



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

**Fourth Session**

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**REPORT OF THE ELECTRONIC WORKING GROUP ON PROPOSED DRAFT STANDARD FOR DRIED  
FLORAL PARTS-CLOVES**

(Prepared by an electronic working group chaired by Nigeria).

**INTRODUCTION**

The 3<sup>rd</sup> session of the Codex Committee on Spices and Culinary Herbs (CCSCH3) which held on 6<sup>th</sup> -10<sup>th</sup> February 2017 agreed to establish an electronic working group (EWG), led by Nigeria and co-chaired by Sri-Lanka, working in English to prepare a standard for cloves under dried floral parts based on the general concept of group standards for comments at Step 3 and consideration at CCSCH4.

However, Sri-Lanka did not participate in this work. Unavailing efforts was made in contacting her to participate in developing the proposed draft standard.

**SUMMARY OF PROCESS**

A total of 16 members consisting of 15 member countries and 1 observer organization registered to participate in the working group. A list of the EWG members is attached as **Appendix IV** to this Report.

The EWG worked online using the Codex Electronic Platform. The first proposed draft was posted on 10<sup>th</sup> November, 2017 and the second proposed draft on 15<sup>th</sup> January, 2018. Comments were received from Argentina, Chile, India, Japan, Mexico, Nigeria, Poland, and USA. These were considered and incorporated to produce the proposed draft standard submitted.

Though the proposed draft standard has placed a focus on “**the quality requirements for cloves**”, the work has been placed in the “Grouping format layout” that was presented at the CCSCH3 session.

**ANALYSIS OF REPONSES**

As regards to the title “*PROPOSED DRAFT STANDARD FOR DRIED FLORAL PARTS-CLOVES*” the standard was developed based on the general concept of group standards, the EWG thus saw the necessity for it to be titled as such. It is hoped that “-Cloves” would be expunged from this title as the work progresses.

Some members of the EWG provided different values on certain chemical and physical parameters on dried cloves in Appendix II and III respectively:

- a. Acid insoluble ash - 0.5[1]
- b. Volatile oils for ground cloves - 14[16]
- c. Foreign matter for whole and cracked/crushed cloves - 1[0.1]
- d. Headless/Mother/Khoker cloves [5/6/5] or [2/2/2]
- e. [Economic adulteration – nil]. This new section was inserted due to the effect and impact of economic adulteration on the quality of dried floral parts. The definition is placed as a footnote of Appendix III.

This new parameter and values are given under square brackets [ ] and as such submitted to the committee for final discussion and approval.

**RECOMMENDATION AND CONCLUSION**

Based on the outcome of CAC41, listing of methods of analysis and sampling may be removed from this standard and included in CXS 234-1999 if adopted by CCSCH.

The Committee is invited to consider the proposed draft as attached in **Appendix I**, with the view to progress it through the Codex step procedure.

**APPENDIX I****PROPOSED DRAFT STANDARD FOR DRIED FLORAL PARTS - CLOVES****1 SCOPE**

This Standard applies to dried floral parts commonly sold in commerce in their dried or dehydrated forms as spices or culinary herbs, defined in Section 2.1 below, offered for direct human consumption, as an ingredient in food processing or for repacking if required. It excludes the product for industrial processing.

**2 DESCRIPTION****2.1 PRODUCT DEFINITION**

Dried floral parts covered by this standard (Table 1) are sold in forms as indicated in 2.2

Table 1: Dried Floral Parts covered by this standard

S/No	Generic Name	Scientific Name
01	Cloves	<i>Syzygium aromaticum</i> (L) Merr. & Perry

**2.2 Styles/forms**

Dried Floral Parts may be:

- Whole
- Cracked/crushed
- Ground

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

Dried floral parts as described in section 2 above

**3.2 QUALITY CRITERIA****3.2.1 Odor, flavor and color:**

Dried Floral Parts shall have a characteristic aroma, color and flavor which can vary depending on geo-climatic factors/conditions and shall be free from any foreign odor or flavor.

**3.2.2 Classification**

Specific grades of dried floral parts may be set where applicable.

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**

Dried Floral Parts covered by this standard shall comply with the requirements specified in Appendix II (Chemical Characteristics) and Appendix III (Physical Characteristics). The defects allowed must not affect the general appearance of the product as regards to its quality, keeping quality and presentation in the package.

