



**JOINT FAO/WHO FOOD STANDARDS PROGRAMME**  
**CODEX COMMITTEE ON FRESH FRUITS AND VEGETABLES**

**Twenty-second Session**

**PROPOSED DRAFT STANDARD FOR ONIONS AND SHALLOTS**

Prepared by the Electronic Working Group chaired by Iran and co-chaired by Indonesia and India

Codex members and observers wishing to submit comments at Step 3 on this draft should do so as instructed in CL 2021/84-FFV available on the Codex webpage/Circular letters 2021:  
<http://www.fao.org/fao-who-codexalimentarius/circular-letters/en/>

## **INTRODUCTION**

1. At the 21<sup>th</sup> session of the Codex Committee on Fresh Fruits and Vegetables (CCFFV21) (Monterrey, Nuevo Leon Mexico, 7-11 October 2019)<sup>1</sup>, Iran, Chair of the EWG, introduced the item and informed the Committee that, in response to the comments submitted, a revised version of the proposed draft standard had been prepared by Chair and co-Chairs for consideration by the Committee.
2. CCFFV21 agreed to retain onions and shallots in the same standard and to include separate provisions when necessary. CCFFV21 considered the revised proposed draft standard.

## **PARTICIPATION AND METHODOLOGY**

3. The Chair and co-Chairs issued the third draft to the EWG for comments on 14 April 2021 and the progress report on 25 November 2021.
4. Twenty three countries have expressed interest to participate in this project. Further, the EWG reviewed comments at third round, received comments from USA and Indonesia. Their comments are included in Table 1. Based on the responses provided, the draft was revised and improved.

## **SUMMARY OF DISCUSSION**

5. The EWG's report below covers all the comments. The conclusions and recommendations are based on an analysis of the comments, and are described below section by section. The revised draft standard, incorporating these conclusions, is in Appendix I.

## **2 DEFINITION OF PRODUCE**

6. The changes were made in accordance with the agreements in paragraph 81 of REP 20/FFV and revised version in CCFFV21/CRD15.

## **3 PROVISION CONCERNING QUALITY**

### **3.1 MINIMUM REQUIREMENTS**

7. Some changes were done in accordance with the agreements in paragraph 82 of REP 20/FFV and revised version in CCFFV21/CRD15 as follows:

- Replace the term "intact" with "whole";

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<sup>1</sup> REP 20/FFV. Para 75(ii)

- Delete “free from mould and yeast” as these were covered under pests;
- Insert a new quality requirement, “free of damage caused by low and/or high temperature”; and
- Insert a new section “3.1.1 sufficiently developed”.

### 3.2 CLASSIFICATION

8. Extra class was described in accordance with the agreements in paragraph 83 of REP 20/FFV and revised version in CCFFV21/CRD15 as follows:

#### 3.2.1 EXTRA CLASS

Onions and shallots in this class must be of superior quality. They must be characteristic of the variety and/or commercial denomination. They must be free from defects, with the exception of very slight superficial defects, provided these do not affect the general appearance of the produce, the quality, the keeping quality and the presentation of the package.

The following slight defects, however, may be allowed, provided that they do not affect the general appearance of the produce, the quality, the keeping quality and presentation in the package:

- a very slight defect in shape;
- very slight defects in colouring;
- very light staining, provided it does not cover more than one fifth of the bulb’s surface; and
- for onions, bulbs should be free from doubles and/or double centres;

### 4 PROVISIONS CONCERNING SIZING

9. The changes are fully clarified based on received comments in Table 1 as follows:

Onions and shallots may be sized by the maximum diameter of the equatorial section, or in accordance with existing trade practices. When sized in accordance with existing trade practices, the package must be labelled with the size and method used. The following sizing provisions are a guide and may be used:

#### (a) Onions:

The minimum diameter shall be 10 mm.

To ensure uniformity in size, the range in size between onions in the same package shall not exceed:

- 5 mm where the diameter of the smallest onion is 10 mm and over but under 20 mm;
- 10mm where the diameter of the smallest onion is 15 mm and over but under 25 mm;
- 15 mm where the diameter of the smallest onion is 20 mm and over but under 40 mm;
- 20 mm where the diameter of the smallest onion is 40 mm and over but under 70 mm; and
- 30 mm where the diameter of the smallest onion is 70 mm or over.

