ANALYSIS OF AGENDA ITEMS IN PREPARATION FOR THE 6th SESSION OF THE CODEX COMMITTEE ON SPICES AND CULINARY HERBS

26th – 30th SEPTEMBER and 3rd OCTOBER 2022 - Virtual Meeting

AGENDA ITEM 5

DRAFT STANDARDS FOR "DRIED FRUITS AND BERRIES"

5.1. Proposed draft Standard for dried or dehydrated chilli peppers and paprika.

5.2. Proposed draft standard for small cardamom.

5.3. Proposed draft standard for spices in dried fruits and berries (allspices, juniper berry, Star anise and Vanilla).

Objectives

This document offers a review and analysis of the agenda items planned for discussion at the 6th session of the **Codex Committee on Spices and Culinary Herbs (CCSCH)**, scheduled to take place virtually September 26th – 30th and October 3rd, 2022. This document is intended for possible use by the Codex communities of practice, promoted by GFoRSS and PARERA, as part of their contribution to enhancing awareness and supporting effective participation in international food standard setting meetings (Codex meetings) by representatives from members and observers.

The analysis provided in this document offers a factual review of agenda items, their background and a discussion of some considerations. This analysis is indicative in nature and does not represent an official position of the organizations mentioned above (PARERA and GFoRSS), their membership or their management. It provides a synthesis and analysis of the work currently under discussion by the CCSCH, which may be useful for delegations from Arab countries to prepare their positions considering the needs and specificity of the region and the potential impact of the proposed food standards.

**It is important to note that experts – members of the Arab Expert Working Group – do not represent the organizations and / or jurisdictions to which they are affiliated. The selection and participation in the Arab Expert Working Group proceedings is based on each expert's own credentials and experience, which should not be misconstrued as the country's / delegation's / organization's position to which they belong.*

This analysis is prepared as part of the **Codex Initiative for the Arab Region**: ***Arab Codex Initiative***, implemented by PARERA and GFoRSS, hosted and coordinated by the Arab Industrial Development, Standardization and Mining Organization (AIDSMO) and funded by the US Codex Office, US Department of Agriculture.

The focus of the analysis of **agenda item 5 of CCSCH6, relates to proposed draft standards for spices of dried fruits and berries: peppers and paprika, small cardamom, allspices, juniper berry, Star anise and Vanilla**.

Agenda Item 5.1: Proposed draft Standard for dried or dehydrated chilli peppers and paprika (step 2/3).

Documents

CX/ SCH 22/6/5

CX/ SCH 22/6/5 Add.1

Recommendations formulated by the EWG chaired by India

In its 6th session, CCSCH is invited to:

consider the proposed draft standard for Dried or Dehydrated Chilli Peppers and Paprika attached as Appendix I to the working document CX/ SCH 22/6/5, with the view to progress it through the Codex procedure.

Background

The CCSCH established an electronic working group (EWG) for Dried or Dehydrated Chilli Peppers and Paprika in its 3rd session (2017), in which 3 Arab countries registered (Egypt, Morocco, Saudi Arabia). The draft standard is considered a work in progress and was returned to step 2/3 during CCSCH5 (2021).

Analysis

Following the template for spices and culinary herbs standards, as adopted by CCSCH, the draft standard for Dried or Dehydrated Chilli Peppers and Paprika was established.

Since CCSCH5 (2021), the draft standard was circulated 2 times, for comments from members and observers.

Comments and discussions were mainly about the moisture content (% w/w) and the pungency, which is a tool for measuring the spiciness of hot peppers. The scale measures the amount of capsaicin (the chemical compound that causes spicy heat) in a pepper and assigns it a number rating in Scoville Heat Units (SHUs).

In addition, other physical requirements were also discussed, i.e., the parameters for: mould damage, insect filth and rodent filth. Here, countries proposed different methodologies resulting in different units of measurement and values.

The draft to be reviewed during CCSCH6 was prepared based on the comments received. However, there are still some outstanding issues not resolved with respect to tables 2 and 3. Therefore, the Proposed Draft requires further discussions on the physical and chemical properties, to reach a potential consensus.

The most recent set of comments was published on the Codex Alimentarius website (https://www.fao.org/fao-who-codexalimentarius/meetings/detail/en/?meeting=CCSCH&session=6) on the 28th of August, 2022, following the circular letter (CL) 2022/27/OCS-SCH issued in June 2022.

10 member countries, the European Union (EU) and 2 observers submitted their comments, among which 3 Arab countries: Egypt, Saudi Arabia and Syria. An overall support was expressed regarding the draft, particularly from India, the Philippines and Syria.

