



**JOINT FAO/WHO FOOD STANDARDS PROGRAMME
CODEX COMMITTEE ON SPICES AND CULINARY HERBS**

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DISCUSSION PAPER ON GROUPING OF SPICES AND CULINARY HERBS

Prepared by the Electronic Working Group hosted by India and co-hosted by Nigeria and Turkey with assistance of: Argentina, Brazil, Cameroon, Canada, Chile, Egypt, European Union, Greece, Indonesia, Japan, Korea Poland, Malaysia, Morocco, Norway, Spain, Switzerland, Thailand, USA and Food Drink Europe

A. INTRODUCTION AND BACKGROUND

1. For the effective working of the Codex Committee on Spices and Culinary Herbs (CCSCH), India had proposed grouping of commodities under the work management modalities (CX/SCH/14/01/4). At the first Session of the CCSCH, the Committee had agreed to establish an electronic Working Group, led by India and working in English only, to prepare a discussion paper for its Second session with the following terms of reference:

- Clarify the intent and purpose of the grouping of spices and culinary herbs (SCH), including the rationale;
- Propose grouping of spices and culinary herbs taking into account scientific and technical information and the work on classification and grouping used by other committees (e.g. CCPR).

2. The report of the first eWG was presented during CCSCH2. The following comments were received during the session (REP16/SCH):

- I. The Chairperson had noted that the group “dried bark” seemed to be a good candidate for a group standard and that further work on the list might lead to the identification of other groups /sub-groups of products for which this type of standards could be developed.
- II. The following comments were made by delegates:
 - a. The background should clearly define the purpose and rationale of the grouping and only refer to the use of spices and culinary herbs within the mandate of CCSCH (e.g. the use of spices and culinary herbs as medicine should not be considered);
 - b. The group “Other” should be better defined;
 - c. Grouping should take into account the botanical similarities of plants; instead of “HS codes” (which are for trade and country names) and should not be used;
 - d. One or two widely used databases for agriculture products, e.g. GREN database, Mansfeld's World Database of Agriculture and Horticultural Crops, could be used as authoritative sources for the nomenclature of the botanical names.
 - e. The list should be used only as a reference and allow for the inclusion of other products.
 - f. Several delegations suggested the addition, deletion and moving to other groups of a number of spices and culinary herbs.

3. The Committee then agreed to the proposal of the Chairperson to continue work on grouping and to establish an eWG, led by India and co-chaired by Nigeria and Turkey, open to all members and observers and working in English only, to:

- a) Update the list;
- b) Revise the list on the basis of the comments submitted;

- c) Attempt some sub-grouping with a view to recommend group standards; and
- d) Explore the possibility to develop a format for group standards for spices, taking into consideration the physical and chemical characteristics of the proposed draft standards for cumin and thyme (Appendices III and IV) and the format of other Codex group standards, e.g. the *Standard for Fruits Juices and Nectars* (CODEX STAN 247-2005).

4. Based on these considerations, a discussion paper with template general standard for spices and culinary herbs were prepared and circulated to the members of the eWG. After two rounds of deliberations, the final draft of the discussion paper and template general standard is prepared incorporating the comments and suggestions of the members.

B. INTENT AND PURPOSE OF GROUPING:

5. According to *Code of Hygienic Practice for Low-moisture Foods* (Annex on Spices and Dried Aromatic Herbs) (CAC/RCP 75-2015), spices and dried aromatic herbs are defined as follows – “dried plants or parts of plants (roots, rhizomes, bulbs, leaves, bark, flowers, fruits, and seeds) used in foods for flavouring, colouring, and imparting aroma. This term equally applies to whole, broken, ground and blended forms”

6. In general use, culinary herbs are any plants used for adding aroma or flavour to food. Culinary use typically refers to the leafy green parts of a plant (either fresh or dried). However for the purposes of the present document only the dried forms are considered.

7. Quality specification of spices or culinary herbs deals with a description of the quality characteristics of the particular commodity. It is the explicit requirement upon which the trade of a spice or a culinary herb is to be based. Such specifications assure that the quality of the commodity is suited to its intended use and encourage fair practices in trade.

