



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

3rd Session

Chennai, India, 6 -10 February 2017

PROPOSALS FOR NEW WORK

Submitted by Nigeria

1. With reference to paragraph 51 of the report of the 2nd session of the Committee on Spices and Culinary Herbs (CCSCH) held 7 – 14 September, 2015 in which Nigeria was requested to revise and provide updated information as it relates to proposal for new work on dried or dehydrated ginger in paragraph 50a) and proposal for new work on cloves in paragraph 50c).
2. Attached are the corrected proposals for new work on dried or dehydrated ginger and cloves for consideration at CCSCH3 (Annex I and II).
3. The corrections requested on the proposals by the CCSCH2 have been effected and the documents have been updated to include the latest data as required.
4. CCSCH3 is requested to consider the two proposals with a view of recommending their inclusion in the priority list.

PROJECT DOCUMENT

PROPOSAL FOR NEW WORK ON CODEX STANDARD FOR DRIED OR DEHYDRATED GINGER

Introduction

Ginger (*Zingiber officinale* Roscoe) is a flowering plant widely used as a spice in most part of the world. It is grown in West Africa, Asia and the Caribbean. Ginger is widely cultivated in the tropical regions as a commercial crop, with world production estimate of 1.6 million tonnes.

1. Purpose and the scope of the standard

The scope of the work is to establish a worldwide quality standard for whole dried or dehydrated ginger, split dried ginger, and (ground) powdered ginger obtained from the rhizome of *Zingiber officinale* to facilitate international trade and consumer protection.

The objective of the standard is to consider the essential quality characteristics of dried ginger for industrial food production and for direct human consumption, including for catering purposes and other essential uses as required, to aid international trade in this product.

2. Relevance and timeliness

Due to the growing trend of worldwide dried ginger production and trade, it is necessary to establish a commodity standard covering the safety, quality, hygiene and labelling in order to have a reference that has been internationally agreed by consensus between the producing, consuming and trading countries across the world. More significantly, the present status of dried or dehydrated ginger is not limited to any particular region and hence justifies the elaboration of an international standard commensurate with the dried or dehydrated ginger's true standing as an increasingly valuable worldwide commodity. In addition, the drafting of a Codex standard for dried ginger will help to protect consumers' health and to promote fair trade in accordance with the international agreements in particular the WTO SPS and TBT Agreements.

Traditionally, dried ginger is used for culinary purposes as well as in confectionery industry. It is also used as a spice in many culinary products ranging from bakery products (ginger bread, ginger cake, ginger biscuits), to ginger tea, ginger ale, ginger beer all of which are of importance in the world food industries.

3. Main aspects to be covered

The standard entails main aspects related to the definition of the produce, essential quality factors e.g. moisture and labelling requirements in order to provide certainty to the consumer on the nature and characteristics. The standard will supply high quality and safe products to protect consumer's health and against misleading practices by including all the necessary parameters such as moisture, proper labelling, and other permissible limits among others.

The most relevant items which may be considered are related to:

- Establish the minimum requirements of dried or dehydrated ginger which shall be complied with, independently from the quality parameters and other requirements regardless of class.
- Define the categories to classify dried or dehydrated ginger in accordance with its characteristics.
- Establish the tolerance as regards quality and size that may be permitted of dried or dehydrated ginger contained in a package.
- Include the provisions to be considered relating to the uniformity of the packaged product and the packaging used.
- Include provisions for the labelling and marking of the product in accordance with the General Standard for the labelling of Pre-packaged Foods.
- Include provisions for pesticides and contaminants with the reference to the General Standard for Contaminants and toxins in food.
- Include provisions for hygiene with the reference to the general principles of food hygiene and other relevant codes of hygiene practices.
- References to methods of analysis and sampling

4. Assessment against the Criteria for the Establishment of Work Priorities

General Criteria

Codex standard for dried or dehydrated ginger would be beneficial for developing countries because they are the major producers, exporters and consumers. Establishing a standard for the commodity as a spice is necessary to meet minimum requirements for food quality and safety to ensure consumer protection.

