	Hungry rice, hay and/or straw <i>Digitaria iburua</i> Stapf; Fonio, white, <i>Digitaria exilis</i> (Kippist) Stapf
AS 3557	Maize, hay and/or straw <i>Zea mays</i> L.
AS 3558	Maize, stover <i>Zea mays</i> L.
AS 0646	Millet, hay and/or straw Millet, barnyard, <i>Echinochloa frumentacea</i> Link; Millet, finger, <i>Eleusine coracana</i> (L.) Gaertn.; Millet, foxtail, <i>Setaria italica</i> (L.) P. Beauv. subsp. <i>italica</i> ; Millet, little, <i>Panicum sumatrense</i> Roth; Millet, proso, <i>Panicum miliaceum</i> L. subsp. <i>miliaceum</i> ; Millet, pearl, <i>Pennisetum glaucum</i> (L.) R. Br.
AS 3559	Oat, hay and/or straw <i>Avena</i> spp.; Oat, common, <i>Avena sativa</i> L.; Oat, Abyssiniam, <i>Avena abyssinica</i> Hochst. ex A. Rich.; Oat, naked, <i>Avena nuda</i> L.; Oat, sand, <i>Avena strigosa</i> Schreb.
AS 0656	Pop corn, stover <i>Zea mays</i> L. subsp. <i>mays</i>
AS 0649	Rice, hay and/or straw <i>Oryza sativa</i> L.; Rice, African, <i>Oryza glaberrima</i> Steud.; Wild rice, <i>Zizania palustris</i> L.; Wild rice, Eastern, <i>Zizania aquatica</i> L.
AS 3560	Rye, hay and/or straw <i>Secale cereale</i> L.

AS 3561	Sorghum, stover <i>Sorghum bicolor</i> (L.) Moench; other <i>Sorghum</i> spp.
AS 3562	Sorghum, hay and/or straw <i>Sorghum bicolor</i> (L.) Moench; other <i>Sorghum</i> spp.
AS 3563	Sweet corn, stover <i>Zea mays</i> L. subsp. <i>mays</i>
AS 0652	Teff, hay and/or straw <i>Eragrostis tef</i> (Zuccagni) Trotter
AS 0657	Teosinte, hay and/or straw <i>Zea mays</i> ssp. <i>mexicana</i> (Schrad.) H. H. Iltis;
AS 0653	Triticale, hay and/or straw x <i>Triticosecale</i> sp.
AS 0654	Wheat, hay and/or straw <i>Triticum</i> spp.

Subgroup 051C Cereal grains (including pseudocereals) processed products (such as bran, hulls)

<u>Code No.</u>	<u>Commodity</u>
AS 3305	Subgroup of Cereal grains (including pseudocereals) processed products (such as bran, hulls) (Includes all commodities in this subgroup) (see Group 020 Cereal grains (code GC 0080) for commodities included in cereal grains)
AS 3564	Dried distiller's grain from Barley <i>Hordeum vulgare</i> L. subsp. <i>vulgare</i>
AS 3565	Dried distiller's grain from Maize <i>Zea mays</i> L.
AS 3566	Dried distiller's grain from Rye <i>Secale cereale</i> L.
AS 3567	Dried distiller's grain from Sorghum <i>Sorghum bicolor</i> (L.) Moench; other <i>Sorghum</i> spp.
AS 3568	Dried distiller's grain from Wheat <i>Triticum</i> spp.
AS 3569	Maize, bran <i>Zea mays</i> L.
AS 3570	Rice, hulls <i>Oryza sativa</i> L.; Rice, African, <i>Oryza glaberrima</i> Steud.; Wild rice, <i>Zizania palustris</i> L.; Wild rice, Eastern, <i>Zizania aquatica</i> L.
AS 3571	Timothy, cubes <i>Phleum</i> spp.

Subgroup 051D, Grasses for animal feed

<u>Code No.</u>	<u>Commodity</u>
AS 3306	Subgroup of Forage, hay and/or straw and silage from grasses used for animal feed (Includes all commodities (grasses in the Poaceae (Gramineae) family in this subgroup, except for commodities in Group 020, Code GC 0080)
AS 0162	Hay and/or straw of grasses for animal feed , includes all hay of species of grasses in the Poaceae (alt.Gramineae) family in this subgroup (except for commodities in Group 020, Code GC 0080)
AS 0163	Forage of grasses , includes all forage of species of grasses for animal feed in the Poaceae (alt.Gramineae) family in this subgroup (except for commodities in Group 020, Code GC 0080)
AS 0164	Silage of grasses , include all silage of species of grasses for animal feed in the Poaceae (alt.Gramineae) family in this subgroup (except for commodities in Group 020, Code GC 0080)

Specific grass codes include:

AS 5241	Bermuda grass, hay and/or straw <i>Cynodon dactylon</i> (L.) Pers.
AS 5243	Bluegrass, hay and/or straw <i>Poa</i> spp.
AS 5245	Brome grass, hay and/or straw <i>Bromus</i> spp.
AS 5251	Darnel, hay and/or straw <i>Lolium</i> spp.
AS 5253	Fescue, hay and/or straw <i>Festuca</i> spp.

Group 052 MISCELLANEOUS FEED PRODUCTS

Class C

Type 11 Primary feed commodities of Plant origin**Group 052 Group Letter Codes AM (hay and processed products) AV (forage)**

Group 052. Miscellaneous forage, hay crops and processed products, are derived from various kinds of plants except leguminous and grassy plants (family *Gramineae*). However, for convenience, the hay and forage of grasses for sugar production are included in this Group. Some of the crops listed in this Group are primarily grown for human food or as raw material for preparing food (e.g. sugar beet) and the “waste” material of such crops is used as animal feed.

The entire commodity may be consumed by livestock animals, either in a succulent form, as silage or in the form of hay.

Portion of the commodity to which the MRL applies (and which is analysed): **Whole commodity as presented for wholesale or retail distribution. In view of the wide range of moisture contents in the animal feeds of this Group moving in commerce the MRLs should, if relevant, preferably be set and expressed on a “dry-weight” basis, see explanation in Group 050 Legume animal feeds.**

Group 052 MISCELLANEOUS FEED PRODUCTS

AM 0165 **Group of miscellaneous feed products except leguminous and grass plants (*Poaceae*), but including grasses for sugar production (Includes all commodities in this group)**

This Group is divided into 3 subgroups:

	Code
Subgroup 052A: Miscellaneous feed products with high water ($\geq 20\%$) content (forage, beet tops)	AM
Subgroup 052B: Miscellaneous feed products with low water ($< 20\%$) content (hay)	AM
Subgroup 052C: Miscellaneous processed feed products (such as meal, hulls, dried pulp)	AM

Subgroup 052A: Miscellaneous feed products with high water ($\geq 20\%$) content (forage, beet tops)

<u>Code No.</u>	<u>Commodity</u>
AM 3307	Subgroup of Miscellaneous Feed Products with high water ($\geq 20\%$) content (forage, beet tops) (Includes all commodities in this subgroup)
AM 3572	Arrowleaf balsamroot, forage <i>Balsamorhiza sagittata</i> (Pursh) Nutt.
-	Beet, leaves or tops, forage, see Chard, VL 0464 (the same MRL applies as the food commodity) <i>Beta vulgaris</i> L. subsp. <i>vulgaris</i>
-	Carrot, culls, see Carrot, VR 0577 (the same MRL applies as the food commodity) <i>Daucus carota</i> L.
AM 1050	Cow cabbage, leaves <i>Brassica oleracea</i> L. var. <i>viridis</i> L.
AM 3573	Fodder beet, leaves or tops <i>Beta vulgaris</i> L. subsp. <i>vulgaris</i>
AM 1051	Fodder beet, roots <i>Beta vulgaris</i> L. subsp. <i>vulgaris</i>
-	Kale, forage, see Kale, VL 0480 (the same MRL applies as the food commodity) <i>Brassica oleracea</i> L. var. <i>viridis</i> L.

AM 3574	Kenaf, forage <i>Hibiscus cannabinus</i> L.
AM 1052	Marrow-stem cabbage or Marrow-stem kale, leaves and stems <i>Brassica oleracea</i> L. var. <i>medullosa</i> Thell.
-	Mangel or Mangold , see Fodder beet, roots, AM 1051
-	Mangoldwurzel , see Fodder beet, roots AM 1051
AM 0353	Pineapple, forage <i>Ananas comosus</i> (L.) Merr.
-	Potato, culls , see Potato, VR 0589 (the same MRL applies as the food commodity) <i>Solanum tuberosum</i> L.
AM 0495	Rape seed, forage <i>Brassica napus</i> L.
AM 3575	Spiny hopsage, forage <i>Grayia spinosa</i> (Hook.) Moq.
AM 0596	Sugar beet, leaves or tops <i>Beta vulgaris</i> L. subsp. <i>vulgaris</i>
AM 0659	Sugar cane, forage or tops <i>Saccharum officinarum</i> L.
AM 0497	Swedish turnip or Swede, leaves or tops; <i>Brassica napus</i> L. subsp. <i>rapifera</i> Metzg.
-	Swedish turnip or Swede, roots see VR 0497 Swede (the same MRL applies as the food commodity) <i>Brassica napus</i> L. subsp. <i>rapifera</i> Metzg.
AM 3576	Sweet potato, silage <i>Ipomoea batatas</i> (L.) Lam. var. <i>Batatus</i>
AM 3577	Sweet potato, vines <i>Ipomoea batatas</i> (L.) Lam. var. <i>Batatus</i>
AM 3578	Taper-tip hawk's-beard, forage <i>Crepis acuminata</i> Nutt.
AM 3579	Threadleaf sedge, forage <i>Carex filifolia</i> Nutt.
AM 0506	Turnip, forage <i>Brassica rapa</i> L. subsp. <i>rapa</i>
-	Turnip, leaves or tops , see Turnip greens, VL 0506 (the same MRL applies as the food commodity) <i>Brassica rapa</i> L. subsp. <i>rapa</i>

Subgroup 052B: Miscellaneous feed products with low water (<20%) content (hay, straw)

AM 3308 **Subgroup of Miscellaneous Feed Products with low water (<20%) content (hay and/or straw)**
 (includes all commodities in this subgroup)

AM 3580 **Arrowleaf balsamroot, hay and/or straw**

Balsamorhiza sagittata (Pursh) Nutt.

AM 0691 **Cotton hay and/or straw**

Gossypium spp.

AM 3581 **Fodder beet, hay and/or straw**

Beta vulgaris L. subsp. *vulgaris*

AM 3582 **Kenaf, hay and/or straw**

Hibiscus cannabinus L.

AM 0738 **Mint, hay and/or straw**

Mentha spp.

AM 3583 **Rape seed, hay and/or straw**

Brassica napus L.

AM 3584 **Sugar cane, hay and/or straw**

Saccharum officinarum L.

AM 3585 **Turnip, hay and/or straw**

Brassica rapa L. subsp. *rapa*

Subgroup 052C: Miscellaneous Processed feed products (such as meal, hulls, dried pulp)

AM 3309 **Subgroup of Miscellaneous Processed feed products (such as meal, hulls, dried pulps)**
 (includes all commodities in this subgroup)

AM 0660 **Almond, hulls**

Prunus dulcis (Mill.) D.A. Webb

- **Canola, meal, see AM 3598 Rape seed, meal**

Brassica spp.

AM 3586 Cassava, dry chips

Manihot esculenta Crantz

AM 3587 **Cotton gin trash**

Gossypium spp.

- **Cotton gin, see AM 3586 Cotton gin trash**

Gossypium spp.

AM 3588 **Cotton seed, hulls**

Gossypium spp.

AM 3589 **Cotton seed, meal**

Gossypium spp.

AM 3590 **Cucurbita seed, meal**

Cucurbitaceae

AM 3141 **Gold of pleasure seed, meal**

Camelina sativa (L.) Crantz

AM 3154 **Hemp seed, meal**

Cannabis sativa L.

AM 0693 **Linseed, meal**

Linum usitatissimum L.

- **Mustard oil, meal, see Rape seed, meal AM 3598**

Brassica spp.

AM 0696 **Palm kernel, meal**

Elaeis guineensis Jacq.

AM 0697 **Peanut meal**

Arachis hypogaea L.

AM 3591 **Pineapple, process residue**

Ananas comosus (L.) Merr.

- **Pineapple, process waste, see AM 3590 Pineapple, process residue**

Ananas comosus (L.) Merr.

AM 0698 **Poppy seed, meal**

Papaver somniferum L.

AM 3592 **Potato, process residue, dehydrated**

Solanum tuberosum L. ssp. *Tuberosum*

AM 3593	Potato, process residue, heat-treated, wet <i>Solanum tuberosum</i> L. ssp. <i>tuberosum</i>
AM 3594	Potato, process residue, raw <i>Solanum tuberosum</i> L. ssp. <i>tuberosum</i>
AM 3595	Potato, process residue, wet <i>Solanum tuberosum</i> L. ssp. <i>tuberosum</i>
-	Potato, process waste , see Potato, process residue
AM 3596	Potato, waste meal, dried <i>Solanum tuberosum</i> L. ssp. <i>tuberosum</i>
AM 3597	Rape seed, hulls <i>Brassica</i> spp.
AM 3598	Rape seed, meal <i>Brassica</i> spp.
AM 0699	Safflower seed, meal <i>Carthamus tinctorius</i> L.
AM 0700	Sesame seed, meal <i>Sesamum indicum</i> L.
AM 3599	Sugar beet, pulp, dry <i>Beta vulgaris</i> L. subsp. <i>vulgaris</i>
AM 1201	Sugar beet, pulp, wet <i>Beta vulgaris</i> L. subsp. <i>vulgaris</i>
AM 3600	Sugar cane bagasse <i>Saccharum officinarum</i> L.
AM 0702	Sunflower seed, meal <i>Helianthus annuus</i> L.
AM 3601	Sweet corn cannery waste <i>Zea mays</i> L., several cultivars, not including popcorn
AM 3602	Sweet potato, hulls <i>Ipomoea batatas</i> (L.) Lam. var. <i>batatas</i>
AM 3603	Vegetable, process residue, wet

APPENDIX VII

Part 2

Revision of the Principles and Guidance on the selection of representative commodities for the extrapolation of maximum residue limits for pesticides to commodity groups (CXG 84-2012)

Table 7. Examples of the selection of representative commodities

Class C, Type 11 Primary Animal Feed Commodities

(includes Legume Feed Products, Cereal grains (including pseudocereals) and grasses feed products and Miscellaneous feed products)

(at Step 5/8)
(for adoption by CAC)

Codex Group / Subgroup	Examples of Representative Commodities ¹⁾	Extrapolation to the following commodities
Group 050 Legume feed products	³⁾	--
Subgroup 050A Products of legume feeds with high water (≥20%) content (forage and silage)	Bean, forage and pea, vines or Bean, forage and alfalfa forage or Pea, vines and alfalfa forage ²	<u>Products of legume feeds with high water content (forage) (AL 3300):</u> Alfalfa, forage; Alfalfa, silage; Anil indigo, forage ; Bean, forage (<i>Phaseolus</i> spp.); Bean, forage (<i>Vigna</i> spp.); Berlandier acacia, forage; Black medic, forage; Black wattle, forage; Brazilian stylo, forage; Burclover, forage; Butterfly pea, forage ; Chick-pea, forage; Clover, forage; Clover, silage; Gliricidia, forage ; Horse bean, forage; Huisache, forage; Kudzu, forage; Leadplant, forage; Lentil, forage; Lespedeza, forage; Leucaena, forage; Leucaena, silage; Lupin, forage; Pea, silage; Pea, vines (green); Peanut, forage (green); Pea, pigeon, forage; Purple prairie clover, forage; Roundleaf cassia, forage; Sainfoin, forage; Sainfoin, silage; Sensitive partridge pea, forage ; Sesbania, forage; Soya bean, forage; Soya bean, silage; Thorn mimosa, forage; Tick clover, forage ; Trefoil, forage; Vetch, forage; Vetch silage
Subgroup 050B Products of legume feeds with low water (<20%) content (hay)	Bean, hay or pea hay or alfalfa hay ²	<u>Products of legume feeds with low water content (hay) (AL 3301):</u> Alfalfa, hay and/or straw; Bean, hay and/or straw (<i>Phaseolus</i> spp.); Bean, hay and/or straw (<i>Vigna</i> spp.); Bean, velvet, hay and/or straw; Brazilian stylo, hay and/or straw; Centurion, hay and/or straw; Chick-pea, hay and/or straw; Clover, hay and/or straw; Crotalaria, hay and/or straw; Guar, hay and/or straw; Horse gram, hay and/or straw; Jackbean, hay and/or straw; Lespedeza, hay and/or straw; Leucaena, hay and/or straw; Pea, hay and/or straw; Peanut, hay and/or straw; Perennial peanut, hay and/or straw; Purple prairie-clover, hay and/or straw; Sainfoin, hay and/or straw; Soya bean hay and/or straw; Trefoil, hay and/or straw; Vetch, hay and/or straw
Subgroup 050C Processed products of legume feeds (such a meal, hulls)	³⁾	--
Group 051 Cereal grains (including pseudocereals) feed	³⁾	--

Codex Group / Subgroup	Examples of Representative Commodities ¹⁾	Extrapolation to the following commodities
product		
Subgroup 051A Cereal grains (including pseudocereals) feed products with high water (≥20%) content (forage and silage)	Forage of wheat- and barley-type Cereals	Amaranth, forage; Barley, forage; Barley, silage; Buckwheat, forage; Canarygrass, annual, forage; Oat, forage; Oat, silage; Rye, forage; Rye, silage; Triticale, forage; Triticale, silage; Wheat, forage; Wheat, silage
	Forage of rice-type cereals	Hungry rice, forage; Rice, forage; Rice, silage
	Forage of Sorghum grain-type cereals	Millet, forage; Sorghum, forage; Sorghum, silage
	Forage of Maize-type cereals	Maize, forage; Maize, silage; Sweet corn, forage
Subgroup 051B Cereal grains (including pseudocereals) feed products with low water (<20%) content (hay, straw)	Hay of wheat and barley-type cereals	Amaranth, hay and/or straw; Barley, hay and/or straw; Buckwheat, hay and/or straw; Canarygrass, annual, hay and/or straw; Oat, hay and/or straw; Rye, hay and/or straw; Triticale, hay and/or straw; Wheat, hay and/or straw
	Hay of Rice-type cereals	Hungry rice, hay and/or straw; Rice, hay and/or straw
	Hay of Sorghum grain-type cereals	Millet, hay and/or straw; Sorghum, stover; Sorghum, hay and/or straw; Teff, hay and/or straw
	Hay of Maize-type cereals	Maize, hay and/or straw; Maize, stover; Popcorn, stover; Sweet corn, stover; Teosinte, hay and/or straw
Subgroup 051C Cereal grains and grasses (including pseudocereals) feed products processed products (such as silage, bran, hulls)	³⁾	--
Subgroup 051D Grasses for Animal Feed	Any grass, hay in this subgroup	<u>Hay of grasses, includes all hay of species of grasses in the Poaceae (alt.Gramineae) family in this subgroup (AS 0162)</u>
	Any grass, forage in this subgroup	<u>Forage of grasses, includes all forage of species of grasses in the Poaceae (alt.Gramineae) family in this subgroup (AS 0163)</u>
	Any grass, silage in this subgroup	<u>Silage of grasses, includes all hay of species of grasses in the Poaceae (alt.Gramineae) family in this subgroup (AS 0164)</u>
Group 052 Miscellaneous Feed Products	³⁾	--
Subgroup 052A Miscellaneous feed products with high	³⁾	--

Codex Group / Subgroup	Examples of Representative Commodities ¹⁾	Extrapolation to the following commodities
water (≥20%) content (forage, beet tops)		
Subgroup 052B Miscellaneous feed products with low water (<20%) content (hay)	³⁾	--
Subgroup 052C Miscellaneous processed feed products (such as meal, hulls, dried pulp)	³⁾	--

¹⁾ Alternative representative commodities may be selected based on documented regional/country differences in dietary consumption and/or areas of production

²⁾ A minimum of two representative commodities are needed for this subgroup.

³⁾ It is not possible to set a group CXL for this group because of the broad diversity of crops. However, when a group contains a number of processed commodities originating from raw commodities from one subgroup in Class A (primary food commodities), the representative commodity from that subgroup in Class A can be used as a representative crop for the corresponding commodities in processed form.

APPENDIX VIII**Part 1****REVISION OF THE CLASSIFICATION OF FOODS AND ANIMAL FEEDS (CXA4 – 1989)****CLASS D – PROCESSED FOODS OF PLANT ORIGIN****(at Step 5/8)****(for adoption by CAC)****CLASS D AND CLASS E PROCESSED FOODS**

The term “processed food” means the product, resulting from the application of physical, chemical or biological processes or combinations of these to a “primary food commodity”, intended for direct sale to the consumer, for direct use as an ingredient in the manufacture of food or for further processing.

“Primary food commodities” treated with ionizing radiation, washed, sorted or submitted to similar treatment are not considered to be “processed foods”.

CLASS D PROCESSED FOODS OF PLANT ORIGIN**TYPE 12 SECONDARY FOOD COMMODITIES OF PLANT ORIGIN**

The term “secondary food commodity” means a “primary food commodity” which has undergone simple processing, such as removal of certain portions, drying (except natural drying), husking, and comminution, which do not basically alter the composition or identity of the product. Natural field dried mature crops or parts of crops such as pulses, bulb onions or cereal grains are not considered as secondary food commodities.

Secondary food commodities may be processed further or used as ingredients in the manufacture of food or sold directly to the consumer.

DRIED FRUITSClass D**Type 12 Secondary food commodities of plant origin****Group 055 Group Letter Code DF**

Group 055: Dried fruits. The commodities of this Group are in general artificially dried. They may or may not be preserved or candied with addition of sugars.

Exposure to pesticides may arise from pre-harvest applications, post-harvest treatment of the fruits before processing, or treatment of the dried fruit to avoid losses during transport and wholesale or retail distribution.