8. There are 109 commodities categorized as spices under the list of ISO (ISO 676:1995). Many spices and culinary herbs have common characteristics and their quality profile may more or less be the same. It would be difficult to elaborate quality standards for each of the spices and culinary herbs individually and hence necessitates the need for grouping. Thus, grouping will ease the development of quality specifications by eliminating duplication of efforts considering the commonality in quality profile of a particular group.

9. Grouping is closely related to the development of a template for the standards of spices and culinary herbs. Development of templates for the standards on spices and culinary herbs would allow the development of specific standards, which would facilitate compliance and make easier the work of competent authorities and regulators. Further, the standard layout would assist the Committee in the efficient conduct of its work.

10. Grouping of spices and culinary herbs in the perspective of trade would facilitate framing the template and subsequently elaboration of quality standards. Perspective of trade means that some spices and culinary herbs would be categorized not strictly based on their botanical definition, but based on their commercial class. For example, Cumin, Coriander, Aniseed etc. are traded as “seeds” in international markets while the correct botanical definition is “fruits”. In such instances, the trade's point of view would be preferred.

C. PROPOSAL FOR GROUPING OF SPICES AND CULINARY HERBS

11. Codex Committee on Pesticide Residues (CCPR) has divided Spices Group 028 into 07 subgroups namely, Seeds, Fruit or Berry, Bark, Root or Rhizome, Buds, Flower or Stigma and Aril. However, considering the fact that certain fruits and berries assume the status of spices / herbs only upon drying, a more general strategy of grouping is proposed. For example, chillies are used as spices in their dried form but in the fresh form it is used as a vegetable and the specifications varies which is dealt by the CCFFV. Hence the word ‘dried’ is added to all the groups in spices. For example, the products to be considered under the group “dried fruits and berries” may include: cardamom, pepper (black, white and green), chillies etc. The same applies for herbs, i.e. their fresh form is under the remit of CCFFV while only their dried form is considered by CCSCHE.

12. For some spices like cumin, all though the term “seeds” is currently used in commerce, the term “fruits” is the correct botanical term (Ref. ISO 6465:2009). Hence, it is proposed to have grouping for “seeds” taking into account the trade for the spices in the category of seed spices. This kind of categorization will support grouping based on the perspective of trade.

Approach and Rationale

13. Initially, a grouping strategy was considered in which the SCH were grouped based on the plant part which finds major use in culinary applications and trade, with further subgroupings of similar commodities under each

group.

14. This strategy had seven groups, viz. (i) fruits and berries, (ii) roots, rhizomes and bulbs, (iii) seeds, (iv) floral parts, (v) bark, (vi) leaves and (vii) herbs. The few SCH which could not be grouped under this strategy were kept in a separate group called 'ungrouped'. Each of the seven groups had further subgroupings of similar commodities when possible.

15. However, it was observed that this strategy, while convenient for organizing the SCH commodities, was not very amenable for preparing a general standard template for SCH. Hence an alternate strategy is proposed.

16. This strategy involves grouping the SCH by the generic product name. Under each generic product name, similar products are grouped. For example, under the generic group of pepper, there can be the following products: Brazilian pepper, Chinese pepper, Chinese prickly ash pepper/ Sechuang pepper, Cubebs, Grain of paradise (Guinea grains, Melegueta pepper, Alligator pepper), Negro pepper / Guinean pepper pods, Pepper (Black, White, Green), Pepper Long, Pink pepper, Sichuan pepper / Japanese pepper, Negro pepper / Guinean pepper pods, West African / Benin pepper (item no. 76, Section 2, Annex I).

17. For each generic group, the major plant part used is indicated, along with the scientific names of products. The rationale for this grouping strategy is that this facilitates easy addition of new varieties of SCH under the generic products, and also greatly improves the ease of developing a generic standard template by defining the common requirements under each generic product group. The use of grouping based on generic names also has the advantage of being trade-friendly. The updated list of SCH as per this grouping strategy is included in Section 2, Annex I.