(a) Volume of production and consumption in individual countries and volume and pattern of trade between countries

Dried Ginger is an important export product that plays significant role as source of income and employment for its producing countries. China, India, Netherlands, Thailand, Ethiopia, Nigeria are currently among the countries most involved in ginger production globally, detailed statistics of its world production import and export are shown in Table 1-5.

Table 1: World-wide Production Data

Year	Production (in Tonnes)
2008	1,596,385.00
2009	1,643,455.00
2010	1,692,581.00
2011	2,335,062.00
2012	2,035,073.00
2013	2,140,451.00

(Source: FAOSTAT)

(b) Diversification of national legislations and apparent resultant or potential impediments to international trade

There exist various national and international standards for dried ginger. Some of them are given below:

- ISO 1003:2008, Spices -- Ginger (*Zingiber officinale* Roscoe.) – Specification
- ESA quality minima document Rev 4.
- Nigerian standard, NIS 409:2007 “Standard for Ginger (Whole and Ground)”
- Indian Standard, IS 1908 (2008), “Spices and Condiments, ginger, Whole and ground, Specification”,
- Malaysian standard, MS 718: 1981 “Specification for ginger, whole and in pieces”

The lack of harmonized and internationally accepted standards is detrimental to the trade and it leads to fraudulent practices and rejections of exports. Therefore, development of a Codex standard will allow the different stakeholders to harmonize their different requirements to facilitate international trade.

(c) International or regional market potential

The import of dried or dehydrated ginger by most countries is increasing. Bangladesh is currently the largest importer of dried ginger with 69311 tonnes according to the current statistic of FAOSTAT. China is the largest exporter globally with 380138 tonnes, Nigeria ranks 6th exporting 14329 tonnes of dried ginger according to FAOSTAT.

Pattern of International Trade
Table 2: World-wide Export Data

Year	Export Quantity (in Tonnes)	Value (in US \$1000)	Growth rate in export quantity* (%)	Growth rate in export value (%)
2009	494,618	409,516		
2010	457,046	657,471	-7.6	61
2011	557,665	669,093	12.7	2
2012	630,050	544,009	27.4	-19
2013	612,574	737,426	23.84	36
2014	527,617	968,486	6.8	31
2015	637,259	756,319	28.8	-22

Note. * % Variation against quantity in 2009

(Source: ITC calculations based on UN COMTRADE statistics.)

Year	Import Quantity (in Tonnes)	Value (in US \$1000)
2009	447,753	382,779
2010	440,282	580,861
2011	552,674	666,118
2012	597,933	522,943
2013	594,499	704,284
2014	553,485	966,818
2015	663,914	858,527

(Source: ITC calculations based on UN COMTRADE statistics.)

Table 4. Import Statistics of Dried ginger in 2013

Rank	Area	Quantity (tonnes)	Value (1000 \$)	Unit value (\$/tonne)
1	Bangladesh	69,311	53,376	770
2	Japan	67,148	100,178	1,492
3	Pakistan	62,145	35,327	568
4	United States of America	57,533	80,792	1,404
5	Netherlands	38,784	65,850	1,698
6	United Arab Emirates	31,917	40,491	1,269
7	Germany	12,576	38,131	3,032

(Source: FAOSTAT)

Table 5. Export Statistics of Dried ginger in 2013

Rank	Area	Quantity (tonnes)	Value (1000 \$)	Unit value (\$/tonne)
1	China, mainland	380,138	399,885	1,052
2	Nepal	35,150	7,998	228
3	Netherlands	29,247	55,354	1,893
4	India	25,912	34,226	1,321
5	Thailand	40,042	33,383	834
6	Nigeria	14,329	19,449	1,357
7	Ethiopia	12,166	14,140	1,162
8	Brazil	5,220	7,796	1,493
9	Lithuania	5,081	11,883	2,339
10	Peru	3,690	7,994	2,166
11	Germany	2,390	9,250	3,870
12	China, Province	1,820	4,846	2,663

(Source: FAOSTAT)

(d) Amenability of commodity to standardization

The characteristics of Dried or dehydrated ginger from its cultivation to retail sale e.g. cultivar varieties, composition, quality characteristics, packaging, etc. all lead to adequate parameters for the standardization of the product

(e) Coverage of the main consumer protection and trade issues by existing or proposed general standards

There is no commodity standard covering dried ginger as spices in international trade considering that globally, dried ginger represents 15-16% of the tonnage of spices imported from 1996 to 2000 according to FAO. The proposed standard will heighten consumer protection and facilitate dried ginger trade by establishing an internationally agreed quality standard.