#### (b) Shallots:

The minimum diameter shall be:

- 10 mm for grey shallots; and
- 15 mm for other shallots.

The maximum diameter shall be:

- 55 mm for round shallots; and
- 60 mm for demi-long and long shallots.

To ensure uniformity in size, the range in size between shallots in the same package shall not exceed:

- 10 mm where the diameter of the smallest bulb is 10 mm and over but under 15 mm;
- 15 mm where the diameter of the smallest bulb is 15 mm and over but under 20 mm; and

- 20 mm where the diameter of the smallest bulb is 20 mm or over.

## **5 PROVISIONS CONCERNING TOLERANCES**

10. Extra class was described in accordance with the agreements in paragraph 87 of REP 20/FFV and revised version in CCFFV21/CRD15 as follows:

### **5.1.1 Extra Class**

Five percent, by number or weight, of onions and shallots not satisfying the requirements of the class, but meeting those of Class I is allowed. Within this tolerance, not more than 1% in total may consist of produce satisfying neither the requirements of Class I quality nor the minimum requirements, or of produce affected by decay.

## **6 PROVISIONS CONCERNING PRESENTATION**

### **6.1 Uniformity**

11. One Member requested for the mixture to be removed and should not be included but the other Members believed that the mixture of onions or shallots should remain because the mixture of onions or shallots is used in trade.

### **7 Non-retail Containers**

12. The 46<sup>th</sup> session of the Codex Committee on Food Labelling (CCFL46) has developed the General Standard for the Labelling of Non-Retail Containers of Food and the corresponding text in the Format for Codex Commodity in the Procedural Manual has been updated accordingly. The 44<sup>th</sup> session of the Codex Alimentarius Commission (CAC44) has adopted the standard as well as the amendments to the Procedural Manual.

13. Codex Committees may decide that further information is required on the container.

14. Accordingly, the EWG put more information in brackets for CCFFV's decision.

## **CONCLUSIONS AND RECOMMENDATION**

15. The Chair and co-Chairs of the EWG have completed the task as per their programme of work. The Chair and co-Chairs of the EWG believe that they have achieved these tasks and CCFFV is in the position to move ahead with the development of a standard for onions and shallots. Significant amount of information has been gathered during the three rounds of consultations with the EWG Members and will form the basis for the development of the standard.

16. The EWG recommends the CCFFV 22 consider Appendix I the proposed draft Codex standard for onions and shallots in particular such as classification.

Table 1- Summary comments for the proposed draft standard for onions and shallots

Country	Draft	Proposed change	Comment
Indonesia	<p>4. PROVISIONS CONCERNING SIZING</p> <p>(b) Shallots:</p> <p>The minimum diameter shall be:</p> <ul style="list-style-type: none"> <li>-10 mm for grey shallots and;</li> <li>-15 mm for other shallots.</li> </ul> <p>The maximum diameter shall be:</p> <ul style="list-style-type: none"> <li>-55 mm for round shallots and;</li> <li>-60 mm for demi-long and long shallots.</li> </ul>	<p>The diameter or Shallots is ranging from 15 mm to 35 mm.</p>	
Indonesia	<p>To ensure uniformity in size, the range in size between shallots in the same package shall not exceed:</p> <ul style="list-style-type: none"> <li>-10 mm where the diameter of the smallest bulb is 10 mm and over but under 15 mm.</li> <li>-15 mm where the diameter of the smallest bulb is 15 mm and over but under 20 mm.</li> <li>-20 mm where the diameter of the smallest bulb is 20 mm or over.</li> </ul>	<p>To ensure uniformity in size, the range in size between shallots in the same package shall not exceed:</p> <ul style="list-style-type: none"> <li>-5 mm where the diameter of the smallest shallot is 15 mm and over but under 25 mm;</li> <li>-10 mm where the diameter of the smallest shallot is 25 mm and over but under 35 mm;</li> <li><del>-10 mm where the diameter of the smallest bulb is 10 mm and over but under 15 mm.</del></li> <li><del>-15 mm where the diameter of the smallest bulb is 15 mm and over but under 20 mm.</del></li> <li><del>-20 mm where the diameter of the smallest bulb is 20 mm or over.</del></li> </ul>	
Indonesia	<p>6.1 Uniformity</p> <p>The contents of each package (or lot presented in bulk in the transport vehicle) must be uniform and contain only onions or shallots of the same origin, variety or</p>	<p><del>However, a mixture of onions or shallots of distinctly different commercial types and/or colours may be packed together in a sales package, provided they are uniform in quality and, for each commercial type and/or colour concerned, in origin and method</del></p>	