General Standard Template for SCH

18. A general standard template for spices and culinary herbs is proposed in the Appendix which would cover most of the spices and culinary herbs in commerce and culinary applications. The proposed template comprises of four parts:

- a. A general standard document outlining the scope, description, essential composition and quality factors and other requirements with respect to food additives, contaminants and food hygiene, weights and measures, labelling and packaging, and methods of analysis / sampling.
- b. Annex I with the list of SCH grouped by generic product name (96 Nos.), other product forms under each generic product, and indicating scientific names / plant part used. The draft general standard refers to this Annex for the list of products covered.
- c. Annex II, chemical properties for different generic products. The values for the different parameters would be fixed as part of the standards development.
- d. Annex III, physical properties for different generic products. The values for the different parameters would be fixed as part of the standards development.

RECOMMENDATION

19. A strategy of characterization of spices and culinary herbs into groups of generic products, taking into consideration the major utility and the terminology used in global commerce, is presented in this discussion paper. The proposed grouping will be dynamic and open to include other spices and culinary herbs in the future. The development and adoption of group standard templates for commodities with similar physical and chemical characteristics will make the standard development process easier and more efficient. Hence it is recommended that the committee approve the draft general standard template for future standards development.

APPENDIX

DRAFT GENERAL STANDARD TEMPLATE FOR DRIED SPICES AND CULINARY HERBS

DRAFT TEMPLATE

STANDARD FOR []

1 SCOPE

This Standard applies to those plants commonly sold in commerce in their dried or dehydrated form as spices or culinary herbs, defined in Section 2.1 below, offered for direct human consumption, commercial food processing and for repacking if required. The exact species and form bought/sold may be defined by contractual specifications. This standard does not apply to those products when intended for industrial processing.

2 DESCRIPTION**2.1 PRODUCT DEFINITION**

Product can be a generic product or other product form of [] as described in Annex I, serial no. [].

2.2 Styles

Spices and culinary herbs may be:

- Whole,
- Cracked/broken, or
- Ground/powdered

Other styles distinctly different for those three are allowed, provided they are labeled accordingly

The size/physical dimensions of each form is determined by contractual agreement between buyer and seller.

3. ESSENTIAL COMPOSITION AND QUALITY FACTORS**3.1 COMPOSITION**

Product shall belong to the list of products in Annex I, serial no. [] and shall conform to standards set in Annexes II and III.

3.1.1 Basic Ingredients

Dried spices / culinary herbs as described in Section 2. Product Description and shall consist of at least 90% (m/m) of the specified species, variety, or cultivar.

3.2 QUALITY CRITERIA**3.2.1 Infestation**

Dried spices and culinary herbs shall be free from live insects and practically free from dead insects, insect fragments and rodent contamination visible to the naked eye (corrected, if necessary, for abnormal vision).

3.2.2 Odour, flavor and color:

The product shall have a characteristic aroma and flavour which can vary depending on geo-climatic factors/conditions and shall be free from any foreign odour or flavour.

3.2.3 Classification

Specific grades of spices shall be set by contractual agreement between buyer and seller.

The defects allowed must not affect the general appearance of the product as regards to its quality, keeping quality and presentation in the package.

3.2.4 Chemical and physical characteristics

The product shall be free of any hard or sharp objects longer than 7 mm and 2 mm wide. The product, generic or other, shall comply with the physical requirements specified in Annex II (Chemical Characteristics) and Annex III (Physical Characteristics).

4 FOOD ADDITIVES

No food additives are permitted in the products covered by this standard except as noted in Annex II or III.

5 CONTAMINANTS

5.1 The products covered by this Standard shall comply with the maximum levels of the *General Standard for Contaminants and Toxins in Food and Feed* (CODEX STAN 193-1995).

5.2 The products covered by this Standard shall comply with the maximum residue limits for pesticides established by the Codex Alimentarius Commission.

