

CODEX ALIMENTARIUS COMMISSION



Food and Agriculture
Organization of the
United Nations



World Health
Organization

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Agenda Item 7(d)

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JOINT FAO/WHO FOOD STANDARDS PROGRAMME CODEX COMMITTEE ON PESTICIDE RESIDUES

50th Session

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REVISION OF THE CLASSIFICATION OF FOOD AND FEED: CLASS C – PRIMARY FEED COMMODITIES TYPE 11 – PRIMARY FEED COMMODITIES OF PLANT ORIGIN Group 050 - Legume feeds Group 051 - Straw, fodder and forage of cereal grains Group 052 - Miscellaneous fodder and forage crops (AT STEP 4)

(Prepared by the Electronic Working Group chaired by the United States of America
and co-chaired by the Netherlands)

Codex members and Observers wishing to submit comments at Step 3 on commodity groups under Type 11 should do so as instructed in CL 2018/14-PR.

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<http://www.fao.org/fao-who-codexalimentarius/resources/circular-letters/en>

BACKGROUND

1. Background on the discussion of the revision of the Classification of Food and Feed (CXM 4-1989) can be found in the reports of the 36th – 49th sessions of the Committee on Pesticide Residues (CCPR) including relevant sessions of the Codex Alimentarius (CAC) held from 2004 to 2017.¹
2. One of the terms of reference² (TOR) given to the Electronic Working Group³ (EWG) on the Revision of the Classification by CCPR49 (2017) was to consider the revision of Class C Primary feed commodities. This Class includes Group 050, Legume feeds; Group 051, Straw, fodder and forage of cereal grains and Group 052, Miscellaneous fodder and forage crops. Additional feed commodities developed within the EWG are highlighted in Appendix I and coded as “XXXX” pending assignment of new codes.
3. There was some support in the EWG to delete forage commodities since they are not traded internationally. However it was pointed out that residues in forage commodities are used to calculate livestock dietary burdens with the use of the estimated supervised trials median residue (STMR) and highest residue (HR) values.
4. The existing classification utilizes the term “fodder”. Fodder is a general term that includes hay, straw, silage and other plant products. The proposed revised commodities included in Appendix I have been revised to include more specific terms for animal feeds, such as “hay”, “straw” and “silage”. Added terms are shaded, while removed terms are shown with a strikethrough. References for these commodities included: Guidance Document of Residues in Livestock, OECD⁴ Environment, Health and Safety Publications No. 73 and US EPA⁵ Residue Test Guidelines OPPTS 860.1000, Table I.
5. The European Union (EU) also proposed the creation of a Group in Class C that would include processed feed commodities of plant origin. Typical by-products of processing animal feeds include pomace, pulp, molasses, meal, cannery waste and other by-products.

¹ Reports of Codex committee meetings are available at:

<http://www.fao.org/fao-who-codexalimentarius/committees/committee/en/?committee=CCPR>

² REP17/PR, para. 141

³ The list of participants can be found in CX/PR 18/50/6, Appendix V

⁴ Organization for Economic Cooperation and Development

⁵ Environmental Protection Agency – United States of America

CONCLUSIONS

6. Appendix I of this document presents revised commodity groups under Type 11 of the Classification.
7. The revised type includes a number of additional commodities for Class C (Groups 050, 051 and 052). In addition to new commodities, the Committee should consider the use of more specific commodity terms (hay, straw and silage) to replace the “fodder” terminology used previously.
8. The Committee should also consider the proposal by the EU to create another group within Class C for processed animal feeds and by-products or if these could be incorporated in the existing Classification.

RECOMMENDATION

9. The EWG recommends the Committee to forward the revised groups 050, 051 and 052 to CAC41 (2018) for adoption at Step 5.

APPENDIX I

**CLASS C – PRIMARY FEED COMMODITIES
TYPE 11 – PRIMARY FEED COMMODITIES OF PLANT ORIGIN
(For comments at Step 3)**

CLASS C PRIMARY FEED COMMODITIES

Type	No.	Group	Group Letter Code
11	Primary feed commodities of plant origin		
	050	Legume feeds	AL
	051	Straw, hay fodder and forage of cereal grains and grasses (including buckwheat fodder pseudocereals) (forage)	AF
	051	Straw, hay fodder and forage of cereal grains and grasses (including buckwheat fodder pseudocereals) (straws and hay, fodders dry)	AS
	052	Miscellaneous Hay Fodder and Forage crops (forage)	AV
	052	Miscellaneous Hay Fodder and Forage crops (fodder)	AM

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, ~~fodder~~ hay or silage, with or without seed. 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 analysed): **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 analysed 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 (ref. Report 1980 JMPR¹).