	commercial type, quality and size (if sized). However, a mixture of onions or shallots of distinctly different commercial types and/or colours may be packed together in a sales package, provided they are uniform in quality and, for each commercial type and/or colour concerned, in origin and method of production. However, in case of those mixtures, uniformity in size is not required.	<del>of production. However, in case of those mixtures, uniformity in size is not required.</del>	
USA	2. DEFINITION OF PRODUCE • Onions may be distinguished by the following shapes: round, oval/elongated, long or demi-long.	• Onions and shallots may be distinguished by the following shapes: spherical, flattened round, oval/elongated, conical, long or demi-long.	Both onions and shallots have the same shapes and colour, therefore they can be merged.
USA	3.1.1 Sufficiently developed Onions and shallots must be sufficiently developed. They must be firm and present dry outer skins that are dry and papery.	Onions and shallots must be sufficiently developed. They must be firm, not soft or spongy and have outer skins that are dry and papery.	Vegetables do not mature, but must be sufficiently developed.
USA	4. PROVISIONS CONCERNING SIZING a) Onions: The minimum diameter shall be 10 mm.	a) Onions: The minimum diameter shall be 25 mm.	The minimum size for shallots and onions should not be the same to avoid fraud in trade as they may be interchanged.
USA	5.2 Size Tolerances For all classes, (if sized), ten percent (10.0%) by number or weight of onions and shallots not satisfying the requirements as regards to sizing.	For all classes, (if sized), ten percent (10.0%) by number or weight of onions and shallots not corresponding to the size indicated on the package.	
USA	6.1 Uniformity	Onions and shallots may be presented with tops braided or interlaced on strings.	This is a common form of presentation for red onions and shallots.

**PROPOSED DRAFT CODEX STANDARD FOR ONIONS & SHALLOTS**  
**(at step 4)**

**1. SCOPE**

The purpose of the standard is to define the quality requirements for onions and shallots after preparation and packaging. However, if applied at stages following packaging, onions and shallots may show in relation to the requirements of the standard:

- a slight lack of freshness and turgidity;
- a slight deterioration due to their development and their tendency to perish.

The holder/seller of products may not display such products or offer them for sale, or deliver or market them in any manner other than in conformity with this standard. The holder/seller shall be responsible for observing with standard such conformity.

**2. DEFINITION OF PRODUCE**

This standard applies to onion bulbs of varieties grown from *Allium cepa* L. Cepa group and *Allium fistulosum* L. of the Amarilidaceae family and shallot bulbs grown from *Allium cepa* spp. Aggregatum group *Allium oschaninii* O Fedtsch and *Allium ascalonicum* group, to be supplied fresh to the consumer. Green onions and green shallots with full leaves as well as onions and shallots intended for industrial processing are excluded.

- Onions and shallots may be distinguished of the following shapes: round, oval/elongated, long or demi-long.
- Onions and shallots may be of the following skin colours: white, purple, pink, red, grey or yellow, and brown.

