

CODEX ALIMENTARIUS COMMISSION



Food and Agriculture
Organization of the
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World Health
Organization

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Agenda Item 7.1

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

Fifth Session

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Report of the In-session Working Group on Draft Standard for
dried or dehydrated Chilli pepper and paprika held on 23 April 2021

Prepared by India

Summary of Discussion

In view of non-consistency and many values under square brackets for the draft standard, the CCSC 5 committee recommended to have an in-session working group before the plenary. Considering the comments from the relevant CRDs, a working document in form of CRD 30 was prepared and submitted for the in-session working group.

Most of the comments received were pertaining to general format in line to align with template document, other draft standards and the recommendations from other codex committees. Some comments were received in section styles and product description. Values for Annex I and Annex II were received for the parameters such as Pungency, moisture, total ash, AIA, colour value, excreta mammalian and mould damage.

Section wise discussion was held in in-session working group meeting and some of the outstanding issues pertaining to the parameters such as pungency, capsaicin, colour value, moisture content, total ash, acid insoluble ash, extraneous matter, foreign matter were resolved and most of the values in square brackets were removed in consensus with member countries.

For moisture content, though majority of countries accepted the value of 11%, USA insisted for keeping high value, stating the rationale that some dried whole chilli pepper varieties have specific moisture contents e.g. Ancho Mulato-12.5%, Guajillo Pasilla-13.5%, hence foot note for the same is included.

The column for capsaicin was deleted since pungency and capsaicin values are relative, a conversion factor can be used to convert value for the required parameter and also for the simplification and practicality of the method. Consensus was reached on setting value of ≥ 900 for chilli pepper, since chilli peppers are traded for its pungency, on the contrary, paprika is traded for its colour, hence paprika was classified based on colour value. For insect filth and rodent filth in whole chilli pepper and crush styles conclusion was not reached.

Recommendations

Based on the comments from member countries at step 3 and in form of CRDs, followed by in-session working group, changes in the draft was made, which included the decisions made in the in-session working group meeting. The Committee is invited to consider the draft attached as Appendix I, with the view to progress it through the Codex step procedure.

PROPOSED DRAFT STANDARD FOR DRIED OR DEHYDRATED CHILLI PEPPER AND PAPRIKA

1 SCOPE

This Standard applies to dried or dehydrated chilli pepper and paprika as defined in section 2.1, 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

2.1.1 Dried or dehydrated Chilli pepper or/and Paprika is the product obtained from drying the fruits/pods of plants mentioned in table 1, with or without seeds or stalks and processed in an appropriate manner.

Table.1. Dried or dehydrated chilli pepper and paprika covered by this standard

Common Name	Scientific Name
Chilli pepper / paprika Chile or Ají/Pimentón	<i>Capsicum annuum</i> L.,
	<i>Capsicum frutescens</i> L.,
	<i>Capsicum baccatum</i> var. <i>pendulum</i> (Willd.) Eshbaugh, (synonym of <i>Capsicum frutescens</i> L.)
	<i>Capsicum chinense</i> Jacq.,
	<i>Capsicum pubescens</i> Ruiz & Pav
	<i>Capsicum baccatum</i> L.

2.2 Styles

Chilli pepper and paprika may be

- Whole
- Crushed/Cracked/broken/Flaked
- Ground/powdered

Ground chilli pepper or/and ground paprika is the product obtained by grinding whole dried chilli pepper or paprika with or without the placenta, seeds, with or without calyx and stalk, without any other added matter.

Other styles distinctly different from above mentioned styles are allowed, provided they are labelled accordingly.

3. ESSENTIAL COMPOSITION AND QUALITY FACTORS

3.1 Composition

Dried or dehydrated Chilli pepper or/and Paprika as described in section 2 above shall conform to requirements set in Annex 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 or colour especially from rancidity and mustiness. The product shall be free from any adulteration.

3.2.2 Chemical and Physical requirements

Dried or dehydrated chilli peppers and paprika shall comply with the requirements given in Annex I and II. 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)

The classification of dried chilli peppers and paprika is optional.

In accordance with the Chemical and Physical Characteristics in Annexes I and II, [paprika] may be classified into the following classes:

- a) Extra class
- b) Class I / Grade I
- c) Class II / Grade II

When dried or dehydrated paprika is unclassified, the provisions for physical and chemical characteristics applicable to class II / Grade II apply 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); *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 Sections 2.1.1.
 - 8.2.2** The common 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**
 - 8.3.1. Country of origin shall be declared.
 - 8.3.2. Country of Harvest (optional)
 - 8.3.3. Year of harvest (optional)
- 8.4** **Commercial Identification**
 - Class/Grade, if applicable
- 8.5** **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.

