

3 Sep 2021

# **UNECE STANDARD FFV-35**

concerning the marketing and  
commercial quality control of

## **STRAWBERRIES**

**2017 EDITION**



**UNITED NATIONS**  
New York and Geneva, 2017

**NOTE**

**Working Party on Agricultural Quality Standards**

The commercial quality standards developed by the Working Party on Agricultural Quality Standards of the United Nations Economic Commission for Europe (UNECE) help facilitate international trade, encourage high-quality production, improve profitability and protect consumer interests. UNECE standards are used by governments, producers, traders, importers and exporters, and other international organizations. They cover a wide range of agricultural products, including fresh fruit and vegetables, dry and dried produce, seed potatoes, meat, cut flowers, eggs and egg products.

Any member of the United Nations can participate, on an equal footing, in the activities of the Working Party. For more information on agricultural standards, please visit our website <[www.unece.org/trade/agr](http://www.unece.org/trade/agr)>.

The present revised Standard for Strawberries is based on document ECE/TRADE/C/WP.7/GE.1/2010/16, reviewed and adopted by the Working Party at its sixty-sixth session.

Aligned with the Standard Layout (2017)

The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the United Nations Secretariat concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Mention of company names or commercial products does not imply endorsement by the United Nations.

All material may be freely quoted or reprinted, but acknowledgement is requested.

Please contact the following address with any comments or enquiries:

Agricultural Standards Unit  
Economic Cooperation and Trade Division  
United Nations Economic Commission for Europe  
Palais des Nations  
CH-1211 Geneva 10, Switzerland  
E-mail: [agrstandards@unece.org](mailto:agrstandards@unece.org)

## UNECE standard FFV-35 concerning the marketing and commercial quality control of Strawberries

### Comment from France:

French production doesn't observe fruits with a dry calyx but being free of any other defect. The calyx of strawberries may dry out during production. This may be due to disease caused by water stress, calcium deficiencies, or *Xanthomonas* or *Zythia fragaria*.

According to the French production, the red calyx could be due to extreme temperature or wind, but there would then also be necroses. Powdery mildew can also give a pinkish to reddish colour to the calyx, but the product is then not healthy and therefore not marketed.

Thus, the French delegation rejects the proposal to amend the list of defects allowed in Class I and II to include the wording "dried out calyx", provided the fruit is fresh and sound." France wishes to maintain the existing standard which allows strawberries with dried out calyx only within the existing tolerances.

### Comments from Spain:

The delegation of Spain supports the removal of the term "green" under the minimum requirements for the calyx. However the delegation of Spain does not support to modify the requirements of Class I and II to allow dry calyx as it is often accompanied by other issues, making the produce unsuitable for consumption

Deleted: g

## I. Definition of produce

This standard applies to strawberries of varieties (cultivars) grown from the genus *Fragaria* L. to be supplied fresh to the consumer, strawberries for industrial processing being excluded.

## II. Provisions concerning quality

The purpose of the standard is to define the quality requirements for strawberries after preparation and packaging.

However, if applied at stages following export, products may show in relation to the requirements of the standard:

- a slight lack of freshness and turgidity
- for products graded in classes other than the "Extra" Class, 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 such conformity.

### A. Minimum requirements

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

- intact, undamaged
- 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
- fresh in appearance, but not washed
- practically free from pests
- practically free from damage caused by pests
- with the calyx (except in the case of wood strawberries); the calyx and the stalk (if present) must be fresh
- free of abnormal external moisture
- free of any foreign smell and/or taste.

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

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

## B. Maturity requirements

The strawberries must be sufficiently developed and display satisfactory maturity and/or ripeness.

## C. Classification

The strawberries are classified in three classes, as defined below:

### (i) "Extra" Class

The strawberries in this class must be of superior quality. They must be characteristic of the variety.

They must be:

- bright in appearance, allowing for the characteristics of the variety
- free from soil.

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 presentation in the package.

