

APPENDIX IV**DRAFT STANDARD FOR DRIED FLORAL PARTS-CLOVES**

(For adoption at Step 8)

1 SCOPE

This Standard applies to plant products in their dried or dehydrated form as spices, defined in Section 2.1 below, offered for direct consumption, as an ingredient in food processing, or for repackaging if required. It excludes the product for industrial processing.

2 DESCRIPTION**2.1 Product definition**

Dried cloves is a product obtained from the dried floral part of the plant (clove nail) as mentioned in Table 1.

Table 1. Common and scientific name of Dried Cloves

Common name	Scientific name
Dried cloves	<i>Syzygium aromaticum</i> (L.), Merrill & Perry

2.2 Styles

Dried cloves may be:

- Whole
- Ground/powdered (without any added matter)

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

Product as described in Section 2 above shall conform to requirements contained in Annexes I and II.

3.2 Quality factors**3.2.1 Odour, flavour and colour**

The product shall have a characteristic odour, flavour and colour which can vary depending on geo-climatic factors/conditions and shall be free from any foreign odour, flavour, and colour especially from rancidity and mustiness.

3.2.2 Chemical and physical characteristics

The generic product shall comply with the requirements specified in Annex I (Chemical Characteristics - Table 2) and Annex II (Physical Characteristics-Table 3). The defects allowed must not affect the general appearance of the product as regards to its quality, keeping quality and presentation in the package.

3.2.3. Classification (Optional)

If traded as classified, the provision in Annex 1 applies as minimum requirements.

4 FOOD ADDITIVES

Anticaking agents listed in Table 3 of the General Standard for Food Additives (CXS 192-1995) are acceptable for use in powdered form of the foods conforming to this standard.

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* (CXS 193-1995) and any other relevant Codex texts.

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

6 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 *Code of Hygienic Practice for low moisture foods* (CXC 75-2015) Annex III on Spices and dried culinary herbs and other relevant Codex texts.

6.2 The products should comply with any microbiological criteria established in accordance with the *Principles and Guidelines for the Establishment and Application of Microbiological Criteria Related to Foods* (CXG 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

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* (CXS 1-1985). In addition, the following specific provisions apply:

8.2 Name of the Product

8.2.1 The common 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 Trade name, variety or cultivar may be listed on the label.

8.3 Country of origin and country of harvest

8.3.1 Country of origin shall be declared.

8.3.2 Country of harvest (optional)

8.3.3 Region of harvest and year of harvest (optional)

8.4 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.

9 METHODS OF ANALYSIS AND SAMPLING

9.1 Methods of Analysis

As described in Annex III, Table 4

9.2 Sampling Plan

To be developed.

Annex I

Table 2 Chemical requirements of dried floral parts-cloves						
Product	Style	Total Ash %w/w (max) on dry basis	Acid Insoluble Ash % w/w (max) on dry basis	Moisture Content % w/w (max)	Volatile Oils ml/100g (min) on dry basis	Crude fibre, % w/w (max)
Dried clove	Whole	7	0.5	12	17	13
	Ground	7	0.5	10	14	13

Annex II

Table 3 Physical requirements of dried floral parts-cloves								
Product	Style	Mammalian or/and other excreta* (w/w)/ mg/10g, (max)	Live Insects Count/100 g (max)	Mold Visible %w/w (max)	Insect de-filed/ Infested %w/w (max)	Extraneous matter ¹ %w/w (max)	Foreign matter ² %w/w (max)	Defects (Headless ³ / Mother ⁴ / Khoker ⁵) % (max)
Dried clove	Whole	1	0	1	1	1	1	5/6/5
	Ground	N/A	0	N/A	1	1	1	N/A

¹Extraneous matter: Vegetative matter associated with the plant from which the product originate but not accepted as a part of the final product²Foreign matter: Any visible/detectable objectionable foreign matter or material not usually associated with the natural component of the spice plant such as sticks, stones, burlap bagging, metal, etc.

³Headless Clove: Clove consisting of only the receptacle and sepals and which has lost the dome-shaped head.

⁴ Mother Clove: Fruit of the clove tree (*Syzygium aromaticum*) in the form of an ovoid brown berry surmounted by four incurved sepals.

⁵ Khoker Clove: Clove having undergone fermentation as a result of incomplete drying, as evidenced by its pale brown colour, whitish mealy appearance and often wrinkled surface.

N/A Not Applicable

*Excreta from other animals such as reptiles and birds

Annex III

Table 4. Methods of Analysis

Parameter	Method	Principle	Type¹
Moisture	ASTA 2.0	Distillation	I
Volatile oil	ISO 6571	Distillation followed by Volumetry	I
Total ash (dry basis)	ISO 928	Gravimetry	I
Acid Insoluble Ash	ISO 930	Gravimetry	I
Extraneous matter	ISO 927	Visual examination followed by Gravimetry	I
Foreign matter	ISO 927	Visual examination followed by Gravimetry	I
Insect damage	ISO 927 Method V-8 Spices, Condiments, Flavors and Crude Drugs (Macroanalytical Procedure Manual, FDA Technical Bulletin Number 5) http://www.fda.gov/Food/FoodScienceResearch/LaboratoryMethods/ucm084394.htm#v-32	Visual Examination Visual Examination	IV IV
Insects/Excreta/Insect fragments	ISO 927	Visual Examination	IV
Crude fibre	ISO 5498	Gravimetry	I
Mold visible	Method V-8 Spices, Condiments, Flavors and Crude Drugs (Macroanalytical Procedure Manual, FDA Technical Bulletin Number 5) http://www.fda.gov/Food/FoodScienceResearch/LaboratoryMethods/ucm084394.htm#v-32	Visual Examination	IV
Live insect	ISO 927	Visual Examination	IV
Mammalian or/and Other excreta	Method V-8 Spices, Condiments, Flavors and Crude Drugs (Macroanalytical Procedure Manual, FDA Technical Bulletin Number 5) http://www.fda.gov/Food/FoodScienceResearch/LaboratoryMethods/ucm084394.htm#v-32	Visual Examination	IV

¹ According to the definition of “types of method of analysis” as per Codex Procedural Manual Section II

*Latest edition or version of the approved method should be used