(f) Number of commodities which would need separate standards including whether raw, semi-processed or processed

A single standard for dried ginger will cover forms of dried ginger traded worldwide. The varieties of dried ginger like, split dried ginger, and (ground) powder of dried ginger and its products will be examined under this individually.

(g) Work already undertaken by other international organizations in this field and/or suggested by the relevant international intergovernmental body(ies)

The existing standards which may be considered while developing a codex standard for dried ginger are:

- ISO international standard ISO 1003:2008 specifies requirements for dried ginger (*Zingiber officinale* Roscoe)

5. Relevance to the Codex strategic objectives

The proposal is in line with the Strategic Vision Statement of the Strategic Plan 2014 - 2019, in particular, Objectives 1.1, 1.3, 2.3 and 3.1 and aims at setting up internationally accepted minimum quality requirements of dried ginger for human consumption with the purpose of protecting the consumer's health and achieving fair practices in food trade. It also contributes to fair practices in trade wherein the farmers will be able to assess their produce with reference to the quality standards thereby empowering them to realize more monetary values.

6. Information on the relation between the proposal and other existing Codex documents.

This proposal is for a new Codex Standard on Dried Ginger has a relationship with *Standard for Ginger* (CODEX STAN 218-1999) which deals with fresh ginger.

7. Identification of any need for any requirements for and availability of expert scientific advice:

Scientific advice from external global bodies like FAO/WHO; JECFA and others are welcomed, but no expert scientific advice is foreseen at this stage. Published research documents by international bodies will be referred in the process of preparing the standard, if found necessary.

8. Identification of any need for technical input to the standard from external bodies so that this can be planned for.

The technical inputs from ISO, American Spice Trade Association, European Spice Association and World Spice Organization shall be welcomed as they have already done work related to the subject. Also ISO standards can be used as a step process to frame the codex standards for dried ginger.

9. Proposed timeline for completion of the new work

DATE	ADVANCE AND PROCEDURES
3 rd CCSCH	Consideration of new work by the 3 rd session of CCSCH
July 2017	Critical review of proposal by CCEXEC; Approval of new work proposals by the Commission
4 th CCSCH	Consideration at Step 3 by the 4 th CCSCH Approval at Step 3.
July 2018	Adoption at Step 5 by CAC
5 th CCSCH	Consideration at Step 6 by the 5 th session of CCSCH
July 2020	Adoption at Step 8 by the CAC

PROJECT DOCUMENT

PROPOSAL FOR NEW WORK ON CODEX STANDARD FOR CLOVES

Introduction

Cloves are the aromatic flower buds of the tree in the family of *Myrtaceae Syzygium aromaticum*. They are sold whole or ground and can be used as a spice.

Cloves are widely cultivated in India, Madagascar, Zanzibar, Pakistan, Sri Lanka and Tanzania; and with world production estimated over 2 00,000 metric tonnes. The major component of clove taste is imparted by the presence of [eugenol](#) and the quantity of the spice required in foods is typically small as it pairs well with other flavours.

1. Purpose and the scope of the standard

The scope of the work is to establish a worldwide quality standard for whole dried cloves, and (ground) powdered cloves.

The objective is to consider the essential quality characteristics of Cloves for industrial food production and for direct consumption, including for catering purposes and other essential uses

2. Relevance and timeliness

Due to the growing trend of worldwide Clove production and trade, it is necessary to establish a commodity standard covering the safety, quality, hygiene and labelling in order to have a reference that has been internationally agreed by consensus between the main producing and trading countries across the world. More significantly, the present status of Cloves is not limited to any particular region as Cloves are used in the cuisine of Asian, African, and the Near and Middle East, lending flavour to meats, curries, and marinades, as complement to fruit such as apples, pears, or rhubarb (Culinary use), Hence, justifying the elaboration of an international standard commensurate with Clove's true standing as an increasingly valuable worldwide commodity. In addition, the establishment of a Codex standard for Cloves will help to protect consumers' health and promote fair trade practices in accordance with the international agreements in particular the absence of a Codex Standard that would be used by governments in World trade thus affecting WTO SPS and TBT Agreements.

