CODEX ALIMENTARIUS COMMISSION

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Food and Agriculture Organization of the United Nations

World Health Organization

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Agenda item 4.2 **CX/SCH 19/4/5 Add.1**

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

Fourth Session

Thiruvananthapuram, India, 21 - 25 January 2019

PROPOSED DRAFT STANDARD FOR DRIED OR DEHYDRATED GARLIC
Comments at Step 3 (Replies to CL 2018/56/OCS -CCSCH)

Comments of Colombia, Iran, Mauritius, Mexico, United States of America and USP

Background

1. This document compiles comments received through the Codex Online Commenting System (OCS) in response to CL 2018/56/OCS-CCSCHissued in September 2018. Under the OCS, comments are compiled in the following order: general comments are listed first, followed by comments on specific sections.

Explanatory notes on the appendix

2. The comments submitted through the OCS are hereby attached as **Appendix** and are presented in table format.

APPENDIX

Proposed Draft Standard for dried and dehydrated garlic - Comments at Step 3 on the " (Replies to CL 2018/56/OCS-CCSCH)

COMMENTS	MEMBER / OBSERVER AND RATIONALE
General Comment	**USA** The United States submits the following comments in support of the activities of the Codex Committee on Spices and Culinary Herbs. The CCSCH is encouraged to use the grouping method to develop the standards because the practice of developing individual product standards does not and cannot meet the immediate needs of the stakeholders. The United States is not aware of any stakeholder with an immediate concern about the quality and safety of spices and culinary herbs who is willing to wait between four and twenty years for a resolution. Hence the CCSCH can only be of relevance to its stakeholders by addressing their needs in the most efficient manner.
General Comment	**USP** Thank you for offering the opportunity to review and comment on this proposed draft standard. As an organization that is interested and involved in the creation of standards for food ingredients and food products (via the Food Chemicals Codex compendium) and herbal products (via the USP-NF compendium), we have concerns over the lack of specific compositional information or requirements for this product and for similar spices, herbs, and botanical ingredients. The only chemical property provided in Annex I part A that might be seen as characteristic for garlic is the requirement for volatile organic sulfur compounds, however, the lack of specificity of this method/requirement would not prevent replacement or adulteration of the product with plant materials that similarly contain volatile organic sulfur compounds. Since this proposed draft standard is intended to include ground or powdered garlic, the risk of adulteration or replacement of the product is increased and the need for more definitive chemical compositional analysis is even more important to assist regulatory bodies in protecting trade. We suggest that the Committee consider incorporating requirements for specific sulfur-containing compounds characteristic of garlic including alliin and gamma-glutamyl-(S)-allyl-L-cysteine as required by the USP41-NF36 (2018) monograph for Powdered Garlic (available from the United States Pharmacopeial Convention, Rockville, MD USA). The public standard published by USP includes validated analytical test methods as well as specifications that may be useful to the Committee to ensure the quality of dried and dehydrated garlic in global trade. Thank you
	Mauritius Mauritius welcomes this Draft Standard and considers that all the sections of the proposed draft are clearly described.

1. SCOPE	
This Standard applies to garlic in their dried or dehydrated form as spices or culinary herbs, defined in Section 2.1 below, offered for ~~direct~~ direct human consumption or as an ingredient industrial processing of food. ~~commercial food or for repackaging in case , or for repacking if required~~. This standard does not apply to the product ~~when it is~~ intended for industrial processing different to what is expressed.	**Colombia** The change seeks to clarify and delimit the scope of application, because by only indicating that it is for "human consumption", it could be understood that the food may or may not be packed or packaged. Thus, it is considered that the expression "or for repackaging, if necessary", does not establish a specific criterion to determine the specific situation in which the product is located. Likewise, it is considered pertinent to adjust the wording of the last paragraph in order to give greater clarity to determine the specific situation in which the rule is not applicable. *Category : TECHNICAL*
2. DESCRIPTION	
2.2 Styles/forms	**Mauritius** According to us, section 2.2 could be revised to include 'flakes' which are very common
Whole, Garlic separated, intact, peeled cloves or dry peeled solo garlic	**USA** The CCSCH is asked to evaluate the definition of whole as it pertains to garlic. “Whole garlic” is usually defined as collection of cloves attached forming a bulb or a solo garlic with only one large clove.
~~Cracked/broken~~ Pieces comprising various cut styles, ~~or~~ such as chopped, minced, diced and sliced.	**USA** The term “Cracked/broken” is usually not associated with roots and rhizomes because they are usually cut i.e. diced or sliced before drying.
~~Cracked/broken, or~~ Cracked/broken	**Colombia**
3. ESSENTIAL COMPOSITION	
3.1 Composition Product shall belong to the one defined in para 2.1 and shall conform to requirements set in Annexes I and II (Chemical and Physical Properties of Dried and Dehydrated Garlic).The General name may be used if the product is a blend of the different species listed under the General name of that commodity. When a specific name is used, the product must contain a minimum of 80% of the species listed for the specific name.	**USA** There are common trade practices that specify either a general or specific name based on a blend of different varieties of the same product. The name given to this blend depends of the species composing 80% or more. Therefore, the United States recommends alignment with a general or specific name, as done in trade based on a percentage of composition