The residues are expressed on a dry-weight basis if not otherwise stated. To avoid confusion caused by the not always consistent commodity description in the past, 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

Group 050 Legume animal feeds

Code No.	Commodity
AL 0157	Subgroup of Legume animal feeds
AL 0061	Bean, fodder vines <i>Phaseolus</i> spp. and <i>Vigna</i> spp.
AL 0072	Pea hay or Pea fodder (dry) <i>Pisum</i> spp.
AL XXXX	Pea, silage <i>Pisum</i> spp.
AL 1020	Alfalfa, fodder <i>Medicago sativa</i> L., subsp. <i>sativa</i> L.
AL 1021	Alfalfa, forage (green) <i>Medicago sativa</i> L., subsp. <i>sativa</i> L.
AL 3350	Alfalfa, hay <i>Medicago sativa</i> L., subsp. <i>sativa</i> L.
AL XXXX	Alfalfa, meal <i>Medicago sativa</i> L., subsp. <i>sativa</i> L.
AL XXXX	Alfalfa, silage <i>Medicago sativa</i> L., subsp. <i>sativa</i> L.
AL 1030	Bean, forage (green), vines <i>Phaseolus</i> spp.; <i>Vigna</i> spp.
AL 3351	Bean, hay <i>Phaseolus</i> spp.; <i>Vigna</i> spp.
AL XXXX	Bean, Broad, hay <i>Vicia faba</i> L. subsp. <i>faba</i> var. <i>faba</i>

¹ FAO Plant Production and Protection Paper no. 26, Rome 1981

- AL XXXX** **Bean, goa, hay**
Psophocarpus tetragonolobus (L.) DC.
- **Bean, lablab, hay**, See Bean, hay AL3351
Lablab purpureus (L.) Sweet ssp. *purpureus*
- **Bean, mung, hay**, See Bean, hay AL3351
Vigna radiata (L.) Wilczek var. *radiata*
- **Bean, rice, hay**, See Bean, hay AL3351
Vigna umbellata (Thunb.) Ohwi & H. Ohashi
- **Bean, runner, hay**, See Bean, hay AL3351
Phaseolus coccineus L.
- **Bean, tepary, hay**, See Bean, hay AL3351
Phaseolus acutifolius A. Gray var. *acutifolius*
- **Bean, urd, hay**, See Bean, hay AL3351
Vigna mungo (L.) Hepper var. *mungo*
- **Bean, yardlong, hay**, See Bean, hay AL3351
Vigna unguiculata (L.) Walp. subsp. *unguiculata* group *sesquipedalis*
- AL 1022 **Bean, velvet, fodder-hay**
Mucuna pruriens (L.) DC. var. *utilis* (Wall. ex Wight) Baker ex Burck
- AL XXXX** **Berlandier acacia, forage**
Senegalia berlandieri (Benth.) Britton & Rose
- AL XXXX** **Black medic, forage**
Medicago lupulina L.
- AL XXXX** **Black wattle, forage**
Acacia mearnsii DeWild.
- AL XXXX** **Burclover, forage**
Medicago spp.; Burclover, California, *Medicago polymorpha* L.; Burclover, spotted, *Medicago arabica* (L.) Huds.
- AL XXXX** **Catjang, fodder hay**
Vigna unguiculata (L.) Walp. subsp. *unguiculata* group *biflora*
- **Chickling vetch**, see Vetch, AL 1029
- AL 0524 **Chick-pea, fodder hay**
Cicer arietinum L.
- AL 1023 **Clover, forage**
Trifolium spp. and *Melilotus* spp.; Clover, alsike, *Trifolium hybridum* L.; Clover, alyce, *Alysicarpus vaginalis* (L.) DC.; Clover, arrowleaf, *Trifolium vesiculosum* Savi; Clover, ball, *Trifolium nigrescens* Viv.; Clover, Beirut, *Trifolium berytheum* Boiss. & Blanche; Clover, berseem, *Trifolium alexandrinum* L.; Clover, bigflower, *Trifolium michelianum* Savi; Clover, clustrer, *Trifolium glomeratum* L.; Clover, crimson, *Trifolium incarnatum* L.; Clover, hop, *Trifolium campestre* Schreb.; Clover, Kura, *Trifolium ambiguum* M. Bieb.; Clover, lappa, *Trifolium lappaceum* L.; Clover, large hop, *Trifolium aureum* Pollich; Clover, Persian, *Trifolium resupinatum* L.; Clover, red, *Trifolium pratense* L.; Clover, rose, *Trifolium hirtum* All.; Clover, Rueppell's, *Trifolium rueppellianum* Fresen.; Clover, sea, *Trifolium squamosum* L.; Clover seaside, *Trifolium wormskioldii* Lehm.; Clover, small hop, *Trifolium dubium* Sibth.; Clover, sour, *Melilotus indicus* (L.) All.; Clover, strawberry, *Trifolium fragiferum* L.; Clover striate, *Trifolium striatum* L.; Clover sub, *Trifolium subterraneum* L.; Clover, tall yellow sweet, *Melilotus altissimus* Thuill.; Clover, tomcat, *Trifolium willdenovii* Spreng.; Clover, white, *Trifolium repens* L.; Clover, white sweet, *Melilotus albus* Medik.; Clover, whitetip, *Trifolium variegatum* Nutt.; Clover, yellow sweet, *Melilotus officinalis* Lam.; Clover, zigzag, *Trifolium medium* L.; Spärklöver, *Trifolium squarrosum* L.

