

# codex alimentarius commission

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FOOD AND AGRICULTURE  
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Agenda Item 4(a)

CX/FFV 09/15/7  
September 2009

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

Fifteenth Session

Mexico City, Mexico, 19 – 23 October 2009

**PROPOSED DRAFT STANDARD FOR AVOCADO (REVISION) (N19-2008)**

(At Step 3)

*Prepared by the Electronic Working Group led by Cuba*

Governments and international organizations in Observer status with the Codex Alimentarius Commission wishing to submit comments on the proposed draft Standard for Tree Tomato are invited to do so **no later than 10 October 2009** as follows: Chairperson of the Committee, Dr. Francisco Ramos Gómez, Director General, General Bureau of Standards (DGN), Av. Puente de Tecamachalco 6, 2do piso, Lomas de Tecamachalco Sección Fuentes, C.P. 53950 Naucalpan de Juárez, Estado de México, México (Tels.: +52 (55) 57 29 94 80, +52 (55) 57 29 91 00, Ext.: 43220, 43218, Fax.: +52 (55) 55 20 97 15, E-mail: [jalopez@economia.gob.mx](mailto:jalopez@economia.gob.mx), [codexmex@economia.gob.mx](mailto:codexmex@economia.gob.mx), [codexmex2@economia.gob.mx](mailto:codexmex2@economia.gob.mx) - *preferably*), with a copy to the Secretary, Codex Alimentarius Commission, Joint FAO/WHO Food Standards Programme, Viale delle Terme di Caracalla, 00153 Rome, Italy (Telefax: +39.06.5705.4593; E-mail: [Codex@fao.org](mailto:Codex@fao.org) - *preferably*).

### BACKGROUND

1. The 14<sup>th</sup> Session of the Committee agreed to initiate the revision of the Standard for Avocado, which was subsequently approved as new work by the 31<sup>st</sup> Session of the Commission, and to establish an electronic Working Group on Avocado led by Cuba.
2. The following Members and Observers attended the electronic Working Group: Argentina, Australia, Colombia, Cuba, European Community, France, Guatemala, Iran, Jamaica, Kenya, Mexico, New Zealand, Peru, Poland, Romania, South Africa, Spain, United States of America and the UNECE.
3. Codex Members and Observers are invited to provide comments on the proposed draft revision of the Standard for Avocado in the Annex to this document for further consideration at the 15<sup>th</sup> Session of the Committee.

**PROPOSED DRAFT REVISION OF  
THE STANDARD FOR AVOCADO (CODEX STAN 197-1995) (N19-2008)  
(at Step 3)**

## 1. DEFINITION OF PRODUCE

This Standard applies to commercial varieties (cultivars) of avocados grown from *Persea americana* Mill. (Syn. *Persea gratissima* Gaertn), of the *Lauraceae* family, to be supplied fresh to the consumer, after preparation and packaging. Parthenocarpic fruit and avocados for industrial processing are excluded.

[ Avocado will be classified into the following commercial types

- Guatemalan race
- Mexican race
- West Indian race
- Mexican X Guatemalan hybrid
- West Indian X Guatemalan hybrid ]

## 2. PROVISIONS CONCERNING QUALITY

### 2.1 MINIMUM REQUIREMENTS

In all classes, subject to the special provisions for each class and the tolerances allowed, the avocados 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 of pests and damage caused by them affecting the general appearance of the produce;  
~~practically free of damage caused by pests;~~
- free of abnormal external moisture, excluding condensation following removal from cold storage;
- free of any foreign smell and/or taste<sup>11</sup>;
- practically free of damage caused by low and/or high temperatures;
- having a stalk not more than 10 mm in length which must be cut off cleanly. However, its absence is not considered a defect provided the place of the stalk attachment is dry and whole.

2.1.1 The avocados must have been carefully picked. Their development should have reached a physiological stage which will ensure a continuation of the maturation process to completion, in accordance with criteria proper to the variety and/or commercial type, and to the locality in which they are grown. The mature fruit should be free of bitterness.

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

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

### 2.1.2 Maturity requirements

[ The fruit should have minimum dry matter content at the harvest, according to the variety, to be measured by drying to constant weight:

<sup>1</sup> [ This provision allows a foreign smell on the skin of the fruit caused by preservatives, or any other chemical substances, used in conformity with the corresponding regulations. ]

- 21 % for the variety Hass;
- 20 % for the varieties Torres, Fuerte, Pinkerton, Ettinger, Edranol, Reed , Zutano;
- 18 % for the other varieties Suardía, Lula, Choquette, Collinson, Booth, and other not defined (including Guatemalan West x Indian hybrids);
- 16% for West Indian varieties Catalina, Sicilia, Wilson popenoe, Pollock, Simmonds and other no defined. ]

## 2.2 CLASSIFICATION

Avocados are classified in three classes defined below:

### 2.2.1 “Extra” Class

Avocados in this class must be of superior quality. In shape and colouring they must be characteristic of the variety. They must be free of 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 presentation in the package. If present, the stalk must be intact.

### 2.2.2 Class I

Avocados in this class must be of good quality and show the typical colour and shape of the variety. The following slight defects, however, may be allowed, provided these do not affect the general appearance of the produce, the quality, the keeping quality and presentation in the package:

- slight defects in shape and colouring;
- slight skin defects (corkiness, healed lenticels) and sunburn; the maximum total area should not exceed 4 cm<sup>2</sup>.

The defects must not, in any case, affect the flesh of the fruit.

The stalk, if present, may be slightly damaged.

