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CODEX COMMITTEE ON PESTICIDE RESIDUES

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Comments at Agenda Item 7(b) submitted by Canada, China, Egypt, European Union, Kenya, Paraguay and Turkey

**REVISION OF THE CLASSIFICATION OF FOOD AND FEED:
CLASS A: PRIMARY FOOD COMMODITIES OF PLANT ORIGIN
TYPE 05: HERBS AND SPICES
GROUP 027 HERBS
GROUP 028 SPICES**

Canada

BACKGROUND

Groups 027 and 028 were finalized by CCPR43 in 2011 and were retained at Step 7 pending finalization of the revision of the Classification. CCPR44 (2012) agreed to hold the commodity group on “edible flowers” at Step 7 pending finalization of the revision of the Classification in relation to the herbs group.

CURRENT STATUS

Subsequent to CCPR43 and CCPR44, the EWG revised Group 027 and Group 028 to consider new commodities in accordance with the terms of reference given by CCPR49 (2017). As a result, the EWG has proposed the following changes:

- Additional commodities added to both Group 027 and Group 028.
- Wasabi stem was moved to Group 027 from Group 028 as it is classified as an herb.
- Caraway seed was moved from 028A to 028B.
- Cross references were added for black, brown and white mustard seeds.
- Kokam was removed as it is already a member Group 006 (Assorted tropical and sub-tropical fruits – inedible peel).
- The EU proposed that Subgroups 028H Citrus Peel and 028I Dried Chili Peppers would be more appropriate for Class D. Processed Foods of Plant Origin.
- Japan proposed that dried chili pepper be included in 028B Spices, fruit or berry instead of Subgroup 028I Dried Chili Peppers.

Codex members and observers have been asked to provide comments on Groups 027 and 028 as presented in Appendices I and II of CX/PR 18/50/7. In particular, comments should consider the proposal from the EU to relocate Subgroups 028H and 028I to Class D, Processed Foods of Plant Origin and consider the appropriate location of Milk thistle and perilla seed which are proposed for inclusion in both the Oilseed group and the Seed Spices Subgroup 028A.

Agreement by CCPR on the revised groups will complete revision of Type 05 for final adoption by CAC41 (2018).

Canada’s Position on the Revised Herbs (Group 027) and Spices (Group 028)

- As a member of the Electronic Working Group on the Revision of the Classification, Canada provided comments through this working group on the revisions to the herbs and spices groups.
- Canada is in agreement with the revisions to Group 027 Herbs and Group 028 Spices as described in Appendix I and II of CX/PR 18/50/7, with the following comments:

- Canada is in agreement with the EU's proposal to relocate Subgroup 028H Citrus Peel and Subgroup 028I Dried Chili Peppers to Class D, Processed Foods of Plant Origin.
 - Dried chilli peppers could be included in Group 056 Dried Vegetables.
 - With regards to citrus peels, the dried peels could be included in Group 055 Dried Fruits.
- Canada supports the location of Milk thistle and perilla seed in Subgroup 028A Seed Spices and not in the Oilseed group as this is consistent with the ICGCC's proposed location for these crops. Milk thistle and perilla seed should be removed from the revised Oilseed group given that the EWG has already determined that a commodity should only be included in one group or subgroup to avoid any possible confusion of having two different CXLs for the same commodity.

China

1 China agrees with the EU to relocate Subgroups 028H and 028I to Class D, Processed foods of plant origin, since these crops have been dried and belong to processed products; similar products are Apples, dried, Raisins in Class D.

2 China suggests putting Milk thistle in 028A with code HS 3297 and deleting the code SO 3168, since Milk thistle is not often used for oil crushing, but mainly for clinical purposes, including the treatment of liver diseases, prevention and treatment of cancer and supportive treatment of poisoning caused by eating death cap mushrooms.

For more information, please refer to https://en.wikipedia.org/wiki/Silybum_marianum.

3 China suggests putting Perilla, seed in 023A with code SO 3145 and deleting the code HS 3298; since Perilla oil is a kind of edible vegetable oil derived from perilla seeds. With a distinct nutty aroma and taste, the oil pressed from the toasted perilla seeds is used as flavor enhancer, condiment and cooking oil.

