



**JOINT FAO/WHO FOOD STANDARDS PROGRAMME**  
**CODEX COMMITTEE ON SPICES AND CULINARY HERBS**  
**Seventh Session**  
**Kochi Kerala, India**

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**DRAFT STANDARD FOR SPICES IN THE FORM OF DRIED FRUITS AND BERRIES – SMALL CARDAMOM**  
**MOM DRAFT STANDARD FOR DRIED SMALL CARDAMOM**

(Step 6/7)

(Further revised by the EWG co-Chairs Prepared by the Electronic Working Group chaired by India and co-chaired by Guatemala and Iran (Islamic republic of)<sup>1</sup>)

~~Codex members and Observers wishing to submit comments, at Step 6/7, on the draft standard for dried or dehydrated small cardamom (**Appendix I**) should do so as instructed in CL-2023/02/OCS-SCH available on the Codex webpage/Circular Letters: <http://www.fao.org/fao-who-codexalimentarius/circular-letters/en/>~~

#### **INTRODUCTION**

- ~~1. The 6<sup>th</sup> Session of Codex Committee on Spices and Culinary Herbs (CCSCH6, 2022)<sup>2</sup> agreed to forward: i) the proposed draft standard for dried small cardamom to CAC45 for adoption at Step 5; and ii) the provisions on labelling and methods of analysis to CCFL and CCMAS, respectively, for endorsement.~~
- ~~2. CAC45 adopted the proposed draft standard for dried small cardamom at Step 5.~~
- ~~3. CCFA53 endorsed the food additive provision in the draft standard for dried small cardamom with small editorial correction<sup>3</sup>. CCFL47 endorsed the labelling provisions in the draft standard for dried small Cardamom<sup>4</sup>. CCMAS42 did not endorse the methods proposed by CCSCH including the standard for dried small cardamom and agreed to return them for further consideration<sup>5</sup>.~~

#### **TERMS OF REFERENCE**

- ~~4. CCSCH6 agreed to establish an Electronic Working Group (EWG) chaired by India and co-chaired by Guatemala and Iran (Islamic republic of) and working in English only and to consider the outstanding parameters or values, taking into account the comments submitted at Step 6 as well as discussions at CCSCH6.~~

#### **PARTICIPATION AND METHODOLOGY**

- ~~5. Fifteen (15) Members and one (01) Observer registered to participate in the EWG.~~
- ~~6. The EWG worked through codex forum on the draft standard for dried small Cardamom. The draft was circulated for two rounds. Eight (08) members commented on the draft in the first round. Based on the comments received during the first round, the draft was revised and updated and then circulated for the second round. In the second round, only two (02) members provided their comments and thus the draft was further revised and improved. The final draft was circulated to the EWG members for information.~~

#### **SUMMARY OF DISCUSSION**

<sup>1</sup> Members of the EWG included: Brazil; Canada; Chile; Egypt; Guatemala; India; Indonesia; Iran; Japan; Morocco; Nigeria; Papua New Guinea; Saudi Arabia; Uganda; USA and IOSTA

<sup>2</sup> REP22/SCH para 107

<sup>3</sup> REP23/FA para. 37 and Appendix IV, Part B.2

<sup>4</sup> REP23/FL para. 14

<sup>5</sup> REP23/MAS, paras 23-25

~~7. The EWG discussed the various aspects of the draft standard for dried small cardamom and there was general agreement on most provisions except the following that require further discussions and these have been kept in square brackets: the values for Total ash on dry basis % w/w (max.) in seeds, Acid insoluble ash on dry basis % w/w (max.), Moisture content % w/w (max.), Volatile oil on dry basis ml/100g (min.), and Powdered Capsules with seeds.~~

~~8. One member submitted new section namely "Definition of Styles", for Cardamom whole Unopened pods/capsules; Cardamom Whole open pods/capsules; Cardamom seeds; Cardamom powder seed; and Whole Cardamom pods/capsules powder, methods for "Opened Capsules", and data on physical and chemical characteristic for small cardamom available in their market. These points also require to be further discussed by CCSCH7.~~

#### **CONCLUSION**

~~9. The EWG has completed the task to prepare the draft standard for dried small cardamom in line with the terms of reference and it is hereby attached as Appendix I for consideration by CCSCH7.~~

#### **RECOMMENDATION**

~~10.1. CCSCH7 is invited to consider the draft standard for dried small cardamom attached as Appendix I, with the view to progress it through the Codex step procedure.~~

**DRAFT STANDARD FOR SPICES IN THE FORM OF DRIED FRUITS AND BERRIES – SMALL  
CARDAMOM DRAFT STANDARD FOR DRIED SMALL CARDAMOM**

(Step 6/7)

**1. SCOPE**

This standard applies to dried or dehydrated small cardamom as ~~plant products in their dried 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 or dehydrated small cardamom is a product obtained from the dried fruits of the plant *Elettaria cardamomum* (L.) Maton of *Zingiberaceae* family as described in Table 1.

**Table 1. Common, trade and scientific name of dried small cardamom**

Common name	Trade name	Scientific Name
Small cardamom	Cardamom, Green Cardamom	<i>Elettaria cardamomum</i> (L.) Maton

**2.2 Styles**

Dried small cardamom may be:

- Whole (Unopened pods/capsules/[opened capsule]);
- Seeds (seed obtained after opening of the pods/capsules);
- Ground/Powdered Seeds (obtained by grinding dried seeds only) and/or [whole capsules powder] [obtained by grinding dried whole capsule including seeds]

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

**2.3 Sizing (Optional)**

**3. ESSENTIAL COMPOSITION AND QUALITY FACTORS**

**3.1 Composition**

Product as described in Section 2 above shall conform to the requirements contained in Annexes I

**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***

Dried or dehydrated small cardamom~~The generic product~~ shall comply with the requirements specified in Annex I (Table 1 Chemical characteristics and Table 2 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.