6 FOOD HYGIENE

6.1 It is recommended that the products covered by the provisions of this Standard be prepared and handled in accordance with the appropriate sections of the *General Principles of Food Hygiene* (CAC/RCP 1-1969), the *Annex on Spices and Dried Aromatic Herbs to the Code Of Hygienic Practice For Low-Moisture Foods* (CAC/RCP 75-2015) and other relevant Codex texts such as codes of hygienic practice and codes of practice.

6.2 The products should comply with any microbiological criteria established in accordance with the *Principles for the Establishment and Application of Microbiological Criteria for Foods* (CAC/GL 21-1997).

7 WEIGHTS AND MEASURES

Containers shall be as full as practicable without impairment of quality and shall be consistent with a proper declaration of contents for the product.

8 LABELLING and PACKAGING

8.1 The products covered by the provisions of this Standard shall be labelled in accordance with the *General Standard for the Labelling of Pre-packaged Foods* (CODEX STAN 1-1985). In addition, the following specific provisions apply:

8.2 Name of the Product

8.2.1 The name of the product shall be as described in Section 2.1

8.2.2 The name of the product may include an indication of the style as described in Section 2.2.

8.2.3 Species, variety or cultivar may be listed on the label.

8.3 Labelling of Non-Retail Containers

Information for non-retail containers shall be given either on the container or in accompanying documents, except that the name of the product, lot identification, and the name and address of the manufacturer, packer, distributor or importer, as well as storage instructions, shall appear on the container. However, lot identification, and the name and address of the manufacturer, packer, distributor or importer may be replaced by an identification mark, provided that such a mark is clearly identifiable with the accompanying documents.

8.4 Packaging

The packaging must not be a source of contamination or migration, should be food grade and must protect the product quality during transportation and storage. It must be free from off odour.

9. METHODS OF ANALYSIS AND SAMPLING¹

For checking the compliance with this standard, the methods of analysis and sampling contained in the *Recommended Methods of Analysis and Sampling* (CODEX STAN 234-1999) relevant to the provisions in this standard, shall be used.

9.1 Methods of Analysis

Provision	Method	Principle
Moisture	ISO 938:1980 AOAC 2001.12 ASTA 2.0	Distillation
Total Ash	ISO 928:1997 AOAC 950.49 ASTA 3.0	Gravimetry
Acid Insoluble Ash	ISO 930:1997 ASTA 4.0	Gravimetry
Volatile Oil	ISO 6571:2008 AOAC 962.17 ASTA 5.0	Distillation
Extraneous Matter	ISO 927:2009 ASTA 14.1	Visual Examination
Foreign Matter	ISO 927:2009	Visual Examination
Insect Damage	Method V-8 Spices, Condiments, Flavors and Crude Drugs (Macroanalytical Procedure Manual, FDA Technical Bulletin Number 5)	Visual Examination
Insects/Excreta/Insect Fragments	Method appropriate for particular spice from AOAC Chapter 16, subchapter 14	Visual Examination

9.2 Sampling

¹ The listing of methods of analysis and sampling will be removed when the standard is adopted by CAC.