4 China suggests changing the English name of HS 3343 (Chinese tree, root) into Chinese chaste tree, root. See https://en.wikipedia.org/wiki/Vitex_negundo; and changing the English name of HS 3344 (Coptis) into Chinese gold thread. See https://en.wikipedia.org/wiki/Coptis_chinensis.

5 China suggests the following modifications:

5.1 Commodity wasabi leaves has two codes VL2786 and HH3220; since one commodity could only exist in one group, we suggest deleting one code.

5.2 The two commodities, HH 3261 Yellow gentian and HH 3263 Buchi, have the same scientific name of *Gentiana lutea* L. One should be corrected.

5.3 The two commodities, HS 3300 Ashwagandha, fruit and HS 3301 Batavia-cassia, fruit, have the same scientific name of *Withania somnifera* (L.) Dunal. One should be corrected.

5.4 The two commodities Mustard, black, seed and HS 3297 Milk thistle, have the same scientific name of *Silybum marianum* (L.) Gaertn. One should be corrected.

5.5 "Sesame seed, SO 0700" should replace "Sesame seed, SO 01700. Correction should be made.

5.6 The two commodities, Anise pepper and Pepperbush, berry, have the same code of HS 3299. One should be corrected.

5.7 The two commodities, HS 3313 Tasmanian pepper berry and HS 3299 Pepperbush berry, have the same scientific name of *Tasmania lanceolata* (Poir.) A. C. Sm; confirmation is requested.

5.8 The two commodities, Catechu, bark and Asafoetida, have the same code of HS 3320. Correction should be made.

5.9 The two commodities, Milk thistle and Pepper, Cubeb, have the same code of HS 3297. Correction should be made.

6 China appreciates the EWG for listing commodities in 027C edible flowers. Considering there are some additional edible flowers consumed in China, we suggest adding the following commodities in this subgroup. Please refer to the following websites for more information.

Chrysanthemum, *Dendranthema morifolium* (Ramat.) Tzvel. In 2017, the value of Chinese export was up to 21 million USD.

<https://en.wikipedia.org/wiki/Chrysanthemum>

Osmanthus, *Osmanthus fragrans* (Thunb.) Lour.

https://en.wikipedia.org/wiki/Osmanthus_fragrans

Peony or paeony, *Paeonia suffruticosa* Andr.

<https://en.wikipedia.org/wiki/Peony>

Lotus flower, *Nelumbo nucifera*

https://en.wikipedia.org/wiki/Nelumbo_nucifera

Orchid, *Orchidaceae* Juss. In 2017, the value of Chinese export was up to 143 million USD.

https://en.wikipedia.org/wiki/Orchidaceae#Use_as_food

Plum Blossom, *Armeniaca mume* Sieb.

https://en.wikipedia.org/wiki/Prunus_mume

Yulan magnolia, *jade orchid*, *Magnolia denudate*

https://en.wikipedia.org/wiki/Magnolia_denudata

Gardenia, *Gardenia jasminoides*

<https://en.wikipedia.org/wiki/Gardenia>

Rose, *Rosa rugosa*. In 2017, the value of Chinese export was up to 0.2 million USD.

https://en.wikipedia.org/wiki/Rosa_rugosa

7 China suggests adding two commodities namely Largehead Atractylodes Rhizome and Dendrobium nobile in 027A Herbs (herbaceous plants), and adding Mulberries leaf in 027B Leaves of woody plants (leaves of shrubs and trees).

More information:

Largehead Atractylodes Rhizome, *Atractylodes macrocephala*. In 2017, the value of Chinese export was up to 16.9 million USD. <https://en.wikipedia.org/wiki/Atractylodes>

Dendrobium nobile, *Orchidaceae*

https://en.wikipedia.org/wiki/Dendrobium_nobile

Mulberries leaf, *Morus alba* L.; *Morus nigra* L.; *Morus rubra* L. [https://en.wikipedia.org/wiki/Morus_\(plant\)](https://en.wikipedia.org/wiki/Morus_(plant))

8 China suggests adding commodity Cornus officinalis in 028B Spices, fruit or berry, adding Tree Peony Bark in 028C Spices, bark, adding Mongolian milkvetch, Prince Ginseng, Tuber Fleece flower Root, Corydalis Tuber and White Paeony Root in 028D Spices, root or rhizome, and adding golden-and-silver honeysuckle in 028F Flower or stigma.