### (ii) Class I

Strawberries 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:

- a slight defect in shape
- presence of a small white patch, not exceeding one tenth of the total surface area of the fruit

Deleted: and green

- slight superficial pressure marks

They must be practically free from soil.

**(iii) Class II**

This class includes strawberries that do not qualify for inclusion in the higher classes but satisfy the minimum requirements specified above.

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

- defects in shape
- a white patch, not exceeding one fifth of the total surface area of the fruit
- slight dry bruising not likely to spread
- slight traces of soil

### III. Provisions concerning sizing

Size is determined by the maximum diameter of the equatorial section.

The minimum size shall be:

- 25 mm in "Extra" Class<sup>1</sup>
- 18 mm in Classes I and II.

There is no minimum size for wood strawberries.

### IV. Provisions concerning tolerances

At all marketing stages, tolerances in respect of quality and size shall be allowed in each lot for produce not satisfying the requirements of the class indicated.

#### A. Quality tolerances

**(i) "Extra" Class**

A total tolerance of 5 per cent, by number or weight, of strawberries not satisfying the requirements of the class but meeting those of Class I is allowed. Within this tolerance not more than 0.5 per cent in total may consist of produce satisfying the requirements of Class II quality.

**(ii) Class I**

A total tolerance of 10 per cent, by number or weight, of strawberries not satisfying the requirements of the class but meeting those of Class II is allowed. Within this tolerance not more than 2 per cent in total may consist of produce satisfying neither the requirements of Class II quality nor the minimum requirements, or of produce affected by decay.

<sup>1</sup> Reservation by the United States of America.

Deleted: <#>dried calyx, provided the fruit is fresh and sound.¶

Deleted: <#>dried calyx, provided the fruit is fresh and sound.¶

**(iii) Class II**

A total tolerance of 10 per cent, by number or weight, of strawberries satisfying neither the requirements of the class nor the minimum requirements is allowed. Within this tolerance not more than 2 per cent in total may consist of produce affected by decay.

**B. Size tolerances**

For all classes: a total tolerance of 10 per cent, by number or weight, of strawberries not satisfying the requirements as regards the minimum size is allowed.

**V. Provisions concerning presentation**

**A. Uniformity**

The contents of each package must be uniform and contain only strawberries of the same origin, variety and quality.

In Class "Extra", strawberries, with the exception of wood strawberries, must be particularly uniform and regular with respect to degree of ripeness, colour and size. In Class I, strawberries may be less uniform in size.

The visible part of the contents of the package must be representative of the entire contents.

**B. Packaging**

The strawberries must be packed in such a way as to protect the produce properly.

The materials used inside the package must be 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.

Packages must be free of all foreign matter.

**VI. Provisions concerning marking**

Each package<sup>2</sup> must bear the following particulars, in letters grouped on the same side, legibly and indelibly marked, and visible from the outside:

**A. Identification**

Packer and/or dispatcher/exporter:

Name and physical address (e.g. street/city/region/postal code and, if different from the country of origin, the country) or a code mark officially recognized by the national authority<sup>3</sup> if the country applying such a system is listed in the UNECE database.

---

<sup>2</sup> These marking provisions do not apply to sales packages presented in packages. However, they do apply to sales packages (pre-packages) presented individually.

<sup>3</sup> The national legislation of a number of countries requires the explicit declaration of the name and

**B. Nature of produce**

- “Strawberries” if the contents of the package are not visible from the outside
- Name of the variety (optional).

**C. Origin of produce**

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

**D. Commercial specifications**

- Class

**E. Official control mark (optional)**

Adopted 1962

Last revised 2010

Aligned with the Standard Layout 2017

The OECD Scheme for the Application of International Standards for Fruit and Vegetables has published an explanatory illustrated brochure on the application of this standard. The publication may be obtained from the OECD bookshop at: [www.oecdbookshop.org](http://www.oecdbookshop.org).

---

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 a commonly used name should be indicated.