Portion of the commodity to which the MRL applies (and which is analysed): **Whole commodity after removal of stones, but the residue is calculated on the whole commodity.**

Group 055 Dried fruits**Code No. Commodity**DF 0167 **Group of dried fruits**~~DF 0175 **Group of fruit and vegetable, dried, (includes all commodities in this Group)**~~DF 0026 **Group of Assorted tropical and subtropical fruits – edible peel, dried** (see Group 005 (Code FT 0026) for species included in the group of Assorted tropical and subtropical fruits – edible peel)DF 0030 **Group of Assorted tropical and subtropical fruits – inedible peel, dried** (see Group 006 (Code FI 0030) for species included in the group of Assorted tropical and subtropical fruits – inedible peel)DF 0018 **Group of Berries and other small fruits, dried** (see Group 004 (Code FB 0018) for species included in the group of Berries and other small fruits)DF 0001 **Group of Citrus, dried** (see Group 001 (Code FC 0001) for species in the group of citrus fruits)DF 0009 **Group of Pome Fruit, dried** (see Group 002 (Code FT 0009) for species in the group of pome fruits)DF 0012 **Group of Stone Fruit, dried** (see Group 003 (Code FS 0012) for species in the group of stone fruits)

DF 0226	Apple, dried <i>Malus domestica</i> Borkhausen
DF 0240	Apricot, dried <i>Prunus armeniaca</i> L.; syn: <i>Armeniaca vulgaris</i> Lamarck
DF 0327	Banana, dried Subsp. and cultivars of <i>Musa</i> ssp. and hybrids
DF 0264	Blackberry, dried <i>Rubus fruticosus</i> auct. aggr., several ssp.
DF 0020	Blueberry, dried <i>Vaccinium corymbosum</i> L.; <i>Vaccinium angustifolium</i> Ait.; <i>Vaccinium virgatum</i> Aiton; <i>Gaylussacia</i> spp
DF 0289	Carambola, dried <i>Averrhoa carambola</i> L.
DF 3310	Chinese hawthorn, dried <i>Crataegus pinnatifida</i> Bunge
DF 0013	Cherries, subgroup of, dried (see subgroup 003A (Code FS 0013) for species included in the subgroup of cherries)
-	Cherry, Sour, dried , see DF 0013 Cherries, subgroup of, dried <i>Prunus cerasus</i> L.
-	Cherry, Sweet, dried , see DF 0013 Cherries, subgroup of, dried <i>Prunus avium</i> L.
DF 0001	Citrus, subgroup of, dried (see Group 001 (Code FC 0001) for species included in the Group of Citrus Fruit)
DF 0265	Cranberry, dried <i>Vaccinium macrocarpon</i> Aiton
DF 0665	Coconut, dried <i>Cocos nucifera</i> L.
DF 0021	Currants, Black, Red, White, dried <i>Ribes nigrum</i> L.; <i>R. rubrum</i> L.
-	Currants Seedless blue grape var., dried, see Grape, dried, DF 0269
DF 0295	Date, dried or dried and candied <i>Phoenix dactylifera</i> L.
-	Dragon fruit, dried , see Pitaya, DF 2540 <i>Hylocercus costaricensis</i> , <i>Hylocercus undatus</i> (Haw) Brit. & Rose.
DF 0334	Durian, dried <i>Durio zibethinus</i> L.
DF 2244	European barberry, dried
DF 0297	Fig, dried or dried and candied <i>Ficus carica</i> L.

DF 0269	Grape, dried (= Currants, Raisins and Sultanas) <i>Vitis vinifera</i> L., var. <i>corinthiaca</i> and var. <i>apyrena</i>
DF 0336	Guava, dried <i>Psidium guajava</i> L.
DF 0338	Jackfruit, dried <i>Artocarpus heterophyllus</i> Lam.
DF 0302	Jujube, Chinese, dried <i>Ziziphus jujuba</i> Mill.
DF 0341	Kiwifruit, dried <i>Actinidia deliciosa</i> , <i>A. chinensis</i>
-	Lemon, dried , see Citrus, dried, subgroup of, DF 0001 <i>Citrus limon</i> (L.) Osbeck
-	Lime, dried , see Citrus, dried, subgroup of, DF 0001 <i>Citrus aurantifolia</i> (Christm.) Swingle
DF 0343	Litchi, dried <i>Litchi chinensis</i> Sonn.
-	Mandarin, dried , see Citrus, subgroup of, dried, DF 0001 <i>Citrus reticulata</i> Blanco
DF 0345	Mango, dried <i>Mangifera indica</i> L.
DF 0346	Mangosteen, dried <i>Garcinia mangostana</i> L.
-	Muscatel, dried see Grape, dried, DF 0269
DF 0271	Mulberries fruits, dried <i>Morus alba</i> L.
DF 0245	Nectarine, dried <i>Prunus persica</i> (L.) Batch, var. <i>nectarina</i>
-	Orange, dried , see Citrus, subgroup of, dried, DF 0001 <i>Citrus sinensis</i> Osbeck; <i>Citrus aurantium</i> L.;
DF 0350	Papaya, dried <i>Carica papaya</i> L.
DF 0351	Passion fruit, dried <i>Passiflora edulis</i>
DF 0247	Peach, dried
DF 0230	Pear, dried <i>Pyrus communis</i> L.; <i>P. pyrifolia</i> (Burm.) Nakai; <i>P. bretschneideri</i> Rhd.; <i>P. sinensis</i> L.
DF 0307	Persimmon, Japanese, dried <i>Diospyros kaki</i> Thunb. Syn: <i>D. chinensis</i> Blume

DF 0353	Pineapple, dried <i>Ananas comosus</i> (L.) Merrill
DF 2540	Pitaya, dried <i>Hylocereus</i> spp.; <i>H. undatus</i> (Haw.) Britton & Rose; <i>H. Megalanthus</i> (K. Schum. Ex Vaupel) Ralf Bauer; <i>H. Polyrhizus</i> (F.A.C. Weber) Britton & Rose; <i>H. Ocamponis</i> (Salm-Dyck) Britton & Rose <i>H. triangularis</i> (L.) Britton&Rose
-	Pomelo, dried , see Citrus, subgroup of, dried, DF 0001 <i>Citrus maxima</i> (Burm.) Merr.
DF 0014	Prune, dried <i>Prunus domestica</i> L.
DF 0356	Prickly pear <i>Opuntia ficus-indica</i> (L.) P. Miller; <i>O. Engelmannii</i> Salm-Dyck ex Engelm. var. <i>Lindheimeri</i> (Engelman.) B.D. Parfitt & Pinkava
-	Raisins (seedless white grape var., partially dried) , see Grape, dried, DF 0269 <i>Vitis vinifera</i> L.
DF 0358	Rambutan, dried <i>Nephelium lappaceum</i> L.
DF 0272	Raspberry, dried <i>Rubus idaeus</i> L.; <i>Rubus occidentalis</i> L. ; several <i>Rubus</i> spp. and hybrids, including wild raspberries <i>Rubus moluccanus</i> L.
DF 0275	Strawberry, dried <i>Fragaria x ananassa</i> Duchene ex Rozier
-	Sultanas , see Grape, dried, DF 0269
DF 0305	Table olive, dried <i>Olea europaea</i> L., var. <i>europaea</i>
DF 0369	Tamarind, dried <i>Tamarindus indica</i> L.
-	Vine fruits, dried see Grape, dried, DF 0269

DRIED VEGETABLES**Class D****Type 12 Secondary food commodities of plant origin****Group 056 Group Letter Code DV**

Group 056, Dried vegetables. The commodities of this Group are in general artificially dried and often comminuted.

Exposure to pesticides is from pre-harvest applications and/or treatment of the dried commodities.

The entire commodity may be consumed after soaking or boiling.

Portion of the commodity to which the MRL applies (and which is analysed): **Whole commodity as prepared for wholesale or retail distribution.**

Group 056 Dried vegetables**Code No. Commodity**

DV 0168 **Group of dried vegetables**

DV 3590 Aloe vera, dried

Aloe vera (L.) Burm.f.

DV 0621 **Asparagus, dried**

Asparagus officinalis L.

DV 3081 **Baby corn, dried**

Zea mays L., several cultivars

DV 0622 Bamboo shoots,dried

Arundinaria spp.; *Bambusa* spp. including *B. blumeana*; *B. multiplex*; *B. oldhamii*; *B. textilis*; *Chimonobambusa* spp.; *Dendrocalamus* spp., including *D. asper*; *D. beecheyana*; *D. brandisii*; *D. giganteus*; *D. laetiflorus* and *D. strictus*; *Gigantochloa* spp. including *G. albociliata*; *G. atter*; *G. levis*; *G. robusta*; *Nastus elatus*; *Phyllostachys* spp.; *Thyrsochloa siamensis*; *Thyrsochloa oliverii* (Poaceae (alt. Gramineae))

DV 0640 Barley shoots ,dried

Hordeum vulgare L.

DV 0061 **Beans with pods (Phaseolus spp) (immature pods and succulent seeds), dried**

DV 0400 **Broccoli, dried**

Brassica oleracea L. var. *italica* Plenck

DV 0575 Burdock, greater or edible ,dried

Arctium lappa L.; Syn: *Lappa officinalis* All.; *L. major* Gaertn.

DV 0041 **Cabbages, head, dried**

Brassica oleracea L. var. *capitata* L., several var. and cvs.

- **Cantaloupe, dried, see Cucurbits – Melons, Pumpkins and Winter Squashes, dried, DV 2040**

DV 0577 **Carrot, dried**

Daucus carota L.

DV 0404 **Cauliflower, dried**

Brassica oleracea L. var. *botrytis* L.

DV 0578 **Celeriac (Turnip rooted celery), dried**

Apium graveolens L., var. *rapaceum* (Mill.) Gaudin

DV 2748	Chamchwi, dried	
		<i>Doellingeria scabra</i> (Thunb.) Nees Syn: <i>Aster scaber</i> Thunb.
DV 2749	Chamnamul, dried	
		<i>Pimpinella calycina</i> Maxim Syn: <i>Pimpinella brachycarpa</i> (Kom.) Nakai;
DV 2750	Chamssuk, dried	
		<i>Artemisia dubia</i> Wall. Ex DC.
DV 0464	Chard, dried	
		<i>Beta vulgaris</i> L. subsp. <i>vulgaris</i> var. <i>vulgaris</i> ; <i>Beta vulgaris</i> L. subsp. <i>vulgaris</i> var. <i>cicla</i>
DV 0463	Cassava, dried	
		<i>Manihot esculenta</i> Crantz;
		Syn: <i>M. aipi</i> Pohl; <i>M. ultissima</i> Pohl; <i>M. dulcis</i> Pax; <i>M. palmata</i> Muell.-Arg
	Chervil, dried	DV 0465
		<i>Anthriscus cerefolium</i> L. Hoffmann
DV 0469	Chicory leaves, dried	
		<i>Cichorium intybus</i> L., var. <i>foliosum</i> Hegi
DV 0467	Chinese cabbage, (type Pe-tsai), dried	
		<i>Brassica rapa</i> L. subsp. <i>pekinensis</i> (Lour.) Hanelt Syn: <i>B. pekinensis</i> (Lour.) Rupr.
-	Chinese cabbage (napa), dried, see Chinese cabbage, (type Pe-tsai), dried, DV 0467	
DV 0444	Chili pepper leaves, dried	
		<i>Capsicum annuum</i> L.
DV 2752	Chrysanthemum, edible leaved, dried	
		<i>Glebionis</i> spp Z
DV 2039	Cucurbits - Cucumbers and summer squashes, subgroup of, dried	(see Subgroup 011A (Code VC 2039) for species included in the subgroup of cucurbits - cucumbers and summer squashes)
DV 2040	Cucurbits – Melons, pumpkins and winter squashes, subgroup of, dried	(see Subgroup 011B (Code VC 2040) for species included in the subgroup of cucurbits – melons, pumpkins and winter squashes)
DV 0474	Dandelion, dried	
		<i>Taraxacum officinale</i> F.H. Wigg. aggr.
DV 2754	Danggwí, dried	
		<i>Angelica gigas</i> Nakai
DV 2600	Daylily, dried	
		<i>Hemerocallis fulva</i> L.
DV 2943	Deodeok, dried	
		<i>Codonopsis lanceolata</i> (Siebold&Zucc.) Trautv.
DV 3026	Dokhwal shoot, dried	
		<i>Aralia continentalis</i> Kitag.
DV 3207	Dureup young shoot, dried	
		<i>Aralia elata</i> (Miq.) Seem.
DV 0440	Eggplant, dried	
		<i>Solanum melongena</i> L.

DV 0476	Endive, dried
	<i>Cichorium endivia</i> L.
DV 3028	Eumnamu shoot, dried
	<i>Kalopanax septemlobus</i> (Thunb.ex A Murr.) Koidz.
DV 2084	Fungi, Group of edible, dried
	Various edible species of fungi, wild and cultivated, dried
DV 0449	Fungi, Edible, except mushrooms, dried
DV 0381	Garlic, dried
	<i>Allium sativum</i> L.
DV 0784	Ginger rhizome, dried
	<i>Zingiber officinale</i> Roscoe
DV 0604	Ginseng, dried including red ginseng
	<i>Panax</i> spp.
DV 2757	Glasswort, common, dried
	<i>Salicornia</i> L.
DV 2758	Godeulppaegi, dried
	<i>Crepidiastrum sonchifolium</i> (Bunge) Pak & Kawano
DV 2704	Goji berry, dried
	<i>LyFrice brcium barbarum</i> L.
DV 2759	Gomchwi, dried
	<i>Ligularia fischeri</i> Turcz.
-	Gourd, round, dried , see Cucurbits – Cucumbers and Summer squashes, dried, DV 2039
DV 2761	Japanese honewort, dried
	<i>Cryptotaenia japonica</i> Hassk
DV 0480	Kale (Borecole, Collards), dried
	<i>Brassica oleracea</i> L., var. <i>sabelica</i> L.
-	Kimchi cabbage, dried see Chinese cabbage, (type Pe-tsai), dried, DV 0467
	<i>Brassica rapa</i> L. subsp. <i>pekinensis</i> (Lour.) Hanelt
	Syn: <i>Brassica rapa</i> L. var. <i>glabra</i> Regel
DV 0384	Leek, dried
	<i>Allium porrum</i> L.
DV 3002	Lotus tuber, dried
	<i>Nelumbo nucifera</i> Geartn.
-	Melons, except watermelon, dried , see Cucurbits – Melons, Pumpkins and Winter Squashes, dried, DV 2040
DV 0450	Mushroom (cultivated), dried
	Cultivated cultivars of <i>Agaricus</i> spp. (included Royal sun agaricus = Hime-Matsutake (<i>Agaricus brasiliensis</i>), Rodman's agaricus, White button mushroom) Syn: <i>Psalliota</i> spp., mainly <i>Agaricus bisporus</i>
-	Napa cabbage,dried , see Chinese cabbage, (type Pe-tsai), dried, DV 0467

DV 0442	Okra, dried <i>Abelmoschus esculentus</i> L.
DV 0385	Onion, bulb, dried
DV 0387	Onion, Welsh, dried <i>Allium fistulosum</i> L.
DV 0587	Parsley, Turnip-rooted, dried <i>Petroselinum crispum</i> (Mill.) Nyman ex A.W. Hill
-	Pak-tsai, dried, see Chinese cabbage, (type Pe-tsai), dried, DV 0467
DV 0588	Parsnip, dried <i>Pastinaca sativa</i> L.
DV 0064	Peas without pods (<i>Pisum</i> spp) (succulent seeds), dried
DV 0445	Pepper, Sweet (incl. pimento or pimiento), dried (<i>Capsicum annuum</i> , var. <i>grossum</i> and var. <i>longum</i>) dried;
-	Pepper, Chili, dried, see HS 0444 Peppers, Chili, dried (<i>Capsicum</i> spp.) Subgroup 028I
-	Potato, dried, see Potato, flakes/granules, DV 0589
DV 0589	Potato, flakes/granules, <i>Solanum tuberosum</i> L. and other potato species
DV 0446	Roselle, dried <i>Hibiscus sabdariffa</i> L. var. <i>sabdariffa</i> L.
-	Pumpkin, dried, see Cucurbits – Melons, Pumpkins and Winter Squashes, dried, DV 2040
DV 3527	Radish leaves, dried <i>Raphanus sativus</i> L., several varieties
DV 0494	Radish roots, dried <i>Raphanus sativus</i> L., several varieties
DV 2767	Sanmaneul leaves, dried <i>Allium victorialis</i> L.; Syn: <i>A. ochotense</i> Prokh. <i>microdictyon</i> Prokh.
DV 2769	Seumbagwi, dried <i>Ixeridium dentatum</i> (Thunb.) Tzvelev
DV 0388	Shallot, dried <i>A. cepa</i> L., var. <i>aggregatum</i> Don.
DV 0541	Soya bean leaves, dried <i>Glycine max</i> (L.) Merr.
DV 0502	Spinach, dried <i>Spinacia oleracea</i> L.
-	Squash, Summer, dried, see Cucurbits – Cucumbers and Summer squashes, dried, DV 2039
DV 0389	Spring onion, dried <i>Allium cepa</i> L., various cultivars, a.o. White Lisbon; White Portugal
DV 1275	Sweet corn (whole kernel without cob or husk), dried <i>Zea mays</i> L., several cultivars

DV 0508 **Sweet potato, roots, dried**

Ipomoea batatas (L.) Poir

DV 3528 **Sweet potato, stems, dried**

Ipomoea batatas (L.) Lam

DV 0505 **Taro, roots, dried**

Colocasia esculenta (L.) Schott, var. *Esculenta*

DV 3529 **Taro stems, dried**

Colocasia esculenta (L.) Schott

DV 0448 **Tomato, dried**

Lycopersicon esculentum Mill.; Syn: *Solanum lycopersicum* L.

DV 0387 **Tree onion, dried**

Allium x proliferum (Moench) Schrad. ex Willd.; *Allium x wakegii* Araki

Syn: *A. cepa* var. *proliferum* (Moench) Regel

Syn: *A. cepa* L. var. *bulbiferum* L.H. Bailey

Syn: *A. cepa* L. var. *viviparum* (Metz.) Alef.

DV 0506 **Turnip, garden, dried**

Brassica rapa L. subsp. *Rapa*

DV 3030 **Udo, dried**

Aralia cordata Thunb. DV 2983

DV 3530 **Yacon, dried**

Smallanthus sonchifolius (Poepp. & Endl.) H. Rob. Syn: *Polymnia sonchifolia* Poepp.

DV 0600 **Yams, dried**

Dioscorea L.; several species

- **Watermelon, dried**, see Cucurbits – Melons, Pumpkins and Winter Squashes, dried, DV 2040

DRIED HERBS**Class D****Type 12 Secondary food commodities of Plant origin****Group 057 Group Letter Code DH**

Group 057, Dried herbs. The commodities of this Group are in general artificially dried and often comminuted. For the commodities in the “fresh” state see Group 027 Herbs.

Exposure to pesticides is from pre-harvest applications and/or treatment of the dried commodities.

They are consumed in the dried form or soaked as a condiment in food commodities of plant or animal origin or in drinks, generally in small amounts.

Portion of the commodity to which the MRL applies (and which is analysed): **Whole commodity as prepared for wholesale or retail distribution.**

Group 057 Dried herbs**Code No. Commodity**

DH 0170 **Group of Dried herbs**, (includes all commodities in this Group)

Subgroup 057A Dried herbs of herbaceous plants**Code No. Commodity**

DH 2095 **Subgroup of Dried herbs of herbaceous plants**, (includes all commodities in this Group)

DH 0720 **Angelica, including Garden Angelica, dried**

Angelica sylvestris L.; *A. archangelica* L.

DH 0721 **Balm leaves, dried**

Melissa officinalis L.

DH 0722 **Basil leaves, dried**

Ocimum basilicum L.

DH 0724 **Borage, dried**

Borago officinalis L.

DH 0728 **Burning bush, dried**

Dictamnus albus L. ;
syn: *D. fraxinella* Pers.

DH 0726 **Catmint, dried**

Nepeta cataria L.

DH 0624 **Celery leaves, dried**

Apium graveolens L.

DH 3501 **Chinese foxglove, dried**

Rehmannia glutinosa (Gaertn.) Steud.

DH 2605 **Chive, dried**

Allium schoenoprasum L.

DH 2606 **Chive, Chinese, dried**

Allium tuberosum Rottler ex Spreng.

DH 3209 **Coriander leaves, dried**

Coriandrum sativum L.

DH 3591	Creat, dried <i>Andrographis paniculata</i> (Burm. f.) Wall. Ex Nees
-	Cretan Dittany, dried , see Burning bush, dried DH 0728
DH 0730	Dillweed, dried <i>Anethum graveolens</i> L.
DH 3503	Echinacea, dried <i>Echinacea angustifolia</i> DC
DH 0731	Fennel, dried <i>Foeniculum vulgare</i> Mill.; syn: <i>F. officinale</i> All.; <i>F. capillaceum</i> Gilib.
DH 3340	Galbanum, dried <i>Ferula gummosa</i> Boiss.
DH 3223	Gambir, dried <i>Uncaria gambir</i> (W. Hunter) Roxb.
DH 0784	Ginger leaves, dried <i>Zingiber officinale</i> Roscoe.
DH 3504	Gotu kola, dried <i>Centella asiatica</i> (L.) Urb.
DH 0732	Horehound, dried <i>Marrubium vulgare</i> L.
DH 0733	Hyssop, dried <i>Hyssopus officinalis</i>
DH 0734	Lavender, dried <i>Lavendula angustifolia</i> Mill.; syn: <i>L. officinalis</i> Chaix; <i>L. spica</i> L.; <i>L. vera</i> DC.
DH 3233	Lemongrass, dried <i>Cymbopogon citratus</i> (DC.) Stapf; <i>C. flexuosus</i> (Nees ex Steud.) Will. Watson.
DH 0735	Lovage, dried <i>Levisticum officinale</i> Koch.
DH 3505	Mamaki, dried <i>Pipturus arborescens</i> (Link) C. B. Rob.
DH 0736	Marjoram, dried , including Turkish oregano and Syrian oregano <i>Origanum majorana</i> L.; <i>O. onites</i> L. and <i>O. syriacum</i> L.
DH 0738	Mints, dried Several Mint species and hybrids and <i>Pulegium vulgare</i> Mill; (see for individual Mints species, HH 0738 Group 027A Herbaceous plants)
-	Oregano, dried , see Marjoram, dried, DH 0736 <i>Origanum vulgare</i> L.

DH 3273	Pepper, leaves, dried <i>Piper</i> spp..
-	Peppermint, dried see Mints, dried DH 0738 <i>Mentha x piperita</i> L.
DH 0740	Parsley, dried <i>Petroselinum crispum</i> (Mill.) Fuss
DH 0741	Rosemary, dried <i>Rosmarinus officinalis</i> L.
DH 0743	Sage, dried <i>Salvia officinalis</i> L.; <i>S. sclarea</i> L.
DH 0745	Savory, Summer; Winter, dried <i>Satureja hortensis</i> L.; <i>S. montana</i> L.
DH 3253	Stevia, dried <i>Stevia rebaudiana</i> (Bertoni) Bertoni
DH 0747	Sweet cicely, dried <i>Myrrhis odorata</i> (L.) Scop.
DH 0748	Tansy and related species, dried <i>Tanacetum vulgare</i> L.; <i>T. balsamita</i> L. ; syn: <i>Chrysanthemum balsamita</i> L.
DH 0749	Tarragon, dried <i>Artemisia dracunculus</i> L. <i>A. dracunculoides</i> Pursh.
DH 0750	Thyme, dried a.o. <i>Thymus vulgaris</i> L.; <i>Th. serpyllum</i> L. and <i>Thymus</i> hybrids.
DH 0752	Wintergreen leaves, dried <i>Gaultheria procumbens</i> L. (not including herbs of the Wintergreen family <i>Pyrolaceae</i>)
DH 3506	Wood betony, dried <i>Stachys officinalis</i> (L.) Trevis
DH 0753	Woodruff, dried <i>Asperula odorata</i> L.
DH 0754	Wormwoods, dried <i>Artemisia absinthium</i> L.; <i>A. abrotanum</i> L.; <i>A. vulgaris</i> L.