- AL 1031 **Clover, hay or fodder**
Trifolium spp. and *Melilotus* spp.
- AL XXXX **Clover, silage**
Trifolium spp. and *Melilotus* spp.
- AL XXXX **Cowpea, forage**
Vigna unguiculata (L.) Walp.
- AL XXXX **Cowpea, hay**
Vigna unguiculata (L.) Walp.
- AL XXXX **Crotalaria, fodder-hay**
Crotalaria spp.; *Crotalaria*, lance-leaf, *Crotalaria lanceolata* E. Mey.; *Crotalaria*, showy, *Crotalaria spectabilis* Roth; *Crotalaria*, slenderleaf, *Crotalaria brevidens* Benth.; *Crotalaria*, striped, *Crotalaria pallida* Aiton; Sunn-hemp, *Crotalaria juncea* L.
- **Grass pea, see Vetch, AL 1029**
- AL XXXX **Guar, fodder hay**
Cyamopsis tetragonoloba (L.) Taub.
- AM XXXX **Huisache, forage**
Vachellia farnesiana (L.) Wight & Arn.
- AL XXXX **Horse gram, fodder hay**
Macrotyloma uniflorum (Lam.) Verde.
- AL XXXX **Jackbean, fodder hay**
Canavalia ensiformis (L.) DC.
- AL 1024 **Kudzu, forage**
Pueraria montana (Lour.) Merr. var. *lobata* (Willd.) Maesen & S. M. Almeida ex Sanjappa & Predeep
- **Kudzu, Tropical, see Kudzu AL 1024**
Neustanthus phaseoloides (Roxb.) Benth.
- AM XXXX **Leadplant, forage**
Amorpha canescens Pursh
- AM XXXX **Leucaena, forage**
Leucaena leucocephala (Lam.) deWit
- AL 1025 **Lespedeza, forage and hay**
Lespedeza spp. and *Kummerowia* spp.; *Lespedeza*, Korean, *Kummerowia stipulacea* (Maxim.) Makino; *Lespedeza*, sericea, *Lespedeza cuneata* (Dum. Cours.) G.Don; *Lespedeza*, striate, *Kummerowia striata* (Thunb.) Schindl.
- AL XXXX **Lespedeza, forage and hay**
Lespedeza spp. and *Kummerowia* spp.; *Lespedeza*, Korean, *Kummerowia stipulacea* (Maxim.) Makino; *Lespedeza*, sericea, *Lespedeza cuneata* (Dum. Cours.) G.Don; *Lespedeza*, striate, *Kummerowia striata* (Thunb.) Schindl.
- AL 0545 **Lupin, forage**
Lupinus spp.; *Lupinus*, blue, *Lupinus albus* L.; *Lupinus*, pearl, *Lupinus mutabilis* Sweet; *Lupinus*, white, *Lupinus albus* L. var. *albus*; *Lupinus*, yellow, *Lupinus luteus* L.
- **Melilot, see Clover, AL 1023**
Melilotus spp.
- AL XXXX **Mulga, forage**
Acacia aneura F. Muell. ex Benth.