**3. PROVISIONS CONCERNING QUALITY**

**3.1 Minimum Requirements**

In all classes, subject to the special provisions for each class and the tolerances allowed, the onions and shallots must be:

- whole;
- sound; produce affected by rotting or deterioration such as to make it unfit for consumption is excluded;
- clean, practically free of any visible foreign matter;
- practically free from pests<sup>1</sup>;
- free from damage caused by pests affecting the flesh;
- without hollow or tough stems;
- free of externally visible shoot growth;
- firm;
- free of abnormal external moisture excluding condensation following; removal from cold storage;
- free of any foreign smell and/or taste;
- free of damage caused by low and/or high temperature;
- free of damage caused by frost or sun;
- sufficiently dry for the intended use (in the case of onions for storing, at least the first two outer skins and the stem must be fully dried); and
- the stems of onions and shallots must be twisted or clean cut and must not exceed 6 cm in length; except for onions or shallots presented in strings that must be braided with their own stems and tied with string, raffia or any other appropriate material,

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<sup>1</sup> The provisions for pests apply without prejudice to the applicable plant protection rules applied by governments in line with the International Plant Protection Convention (IPPC).

### 3.1.1 **Sufficiently Developed**

Onions and shallots must be sufficiently developed. They must be firm, not soft or spongy and present dry outer skins that are dry and papery.

The development and condition of the onions and shallots must be such as to enable them to:

- withstand transportation and handling; and
- arrive in satisfactory condition at the place of destination.

### 3.2 **Classification**

Onions and shallots may be classified into three classes defined below:

#### 3.2.1 **“Extra” Class**

Onions and shallots in this class must be of superior quality. They must be characteristic of the variety and/or commercial denomination. They must be free from defects, with the exception of very slight superficial defects, provided these do not affect the general appearance of the produce, the quality, the keeping quality and the presentation of the package.

The following slight defects, however, may be allowed, provided that they do not affect the general appearance of the produce, the quality, the keeping quality and presentation in the package:

- a very slight defect in shape;
- very slight defects in colouring;
- very light staining, provided it does not cover more than one fifth of the bulb's surface;
- for onions, bulbs should be free from doubles and/or double centres; and
- for shallots, bulbs should be free from doubles or three bulbs.

#### 3.2.2 **Class I**

Onions and shallots in this class must be of good quality and characteristics of the variety and/or the commercial type.

The following slight defects, however, may be allowed, provided that they do not affect the general appearance of the produce, the quality, the keeping quality and presentation in the package:

- a slight defect in shape;
- slight defects in colouring;
- superficial cracks in and partial absence of the outer skins, provided the flesh is protected;
- light staining, provided it does not cover more than one fifth of the bulb's surface; and
- for onions, slight glassiness /translucence not exceeding the outer fleshy ring.

The bulbs must be:

- firm and compact;
- practically free of root tufts; however, for onions and grey shallots harvested before complete maturity, root tufts shall be allowed; and
- onion bulbs should be free from doubles and/or double centres.

#### 3.2.3 **Class II**

This class includes onions and shallots that do not qualify for inclusion in Class I but satisfy the minimum requirements specified in section 3.1 above.

The following defects may be allowed, provided the onions and shallots retain their essential characteristics as regards the quality, the keeping quality and presentation:

- defects in shape;
- defects in colouring;
- slight marking caused by pests or disease;
- slight bruising;

- healed mechanical damage;
- root tufts;
- stains, provided they do not cover more than 25%(a quarter) the bulb's surface;
- cracks in the outer skins and partial absence of the skins on a maximum of one third of the bulb's surface, provided the flesh is not damaged; and
- for onions, slight glassiness /translucence not exceeding the outer fleshy ring;

The bulbs must be firm.

#### 4. PROVISIONS CONCERNING SIZING

4.1 Onions and shallots may be sized by the maximum diameter of the equatorial section in accordance with existing trade practices. When sized in accordance with existing trade practices, the package must be labelled with the size and method used. The following sizing provisions are a guide and may be used:

##### (a) Onions:

The minimum diameter shall be 10 mm.

To ensure uniformity in size, the range in size between onions in the same package shall not exceed:

- 5 mm where the diameter of the smallest onion is 10 mm and over but under 20 mm;
- 10mm where the diameter of the smallest onion is 15 mm and over but under 25 mm;
- 15 mm where the diameter of the smallest onion is 20 mm and over but under 40 mm;
- 20 mm where the diameter of the smallest onion is 40 mm and over but under 70 mm; and
- 30 mm where the diameter of the smallest onion is 70 mm or over.