Subgroup 057B Subgroup of Dried herbs of woody plants

<u>Code No.</u>	<u>Commodity</u>
DH 2096	Subgroup of Dried herbs of woody plants , (includes all commodities in this Group)
-	Bay leaves, dried , see Laurel leaves, DH 0723 <i>Laurus nobilis</i> L.
DH 3363	Cat's claw, dried <i>Uncaria tomentosa</i> (Willd.) DC., <i>U. guianensis</i> (Aubl.) J. F. Gmel.
DH 3308	Chinese chastetree, dried <i>Vitex negundo</i> L.
DH 3338	Eucommia, dried <i>Eucommia ulmoides</i> Oliv.
DH 3507	Gymnema, dried <i>Gymnema sylvestre</i> (Retz.) Schult.
DH 0723	Laurel leaves, dried <i>Laurus nobilis</i> L.
DH 3270	Mulberry leaves, dried <i>Morus alba</i> L.
DH 0742	Rue, dried <i>Ruta graveolens</i> L.
DH 2260	Squaw vine, dried <i>Mitchella repens</i> L.
DH 3508	St. John's Wort, dried <i>Hypericum perforatum</i> L.
DH 3509	Vasaka, dried <i>Justicia adhatoda</i> L.

MILLED CEREAL PRODUCTS (EARLY MILLING STAGES)Class D**Type 12 Secondary food commodities of plant origin****Group 058 Group Letter Code CM**

For final milling fractions, whether processed or not, see Group 065 Cereal grain milling fractions

Group 058. Milled cereal products (early milling stages). The Group includes the early milling of fractions of cereal grains, except buckwheat, cañihua and quinoa, such as husked rice, polished rice and the unprocessed cereal grain brans.

Exposure to pesticides is through pre-harvest treatments of the growing cereal grain crop and especially through post-harvest treatment of cereal grains.

The entire commodity may be consumed after further processing or household preparation.

Portion of the commodity to which the MRL applies (and which is analysed): **Whole commodity as prepared for wholesale or retail distribution.**

Group 058 Milled cereal products (early milling stages)

<u>Code No.</u>	<u>Commodity</u>
CM 0081	Group Bran, unprocessed of cereal grain (except buckwheat, cañihua and quinoa)
CM 0640	Barley, pearled
CM 3510	Barley bran, unprocessed
CM 1206	Rice bran, unprocessed
CM 0649	Rice, husked
CM 1205	Rice, polished
CM 0650	Rye bran, unprocessed
-	Spelt bran, unprocessed , see Wheat bran, unprocessed, CM 0654
CM 0654	Wheat bran, unprocessed

MISCELLANEOUS SECONDARY FOOD COMMODITIES OF PLANT ORIGINClass D**Type 12 Secondary food commodities of plant origin****Group 059 Group Letter Code SM**

Portion of commodity to which the MRL applies (and which is analysed): **Whole commodity.**

Group 059 Miscellaneous secondary food commodities of plant origin

<u>Code No.</u>	<u>Commodity</u>
SM 0718	Brewer's grain from Barley
SM 0720	Brewer's grain from Wheat
SM 0715	Cacao beans, roasted
SM 0716	Coffee beans, roasted

TYPE 13 DERIVED EDIBLE PRODUCTS OF PLANT ORIGIN

"Derived edible products" are foods or edible substances isolated from primary food commodities or raw agricultural commodities, using physical, biological or chemical processing.

This type of processed food includes groups such as vegetable oils (crude and refined), by-products of the fractionation of cereals, fruit juices, teas (fermented and dried), cacao powder and by-products of cacao manufacturing, and extracts of various plants.

CEREAL GRAIN MILLING FRACTIONS**Class D****Type 13****Derived products of Plant origin****Group 065 Group Letter Code CF**

Group 065. Cereal grain milling fractions includes milling fractions of cereal grains at the final stage of milling and preparation in the fractions. The Group also include the processed brans, as prepared for direct consumption.

Portion of the commodity to which the MRL applies (and which is analysed): **Whole commodity.**

Group 065 Cereal grain milling fractions

<u>Code No.</u>	<u>Commodity</u>
CF 0080	Group of Cereal grains, flour; (see Group 020 (Code GC 0080) for species included in the group of cereals grains)
CF 0081	Subgroup of Cereal grains, bran, processed; (see Group 020 (Code GC 0080) for species included in the group of cereals grains)
CF 2087	Subgroup of Barley cereals, similar grains, and pseudocereals with husks, flour; (see Subgroup 020B (Code GC 2087) for species included in the subgroup of barley, similar grains, and pseudocereals with husks)
CF 2091	Subgroup of Maize cereals and sweet corns, flour; (see Subgroups 020E and 020F (Codes GC 2090 and GC 2091) for species included in the subgroups of maize cereals)
CF 2088	Subgroup of Rice cereals, flour; (see Subgroup 020C (Code GC 2088) for species included in the subgroup of rice cereals)
CF 2089	Subgroup of Sorghum grain and millet cereals, flour; (see Subgroup 020D (Code GC 2089) for species included in the subgroup of sorghum grain and millet)
CF 2086	Subgroup of Wheat cereals, similar grains, and pseudocereals without husks, flour; (see Subgroup 020A (Code GC 2086) for species included in the subgroup of wheat, similar grains, and pseudocereals without husks)
CF 0640	Barley, bran, processed
CF 3511	Barley, flour
CF 3526	Barley, wholemeal
CF 0641	Buckwheat, flour
-	Corn aspirated grain fractions, see Maize aspirated grain fractions
-	Corn, flour, see Maize flour, CF 1255
-	Corn gluten, see Maize gluten, CF 3517
-	Corn gluten meal, see Maize gluten meal, CF 3518F
-	Corn hominy meal, see Maize hominy meal, CF 3519
-	Corn, meal, see Maize meal, CF 0645
CF 3516	Maize aspirated grain fractions
CF 1255	Maize, flour
CF 3517	Maize gluten
CF 3518	Maize gluten meal
CF 3519	Maize hominy meal (blend of corn bran, endosperm and corn germ produced during corn milling)
CF 0645	Maize, meal
CF 0646	Millet, flour
CF 0647	Oats, flour

CF 3512	Oats, groats/rolled
CF 0649	Rice bran, processed
CF 3513	Rice flour
CF 0650	Rye bran, processed
CF 1250	Rye, flour
CF 1251	Rye, wholemeal
CF 3520	Sorghum aspirated grain fractions
CF 0651	Sorghum, Grain, flour
-	Spelt, Flour , see Wheat, flour CF 1211
-	Spelt, wholemeal , see Wheat, wholemeal CF 1212
CF 1275	Sweet corn, flour
CF 3521	Wheat aspirated grain fractions
CF 0654	Wheat bran, processed
CF 1211	Wheat, flour
CF 1210	Wheat, germ
CF 3522	Wheat gluten meal
CF 3514	Wheat, middlings (by-products from the production of flour and include bran, shorts, germ, flour, and tailings)
CF 3515	Wheat, shorts (cereal grain milling by-product)
CF 1212	Wheat, wholemeal

TEASClass D**Type 13 Derived edible products of plant origin****Group 066 Group Letter Code DT**

Group 066 Teas, are mainly derived from the leaves of several plants, principally *Camellia sinensis*.

Tea from *Camellia sinensis* is derived solely and exclusively from the tender shoots of varieties of the species *Camellia sinensis* (L.) Kuntze and produced by good agricultural and acceptable manufacturing processes. This tea is intended for making a brew suitable for consumption as a beverage.

Herbal teas: Plant materials for herbal teas are from plants or from parts of plants that do not originate from the tea plant (*Camellia sinensis* (L.) Kuntze) and are intended for food use by brewing with freshly boiling water.

The Group Teas and herbal teas is divided into three subgroups

Subgroup 66A Teas - Teas from *Camellia sinensis*

Subgroup 66B Teas - Herbal teas from leaves/blossoms

Subgroup 66C Teas - Herbal teas from roots

Portion of commodity to which the MRL applies (and which is analysed): **Whole commodity as prepared for wholesale or retail distribution.**

Group 066 Teas**Code No. Commodity**

DT 0171 **Group of Teas (Tea and Herbal teas),** (includes all commodities in this Group)

Subgroup 66A Teas - Teas from *Camellia sinensis***Code No. Commodity**

DT 1114 **Subgroup of Tea, Black, Green, dried and fermented**

Camellia sinensis (L.) O Kuntze, several cultivars;
syn: *C. thea* Link; *C. theifera* Griff.; *Thea sinensis* L.;
T. bohea L. ; *T. viridis* L.

DT 1115 Purple Tea

Camellia sinensis var. Kitamura;

DT 1116 **Tea, Green, dried**

Camellia sinensis (L.) O Kuntze, several cultivars;

DT 1117 **Tea, Black, dried and fermented**

Camellia sinensis (L.) O Kuntze, several cultivars;

Subgroup 66B Teas - Herbal teas from leaves/blossoms**Code No. Commodity**

DT 0172 **Subgroup of Teas - Herbal teas from leaves/blossoms,** (includes all commodities in this Group)

DT 1110 **Camomile or Chamomile, dried leaves/blossoms**

- *Matricaria recutita* L.; syn: *M. chamomilla* L.
- *Chamaemelum nobile* (L.) All.; syn: *Anthemis nobilis* L.

- **Camomile, German or Scented,** see Camomile, DT 1110

- **Camomile, Roman or Noble,** see Camomile, DT 1110

DT 1118 **Chrysanthemum, dried blossoms**

Chrysanthemum x morifolium Ramat;

DT 1119	Cyclocarya, dried leaves <i>Cyclocarya paliurus</i> (Batalin) Iljinsk.
-	Hibiscus tea, see Roselle, calyxes/ blossoms, dried, DT 0446
DT 9999	Leaves and blossoms from other crops used for herbal teas, dried
DT 1111	Lemon verbena, dried leaves <i>Lippia citrodora</i> Kunth
DT 1112	Lime/Linden, dried blossoms <i>Tilia cordata</i> Mill., <i>Tilia platyphyllos</i> Scop.; <i>Tilia tomentosa</i> Moench.
DT 1113	Maté, dried leaves <i>Ilex paraguariensis</i> A.St.-Hill.
-	Mayweed, Scented, see Camomile, German, DT 1110
-	Mints, dried see Mints, dried DH 0738 Several Mint species and hybrids and <i>Pulegium vulgare</i> Mill;
DT 1120	Noble Dendrobium, dried leaves <i>Dendrobium nobile</i> Lindl.
-	Paraguay tea, see Maté, DT1113
-	Peppermint tea, dried leaves see Peppermint, Group 027A Mints,
DT 1121	Rooibos <i>Aspalathus linearis</i> (Burm. f.) R. Dahlgren
DT 0446	Roselle, calyxes/ blossoms, dried <i>Hibiscus sabdariffa</i> L.

Subgroup 66C Teas - Herbal teas from roots

<u>Code No.</u>	<u>Commodity</u>
DT 0173	Subgroup of Teas - Herbal teas from roots, (includes all commodities in this Group)
DT 0604	Ginseng, dried
	<i>Panax spp.</i>
DT 9998	Roots from other crops used for herbal teas, dried
DT 1122	Valerian root, dried <i>Valeriana officinalis</i>

VEGETABLE OILS, CRUDE**Class D****Type 13 Derived edible products of plant origin****Group 067 Group Letter Code OC**

Group 067. Vegetable oils, crude, includes the crude vegetable oils derived from oil seeds, nuts, tropical and sub-tropical oil-containing fruits such as olives, and some pulses (e.g. soya bean, dried). For the definition and characteristics of Olive oil, crude see CXS 33-1981. The crude oils are used as constituents of compounded animal feeds or further processed (refined, clarified). See Group 068, Vegetable oils, edible (or refined).

Exposure to pesticides is through pre-harvest treatment of the relevant crops or post-harvest treatment of the oilseeds or oil-containing pulses.

Portion of commodity to which the MRL applies (and which is analysed): **Whole commodity as prepared for wholesale distribution.**

Group 067 Oils and fats from plant origin, crude**Code No. Commodity**

OC 0172 **Group of vegetable oils, crude** (includes all commodities in this Group)

- **Corn oil, crude**, see Maize oil, crude OC 0645

OC 0665 **Coconut oil, crude**

OC 0691 **Cotton seed oil, crude**

OC 0693 **Linseed oil, crude**

OC 0645 **Maize oil, crude**

OC 0305 **Olive oil, virgin**

OC 0696 **Palm oil, crude**

made from the fleshy fruit mesocarp of *Elaeis guineensis* Jacq., see CXS 125-1981.

OC 1240 **Palm kernel oil, crude**

made from the kernels of the fruits of *Elaeis guineensis* Jacq., see CXS 126-1981.

OC 0697 **Peanut oil, crude**

OC 3145 **Perilla seed oil, crude**

OC 0495 **Rape seed oil, crude**

OC 0649 **Rice bran oil, crude**

OC 0699 **Safflower seed oil, crude**

OC 0700 **Sesame seed oil, crude**

OC 0701 Shea nut butter oil, crude

OC 0541 **Soya bean oil, crude**

OC 0702 **Sunflower seed oil, crude**

VEGETABLE OILS, EDIBLE (OR REFINED)**Class D****Type 13 Derived edible products of plant origin****Group 068 Group Letter Code OR**

Group 068. Vegetable oils, edible (or refined) include the vegetable oils derived from oil seeds, nuts, tropical and sub-tropical oil-containing fruits such as olives, and some pulses with a high oil content. The edible oils are derived from the crude oils through a refining and/or clarifying process. For definitions and characteristics of the edible oils listed below, see CXS 20-27 (inclusive), 33, 124 and 126 (inclusive) (1981).

Exposure to pesticides is through pre-harvest treatment of the relevant crops, or post-harvest treatment of the oilseeds and oil containing pulses.

Portion of commodity to which the MRL applies (and which is analysed): **Whole commodity as prepared for wholesale or retail distribution.**

Group 068 Oils and fats from plant origin, edible (or refined)

<u>Code No.</u>	<u>Commodity</u>
OR 0172	Group of vegetable oils, edible (includes all commodities in this Group)
OR 0660	Almond oil
OR 0326	Avocado oil, refined
OR 3501	Babassu oil
OR 3140	Borage seed oil
OR 1215	Cacao butter
OR 3170	Castor oil, refined
OR 0001	Citrus oil, edible (see Group 001 (Code FC 0001) for species in the group of citrus fruits)
-	Corn oil, edible , see Maize oil, edible, OR 0645
OR 0665	Coconut oil, refined
OR 0691	Cotton seed oil, edible
OR 3153	Grapeseed oil, edible
OR 0666	Hazelnut oil, edible
OR 0002	Lemons and limes, edible oil refined
OR 0669	Macadamia nut oil, edible
OR 0645	Maize oil, edible
OR 0485	Mustard seed oil, edible
OR 0305	Olive oil, refined , as defined in CXS 33-1981
-	Olive, residue oil , see Olive oil, refined, OR 0305
OR 0004	Orange oil, edible
OR 1240	Palm kernel oil, edible
OR 0696	Palm oil, edible
OR 0697	Peanut oil, edible
OR 0672	Pecan nut oil, edible
OR 0738	Peppermint oil, edible
OR 3145	Perilla seed oil, edible
OR 0698	Poppy seed oil, edible

OR 3156	Pumpkin seed oil, edible
OR 0495	Rapeseed oil, edible
OR 0649	Rice bran oil, refined
OR 0699	Safflower seed oil, edible
OR 0700	Sesame seed oil, edible
OR 0701	Shea nut butter oil, refined
OR 0541	Soya bean oil, refined
-	Spearmint oil, edible , see Peppermint oil, edible, OR 0738
OR 0702	Sunflower seed oil, edible
OR 3592	Tea seed oil, edible
OR 0678	Walnut oil, edible

MISCELLANEOUS DERIVED EDIBLE PRODUCTS OF PLANT ORIGINClass D**Type 13 Derived edible products of plant origin****Group 069 Group Letter Code DM**

Group 069. Miscellaneous derived edible products include various intermediate products in the manufacture of edible food products. Some of these are used for further processing and not consumed as food or feed as such.

Portion of the commodity to which the MRL applies (and which is analysed): **Whole commodity.**

Group 069 Miscellaneous derived edible products of plant origin

<u>Code No.</u>	<u>Commodity</u>
DM 0560	Adzuki bean, flour
DM 0660	Almond, flour
DM 0523	Broad bean, flour
DM 2065	Beans, subgroup of, flour (see Subgroup 015A (Code VD 2065) for species included in the subgroup of beans)
DM 0071	Beans (Phaseolus), subgroup of, flour (see Subgroup 015A (Code VD 0071) for species included in the subgroup of beans)
DM 2891	Beans (Vigna), subgroup of, flour (see Subgroup 015A (Code VD 2891) for species included in the subgroup of beans)
DM 0001	Citrus molasses , (see Group 001 (Code FC 0001) for species in the group of citrus fruits)
DM 1216	Cacao mass
DM 0715	Cacao powder
DM 0524	Chickpea, flour
DM 0665	Coconut, Copra (dried meat)
DM 0604	Ginseng, extracts
DM 0533	Lentil, flour
DM 0545	Lupin, flour
DM 0536	Mung bean, flour
DM 0305	Olives, processed
DM 0697	Peanut, flour
DM 2066	Pea, subgroup of, flour (see Subgroup 015B (Code VD 2066) for species in the subgroup of peas)
DM 0070	Pulses, group of, flour , (see Group 015 (Code VD 0070) for species in the subgroup of pulses)
DM 0651	Sorghum, sweet syrup
DM 0658	Sorghum molasses
DM 0596	Sugar beet molasses
DM 3523	Sugar beet, sugar refined
DM 0659	Sugar cane molasses
DM 3524	Sugar cane, sugar refined
-	Tomato, paste , see tomato, puree, DM 0448
DM 3525	Tomato, pomace
DM 0448	Tomato, puree CXS 57-1981

FRUIT AND VEGETABLE JUICESClass D**Type 13** **Derived edible products of plant origin****Group 070** **Group Letter Code JF**

Fruit and vegetable juices, Group 070, are pressed from various mature fruits, either from the whole fruits or from the pulp or from vegetable commodities. A small amount of preserving agent(s) may be added to the juices during processing. The juices are often prepared for international trade in a concentrated form which is reconstituted for wholesale or retail distribution to about the original juice concentration as obtained by the pressing process.

Fruit and vegetable juices, Group 070, are pressed from the edible part of mature fruits or from vegetable commodities. Juices are often prepared for international trade in a concentrated form, which is reconstituted for wholesale or retail distribution. Fruit juice concentrates should be reconstituted to the relevant provision listed in the appendix of CODEX STAN 247-2005. In processing vegetables, a small amount of preserving agent(s) may be added. Vegetable juice concentrates should be reconstituted to about the original juice concentration as obtained by the pressing process.

The group Fruit and Vegetable Juices is divided into two subgroups

070A Fruit Juices

070B Vegetable juices

Portion of the commodity to which the MRL applies (and which is analysed): **Whole commodity (not concentrated) or commodity reconstituted to the original juice concentration.**

Group 070 **Group of Fruit and Vegetables****Subgroup 070A** **Fruit Juices**

Code No.	Commodity
JF 0175	Group of fruit and vegetable, juices, (includes all commodities in this Group)
JF 0026	Group of Assorted tropical and subtropical fruits – edible peel, juices (see Group 005 (Code FT 0026) for species included in the group of Assorted tropical and subtropical fruits – edible peel)
JF 0030	Group of Assorted tropical and subtropical fruits – inedible peel, juices (see Group 006 (Code FI 0030) for species included in the group of Assorted tropical and subtropical fruits – inedible peel)
JF 0018	Group of Berries and other small fruits, juices (see Group 004 (Code FB 0018) for species included in the group of Berries and other small fruits)
JF 0001	Group of Citrus, juice (see Group 001 (Code FC 0001) for species in the group of citrus fruits)
JF 0009	Group of Pome Fruit, juices (see Group 002 (Code FT 0009) for species in the group of pome fruits)
JF 0012	Group of Stone Fruit, juices (see Group 003 (Code FS 0012) for species in the group of stone fruits)
JF 0226	Apple, juice
JF 1140	Black currant, juice
-	Cassis , see Black currant juice, JF 1140
JF 0665	Coconut, juice
JF 0265	Cranberry, juice
JF 0269	Grape, juice
JF 0203	Grapefruit, juice
JF 0204	Lemon, juice
JF 0345	Mango, juice
JF 0004	Orange, juice
JF 2001	Peach, juice

JF 0341	Pineapple, juice
JF 0355	Pomegranate, juice
JF 0273	Rose hips, juice
JF 0448	Tomato, juice
Subgroup 070B Vegetable Juices	
<u>Code No.</u>	<u>Commodity</u>
JF 0577	Carrot, juice
JF 0480	Kale, juice
JF 0432	Watermelon, juice

BY-PRODUCTS DERIVED FROM FRUIT AND VEGETABLE PROCESSINGClass D**Type 13 Derived edible products of plant origin****Group 071 Group Letter Code AB**

Group 071. The commodities of this Group are by-products derived from Fruit and Vegetable processing, e.g. by product from the extraction of oil (meal). The commodities are prepared, in general, in a dry form for wholesale or retail distribution.

Portion of the commodity to which the MRL applies (and which is analysed): **Whole commodity. Residues in “wet” commodities of this Group should be expressed on a “dry-weight” basis; see explanation in Group 050, Legume animal feeds.**

Group 071 By-products, derived from fruit and vegetable processing**Code No. Commodity**AB 0226 **Apple pomace, dried**AB 1230 **Apple pomace, wet**AB 0001 **Citrus pulp, dried** (see Group 001 (Code FC 0001) for species in the group of citrus fruits)AB 0665 **Coconut, meal**AB 0269 **Grape pomace, dried****MANUFACTURED FOODS (SINGLE-INGREDIENT) OF PLANT ORIGIN**Class D**Type 14 Manufactured Foods (single-ingredient) of plant origin**

The term “single-ingredient manufactured food” means a “processed food” which consists of one identifiable food ingredient, with or without packing medium or minor ingredients, such as flavouring agents, spices and condiments, and which is normally pre-packaged and ready for consumption with or without cooking.

Group 075 Reserved for future purposes**MANUFACTURED FOODS (MULTI-INGREDIENT) OF PLANT ORIGIN**

The term “multi-ingredient manufactured food” means a processed food, consisting of more than one major ingredient.

A multi-ingredient food consisting of ingredients of both plant and animal origin will be included in this type if the ingredient(s) of plant origin is (are) predominant.

Manufactured multi-ingredient cereal productsClass D**Type 15 Manufactured foods (multi-ingredient) of plant origin****Group 078 Reserved for future purposes**

The commodities of this Group are manufactured with several ingredients; products derived from cereal grains however form the major ingredient.