AL XXXX	Pea, pigeon, fodder hay <i>Cajanus cajan</i> (L.) Huth
AL XXXX	Pea, southern, fodder hay <i>Vigna unguiculata</i> (L.) Walp. subsp. <i>unguiculata</i> group <i>unguiculata</i>
AL 0528	Pea, vines (green) <i>Pisum</i> spp.
AL 0697	Peanut, fodder hay <i>Arachis hypogaea</i> L.
AL 1270	Peanut, forage (green) <i>Arachis hypogaea</i> L.
AL 3352	Peanut, hay <i>Arachis hypogaea</i> L.
AL XXXX	Perennial peanut, hay <i>Arachis glabrata</i> Benth. var. <i>glabrata</i> ; Pinto peanut, <i>Arachis pintoi</i> Krapov. & W.C. Greg
-	Puero , see Kudzu, AL 1024 <i>Pueraria phaseoloides</i> (Roxb.) Benth.
AL XXXX	Purple prairie-clover, hay <i>Dalea purpurea</i> Vent.
AL XXXX	Roundleaf cassia, forage <i>Chamaecrista rotundifolia</i> (Pers.) Greene
AL 1027	Sainfoin, forage <i>Onobrychis viciifolia</i> Scop.; syn: <i>O. sativa</i> Lamk.
-	Sericea , see Lespedeza, AL 1025
AL XXXX	Roundleaf cassia, forage <i>Chamaecrista rotundifolia</i> (Pers.) Greene
AL XXXX	Sesbania, forage <i>Sesbania exaltata</i> (Raf.) Rydb.
AL 1265	Soya bean, forage (green) <i>Glycine max</i> (L.) Merr;
AL 0541	Soya bean, fodder hay <i>Glycine max</i> (L.) Merr;
AL 3354	Soya bean, hay <i>Glycine max</i> (L.) Merr;
AL XXXX	Soya bean, hulls <i>Glycine max</i> (L.) Merr;
AL XXXX	Soya bean, meal <i>Glycine max</i> (L.) Merr;
AL XXXX	Soya bean, silage <i>Glycine max</i> (L.) Merr;
AL XXXX	Thorn mimosa, forage <i>Vachellia nilotica</i> (L.) P. J. H. Hurter & Mabb. subsp. <i>nilotica</i>

AL XXXX

Trefoil, forage

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

AL 1028

Trefoil, forage hay

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

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Tropical kudzu, see Kudzu, AL 1024

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Velvet bean, see Bean, Velvet, AL 1022

AL 1029

Vetch, forage and hay

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.

AL XXXX

Vetch, forage and hay

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.

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Vetch, Chickling, see Vetch, AL 1029*Lathyrus sativus* L.

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Vetch, Crown, see Vetch, AL 1029*Coronilla varia* L.

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Vetch, Milk, see Vetch, AL 1029*Astralagus* spp.

Group 051 Straw, fodder and forage of cereal grains and grasses, except grasses for sugar production (including pseudocereals)

Class C

Type 11 Primary feed commodities of plant origin

Group 051 Group Letter Code AS (straws and ~~fodders~~ dry hay) AF (forage)

The straw, fodder and forage of cereal grains are derived from various plants of the grass family (*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 ~~fodder~~ 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 wide range of moisture contents in the animal feeds of this group, except the straws and hays, 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 (ref. Report 1980 MJPR).

The residues on the dry commodities of this group, e.g. straws and hays, are expressed on the commodity as such (see explanatory note below).

Group 051 Straw, ~~fodder~~ hay and forage of cereal grains and grasses, except grasses for sugar production (including buckwheat fodder)

<u>Code No.</u>	<u>Commodity</u>
AF 0081	Subgroup of Forage (green) of cereal grains and other grass-like plants Includes all commodities in this subgroup
AS 0161	Straw, fodder (dry) and hay of cereal grains and other grass-like plants Includes all commodities in this subgroup
AS 0081	Straw and hay fodder (dry) of cereal grains Includes all commodities in this subgroup
AS 0162	Hay or fodder (dry) silage of grasses Includes all commodities in this subgroup
AF XXXX	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 XXXX	Amaranth, hay <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.
AF XXXX	Barley, forage <i>Hordeum vulgare</i> L. subsp. <i>vulgare</i>
AS 3491	Barley, hay <i>Hordeum vulgare</i> L. subsp. <i>vulgare</i>
AS XXXX	Barley, silage <i>Hordeum vulgare</i> L. subsp. <i>vulgare</i>