ANNEX I : List of Spices and Culinary Herbs, Arranged by Generic Names				
Sl. No.	Generic Product	Other Product Forms	Scientific Name	Plant Part Used
1	Ajowan/ Ajwain		<i>Trachyspermumammi</i> Sprague	Seed
2	Alfalfa Seed		<i>Medicago sativa</i> L.	Seed
3	Allspice (Leaf)		<i>Pimentadioica</i> (L) Merr.	Leaf
4	Allspice (Pimento)		<i>Pimentadioica</i> (L) Merr.	Seed
5	Ambrette		<i>Abelmoschusmoschatus</i> Medik.	Seed
6	Ambrette		<i>Hibiscus abelmoschus</i>	Fruit
7	Anatto		<i>Bixaorellana</i>	Seed
8	Angelica Root		<i>Angelica archangelica</i> L. or <i>Angelica</i> spp.	Root
9	Angelica Leaf		<i>Angelica archangelica</i> L. or <i>Angelica</i> spp.	Leaf
10	Angelica Seed		<i>Angelica archangelica</i> L. or <i>Angelica</i> spp.	Seed
11	Angostura (Cusparia bark)		<i>Galipeaofficinalis</i> Hancock.	Bark
12	Anise (AniSeed)		<i>Pimpinellaanisum</i> L.	Fruit
13	Asafoetida		Any of the below species <i>Ferula narthex</i> Boiss <i>Ferula assa-foetida</i> L. <i>Ferula foetida</i> (Binge) Regel	Roots, Rhizomes, Bulbs
14	Basil	Sweet Basil Bush Basil	Any of the below species <i>Ocimumbasilicum</i> L. <i>Ocimum minimum</i> L.	Leaf
15	Bay Leaves (Laurel Leaves)		<i>Laurusnobilis</i> L.	Leaf
16	Bergamot		<i>Menthacitrata</i> Ehrh.	Leaf/Stem
17	Black caraway		<i>Buniumpersicum</i> B.Fedtsch.	Seed
18	Black cumin	Russian Caraway Black Caraway Damas black cumin	Any of the below species <i>Nigella sativa</i> L. <i>Nigella sativa</i> L. <i>Nigella damascena</i> L.	Seed
19	Borage Leaf		<i>Boragoofficinalis</i>	Leaf
20	Calendula, Pot marigold		<i>Calendula officinalis</i> L.	Flower
21	Camboge		<i>Garcinia cambogia</i> (Gaertn.) Desr. <i>Garcinia atroviridis</i>	Fruit
22	Camomile, English or Roman		<i>Anthemisnobilis</i> L.	Flower
23	Camomile, German or Hungarian		<i>Matricariachamomilla</i> L.	Flower
24	Canelo pepper		<i>Drimyswinteri</i> J.R. Forst. & G. Forst.	Bark

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Sl. No.	Generic Product	Other Product Forms	Scientific Name	Plant Part Used
25	Caper		<i>Capparis spinosa</i> L.	Floral Parts
26	Caraway		<i>Carum carvi</i> L.	Seed
27	Cardamom	<p>Bengal cardamom</p> <p>Cambodian cardamom</p> <p>Cameroon cardamom</p> <p>Cardamom (Large)/ Black cardamom</p> <p>Cardamom (Small)</p> <p>Grain of paradise (Guinea grains, Melegueta pepper, Alligator pepper)</p> <p>Korarima cardamom</p> <p>Madagascar cardamom</p> <p>Round cardamom/Chester cardamom/Siamese cardamom/ Indonesian cardamom</p> <p>Sri Lankan Cardamom</p> <p>Tsao-ko Cardamom</p>	<p>Any of the below species</p> <p><i>Amomum aromaticum</i> Roxb.</p> <p><i>Amomum krervanh</i> Pierre ex Gagnep.</p> <p><i>Aframomum hanburyi</i> K. Schum.</p> <p><i>Amomum subulatum</i> Roxb.</p> <p><i>Elettaria cardamomum</i> Maton</p> <p><i>Aframomum melegueta</i> (Roscoe) K. Schum.</p> <p><i>Aframomum korarima</i> (Pereira) Engl.</p> <p><i>Aframomum angustifolium</i> K. Schum.</p> <p><i>Amomum kepulaga</i> Sprague & Burkill</p> <p><i>Elettaria cardamomum</i> var. major (Sm.) Thwaites</p> <p><i>Amomum tsao-ko</i> Crevost & Lemarié</p>	Fruit/berry
28	Celery leaves		<i>Apium graveolens</i> Dulce	Leaf
29	Celery Seed		<i>Apium graveolens</i> Dulce	Seed
30	Chervil		<i>Anthriscus cerefolium</i> Hoffm.	Leaf
31	Chilli (equal or greater than 900 Scoville units)		<i>Capsicum</i> spp.	Fruit with or without Seeds
32	Chilli Paprika (less than 900 Scoville units)		<i>Capsicum</i> spp.	Fruit with or without Seeds
33	Chive		<i>Allium schoenoprasum</i> Regel & Tiling	Leaf