3.1.2 Composition for use of General and Specific Names The general name may be used if the product is a blend of the different species listed under the general name of that commodity. When a specific name is used, the product must contain a minimum of 80% of the species listed for the specific name.	
Product shall belong to the one defined in para 2.1 and shall conform to requirements set in Annexes I and II (Chemical and Physical Properties of Dried and Dehydrated Garlic).~~The General name may be used if the product is a blend of the different species listed under the General name of that commodity. When a specific name is used, the product must contain a minimum of 80% of the species listed for the specific name.~~	**Mexico** The draft is confusing. There is no listing in the standard on garlic species.
3.2 QUALITY FACTORS	
3.2.1 Odour, flavor and color	**Mauritius** section 3.2.1 mustiness could be replaced by mouldiness
3.2.2 Chemical and physical characteristics	
The generic product shall comply with the requirements specified in Annex I (Chemical Characteristics) and Annex II (Physical Characteristics). Dried bulbs shall be free from live insects and practically free from dead insects, insect fragments and rodent contamination visible to the naked eye (corrected, if necessary, for abnormal vision). The defects allowed must not affect the general appearance of the product as regards to its quality, keeping quality and presentation in the package. ~~There~~ Dried and dehydrated garlic shall ~~not~~ be free from any ~~form of adulteration in the product.~~economic adulteration	**USA** Previous sessions of the CCSCH agreed that economic adulteration is of major concern in all dried spices and culinary herbs and included a section in the standard layout to address this concern. The United States recommends inserting the following section in the draft standard for consistency with the standard layout and as a quality requirement.
The generic product shall comply with the requirements specified in Annex I (Chemical Characteristics) and Annex II (Physical Characteristics). Dried bulbs shall be free from live insects and practically free from dead insects, insect fragments and rodent contamination visible to the naked eye (corrected, if necessary, for abnormal vision). The defects allowed must not affect the general appearance of the product as regards to its quality, keeping quality and presentation in the package. There shall not be any form of adulteration in the ~~product~~product.	**Iran** The product shall be free from foreign matter like sands, stones, piece of metal and glass, plants residuals , hair and etc.

The generic product shall comply with the requirements specified in Annex I (Chemical Characteristics) and Annex II (Physical Characteristics). ~~Dried bulbs shall be free from live insects and practically free from dead insects, insect fragments and rodent contamination visible to the naked eye (corrected, if necessary, for abnormal vision).~~ The defects allowed must not affect the general appearance of the product as regards to its quality, keeping quality and presentation in the package. There shall not be any form of adulteration in the product.	**Mexico** "Practically free" is subjective. The infestation part is already contemplated in table B "A. Physical properties of dried and dehydrated garlic "
The generic product shall comply with the requirements specified in Annex I (Chemical Characteristics) and Annex II (Physical Characteristics). Dried bulbs shall be free from live insects and practically free from dead insects, insect fragments and free from rodent contamination visible to the naked eye (corrected, if necessary, for abnormal vision). The defects allowed must not affect the general appearance of the product as regards to its quality, keeping quality and presentation in the package. There shall not be any form of adulteration in the product.	**Colombia** Adjustment is made in the indicated paragraph, so as not to allow contamination by rodents. *Category : SUBSTANTIVE*
4 FOOD ADDITIVES	
4 FOOD ADDITIVES	**USA** There is no uniform requirement or practice on the use of food additives in this product. Some countries prohibit their use while other do not. The use of food additives is largely dependent on its functional use, and market preferences. In this regard, the United States recommend making this section optional by utilizing some of the text from the same section of the Codex General Standard for Fruit Juices and Nectars (CODEX STAN 247-2005).
To facilitate the retention of powdered state of the product, anticaking agents that are listed in Table 3 of the Codex General Standard for Food Additives (CXS 195-1995) may be ~~used~~used in ground/powdered form of this product..	**USA**
~~To facilitate the retention of powdered state of the product, anticaking agents that are listed in Table 3 of the Codex General Standard for Food Additives (CXS 195-1995) may be used.~~ The additives allowed in the products covered by this standard are those indicated for this category of foods in the General Standard for Food Additives (CODEX	**Colombia** Colombia considers that according to the procedures established by the Codex Alimentarius Commission, the use of additives must comply with the provisions of Codex Stan 192-1995, in order not to create inconsistencies between the standards.