Portion of the commodity to which the MRL applies (and which is analysed): **Whole commodity as prepared for wholesale or retail distribution.**

MISCELLANEOUS PROCESSED FOODS OF PLANT ORIGIN**Class D****Type M Miscellaneous processed foods of plant origin****Group 079 Group Letter Code MU**

Miscellaneous commodities are those commodities which do not meet the criteria for crop grouping. These criteria include (1) commodity's similar potential for pesticide residues, (2) similar morphology, (3) similar production practices, growth habits, etc., (4) edible portion, (5) similar GAP for pesticides uses, (6) similar residue behavior, and (7) to provide flexibility for setting subgroup tolerances. Due to the heterogeneous nature of miscellaneous commodities, no representative commodity will be established for miscellaneous groups.

Portion of commodity to which the MRL applies (and which is analysed): **Whole commodity as prepared for wholesale or retail distribution.**

Group 079 Miscellaneous processed foods of plant origin**Code No. Commodity**

MU 1100 **Hops, dried**

Humulus lupulus L.

APPENDIX VII**Part 2****Revision of the Principles and Guidance on the selection of representative commodities for the extrapolation of maximum residue limits for pesticides to commodity groups (CXG 84-2012)****Table 8. Examples of the selection of representative commodities Class D, Processed foods of plant origin****Type 12 Secondary food commodities of plant origin**

(includes Dried fruits, Dried vegetables, Dried herbs, and Milled cereal products (early milling stages) Miscellaneous secondary food commodities of plant origin)

Type 13 Derived products of plant origin

(includes Cereal grain milling fractions, Teas, Vegetable oils, crude, Vegetable oils, edible, Miscellaneous derived edible products of plant origin, Fruit and vegetable juices and By-products, derived from fruit and vegetable processing)

(at Step 5/8)
(for adoption by CAC)

Codex Group / Subgroup	Examples of Representative Commodities ¹⁾	Extrapolation to the following commodities
Group 055 Dried fruits	2)	--
Group 056 Dried vegetables	2)	--
Group 057 Dried herbs	Any commodity of subgroup 057A and 057B	<u>Group of Dried herbs (DH 0170)</u> : Angelica, including Garden Angelica, dried; Balm leaves, dried; Basil leaves, dried; Borage, dried; Burning bush, dried; Cat's claw, dried; Catmint, dried; Celery leaves, dried; Chinese chastetree, dried; Chinese foxglove, dried; Chive, dried; Chive, Chinese, dried; Coriander leaves, dried; Creat, dried; Dillweed, dried; Echinacea, dried; Eucommia, dried; Fennel, dried; Galbanum, dried; Gambir, dried; Ginger leaves, dried; Gotu kola, dried; Gymnema, dried; Horehound, dried; Hyssop, dried; Laurel leaves, dried; Lavender, dried; Lemongrass, dried; Lovage, dried; Mamaki, dried; Marjoram, dried; Mints, dried; Mulberry leaves, dried; Parsley, dried; Rosemary, dried; Rue, dried; Sage, dried; Savory, Summer, dried; Pepper, leaves, dried; Winter; Squaw vine, dried; Stevia, dried; St. John's Wort, dried; Winter, dried; Sweet cicely, dried; Tansy and related species, dried; Tarragon, dried; Thyme, dried; Vasaka, dried; Wintergreen leaves, dried; Wood betony, dried; Woodruff, dried; Wormwoods, dried
Group 057A Dried herbs - Subgroup of Dried herbs of herbaceous plants	Any commodity in this subgroup	<u>Subgroup of Dried herbs of herbaceous plants (DH 2095)</u> : Angelica, including Garden Angelica, dried; Balm leaves, dried; Basil leaves, dried, dried; Borage, dried; Burning bush, dried; Catmint, dried; Celery leaves, dried; Chinese foxglove, dried; Chive, dried; Chive, Chinese, dried; Coriander leaves, dried; Creat, dried; Dillweed, dried; Echinacea, dried; Fennel, dried; Galbanum, dried; Gambir, dried; Ginger leaves, dried; Gotu kola, dried; Horehound, dried; Hyssop, dried; Lavender, dried; Lemongrass, dried; Lovage, dried; Mamaki, dried; Marjoram, dried; Mints, dried; Parsley, dried; Pepper, leaves, dried, Rosemary, dried; Sage, dried; Savory, Summer, Winter, dried; Stevia, dried; Sweet cicely, dried; Tansy and related species, dried; Tarragon, dried; Thyme, dried; Wintergreen leaves, dried; Wood betony, dried; Woodruff, dried; Wormwoods, dried

Codex Group / Subgroup	Examples of Representative Commodities ¹⁾	Extrapolation to the following commodities
Group 057B Dried Herbs - Subgroup of Dried herbs of woody plants	Any commodity in this subgroup	<u>Subgroup of Dried herbs of woody plants (DH 2096)</u> : Cat's claw, dried; Chinese chastetree, dried; Eucommia, dried; Gymnema, dried; Laurel leaves, dried; Mulberry leaves, dried; Rue, dried; Squaw vine, dried; St. John's Wort, dried; Vasaka, dried
Group 058 Milled cereal products (early milling stages)	2)	--
Group 059 Miscellaneous secondary food commodities of plant origin	2)	--
Group 065 Cereal grain milling fractions - Subgroup of cereal grains, flour	Wheat and Barley and Rice and Sorghum grain and Maize and sweet corn	<u>Group of cereal grains, flour (CF 0080)</u> : Amaranth, grain; Baby corn (immature corn); Barley; Buckwheat; Buckwheat, tartary; Canarygrass, annual; Cañihua; Chia; Corn-on-the-cob (kernels plus cob with husk removed); Cram-cam; Hungry rice; Huauzontle; Job's tears; Maize; Millet; Oats; Popcorn; Psyllium sp., Quinoa; Rice; Rice, African; Rye; Sorghum; Sweet corn (whole kernel without cob or husk); Teff or Tef; Teosinte; Triticale; Wheat; Wild rice
Group 065 Cereal grain milling fractions - Subgroup of cereal grains, bran, processed	Wheat and Barley and Rice and Sorghum grain and Maize and sweet corn	<u>Group of cereal grains, bran, processed (CF 0081)</u> : Amaranth, grain; Baby corn (immature corn); Barley; Buckwheat; Buckwheat, tartary; Canarygrass, annual; Cañihua; Chia; Corn-on-the-cob (kernels plus cob with husk removed); Cram-cam; Hungry rice; Huauzontle; Job's tears; Maize; Millet; Oats; Popcorn; Psyllium sp., Quinoa; Rice; Rice, African; Rye; Sorghum; Sweet corn (whole kernel without cob or husk); Teff or Tef; Teosinte; Triticale; Wheat; Wild rice
Group 065 Cereal grain milling fractions - Subgroup of Barley, similar grains, and pseudocereals with husks, flour	Barley	<u>Subgroup of Barley, similar grains, and pseudocereals with husks, flour (CF 2087)</u> : Barley; Buckwheat; Buckwheat, tartary; Canarygrass, annual; Oats
Group 065 Cereal grain milling fractions - Subgroup of Maize Cereals and sweet corn, flour	Maize	<u>Subgroup of Maize Cereals and Sweet corn, flour (CF 2090)</u> : Maize; Popcorn; Teosinte, Sweet corn

Codex Group / Subgroup	Examples of Representative Commodities ¹⁾	Extrapolation to the following commodities
Group 065 Cereal grain milling fractions - Subgroup of Rice cereals, flour	Rice	<u>Subgroup of Rice cereals, flour (CF 2088)</u> : Rice; Rice, African; Wild rice
Group 065 Cereal grain milling fractions - Subgroup of Sorghum Grain and Millet, flour	Sorghum grain	<u>Subgroup of Sorghum Grain and Millet, flour (CF 2089)</u> : Hungry rice; Job's tears; Millet; Sorghum Grain; Teff or Tef
Group 065 Cereal grain milling fractions - Subgroup of Wheat, similar grains, and pseudocereals without husks, flour	Wheat	<u>Subgroup of Wheat, similar grains, and pseudocereals without husks, flour (CF 2086)</u> : Amaranth, grain; Cañihua; Chia; Cram-cam; Huauzontle; Psyllium sp., Quinoa; Rye; Triticale; Wheat
Group 066 Teas	2)	
Subgroup 66A Teas - Teas from Camellia sinensis	<i>Camellia sinensis</i>	<u>Tea, Black, Green (fermented and dried); (DT 1114)</u> : Purple tea; Tea, Green, dried; Tea, Black, dried and fermented
Subgroup 66B Teas - Herbal teas from leaves/blossoms	Any herbal tea from leaves/blossoms in this subgroup	<u>Teas - Herbal teas from leaves/blossoms (DT 0172)</u> : Camomile or Chamomile, dried leaves/blossoms; Chrysanthemum, dried blossoms; Cyclocarya, dried leaves; Leaves and blossoms from other crops used for herbal teas, dried; Lemon verbena, dried leaves; Lime/Linden dried blossoms; Maté, dried leaves; Noble dendrobium, dried leaves; Rooibos; Roselle, calyxes/ blossoms, dried
Subgroup 66C Teas - Herbal teas from roots	Any herbal tea from roots in this subgroup	<u>Teas - Herbal teas from roots (DT 0173)</u> : Valerian root, dried; Roots from other crops used for herbal teas, dried; Valerian root, dried
Group 067 Vegetable oils, crude	2)	--
Group 068 Vegetable oils, edible (or refined)	2)	--
Group 069 Miscellaneous derived edible products of plant origin	2)	--
Group 070 Fruit and vegetable juices	2)	--

Codex Group / Subgroup	Examples of Representative Commodities ¹⁾	Extrapolation to the following commodities
Group 071 By-products, derived from fruit and vegetable processing	2)	--

¹⁾ Alternative representative commodities may be selected based on documented regional/country differences in dietary consumption and/or areas of production.

²⁾ It is not possible to set a group CXL for this group because of the broad diversity of crops. However, when a group contains a number of processed commodities originating from raw commodities from one subgroup in Class A (primary food commodities), the representative commodity from that subgroup in Class A can be used as a representative crop for the corresponding commodities in processed form. For extrapolation of processed commodities, extrapolation options in the OECD guideline can also be considered

APPENDIX IX**REVISION OF THE CLASSIFICATION OF FOODS AND ANIMAL FEEDS (CXA 4 – 1989)****Commodities Transferred from Class D to Class C
(for information)**

Transferring commodity	Existing code	Number of CXLs	New code	Class C Subgroup
Cotton gin trash	AB 1204	1	AM 3587	052C
Cotton seed, hulls	AB 0691	1	AM 3588	052C
Cotton seed, meal	AB 1203	2	AM 3589	052C
Rice hulls	CM 1207	2	AS 3570	051C
Soya bean meal	AB 1265	1	AL 3539	050C
Soya bean hulls	AB 0541	4	AL 3538	050C
Sugar beet, pulp, dry	AB 0596	2	AM 3599	052C
Sugar beet, pulp, wet	AB 1201	0	AM 1201	052C
Sweet corn cannery waste	AB 0447	1	AM 3601	0552C

No commodities are proposed to transfer from Class C (Feed) to Class D (Food)

APPENDIX X
Part 1

IMPACT OF THE REVISED CLASS C ON CXLS
CLASS C: PRIMARY ANIMAL FEED COMMODITIES
(For action by the Codex Secretariat)

Changed classification of groups and subgroups

In Type 11 “Primary feed commodities of plant origin” 5 groups with no subgroups exists. In the revised Classification, it is proposed to create 3 groups, with several subgroups.

Existing groups in Type 11

050	Legume animal feeds
051	Straw, fodder and forage of cereal grains and grasses (including buckwheat fodder) (forage)
051	Straw, fodder and forage of cereal grains and grasses (including buckwheat fodder) (straws and fodders dry)
052	Miscellaneous fodder and forage crops (forage)
052	Miscellaneous fodder and forage crops (fodder)

Proposed groups and subgroups in Type 11

050	Legume feed products
	Subgroup 050A: Products of legume feeds with high water ($\geq 20\%$) content (forage and silage)
	Subgroup 050B: Products of legume feeds with low water ($< 20\%$) content (hay)
	Subgroup 050C: Processed products of legume feeds (such as meal, hulls)
051	Cereal grains (including pseudocereals) and grass feed products
	Subgroup 051A: Cereal grains (including pseudocereals) feed products with high water ($\geq 20\%$) content (forage and silage)
	Subgroup 051B: Cereal grains (including pseudocereals) feed products with low water ($< 20\%$) content (hay, straw)
	Subgroup 051C: Cereal grains (including pseudocereals) processed products (such as bran, hulls)
	Subgroup 051D: Grasses for animal feed
052	Miscellaneous feed products
	Subgroup 052A: Miscellaneous feed products with high water ($\geq 20\%$) content (forage, beet tops)
	Subgroup 052B: Miscellaneous feed products with low water ($< 20\%$) content (hay)
	Subgroup 052C: Miscellaneous processed feed products (such as meal, hulls, dried pulp)

New (Sub)groups and (sub)group codes

AL 3300 Subgroup of Products of legume feeds with high water ($\geq 20\%$) content (forage and silage) (includes all commodities in this subgroup)

AL 3301 Subgroup of Products of legume feeds with low water ($< 20\%$) content (hay) (includes all commodities in this subgroup)

AL 3302 Subgroup of Processed products of legume feeds (like meal, hulls) (includes all commodities in this subgroup)

AS 3303 Subgroup of Cereal grains (including pseudocereals) feed products with high water ($\geq 20\%$) content (forage and silage) (Includes all commodities in this subgroup) (see Group 020 Cereal grains (code GC 0080) for commodities included in cereal grains)

AS 3304 Subgroup of Cereal grains (including pseudocereals) feed products with low water ($< 20\%$) content (hay and/or straw) (Includes all commodities in this subgroup) (see Group 020 Cereal grains (code GC 0080) for commodities included in cereal grains)

AS 3305 Subgroup of Cereal grains (including pseudocereals) processed products (such as bran, hulls) (Includes all commodities in this subgroup) (see Group 020 Cereal grains (code GC 0080) for commodities included in cereal grains)

AS 3306 Subgroup of Forage, hay and/or straw and silage from grasses used for animal feed (Includes all commodities (grasses in the Poaceae (Gramineae) family in this subgroup, except for commodities in Group 020, Code GC 0080)

AM 3307 Subgroup of Miscellaneous Feed Products of high water ($\geq 20\%$) content (forage, beet tops) (includes all commodities in this subgroup)

AM 3308 Subgroup of Miscellaneous Feed Products with low water ($< 20\%$) content (hay and/or straw) (Includes all commodities in this subgroup)

AM 3309 Subgroup of Miscellaneous Processed feed Products (such as meal, hulls, dried pulps) (Includes all commodities in this subgroup)

Remark: In some (sub)groups minor subgroups with more than one commodity are created e.g. AS 0081, AS 0162

The new codes will not have an impact on the existing CXLs. They will make it more easy to set in future a CXL for those (sub)groups.

New commodities

New commodities are added to the Classification.

The following codes have to be added to the classification: AL 3493 – AL 3534, AS 3535 - AS 3566 and AM 3567 – AM 3595.

(see REP21/PR-Appendix VII for a full overview of commodities included in Class C and REP21/PR-Appendix IX for the full overview of the transfer of commodities from Class D to Class C)

Fodder Replacing the term fodder for hay or straw. The recommendations in the Japanese document should be the guidance in replacing the term fodder by hay or straw (REP21/PR-Appendix XI).

Note: The codes for some commodities in the document on “fodder” prepared by Japan in Appendix III are based on the codes of the draft revision of last year. Because several changes are made in the draft for this year, some codes in this document are not the same as in the proposed revision in pr52_06e Rev1

Commodities transferring between Class C and D

- No commodities are proposed to transfer from Class C (Feed) to Class D (Food)
- Processed commodities transferring from Class D (Food) to Class C (Feed):

Transferring commodity	Existing code	Number of CXLs	New code	Action
Cotton gin trash	AB 1204	1	AM 3577	Adapt code in database
Cotton seed, hulls	AB 0691	1	AM 3578	Adapt code in database
Cotton seed, meal	AB 1203	2	AM 3579	Adapt code in database
Rice hulls	CM 1207	2	AS 3565	Adapt code in database
Soya bean meal	AB 1265	1	AL 3534	Adapt code in database
Soya bean hulls	AB 0541	4	AL 3533	Adapt code in database
Sugar beet, pulp, dry	AB 0596	2	AM 3592	Adapt code in database
Sugar beet, pulp, wet	AB 1201	0	AM 1201	Adapt code in database
Sweet corn cannery waste	AB 0447	1	AM 3594	Adapt code in database

- Commodities with code changes (not all commodity codes are used in the existing classification, some codes have been added over time). For the following commodities the code in the database has to be adapted

Commodity	Existing code	New code	Number of CXLs
Cow cabbage, leaves	AV 1050	AM 1050	0
Fodder beet, leaves or tops	AV 1051	AM 3568	0
Maize, forage	AF 0645	AS 0645	37
Maize, hay and/or straw	AS 0645	AS 3552	0
Marrow-stem cabbage or Marrow-stem kale, leaves and stems	AV 1052	AM 1052	0
Oat, hay and/or straw	AS 0647	AS 3554	14
Rye, hay and/or straw	AS 0650	AS 3555	16
Sorghum, forage (green)	AF 0651	AS 0651	1
Sugar beet, leaves or tops	AV 0596	AM 0596	3
Sugar cane, forage or tops	AV 0659	AM 0659	2
Sugar cane, hay and/or straw	AM 0659	AM 3576	0
Cotton gin trash	AB 1204	AM 3577	1
Cotton seed, hulls	AB 0691	AM 3578	1
Cotton seed, meal	AB 1203	AM 3579	2
Rice hulls	CM 1207	AS 3565	2
Soya bean meal	AB 1265	AL 3534	1
Soya bean hulls	AB 0541	AL 3533	4
Sugar beet, pulp, dry	AB 0596	AM 3592	2
Sugar beet, pulp, wet	AB 1201	AM 1201	0
Sweet corn cannery waste	AB 0447	AM 3594	1

None of the transferring commodities is included or will be included in a (sub)group, so there are no consequences for (sub)group CXLs

APPENDIX X
Part 2

CLASS D: PROCESSED FOODS OF PLANT ORIGIN

(Supporting information when submitting comments on the revision of Class D (Agenda Item 7b))

Changed classification into groups and subgroups

In the revised Classification, it is proposed to divide the group of Dried herbs and the group of Teas in subgroups (Sub)groups and (sub)group codes in Class D

Overview of new (sub)group codes

DH 2095	Subgroup of dried herbs of herbaceous plants
DH 2096	Subgroup of dried herbs of woody plants
DT 1114	Subgroup of Tea, Black, Green (fermented and dried)
DT 0172	Subgroup of Teas - Herbal teas from leaves/blossoms
DT 0173	Subgroup of Teas - Herbal teas from roots

Remark: In some (sub)groups minor subgroups with more than one commodity are created e.g. CF 0080, AS 0162

The new (sub)group codes will not have an impact on the existing CXLs. They will make it more easy to set in future a CXL for those subgroups.

New commodities

- New commodities are added to the Classification. The following codes has to be added to the database: DF3310, DV 3590, DH 3501- DH 3509, CF 3511-CF 3522, DT 9998-DT 9999, DM 3523-DM 3525
- In case a commodity already occurs in another form in another Class, the number part of the code is the same and the letter part of the code is adapted (e.g. existing code fresh herb HH 0740 Parsley; new code dried herb DH 0740 Parsley, dry).
New codes created in this way are e.g : DH 3289, CM 0640, SM 0715 and JF 0204.
- For hops, the code MU 1100 is replacing, DH 1100, because hops is classified as a miscellaneous commodity See Appendix I agenda item 7b for a full overview of commodities included in Class D

Commodities transferring between Class C and D See the paragraph about this subject in Appendix I.

APPENDIX XI

**INVESTIGATION OF MRLs FOR PESTICIDES RECOMMENDED
FOR FEED COMMODITIES WHOSE NAMES INCLUDE THE TERM “FODDER”**

(Prepared by Japan)

(For information/use by JMPR)

INTRODUCTION

1. In the Codex System, Maximum Residue Limits (MRLs) are recommended for foods as well as feeds. Those feed items (not including those commodities also used as foods) for which MRLs have been recommended are (1) primary feed commodities of plant origin, (2) cereal grain milling fractions, (3) byproducts used for animal feeding purposes, derived from fruits and vegetable processing, and (4) some other commodities.
2. The term “fodder” is used in relation to the primary feed commodities of plant origin. The Classification of Foods and Animal Feeds (1993) includes Class C Primary Animal Feed Commodities as follows:

Primary feed commodities of plant origin

No	Letter code	Group
050	AL	Legume animal feeds ^{a/}
051	AF	Straw, fodder and forage of cereal grains and grasses (including buckwheat fodder) (forage)
051	AS	Straw, fodder and forage of cereal grains and grasses (including buckwheat fodder) (straws and fodders dry)
052	AV	Miscellaneous Fodder and Forage crops (forage)
052	AM	Miscellaneous Fodder and Forage crops (fodder)

a/ including forage and fodder commodities

3. For these commodities, the Codex Classification indicates that in view of the wide range of moisture contents in most animal feeds, except straws, moving in commerce, the MRLs should preferably be set and expressed on a “dry-weight” basis.
4. The Codex Committee on Pesticide Residues (CCPR) decided some time ago not to recommend MRLs for forage (fresh products) as the forage commodities are not traded internationally. As a result, among the above feed groups, MRLs have been recommended for fodders in Groups AL, AS and AM. However, three Codex MRL have been recommended for triadimefon (133), flutriafol (248) and acetochlor (280) in “sugar beet leaves or tops (dry)” (AV 0596) which has the term “(dry)” in its name.
5. Within the framework of revising the Codex Classification of Foods and Animal Feeds, the 51st Session of the CCPR in 2019 considered how to revise Class C feed commodities. It considered, “there would be a possible impact of removing the term ‘fodder’, as it could affect existing CXLs for this commodity. It was not clear on which basis the individual CXLs for fodder were set, e.g., on residues in hay or in straw. CCPR further noted the kind offer of Japan to investigate the basis on which the CXLs for fodder and related feed are set.” (REP 19/PR, para. 149) The CCPR agreed to further look into the issue of “fodder” in Class C based on a paper to be prepared by Japan for discussion at CCPR52 (para. 150)

INVESTIGATION PROCESS

6. MRLs recommended for “fodder” commodities with the letter codes AL, AS and AM were extracted from the database of Codex MRLs and MRLs at different steps provided by the Codex Secretariat (Note: as of the 51st CCPR). Those commodities included in the category AV were not included as they are forages except AL 0596. AL 0596 is sugar beet leaves or tops (dry) referring to dry feed item but the description is clear.

