CODEX ALIMENTARIUS COMMISSION

Food and Agriculture Organization of the United Nations

World Health Organization

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Agenda Item 3.3 **CRD16**

JOINT FAO/WHO FOOD STANDARDS PROGRAMME

CODEX COMMITTEE ON SPICES AND CULINARY HERBS

Seventh Session

Kochi, Kerala India

29 January – 2 February 2024

DRAFT STANDARD FOR SPICES IN THE FORM OF DRIED FRUITS AND BERRIES:

PART B – REQUIREMENTS FOR VANILLA (CX/SCH 24/7/5)

COMMENTS FROM MEXICO (MX)

1. SCOPE

This standard applies to vanilla (cured vanilla beans) 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.

2. DESCRIPTION

2.1 Product Definition

2.1.1 MX: Vanilla beans belonging to the **species** ~~varieties~~ listed in Table 1:

Mx: Wish to note some editorial changes to Table 1

Table 1: Specie ~~**Variety**~~ **of vanilla covered by this standard.**

Common Name	Trade Name/s	Scientific name
Vanilla	Pompona vanilla	*Vanilla pompona* Schiede (Orchidaceae)
	vanilla Mexican vanilla Bourbon vanilla Planifolia vanilla	*Vanilla planifolia* Andrews (Orchidaceae) ~~*or*~~ (syn. *V. fragrans* (Salis.) Ames)
	vanilla	*Vanilla odorata* C. Presl (Orchidaceae)
	Tahitian vanilla/	**MX**: *Vanilla* ***x*** *tahitensis J.W.* Moore (Orchidaceae)
	Maya vanilla	**MX:** *Vanilla cribbiana Soto Art~~e~~nas* (Orchidaceae)

2.2. Styles

Vanilla may be:

Mx: supports the proposal to add split beans, diferenciated of whole beans as follows:

- Whole beans ~~[split beans]~~
- **Split beans**
- Cut/broken.
- Seeds/vanilla caviar.
- Ground/powdered; processed into a powder.

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

2.3. Sizing (optional)

Vanilla 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

Mx: Vanilla bean as described in Section (2) shall confirm to the requirements specified in Annex 1.

~~Vanilla 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. Vanilla beans colour ranges from reddish to shiny black (oily black).

3.2.2. Classification (optional)

When vanilla beans are traded as classified/graded, the provisions in Annex 1, Table 1 (Chemical Characteristics) and Table 2 (Physical Characteristics) shall apply as the minimum requirements.

3.2.3 Chemical and physical characteristics

Vanilla beans shall comply with the requirements specified in Annex 1. (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.

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.

Mx. Agree to add

The products should comply with any microbiological criteria established in accordance with the *Principles for the Establishment and Application of Microbiological Criteria Related to Foods* (CXG 21-1997). 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 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) **[**mandatory**]**

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 ANALYSIS AND SAMPLING

9.1 Methods of Analysis[1]

See Annex 2 Table 1- Methods of analysis for vanilla.

9.2 SAMPLING PLAN

It is recommended that the produce covered by the provisions of this standard be in accordance with the *Recommended Methods of Analysis and Sampling* (CXS 234-1999). However, sampling shall be carried out in accordance with the method specified in ISO 948 (Table 4). Each laboratory sample shall have a minimum mass of 100 g. In the case of vanilla pods, the pods taken as increments shall be representative of the packets contained in the packages chosen for sampling. The sample shall be stored in an airtight container, away from any source of heat and shall be analysed immediately on reception.

Annex 1

Table 1. Chemical characteristics for vanilla

Option 1. **[**Chemical Characteristics per style**]**

Name	Form/Style	Moisture content %w/w [(max)]	Total Ash on dry basis % w/w (max)	Acid Insoluble Ash on dry Basis % w/w (max)	Vanillin Content on dry basis g/100g
Vanilla	Whole	~~25-38,~~ 35 15-38	5 NA	1 NA	>2.0 2.0 >1.2
	Cut/Broken	~~25-38,~~ 20~~,~~ 10-~~25~~ 10 - 38	5 NA	1 NA	1.6–2.0 1.6
	Ground/powdered	~~20-25, 17~~, ~~<~~15 15 - 25	5 NA	1 NA	>1.0 1.0 < 1.5
	Vanilla caviar	35, NA	5 NA	1 NA	> 2.0 2.0 >0.2

Option 2. **[**Chemical Characteristics**]** without Total ash and Acid Insoluble Ash

Name	Form/Style	Moisture content % w/w (max)	~~Total Ash on dry basis % w/w (max)*~~	~~Acid Insoluble Ash on dry Basis % w/w (max)*~~	Vanillin Content on dry basis g/100g
Vanilla	Whole	15 – 38			> 1.2
	Cut/ Broken	10 – 25			> 1
	Ground/ powdered	<15			> 1
	Vanilla caviar				

Option 3. [Chemical Characteristics per specie per style**]** without Total Ash and Acid Insoluble Ash Requirements