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Sl. No.	Generic Product	Other Product Forms	Scientific Name	Plant Part Used
34	Cinnamon	Indonesian, Padang, Batavia Cassia/Cinnamon Chinese Cassia/Cinnamon Vietnamese, Saigon Cassia/Cinnamon	Any of the below species <i>Cinnamomumburmanii</i> (Nees& T. Nees) Blume <i>Cinnamomumcassia</i> Blume. <i>Cinnamomumloureirii</i> Nees	Bark
		Ceylong Cinnamon	<i>Cinnamomumzeylanicum</i> Blume	
35	Clove		<i>Syzygiumaromaticum</i> (L) Merr.& Perry	Floral Bud
36	Clover		<i>Trifolium</i> spp.	Leaf
37	Coriander Leaf		<i>Coriandrum</i> sativum L.	Leaf
38	Coriander Seed		<i>Coriandrum</i> sativum L.	Seeds
39	Cumin, Brown (Jerra, cumin)		<i>Cuminum</i> cyminum L.	Seed
40	Curry Leaf		<i>Murrayakoenigii</i> Spreng.	Leaf/Stem
	Dill Seed	Dill Indian Dill	Any of the below species <i>Anethumgraveolens</i> L. <i>Anethumsowa</i> Roxb. ex Fleming	Seeds
	Dill, Leaf	Dill Indian Dill	Any of the below species <i>Anethumgraveolens</i> L. <i>Anethumsowa</i> Roxb. ex Fleming	Leaf
	Elder flowers	Winter savory Summer Savory	Any of the below species <i>Saturejamontana</i> L. <i>SaturejaThymbra</i> L. <i>SaturejaSpinosa</i> L <i>Saturejahortensis</i> L.	Leaf/Stem
44	Fennel Seed		<i>Foeniculumvulgare</i> Mill.	Seeds
45	Fennel Leaf		<i>Foeniculumvulgare</i> Mill.	Leaf
46	Fenugreek		<i>Trigonellafoenum-graecum</i> L.	Seeds
47	Galangal	Greater Galangal Galangal	Any of the below species <i>Alpiniagalanga</i> Willd. <i>Alpiniaofficinarum</i> Hance	Roots, Rhizomes, Bulbs

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47	Galangal	Galangal Lesser galangal	<i>Kaempferiagalanga</i> L. <i>Alpiniaofficinarum</i> Hance	
48	Garden Celery		<i>Apiumgraveolens</i> L.	Seeds
49	Garlic		<i>Allium sativum</i> L. <i>Allium ampeloprasum</i> L.	Roots, Rhizomes, Bulbs
50	Geranium		<i>Pelargonium</i> spp.	Leaf
51	Ginger		<i>Zingiberofficinale</i> Roscoe	Roots, Rhizomes, Bulbs
52	Horehound (hoarhound)		<i>Marrubiumvulgare</i> L.	Leaf
53	Horseradish		<i>Armoracialapathfolia</i> Gilib.	Roots, Rhizomes, Bulbs
54	Horseradish root		<i>Armoraciarusticana</i> G.Gaertn.,B.Mey. &Scherb.	Roots, Rhizomes, Bulbs
55	Hyssop		<i>Hyssopusofficinalis</i> L.	Leaf/Stem
56	Japanese mint / field mint / corn mint		<i>Menthaarvensis</i> L.	Leaf/Stem
57	Juniper berry		<i>Juniperuscommunis</i> L.	Fruit/berry
58	Kaffir Lime		<i>Citrus hystrix</i> DC.	Fruit
59	Kokam		<i>Garciniaindica</i> (Thouars) Choisy	Fruit/berry
60	Lavender		<i>Lavandulaofficinalis</i> Chaix.	Leaf/Flower
61	Leek	Stony leek/ Welsh onion/ Japanese bunching onion Leek / Winter leek Indian leek/ Chinese chive	Any of the below species <i>Allium fistulosum</i> L. <i>Allium porrum</i> L. <i>Allium ramosum</i> L <i>Allium ampeloprasum</i> L.	Entire plant
62	Lemon balm		<i>Melissa officinalis</i> L.	Leaf
63	Lemon Grass		<i>Cymbopogoncitratus</i> (DC.) Stapf	Leaf
64	Linden Flowers		<i>Tiliaspp.</i>	Flower
65	Lovage Root		<i>Levisticumofficinale</i> W.D.J.Koch	Rhizome
66	Lovage Leaf		<i>Levisticumofficinale</i> W.D.J.Koch	Leaf/Stem
67	Mace		<i>Myristicafragrans</i> Houtt.	Aril
68	Mango Dried		<i>Mangiferaindica</i>	Seed
69	Marjoran	Marjoram Marjoram, sweet Pot marjoram	Any of the below species Majoranahortensis, Syn. Origanummajorana <i>Majoranahortensis</i> Moench. <i>Origanumonites</i> (L.) Benth.	Leaf/Stem

