



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

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**DRAFT STANDARD FOR SPICES IN THE FORM OF DRIED FRUITS AND BERRIES  
PART B – REQUIREMENTS FOR VANILLA**

(Prepared by the electronic working group chaired by the United States of America and co-chaired by Madagascar, Mexico and India<sup>1</sup>)

**(At Step 3)**

Codex members and Observers wishing to submit comments at Step 3 on **Appendix I** of this proposed draft standard should do so as instructed in CL 2023/55/OCS-SCH available on the Codex webpage/Circular Letters: <http://www.fao.org/fao-who-codexalimentarius/circular-letters/en/>

## Background

1. CCSCH5 endorsed a proposal from the United States to develop a group standard for spices derived from dried fruits and berries (allspice, juniper berry, star anise and vanilla) and submitted it to CAC. A working group led by the United States and co-led by India, prepared the draft standard through two rounds of consultations, and submitted it to CCSCH6 at Step 2.

2. During CCSCH6 discussions, several delegations cited the economic importance of vanilla, in light of its very distinct chemical and physical characteristics and its importance in global trade, proposed to remove vanilla from the proposed draft group standard and rather develop a stand-alone standard for this spice. Some delegations, including the U.S., objected to the justification for the independent standard. However, CCSCH6 agreed to return the provisions for vanilla extracted from the proposed overall draft group standard for spices derived from dried fruits and berries to a working group at Step 2/3 for re-drafting and circulation for comments (Appendix VII Part B) and 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 standard.

## Terms of references

3. CCSCH6 agreed to:

- a. Return the provisions for vanilla in the proposed draft group standard for spices derived from dried fruits and berries to Step 2/3 for redrafting and circulation for comments.
- b. 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. Codex Members and Observers interested in participating in the EWG submitted their nominations. In total, fifteen (15) Members and three (3) Observers registered to participate in the EWG. The EWG worked via the Codex online platform.

5. The EWG conducted two rounds of consultations. Based on the comments received, proposals for new texts have been included in the proposed draft but placed in [square brackets]. The main unresolved technical issues are highlighted in paragraph 7 ("Key Unresolved Issues") with some proposals for consideration by CCSCH.

<sup>1</sup> Members of the EWG include Brazil; Canada; Egypt; France; India; Indonesia; Japan; Madagascar; Mauritius; Mexico; Papua New Guinea; Saudi Arabia (Kingdom of); Türkiye, Uganda, USA, IOSTA, THIE, U.S. PHARMACOPEIA/ FOODS CHEMICAL CODEX

6. This EWG report is limited to technical aspects of the Draft Standard for Vanilla and comments related to grammatical and spelling corrections are not included.

### Analysis of responses

7. **Key unresolved issues** - The following key issues of the draft standard were unresolved:

#### 2.2 Style. Whole beans/Split beans

Clarification of “split vanilla” is needed. i.e.

- a). What is “split vanilla”? Are the beans split longitudinally through their entire length? Or only the split ends? If split vanilla beans it is the latter, then,
  - i. what is the maximum length of split allowed?
  - ii. is the split limited to being along the natural suture/seam of the bean or any vertical split of the ends of the bean?
  - iii. is there any requirement for the split part of the bean to contain vanilla seeds/caviar?
  - iv. is there an allowance for split beans among whole? Or can the entire lot be split beans only?
- b). How does the splitting of vanilla affect moisture and vanillin content – at it exposes a greater surface of the vanilla bean to the atmosphere.

#### 8.3.2 Country of harvest (optional)[mandatory].

This issue was not resolved as there was no change in the positions of the delegations. Therefore, CCSCH may want to adhere to the advice of the 45<sup>th</sup> and 47<sup>th</sup> Sessions of the Codex Committee on Food Labeling (CCFL45 & CCFL47) on this matter in the saffron standard. CCFL45 advice REP21/FL para 41 in the “General Standard for the Labelling of Prepackaged Foods (CXS 1-1985) defined country of origin, while no definition was provided for country of harvest - which justified the decision of CCSCH5 on ‘country of harvest’ as an optional declaration”.

Additionally, CCFL47 returned to CCSCH the identical, mandatory provisions in the draft standard for Saffron with a request to provide the rationale/justification on why the provision for country of harvest should be mandatory and how such a declaration would be beneficial for fraud prevention. Presently, there are no known methods within Codex or the international trade system that can be efficiently applied (time and cost) to determine country of harvest, nor have any delegations supporting this requirement to be mandatory proposed any validated methods. Therefore, CCSCH should adhere to CCFL45 decision on this matter as final. The existing labeling requirement makes provisions for the voluntary labeling of country of harvest, therefore, countries who believe their SCH are superior can be permitted to voluntarily indicate the country of harvest on the label.

#### Annex 1 - Table 1 - Chemical characteristics for vanilla

There was no consensus on: (i) Chemical Characteristics for Vanilla (names of the individual chemical requirements and the numerical values) and (ii). each requirement per style and/or style per individual vanilla specie covered by the standard. The following options were submitted for consideration of the EWG.

Option 1 – In this option the highest and lowest Moisture Content values were placed in a range format, which incorporates the different proposed values. Under this option, CCSCH should consider:

- a. if a single maximum value for moisture content and for vanillin content is acceptable instead of a range. If not, the word “maximum (max)” should be deleted from the heading of the Moisture Content column.
- b. if the moisture content requirement for vanilla seeds/caviar as values range from not applicable (NA) to 35.0%.

Option 2 – This option provides for only moisture content and vanillin contents, while the requirements for Total Ash and Acid Insoluble Ash are omitted.