3. Main aspects to be covered

The standard entails main aspects related to the definition of the produce, essential quality factors e.g. moisture, acid insoluble ash and labelling requirements in order to provide certainty to the consumer on the nature and characteristics. The standard will supply high quality and safe products to protect consumer's health and against misleading practices by including all the necessary parameters such as, moisture, proper labelling, and other permissible limits among others.

The most relevant items which may be considered are related to:

- Establish the minimum requirements of cloves which shall be complied independently from the quality parameters and other requirements regardless of class.
- Define the categories to classify cloves in accordance with its characteristics.
- Establish the tolerance as regards quality and size that may be permitted of cloves contained in a package.
- Include the provisions to be considered relating to the uniformity of the packaged product and the packaging used.
- Include provisions for the labelling and marking of the product in accordance with the General Standard for the labelling of Pre-packaged Foods.
- Include provisions for pesticides and contaminants with the reference to the General Standard for Contaminants and toxins in food.
- Include provisions for hygiene with the reference to the general principles of food hygiene and other relevant codes of hygiene practices.
- References to methods of analysis and sampling

4. Assessment against the Criteria for the Establishment of Work Priorities

(a) Volume of production and consumption and volume and pattern of trade between countries

Clove is an important trade crop globally because it is of great importance in the spices and culinary industry in many of the countries that produce and import the commodity. Thus to countries like: Indonesia, Singapore, India, Tanzania and Nigeria just to mention a few. The consumption of cloves globally is immense, detailed statistics of its world production import and export are shown in Table 1-6.

Table 1. Import data of Nigeria for Cloves 2004 - 2013

Year	Quantity (in Tonnes)	Value (in US \$1000)
2004	63	230
2005	171	543
2006	164	656
2007	245	398
2008	43	60
2009	43	60
2010	400	2,148
2011	335	2,175
2012	264	3,162
2013	191	2,255

(Source: FAOSTAT)

Table 2: World-wide Production Data

Year	Production (in Tonnes)
2008	99,567
2009	110,755
2010	127,456
2011	101,342
2012	126,956
2013	137,010
2014	152,968

(Source: FAOSTAT)

(b) Diversification of national legislations and apparent resultant or potential impediments to International trade:

Clove is a traded commodity across the globe with differences with regard to the quality of the product such as moisture levels, ash content and extraneous matter across countries. Trade in cloves as at the moment depends on producing and importing countries mutual agreement in terms of grades and specifications, which lead to having different standards for each producing country.

International organisations like ISO already has an existing standard for cloves; therefore there is dire need to harmonize grades and specifications for cloves. To overcome the resultant or potential impediments to international trade, it is essential to incorporate all existing different standards in a single improved comprehensive standard acceptable across board internationally. This warrants the establishment of a Codex standard in line with the Procedural Manual.

(c) International or regional market potential:

The import of Cloves by most countries is increasing. India is currently the largest importer of Cloves with 10924 tonnes and Madagascar is the largest exporter globally with 11697 tonnes, according to the current statistic of FAOSTAT.

Pattern of International Trade

Table 3: World-wide Export Data

Year	Export Quantity (in Tonnes)	Value (in US \$1000)
2009	53,283	169,206
2010	43,904	159,871
2011	91,358	734,463
2012	49,077	411,878
2013	37,348	334,091

2014	52,906	433,731
2015	51,800	364,076

(Source: ITC calculations based on UN COMTRADE statistics.)

Year	Import Quantity (in Tonnes)	Value (in US \$1000)
2009	47,735	153,464
2010	38,594	140,938
2011	64,621	710,526
2012	45,111	437,739
2013	32,269	271,255
2014	50,309	378,470
2015	50,291	371,181

(Source: ITC calculations based on UN COMTRADE statistics.)