More information:

Cornus officinalis, *Cornus officinalis* Sieb. et Zucc. https://en.wikipedia.org/wiki/Cornus_officinalis

Tree Peony Bark, *Paeonia suffruticosa* Andr. https://en.wikipedia.org/wiki/Paeonia_suffruticosa

Mongolian milkvetch, *Astragalus propinquus* (syn. *Astragalus membranaceus*)
https://en.wikipedia.org/wiki/Astragalus_propinquus

Prince Ginseng, *Pseudostellaria heterophylla* (Miq.)Pax ex Pax et Hoffm.
https://en.wikipedia.org/wiki/Pseudostellaria_heterophylla

Tuber Fleece flower Root, *Fallopia multiflora* (Thunb.) Harald
https://en.wikipedia.org/wiki/Fallopia_multiflora

Corydalis Tuber, *Corydalis* <https://en.wikipedia.org/wiki/Corydalis>

White Paeony Root, *Paeonia lactiflora* Pall. *Radix Paeoniae Alba*. In 2017, the value of Chinese export was up to 14.75 million USD.

<http://www.shen-nong.com/eng/herbal/baishaoyao.html>

https://en.wikipedia.org/wiki/Paeonia_lactiflora

Golden-and-silver honeysuckle, *Lonicera japonica* https://en.wikipedia.org/wiki/Lonicera_japonica

Egypt

Egypt agrees on the classification mentioned in Document no. CI 2018/20-PR related to:

Revision of the Classification of Food and Feed (CXM 4-1989) Class A: Primary commodities of plant origin
Type 05: Herbs and Spices

- Group 027 – Herbs
- Group 028 - Spices

Egypt would like to provide the following comments Regarding Document no. CI 2018/20-PR:

- Egypt supports the European Union to relocate Subgroups 028H and 028I to Class D, Processed foods of plant origin
- Egypt proposes that the appropriate location of Milk thistle and perilla seed is inclusion in Seed Spices Subgroup 028A.

European Union

European Union Competence

European Union Vote

The European Union (EU) would like to thank the Electronic Working Group (eWG) on the revision of the Classification of food and feed chaired by the United States of America and co-chaired by the Netherlands for the preparation of the draft on the revision of the Codex Classification of Foods and Animal Feeds.

The EU acknowledges the work done by the eWG to harmonise and to check the internal coherence of various decisions taken by the CCPR in the period 2004-2017 on the revision of the classification of food and feed, in particular of the commodities of Type 5.

The EU notes that discussions on the Type 05 'Herbs and Spices' were finalised in 2011, and the Type was pending at step 7, waiting for the finalisation of other types. Therefore, with a view to the common goal to proceed with the revision of the Classification of Food and Feed, the EU will not oppose to the advancement of the entire revised Type 05 'Herbs and Spices' to CAC41 (2018) for final adoption.

Kenya

Position: Kenya supports the recommendation of the EWG to forward the revised Type 05 herbs and spices and the corresponding table on examples of representative commodities for commodity groups for this grouping forwarded for final adoption by CAC41.

Rationale: the proposed revision by the EWG is consistent with the decision of the committee to include a commodity only in one group or subgroup to avoid confusion of having two different CXLs for the same commodity; the same commodity with different plant parts in different groups to allow consideration of plant parts when describing the commodity and this will facilitate the establishment of MRLs for Herbs and spices and facilitate trade on these commodities most of which are minor crops.

Paraguay

Paraguay is grateful for the opportunity to comment to the reference document and proposes to consider the following comments:

On page 5 of CX/PR 18/50/7 (English version), the scientific name corresponding to HH 3233 Centaury should be corrected. Where it says *Centaurium erythraea* Rafn., it should say *Centaurium erythraea* Rafn.

On page 14 of the CX/PR 18/50/7 (English version), the scientific name corresponding to HS 3286 Calabash nutmeg should be corrected. Where it says *Monodora myristicca* (Gaertn.) Dunal., it should say *Monodora myristica* (Gaertn.) Dunal.

