CODEX ALIMENTARIUS COMMISSION

E

Food and Agriculture Organization of the United Nations

World Health Organization

Viale delle Terme di Caracalla, 00153 Rome, Italy - Tel: (+39) 06 57051 - E-mail: codex@fao.org - www.codexalimentarius.org

Agenda Item 3.2 **CX/SCH 24/7/4**

JOINT FAO/WHO FOOD STANDARDS PROGRAMME
CODEX COMMITTEE ON SPICES AND CULINARY HERBS
Seventh Session
29 January - 2 February 2024

DRAFT STANDARD FOR SPICES DERIVED FROM DRIED FRUITS AND BERRIES PART A – REQUIREMENTS FOR ALLSPICE, JUNIPER BERRY AND STAR ANISE

(Prepared by the electronic working group chaired by the United States of America and co-chaired by Madagascar, Mexico and India[1])

(At Step 6/7)

Codex members and Observers wishing to submit comments at Step 6/7 on **Appendix** of this draft standard should do so as instructed in CL 2023/03/OCS-SCH available on the Codex webpage/Circular Letters: http://www.fao.org/fao-who-codexalimentarius/circular-letters/en/

Background

1. CCSCH6 (2022) discussed the draft standard for spices derived from dried fruits and berries at Step 3 developed in an EWG chaired by the United States of America and the co-chaired by India. CCSCH6 excluded vanilla from the group standard and submitted the provisions for remaining spices in the group (allspice, juniper berry, and star anise) to CAC45 for adoption at Step 5[2].

2. CAC45 (2022) adopted the draft standard at Step 5.

Terms of reference

3. Further, CCSCH6 agreed to establish an EWG, led by the United States of America, and Co-chaired by Madagascar, Mexico, and India, working in English, to further the work on this proposed draft group standard.

Participation and methodology

4. The kick-off message inviting Codex Members and Observers interested in participating in the EWG was circulated on 12 December 2022 with a deadline for registration on 15 January 2023. In total, thirteen (13) Members and three (3) Observers registered to participate in the EWG. The EWG worked via the Codex online platform.

Analysis of responses

5. The EWG conducted two rounds of consultations. In the first round, only two EWG members (Canada and Egypt) submitted comments on the outstanding provisions in square brackets in the document, Table 1, and Table 2. Issues resolved from the 1st round:

i. Product Definition – A member wanted to slightly alter the standard text; however, the EWG chairs left it as the original text found in the Group Standard Layout

ii. Composition – A member requested to add “above shall conform to the requirements specified in Annex I”.; however, the EWG chairs left the text as is written since the original text is consistent with previously adopted standards.

iii. Commercial Identification – A member requested to replace classification with identification – this proposed change was accepted.

6. There were no comments submitted to the second circulation. Based on the lack of feedback, all the provisions in square brackets were accepted indicated in **bold and underline**. However, there are a few bracketed values in Tables 1 and 2 that need to be discussed and adjudicated.

[1] Members of the EWG include Brazil, Canada, Costa Rica, Egypt, Guatemala, Indonesia, Japan, Mauritius, Morocco, Syria, Türkiye, United Arab Emirates; USA, IOSTA and IAEA

[2] REP22/SCH paragraph 108-121

Conclusion and recommendation

7. The Chair and Co-chairs of the EWG note that the draft Standard for Spices Derived from Dried Fruits and Berries - Allspices, Juniper berry, and Star anise is ready for consideration by CCSCH7 plenary session with a view to recommending it for final adoption by CAC.

8. CCSCH7 is invited to consider the draft hereby attached as Appendix, with the view to progress it through the Codex step procedure.

9. The leadership of the EWG thanks all the delegations that participated in the EWG.

APPENDIX

DRAFT STANDARD FOR SPICES DERIVED FROM DRIED FRUITS AND BERRIES
PART A – REQUIREMENTS FOR ALLSPICE, JUNIPER BERRY AND STAR ANISE
(At Step 6/7)

1. SCOPE

This standard applies to spices derived from dried or dehydrated fruits and berries, as defined in Section 2.1 below, and offered for direct human consumption, as an ingredient in food processing or for repackaging if required. This standard does not apply to these products when intended for industrial processing. The exact species bought/sold may be defined by contractual specifications.