Concerning the description of the product (section 2), Egypt suggested the addition of the family name as follows: *…dried or dehydrated chilli peppers or/and paprika is the product obtained from drying the fruits/pods of plants, of the (Solanaceae) family…*

Canada suggested the inclusion of "Hot paprika" to the scope of the standard, which was supported by the European Union and the International Organization of Spice Trade Associations (IOSTA), and which in case added, will have to be described by *Capsicum annuum* and *Capsicum frutescens*.

The EU and IOSTA suggested to modify the section 2.2 about the "Styles", by amending the following part "*Ground chilli peppers or/and ground paprika is the product obtained by grinding whole dried chilli peppers or paprika with or without variant proportions of pericarp, placenta, seeds, pedicel and calyx, without any other added matter*". The underlined clause may involve some ambiguities regarding the thresholds (ranges) for the variant proportions, so EU suggested to remove it completely, while IOSTA proposed to add thresholds or ranges to the appendices.

Saudi Arabia suggested to revise section 9.2 "Sampling plan", considering the ISO 948: 1980 "Spices and condiments — Sampling".

In the following **tables 1 and 2** are assembled the major comments related to the chemical and physical requirements of Chilli pepper and paprika, respectively.

***Table 1**: Major comments related to chemical requirements of Chilli Pepper and Paprika.*

Chemical Requirement	Member/Observer	Comment
Moisture Content (% w/w) max	**EU**	Retain 11%
	India	Retain 12%
Acid insoluble ash (dry basis) % w/w max	**EU**	Insert footnote to the value of 1.6% w/w for ground paprika: " If the product contains an anti-caking agent (max. 2%), this value is allowed to be max. 3% for sweet paprika and max. 3.6% for hot paprika."
Column Pungency - Scoville Heat units	**EU**	Insert value of 480 for paprika
	India	Value of = 900 for Pungency of Chilli peppers and value of < 900 for Pungency of Paprika.
Color value (ASTA color unit)	**IOSTA**	60 for paprika

For the methods of analysis, IOSTA suggested to replace ISO 3513, which is a sensory method that is subjective, by an alternative method, ASTA 21.3, which is for the chemical assessment of pungency using chromatography.

***Table 2**: Major comments related to physical requirements of Chilli Pepper and Paprika.*

Physical Requirement	Member/Observer	Comment
Extraneous matter (% w/w max)	**EU**	add a footnote to the values of foreign matter for crushed/cracked/broken and ground peppers and paprikas reading: "Product must be obtained from raw materials meeting the criteria fixed for whole products."
Insect filth and Rodent filth hairs	**India**	To delete
Insect defiled/infested (% w/w max)	**India**	1% w/w (max) for Insect defiled/ Infested in Chilli peppers (Whole; Class/Grade-N/A) and Paprika (Whole; Class/Grade-II).
Other	**USA**	Proposal to add this column / • allowance of 10.0% is given for off-size, i.e., products shorter or longer than the length (maximum, minimum or length range). • Allowance of 10% for other varieties.

Considerations for the Arab Region

The Arab Industrial Development, Standardization and Mining Organization (AIDSMO), through its "Standardization & Metrology Center" has the mandate to harmonize and disseminate unified "Arab Standards". Among the standards already published, the Arab Standard 504/2000 deals with the whole and ground Chilli Pepper. The following **table 3** presents a comparative representation between the Arab standard and the Codex draft.

***Table 3**: Comparative representation between Arab Standard 504/2000 and the draft Codex Standard for Chilli Pepper.*

Section / requirement	Arab Standard 504/2000	Codex draft
Product definition	Major species: *Capsicum annuum* L. and *Capsicum frutescens* L. Minor species*: Capsicum Ghinese*, *Capsicum pubscens* and *Capsicum Pendulum*	*Capsicum annuum L.*, *Capsicum frutescens L.*, *Capsicum baccatum* var. pendulum (Willd.) Eshbaugh, (synonym of Capsicum frutescens L.), *Capsicum chinense* Jacq., *Capsicum pubescens* Ruiz &Pav
Food additives	No additives allowed	Anticaking agents as per CXS 192-1995
Extraneous Matter % w/w (max) - whole	1	1
Immature, spotted and crushed whole peppers % w/w (max)	5	1 or 3% (as Mould damaged)
Moisture content % w/w (max)	**11**	11 or 12

Total ash (dry basis) % w/w (max)	**10**	10
Acid insoluble ash (dry basis) % w/w (max)	**1.6**	1.6
Non-volatile Ether extract % (min)	**15**	N/A
Total Nitrogen (dry basis) % (min)	**12**	N/A
Crude fibers (dry basis) % (max)	28	N/A

After comparing the common indicators between both standards, no major differences can be spotted, except some additional chemical requirements mentioned in the Arab standards, and which can be suggested to be added if judged suitable.