On page 15 of CX/PR 18/50/7 (English version), the scientific name corresponding to Marjoran seed should be corrected. Where it says *Origanum marjorana* L., it should say *Origanum majorana* L.

On page 16 of CX/PR 18/50/7 (English version), it is suggested to review the list described for Subgroup 028B, specifically the species *Withania somnifera* (L.) Dunal, because there are two codes for the same species within the same group (HS 3300 and HS 3301).

On page 19 of CX/PR 18/50/7 (English version), the scientific name corresponding to Gum karaya should be corrected. Where it says *Stercula urens* L., it should say *Sterculia Urens* L.

Turkey

Turkey welcomes and appreciates the work on the revision of the classification of food and feed by the eWG chaired by the United States of America and co-chaired by the Netherlands.

The eWG presented in the document CX/PR 18/50/7 several amendments and recommendations for the classification of food and feed

Turkey would like to provide the following comments:

The genus name *Origanum* L. comes from the Greek words oros, which means mountain, ganos and hence joy, referring to the beautiful aspect (Fonnegra and Jiménez, 2007). *Origanum* L. is a member of the Lamiaceae plant family and it refers to a number of species that produce essential oils with a characteristic smell due to the high concentration of carvacrol (Kokkini et al., 2004). *Origanum* L. genus comprises different plant species, with flowers and leaves giving the characteristic odor and flavor. Based on morphological criteria, the genus *Origanum* L. has been classified into 42 species, 51 taxa and 19 hybrids and most of them have a local distribution around the Mediterranean. Four groups of oregano have been named, due to their common use and economic importance; Greek oregano (*Origanum vulgare* L. ssp. *hirtum* (Link) Letswaart), Turkish oregano (*Origanum onites* L. and *Origanum majorana* L.), Spanish oregano (*Coridohymus capitatus* (L.) Reichb. fil.), and Mexican oregano (*Lippia graveolens* Kunth or *Lippia berlandieri* Schauer) (Arcila-Lozano et al., 2004). On the other hand, among the most popular oregano species are the commercially known as Greek oregano (*Origanum vulgare* ssp. *hirtum*) and Turkish oregano (*Origanum onites* L.). Furthermore, among all the Oregano species, only *Origanum vulgare*, *Origanum onites*, *Origanum majorana* and *Origanum dictamnus* are considered GRAS (Generally Recognized as Safe). *Origanum vulgare* ssp. *hirtum* (section *Origanum*) grows widely in the Balkan Peninsula, Turkey and Cyprus, while *Origanum onites*, *Origanum majorana*, *Origanum dictamnus* and *Origanum syriacum* (section *Majorana*) has a rather narrow distribution. *Origanum onites* inhabits in Greece and in west and south Turkey (Balikesir, İzmir, Antalya, Muğla). On the other hand, the growing habitat of *Origanum majorana* is a native plant of Turkey and naturally distributed in a restricted area varying from Mersin to Antalya in the southeastern Mediterranean region of Turkey. Although the cultivated form of *Origanum majorana* is used in the USA and European and African countries for medical uses, the only naturally growing is available in Turkey. Furthermore, the essential oil compositions of the cultivated (high content of terpinen and sabinene) and naturally growing one (high content of carvacrol) are found to be different (Tabanca et al., 2004). *Origanum syriacum* (section *Majorana*) grows a large area in the eastern Mediterranean and found in southern Turkey, on Cyprus, in Syria, Lebanon, Israel, Jordan, and on the Sinai Peninsula. It has been hypothesized that the essential oils of these *Origanum* species have antimicrobial, antioxidant, antifungal, cytotoxic, insecticidal and nematocidal activities (Kokkini et al., 2004).