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Sl. No.	Generic Product	Other Product Forms	Scientific Name	Plant Part Used
70	Mustard	Mustard, white or yellow Mustard, brown Mustard, black or brown	Any of the below species <i>Brassica hirta</i> Moench. <i>Brassica juncea</i> (L.) Czern. <i>Brassica nigra</i> (L.) Koch. <i>Sinapis alba</i> L. <i>Sinapis nigra</i> L.	Seed
71	Nutmeg	Papuan nutmeg	Any of the below species <i>Myristica fragrans</i> Houtt. <i>Myristica argentea</i> Warb.	Seed
72	Onion	Potato onion	<i>Allium cepa</i> L. <i>Allium cepa</i> Aggregatum Group	Roots, Rhizomes, Bulbs
73	Oregano		Any of the below species	Leaf/stem
		Mexican oregano	<i>Lippia berlandieri</i> Schauer	
		Mexican oregano	<i>Lippia graveolens</i> H.B.K. <i>Lippia micromera</i> Schauer	
		Oregano Oreganum, Mexican Oregano, Mexican Sage, Origan) Mt. Pima oregano	<i>Lippia</i> spp. <i>Monarda citriodora</i> Cerv. ex Lag.	
		oregano de la sierra Italian oregano	<i>Monarda fistulosa</i> L. <i>Origanum x majoricum</i> Cambess.	
		Turkish oregano	<i>Origanum onites</i> L.	
		Cretan oregano	<i>Origanum onites</i> L.	
		Oikea oregano	<i>Origanum onites</i> L.	
		Syrian oregano	<i>Origanum syriacum</i> L.	
		Oregano	<i>Origanum vulgare</i> L.	
		Greek oregano	<i>Origanum vulgare</i> subsp. <i>viride</i> (Boiss.) Hayek	
		Turkestan oregano	<i>Origanum vulgare</i> subsp. <i>viride</i> (Boiss.) Hayek <i>Origanum vulgare</i> subsp. <i>Vulgare</i>	
		Cuban oregano	<i>Plectranthusamboinicus</i> (Lour.) Spreng. <i>Poliominthabustamenta</i> B. L. Turner	
		Spanish oregano	<i>Thymus capitatus</i> (L.) Hoffmanns. & Link	
74	Pandanwangi		<i>Pandanus amaryllifolius</i> Roxb.	Leaf/Stem

