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PROPOSED DRAFT STANDARD FOR DRIED ROOTS, RHIZOMES AND BULBS- TURMERIC

(At Step 3)

(Prepared by the Electronic Working Group chaired by Iran (Islamic Republic of) and co-chaired by India)

Codex members and Observers wishing to submit comments at Step 3 on this draft standard should do so as instructed in CL 2022/30/OCS-SCH available on the Codex webpage/Circular Letters:

<http://www.fao.org/faowho-codexalimentarius/circular-letters/en/>

Introduction

CCSCH5 was held virtually (April 2021), agreed to establish an electronic working group (EWG) chaired by Iran and co-hosted by India, working in English, to elaborate the specific requirements for turmeric based on the concept of group standards i.e. category of “Dried roots, rhizomes and bulbs”.

Participation and methodology

The kick-off message inviting members and observers to join the EWG for dried Turmeric was circulated in December 2021. Eight members and one observer organisation registered to participate in the EWG, as indicated **Appendix II**.

The EWG worked in English only through the Codex EWG platform. The proposed draft standard was uploaded in May of 2022 and comments were received from India only. The EWG conducted one round of consultation.

Analysis and consideration of comments

Section ‘3.2.2 Chemical and physical characteristics’, ANNEX I and ANNEX III

One member requested to change the chemical characteristic colouring power to “Total curcuminoids in (%)” in ANNEX I -Table2. (*Chemical Characteristics for Dried or Dehydrated Turmeric*) and in ANNEX III - Table 4 *Method of analysis*. This suggestion was accepted.

Conclusions and recommendations

The chair and co-chair of EWG on Turmeric noted that the EWG completed the assigned task of preparing a proposed Draft Standard for Turmeric as attached in **Appendix I**.

APPENDIX I

**PROPOSED DRAFT STANDARD FOR DRIED ROOTS, RHIZOMES AND BULBS - TURMERIC
(STEP3)**

1. SCOPE

This proposed draft standard applies to dried or dehydrated Turmeric as 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 Turmeric is the product obtained from drying of the rhizomes of plants mentioned in Table 1.

Table 1. Common and scientific name of dried Turmeric.

Common Name	Scientific Name
Turmeric	<i>Curcuma longa</i> L.

2.2. STYLES

Turmeric may be:

- Whole
- Crushed/Cracked/Broken
- Powdered /ground

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

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

Product as described in Section 2 above shall conform to the requirements specified 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

Dried Turmeric 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)

When dried Turmeric is traded as classified, the chemical and physical characteristics in Annexes I and II apply as the minimum requirements.

4. FOOD ADDITIVES

4.1. The anticaking agents listed in Table 3 of the General Standard for Food Additives (CXS192-1995) may be permitted for use in ground/powdered Turmeric.

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, *Code of Practice for the Prevention and Reduction of Mycotoxins in Spices* (CXS 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 Aromatic Herbs 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. 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 III, Table 4

9.2. Sampling plan

To be developed

ANNEX I

Table 2. Chemical Characteristics for Dried or Dehydrated Turmeric

Product	Styles	Moisture Content (%w/w (max))	Total Ash (%w/w (max))	Acid Insoluble Ash (%w/w (max))	Total curcuminoids (%)
Turmeric	Whole	12	9	1.5	2
	Crushed/Cracked/Broken	12	9	1.5	2
	Powdered /Ground	10	9	1.5	2

ANNEX II

Table 3. Physical Characteristics for Dried or Dehydrated Turmeric

Product	Style	Damaged rhizomes % w/w (max)	Mold visible % w/w	live insects, (By count)	Insect defiled/infested %w/w	Extraneous/ Foreign matter %w/w (max)	Mammalian excreta %mg/kg (max)
Turmeric	Whole	5	NA	NA	NA	2	2
	Crushed/Cracked/Broken	NA	NA	NA	NA	2	2
	Powdered /Ground	NA	NA	NA	NA	NA	NA

ANNEX III

Table 4. Method 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 (dry basis)	ISO 939 and ISO 930	Distillation and Gravimetry	I
Colouring power (curcuminoids content)	ISO 5566	Spectrophotometry**	IV
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) MPM: V-8. Spices	Visual Examination	IV
Live insect	ISO 927	Visual Examination	I
Mammalian or/and Other excreta	Method V-8 Spices, Condiments, Flavors and Crude Drugs (Macroanalytical Procedure Manual) MPM: V-8. Spices ISO 927	Visual Examination	IV
Mould Damage	Method V-8 Spices, Condiments, Flavors and Crude Drugs (Macroanalytical Procedure Manual) MPM: V-8. Spices ISO 927	Visual Examination	IV

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

** For whole Turmeric preparing sample followed by ISO 2825

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

Appendix II

COUNTRY	PARTICIPANT NAMES
1. Indonesia	<p>Dina Martha Susilawati Sub Coordinator of Quality Ministry of Agriculture</p>
2. Egypt	<p>Ahmed Mohammed ELHELW Food Standards Specialist Egyptian Organization for Standardization & Quality (EOS) Ministry of Trade and Industry</p>
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5. Japan	<p>Masakazu Kawashima Deputy Director, Food Manufacture Affairs Division, New Business and Food Industry Department, Minister's Secretariat Ministry of Agriculture, Forestry and Fisheries</p>
6. India	<p>Manu Mohan Manager, Quality Assurance Nedspice Processing India</p>
	<p>Mr. Kannan B AM-Regulatory Affairs ITC Limited</p>
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7. Iran	<p>Arasteh Alimardani Iran, Novin Saffron Co.</p>
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