

APPENDIX III

DRAFT STANDARD FOR DRIED ROOTS, RHIZOMES AND BULBS — DRIED OR DEHYDRATED GINGER

(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 products for industrial processing.

2 DESCRIPTION**2.1 Product Definition**

Dried or dehydrated ginger is a product obtained from the rhizomes of the plant as mentioned in Table 1.

Table 1. Common and scientific names of plants used as dried or dehydrated ginger

Common name	Scientific name
Dried Ginger	<i>Zingiber officinale</i> Roscoe

2.2 Styles/forms

Dried or dehydrated ginger may be:

- Whole: single or branched rhizomes of varying sizes, which may be cut at both ends with the flattened circular shape intact;
- Pieces: comprising various cut, diced or sliced styles;
- Ground/powdered;

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

Dried or dehydrated ginger as described in Section 2 above shall conform to requirements set 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.

4 FOOD ADDITIVES

4.1 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

4.2 Processing Aids

The following processing aids used in products conforming to this Standard should be consistent with the *Guidelines on Substances used as Processing Aids* (CXG 75-2010).

	INS No.	Processing Aid	Maximum Level
4.2.1	529	Calcium oxide	2.5 mg/kg
4.2.2	220	Sulfur dioxide	150 mg/kg, as residual SO ₂

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 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 Analysis¹

As described in Annex III, Table 4.

9.2 Sampling Plan

. To be developed

¹Latest edition or version of the approved method should be used

Annex I

Table 2. Chemical characteristics for dried or dehydrated ginger

Product	Styles/ Forms	Total Ash on dry basis %w/w (max)	Acid Insoluble Ash (on dry basis %w/w (max))	Moisture Content (%w/w (max))	Volatile Oils (on dry basis mL/ 100g (min))
Dried or dehydrated Ginger	Whole/ Pieces	8.0 (unbleached) 12.0 (bleached)*	1.5	12.0	1.5
	Ground/ Powdered	8.0 (unbleached) 12.0 (bleached)	1.5	12.0	1.0

Annex II

Table 3. Physical characteristics for dried or dehydrated ginger

Product	Styles/ Forms							
		Whole dead insects, Count/ 100g (max)	Live Insects Count/ 100g (max)	Mammalian Excreta mg/kg (max)	Other Excreta ³ mg/kg (max)	Mould visible/ Insect defiled/ infested %w/w (max)	Extraneous matter ¹ %w/w (max)	Foreign matter ² %w/w (max)
Dried or dehydrated Ginger	Whole	4.0	0	6.6	6.6	3.0*	1.0	0.5
	Pieces	4.0	0	NA	NA	NA	1.0	0.5
	Ground/ Powdered	NA	0	NA	NA	NA	NA	NA

Annex III

Table 4. Methods of analysis

Parameter	Method	Principle	Type ¹
Moisture	ISO 939	Distillation	I
Total Ash on dry basis	ISO 939 and ISO 928	Distillation and Gravimetry	I
Acid Insoluble Ash on dry basis	ISO 939 and ISO 930	Distillation and Gravimetry	I
Volatile Oil on dry basis	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 Damage	Method V-8 Spices, Condiments, Flavors and Crude Drugs (Macroanalytical Procedure Manual) <u>MPM: V-8. Spices</u>	Visual Examination	IV
Whole dead insect	ISO 927	Visual examination	I
Mammalian/ Other Excreta	MPM V-8 Spices, Condiments, Flavours and Crude Drugs (Macroanalytical Procedure Manual) <u>MPM: V-8. Spices (For whole)</u>	Visual Examination followed by Gravimetry	IV
Mould visible	Method V-8 Spices, Condiments, Flavors and Crude Drugs (Macroanalytical Procedure Manual) <u>MPM: V-8. Spices</u>	Visual examination	IV
Live Insect	ISO 927 AOAC 960.51	Visual Examination Visual Examination	IV IV
Calcium (as oxide) on dry basis	ISO 1003, Annex A	Chemical reaction followed by gravimetry	IV
SO ₂	AOAC 963.20	Colorimeter	II

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