Scientific name	**Form/Style**	**Moisture content %w/w (max)**	**Vanillin content in % of the raw material as traded**
Vanilla planifolia	Whole/split	38	0.5 – 2.4
Vanilla planifolia	Broken/chopped	38	0.3 – 2.4
Vanilla planifolia	Ground/powdered	10	0.3 – 2.4
Vanilla planifolia	Seeds/ **[**caviar**]**	N/A	N/A, tasteless

Scientific name	**Form/Style**	**Moisture content %w/w (max)**	**Vanillin content in % of the raw material as traded**
Vanilla tahitensis	Whole/split	50	0.3 – 1. 0
Vanilla tahitensis	Broken/chopped	50	0.3 – 1.0
Vanilla tahitensis	Ground/powdered	10	0.3 – 1.0
Vanilla tahitensis	Seeds**[**caviar**]**	N/A	N/A, tasteless

Scientific name	**Form/Style**	**Moisture content %w/w (max)**	**Vanillin content in % of the raw material as traded**
Vanilla pompona	Whole/split	38	0.2 – 1.2
Vanilla pompona	Broken/chopped	38	0.2 – 1.2
Vanilla pompona	Ground/powdered	10	0.2 – 1.2
Vanilla pompona	Seeds**[**caviar**]**	N/A	N/A, tasteless

Scientific name	**Form/Style**	**Moisture content %w/w (max)**	**Vanillin content in % of the raw material as traded**
Vanilla cribbiana	Whole/split	38	0.5 – 2.4
Vanilla cribbiana	Broken/chopped	38	0.5 – 2.4
Vanilla cribbiana	Ground/powdered	10	0.5 – 2.4
Vanilla cribbiana	Seeds**[**caviar**]**	N/A	N/A, tasteless

Mx supports Option 4 and after reviewing the comments on proposals 1, 2 and 3, proposes the following inclusive adaptation of the vanillas available in the international market:

[Option 4: Chemical characteristics for vanilla per specie**]**

Name	Form/Style	Moisture content %w/w (max)	Total Ash on dry basis % w/w (max)	Acid Insoluble Ash on dry basis % w/w (max)	Vanillin content in g/100g dry basis (min)
Vanilla planifolia	Whole	35	5	1	1.6
	Split	25			
	Cut/Broken	35	5	1	1.4
	Ground/ powdered	15	5	1	1
	Vanilla caviar	35	5	1	1.6
Vanilla odorata	Whole	30	5	1	2
	Split	20			
	Cut/Broken	35	5	1	1.4
	Ground/ powdered	15	5	1	1
	Vanilla caviar	35	5	1	2
Vanilla tahitensis	Whole	35	5	1	1
	Split	30			
	Cut/Broken	35	5	1	0.7
	Ground/ powdered	15	5	1	0.5
	Vanilla caviar	35	5	1	1
Vanilla cribbiana	Whole	35	5	1	1.4
	Split	30			
	Cut/Broken	35	5	1	0.7
	Ground/ powdered	15	5	1	0.5
	Vanilla caviar	35	5	1	1
Vanilla pompona	Whole/	40	5	1	0.02
	Split	30			
	Cut/Broken	25	5	1	0.02
	Ground/ powdered	N/A			
	Vanilla caviar				

Table 2. Physical Characteristics for vanilla

Mx: Does not agree with column 5th referring to unripe vanilla pods. These should not be part of the standard since they constitute a health risk (for example, diseases such as fungi. In addition, their vanillin content is generally low.

Name	Form/Style	Extraneous	Live	~~[Shriveled~~	Other factors

		matter % w/w (max)	insect	~~immature broken.~~ ~~%w/w (max)~~]	Color Tolerance % w/w (max)	[Size Tolerance % w/w (max)]
Vanilla	Whole/split	1	0	~~5~~	7	10
	Cut/Broken	1	0	~~5~~	7.0	10
	Ground/Powdered	1[N/A][2]	0	-	NA (1)	NA
	Seeds/Vanilla caviar	1[N/A][2]	0	-	NA	NA

[1] The particle size of ground/powdered styles is determined by contractual agreement between buyer and seller.

[2] [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 2

Table 1. Methods of Analysis for vanilla

Spices	Provision	Method [1,2]	Principles	Type
Vanilla	Moisture Content	ISO 5565-2	Distillation	I
	Extraneous matter[3]	ISO 927	Visual examination followed by Gravimetry	I
	Live Insect	ISO 927	Visual examination counting	I
	Insect fragments	AOAC 975.49	Flotation method	IV
	Vanillin Content	ISO 5565-2	Distillation and HPLC followed by UV-Spectrophotometry	I
		AOAC 990.25	Distillation and HPLC	I
	Total ash	ISO 939 and ISO 928	Distillation followed by Gravimetry.	I
	Acid- insoluble ash	ISO 939 and ISO 930	Distillation followed by Gravimetry.	I
	[Colour]	[ISO 11037:2011]	Sensory Analysis	
		Munsell Colour Chart	Visual	

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

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

[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.”.

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