- AS 0640 **Barley, straw and fodder, dry**
- **Bermuda grass**, see Subgroup Hay or Fodder (dry) of Grasses, AS 0162
Cynodon dactylon (L.) Pers.
- Bluegrass**, see Subgroup Hay or Fodder (dry) of Grasses, AS 0162
Poa spp.
- Brome grass**, see Subgroup Hay or Fodder (dry) of Grasses, AS 0162
Bromus spp.
- AS 0641 **Buckwheat, fodder-hay**
Fagopyrum esculentum Moench; Buckwheat, Tartary, *Fagopyrum tataricum* (L.) Gaertn.
- AF XXXX **Canarygrass, annual, forage**
Phalaris canariensis L.
- AS XXXX **Canarygrass, annual, hay**
Phalaris canariensis L.
- **Corn, fodder hay**, see Maize fodder hay, AS 0645
- **Corn, forage**, see Maize forage, AS 0645
- **Corn, silage**, See Maize silage, AS XXXX
Zea mays L.
- **Darnel** see Subgroup Hay or Fodder (dry) of Grasses, AS 0162
Lolium spp.
- AS 5253 **Fescue**, see Subgroup Hay or Fodder (dry) of Grasses, AS 0162
Festuca spp.
- AF XXXX **Hungry rice, forage**
Digitaria iburua Stapf; Fonio, white, *Digitaria exilis* (Kippist) Stapf
- AS XXXX **Hungry rice, hay**
Digitaria iburua Stapf; Fonio, white, *Digitaria exilis* (Kippist) Stapf
- AS 3490 **Maize, bran**
Zea mays L.
- AS 0645 **Maize, fodder-hay**
Zea mays L.
- AF 0645 **Maize, forage**
Zea mays L.
- AS XXXX **Maize, silage**
Zea mays L.
- AS XXXX **Maize, stover**
Zea mays L.
- AF XXXX **Millet, forage**
Millet, barnyard, *Echinochloa frumentacea* Link; Millet, finger, *Eleusine coracana* (L.) Gaertn.; Millet, foxtail, *Setaria italica* (L.) P. Beauv. subsp. *italica*; Millet, little, *Panicum sumatrense* Roth; Millet, proso, *Panicum miliaceum* L. subsp. *miliaceum*; Millet, pearl, *Pennisetum glaucum* (L.) R. Br.;
- AS 0646 **Millet, fodder, dry, hay**
Millet, barnyard, *Echinochloa frumentacea* Link; Millet, finger, *Eleusine coracana* (L.) Gaertn.; Millet, foxtail, *Setaria italica* (L.) P. Beauv. subsp. *italica*; Millet, little, *Panicum sumatrense* Roth; Millet, proso, *Panicum miliaceum* L. subsp. *miliaceum*; Millet, pearl, *Pennisetum glaucum* (L.) R. Br.;