##### (b) Shallots:

The minimum diameter shall be:

- 10 mm for grey, pink, red, purple shallots; and
- 15 mm for other shallots.

The maximum diameter shall be:

- 55 mm for round shallots; and
- 60 mm for demi-long and long shallots.

To ensure uniformity in size, the range in size between shallots in the same package shall not exceed:

- 10 mm where the diameter of the smallest bulb is 10 mm and over but under 15 mm;
- 15 mm where the diameter of the smallest bulb is 15 mm and over but under 20 mm; and
- 20 mm where the diameter of the smallest bulb is 20 mm or over.

#### 5. PROVISIONS CONCERNING TOLERANCES

##### 5.1 Quality Tolerances

At all marketing stages, tolerances in respect of quality shall be allowed in each lot for produce not satisfying the requirements of the class indicated. Produce that fail conformity assessment, may be allowed to be resorted and brought into conformity in accordance with the relevant provisions in the *Guideline for Food Import Control System (CXG 47-2003)*.

##### 5.1.1 "Extra" Class

Five per cent, by number or weight, of onions and shallots not satisfying the requirements of the class, but meeting those of Class I is allowed. Within this tolerance not more than 1% in total may consist of produce satisfying neither the requirements of Class I quality nor the minimum requirements, or of produce affected by decay.

##### 5.1.2 Class I

Ten per cent, by number or weight, of onions and shallots not satisfying the requirements of the class, but meeting those of Class II is allowed. Within this tolerance not more than 1% in total may consist of



produce satisfying neither the requirements of Class II quality nor the minimum requirements, or of produce affected by decay.

In addition, 4.0%, by weight, of bulbs may present externally visible shoot growth not exceeding 1 cm.

### 5.1.3 **Class II**

Ten per cent, by number or weight, of onions and shallots satisfying neither the requirements of the class nor the minimum requirements is allowed. Within this tolerance not more than 2% neither in total may consist of produce affected by decay.

In addition, 10.0%, by weight, of bulbs may present externally visible shoot growth not exceeding 1 cm.

## 5.2 **Size Tolerances**

For all classes, (if sized), 10.0% by number or weight of onions and shallots not satisfying the requirements as regards to sizing.

## 6. **PROVISIONS CONCERNING PRESENTATION**

### 6.1 **Uniformity**

The contents of each package must be uniform and contain only onions or shallots of the same origin, variety or commercial type, quality and size.

However, a mixture of onions or shallots of distinctly different commercial types and/or colours may be packed together in a consumer package, provided they are uniform in quality and, for each commercial type and/or colour concerned, in origin. However, in case of those mixtures, uniformity in size is not required.

The visible part of the contents of the package or lot for produce presented in bulk must be representative of the entire contents.

### 6.2 **Packaging**

Onions and shallots must be packed in such a way as to protect the produce properly. The materials used inside the package must be of food-grade quality, clean, and of a quality such as to avoid causing any external or internal damage to the produce. The use of materials, particularly of paper or stamps bearing trade specifications, is allowed, provided the printing or labelling has been done with non-toxic ink or glue.

Onions and shallots shall be packed in each package in compliance with the appropriate section of the *Code of Practice for Packaging and Transport of Fresh Fruits and Vegetables* (CXC 44-1995).

#### 6.2.1 **Description of Containers**

The containers shall meet the quality, hygiene, ventilation and resistance characteristics to ensure suitable handling, shipping and preserving of the onions and shallots.

Packages must be free of all foreign matter and smell.

## 7. **PROVISIONS CONCERNING MARKING OR LABELLING**

### 7.1 **Consumer Packages**

In addition to the requirements of the *General Standard for the Labelling of Pre-packaged Foods* (CXS 1-1985), the following specific provisions apply:

#### 7.1.1 **Name of produce**

If the produce are not visible from the outside, each package shall be labelled as to the name of the produce ("Onions", "Shallots" or "Grey, Pink, Purple, Red shallots") and may be labelled as to name of the variety and/or commercial type ("long", "demi-long" or "round").