**4 FOOD ADDITIVES**

Where applicable, only the anti-caking agents listed in Table 3 of the *General Standard for Food Additives* (CXS 195- 1995) are acceptable for use in ground dried floral parts.

**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).

**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** Dried floral parts within the scope of this standard shall 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* (CXP 75-2015), *Code of Practice for the Prevention and Reduction of Mycotoxins in Spices* (CXP 78-2017), and other relevant Codex texts.

**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* (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 LABELING

**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 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 (optional)

**8.2.4** Commercial Identification- Class/Grade (if applicable)

**8.2.5** Inspection mark (optional)

**8.3** Country of origin/country 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<sup>1</sup>

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

### 9.1 Methods of Analysis<sup>1</sup>

Parameter	Method	Principle	Type
Moisture	ISO 939 [AOAC 2001.12] [ASTA 2.0]	Distillation	
Total Ash	ISO 928 ISO 3632-2 AOAC 950.49 ASTA 3.0	Gravimetry	

<sup>1</sup> The listing of methods of analysis and sampling will be removed when the standard is adopted by CAC and included in CXS 234-1999.

Acid Insoluble Ash	ISO 93 ISO 3632-2 ASTA 4.0	Gravimetry	
Volatile oil	ISO 6571 AOAC 962.17 ASTA 5.0	Distillation	
Extraneous Matter	ISO 927 ISO 3632-2 ASTA 14	Visual Examination	
Foreign Matter	ISO 927 ISO 3632-2	Visual Examination	
Insect Damage	ISO 927 Method V-8 Spices, Condiments, Flavors and Crude Drugs (Macroanalytical Procedure Manual, FDA Technical Buletin Number 5) <a href="http://www.fda.gov/Food/FoodScienceResearch/LaboratoryMethods/ucm084394.htm#v-32">http://www.fda.gov/Food/FoodScienceResearch/LaboratoryMethods/ucm084394.htm#v-32</a>	Visual Examination	
Insects/Excreta/Insect Fragments	ISO 927 Method appropriate for particular spice from AOAC Chapter 16, subchapter 14	Visual examination	

<sup>1</sup> Latest edition or version of the approved method should be used

## 9.2 SAMPLING PLAN

To be developed

**APPENDIX II**

Chemical Characteristics for Dried Floral Parts								
S/No	Product	Form	Total Ash %w/w (max)	Acid Insoluble Ash % w/w (max)	Moisture Content %w/w (max)	Volatile Oils ml/100g (min)	Crude fibre, % m/m (max)	Notes (if applicable)
01	Clove	Whole	7	0.5[1]	12	17	10	
		Cracked/crushed	7	0.5[1]	12	17	10	
		Ground	7	0.5[1]	10	14[16]	13	

**APPENDIX III**

Physical Characteristics for Dried Floral Parts									
S/No	Product	Form	Excreta mammalian/other mg/kg (max)	Mold damaged %w/w (max)	Insect defiled/infested % w/w (max)	Extraneous matter % w/w (max)	Foreign matter % w/w (max)	Economic adulteration % w/w (max)	Notes (if applicable)
01	Clove	Whole	1	1	1	1	1[0.1]	[ Nil ]	Headless/Mother/Khoker cloves (%max) [5/6/5] [2/2/2]
		Cracked/crushed	1	1	1	1	1[0.1]	[ Nil ]	[NA]
		Ground	Nil	Nil	Nil	Nil	Nil	[ Nil ]	NA

<sup>1</sup>Extraneous [vegetable] matter: vegetative matter associated with the plant from which the product originates, but is not accepted as part of the final product

<sup>2</sup>Foreign Matter: Any visible objectionable foreign detectable matter or material not usually associated with the natural components of the spice plant; such as sticks, stones, burlap bagging, metal, etc.

<sup>3</sup>Economic adulteration: Intentional failure to remove inedible materials from the finished product, the intentional addition or substitution of cheaper food or ingredient to a product, the omission or removal of any valuable constituent such as essential oils, the concealing of an inferiority, or the addition of a substance to increase bulk or weight.

## APPENDIX IV

## LIST OF PARTICIPANTS

Member/observer	Representatives
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