- AS XXXX** **Millet, straw**
Millet, barnyard, *Echinochloa frumentacea* Link; Millet, finger, *Eleusine coracana* (L.) Gaertn.; Millet, foxtail, *Setaria italica* (L.) P. Beauv. subsp. *italica*; Millet, little, *Panicum sumatrense* Roth; Millet, proso, *Panicum miliaceum* L. subsp. *miliaceum*; Millet, pearl, *Pennisetum glaucum* (L.) R. Br.;
- AF 0647 **Oat, forage-(green)**
Avena spp.; Oat, common, *Avena sativa* L.; Oat, Abyssiniam, *Avena abyssinica* Hochst. ex A. Rich.; Oat, naked, *Avena nuda* L.; Oat, sand, *Avena strigosa* Schreb.
- AS XXXX** **Oat, ~~straw and fodder, dry hay~~**
Avena spp.; Oat, common, *Avena sativa* L.; Oat, Abyssiniam, *Avena abyssinica* Hochst. ex A. Rich.; Oat, naked, *Avena nuda* L.; Oat, sand, *Avena strigosa* Schreb.
- AS XXXX** **Oat, silage**
Avena spp.; Oat, common, *Avena sativa* L.; Oat, Abyssiniam, *Avena abyssinica* Hochst. ex A. Rich.; Oat, naked, *Avena nuda* L.; Oat, sand, *Avena strigosa* Schreb.
- AS 0647 **Oat, ~~straw and fodder~~**
Avena spp.; Oat, common, *Avena sativa* L.; Oat, Abyssiniam, *Avena abyssinica* Hochst. ex A. Rich.; Oat, naked, *Avena nuda* L.; Oat, sand, *Avena strigosa* Schreb.
- AS XXXX** **Pop corn, stover**
- AS XXXX** **Rice, bran [note that Rice bran is already included in Class D, CM 1206]**
Oryza sativa L.; Rice, African, *Oryza glaberrima* Steud.; Wild rice, *Zizania palustris* L.; Wild rice, Eastern, *Zizania aquatica* L.
- AS XXXX** **Rice, hulls**
Oryza sativa L.; Rice, African, *Oryza glaberrima* Steud.; Wild rice, *Zizania palustris* L.; Wild rice, Eastern, *Zizania aquatica* L.
- AS XXXX** **Rice, silage**
Oryza sativa L.; Rice, African, *Oryza glaberrima* Steud.; Wild rice, *Zizania palustris* L.; Wild rice, Eastern, *Zizania aquatica* L.
- AS 0649 **Rice, ~~straw and fodder, dry~~**
Oryza sativa L.; Rice, African, *Oryza glaberrima* Steud.; Wild rice, *Zizania palustris* L.; Wild rice, Eastern, *Zizania aquatica* L.
- AF 0650 **Rye, forage-(green)**
Secale cereale L.
- AS XXXX** **Rye, silage**
Secale cereale L.
- AS 0650 **Rye, ~~straw and fodder, dry~~**
Secale cereale L.
- AF 0651 **Sorghum, forage-(green)**
Sorghum bicolor (L.) Moench;
other *Sorghum* spp.
- AS XXXX** **Sorghum, silage**
Sorghum bicolor (L.) Moench;
other *Sorghum* spp.
- AS 1053 **Sorghum, ~~forage (dry) stover~~**
Sorghum bicolor (L.) Moench;
other *Sorghum* spp.
- AS 0651 **Sorghum, ~~straw and fodder, dry hay~~**
Sorghum bicolor (L.) Moench; other *Sorghum* spp.
- AS 0447 **Sweet corn, stover**
Zea mays L. subsp. *mays*

AF XXXX	Sweet corn, forage <i>Zea mays</i> L. subsp. <i>mays</i>
AS XXXX	Teff, straw and hay <i>Eragrostis tef</i> (Zuccagni) Trotter
AS 0657	Teosinte, fodder hay <i>Zea mays</i> ssp. <i>mexicana</i> (Schrad.) H. H. Iltis;
AF XXXX	Triticale, forage x <i>Triticosecale</i> sp.
AS XXXX	Triticale, silage x <i>Triticosecale</i> sp.
AS 0653	Triticale, straw and fodder, dry hay x <i>Triticosecale</i> sp.
AF XXXX	Wheat, forage <i>Triticum aestivum</i> L. subsp. <i>aestivum</i>
AS 3492	Wheat, hay <i>Triticum aestivum</i> L. subsp. <i>aestivum</i>
AS XXXX	Wheat, silage <i>Triticum aestivum</i> L. subsp. <i>aestivum</i>
AS 0654	Wheat, straw and fodder, dry <i>Triticum aestivum</i> L. subsp. <i>aestivum</i> .; Wheat, Durum, <i>Triticum turgidum</i> L. subsp. <i>durum</i> (Desf.) Husn.; Wheat, Einkorn, <i>Triticum monococcum</i> L. subsp. <i>monococcum</i> ; Wheat, Emmer, <i>Triticum turgidum</i> L. subsp. <i>dicoccon</i> (Schrank) Thell.; Wheat, Macha, <i>Triticum aestivum</i> L. subsp. <i>macha</i> (Dekapr. & Menabde) Mackey; Wheat, Oriental, <i>Triticum turgidum</i> L. subsp. <i>turanicum</i> (Jakubz.) Á. Löve & D. Löve; Wheat, Persian, <i>Triticum turgidum</i> L. subsp. <i>carthlicum</i> (Nevski) Á. Löve & D. Löve; Wheat, Polish, <i>Triticum turgidum</i> L. subsp. <i>polonicum</i> (L.) Thell.; Wheat, Poulard, <i>Triticum turgidum</i> L. subsp. <i>turgidum</i> ; Wheat, Shot, <i>Triticum turgidum</i> L. subsp. <i>turgidum</i> ; Wheat, Spelt, <i>Triticum aestivum</i> L. subsp. <i>spelta</i> (L.) Thell.; Wheat, Timopheevi, <i>Triticum timopheevii</i> (Zhuk.) Zhuk. subsp. <i>timopheevii</i> ; Wheat, Vavilovi, <i>Triticum vavilovii</i> Jakubz.; Wheat, Wild einkorn, <i>Triticum monococcum</i> L. subsp. <i>aegilopoides</i> (Link) Thell.; Wheat, Wild emmer, <i>Triticum turgidum</i> L. subsp. <i>dicoccoides</i> (Körn. ex Asch. & Graebn.) Thell.

