

CODEX ALIMENTARIUS

INTERNATIONAL FOOD STANDARDS



Food and Agriculture
Organization of
the United Nations



World Health
Organization

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STANDARD FOR TREE TOMATOES¹

CXS 303-2011

Adopted in 2011.

¹ Commonly known in certain regions by tamarillo.

1. DEFINITION OF PRODUCE

This Standard applies to commercial varieties of tree tomatoes grown from *Cyphomandra betacea* Sendt or *Solanum betaceum* Cav. of the *Solanaceae* family, to be supplied fresh to the consumer, after preparation and packaging. Tree Tomatoes for industrial processing are excluded.

2. PROVISIONS CONCERNING QUALITY

2.1 Minimum Requirements

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

- whole;
- sound, produce affected by rotting or deterioration such as to make it unfit for consumption is excluded;
- clean and practically free of any visible foreign matter;
- practically free of pests and damage caused by them affecting the general appearance of the produce;
- free of abnormal external moisture, excluding condensation following removal from cold storage;
- free of any foreign smell and/or taste;
- firm;
- fresh in appearance;
- with the stalk present to the first knot.

2.1.1 The tree tomatoes must have reached an appropriate degree of development and ripeness² account being taken of the characteristics of the variety and the area in which they are grown.

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

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

2.2 Classification

Tree tomatoes are classified in three classes defined below:

2.2.1 "Extra" Class

Tree tomatoes in this class must be of superior quality. 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.

2.2.2 Class I

Tree tomatoes in this class must be of good quality. They must be characteristic 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;
- slight defects of the skin such as scratches and blemishes, not exceeding more than 10% of the total surface area of the fruit.

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

2.2.3 Class II

This class includes tree tomatoes 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 tree tomatoes retain their essential characteristics as regards the quality, the keeping quality and presentation:

- defects in shape, such as extension or flattening of the apex;
- defects in colouring and of the skin such as scratches and blemishes, not exceeding 20% of the total surface area of the fruit.

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

3. PROVISIONS CONCERNING SIZING

Tree tomatoes may be sized by diameter, weight or count.

- A. When sized by diameter, size is determined by the maximum diameter of the equatorial section in accordance with the following table:

Size code	Diameter (in millimeters)
A	≥ 61
B	60 – 55
C	54 – 51
D	50 – 46
E	45 - 35

- B. When sized by weight, size is determined by the weight of each individual fruit in accordance with the following table:

Size code	Weight (in grams)
1	> 125
2	101 – 125
3	75 – 100
4	45 - 75

- C. When sized by count, size is determined by the number of individual fruit per package.

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 tree tomatoes 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 tree tomatoes 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 tree tomatoes satisfying neither the requirements of the class nor the minimum requirements, with the exception of produce affected by rotting or any other deterioration rendering it unfit for consumption.

4.2 Size Tolerances

For all classes, ten percent by number or weight of tree tomatoes corresponding to the size immediately above and/or below that indicated on the package.

5. PROVISIONS CONCERNING PRESENTATION

5.1 Uniformity

The contents of each package must be uniform and contain only tree tomatoes of the same origin, variety, quality, colour and size. The visible part of the contents of the package must be representative of the entire contents.

² The maturity of the tree tomatoes can be gauged visually from its external colouring and confirmed by examining flesh content and using the iodine test.

5.2 Packaging

Tree tomatoes must be packed in such a way as to protect the produce properly. The materials used inside the package must be new³, 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.

Tree tomatoes shall be packed in each container in compliance with the *Code of Practice for Packaging and Transport of Fresh Fruits and Vegetables* (CXC 44-1995).

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 tree tomatoes. 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 *General Standard for the Labelling of Prepackaged Foods* (CXS 1-1985), 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 the name of the variety.

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.

6.2.1 Identification

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

6.2.2 Nature of produce

Name of the produce if the contents are not visible from the outside.

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 (size code or diameter or weight range or count);
- Net weight (optional).

6.2.5 Official Inspection Mark (optional)

7. CONTAMINANTS

7.1 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).

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

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 *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.

8.2 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).

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

⁴ 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.