7. For those extracted MRLs, the basis of each MRL was investigated using the Evaluations and Reports of the Joint FAO/WHO Meeting on Pesticide Residues (JMPR): first checking the descriptions in the related year's appraisal (i.e., Report) and, if the information in the appraisal is not clear enough, then checking the descriptions in the same year's Evaluation.
8. For a number of old MRLs, it was not possible to find detailed information about residue levels or the nature of samples analyzed. In addition, JMPR Evaluations are available from the FAO website for the years 1993-2019 extra; and JMPR Reports for the years 1991-2019 extra. Old Evaluations and Reports have much briefer descriptions about supervised residue trials.
9. In the course of checking the information, no attempts were made to evaluate the residue data or to review the JMPR evaluations. Attempts were made to find the basis for individual MRLs and to extract that information.

RESULTS OF INVESTIGATION

10. In the Codex database, there are 421 MRLs for the group AL, AS and AM (excluding AM 0738 "mint hay" and AM 1051 Fodder beet and related commodities as the commodities for which MRLs are recommended are clear).

11. The situations of each MRL as described in the respective JMPR Report/Evaluation are shown in the tables in the Annex: basis of individual MRLs for "fodder" commodities, availability of separate data on hay, straw and/or related commodities/portions along with the time of JMPR evaluation.

- The JMPR (year) is according to the Codex database and the working document CX/PR 19/51/5.
- Commodities in the group are in the alphabetical order as much as feasible. If there are related commodities, such as fodder and hay for the same crop, they are placed in a close proximity for easier reference, regardless of the code number.
- A brief analysis is provided for each commodity in relation to the basis of MRLs: whether hay or straw or any related fodder product.

12. Some specific situations for a number of MRLs are also explained, such as extrapolation from other MRLs, in the "Note to MRL/Descriptions of commodities". Where some problem is identified, the text in the Note is italicized. Where there is no problem, the Note cell is blank. Information on for what commodity MRLs should be recommended is also included in the table if the term "fodder" is removed from the Codex Classification. Additionally, whether each MRL is expressed on a "dry-weight" basis is also indicated.

Note: How residue data are described and how the samples are called are defined in the Codex Classification of Foods and Animal Feeds as well as in the FAO Manual. However, it depends on the data submission. Sometimes, the same term may be used differently, or the same type of samples may be called differently.

Points to consider

13. This section is to be read in conjunction with the information in the Annex.

- Commodity names (taken from the online Codex database (commodities))
 - AL group

For some commodities/crops, there are separate entries for "fodder" and "hay": for alfalfa, bean, peanut and soya bean. On the other hand, there are "Pea hay or Pea fodder (dry)" (AL 0072) and "pea hay" (AL 3353), differently from the aforementioned commodities. If the term "fodder" is to be deleted, it is necessary to consider an alternative term(s), such as "straw" to replace the term "fodder". A number of MRLs are estimated on a basis of "straw data".
 - AS group

For the individual commodities, the names refer to either "straw and fodder, dry" or "fodder". It is absolutely critical to have clear definitions for related terms, such as "hay", "straw" and stover.
 - AM group

Except fodder beet and related commodities, the commodity names refer to "fodder".

- Basis of MRLs

For many commodities, the basis of MRLs is either hay or straw/stover. Other commodities may refer to only onetype of “fodder”. In the former case, the term fodder can be separated into two different commodities, for example, hay and straw, or hay and stover. However, the trade volume of these commodities should be taken into consideration for decision making. In the latter case, the term fodder can be changed to other name. In both cases, it is extremely important to have clear definitions for each commodity and data submission shall use the terms according to the definitions, so that it will be clear for JMPR about the nature of samples analyzed for residues.

- New MRLs?

If one commodity is separated into two commodities, the current MRL is maintained for one of them and there may be a need to establish a new MRL for the other. Some MRLs can be recommended also as new MRLs or new MRLs can be recommended at future periodic reevaluation. It should be noted that with the revision of feeds, there may be a need for re-evaluating the residue data, which should be done at future periodic review occasions. For old MRLs, there may be different MRL recommendations in the future because the OECD¹ Calculator is now usedby JMPR while it was not in the past.

- Extrapolation

There are a number of MRLs extrapolated from other recommendations. It is done on the condition that: (1) Good agricultural practice (GAP) is the same or similar, and (2) residue populations are similar. Even after the revision of the fodder commodities, the same extrapolation can be maintained.

- MRLs for sugar cane fodder

There are two MRLs for sugar cane fodder. However, they are recommended on a basis of sugar cane forage. There may be a need for CCPR to consider whether to retain these MRLs or not. Other MRLs for forage crops have already been revoked.

14. For individual commodities, some analysis can be found in the tables in the Annex. The analysis is on the assumption that straw was obtained at the time of normal harvest or later and hay before the normal harvest time, although there are exceptions to these definitions or there were no detailed explanations in the JMPR Evaluations/Reports.

Additional issues identified

15. The issues below were identified during the course of this work. While not directly related to the revision of feed classification, the CCPR may need to consider how to deal with them.

Dry weight basis

16. Among the extracted MRLs for fodder -related commodities, there are inconsistencies among the expression on dry weight basis. There are a number of cases:

- Set and expressed on a dry weight basis: with

- Footnote “(dw)” next to the MRL, and
- Footnote “(DM)” next to the MRL; or
- Without any indication of dry-weight basis

- No indication of dry weight basis without any footnote

- In the text, indication of “as received” or “fresh weight”
- No mention of dry weight or as received, perhaps because “Straws” are exempted from the expression of “dry weight basis” according to the Codex definition for fodder (see para.3 of this paper)

17. It should be noted though, as the dry matter is around 90% of the “fodder”, whether the MRL value is expressed on a dry weight basis or not will not make significant difference. However, the Codex Secretariat can adjust the footnotes accordingly.

MRLs for 9 pesticides (replacing the MRLs for Apple pomace, dry)

¹ Organization for Economic Cooperation and Development

18. There are 9 MRLs for Sweet corn fodder, dry included in the Codex database as well as the working document for each CCPR session containing all existing MRLs: fenarimol, fenbuconazole, fludioxonil, flusilazole, imidacloprid, methoxyfenozide, novaluron, pyrimethanil and spirodiclofen. However, related information or the basis of these MRLs could not be found in JMPR Evaluations or Reports.
19. Further investigation was made using all the reports of the Codex Alimentarius Commission and CCPR, and working documents prepared for the sessions of CCPR. It was found that these MRLs currently existing for sweet corn fodder are at the same values as those recommended by the JMPR and adapted by the Codex Alimentarius Commission for AB 0226 apple pomace, dry. These MRLs for apple pomace, dry are not included in the current Codex database despite their adaptation by the Commission without any information about revision or revocation. It seems that these MRLs for sweet corn fodder (not adapted by the Commission) inadvertently replaced those for apple pomace, dry. Therefore, these MRLs for apple pomace, dry, shall be reinstated in the Codex database while those for the respective pesticides in sweet corn fodder shall be removed from the database as they were not adapted by the Commission. This problem can be solved by the Codex Secretariat.

Note: The codes for some commodities in this document are based on the codes of the draft revision of last year. Because several changes are made in the draft for this year, some codes in this document are not the same as in the proposed revision in agenda item 7a

Annex: Individual MRLs

1. AL Group: Legume Animal Feeds

(only “fodder” commodities are shown below: “forage” commodities are not shown)

Code	Commodity name	Table Number in the Annex
AL 0157	Legume animal feeds	1.1
AL 0061	Bean fodder	1.3.1
AL 0072	Pea hay or Pea fodder (dry)	1.6.1
AL 1020	Alfalfa fodder	1.2.1
AL 0524	Chick-pea fodder	1.4
AL 1031	Clover hay or fodder	1.5
AL 0697	Peanut fodder	1.7.1
AL 0541	Soya bean fodder	1.8.1
AL 3350	Alfalfa hay	1.2.2
AL 3351	Bean hay	1.3.2
AL 3352	Peanut hay	1.7.2
AL 3353	Pea hay	1.6.2
AL 3354	Soya bean hay	1.8.2

1.1 AL 0157 Legume animal feeds

- The MRL recommendations are mostly based on the hay data.
- Except for Spirotetramat, the basis of MRLs is rotational crop study data.

Pesticide	MRL (mg/kg)	JMPR (year) ^{a/}		Data available for ^{b/} :			MRL (mg/kg) ^{c/} , if "fodder" is removed			Dry weight? ^{d/}	Note to MRL/ Description of commodities
				Hay	Straw	Fodder	Hay	Straw	Fodder		
Acetochlor	3	2015	-	o	X		3	X		DW	Based on follow-up alfalfa hay and clover hay.
Cyantraniliprole	0.8	2013	-	o	X		0.8	X		DW	<i>On a dry weight basis</i> Based on the combined dataset of hay of alfalfa, clover, bean, pea, peanut and soya bean grown as follow-up crops.
Myclobutanil	0.2	2014	PR	o	o		0.2	o		DW	Based on soya bean hay and consideration of crop rotation.
Spirotetramat	30	2011	-	o	X		30	X		DW	<i>On a dry weight basis.</i> Based on hay of soya bean cowpea and pea

a/ "PR": Periodic Review.

b/ Data available (described) in the JMPR Evaluation. Description of hay, straw or fodder. If the description is not clear, "?".

c/ If the commodity "fodder" is removed, for what commodity(ies) MRL(s) should be recommended.

d/ DW, dry weight basis.

1.2 Alfalfa

1.2.1 AL 1020 Alfalfa fodder

- All of the MRL recommendations, for which information was found, are based on hay data.
- The Commodity name can be changed to alfalfa hay.

Pesticide	MRL (mg/kg)	JMPR (year) ^{a/}		Data available for ^{b/} :			MRL (mg/kg) ^{c/} , if "fodder" is removed			Dry weight? ^{d/}	Note to MRL/ Description of commodities
				Hay	Straw	Fodder	Hay	Straw	Fodder		
Azinphos-Methyl	10	1991		o	X		10	x		?	Only in the recommendation table for AL 1020 Alfalfa hay (no Evaluation available)
Bentazone	0.5	2013	PR	o	X		0.5	x		DW	
Chlorantraniliprole	50	2010	-	o	X		50	x		DW	
Chlorpyrifos	5	2000	PR	o	X		5	x		DW	
Clethodim	10	1997	-	o	X		10	x		-	
Cypermethrins (including alpha- and zeta- cypermethrin)	30	2008	PR	o	X		30	x		-	
Disulfoton	5 (dw)	1991	-	?	?		5?	5?		?	Only in the recommendation table for AL 1020 Alfalfa fodder (dry weight) (no Evaluation available)
Flumioxazin	3 (dw)	2015	-	o	X		3	x		-	
Glyphosate	500	2005	PR	o	X		500	x		DW	
Imazamox	0.1 (*)	2014	-	o	X		0.1(*)	x		AR	
Indoxacarb	60	2005	-	o	X		60	x		DW	
Methomyl	20	2001	PR	o	X		20	x		-	Based on the use of thiodicarb
Norflurazon	7 (DM)	2018	-	o	X		7	x		DW	

Pesticide	MRL (mg/kg)	JMPR (year) ^{a/}		Data available for ^{b/} :			MRL (mg/kg) ^{c/} , if “fodder” is removed			Dry weight? ^{d/}	Note to MRL/ Description of commodities
				Hay	Straw	Fodder	Hay	Straw	Fodder		
Pendimethalin	4 (dw)	2016	-	o	X		4	x		DW	
Penthiopyrad	20 (DM)	2012	-	o	X		20	x		DW	
Permethrin	100	<1991		?	?		?	?		?	No information found
Pyraclostrobin	30	2011	-	o	X		30	x		DW	
Saflufenacil	0.06	2016	-	o	X		0.06	x		DW	<i>On a dry weight basis.</i>

a/ “PR”: Periodic Review.

b/ Data available (described) in the JMPR Evaluation. Description of hay, straw or fodder. If the description is not clear, “?”.

c/ If the commodity “fodder” is removed, for what commodity(ies) MRL(s) should be recommended.

d/ DW, dry weight basis; and AR, as received.

1.2.2 AL 3350 Alfalfa hay

- If the name of AL 1020 is changed to alfalfa hay, the MRLs below can be under that commodity name.

Pesticide	MRL (mg/kg)	JMPR (year) ^{a/}		Data available for ^{b/} :			MRL (mg/kg) ^{c/} , if “fodder” is removed			Dry weight? ^{d/}	Note to MRL/ Description of commodities
				Hay	Straw	Fodder	Hay	Straw	Fodder		
Flupyradifurone	30 (dw)	2016	-	o	X		30	x		DW	
Fluxapyroxad	20 (DM)	2018	-	o	X		20	x		DW	

a/ “PR”: Periodic Review.

b/ Data available (described) in the JMPR Evaluation. Description of hay, straw or fodder. If the description is not clear, “?”.

c/ If the commodity “fodder” is removed, for what commodity(ies) MRL(s) should be recommended.

d/ DW, dry weight basis.

1.3 Bean

1.3.1 AL 0061 Bean fodder

- About a half of MRLs are based on hay data and others on straw data.
- There may be a need to have hay and straw as separate commodities, without using the term “fodder”.

Pesticide	MRL (mg/kg)	JMPR (year) ^{a/}		Data available for ^{b/} :			MRL (mg/kg) ^{c/} , if “fodder” is removed			Dry weight ^{d/} ?	Note to MRL/ Description of commodity in the Evaluation
				Hay	Straw	Fodder	Hay	Straw	Fodder		
Clethodim	10	1999	-	○	x		10	x		DW	
Cyantraniliprole	40 (DM)	2015	-	○	x		40	x		DW	
Cypermethrins (including alpha- and zeta- cypermethrin)	2	2008	PR	x	○		x	2		-	
Dimethenamid-P	0.01 (*)	2005	-	x	○		x	0.01 (*)		DW	
Fluazifop-p-butyl	7 (dw)	2016	-	x	○		x	7		DW	
Fluopyram	70	2017	-	○	x		70	x		DW	<i>On a dry weight basis</i>
Glufosinate-Ammonium	1	2012	PR	x	○		x	1		DW	
Glyphosate	200	2005	PR	x	○		x	200		DW	
Methomyl	10	2001	PR	○	x		10	x		DW	
Pendimethalin	0.3 (dw)	2016	-	x	○		x	0.3		DW	
Sedaxane	0.01 (*)	2014	-	○	x		0.01(*)	x		-	Residues in bean and pea hay from all the trials were <0.01 mg/kg.

a/ “PR”: Periodic Review.

b/ Data available (described) in the JMPR Evaluation. Description of hay, straw or fodder. If the description is not clear, “?”.

c/ If the commodity “fodder” is removed, for what commodity(ies) MRL(s) should be recommended.

d/ DW, dry weight basis; and AR, as received.

1.3.2 AL 3351 Bean hay

- The MRL can be merged with a new commodity of “bean hay”
- However, the MRL can be under the hay together with those MRLs recommended on a basis of hay data above.

Pesticide	MRL (mg/kg)	JMPR (year) ^{a/}		Data available for ^{b/} :			MRL (mg/kg) ^{c/} , if “fodder” is removed			Dry weight? ^{d/}	Note to MRL/ Description of commodities
				Hay	Straw	Fodder	Hay	Straw	Fodder		
Flupyradifurone	30	2016	-	o	x		30	x		DW	<i>On a dry weight basis.</i>

a/ “PR”: Periodic Review.

b/ Data available (described) in the JMPR Evaluation. Description of hay, straw or fodder. If the description is not clear, “?”.

c/ If the commodity “fodder” is removed, for what commodity(ies) MRL(s) should be recommended.

d/ DW, dry weight basis.

1.4 AL 0524 Chick-pea fodder

- There is only one MRL, not sufficient for analysis.

Pesticide	MRL (mg/kg)	JMPR (year) ^{a/}		Data available for ^{b/} :			MRL (mg/kg) ^{c/} , if “fodder” is removed			Dry weight? ^{d/}	Note to MRL/ Description of commodities
				Hay	Straw	Fodder	Hay	Straw	Fodder		
Isoxaflutole	0.01 (*)	2013	-	x	o		x	0.01(*)		-	

a/ “PR”: Periodic Review.

b/ Data available (described) in the JMPR Evaluation. Description of hay, straw or fodder. If the description is not clear, “?”.

c/ If the commodity “fodder” is removed, what MRLs should be recommended.

d/ DW, dry weight basis; and AR, as received.

1.5 AL 1031 Clover hay or fodder

- Only one MRL, insufficient for analysis. Only hay data.

Pesticide	MRL (mg/kg)	JMPR (year) ^{a/}		Data available for ^{b/} :			MRL (mg/kg) ^{c/} , if “fodder” is removed			Dry weight? ^{d/}	Note to MRL/ Description of commodities
				Hay	Straw	Fodder	Hay	Straw	Fodder		
Azinphos-Methyl	5	1991		o	x		5	x		-	Only in the recommendation table for AL 1031 clover hay (no Evaluation available)
Disulfoton	10	1975	-	?	?		10?	10?		?	The 1991 JMPR confirmed the MRL recommended by the 1975 JMPR as temporary MRL. No detailed information available on the 1975 Evaluation.
Imazethapyr	1.5 (dw)	2016	-	o	x		1.5	x		DW	

a/ “PR”: Periodic Review.

b/ Data available (described) in the JMPR Evaluation. Description of hay, straw or fodder. If the description is not clear, “?”.

c/ If the commodity “fodder” is removed, for what commodity(ies) MRL(s) should be recommended.

d/ DW, dry weight basis.

1.6 Pea

1.6.1 AL 0072 Pea hay or pea fodder

- The majority of MRLs are based on hay data. About one third of them are based on straw.
- There were some cases where only straw data were submitted.
- Hay and straw (or any other appropriate name) can be maintained as separate commodities, without using the term “fodder”

Pesticide	MRL (mg/kg)	JMPR (year) ^{a/}		Data available for ^{b/} :			MRL (mg/kg) ^{c/} , if “fodder” is removed			Dry weight? ^{d/}	Note to MRL/ Description of commodities
				Hay	Straw	Fodder	Hay	Straw	Fodder		
Azoxystrobin	20	2013	-	x?	x	plant	20?	?		DW	Residues in plant
Benzovindiflupyr	8 (dw)	2016	-	o	x		8	x		DW	
Bifenthrin	0.7	2010	PR	o?	x	o?	0.7?	0.7?		DW	"Hay or fodder" without detailed description
Clothianidin	0.2 T	2010	-	o	x		0.2 T	x		DW	
Cyantraniliprole	60 (DM)	2015	-	o	x		60	x		DW	
Cypermethrins (including alpha- and zeta- cypermethrin)	2	2008	PR	x	o		x	2		DW	
Diquat	50	2013	PR	x	o		x	50		DW	<i>On a dry weight basis.</i>
Flubendiamide	40	2010	-	o	x		40	x		-	Based on the combined dataset of pea and cowpea hay.
Fluopyram	100	2017	-	o	x		100	x		DW	<i>On a dry weight basis</i>
Fluxapyroxad	40	2012	-	o	x		40	x		DW	
Glyphosate	500	2005	PR	x	o		x	500		DW	
Imazamox	0.05 (*)	2014	-	x	Pod+ haulm		x	0.05(*)		-	
Methiocarb	0.5	2005	-	o	X		0.5	x		DW	

Pesticide	MRL (mg/kg)	JMPR (year) ^{a/}		Data available for ^{b/} :			MRL (mg/kg) ^{c/} , if “fodder” is removed			Dry weight? ^{d/}	Note to MRL/ Description of commodities
				Hay	Straw	Fodder	Hay	Straw	Fodder		
Penthiopyrad	60 (DM)	2012	-	o	x		60	x		DW	
Picoxystrobin	150 (dw)	2017	-	o	x		150	x		DW	
Piperonyl Butoxide	200	2001	PR	o	x		200	x		DW	
Pirimicarb	60	2006	PR	?	?		?	?		DW	<i>On a dry weight basis. Based on pea vines and empty pods (25% dry matter for pea vines)</i>
Pyraclostrobin	30	2004	-	o	x		30	x		DW	<i>On a dry weight basis.</i>
Pyrethrins	1	2000	PR	o	x		1	x		DW	<i>On a dry weight basis Based on the combined dataset of bean and pea hay but the recommendation was only for pea hay or fodder.</i>
Pyrimethanil	3	2007	-	x	o		x	3		-	
Quintozene	0.05	1998	PR	o	o		0.05	0.05?		-	
Sedaxane	0.01 (*)	2014	-	o	x		0.01(*)	x		-	Residues in bean and pea hay from all the trials were <0.01 mg/kg.
Thiamethoxam	0.3	2010	-	o	x		0.3	x		DW	

1.6.2 AL 3353 Pea hay

- There is only one MRL, not sufficient for analysis.
- However, the MRL can be under the hay together with those MRLs recommended on a basis of hay data above.

Pesticide	MRL (mg/kg)	JMPR (year) ^{a/}		Data available for ^{b/} :			MRL (mg/kg) ^{c/} , if “fodder” is removed			Dry weight ? ^{d/}	Note to MRL/ Description of commodities
				Hay	Straw	Fodder	Hay	Straw	Fodder		
Flupyradifurone	50 (dw)	2016	-	o	x		50	x		DW	

a/ “PR”: Periodic Review.

b/ Data available (described) in the JMPR Evaluation. Description of hay, straw or fodder. If the description is not clear, “?”.

c/ If the commodity “fodder” is removed, for what commodity(ies) MRL(s) should be recommended.

d/ DW, dry weight basis; and AR, as received.

1.7 Peanut

1.7.1 AL 0697 Peanut fodder

- A majority of MRLs are based on hay data and two others on straw data.
- Data were submitted only for hay or straw.
- There may be a need to have hay and straw as separate commodities, without using the term “fodder”.

Pesticide	MRL (mg/kg)	JMPR (year) ^{a/}		Data available for ^{b/} :			MRL (mg/kg) ^{c/} , if “fodder” is removed			Dry weight? ^{d/}	Note to MRL/ Description of commodities
				Hay	Straw	Fodder	Hay	Straw	Fodder		
Azoxystrobin	30	2008	-	o	x		30	x		DW	
Benzovindiflupyr	15 (dw)	2016	-	o	x		15	x		DW	
Carbendazim	3 Th	2003	PR	o	x		3 Th	x		DW	
Diflubenzuron	40	2011	-	o	x		40	x		-	
Dimethenamid-P	0.01 (*)	2005	-	x	o		0.01 (*)	0.01 (*)		-	Fodder means the vines (without pods) sampled at normal harvest, after drying in the field.
Dithiocarbamates	5 c	1993	PR	x	x		5 c	x		-	
Fenbuconazole	15	2009	-	o	x		15	x		-	
Fluopyram	47	2017	-	o	x		47	x		DW	<i>On a dry weight basis</i>
Flutriafol	20	2011	-	o	x		20	x			
Haloxypop	5	2009	PR	x	o		x	5		DW	
Imidacloprid	30	2008	-	o	x		30	x		DW	
Indoxacarb	50	2005	-	o	x		50	x		DW	
Methoxyfenozide	80	2009	-	o	x		80	x		DW	
Penthiopyrad	30 (DM)	2012	-	o	x		30	x		DW	
Prothioconazole	15	2014	-	o	x		15	x		-	

Pesticide	MRL (mg/kg)	JMPR (year) ^{a/}		Data available for ^{b/} :			MRL (mg/kg) ^{c/} , if “fodder” is removed			Dry weight? ^{d/}	Note to MRL/ Description of commodities
				Hay	Straw	Fodder	Hay	Straw	Fodder		
Pyraclostrobin	50	2004	-	○	x		50	x		DW	<i>On a dry weight basis.</i>
Tebuconazole	40	2011	PR	○	x		40	x		-	
Trifloxystrobin	5	2004		○	x		5	x		DW	

a/ “PR”: Periodic Review.

b/ Data available (described) in the JMPR Evaluation. Description of hay, straw or fodder. If the description is not clear, “?”.

c/ If the commodity “fodder” is removed, for what commodity(ies) MRL(s) should be recommended.

d/ DW, dry weight basis; and AR, as received.