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Sl. No.	Generic Product	Other Product Forms	Scientific Name	Plant Part Used
75	Parsley		<i>Petroselinum crispum</i> (Mill.) Nym.	Leaf
76	Pepper	Black, White, Green Pepper Brazilian pepper Chinese pepper	Any of the below species <i>Piper nigrum</i> L. <i>Schinusterebenthifolius</i> Raddi <i>Zanthoxylum acanthopodium</i> DC.	Seed
		Chinese prickly ash pepper/ Sechuang pepper Cubebs Grain of paradise (Guinea grains, Melegueta pepper, Alligator pepper)	<i>Zanthoxylum bungei</i> Planch. <i>Piper cubeba</i> L. <i>Aframomum melegueta</i> (Roscoe) K. Schum.	
		Negro pepper / Guinean pepper pods Pepper (Black, White, Green) Pepper Long Pink pepper Sichuan pepper / Japanese pepper Negro pepper / Guinean pepper pods Canelo pepper West African / Benin pepper	<i>Xylopiiaethiopica</i> A. Rich. <i>Piper nigrum</i> L. <i>Piper longum</i> L. <i>Schinus molle</i> L. <i>Zanthoxylum piperitum</i> (L.) DC. <i>Xylopiiaethiopica</i> A. Rich. <i>Drimys winteri</i> <i>Piper guineense</i> Schumach. & Thonn.	
77	Peppermint		<i>Mentha piperita</i> L.	Leaf/Stem
78	Pomegranate Seed		<i>Punicagranatum</i> L.	Seeds
79	Poppy Seed		<i>Papayersomniferum</i> L.	Seed
80	Rosemary		<i>Rosmarinus officinalis</i> L.	Leaf
81	Saffron		<i>Crocus sativus</i> L.	Floral Parts
82	Sage	Sage Clary (Clary Sage) Sage, Greek	Any of the below species <i>Salvia officinalis</i> L. <i>Salvia sclarea</i> L. <i>Salvia triloba</i> L.	Leaf Leaf
83	Sesame/ Gingelly		<i>Sesamum indicum</i> L.	Seeds
84	Shallot		<i>Allium ascalonicum</i> L.	Roots, Rhizomes, Bulbs
85	Spearmint		<i>Mentha spicata</i> L.	Leaf/Stem

ANNEX I : List of Spices and Culinary Herbs, Arranged by Generic Names				
Sl. No.	Generic Product	Other Product Forms	Scientific Name	Plant Part Used
86	Sri Lankan Citronella		<i>Cymbopogonnardus</i> (L.) Rendle	Leaf/Stem
87	Star Anise		<i>Illiciumverum</i> Hook. f.	Seed
88	Sumac/Sumach		<i>Rhuscoriaria</i> L.	Fruit
89	Sweet flag		<i>Acoruscalamus</i> L.	Roots, Rhizomes, Bulbs
90	Tarragon		<i>Artemisia dracunculus</i> L.	Leaf/Stem
91	Tejpat (Indian Bay)		<i>Cinnamomumtamala</i> (Buch. –Ham.) C. H. Nees&Eberm.	Leaf
92	Thyme	Creeping thyme / Wild thyme / Mother of thyme	Any of the below species <i>Thymus vulgaris</i> L. <i>Thymus serpyllum</i> L. <i>Thymus capitatus</i> L. <i>Thymus zygis</i> L. <i>Thymus saturejoides</i> Coss.	Leaf
93	Turmeric		<i>Curcuma longa</i> L.	Roots, Rhizomes, Bulbs
94	Vanilla		Any of the below species	
		Pompon vanilla	<i>Vanilla pompona</i> Schiede	Pods
		Tahitian Vanilla	<i>Vanilla tahitensis</i> J.W. Moore	
95	West Indian bay		<i>Pimentaracemosa</i> (Mill.) J.W. Moore	Leaf
96	Zedoary		<i>Curcuma zedoaria</i> (Bergius) Rosc.	Roots, Rhizomes, Bulbs

ANNEX II: Chemical Properties for Dried Spices and Culinary Herbs							
Product Name	Total Ash %w/w (max)	Acid Insoluble Ash % w/w (max)	Moisture Content %w/w (max)	Volatile Oils mL/100g (min)	Volatile oil markers	Bulk Density	Notes

(The product names are to be chosen from Annex 1. The values of chemical parameters are to be fixed during the standards development under CCSCH)

ANNEX III: Physical Properties for Dried Spices and Culinary Herbs							
Product Name	Whole insects, dead Count /100 gm (max)	Excreta mammalian mg/kg (max)	Excreta, other mg/Kg (max)	Mold damaged %w/w (max)	Insect defiled/infested %w/w (max)	Extraneous/Foreign matter %w/w (max)	Notes

(The product names are to be chosen from Annex 1. The values of chemical parameters are to be fixed during the standards development under CCSCH)