2. DESCRIPTION

2.1 Product definition

2.1.1 Dried fruits and berries belonging to the varieties listed in Table 1:

Table 1: Dried Fruits and Berries covered by this standard.

	Common Name	Trade Names	Scientific Name
1	Allspice	Allspice Pimento Jamaican Pepper	*Pimenta dioica* (L) Merr. (Myrtaceae) *Pimenta dioica var.tabasco* (Willd. ex Schltdl. & Cham.). (Myrtaceae)
2	Juniper berry	Juniper berry	*Juniperus communis* L. (Cupressaceae)
3	Star Anise	Star Anise	*Illicium verum* Hook. f. (Schisandraceae)

2.2. Styles

Dried fruits and berries may be:

- Whole
- Cut/broken
- Ground/powdered; processed into a powder. The particle size of ground/powdered style is determined by contractual agreement between buyer and seller.

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

2.3. Sizing (optional)

Dried fruits and berries may be sized whole or cut when appropriate in accordance with existing trade practices. When sized, the size designation and the method used shall be indicated on the package.

3. ESSENTIAL COMPOSITION AND QUALITY FACTORS

3.1 Composition

Dried fruits and berries as described in Section 2.

3.2 Quality criteria

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. Classification (optional)

When dried fruits and berries are traded as classified/graded, the provisions in Annex I shall apply as the minimum requirements.

3.2.3 Chemical and physical characteristics

Dried fruits and berries 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.

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 ground/powdered form of product conforming to this standard.

4.1.1 Processing aids

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

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), *Code of Hygienic Practice for Low-Moisture Foods* (CXC 75-2015), Annex III, 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 Prepackaged 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. (Styles).

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 Commercial Identification

- Class/Grade, if applicable
- Size (optional)

8.5 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 AN/ALYSIS AND SAMPLING

9.1 Methods of Analysis[3]

See Annex II.

9.2 Sampling plan

To be developed.

[3] The methods of analysis will be included in CXS 234- 1999 after endorsement by CCMAS and the following text shall 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".

Annex I

Table 1 - Chemical characteristics for spices derived from dried fruits and berries - Allspices, Juniper berry, and Star anise.

Name	Style	Moisture content %w/w (Max)	Total Ash on dry basis % w/w (Max)	Acid Insoluble Ash on drybasis %w/w (Max)	Volatile Oil on dry basis ml/100g (Min)	Other Factors
Allspice	Whole	12	5	1	3	
	Cut/Broken	12	5	1	2	
	Ground/ Powdered	12	4.5	1	1	Non-volatile ether extract (%w/w) **[max/min]** - 8.5
Juniper Berries	Whole	16	4	1	1.4	
	Cut/Broken	16	4	1	**N/A***	
	Ground/powdered	4	4	**N/A**	**N/A**	
Star Anise	Whole	10	4	0.5	7.0	Min. no. fruit per 100g - 130/100gm.
	Cut/Broken	10	4	**0.5**	**N/A**	
	Ground/powdered	8	**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 there are no values, N/A does not refer to zero.

Table 2 - Physical Characteristics for Spices derived from Dried Fruits and Berries - Allspices, Juniper berry, and Star anise