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

ANNEX I

Table 2. Chemical Requirements of Dried or Dehydrated Chilli Pepper and Paprika

Product	Styles	Class / Grade	Moisture % w/w (max)*	Total ash (dry basis) %w/w (max)	Acid insoluble ash (dry basis) % w/w (max)	Pungency Scoville Heat units	Colour Value ASTA Colour Units (min)
Chilli pepper	Whole	N/A	11 [12]	10	1.6	≥900	N/A
	Crushed/Cracked/broken/Flaked	N/A	11	10	1.6	≥900	N/A
	Ground	N/A	11	10	1.6	≥900	N/A
Paprika	Whole	Extra	11	8	1.3	<900	120
		I	11	8	1.6	<900	100
		II	11	8.5	1.6	<900	80
	Crushed/Cracked/broken/Flaked	NA	11	8	1.6	<900	80
	Ground	Extra	11	8	1.6	<900	120
		I	11	8	1.6	<900	100
		II	11	8.5	1.6	<900	80

* Some dried whole chilli peppers have specific moisture contents e.g. Ancho Mulato-12.5%, Guajillo Pasilla-13.5%

Table 3. Physical Requirements of Dried or Dehydrated Chilli Pepper and Paprika

Product	Styles/ Form	Classes / Grade	Excreta mammalian or/and other ¹ mg/kg (max)	Mold damaged % w/w (max)	Insect defiled/ Infested% w/w (max)	Extraneous Matter ² % w/w (max)	Foreign matter ³ % w/w (max)	Insect filth % w/w (max) [Fragments/25g (max)]	Rodent filth hairs % w/w (max) [/25g (max)]
Chilli pepper	Whole	N/A	2.2 [1]	3	1 [3]	1	1	N/A [0]	N/A [0]
	Crushed/Cracked/broken/Flaked	N/A	N/A	N/A	N/A	N/A	N/A	N/A [0]	N/A [0]
	Ground	N/A	N/A	20 ⁵	N/A	N/A	N/A	[50]	[6]
Paprika	Whole	Extra	1	Nil	0.5	1	1	[0] [0.1]	[0] [0.1]
		I	1	1	1	1	1	[0] [0.5]	[0] [0.5]
		II	2.2	1 [3 ⁴]	1 [3]	1	1	[0] [0.5] [10]	[0] [0.5] [8]
	Crushed/Cracked/broken/Flaked	N/A	N/A	N/A	N/A	N/A	N/A	[NA][0][30]	[NA][0][8]
	Ground	N/A	N/A	20 ⁵	N/A	N/A	N/A	[NA][0][75]	[NA][0][11]

¹Excreta from other animals, such as reptiles and birds.

² Vegetative matter associated with the plant from which the product originates but not accepted as part of the final product.

³ 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.

⁴ Mold damage combined with insect infested

⁵This doesn't mean the product could be 20% moldy it means that mold filaments can be observed in 20% of the fields examined using Howard Mold Count

NA= Not applicable at this time and may change

ANNEX III

Table 4. Method of Analysis

Parameter [Provision]	Method ¹	Principles	Type ²
Moisture	ISO 939	Distillation	I
Total Ash (dry basis)	ISO 939 ISO 928	Distillation Gravimetry	I I
Acid-insoluble ash (dry basis)	ISO 939 ISO 930	Distillation Gravimetry	I I
Pungency Scoville units	ISO 3513	Sensory evaluation (Taste)	IV
Capsaicin content	AOAC 995.038	HPLC	IV
Natural colouring matter	ISO 7541	Spectrophotometry	IV
Mammalian excreta	ISO 9273	Visual examination followed by Gravimetry (whole/pieces)	I
Mould damage	MPM V-8 Spices, Condiments, Flavours and Crude Drugs A. General methods for spices herbs and botanicals (V 32)	Visual Examination (for whole)	IV
[Howard Mould Count	AOAC 945.94	Microscopic Examination]	I
Insect Damage	MPM V-8 Spices, Condiments, Flavours and Crude Drugs A. General methods for spices herbs and botanicals (V 32)	Visual Examination	IV
Extraneous vegetable matter ³	ISO 927	Visual Examination followed by Gravimetry	I
Foreign matter ⁴	ISO 927	Visual Examination followed by Gravimetry	I
Insect filth	US FDA MPM V-8 Spices, Condiments, Flavours and Crude Drugs - A. General methods for spices herbs and botanicals (V 32) [Ground Chilli AOAC 978.22) Ground Paprika (AOAC 977.25B)]	Visual Examination	IV
Rodent filth	ISO 927	Visual examination followed by Gravimetry	IV

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

²According to the definition of "types of method of analysis" as per Codex Procedural Manual Section II

³ Vegetative matter associated with the plant from which the product originates but not accepted as part of the final product.

⁴ 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.