Another Arab Standard exists for the ground paprika (1486-2002), covering the same species (*Capsicum annuum* L.). This standard specifies that the ground paprika can be obtained from grinding the whole product with proportions of pericarp, placenta, seeds, pedicel and calyx, as long as it does not exceed the percentage of the fruit shell. Some chemical requirements are compared in **table 4**, where also, no major differences were observed.

***Table 4**: Comparative study between Arab Standard 1486/2002 and the draft Codex Standard for Paprika.*

Section / requirement	Arab Standard 504/2000	Codex draft
Moisture content % w/w (max)	11	11 or 12
Total ash (dry basis) % w/w (max)	6.5-10 (according to pungency level)	10
Acid insoluble ash (dry basis) % w/w (max)	0.5-1.6 (according to pungency level)	1.6
Non-volatile Ether extract % (min)	17	N/A
Capsaicin Content (mg/100 g) (max)	10-20-30 (according to pungency level)	Pungency is expressed by Scoville Heat units
Crude fibers (dry basis) % (max)	25-30 (according to pungency level)	N/A

Capsaicin quantification by chromatographic methods constitutes a more accurate and precise method to evaluate the pungency and may substitute the Scoville Heat unit's approach.

This approach would however require correlating the chromatography-based findings with the sensory testing methods such that the two approaches are deemed equivalent.

As for the "Styles" of the product in section 2.2, the Arab Standard 1486-2002 may bring a solution by adding the following underlined clause: "*Ground chilli peppers or/and ground paprika is the product obtained by grinding whole dried chilli peppers or paprika with or without variant proportions placenta, seeds, pedicel and calyx, **provided that this part is not larger than the pericarp itself**, without any other added matter*".

Conclusion

Taking into consideration all received comments from members and observers, and upon reviewing the comparative analysis with the Arab standards on chilli pepper and paprika, the draft standard would gain to be advanced to the next step in the Codex procedure and even to be considered for adoption through the accelerated procedure at 5/8, by the Codex Commission during its next meeting (CAC45).

Agenda Item 5.2: Proposed draft standard for small cardamom (step 2/3)

Document

CX/ SCH 22/6/6

CX/ SCH 22/6/6 Add.1

Recommendations formulated by the EWG chaired by India and co-chaired by Iran

In its 6th session, CCSCH is invited to:

Consider the proposed draft standard for Small Cardamom attached as Appendix I to the working document CX/ SCH 22/6/6, with the view to progress it through the Codex procedure.

Background

This work was initiated during the 5th session of CCSCH (2021). 12 Members and 01 Observer registered to participate in the EWG, among which 1 country from the Arab region (Saudi Arabia).

Analysis

The EWG had 2 rounds of circulated drafts, where members and observers discussed the various aspects of the draft standard for small cardamom. Some diverse views were noted on few parameters, such as, whole Acid insoluble ash, Seeds Visible mould, Whole insect, Dead, Excreta Mammalian, Excreta others, and Powdered Seeds Volatile Oil.

The most recent set of comments was published on the Codex Alimentarius website (https://www.fao.org/fao-who-codexalimentarius/meetings/detail/en/?meeting=CCSCH&session=6) on the 28th of August, 2022, following the circular letter (CL) 2022/28/OCS-SCH issued in June 2022.

12 member countries, the European Union (EU) and 1 observer submitted their comments, among which 3 Arab countries: Egypt, Saudi Arabia and Syria. An overall support was expressed regarding the draft, particularly from India, the Philippines and Syria.

Egypt suggested to add the family name to the definition, as follows: *Dried Small Cardamom is a product obtained from the dried fruits of Elettaria cardamomum L. Maton, Maton of the (Zingiberaceae) family*, while Saudi Arabia suggested to add a comprehensive definition for small cardamom. The USA evoked the same issue of definition clarification and suggested 2 solutions:

- To include the maximum size/dimension as a second sentence in section 2.1.

Or

- To insert “Green Cardamom” in brackets next to Small Cardamon in the Common name; to clarify that this standard only covers the “small green cardamom”; while another variety exists which is the “Large/Black cardamom”.

Regarding the styles, Egypt suggested to add “"powdered whole pods / capsules” to the list, while the EU supported the requirement that small cardamom powder is obtained (exclusively) from seeds and not from whole pods (capsules included).

The chemical requirements were also commented by Egypt, EU, India and IOSTA, where some disparities can be highlighted regarding the proposed values to be adopted.

The physical requirements got some comments, mainly related to the format, some missing unit indications and suggestions about values to be adopted from the available choices.

Considerations for the Arab Region

Cardamom seeds are used widely for flavoring purposes in food. Despite their numerous applications in the cooking styles of Sri Lanka, India and Iran, a large percentage of the world production is exported to Arab countries, where it is used to prepare coffee.