1.7.2 AL 3352 Peanut hay

- There is only one MRL, insufficient for analysis
- However, the MRL can be under the hay together with those MRLs recommended on a basis of hay data above.

Pesticide	MRL (mg/kg)	JMPR (year) ^{a/}		Data available for ^{b/} :			MRL (mg/kg) ^{c/} , if “fodder” is removed			Dry weight? ^{d/}	Note to MRL/ Description of commodities
				Hay	Straw	Fodder	Hay	Straw	Fodder		
Flupyradifurone	30 (dw)	2016	-	o	x		30	x		DW	

a/ “PR”: Periodic Review.

b/ Data available (described) in the JMPR Evaluation. Description of hay, straw or fodder. If the description is not clear, “?”.

c/ If the commodity “fodder” is removed, for what commodity(ies) MRL(s) should be recommended.

d/ DW, dry weight basis.

1.8 Soya bean

1.8.1 AL 0541 Soya bean fodder

- All except one MRLs (on which information was found) are based on hay.
- For no pesticides, data were submitted on hay only.
- The commodity name can be changed to soya bean hay.

Pesticide	MRL (mg/kg)	JMPR (year) ^{a/}		Data available for ^{b/} :			MRL (mg/kg) ^{c/} , if “fodder” is removed			Dry weight? ^{d/}	Note to MRL/ Description of commodities
				Hay	Straw	Fodder	Hay	Straw	Fodder		
2,4-D	0.01 (*)	1998	PR	?	?		0.01(*)?	?			Based on air-dried forage data
Azoxystrobin	100	2008	-	o	x		100	x		DW	
Carbaryl	15	2002	PR	o	x		15	x		DW	<i>On a dry weight basis</i>
Carbendazim	0.1 C	1998		x	x		x	x		-	<i>Proposed for withdrawal by the 1998 JMPR</i>
Chlorfenapyr	7 (DM)	2018	-	o	x		7	x		DW	
Cyantraniliprole	80 (DM)	2015	-	o	x		80	x		DW	
Cyfluthrin/beta-cyfluthrin	4	2012	PR	o	x		4	x		DW	
Cyproconazole	3	2010	-	o	x		3	x		-	
Fluazifop-p-butyl	4 (dw)	2016	-	o	x		4	x		DW	
Flubendiamide	60	2010	-	o	x		60	x		-	
Fluopyram	35	2017	-	o	x		35	x		DW	<i>On a dry weight basis</i>
Fluxapyroxad	30	2012	-	o	x		30	x		DW	
Imazamox	0.01 (*)	2014	-	o	x		0.01(*)	x		AR	
Imidacloprid	50	2015	-	o	x		50	x		DW	
Methomyl	0.2	2001	PR	o	x		0.2	x		DW	

Pesticide	MRL (mg/kg)	JMPR (year) ^{a/}		Data available for ^{b/} :			MRL (mg/kg) ^{c/} , if "fodder" is removed			Dry weight? ^{d/}	Note to MRL/ Description of commodities
				Hay	Straw	Fodder	Hay	Straw	Fodder		
Paraquat	0.5	2004	PR	o	o	o	0.5	-	-	DW	Mostly for hay. But some data were for "hay or fodder" and "fodder"
Penthiopyrad	200 (DM)	2012	-	o	x		200	x		DW	
Permethrin	50	<1991		?	?		?	?		?	Temporary MRL estimated in 1980. No information was found.
Picoxystrobin	5 (dw)	2017	-	o	x		5	x		DW	
Propiconazole	5	2007	PR	o	x		5	x		-	
Quintozene	0.01 (*)	1998	PR	o	x		0.01 (*)	x		DW	
Sulfoxaflor	3	2011	PR	o	x		3	x		-	
Tioxazafen	0.4 (DM)	2018	-	o	x		0.4	x		DW	

a/ "PR": Periodic Review.

b/ Data available (described) in the JMPR Evaluation. Description of hay, straw or fodder. If the description is not clear, "?".

c/ If the commodity "fodder" is removed, for what commodity(ies) MRL(s) should be recommended.

d/ DW, dry weight basis; and AR, as received.

1.8.2 AL 3354 Soya bean hay

- There are only two MRLs, insufficient for analysis.
- However, the MRL can be under the hay together with those MRLs recommended on a basis of hay data above.

Pesticide	MRL (mg/kg)	JMPR (year) ^{a/}		Data available for ^{b/} :			MRL (mg/kg) ^{c/} , if “fodder” is removed			Dry weight? ^{d/}	Note to MRL/ Description of commodities
				Hay	Straw	Fodder	Hay	Straw	Fodder		
Flupyradifurone	40 (dw)	2016	-	o	X		40	x		DW	
Oxathiapiprolin	0.02	2018	-	o	X		0.02	x		-	

a/ “PR”: Periodic Review.

b/ Data available (described) in the JMPR Evaluation. Description of hay, straw or fodder. If the description is not clear, “?”.

c/ If the commodity “fodder” is removed, for what commodity(ies) MRL(s) should be recommended.

d/ DW, dry weight basis; and AR, as received.

2. AS Group: Straw, Fodder and Forage of Cereal Grains and Grasses (including Buckwheat Fodder)(Straws and Fodder Dry)

Where there is a footnote for an entry referring to another commodity, that entry is not included in this group (e.g., corn fodder referring to maize fodder).

Code	Commodity name	Table Number in the Annex
AS 0161	Straw, fodder (dry) and hay of cereal grains and other grass-like plants	2.1
AS 0081	Straw and fodder (dry) of cereal grains	2.2
AS 0162	Hay or fodder (dry) of grasses	2.3
AS 0163	Straw of cereal grains	2.4
AS 0164	Fodder (dry) of cereal grains	2.5
AS 0447	Sweet corn fodder	2.15
AS 0640	Barley straw and fodder, dry	2.6
AS 0641	Buckwheat fodder	2.17
AS 0645	Maize fodder (dry)	2.14
AS 0646	Millet fodder, dry	2.12
AS 0647	Oat straw and fodder, dry	2.7
AS 0649	Rice straw and fodder, dry	2.11
AS 0650	Rye straw and fodder, dry	2.8
AS 0651	Sorghum straw and fodder, dry	2.13
AS 0653	Triticale straw and fodder, dry	2.9
AS 0654	Wheat straw and fodder, dry	2.10
AS 0657	Teosinte fodder	2.16

With a footnote "See Subgroup Hay or Fodder (dry) of Grasses"

AS 5241	Bermuda grass	-
AS 5243	Bluegrass	-
AS 5245	Brome grass	-
AS 5251	Darnel	-
AS 5253	Fescue	-

Fodder: Coarse feed for livestock animals, especially cattle, horses and sheep, such as straw, hay, maize stalks (stover) etc.

e.g. Maize forage: whole green plant, prior to maturity (including the immature or nearly mature cobs).

Maize fodder: stover or whole stalks (with ears removed) remaining after the harvest of the mature and sun-dried cobs

2.1 AS 0161 Straw, fodder (dry) and hay of cereal grains and other grass-like plants

- Residue data on straw/stover were used for recommending MRLs
- When there are data on both straw and hay, both were used for recommending MRLs.
- MRLs are recommended on a basis of combined dataset of multiple crops.
- For all the pesticides, straw data were submitted while there is no pesticide for which only hay data were submitted.

Pesticide	MRL (mg/kg)	JMPR (year) ^{a/}		Data available for ^{b/} :			MRL (mg/kg) ^{c/} , if "fodder" is removed			Dry weight? ^{d/}	Note to MRL/ Description of commodities
				Hay	Straw	Fodder	Hay	Straw	Fodder		
Chlorantraniliprole	30 (dw) Except maize and rice	2016	-	o	o		o?	30		DW	Based on the combined dataset of barley straw, wheat straw and sorghum stover (except maize and rice)
Cyantraniliprole	0.2	2013	-	o	o		0.2	0.2		DW	<i>On a dry weight basis</i> Based on the combined dataset of cereal and grass straws and hays (sorghum stover, rice straw, corn stover, brome grass hay, Bermuda grass hay, oat straw, wheat straw, oat hay, wheat hay and bluegrass hay)
Methomyl	10	2001	PR	x	o		x	10		DW	From the use of methomyl plus thiodicarb Based on the combined dataset of straw of barley, wheat and rice and stover and hay of sorghum
Sedaxane	0.1	2014	-	o	o		x	0.1		DW	Based on maize and sorghum stover, and the recommendation from the 2012 JMPR on the MRL for barley, oat, rye, triticale and wheat straw and fodder.

a/ "PR": Periodic Review.

b/ Data available (described) in the JMPR Evaluation. Description of hay, straw or fodder. If the description is not clear, "?".

c/ If the commodity "fodder" is removed, for what commodity(ies) MRL(s) should be recommended.

d/ DW, dry weight basis; and AR, as received.

2.2 AS 0081 Straw and fodder (dry) of cereal grains

- Most of MRLs are based on straw data.
- Where there are data for both hay and straw, MRLs are based on hay data (except EMRL for lindane).
- Some MRLs are based on rotational crop studies.
- For no pesticides, data were submitted for hay only.

Pesticide	MRL (mg/kg)	JMPR (year) ^{a/}		Data available for ^{b/} :			MRL (mg/kg) ^{c/} , if “fodder” is removed			Dry weight? ^{d/}	Note to MRL/ Description of commodities
				Hay	Straw	Fodder	Hay	Straw	Fodder		
Azoxystrobin	15 Except maize & stover	2013	-	○	○		15	15		DW	Based on straw and hay of barley and oat and the recommendation of 2008 JMPR for “straw and fodder of cereal grains, except maize”, made on the combined dataset of barley, oat, rice, rye, triticale and wheat straw.
Boscalid	5 Except barley, oats, rye and wheat	2009	-	x	x		x	5		DW	Based on follow-up wheat straw
Cyclaniliprole	0.45 (dw)	2017	-	x	○		x	0.45		DW	Based on the wheat straw data from rotational crop studies and extrapolated to all other straw and fodder of cereal grains.
Cyhalothrin (includes lambda-cyhalothrin)	2	2007	PR	x	○		x	2		DW	Based on wheat straw data. Data were available for straw of barley, oat, rice, rye, triticale and wheat and fodder of maize
Cypermethrins (including alpha- and zeta- cypermethrin)	10	2008	PR	x	○		x	10		DW	Based on wheat straw (highest residues among barley, maize, oats, rice and wheat)
Cyproconazole	5 Except maize, rice & sorghum	2010	-	x	○		x	5		-	Based on wheat straw data. Data were available for barley, rye and wheat straw.
Cyprodinil	10	2003	-	x	○		x	10		DW	Based on the combined dataset of barley and wheat straw.

Pesticide	MRL (mg/kg)	JMPR (year) ^{a/}		Data available for ^{b/} :			MRL (mg/kg) ^{c/} , if "fodder" is removed			Dry weight? ^{d/}	Note to MRL/ Description of commodities
				Hay	Straw	Fodder	Hay	Straw	Fodder		
Dichlobenil	0.4 FL	2014	-	o	o		0.4	o		DW	Based on follow-up wheat hay
Diflubenzuron	1.5	2011	-	x	o		x	1.5		-	Based on the combined dataset of barley and wheat straw
Fludioxonil	0.06 (*)	2004	-	x	o		x	0.06		-	Based on barley, rye and wheat straw and sorghum, maize and sweet corn stover.
Fluopicolide	0.2	2009	-	x	o		x	0.2		DW	Based on follow-up wheat straw.
Flupyradifurone	40 (dw)	2016	-	o	o		40	o		DW	Based on the barely hay data. Residues to cover hays and straws/stovers of cereals. Data available for barley and wheat hay and straw, and sorghum and maize and sweet corn stover
Flusilazole	5 Except rice	2007	PR	x	o		x	5		DW	Based on the combined dataset of barley and wheat straw to extrapolate to rye straw.
Kresoxim-Methyl	3 (DM)	2018	PR	x	o		x	3		DW	Based on the combined dataset of barley and wheat straw. To replace the current CXL of 5 mg/kg recommended by the 1998 JMPR.
Lindane	0.01	2015	PR	o	o		0.01	0.01		DW	Recommended as EMRL On a basis of the data on wheat hay and straw provided to the 2003 JMPR and the USFDA data summary, it was concluded that it was unlikely for residues to be present above 0.01 mg/kg.
Myclobutanil	0.3	2014	PR	o	o		0.3	0.3		DW	Based on follow-up wheat hay and straw.

Pesticide	MRL (mg/kg)	JMPR (year) ^{a/}		Data available for ^{b/} :			MRL (mg/kg) ^{c/} , if “fodder” is removed			Dry weight? ^{d/}	Note to MRL/ Description of commodities
				Hay	Straw	Fodder	Hay	Straw	Fodder		
Pirimicarb	0.3 Except rice	2006	PR	x	o		x	0.3		-	Based on the combined dataset of barley straw, wheat straw, maize fodder
Prochloraz	40	2004	-	x	o		x	40		DW	Based on the data on barley, rye and wheat straw.
Prothioconazole	4	2009	-	x	o		x	4		DW	Based on the combined dataset of barley and wheat straw (2008 JMPR evaluated the data on barley, oat, rye, triticale and wheat straw)(see also AS 0164)
Pyraclostrobin	30	2004	-	o	o		o?	30		DW	<i>On a dry weight basis.</i> Based on hay of barley and wheat. Data were also available for straw of barley and wheat. Confirmed by the 2011 JMPR.
Triadimefon	5 Except maize	2007	PR	x	o		x	5		-	Based on triadimefon and triadimenol uses
Triadimenol	5 Except maize	2007	PR	x	o		x	5			Based on the combined dataset of barley, oat, rye and wheat straw after foliar treatment.

a/ “PR”: Periodic Review.

b/ Data available (described) in the JMPR Evaluation. Description of hay, straw or fodder. If the description is not clear, “?”.

c/ If the commodity “fodder” is removed, for what commodity(ies) MRL(s) should be recommended.

d/ DW, dry weight basis; and AR, as received.

2.3 AS 0162 Hay or fodder (dry) of grasses

- Where there is any information on the data, all the MRLs are based on hay data as the data submitted were on hay only.
- The commodity name may be changed to “hay of grasses” without referring to “fodder”

Pesticide	MRL (mg/kg)	JMPR (year) ^{a/}		Data available for ^{b/} :			MRL (mg/kg) ^{c/} , if “fodder” is removed			Dry weight? ^{d/}	Note to MRL/ Description of commodities
				Hay	Straw	Fodder	Hay	Straw	Fodder		
2,4-D	400	1998	PR	○	x		400	x		-	Based on data on Bermuda grass, Fescue, Kentucky bluegrass, Mixed grass and Rangeland grass
Aminocyclopyrachlor	150	2014	-	○	x		150	x		DW	<i>Included in the recommendation table but not in the body of the 2014 JMPR Evaluation.</i>
Aminopyralid	70	2006	-	○	x		70	x		DW	
Bentazone	2	2013	PR	○	x		2	x		DW	
Dicamba	30	2010	-	○	x		30	x			
Diflubenzuron	3	2011	-	○	x		3	x		-	Based on the combined dataset of barley and wheat hay.
Flumioxazin	0.02 (*)	2015	-	x	x		x	x		x	<i>Not in the body of 2015 Evaluation, Report or Annex I. However, there are descriptions and MRL recommendation for wheat hay at 0.02 (*) mg/kg.</i>
Glyphosate	500	2005	PR	○	x		500	x		DW	
Imazapic	3	2013	-	○	x		3	x		-	
Imazapyr	6	2015	-	○	x		6	x		DW	
MCPA	500	2012	-	○	x		500	x		DW	
Pendimethalin	2500 (dw)	2016	-	○	x		2500	x		DW	
Saflufenacil	30	2016	-	○	x		30	x		DW	<i>On a dry weight basis</i>

a/ “PR”: Periodic Review.

b/ Data available (described) in the JMPR Evaluation. Description of hay, straw or fodder. If the description is not clear, “?”.

c/ If the commodity “fodder” is removed, for what commodity(ies) MRL(s) should be recommended.

d/ DW, dry weight basis; and AR, as received.

2.4 AS 0163 Straw of cereal grains

- Only one MRL, insufficient for analysis. Based on straw data.

Pesticide	MRL (mg/kg)	JMPR (year) ^{a/}		Data available for ^{b/} :			MRL (mg/kg) ^{c/} , if “fodder” is removed			Dry weight? ^{d/}	Note to MRL/ Description of commodities
				Hay	Straw	Fodder	Hay	Straw	Fodder		
Aminopyralid	0.3	2006	-	x	o		x	0.3		DW	Based on the combined dataset of barley, oat and wheat straw and extrapolated to triticale.

a/ “PR”: Periodic Review.

b/ Data available (described) in the JMPR Evaluation. Description of hay, straw or fodder. If the description is not clear, “?”.

c/ If the commodity “fodder” is removed, for what commodity(ies) MRL(s) should be recommended.

d/ DW, dry weight basis; and AR, as received.

2.5 AS 0164 Fodder (dry) of cereal grains

- Only two MRLs, insufficient for analysis but both are based on hay data.

Pesticide	MRL (mg/kg)	JMPR (year) ^{a/}		Data available for ^{b/} :			MRL (mg/kg) ^{c/} , if “fodder” is removed			Dry weight? ^{d/}	Note to MRL/ Description of commodities
				Hay	Straw	Fodder	Hay	Straw	Fodder		
Aminopyralid	3	2006	-	o	x		3	x		DW	Based on wheat hay.
Prothioconazole	5	2009	-	o	x		5	x		DW	Based on the combined dataset of barley and wheat hay. (see AS 0081)

a/ “PR”: Periodic Review.

b/ Data available (described) in the JMPR Evaluation. Description of hay, straw or fodder. If the description is not clear, “?”.

c/ If the commodity “fodder” is removed, for what commodity(ies) MRL(s) should be recommended.

d/ DW, dry weight basis; and AR, as received.

2.6 AS 0640 Barley straw and fodder, dry

- The majority of MRLs are based on straw data.
- Where there are data for both hay and straw, MRLs are based on hay data.
- There are a number of MRLs based on combined dataset of barley and wheat and/or other cereals.
- There is on MRL based on rotational crop data.
- For only one pesticide, data were submitted for hay only. For all others straw data were available.

Pesticide	MRL (mg/kg)	JMPR (year) ^{a/}		Data available for ^{b/} :			MRL (mg/kg) ^{c/} , if “fodder” is removed			Dry weight? ^{d/}	Note to MRL/ Description of commodities
				Hay	Straw	Fodder	Hay	Straw	Fodder		
Acetochlor	0.3	2015	-	x	x		o?	0.3		DW	Extrapolated from follow-up oat straw
Aldicarb	0.05	1994	PR	x	o		x	0.05		-	Based on barley and wheat straw.
Bentazone	0.3	2013	PR	x	o		x	0.3		DW	<i>On a dry weight basis.</i> Based on the combined dataset of barley and wheat straw
Benzovindiflupyr	15 (dw)	2016	-	o	o		o	15		DW	Based on the combined dataset of barley and wheat hay
Bicyclopyrone	0.8 (dw)	2017	-	o	o		0.8	o		DW	Based on residues in wheat hay.
Bifenthrin	0.5	2010		x	o		x	x		x	<i>The 2010 JMPR withdrew the previous MRL of 0.5 mg/kg as no GAP was submitted. CCPR 43 decided to retain the CXL for 4 years. CCPR 48 agreed to retain awaiting the 2018 JMPR.</i>
Bitertanol	0.05 (*)	1999	-	x	o		x	0.05		-	Based on the residues in straw of barley, oat, rye and wheat <0.05 mg/kg.
Bixafen	20 (dw)	2016	-	x	o		x	20		DW	Based on a combined dataset of barley and wheat straw

Pesticide	MRL (mg/kg)	JMPR (year) ^{a/}		Data available for ^{b/} :			MRL (mg/kg) ^{c/} , if “fodder” is removed			Dry weight? ^{d/}	Note to MRL/ Description of commodities
				Hay	Straw	Fodder	Hay	Straw	Fodder		
Boscalid	50	2009	-	x	o		x	50		DW	<i>On a dry weight basis.</i> Based on the combined dataset of barley and wheat straw.
Carbendazim	2 C	1998	PR	x	o		x	2		-	
Chlormequat	50 (dw)	2017	PR	x	o		x	50		DW	
Clothianidin	0.2 T,c	2010	-	x	o		x	0.2		DW	
Dicamba	50	2010	-	x	o		x	50		DW	Based on the combined dataset of barley and wheat straw.
Diquat	40 (dw)	2018	PR	x	o		x	40		DW	Based on the combined dataset of straw of barley, oat and wheat. The GAP was common for barley, rye and triticale.
Disulfoton	3	1991	-	x	o		x	3		-	<i>Only in the recommendation table for AS 0640 Barley straw</i>
Dithiocarbamates	25 C,n	1993	PR	x	x		x	25		-	
Ethephon	7 (dw)	2015	PR	x	o		x	7		DW	
Famoxadone	5	2003	-	x	o		x	5		DW	
Fenbuconazole	3	1997	-	x	o		x	3		-	
Fenpropimorph	0.5	2017	PR	x	o		x	0.5		-	Based on a combined dataset of barley and wheat straw
Fluopyram	2	2017	-	x	o		x	2		DW	<i>On a dry weight basis</i>
Fluxapyroxad	30	2012	-	o	o		30	o		DW	Extrapolated from wheat hay
Glyphosate	400	2005	PR	x	o		x	400		DW	

Pesticide	MRL (mg/kg)	JMPR (year) ^{a/}		Data available for ^{b/} :			MRL (mg/kg) ^{c/} , if “fodder” is removed			Dry weight? ^{d/}	Note to MRL/ Description of commodities
				Hay	Straw	Fodder	Hay	Straw	Fodder		
Imazalil	0.01	2018	PR	○	○		0.01	0.01		DW	Based on residues in straw and whole plant without roots
Imazamox	0.05 (dw)	2017	-	x	○		x	0.05		DW	
Imazapyr	0.05 (dw)	2017	-	x	○		x	0.05		DW	
Imidacloprid	1	2002	-	x	○		x	1		DW	Based on straw of barley, oat, triticale and wheat.
Isoprazam	15 (dw)	2017	-	x	○		x	15		DW	Based on a combined dataset of barley and wheat straw
MCPA	50	2012	-	○	○		50	X		DW	<i>On a dry weight basis.</i> Extrapolated from wheat hay data.
Methiocarb	0.05	2005	-	○	x		0.05	X		DW	
Metrafenone	6	2014	-	x	○		x	6		DW	
Oxydemeton-Methyl	0.1	2004	-	x	○		x	0.1		-	Based on barley and wheat straw
Penthiopyrad	80 (DM)	2012	-	○	○		80	○		DW	Based on the combined dataset of barley and wheat hay.
Picoxystrobin	7 (dw)	2017	-	○	○		7	○		DW	Based on a combined dataset of barley hay and wheat hay.
Pinoxaden	3 (dw)	2016	-	○	○		3	○		DW	Based on the combined dataset of barley and wheat hay.
Propiconazole	8	2014	PR	○	○		8	○		-	Based on barley hay
Quintozene	0.01 (*)	1998	PR	x	○		x	0.01			

Pesticide	MRL (mg/kg)	JMPR (year) ^{a/}		Data available for ^{b/} :			MRL (mg/kg) ^{c/} , if “fodder” is removed			Dry weight? ^{d/}	Note to MRL/ Description of commodities
				Hay	Straw	Fodder	Hay	Straw	Fodder		
Saflufenacil	10	2016	-	x	o		x	10		DW	<i>On a dry weight basis.</i> Based on the combined dataset of barley and wheat straw.
Sulfoxaflor	3	2011	PR	o	o		o	3		DW	Based on wheat straw residues (higher than barley hay/straw and wheat hay)
Tebuconazole	40	2011	PR	x	o		x	40		DW	Based on barley straw (highest among straw of barley, rye and wheat, and hay of wheat)
Thiamethoxam	2	2010	-	x	o		x	2		DW	
Trifloxystrobin	7	2004	-	x	o		x	7		DW	
Trinexapac-ethyl	0.9	2013	-	o	o		0.9	o		DW	Based on wheat hay

a/ “PR”: Periodic Review.

b/ Data available (described) in the JMPR Evaluation. Description of hay, straw or fodder. If the description is not clear, “?”.

c/ If the commodity “fodder” is removed, for what commodity(ies) MRL(s) should be recommended.

d/ DW, dry weight basis; and AR, as received.