Name	Form/Style	Classes*	Dead Whole Insects Count/100g (max)	Excreta Mammalian mg/kg (max)	Mould Damage %W/W (max)	Insect Defiled/Infested %W/W (max)	Extraneous Matter %W/W (max)	Foreign Matter %W/W (max)	Live Insect	Shriveled Immature Broken %W/W (max)	Other Factors
Allspice	Whole	-	2	11	2	1	Combined 0.50		0	**	- Black, white, and broken berries, berries with stem each @ 0.05% max - Off-size ±10.0% - Other Excreta 11mg/kg (max)
	Cut/Broken		2	N/A	N/A	N/A	Combined 0.50		0	**	
	Ground/ Powdered	-	N/A	N/A	N/A	N/A	N/A		0		- Insect fragments: 30/10g - Rodent hair: 1/10g [N/A] - Crude fibre (% by mass): 27.5 max.
Juniper Berries	Whole		N/A	N/A	1.0	1.0	2.0	N/A	0	20 including discoloured	- Stalks 3% - Broken %w/w max 10 - **[ISO=25]** - Off-size ± 10.0%
	Cut/Broken	-	N/A	N/A	N/A	N/A	1 **[NA]**	N/A	0	**	
	Ground/ Powdered		N/A	N/A	N/A	N/A	**[NA]**	N/A	0	**	
Star Anise	Whole	-	N/A	N/A	N/A	N/A	2		0	25	- Stalks 3% - Max. no. fruit per 100g 130/100gm
	Cut/Broken		N/A	N/A	N/A	N/A	1	N/A	0	**	
	Ground/ Powdered	-	N/A	N/A	N/A	N/A	**[N/A]**	N/A	0	**	

Notes:

* Values or Unclassified is the current text in the draft standard are the absolute minimum requirement

** To be decided

2: Mammalian Excreta- If the average of the total number of sub-samples exceeds the listed milligram per kg

3: Dead Whole Insects- If the total number of whole dead insects found in the total number of the sub samples exceeds the specified value shown in the table

4. N/A: Not applicable, means that this form of the above product has not been evaluated for this provision, and currently there are no values. N/A does not refer to zero.

Annex II

Table 1 - Methods of Analysis for spices derived from dried fruits and berries - Allspices, Juniper berry, and Star anise

Sl. No	Spices	Provision	Method[1,2]	Principles	Type
1	Dried Allspice Dried Juniper Berries Dried Star Anise	Moisture	ISO 939	Distillation	I
		Total ash	ISO 939 and ISO 928	Distillation followed by gravimetry	I
		Acid- insoluble	ISO 939 and ISO 930	Distillation gravimetry followed by gravimetry.	I
		Volatile oils	ISO 939 and ISO 6571	Distillation followed by gravimetry	I
		Extraneous matter	ISO 927	Visual examination followed by gravimetry	I
		Foreign matter	ISO 927	Visual examination followed by gravimetry	I
		Mould visible	ISO 927	Visual examination followed by gravimetry	I
		Mammalian excreta	MPM V-8 Spices, Condiments, Flavors and Crude Drugs General methods for spices herbs and botanicals (V 32) https://www.fda.gov/food/laboratory-methods-food/mpm-v-8-spices-c o n d i m e n t s - flavors-and-crude-drugs (Applicable to whole form of the spice)	Visual examination followed by gravimetry	I
		Whole dead insect	ISO 927	Visual examination	I
			AOAC 969.44	Flotation method	IV
		Insect fragments	ISO 927	Visual examination	I
			AOAC 975.49	Flotation method	IV
		Insect damage	MPM V-8 Spices, Condiments, Flavours and Crude Drugs General methods for spices herbs and botanicals (V 32)	Visual examination followed by gravimetry or counting	I
		Mould damage	MPM V-8 Spices, Condiments, Flavours and Crude Drugs General methods for spices herbs and botanicals (V 32) (Applicable to whole form of the spice)	Flotation	I

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

[2] 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."

2	Allspice (whole, cracked/pieces)	Filth (list all the filth here - for example - mammalian excreta)	AOAC 965.40	Flotation	I
	Allspice (Ground/powdered)	Light filth (list all the filth here - for example - mammalian excreta)	AOAC 981.21	Flotation	I
3	Juniper Berries, Star Anise, (cut/broken	Light filth (list all the filth here - for example - mammalian excreta)	AOAC 975.49	Flotation	I