### 2.2.3 Class II

This class includes avocados which do not qualify for inclusion in the higher classes, but satisfy the minimum requirements specified in Section 2.1 above. The following defects, however, may be allowed, provided the avocados retain their essential characteristics as regards the quality, the keeping quality and presentation:

- defects in shape and colouring;
- skin defects (corkiness, healed lenticels) and sunburn; the maximum total area should not exceed 6 cm<sup>2</sup>.

The defects must not, in any case, affect the flesh of the fruit.

The stalk, if present, may be damaged.

## 3. PROVISIONS CONCERNING SIZING

a) Size is determined by the weight of the fruit, in accordance with the following table<sup>2</sup>:

Size Code	Weight (in grams)
2	> 1220
4	781 to 1 220
6	576 to 780
8	461 to 575
10	366 to 460
12	306 to 365

<sup>2</sup> Nevertheless, no account should be taken for a given fruit of a deviation of more or less than 2% with regard to the size code indicated on the package.

14	266 to 305
16	236 to 265
18	211 to 235
20	191 to 210
22	171 to 190
24	156 to 170
26	146 to 155
28	136 to 145
30	125 to 135
<a href="#">[ 32 (S) ]</a>	<a href="#">[ 124 to 80 ]</a>

The minimum weight of avocados must not be less than 125 g [\[ , except for the Hass that is 80 g \]](#).

[b\) Avocados may be sized by number of fruits, according to the provisions of the legislation of the importing country.](#)

#### 4. PROVISIONS CONCERNING TOLERANCES

Tolerances in respect of quality and size shall be allowed in each package for produce not satisfying the requirements of the class indicated.

##### 4.1 QUALITY TOLERANCES

###### 4.1.1 “Extra” Class

Five percent by number or weight of avocados not satisfying the requirements of the class, but meeting those of Class I or, exceptionally, coming within the tolerances of that class.

###### 4.1.2 Class I

Ten percent by number or weight of avocados not satisfying the requirements of the class, but meeting those of Class II or, exceptionally, coming within the tolerances of that class.

###### 4.1.3 Class II

Ten percent by number or weight of avocados satisfying neither the requirements of the class nor the minimum requirements, with the exception of produce affected by rotting, marked bruising or any other deterioration rendering it unfit for consumption.

##### 4.2 SIZE TOLERANCES

For all classes, 10% by number or weight of avocados corresponding to the size immediately above or below that indicated on the package. [The difference between the smallest and largest fruit within a package should not be more than 25 g.](#)

#### 5. PROVISIONS CONCERNING PRESENTATION

##### 5.1 UNIFORMITY

The contents of each package must be uniform and contain only avocados of the same origin, variety [and/or commercial type](#), quality, and size [and colouring \(if sized except for mixed sizes and varieties\)](#). The visible part of the contents of the package must be representative of the entire contents.

##### 5.2 PACKAGING

Avocados must be packed in such a way as to protect the produce properly. The materials used inside the package must be new<sup>3</sup>, 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.

Avocados shall be packed in each container in compliance with the Recommended International Code of Practice for Packaging and Transport of Fresh Fruits and Vegetables (CAC/RCP 44-1995, Amd. 1-2004).

<sup>3</sup> For the purposes of this Standard, this includes recycled material of food-grade quality.

### 5.2.1 Description of Containers

The containers shall meet the quality, hygiene, ventilation and resistance characteristics to ensure suitable handling, shipping and preserving of the avocados. Packages must be free of all foreign matter and smell.

## 6. MARKING OR LABELLING

### 6.1 CONSUMER PACKAGES

In addition to the requirements of the Codex General Standard for the Labelling of Prepackaged Foods (CODEX STAN 1-1985, Rev. 1-1991), the following specific provisions apply:

#### 6.1.1 Nature of Produce

If the produce is not visible from the outside, each package shall be labelled as to the name of the produce and may be labelled as to name of the variety [and/or commercial type](#).

### 6.2 NON-RETAIL CONTAINERS

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 produce transported in bulk, these particulars must appear on a document accompanying the goods.

#### 6.2.1 Identification

Name and address of exporter, packer and/or dispatcher. Identification code (optional)<sup>4</sup>.

#### 6.2.2 Nature of Produce

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

#### 6.2.3 Origin of Produce

Country of origin and, optionally, district where grown or national, regional or local place name.

#### 6.2.4 Commercial Identification

- Class;
- Size ([if sized](#)) expressed in minimum and maximum weight in grams;
- Code number of the size scale and number of fruits when it is different from reference number;
- Net weight (optional).

#### 6.2.5 Official Inspection Mark (optional)

## 7. CONTAMINANTS

### ~~7.1 HEAVY METALS~~

~~Avocados shall comply with those maximum levels for heavy metals established by the Codex Alimentarius Commission for this commodity.~~

### 7.21 PESTICIDE RESIDUES

Avocados shall comply with those maximum pesticide residue limits established by the Codex Alimentarius Commission for this commodity.

<sup>4</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.

## **7.2 OTHER CONTAMINANTS**

Avocados shall comply with those maximum levels for contaminants established by the Codex Alimentarius Commission for this commodity

## **8. HYGIENE**

8.1 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 Recommended International Code of Practice – General Principles of Food Hygiene (CAC/RCP 1-1969, Rev. 4-2003), Code of Hygienic Practice for Fresh Fruits and Vegetables (CAC/RCP 53-2003), and other relevant Codex texts such as Codes of Hygienic Practice and Codes of Practice.

8.2 The produce should comply with any microbiological criteria established in accordance with the Principles for the Establishment and Application of Microbiological Criteria for Foods (CAC/GL 21-1997).