2.7 AS 0647 Oat straw and fodder, dry

- More than half of the MRLs are extrapolated from wheat or barley. However in one case, data on follow up oat straw is used for extrapolation to other cereals.
- Most of MRLs are based on straw data.
- Where there are data for both hay and straw, the MRL is based on hay data (one case)

Pesticide	MRL (mg/kg)	JMPR (year) ^{a/}		Data available for ^{b/} :			MRL (mg/kg) ^{c/} , if “fodder” is removed			Dry weight? ^{d/}	Note to MRL/ Description of commodities
				Hay	Straw	Fodder	Hay	Straw	Fodder		
Acetochlor	0.3	2015	-	○	○		○	0.3		DW	Only dry weight basis. Based on follow-up oat straw. It was extrapolated to barley, buckwheat, millet, rye and teosinte as well as to <u>triticale</u> (not included in Annex I or the database)
Bentazone	0.3	2013	PR	x	○		x	0.3		DW	<i>On a dry weight basis.</i> Extrapolated from the combined dataset of barley and wheat straw
Benzovindiflupyr	15 (dw)	2016	-	○	○		15	○?		DW	Extrapolated. Based on the combined dataset of “barley hay” and “wheat hay”
Bitertanol	0.05 (*)	1999	-	x	○		x	0.05		-	Based on the residues in straw of barley, oat, rye and wheat <0.05 mg/kg.
Bixafen	20 (dw)	2016	-	x	○		x	20		DW	Extrapolated. Based on a combined dataset of barley and wheat straw
Boscalid	50	2009	-	x	○		x	50		DW	Extrapolated. Based on the combined dataset of barley and wheat straw.
Chlormequat	7 (dw)	2017	PR	x	○		x	7		DW	
Disulfoton	0.05	1991	-	x	○		x	0.05		-	Only in recommendation table for AL 0647 Oat straw.

Pesticide	MRL (mg/kg)	JMPR (year) ^{a/}		Data available for ^{b/} :			MRL (mg/kg) ^{c/} , if “fodder” is removed			Dry weight? ^{d/}	Note to MRL/ Description of commodities
				Hay	Straw	Fodder	Hay	Straw	Fodder		
Fenpropimorph	0.5	2017	PR	X	o		x	0.5		-	Extrapolated. Based on the combined dataset of barley and wheat straw
Fluopyram	2	2017	-	X	o		x	2		DW	<i>On a dry weight basis</i> Extrapolated from the barley straw data
Fluxapyroxad	30	2012	-	X	x		30	o?		DW	Extrapolated from wheat hay data.
Glyphosate	100	2005	PR	X	o		x	100		DW	
Imidacloprid	1	2002	-	X	o		x	1		DW	Based on straw of barley, oat, triticale and wheat.
MCPA	50	2012	-	X	x		50	o?		DW	<i>On a dry weight basis.</i> Extrapolated from wheat hay data.
Metrafenone	6	2014	-	X	x		x	6		DW	Extrapolated from barley straw
Penthiopyrad	80 (DM)	2012	-	X	x		80	o		DW	Extrapolated. Based on the combined dataset of barley and wheat hay.
Picoxystrobin	7 (dw)	2017	-	X	x		7	o?		DW	Extrapolated from MRL for barley and wheat straw and fodder, dry (based on the combined dataset of barley and wheat hay)
Propiconazole	8	2014	PR	o	o		8	?		-	Extrapolated from oat hay
Trinexapac-ethyl	0.9	2013	-	X	x		0.9	o?		DW	Extrapolated from wheat hay

a/ “PR”: Periodic Review.

b/ Data available (described) in the JMPR Evaluation. Description of hay, straw or fodder. If the description is not clear, “?”.

c/ If the commodity “fodder” is removed, for what commodity(ies) MRL(s) should be recommended.

d/ DW, dry weight basis; and AR, as received.

2.8 AS 0650 Rye straw and fodder, dry

- The majority of MRLs are extrapolated from barley and wheat (and/or other cereals)
- One MRL is based on rotational crop study on oat.

Pesticide	MRL (mg/kg)	JMPR (year) ^{a/}		Data available for ^{b/} :			MRL (mg/kg) ^{c/} , if “fodder” is removed			Dry weight? ^{d/}	Note to MRL/ Description of commodities
				Hay	Straw	Fodder	Hay	Straw	Fodder		
Acetochlor	0.3	2015	-	○	○		x	0.3		DW	<i>On a dry weight basis.</i> Extrapolated from follow-up oat straw
Bentazone	0.3	2013	PR	X	○		x	0.3		DW	<i>On a dry weight basis.</i> Extrapolated from the combined dataset of barley and wheat straw
Benzovindiflupyr	15 (dw)	2016	-	○	○		15	x		DW	Extrapolated. Based on the combined dataset of barley wheat hay
Bitertanol	0.05 (*)	1999	-	X	○		x	0.05		-	Based on the residues in straw of barley, oat, rye and wheat <0.05 mg/kg.
Bixafen	20 (dw)	2016	-	X	○		x	20		DW	Extrapolated. Based on the combined dataset of barley and wheat straw
Boscalid	50	2009	-	X	○		x	50		DW	Extrapolated. Based on the combined dataset of barley and wheat straw.
Chlormequat	20 (dw)	2017	PR	X	○		x	20		DW	
Diquat	40 (dw)	2018	PR	X	○		x	40		DW	Extrapolated. Based on the combined dataset of straw of barley, oat and wheat. The GAP was common for barley, rye and triticale.

Pesticide	MRL (mg/kg)	JMPR (year) ^{a/}		Data available for ^{b/} :			MRL (mg/kg) ^{c/} , if “fodder” is removed			Dry weight? ^{d/}	Note to MRL/ Description of commodities
				Hay	Straw	Fodder	Hay	Straw	Fodder		
Ethephon	7 (dw)	2015	PR	X	x		x	7		-	Extrapolated from barley straw
Fenpropimorph	0.5	2017	PR	X	o		x	0.5		-	Extrapolated. Based on the combined dataset of barley and wheat straw
Fluopyram	23	2017	-	X	x		?	23		DW	<i>On a dry weight basis</i> Extrapolated from MRL for wheat straw and fodder, dry (based on straw data)
Fluxapyroxad	30	2012	-	X	x		30	x		DW	Extrapolated from wheat hay data
Imidacloprid	1	2002	-	X	o		x	1		DW	Based on straw of barley, oat, triticale and wheat (extrapolated?)
Isopyrazam	15 (dw)	2017	-	X	o		x	15		DW	Extrapolated. Based on a combined dataset of barley and wheat straw
MCPA	50	2012	-	X	x		50	x		DW	<i>On a dry weight basis.</i> Extrapolated from wheat hay data.
Metrafenone	10	2014	-	X	x		x	10		DW	Extrapolated from wheat straw
Oxydemeton-Methyl	0.1	2004	-	X	o		X	0.1		-	Extrapolated from barley and wheat straw
Penthiopyrad	80 (DM)	2012	-	X	x		80	o		DW	Extrapolated. Based on the combined dataset of barley and wheat hay.

Pesticide	MRL (mg/kg)	JMPR (year) ^{a/}		Data available for ^{b/} :			MRL (mg/kg) ^{c/} , if “fodder” is removed			Dry weight? ^{d/}	Note to MRL/ Description of commodities
				Hay	Straw	Fodder	Hay	Straw	Fodder		
Picoxystrobin	7 (dw)	2017	-	X	x		7	o?		DW	Extrapolated from MRL for barley and wheat straw and fodder, dry (based on the combined dataset of barley and wheat hay)
Propiconazole	15	2014	PR	o	x	x	15	?		-	Extrapolated from wheat hay
Tebuconazole	40	2011	PR	x	o		x	40		DW	Based on barley straw (highest among straw of barley, rye and wheat, and hay of wheat)

a/ “PR”: Periodic Review.

b/ Data available (described) in the JMPR Evaluation. Description of hay, straw or fodder. If the description is not clear, “?”.

c/ If the commodity “fodder” is removed, for what commodity(ies) MRL(s) should be recommended.

d/ DW, dry weight basis; and AR, as received.

2.9 AS 0653 Triticale straw and fodder, dry

- The majority of MRLs are extrapolated from barley and wheat (and/or other cereals)

Pesticide	MRL (mg/kg)	JMPR (year) ^{a/}		Data available for ^{b/} :			MRL (mg/kg) ^{c/} , if “fodder” is removed			Dry weight? ^{d/}	Note to MRL/ Description of commodities
				Hay	Straw	Fodder	Hay	Straw	Fodder		
Bentazone	0.3	2013	PR	x	o		x	0.3		DW	<i>On a dry weight basis.</i> Extrapolated from the combined dataset of barley and wheat straw
Benzovindiflupyr	15 (dw)	2016	-	o	o		15	x		DW	Extrapolated. Based on the combined dataset of “barley hay” and “wheat hay”
Bitertanol	0.05 (*)	1999	-	x	o		x	0.05		DW	Based on the residues in straw of barley, oat, rye and wheat <0.05 mg/kg. Extrapolated
Bixafen	20 (dw)	2016	-	x	o		x	20		DW	Extrapolated. Based on a combined dataset of barley and wheat straw
Chlormequat	80 (dw)	2017	PR	x	o		X	80		DW	Based on the residue data on wheat straw adjusted to the GAP for triticale.
Diquat	40 (dw)	2018	PR	x	o		X	40		DW	Extrapolated. Based on the combined dataset of straw of barley, oat and wheat. The GAP was common for barley, rye and triticale.
Ethephon	7 (dw)	2015	PR	x	x		X	7		-	Extrapolated from barley straw
Fenpropimorph	0.5	2017	PR	x	o		X	0.5		-	Extrapolated. Based on the combined dataset of barley and wheat straw

Pesticide	MRL (mg/kg)	JMPR (year) ^{a/}		Data available for ^{b/} :			MRL (mg/kg) ^{c/} , if “fodder” is removed			Dry weight? ^{d/}	Note to MRL/ Description of commodities
				Hay	Straw	Fodder	Hay	Straw	Fodder		
Fluopyram	23	2017	-	x	o		X	23		DW	<i>On a dry weight basis</i> Extrapolated from MRL for wheat straw and fodder, dry (based on straw data)
Fluxapyroxad	30	2012	-	x	x		30	x		DW	Extrapolated from wheat hay data
Imazalil	0.01	2018	PR	x	x		0.01	0.01		DW	Based on data on barley straw and whole plant without roots
Isoprazam	15 (dw)	2017	-	x	o		X	15		DW	Extrapolated. Based on a combined dataset of barley and wheat straw
MCPA	50	2012	-	x	x		50	x		DW	<i>On a dry weight basis.</i> Extrapolated from wheat hay data.
Metrafenone	10	2014	-	x	x		X	10		DW	Extrapolated from wheat straw
Penthiopyrad	80 (DM)	2012	-	x	x		80	x		DW	Extrapolated. Based on the combined dataset of barley and wheat hay.
Picoxystrobin	7 (dw)	2017	-	x	x		7	x		DW	Extrapolated from MRL for barley and wheat straw and fodder, dry (based on the combined dataset of barley and wheat hay)
Propiconazole	15	2014	PR	x	x		15	?		-	Only in the recommendation table. Possibly extrapolated from wheat hay.
Saflufenacil	10	2016	-	x	x		x	10		DW	Extrapolated. <i>On a dry weight basis.</i> Based on the combined dataset of barley and wheat straw.

Pesticide	MRL (mg/kg)	JMPR (year) ^{a/}		Data available for ^{b/} :			MRL (mg/kg) ^{c/} , if “fodder” is removed			Dry weight? ^{d/}	Note to MRL/ Description of commodities
				Hay	Straw	Fodder	Hay	Straw	Fodder		
Trinexapac-ethyl	0.9	2013	-	x	x		0.9	o		DW	Extrapolated from wheat hay

a/ “PR”: Periodic Review.

b/ Data available (described) in the JMPR Evaluation. Description of hay, straw or fodder. If the description is not clear, “?”.

c/ If the commodity “fodder” is removed, for what commodity(ies) MRL(s) should be recommended.

d/ DW, dry weight basis; and AR, as received.

Special note:

- For acetochlor, an MRL for oat straw and fodder, dry was extrapolated to triticale straw and fodder, dry by the 2015 JMPR, but not in the Codex database.
- For imidacloprid, an MRL was proposed by the 2002 JMPR at 1 mg/kg based on the data on barley, oat, triticale and wheat, but not in the Codex database
- For fenbuconazole, an MRL was proposed by the 1997 JMPR (body of the 1997 JMPR Report) based on the residue data on wheat straw and fodder, dry. However, the MRL for rye straw and fodder, dry is not in the recommendation table of the 1997 JMPR.

2.10 AS 0654 Wheat straw and fodder, dry

- Most of MRLs are based on straw data.
- Where there are data on both hay and straw, the majority of MRLs are based on hay data but others on straw data .
- Where there are any data, straw data were submitted for all the pesticides.

Pesticide	MRL (mg/kg)	JMPR (year) ^{a/}		Data available for ^{b/} :			MRL (mg/kg) ^{c/} , if “fodder” is removed			Dry weight? ^{d/}	Note to MRL/ Description of commodities
				Hay	Straw	Fodder	Hay	Straw	Fodder		
2,4-D	100	1998	PR	x	o		X	100		-	
Acetochlor	0.2	2015	-	x	o		X	0.2		DW	<i>On a dry weight basis.</i> Based on follow-up “wheat straw”
Aldicarb	0.05	1994	PR	x	o		X	0.05		-	Based on barley and wheat straw.
Bentazone	0.3	2013	PR	x	o		X	0.3		DW	<i>On a dry weight basis.</i> Based on the combined dataset of barley and wheat straw
Benzovindiflupyr	15 (dw)	2016	-	o	o		o	15		DW	Based on the combined dataset of “barley hay” and “wheat hay”
Bicyclopyrone	0.8 (dw)	2017	-	o	o		o?	0.8		DW	Based on residues in barley hay
Bitertanol	0.05 (*)	1999	-	x	o		X	0.05		DW	Based on the residues in straw of barley, oat, rye and wheat <0.05 mg/kg.
Bixafen	20 (dw)	2016	-	x	o		X	20		DW	Based on a combined dataset of barley and wheat straw
Boscalid	50	2009	-	x	o		X	50		DW	Based on the combined dataset of barley and wheat straw.
Carbaryl	30	2002	PR	x	o		X	30		DW	<i>On a dry weight basis</i>
Carbendazim	1 B,C	1998	PR	x	o		X	1		-	
Chlormequat	80 (dw)	2017	PR	x	o		X	80		DW	
Chlorpyrifos	5	2000	PR	x	o		X	5		DW	
Clothianidin	0.2 T,c	2010	-	x	o		X	0.2		DW	
Dicamba	50	2010	-	x	o		X	50		DW	Based on the combined dataset of barley and wheat straw.

Pesticide	MRL (mg/kg)	JMPR (year) ^{a/}		Data available for ^{b/} :			MRL (mg/kg) ^{c/} , if "fodder" is removed			Dry weight? ^{d/}	Note to MRL/ Description of commodities
				Hay	Straw	Fodder	Hay	Straw	Fodder		
Difenoconazole	3	2007	-	x	o		X	3		-	
Dimethoate	1	2003	PR	x	o		X	1		DW	<i>On a dry weight basis.</i>
Disulfoton	5	1998	-	x	o		X	5		-	
Dithiocarbamates	25 C,n,m	1993	PR	x	o		X	25		-	Based on mancozeb use.
Esfenvalerate	2	2002	-	x	o		X	2		DW	
Ethephon	7 (dw)	2015	PR	x	o		X	7		DW	Extrapolated from barley straw.
Famoxadone	7	2003	-	x	o		X	7		DW	
Fenbuconazole	3	1997	-	x	o		X	3		-	<i>This MRL was extrapolated to rye straw and fodder, dry according to the 1997 JMPR Report but the MRL for rye straw and fodder, dry is not in the recommendation table.</i>
Fenpropimorph	0.5	2017	PR	x	o		X	0.5		-	Based on the combined dataset of barley and wheat straw
Flonicamid	0.3	2015	-	x	o		X	0.3		-	
Flumioxazin	7 (dw)	2015	-	o	o		0.02*	7		DW	Based on straw. <i>There is another recommendation for wheat hay at 0.02 * mg/kg.</i>
Fluopyram	23	2017	-	o	o		o	23		DW	<i>On a dry weight basis</i> Based on straw data
Flutriafol	8	2011	-	x	o		X	8		-	
Fluxapyroxad	30	2012	-	o	o		X	30		DW	Based on hay data
Glyphosate	300	2005	PR	x	o		X	300		DW	
Imazalil	0.01	2018	PR	x	x		0.01	0.01		DW	Based on barley straw and whole plant without roots; to replace the current Codex MRL of 0.1 mg/kg.
Imazamox	0.05 (*)	2014	-	o	o		0.05(*)	0.05(*)		AR	

Pesticide	MRL (mg/kg)	JMPR (year) ^{a/}		Data available for ^{b/} :			MRL (mg/kg) ^{c/} , if "fodder" is removed			Dry weight? ^{d/}	Note to MRL/ Description of commodities
				Hay	Straw	Fodder	Hay	Straw	Fodder		
Imazapic	0.05 (*)	2013	-	x	o		X	0.05(*)		-	
Imazapyr	0.05 (*)	2013	-	x	o		X	0.05(*)		-	
Imidacloprid	1	2002	-	x	o		X	1		DW	Based on straw of barley, oat, triticale and wheat
Isoprazam	15 (dw)	2017	-	x	o		X	15		DW	Based on a combined dataset of barley and wheat straw
MCPA	50	2012	-	o	o		X	50		DW	Based on wheat hay data
Methiocarb	0.05	2005	-	x	o		x	0.05		DW	
Methomyl	5	<1991		x	x		?	?		?	<i>There is another MRL for "AS 0161 Straw, fodder (dry) and hay of cereal grains and other grass-like plants" at 10 mg/kg recommended by the 2001 JMPR, which should cover wheat straw and fodder, dry.</i> <i>The MRL was adapted in 1991 and should have been replaced by the one for AS 0161.</i>
Metrafenone	10	2014	-	x	o		x	10		DW	
Oxydemeton-Methyl	0.1	2004	-	x	o		x	0.1		-	Based on barley and wheat straw.
Penthiopyrad	80 (DM)	2012	-	o	o		80	x		DW	Based on the combined dataset of barley and wheat hay.
Picoxystrobin	7 (dw)	2017	-	o	o		x	7		DW	Based on a combined dataset of barley hay and wheat hay.
Pinoxaden	3 (dw)	2016	-	o	o		3	o		DW	Based on the combined dataset of barley and wheat hay.
Propiconazole	15	2014	PR	o	o		x	15		-	Based on wheat hay.
Quintozene	0.03	1998	PR	x	o		x	0.03		-	

Pesticide	MRL (mg/kg)	JMPR (year) ^{a/}		Data available for ^{b/} :			MRL (mg/kg) ^{c/} , if “fodder” is removed			Dry weight? ^{d/}	Note to MRL/ Description of commodities
				Hay	Straw	Fodder	Hay	Straw	Fodder		
Saflufenacil	10	2016	-	x	o		x	10		DW	<i>On a dry weight basis.</i> Based on the combined dataset of barley and wheat straw.
Spinosad	1	2001	-	o	o		x	1		DW	<i>On a dry weight basis.</i> Based on the combined dataset of hay and straw.
Sulfoxaflor	3	2011	PR	o	o		o	3		DW	<i>On a dry weight basis.</i> Based on wheat straw residues (higher than barley hay/straw and wheat hay)
Tebuconazole	40	2011	PR	o	o		o	40		DW	Based on barley straw (highest among straw of barley, rye and wheat, and wheat hay)
Thiacloprid	5	2006	-	x	o		x	5		DW	
Thiamethoxam	2	2010	-	x	o		x	2		DW	
Trifloxystrobin	5	2004	-	x	o		x	5		DW	
Trinexapac-ethyl	0.9	2013	-	o	o		o?	0.9		DW	Based on wheat hay data

a/ “PR”: Periodic Review.

b/ Data available (described) in the JMPR Evaluation. Description of hay, straw or fodder. If the description is not clear, “?”.

c/ If the commodity “fodder” is removed, for what commodity(ies) MRL(s) should be recommended.

d/ DW, dry weight basis; and AR, as received.

2.11 AS 0649 Rice straw and fodder, dry

- Except one pesticide, all other MRLs are based on straw data.
- Except that one, for which hay data were available, straw data were submitted for all other pesticides.