Option 3 – This option is a table with chemical characteristics per specie without total ash and acid insoluble ash requirements.

Option 4 – This table provides the chemical characteristics for each individual vanilla specie.

Under these multiple options, the proposals that list the Chemical Characteristics according to species, when evaluated against existing national standards and inspection practices are not found. The EWG recommends that CCSCH reconsider Option 1, the table that lists chemical characteristics according to style.

### CONCLUSION AND RECOMMENDATION

8. CCSCH7 is invited to consider the draft 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 IN THE FORM OF DRIED FRUITS AND BERRIES -  
PART B - PROPOSED DRAFT REQUIREMENTS FOR VANILLA  
(At Step 3)**

**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 Vanilla beans belonging to the varieties listed in Table 1:

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

| Common Name | Trade Name/s  | Scientific name   |
|-------------|---|---|
| Vanilla     | Pompona vanilla   | <i>Vanilla pompona</i> Schiede (Orchidaceae)  |
|             | vanilla<br>Mexican vanilla<br>Bourbon vanilla<br>Planifolia vanilla | <i>Vanilla planifolia</i> Andrews (Orchidaceae)<br><i>or</i><br>(syn. <i>V. fragrans</i> (Salis.) Ames) |
|             | vanilla   | <i>Vanilla odorata</i> C. Presl (Orchidaceae)   |
|             | Tahitian vanilla/   | <i>Vanilla tahitensis</i> J.W. Moore (Orchidaceae)  |
|             | Maya vanilla  | <i>Vanilla cribbiana</i> Soto Atenas (Orchidaceae)  |

**2.2. Styles**

Vanilla may be:

- Whole 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**

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 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<sup>1</sup>

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.

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<br>15-38            | 5<br>NA                            | 1<br>NA                                     | >2.0<br>2.0<br>>1.2                  |
|         | Cut/Broken      | 25-38, 20, 10-25<br>10 - 38   | 5<br>NA                            | 1<br>NA                                     | 1.6-2.0<br>1.6                       |
|         | Ground/powdered | 20-25, 17, <15<br>15 - 25     | 5<br>NA                            | 1<br>NA                                     | >1.0<br>1.0<br>< 1.5                 |
|         | Vanilla caviar  | 35, NA                        | 5<br>NA                            | 1<br>NA                                     | > 2.0<br>2.0<br>>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                                      |

**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) |
|---------------------------|---------------------|-----------------------------|------------------------------------|---|--|
| <i>Vanilla planifolia</i> | Whole/ <b>split</b> | 35                          | 5                                  | 1   | 1.6  |
|                           | Cut/Broken          | 35                          | 5                                  | 1   | 1.4  |
|                           | Ground/powdered     | 15                          | 5                                  | 1   | 1  |
|                           | Vanilla caviar      | 35                          | 5                                  | 1   | 1.6  |
| <i>Vanilla odorata</i>    | Whole/ <b>split</b> | 35                          | 5                                  | 1   | 2  |
|                           | Cut/Broken          | 35                          | 5                                  | 1   | 1.4  |
|                           | Ground/powdered     | 15                          | 5                                  | 1   | 1  |
|                           | Vanilla caviar      | 35                          | 5                                  | 1   | 2  |
| <i>Vanilla tahitensis</i> | Whole/ <b>split</b> | 35                          | 5                                  | 1   | 1  |
|                           | Cut/Broken          | 35                          | 5                                  | 1   | 0.7  |
|                           | Ground/powdered     | 15                          | 5                                  | 1   | 0.5  |
|                           | Vanilla caviar      | 35                          | 5                                  | 1   | 1  |
| <i>Vanilla cribbiana</i>  | Whole/ <b>split</b> | 35                          | 5                                  | 1   | 1  |
|                           | Cut/Broken          | 35                          | 5                                  | 1   | 0.7  |
|                           | Ground/powdered     | 15                          | 5                                  | 1   | 0.5  |
|                           | Vanilla caviar      | 35                          | 5                                  | 1   | 1  |
| <i>Vanilla pompona</i>    | Whole/split         | 40                          | 5                                  | 1   | 0.02                                       |
|                           | Cut/Broken          | 25                          | 5                                  | 1   | 0.02                                       |
|                           | Ground/powdered     | N/A                         |                                    |   |  |
|                           | Vanilla caviar      | N/A                         |                                    |   |  |

**Table 2.** Physical Characteristics for vanilla

| Name    | Form/Style           | Extraneous matter % w/w (max) | Live insect | [Shriveled immature broken. %w/w (max)] | Other factors               |                              |
|---------|----------------------|-------------------------------|-------------|---|-----------------------------|------------------------------|
|         |                      |                               |             |   | 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] <sup>2</sup>           | 0           | -                                       | NA <sup>(1)</sup>           | NA                           |
|         | Seeds/Vanilla caviar | 1[N/A] <sup>2</sup>           | 0           | -                                       | NA                          | NA                           |

<sup>1</sup> The particle size of ground/powdered styles is determined by contractual agreement between buyer and seller.

<sup>2</sup> [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 <sup>(1,2)</sup> | Principles   | Type |
|----------------------|--------------------------------|-------------------------|--|------|
| Vanilla              | Moisture Content               | ISO 5565-2              | Distillation   | I    |
|                      | Extraneous matter <sup>3</sup> | 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.

<sup>1</sup> According to the definition of "types of method of analysis" as per Codex Procedural Manual Section II.

<sup>2</sup> 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."

<sup>3</sup> Vegetative matter associated with the plant from which the product originates but not accepted as part of the final product