In the library of the Arab Standards, developed by the Arab Industrial Development, Standardization and Mining Organization (AIDSMO), through its "Standardization & Metrology Center", 2 documents exist for cardamom: standard 2887-2018, Spices and Condiments – Cardamom Part 1: Whole Capsules and 2888-2018, Spices and Condiments – Cardamom Part 2: Seeds.

The Arab standard targets all varieties of cardamom, where colors can go from green to dark brown, through fade yellow and white and having different sizes. Nevertheless, the following **table 5** presents a comparative study between the Codex draft and both Arab standards.

***Table 5**: Comparative study between Arab Standards the draft Codex Standard for Cardamom.*

Style	Standard	Moisture content % w/w (max)	Volatile oil % v/w (min)	Total Ash % w/w (max)
Whole	Arab Standard 2887-2018	13	4	9.2
	Codex draft	13	3.5	9.5
Seeds	Arab Standard 2888-2018	13	3.5	9.5
	Codex draft	**13**	3.5	8

When inspecting these values, 2 differences can be noticed regarding the volatile oil content and the total ash content. Regarding the total ash content of cardamom seeds, the value of 9.5% should be endorsed, as per the ISO 882-2, which constitutes the main reference for all these standards.

Conclusion

Taking into consideration all received comments from members and observers, and after the comparative study with the Arab standards on Cardamom, the draft standard can be advanced to the next step in the Codex procedure and should all comments be applied, it may even gain to be advanced for a final adoption by the Codex Commission during its next meeting (CAC45).

Agenda Item 5.3: Proposed draft standard for spices in dried fruits and berries (allspices, juniper berry, Star anise and Vanilla) (step 2/3)

CX/ SCH 22/6/7

CX/ SCH 22/6/7 Add.1

Recommendations formulated by the EWG chaired by India and co-chaired by Iran

In its 6th session, CCSCH is invited to:

Consider the proposed draft standard for spices in dried fruits and berries (allspices, juniper berry, Star anise and Vanilla), attached as Appendix I to the working document CX/ SCH 22/6/7, with the view to progress it through the Codex procedure.

Background

Considering that there are 109 named spices and culinary herbs to be considered under the CCSCH mandate, and even if the Committee succeeds in developing four standards at every session, which might face some complications, this risks to be a very difficult and time-consuming process.

Therefore, the committee underwent a process to adopt the development of horizontal group standards, which would enable the Committee to increase the frequency of its outputs, in a reasonable amount of time.

To validate the group standard format, the United States submitted a project proposal to CCSCH5 (2020), limited to only four products (Allspice, Juniper berry, Star anise and Vanilla), belonging to the dried fruits and berries group. The proposal was advanced by CCSCH5 and was adopted during CAC44.

Analysis

Sixteen - (14) member countries and (2) observer organizations – participated to the EWG, chaired by the United States of America and India, among which 1 Arab country (Egypt).

After the first rounds of discussions, some issues surfaced as lacking consensus between participants, such as the definition of Product, where *Vanilla Cribbiana* needs to be verified if edible and concerning values of chemical and physical requirements, which are still missing or need to be addressed.

After the last round of comments, received as response to the CL 2022/29/OCS-SCH, 10 member countries replied and 1 observer, among which 3 Arab countries (Egypt, Syria, and Saudi Arabia).

Some disparities of opinions can be noticed starting from the General comments, where Madagascar expressed the opinion to remove Vanilla from the grouped standard and IOSTA pointed out that *Vanilla cribbiana* may not be familiar to the food industry.

Egypt suggested to add family names to the definition of the products. Saudi Arabia proposed to complete the section on methods of analysis based on ISO references for the same products.

Considering that the circulated draft was still missing numerous chemical and physical requirements' values, member countries and observers commented with suggestions regarding these values, where Egypt provided a full list of values, as well as propositions from India, Syria, Uganda, Venezuela and IOSTA.

Considerations for the Arab Region

The Arab region may be considered as a producer for Star Anis, particularly Egypt and Syria and an Arab Standard was adopted by AIDSMO under the reference 2892- 2018. Based on this reference, 3 chemical requirements can be found:

- Moisture content % w/w (max): 10
- Total Ash % w/w (max): 4
- Volatile oil ml/100 g (min): 8

Conclusion

The proposed draft standard constitutes, undoubtedly, a step forward regarding the approach adopted by CCSCH. The grouping of products to be considered will accelerate the frequency of standard adoption, which will have positive impact on international trade. However, and due to the unreadiness of this document, where disparities surfaced regarding the inclusion of Vanilla or not and while a lot of the chemical and physical requirements are yet to be completed, the Arab delegations may consider endorsing the non-advancement of this standard and to leave it at step 2/3 for another round of discussions. This will allow a re-established EWG to provide a complete draft to the CCSCH7 for advancement. Arab delegations are encouraged to participate to the EWG, rather than just comment the finalized draft.