Pesticide	MRL (mg/kg)	JMPR (year) ^{a/}		Data available for ^{b/} :			MRL (mg/kg) ^{c/} , if “fodder” is removed			Dry weight? ^{d/}	Note to MRL/ Description of commodities
				Hay	Straw	Fodder	Hay	Straw	Fodder		
2,4-D	10	1998	PR	x	o		x	10		-	
Abamectin	0.001	2015	PR	x	o		x	0.001		-	Whole plants including grain with husks were analyzed.
Acephate	0.3	2011	PR	x	o		x	0.3		-	
Carbaryl	120	2002	PR	x	o		x	120		DW	<i>On a dry weight basis</i>
Carbendazim	15 C	1998	PR	x	o		x	15		DW	
Carbofuran	1	2002	PR	o	x		1	x		DW	
Carbosulfan	0.05 (*)	2003		x	o		x	0.05 (*)?		-	<i>The 2003 JMPR Report indicates, “too few trials to make a recommendation.” However, the residues from 2 trials were <0.01 mg/kg.</i>
Cyantraniliprole	1.7 (dw)	2018	-	x	o		x	1.7		DW	
Cycloxydim	0.09	2012	PR	x	o		x	0.09(*)		DW	
Difenoconazole	17 (dw)	2017	-	x	o		x	17		DW	
Diiflubenzuron	0.7	2002	PR	x	o		x	0.7		DW	
Dinotefuran	6	2012	-	x	o		x	6		-	
Etofenprox	0.05	2011	PR	x	o		x	0.05		-	
Fipronil	0.2	2001	PR	x	o		x	0.2		DW	

Pesticide	MRL (mg/kg)	JMPR (year) ^{a/}		Data available for ^{b/} :			MRL (mg/kg) ^{c/} , if “fodder” is removed			Dry weight? ^{d/}	Note to MRL/ Description of commodities
				Hay	Straw	Fodder	Hay	Straw	Fodder		
Fluopyram	17	2017	-	○	○		○	17		DW	<i>On a dry weight basis. Based on residues in straw</i>
Flutolanil	10	2002	-	x	○		x	10		DW	
Fluxapyroxad	50 (dw)	2015	-	x	○		x	50		DW	
Glufosinate-Ammonium	2	2012	PR	x	○		x	2		AR	
Imazamox	0.01 (*)	2014	-	x	○		x	0.01(*)		AR	
Imazethapyr	0.15 (*) (dw)	2016	-	x	○		x	0.15(*)		DW	
Methamidophos	0.1	2011	-	x	○		x	0.1			Based on the use of acephate
Paraquat	0.05	2009	PR	x	○		x	0.05		-	
Pyraclostrobin	5 (dw)	2018	-	x	○		x	5		DW	
Quinclorac	8 (dw)	2017	-	x	○		x	8		DW	
Spinetoram	1.5	2017	-	x	○		X	1.5		DW	<i>On a dry weight basis.</i>
Sulfoxaflor	20	2018	-	x	○		X	20		-	
Trifloxystrobin	10	2004	-	x	○		X	10		DW	
Triflumezopyrim	0.4 (dw)	2017	-	x	○		X	0.4		DW	

a/ “PR”: Periodic Review.

b/ Data available (described) in the JMPR Evaluation. Description of hay, straw or fodder. If the description is not clear, “?”.

c/ If the commodity “fodder” is removed, for what commodity(ies) MRL(s) should be recommended.

d/ DW, dry weight basis; and AR, as received.

2.12 AS 0646 Millet fodder, dry

- MRLs are extrapolated or based on rotational crop data.

Pesticide	MRL (mg/kg)	JMPR (year) ^{a/}		Data available for ^{b/} :			MRL (mg/kg) ^{c/} , if “fodder” is removed			Dry weight? ^{d/}	Note to MRL/ Description of commodities
				Hay	Straw	Fodder	Hay	Straw	Fodder		
Acetochlor	0.3	2015	-	x	x		X	0.3		DW	<i>On a dry weight basis.</i> Based on follow-up oat straw.
Bentazone	0.3	2013	PR	x	o		X	0.3		DW	<i>On a dry weight basis.</i> Extrapolated from the combined dataset of barley and wheat straw
Penthiopyrad	10 (DM)	2012	-	x	o		X	10		DW	Extrapolated. Based on sorghum stover

a/ “PR”: Periodic Review.

b/ Data available (described) in the JMPR Evaluation. Description of hay, straw or fodder. If the description is not clear, “?”.

c/ If the commodity “fodder” is removed, for what commodity(ies) MRL(s) should be recommended.

d/ DW, dry weight basis; and AR, as received.

2.13 AS 0651 Sorghum straw and fodder, dry

- Most of MRLs are based on stover data.
- Where there is information, data on straw were available for all but one pesticides.

Pesticide	MRL (mg/kg)	JMPR (year) ^{a/}		Data available for ^{b/} :			MRL (mg/kg) ^{c/} , if "fodder" is removed			Dry weight? ^{d/}	Note to MRL/ Description of commodities
				Hay	Straw	Fodder	Hay	Straw	Fodder		
Aldicarb	0.5	1994	PR	x	o		X	0.5		-	
Azoxystrobin	30	2013	-	x	o		X	30		DW	<i>On a dry weight basis. Based on stover</i>
Carbofuran	0.5	1997	PR	x		o	x	0.5		DW	
Chlorpyrifos	2	2000	PR	x	o		x	2		DW	Based on stover
Clothianidin	0.01 (*) C	2010	-	x	o		x	0.01(*)		DW	Based on stover
Dicamba	8	2010	-	x	o		x	8		DW	Based on stover
Dimethenamid-P	0.01 (*)	2005	-	x	o		x	0.01 (*)		-	Fodder means the mature plant (without roots) except grain, sampled at normal grain harvest.
Flutriafol	7	2015	-		o		x	7		DW	Based on stover
Fluxapyroxad	7 (dw)	2015	-	x	o		x	7		DW	Based on stover
Glyphosate	50	2005	PR	o	o		x	50		DW	Based on stover
Paraquat	0.3	2004	PR	o		o	0.3?	x	0.3?	DW	<i>On a dry weight basis. Based on hay or fodder data whichever higher.</i>
Penthiopyrad	10 (DM)	2012	-	x	o		x	10		DW	Based on stover
Permethrin	20	<1991		?	?		?	?		?	
Saflufenacil	0.05	2011	PR	x	o		x	0.05		-	
Sulfoxaflor	0.7	2018	-	x	o		x	0.7		-	Based on stover
Terbufos	0.3	2005	PR	x	o		x	0.3		DW	<i>On a dry weight basis. Based on stover.</i>

a/ "PR": Periodic Review.

b/ Data available (described) in the JMPR Evaluation. Description of hay, straw or fodder. If the description is not clear, "?".

c/ If the commodity "fodder" is removed, for what commodity(ies) MRL(s) should be recommended.

d/ DW, dry weight basis; and AR, as received.

2.14 AS 0645 Maize fodder (dry)

- Most of MRLs are based on stover.
- Where information is available, data were submitted for straw/stover for all the pesticides except one
- For that one pesticide, hay data were available but for all others hay data were not available
- It may be possible to use the term “stover” clearly defined or some related term.

Pesticide	MRL (mg/kg)	JMPR (year) ^{a/}		Data available for ^{b/} :			MRL (mg/kg) ^{c/} , if “fodder” is removed			Dry weight? ^{d/}	Note to MRL/ Description of commodities
				Hay	Straw	Fodder	Hay	Straw	Fodder		
2,4-D	40	1998	PR	x		o	x	40		-	
Aldicarb	0.5	1994	PR	o	x		0.5?	x		DW	Based on stover.
Azoxystrobin	40	2008	-	x	x	o	x	x	40	DW	
Bentazone	0.4	2013	PR	x	o		x	0.4		DW	<i>On a dry weight basis</i>
Bicyclopyrone	0.5	2017	-	x	o		x	0.5		DW	<i>On a dry weight basis. Based on a combined dataset of corn crops (stover)</i>
Bifenthrin	15	2010	PR	x	o		x	15		DW	
Carbaryl	250	2002	PR	x	o		x	250		DW	<i>On a dry weight basis. Based on stover of field corn and sweet corn</i>
Chlorpyrifos	10	2000	PR	x	o		x	10		DW	Based on stover. Data on sweet corn stover were available but with lower residues.
Clothianidin	0.01 (*) T	2010	-	x	o		x	0.01(*)		DW	Based on stover
Cycloxydim	2	2012	PR	x	o		x	2		DW	Based on stover (rest of plant without roots)
Cyproconazole	2	2010	-	x	o		x	2		-	
Dicamba	0.6	2010	-	x	o		x	0.6		DW	Based on stover
Dimethenamid-P	0.01 (*)	2005	-	x	o		x	0.01 (*)		-	Fodder means mature stalks and leaves, without cobs sampled at normal harvest
Disulfoton	3	1991	-	x	o		x	3		DW	<i>On a dry weight basis.</i>
Dithiocarbamates	2 C	1993	PR	x	o		x	2		-	

Pesticide	MRL (mg/kg)	JMPR (year) ^{a/}		Data available for ^{b/} :			MRL (mg/kg) ^{c/} , if “fodder” is removed			Dry weight? ^{d/}	Note to MRL/ Description of commodities
				Hay	Straw	Fodder	Hay	Straw	Fodder		
Fenpyroximate	5	2017	PR	x	o		x	5		-	Based on stover
Fipronil	0.1	2001	PR	x	o		x	0.1		DW	
Flumioxazin	0.02 (*)	2015	-	x	o		x	0.02(*)		DW	Based on stover.
Fluopyram	18	2017	-	x	o		x	18		DW	<i>On a dry weight basis.</i> Based on residues in stover
Flutriafol	20	2015	-	x	o		x	20		DW	Based on stover.
Fluxapyroxad	15	2012	-	x	o		x	15		DW	Based on stover
Glufosinate-Ammonium	8	2012	PR	x	o		x	8		AR	<i>On a fresh weight basis.</i> Based on stover.
Glyphosate	150	2005	PR	x	o		x	150		DW	Based on stover
Imazethapyr	0.1 (*) (dw)	2016	-	x	o		x	0.1(*)		DW	
Imidacloprid	0.2	2002	-	x	o		x	0.2		DW	Based on stover
Indoxacarb	25	2005	-	x	o		x	25		DW	Based on sweet corn stover data
Isoxaflutole	0.02 (*)	2013	-	x	o		x	0.02(*)		-	Based on stover (plant after removal of cobs/kernels)
MCPA	0.3	2012	-	x	o		x	0.3		DW	Based on stover
Methoxyfenozide	60	2003	-	x	o		x	60		DW	<i>On a dry weight basis.</i> Based on sweet corn stover
Oxathiapiprolin	0.01 (*)	2018	-	x	o		x	0.01(*)		-	Based on stover
Paraquat	10	2004	PR	x		o	x		10	DW	<i>On a dry weight basis.</i> Based on fodder
Penthiopyrad	10 (DM)	2012	-	x	o		x	10		DW	Extrapolated. Based on sorghum stover data
Permethrin	100	<1991		?	?		?	?		?	<i>No information found</i>
Picoxystrobin	20 (dw)	2017	-	x	o		x	20		DW	Based on stover
Prothioconazole	15	2017	-	x	o		x	15		DW	<i>On a dry weight basis.</i> Based on the combined dataset of maize and sweet corn stover.

Pesticide	MRL (mg/kg)	JMPR (year) ^{a/}		Data available for ^{b/} :			MRL (mg/kg) ^{c/} , if “fodder” is removed			Dry weight? ^{d/}	Note to MRL/ Description of commodities
				Hay	Straw	Fodder	Hay	Straw	Fodder		
Quintozene	0.01	1998	PR	x		o	x	0.01		-YY	
Saflufenacil	0.05	2011	PR	x	o		x	0.05		-	
Spinosad	5	2001	-	x	o		x	5		DW	Based on sweet corn stover
Spiromesifen	6	2016	-	x		(stover)	x	6		DW	<i>On a dry weight basis.</i>
Sulfoxaflor	0.6	2018	-	x	o		x	0.6		-	Based on stover
Terbufos	0.2	2005	PR	x	o		x	0.2		DW	<i>On a dry weight basis</i> Based on stover
Thiamethoxam	0.05	2010	-	x	o		x	0.05		DW	
Tioxazafen	0.03 (DM)	2018	-	x	o		x	0.03		DW	Based on stover
Trifloxystrobin	10	2004	-	x	o		x	10		DW	

a/ “PR”: Periodic Review.

b/ Data available (described) in the JMPR Evaluation. Description of hay, straw or fodder. If the description is not clear, “?”.

c/ If the commodity “fodder” is removed, for what commodity(ies) MRL(s) should be recommended.

d/ DW, dry weight basis; and AR, as received.

Special note: The 2010 JMPR recommended an MRL for maize fodder at 25 mg/kg (dw) based on maize stover data. The recommendation is in the body of the 2010 Report and the recommendation table but not in the Codex database.

2.15 AS 0447 Sweet corn fodder

- Mostly based on stover.
- There are 9 MRLs whose information was not found in the JMPR Evaluations or Reports. There was no record of adaption of these MRLs by the Commission. After further investigation using the reports of the Codex Alimentarius Commission and CCPR, and working documents prepared for CCPR sessions containing MRLs, it was found that these MRLs seem inadvertently replaced the MRLs for AB 0226 Apple pomace, dry (adapted by the Commission) at the same values. This problem shall be solved even though this problem does not relate to the revision of classification.

Pesticide	MRL (mg/kg)	JMPR (year) ^{a/}		Data available for ^{b/} :			MRL (mg/kg) ^{c/} , if "fodder" is removed			Dry weight? ^{d/}	Note to MRL/ Description of commodities
				Hay	Straw	Fodder	Hay	Straw	Fodder		
Acetamiprid	40	2015	-	x	o		x	40		DW	<i>On a dry weight basis. Based on stover</i>
Acetochlor	1.5	2015	-	x	o		x	1.5		DW	<i>On a dry weight basis. Based on stover.</i>
Bicyclopyrone	0.5 (dw)	2017	-	x	o		x	0.5		DW	Based on the combined dataset of corn crops (stover)
Difenoconazole	0.01 (*) (dw)	2017	-	x	o		x	0.01*		DW	Based on stover
Fenarimol	5	1995 1996		x	x		?	?		?	<i>The Codex database includes this MRL. No information was found in JMPR Evaluations. There is an MRL for AB 0226 apple pomace, dry at the same value.</i>
Fenbuconazole	1	2009		x	x		?	?		?	<i>The Codex database indicates the CXL as recommended by the 2009 JMPR. However, no description is found in the body and recommendation table of the 2009 JMPR. There is an MRL for AB 0226 apple pomace, dry at the same value.</i>

Pesticide	MRL (mg/kg)	JMPR (year) ^{a/}		Data available for ^{b/} :			MRL (mg/kg) ^{c/} , if "fodder" is removed			Dry weight? ^{d/}	Note to MRL/ Description of commodities
				Hay	Straw	Fodder	Hay	Straw	Fodder		
Fludioxonil	20	2005		x	x		?	?		?	<i>The Codex database includes this MRL. Neither the recommendation table of the 2004 JMPR or 2006 JMPR Evaluation includes MRL for sweet corn fodder. The body of the 2004 JMPR Report mentions sweet corn fodder without recommendation. There is an MRL for AB 0226 apple pomace, dry at the same value.</i>
Flusilazole	2	2007		x	x		?	?		?	<i>While the Codex database includes this CXL from the 2007 JMPR, there is no description about this in the body or recommendation table of the 2007 JMPR Report. There is an MRL for AB 0226 apple pomace, dry at the same value.</i>
Imidacloprid	5	2002		x	x		?	?		?	<i>While the Codex database includes this MRL, there is no description about sweet corn fodder in the 2002 JMPR Evaluation. There is an MRL for AB 0226 apple pomace, dry at the same value.</i>
Methoxyfenozide	7	2003		x	x		?	?		?	<i>On a dry weight basis. Based on stover (not in the recommendation table). There is an MRL for AB 0226 apple pomace, dry at the same value.</i>

Pesticide	MRL (mg/kg)	JMPR (year) ^{a/}		Data available for ^{b/} :			MRL (mg/kg) ^{c/} , if “fodder” is removed			Dry weight? ^{d/}	Note to MRL/ Description of commodities
				Hay	Straw	Fodder	Hay	Straw	Fodder		
Novaluron	40	2005		x	x		?	?		?	<i>While the Codex database includes this MRL, No description in the body or recommendation table of the 2005 JMPR Evaluation. There is an MRL for AB 0226 apple pomace, dry at the same value.</i>
Permethrin	50	<1991		?	?		?	?		?	No information was found
Prothioconazole	15	2014	-	x	o		x	15		DW	<i>On a dry weight basis. Based on the combined dataset of maize and sweet corn stover.</i>
Pyrimethanil	40	2007		x	x		x	x		?	<i>The Codex database includes this CXL from the 2007 JMPR. However, there is no description about this MRL in the body or recommendation table of the 2007 JMPR Evaluation. There is an MRL for AB 0226 apple pomace, dry at the same value.</i>
Spinetoram	0.15	2017	-	x	o		x	0.15		DW	<i>On a dry weight basis. Based on stover</i>
Spirodiclofen	4	2009		x	x		x	x		?	<i>The Codex database includes this CXL from the 2009 JMPR. However, neither the body nor the recommendation table includes any description about sweet corn fodder. There is an MRL for AB 0226 apple pomace, dry at the same value.</i>

a/ “PR”: Periodic Review.

b/ Data available (described) in the JMPR Evaluation. Description of hay, straw or fodder. If the description is not clear, “?”.

c/ If the commodity “fodder” is removed, for what commodity(ies) MRL(s) should be recommended.

d/ DW, dry weight basis; and AR, as received.

2.16 AS 0657 Teosinte fodder

- Only one MRL, insufficient for analysis. Extrapolation from follow-up oat straw.

Pesticide	MRL (mg/kg)	JMPR (year) ^{a/}		Data available for ^{b/} :			MRL (mg/kg) ^{c/} , if “fodder” is removed			Dry weight? ^{d/}	Note to MRL/ Description of commodities
				Hay	Straw	Fodder	Hay	Straw	Fodder		
Acetochlor	0.3	2015	-	x	x		x	0.3		DW	<i>On a dry weight basis.</i> Extrapolated from the MRL from follow-up oat straw.

a/ “PR”: Periodic Review.

b/ Data available (described) in the JMPR Evaluation. Description of hay, straw or fodder. If the description is not clear, “?”.

c/ If the commodity “fodder” is removed, for what commodity(ies) MRL(s) should be recommended.

d/ DW, dry weight basis; and AR, as received.

2.17 AS 0641 Buckwheat fodder

- Only one MRL, insufficient for analysis. Extrapolation from follow-up oat straw.

Pesticide	MRL (mg/kg)	JMPR (year) ^{a/}		Data available for ^{b/} :			MRL (mg/kg) ^{c/} , if “fodder” is removed			Dry weight? ^{d/}	Note to MRL/ Description of commodities
				Hay	Straw	Fodder	Hay	Straw	Fodder		
Acetochlor	0.3	2015	-	x	X		x	0.3		DW	<i>On a dry weight basis.</i> Extrapolated from MRL from follow-up oat straw.

a/ “PR”: Periodic Review.

b/ Data available (described) in the JMPR Evaluation. Description of hay, straw or fodder. If the description is not clear, “?”.

c/ If the commodity “fodder” is removed, for what commodity(ies) MRL(s) should be recommended.

d/ DW, dry weight basis; and AR, as received.

3. AM Group: Miscellaneous Fodder and Forage (Fodder)

Where there is a footnote referring to another group, subgroup or commodity, that commodity is not included in this group.

Code	Commodity name	Table Number in the Annex
AM 0165	Miscellaneous fodder and forage crops	-
AM 0353	Pineapple fodder	-
AM 0497	Swedish turnip or Swede fodder	-
AM 0506	Turnip fodder	3.3
AM 0659	Sugar cane fodder	3.2
AM 0691	Cotton fodder, dry	3.1
AM 0738	Mint hay	Excluded from this Annex
AM 1051	Fodder beet	Excluded from this Annex
AM 5255	Mangel or Mangold	-
AM 5256	Mangoldwurzel	-

3.3 AM 0691 Cotton fodder, dry

- This MRL should be moved under “cotton gin trash”.

Pesticide	MRL (mg/kg)	JMPR (year) ^{a/}		Data available for ^{b/} :			MRL (mg/kg) ^{c/} , if “fodder” is removed			Dry weight? ^{d/}	Note to MRL/ Description of commodities
				Hay	Straw	Fodder	Hay	Straw	Fodder		
Indoxacarb	20	2005	-	x	o		x	20		DW	<i>Based on cotton gin trash data</i>

a/ “PR”: Periodic Review.

b/ Data available (described) in the JMPR Evaluation. Description of hay, straw or fodder. If the description is not clear, “?”.

c/ If the commodity “fodder” is removed, for what commodity(ies) MRL(s) should be recommended.

d/ DW, dry weight basis; and AR, as received.

3.2 AM 0659 Sugar cane fodder

- Need to consider whether to retain these MRLs which are based on sugar cane forage.

Pesticide	MRL (mg/kg)				JMPR (year) ^{a/}		Data available for ^{b/} :			MRL (mg/kg) ^{c/} , if "fodder" is removed			Dry weight? ^{d/}	Note to MRL/ Description of commodities
							Hay	Straw	Fodder	Hay	Straw	Fodder		
Ethoprophos	0.02	(*)			2003	PR	x	o		x	0.02(*)		-	<i>Recommended for sugar cane forage</i>
Isoxaflutole	0.01	(*)			2013	-	x	x		0.01(*)?	x		-	<i>Based on sugar cane forage</i>

a/ "PR": Periodic Review.

b/ Data available (described) in the JMPR Evaluation. Description of hay, straw or fodder. If the description is not clear, "?".

c/ If the commodity "fodder" is removed, for what commodity(ies) MRL(s) should be recommended.

d/ DW, dry weight basis; and AR, as received.

3.3 AM 0506 Turnip fodder

- There is only one MRL, insufficient for analysis
- Based on rotational crop studies on root and tuber vegetables.

Pesticide	MRL (mg/kg)				JMPR (year) ^{a/}		Data available for ^{b/} :			MRL (mg/kg) ^{c/} , if "fodder" is removed			Dry weight? ^{d/}	Note to MRL/ Description of commodities
							Hay	Straw	Fodder	Hay	Straw	Fodder		
Cyantraniliprole	0.02				2013	-	x	o		x	0.02		-	Based on rotational crop studies on root and tuber vegetables.

a/ "PR": Periodic Review.

b/ Data available (described) in the JMPR Evaluation. Description of hay, straw or fodder. If the description is not clear, "?".

c/ If the commodity "fodder" is removed, for what commodity(ies) MRL(s) should be recommended.

d/ DW, dry weight basis; and AR, as received.