#### 7.1.2 **Origin of produce**

Country of origin<sup>2</sup> and, optionally, district where grown, or national, regional or local place name.

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<sup>2</sup> The full or commonly used name should be indicated.

In the case of a mixture of distinctly different varieties of onions or shallots of different origins, the indication of the country of origin shall appear next to the name of the variety and/or colour concerned.

## **7.2. 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).

[Each package must bear the following particulars, in letters grouped on the same side, legibly and indelibly marked, and visible from the outside or in the documents accompanying the shipment.

For onions and shallot transported in bulk, these particulars must appear on a document accompanying the good, and attached in a visible position inside the transport vehicle, unless the document is replaced by an electronic solution. In that case the identification must be machine readable and easily accessible.]

### **7.2.1 Identification**

Name and address of exporter, packer and/or dispatcher. Identification code (optional)<sup>3</sup>.

### **7.2.2 Name of the Produce**

- Name of the produce, if the contents are not visible from the outside.
- Name of the variety and/or commercial type (optional).

“Mixture of onions” or “mixture of shallots”, or equivalent denomination, in the case of a mixture of distinctly different commercial types and/or colours of onions or shallots. If the produce is not visible from the outside, the commercial types and/or colours and the quantity of each in the package must be indicated.

### **7.2.3 Origin of the Produce**

Country of origin<sup>4</sup> and, optionally, district where grown, or national, regional or local place name.

In the case of a mixture of distinctly different commercial types and/or colours of onions or shallots of different origins, the indication of each country of origin shall appear next to the name of the commercial types and/or colours concerned.

### **7.2.4 Commercial Specifications**

- Class;
- Variety and/or commercial type (optional);
- Size expressed as minimum and maximum diameters or in accordance with the method used.

### **7.2.5 Official Inspection Mark (optional)**

## **8. CONTAMINANTS**

**8.1** The produce covered by this Standard shall comply with the maximum residue limits for pesticides established by the Codex Alimentarius Commission.

**8.2** The produce 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).

## **9. HYGIENE**

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<sup>3</sup> The national legislation of a number of countries requires the explicit declaration of the name and address. However, in the case where a code mark is used, the reference “packer and/or dispatcher (or equivalent abbreviations)” has to be indicated in close connection with the code mark, and the code mark should be preceded by the ISO 3166 (alpha) country/area code of the recognizing country, if not the country of origin.

<sup>4</sup> The full or commonly used name should be indicated.

**9.1** It is recommended that the produce 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 Fresh Fruits and Vegetables* (CXC 53-2003), and other relevant Codex texts such as Codes of Hygienic Practice and Codes of Practice.

**9.2** The produce 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).

## List of Participants

NUMBER	MEMBER NAME/ OBSERVER NAME	PARTICIPANT NAME
1	Iran(Chair)	Nadia Ahmadi
2	Iran(Chair)	Homa Behmadi
3	Iran(Chair)	Behnam Pad
4	India(Co-chair)	Shri Devendra Prasad
5	India(Co-chair)	Suresh Kumar Malhotra
6	Indonesia(Co-chair)	Andi Arnida Massusungan
7	Argentina	Silvia Santos
8	Brazil	Andre Bispo Oliveira
9	Burkina Faso	Yaguibou Alain
10	Chile	Claudia Espinoza Cayulen
11	Colombia	Blanca Cristina Olarte Pinilla
12	Croatia	Andreja Martonja Hitrec
13	Croatia	Anita Štefenac
14	European Union	Denis De Froidmont
15	France	Emilie Maire
16	France	Karine Simbelie
17	Germany	Ulrike Bickelmann
18	Jamaica	Damian Rowe
19	Korea	Lee Eunsil
20	Latvia	Mārīte Gailīte
21	Malaysia	Sakhiah Binti Md Yusof
22	Mexico	Tania D. Fosado Soriano
23	Netherlands	Ilse Van Dijn
24	Paraguay	Maria Laura Vera Sosa
25	Spain	María de Armas Jaraquemada
26	Thailand	Sasiwimon Tabyam
27	UK	Ian Hewett
28	USA	Kenneth Lowery