Explanatory note: Another advantage of expressing the residue on a “dry-weight” basis is that it overcomes the problems arising from the often inconsistent use of the terms forage and ~~fodder~~ hay.

Forage: Crops grown exclusively for animal feed. These crops are either used for grazing or are prepared as silage or as ~~dry fodder~~ hay.

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

Group 052 Miscellaneous Fodder and Forage crops

Class C

Type 11 Primary feed commodities of Plant origin**Group 052 Group Letter Codes AM (fodder) AV (forage)**

Group 052. Miscellaneous Fodder and Forage crops, are derived from various kinds of plants except leguminous and grassy plants (family *Gramineae*). However, for convenience, the fodders 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 dry fodder.

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 Fodder and Forage crops

<u>Code No.</u>	<u>Commodity</u>
AM 0165	Subgroup of Miscellaneous fodder and forage crops except leguminous and grass plants (<i>Gramineae</i>), but including grasses for sugar production
AM 0660	Almond, hulls <i>Prunus dulcis</i> (Mill.) D.A. Webb
AV XXXX	Arrowleaf balsamroot, forage <i>Balsamorhiza sagittata</i> (Pursh) Nutt.
AM XXXX	Arrowleaf balsamroot, hay <i>Balsamorhiza sagittata</i> (Pursh) Nutt.
AM 0691	Cotton, hulls fodder, dry <i>Gossypium</i> spp.
AM XXX	Cotton, meal <i>Gossypium</i> spp.
AV 1050	Cow cabbage, leaves <i>Brassica oleracea</i> L. var. <i>viridis</i> L.
AM 1051	Fodder beet <i>Beta vulgaris</i> L. subsp. <i>vulgaris</i>
AV 1051	Fodder beet, leaves or tops <i>Beta vulgaris</i> L. subsp. <i>vulgaris</i>
AV 0480	Kale, forage <i>Brassica oleracea</i> L. var. <i>viridis</i> L.
AV XXXX	Kenaf, forage <i>Hibiscus cannabinus</i> L.
AM XXXX	Kenaf, hay <i>Hibiscus cannabinus</i> L.
-	Mangel or Mangold , see Fodder beet, AM 1051
-	Mangoldwurzel , see Fodder beet, AM 1051
AV 1052	Marrow-stem cabbage or Marrow-stem kale, leaves and stems <i>Brassica oleracea</i> L. var. <i>medullosa</i> Thell.

AM 0738	Mint, hay <i>Mentha</i> spp.
AM 0353	Pineapple, fodder process residue <i>Ananas comosus</i> (L.) Merr.
AV 0353	Pineapple, forage <i>Ananas comosus</i> (L.) Merr.
AV XXXX	Spiny hopsage, forage <i>Grayia spinosa</i> (Hook.) Moq.
AV 0596	Sugar beet, leaves or tops <i>Beta vulgaris</i> L. subsp. <i>vulgaris</i>
AM XXXX	Sugar beet, pulp, dried <i>Beta vulgaris</i> L. subsp. <i>vulgaris</i>
AM XXXX	Sugar beet, molasses <i>Beta vulgaris</i> L. subsp. <i>vulgaris</i>
AM 0659	Sugar cane, fodder <i>Saccharum officinarum</i> L.
AV 0659	Sugar cane, forage <i>Saccharum officinarum</i> L.
AV 0497	Swedish turnip or Swede fodder, leaves or tops <i>Brassica napus</i> L. subsp. <i>rapifera</i> Metzg.
AV XXXX	Taper-tip hawk's-beard, forage <i>Crepis acuminata</i> Nutt.
AV XXXX	Threadleaf sedge, forage <i>Carex filifolia</i> Nutt.
AV 0506	Turnip, fodder, leaves and tops <i>Brassica rapa</i> L. subsp. <i>rapa</i>