**3.2.3 *Classification (optional)***

If traded as classified, the provisions in Annex I shall apply as minimum requirements.

**4 FOOD ADDITIVES**

Anticaking agents listed in Table 3 of the *General Standard for Food Additives* (CXS192-1995) are acceptable for use in ground/powdered form of product 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), the Code of Practice for the Prevention and Reduction of Mycotoxins in Spices (CXC 78- 2017) and 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* (CXC 1- 1969), the *Code of Hygienic Practice for Low Moisture Foods* (CXC 75-2015) Annex III 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

The labelling of non-retail containers should be in accordance with the *General Standard for the Labelling of Non-Retail Containers of Foods* (CXS 346-2021).

## 9 METHODS OF ANALYSIS AND SAMPLING

### 9.1 Methods of Analysis

As described in Annex II, Table 1

### 9.2 Sampling Plan

To be developed.

## Annex I

Table 1. Chemical Characteristics for dried or dehydrated small cCardamom

Product Name	Style	Total ash on dry basis % w/w (max-)	Acid insoluble ash on dry basis % w/w (max-)	Moisture content % w/w (max-)	Volatile oil on dry basis ml/100_g (min-)
Small Cardamom	Whole	9.5	2.5	13	3.5
	Seeds	9.5 [8.0]	3	13	3.5
	Powdered seeds	8	3	11	3, (1)*
	Powdered Capsules with seeds	[8] [10]	[2.5]	[12]	[2.7]

\*For steam treated seeds.

## Annex I

Table 2. Physical characteristics for dried or dehydrated small Cardamom

Product Name	Style	Empty and malformed capsules by count/100 capsules (mMax)	Immature and shriveled capsules % w/w (max)	Light seeds % w/w (max)	Insect defiled/infested. % w/w (max)	Extraneous matter <sup>±†</sup> % w/w (max)	Foreign matter <sup>±‡</sup> % w/w (max)	Whole dead insects, (by count) /100 g (mMax)	Live insects (by count) /100 g (mMax)	Mammalian Excreta mg/-kg (max)	Other Excreta <sup>°</sup> , mg/kg, (max)	Mould Visible % w/w (max)
Small	Whole	5	7	N/A <sub>-</sub>	1	5	0.5	4	0	6.6	2.2	1.00
	Seeds	N/A <sub>-</sub>	N/A <sub>-</sub>	5	N/A	2	N/A	[4]	0	[6.6]	[2.2]	[1]
Cardamom	Powdered seeds	N/A <sub>-</sub>	N/A <sub>-</sub>	N/A <sub>-</sub>	N/A	N/A	N/A	[N/A]	0	[N/A]	[N/A]	[N/A]
	Powdered Capsules with seeds	N/A <sub>-</sub>	N/A <sub>-</sub>	N/A	N/A	N/A	N/A	N/A	0	N/A	N/A	N/A

N/A\*: Not applicable, means that this form of the above product has not been evaluated for this provision, and currently we do not have values. N/A does not refer to zero<sup>†</sup>

<sup>±†</sup> Vegetative matter associated with the plant from which the product originates but not accepted as part of the final product.

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

<sup>°</sup> Excreta from other animals, such as reptiles and birds.

## Annex II

Table 1. Method of analysis\*

Provision	Method <sup>1</sup>	Principle	Type <sup>2</sup>
Moisture	ISO 939	Distillation	I
Total Ash	ISO 939 and ISO 928	Distillation and Gravimetry	I
Acid Insoluble Ash	ISO 939 and ISO 930	Distillation and Gravimetry	I
Volatile Oil	ISO 939 and ISO 6571	Distillation followed by Volumetry	I
Extraneous Matter	ISO 927	Visual Examination followed by Gravimetry	I
Foreign Matter	ISO 927	Visual Examination followed by Gravimetry	I
Insect defiled/infested	Method V-8 Spices, Condiments, Flavors and Crude Drugs (Macroanalytical Procedure Manual) MPM: V-8. Spices	Visual Examination followed by Gravimetry	I
Immature and shriveled capsules	ISO 927	Visual Examination followed by Gravimetry	I
Mammalian or/and Other excreta	Method V-8 Spices, Condiments, Flavors and Crude Drugs (Macroanalytical Procedure Manual) MPM: V-8. Spices	Visual Examination followed by Gravimetry	I
Mould visible	Method V-8 Spices, Condiments, Flavors and Crude Drugs (Macroanalytical Procedure Manual) MPM: V-8. Spices	Visual Examination followed by Gravimetry	IV
Empty and malformed capsules	<del>ISO 882-1</del> <del>IS 1907:1984</del>	Visual Examination followed by Gravimetry	I
Whole insect Live/dead	ISO 927	Visual examination followed by Gravimetry	I
Light seeds	<del>IS 1907:1984</del> <del>ISO 927</del>	Visual examination followed by Gravimetry	I

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

<sup>2</sup> According to the definition of “types of method of analysis” as per Codex Procedural Manual Section II

\* The methods of analysis will be included in CXS 234-1999 after endorsement by CCMAS and the following text replace the Table

“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”