Oregano plays a primary role among culinary herbs in world trade (Olivier, 1996), and it is mainly produced in Turkey, France, Greece and Spain in Europe, and Chile, Mexico and Peru in America (Barreyro et al., 2005). Species of the genus have traditionally been collected for centuries for flavouring and medical purposes. Today two aromatic qualities, named as majorana and oregano are commercially traded and commonly used all over the world (Lucas et al., 2010). Since they are commonly finely fragmented when trading, their botanical source is difficult to be determined (Kokkini et al., 2004). The essential oils of the members of the genus *Origanum* vary in respect of the total amount produced by plants as well as in their qualitative composition. Consequently, knowledge of the large morphological and chemical diversity of the genus *Origanum* and the native distribution of its different taxa is essential for the better exploitation of this promising crop. The genus *Origanum* is represented in Turkey by 21 species, 3 subspecies, 11 hybrid taxa, of these 11 species and 11 hybrid taxa are endemic and the ratio of endemism in the genus is 65 % (Aydin et al., 1998). *Origanum onites*, *Origanum minutiflorum*, *Origanum majorana* (*O. dubium* synonym of *O. majorana*), *Origanum syriacum* spp. *bevanii*, *Origanum vulgare* spp. *hirtum* are exported from Turkey (Baser et al., 1993; Kirimer et al., 2003). Turkish Oregano (*Origanum onites*) is the most exported *Origanum* species from Turkey to the entire world (Yaldiz et al., 2005) and is commonly known as “İzmir kekiği” and it includes 2-3 % of essential oil (Gonuz and Ozorgucu, 1999). In Turkey, until early 2000s, oregano was primarily a wild collected plant and thought as an item of additional income to the farmer families, which they could collect in their free time. Therefore, oregano was an item of little interest in the larger scheme of agricultural production. Throughout 2000s, as the traditional tobacco cultivation shrank, farmer families with arid land found it increasingly hard to sustain themselves. Private companies initiated efforts to cultivate oregano in Denizli mountain villages. Moreover, Oregano was immediately adopted as an alternative crop. Oregano is now an important product for the livelihood of over 9000 farmer families in Denizli province. Turkey is among the world's largest *Origanum* producers (Table 1) and more than 80% of exports (>7500 tons of oregano) are produced in field conditions. Generally, *Origanum onites* and *Origanum vulgare* are traded and The United States has the largest share of Turkey's oregano exports. The other importing countries are Germany, Italy, Canada, Poland, the Netherlands, France, Japan and Australia.

Table 1. Turkey oregano production area and production amount (tons) of oregano between 2014-2016 according to TURKSTAT.

Year	2014	2015	2016
Production Area (hectare)	9.295	10.486	12.113
Production amount (tons)	11.752	12.992	14.724

In Turkey, the standard is provided for 5 *Origanum* species. Table 2 indicates the names of traded oregano species with their international and national known names and also the amounts of essential oils and carvacrol (Baser et al., 1993). All of them are placed in the market as **Turkish Oregano**. In the world, the species known as Marjoram contains carvacrol, linalool and carvacrol-linalool chemotypes.

Table 2. The names of traded oregano species including their known names for the outer and inner market and also the amounts of essential oils and carvacrol.

<i>Origanum</i> L. Species *International Name (I.N) **National Name (N.N)	The yield of essential oil (%)	Carvacrol (%)
<i>Origanum onites</i> L. (<i>O. smyrneum</i> L.) *I.N.: Turkish Oregano **N.N.: İzmir kekiği	0.1 – 4.8	19- 82
<i>O. vulgare</i> L. ssp. <i>hirtum</i> (Link) lestwaart (syn. <i>O. hirtum</i> Link) I.N.: Greek Oregano N.N.: İstanbul Kekiki	1.3 - 3.9	44- 85
<i>O. minutiflorum</i> O.Schwarz&P.H.Davis [ENDEMİC] N.N.: Yayla kekiği, Sütçüler kekiği, Çingilli Kekik, Toka kekik	1.1- 2.5	42- 84
<i>O.majorana</i> (<i>O. dubium</i> Boiss.) I.N.: White Oregano N.N.: Beyaz kekik, Alanya beyazı, Anamur beyazı	1.3- 7.7	38- 88
<i>O. syriacum</i> var. <i>bevani</i> (Holmes) lestwaart I.N.: Syrian Oregano N.N.: Tarsus kekiği, Tarsus beyazı, İsrail kekiği, Dağ kekiği	0.4-3.8	43- 79

Table 3 shows the changes in CX / PR 18/50/7 document for oregano and marjoram prepared by EWG.