STAN 192-1995).	In the General Standard of Alimentarius Additives (Codex Stan 192-1995), additives are allowed such as: acesulfame potassium (flavor enhancer), butylhidoxytoluene (antioxidant), polysorbates (stabilizers), among others, which are authorized for the category "12.2.1 Aromatic herbs and spices".
8. LABELLING	
8 LABELLING	**Colombia** There are international regulations in which the safety and quality of packages and packaging for this class of products is required, which must be harmonized for free trade.
- Class/Grade, if applicable	**Iran** Grade for products is not determined
9.1 METHODS OF ANALYSIS	
Distillation	**Iran** It is not correct. The principle of method is extraction
ANNEX	
~~A~~**Table I. Chemical ~~Properties~~ Characteristics for Dried and Dehydrated Garlic**	**USA**
A. Chemical Properties for Dried and Dehydrated Garlic	**USA** The values/limits submitted by the United States submission are based on existing trade practices and national standards/regulations and are indicated.
MOISTURE CONTENT	
~~Moisture,~~ Moisture Content (Max. %) ~~% w/w (max)~~	**USA**
i) Powered Garlic	
~~HH[5] [6.5]~~ [7]	**USA**
[5] [6.5] [7]	**Japan** Japan supports 6.5 or 7% on moisture values given the fact that it can exceed 5% even if properly processed.
~~[5] [6,5]~~ [7]	**Mexico** Permissible parameters for dehydrated garlic
~~[5] [6,5] [7]~~6.75	**Colombia** The Colombian regulations through Resolution 4241 of 1991, establishes a moisture

	content of 6.75%, this percentage being the one currently verified within the ambit of of IVC in the industry.
ii) Other than Powdered Garlic	
~~Other than Powdered Garlic~~Pieces Whole	**USA**
~~8~~7 8	**USA**
Total ash on dry basis	
~~[5.5]~~ [6]	**USA**
Volatile organic sulphur compounds	
Volatile ~~organic sulfur compounds content, % (m/m) on dry basis, min.~~oils mL/100 gm Whole	**USA**
PHYSICAL PROPERTIES	
~~B.~~ Table II: Physical ~~Properties~~ Characteristics for Dried and Dehydrated Garlic	**USA**
B. Physical Properties for Dried and Dehydrated Garlic	**USA** Values for rodent filth, dead insects, excreta etc. in whole and powdered garlic need to be visited. Already established standards, for example black pepper and/or cumin may be used as models for establishing garlic standards. Of course, we must keep in mind that garlic has different chemical properties compared to cumin and black pepper. This topic needs further discussion and we are unable to past the table we propose in this format on the OCS.
B. Physical Properties for Dried and Dehydrated Garlic	**Japan** In terms of maintaining proper hygiene conditions, Japan supports 0.5% for 'Extraneous matter', 0% for 'Mould visible' and 'Dead insects, insect fragments, rodent contamination'. In addition, 'Foreign matter' and 'Live insects' requirements should be 0 with units specified.
Extraneous matter	
Whole [0.~~5]~~ 5] Pieces [1]	**USA**

Ground/Powdered [1]	
[0,5] ~~[1]~~	**Mexico** Permissible parameters for dehydrated garlic
Foreign matter	
~~[0]~~ Whole [0.~~5]~~ 5] Pieces [0.5] Ground/Powdered	**USA**
~~[0]~~ [0,5]	**Mexico** Permissible parameters for dehydrated garlic
Mould visible	
~~[0]~~ Whole[1] Pieces [1] Ground/Powdered [1]	**USA**
~~[0]~~ [1]	**Mexico** Permissible parameters for dehydrated garlic
Dead Insects, insect fragments, rodent contamination	
~~[0] [0.5]~~	**USA**
~~[0]~~ [0,5]	**Mexico** Permissible parameters for dehydrated garlic