Table 5. Import Statistics of Cloves in 2013

Rank	Area	Quantity (tonnes)	Value (1000 \$)	Unit value (\$/tonne)
1	India	10,924	93,934	8,599
2	Singapore	6,007	6,3209	10,526
3	United Arab Emirates	3,683	41,377	11,235
4	Viet Nam	2,600	14,785	5,687
5	United States of America	1,970	19,708	10,004
6	Netherlands	1,276	12,219	9,576
7	Pakistan	1,192	2,432	2,040
8	Malaysia	691	3,961	10,130
9	Germany	669	7,020	10,493
10	United Kingdom	432	5,258	12,171
11	Bangladesh	363	3,907	10,763
12	Japan	354	4,031	11,387
13	South Africa	311	1,606	5,164
14	Indonesia	308	3299	10,711
15	Nigeria	191	2,255	11,806

(Source: FAOSTAT)

Table 6. Export Statistics of Cloves in 2013

Rank	Area	Quantity (tonnes)	Value (1000 \$)	Unit value (\$/tonne)
1	Madagascar	11,697	104,303	8,917
2	Sri Lanka	5,478	49,297	8,999
3	Indonesia	5,177	25,399	4,906
4	Comoros	4,527	26,039	5,752
5	India	4,298	5,177	1,205
6	Brazil	4,095	37,698	9,207
7	United Republic of Tanzania	4,089	43,061	10,531
8	Singapore	4,019	43,008	10,701
9	Netherlands	723	9,567	13,232
10	United States of America	353	1,458	4,130
11	Germany	222	3,203	14,428
12	Malaysia	163	1,151	7,061

(Source: FAOSTAT)

(d) Amenability of commodity to standardization

The characteristics of cloves from its cultivation to retail sale e.g. cultivar varieties, composition, quality characteristics, packaging, etc. all lead to adequate parameters for the standardization of the product. Using ISO standards as well as ASTA and ESA technical inputs from other cloves producing countries like Indonesia,

Madagascar, Tanzania, to mention a few, shall be welcomed as the basis to develop a global harmonized standard by considering other countries / regions needs should therefore be amenable to / facilitate worldwide harmonization.

(e) Coverage of the main consumer protection and trade issues by existing or proposed general standards

There is no commodity standard covering cloves in international trade. The proposed standard will enhance consumer protection and facilitate cloves fair trade by establishing an internationally agreed and recognized quality standard.

(f) Number of commodities which would need separate standards including whether raw, semi-processed or processed

A single standard for cloves will cover all varieties of cloves traded worldwide. The varieties of cloves like whole cloves, split dried cloves, and (ground) powder of cloves and its products will be examined under this individually.

(g) Work already undertaken by other international organizations in this field and/or suggested by the relevant international intergovernmental body(ies)

The existing standards which may be considered while developing a codex standard for cloves are:

- ISO 2254:2004 specifies requirements for whole and ground (powdered) Cloves (*Syzygium aromaticum* L).

5. Relevance to the Codex strategic objectives

The proposal is in line with the Strategic Vision Statement of the Strategic Plan 2014 - 2019, in particular, Objectives 1.1, 1.3, 2.3 and 3.1 and aims at setting up internationally accepted minimum quality requirements of cloves for human consumption with the purpose of protecting the consumer's health and achieving fair practices in food trade. It also contributes to fair practices in trade wherein the farmers will be able to assess their produce with reference to the quality standards thereby empowering them to realize more monetary values.

6. Information on the relation between the proposal and other existing Codex documents.

This proposal is for a new global standard and it is believed not to have any relationship to other existing Codex text on this item, except that this standard will make reference to relevant standards and related texts developed by General Subject Committees.

7. Scientific advice related to expert input from FAO, WHO, JECFA and such related bodies.

No expert scientific advice is foreseen at this stage. Published research documents by international bodies will be referred in the process of preparing the standard, if found necessary.

8. Identification of any need for technical input to the standard from external bodies so that this can be planned for.

The technical inputs from ISO, EU, European Spice Association and World Spice Organization as well as from cloves producing countries shall be welcomed as they have already done work related to the subject. Also ISO standards can be used as a step process to frame the codex standards for cloves.

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