Table 3. Recommended changes in CX / PR 18/50/7 document for oregano and marjoram prepared by EWG

CODEX CLASSIFICATION OF FOODS AND ANIMAL FEEDS (1993)	CX/PR 18/50/7
Group: 27 HERBS	Group:27 HERBS Subgroup: 27A Herbs (herbaceous plants)
HH 4757 Oregano, see Marjoram	---- Oregano, see Marjoram, HH 0736 <i>Origanum vulgare</i> L.; <i>O. onitus</i> L.
	HH 3212 Oregano, Mexican <i>Lippia graveolens</i> Kunth; L. <i>micromera</i> Schauer
HH 0736 Marjoram <i>Origanum marjorana</i> L.; syn: <i>Marjorana hortensis</i> Moench.; <i>Origanum vulgare</i> L.	HH 0736 Marjoram <i>Origanum marjorana</i> L.; <i>O. vulgare</i> L. <i>O. onites</i> L.
	HH 3257 Syrian oregano <i>Origanum syriacum</i> L.
	Group:28 SPICES Altgrup: 28A Seeds
	HS XXXX Marjoram, seed <i>Origanum marjorana</i> L.; <i>O. vulgare</i> L. <i>O. onites</i> L.

We offer the following comments for your consideration based on CX/PR 18/50/7.

1. Oregano is rich in phenolic monoterpenes, mainly carvacrol. The importance of oregano is due its characteristic use as a food condiment as well as its medicinal properties. Among different oregano species, *Origanum onites* and *Origanum vulgare* have been accepted as a main and source plants for Oregano. Besides, Oregano has an international commercial prominence. It is known that *O. onites*, *O. syriacum*, *O. majorana* and *O. dubium* are classified under section Majorana. The available taxonomic information indicates that Oregano belongs to *Lamiaceae* family, *Origanum* genus and also it consists of *Origanum onites*, *Origanum syriacum*, *Origanum vulgare* and *Origanum majorana* species which are also named as direct children (Anonymous, 2018)

Besides, it has been demonstrated that the oil yield and the amount of essential oil (carvacrol) of these oregano species were found to be similar (Al-Kalaldehy et al., 2010; Baser et al., 1993). According to European Pharmacopoeia, Oregano monography, *Origanum onites* and *Origanum vulgare* subsp. *hirtum* and the mixture of these two species are approved as Oregano. Besides, these species are considered GRAS (Generally Recognized as Safe). In 2005, the European Pharmacopoeia also approved and published this Oregano monography.

As mentioned above, the growing habitat of *Origanum majorana* is a native plant of Turkey and naturally distributed in a restricted area varying from Mersin to Antalya in the southeastern Mediterranean region of Turkey. Turkey has become a major supplier of oregano herb for various demands and *Origanum onites* tops the list of commercial *Origanum* species of Turkey with 80% of oregano export rate. Therefore, due to the critical roles of *Origanum onites*, *Origanum vulgare* and *Origanum majorana* from the nutritional and trade aspects, Turkey wants to the addition of *Origanum onites* and *Origanum majorana* under the column of majorana as Turkish oregano. Besides, Syrian oregano should be belong to section Majorana. Thus *Origanum syriacum* also should be under the column of marjoram (as mentioned below).

CX/PR 18/50/7	Recommendation of Turkey
Group:27 HERBS Subgroup: 27A Herbs (herbaceous plants)	Group:27 HERBS Subgroup: 27A Herbs (herbaceous plants)
—Oregano, see Marjoram, HH 0736 -Origanum vulgare L.; -O. onitus L.	HH 4757 Oregano Greek oregano <i>Origanum vulgare</i> L.
HH 0736 Marjoram -Origanum marjorana L.; -O. vulgare L. O. onites L.	HH 0736 Majorana Turkish oregano <i>Origanum onites</i> L. <i>Origanum majorana</i> L. Syrian oregano <i>Origanum syriacum</i> L.
HH 3257 Syrian oregano -Origanum syriacum L.	

2. *O. onitus* should be corrected as *O. onites*

3. *Origanum marjorana* L should be corrected as *Origanum majorana* L.

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