



Economic and Social Council

Distr.: General
8 April 2015

English only

Economic Commission for Europe

Committee on Trade

Working Party on Agricultural Quality Standards

Specialized Section on Standardization of Fresh Fruit and Vegetables

Sixty-third session

Geneva, 21 -24 April 2015

Item 5 (d) of the provisional agenda

Revision of UNECE standards

UNECE Standard for Garlic

The following document has been submitted by the delegation of Spain. Proposed amendments are underlined, explanations are in italics.

UNECE Standard FFV-18 concerning the marketing and commercial quality control of garlic

I. Definition of produce

This standard applies to garlic of varieties (cultivars) grown from *Allium sativum* var. *sativum* L. to be supplied fresh¹, semi-dry² or dry³ to the consumer, green garlic with full leaves and undeveloped cloves and garlic for industrial processing being excluded.

The garlic bulbs may consist of several or only one clove ("solo garlic").

II. Provisions concerning quality

The purpose of the standard is to define the quality requirements for garlic at the export-control stage 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 bulbs must be:

- 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
- practically free from damage caused by pests
- firm
- free of damage caused by frost or sun
- free of externally visible sprouts
- free of abnormal external moisture

¹ "Fresh garlic" means produce with a "green" stem and with the outer skin of the bulb still fresh.

² "Semi-dry garlic" means fresh produce with the stem and outer skin of the bulb not completely dry.

³ "Dry garlic" means fresh produce in which the stem, outer skin of the bulb and the skin surround each clove are completely dry.

- free of any foreign smell and/or taste⁴.

For dry garlic, if trimmed, the stem length should not exceed 3 cm.

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

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

B. Classification

Garlic is classified in three classes, as defined below:

(i) "Extra" Class

Garlic in this class must be of superior quality. It must be characteristic of the variety and/or commercial type.

The bulbs must be:

- intact
- of regular shape
- properly cleaned.

The cloves must be compact.

The roots must be cut close to the base of the bulb in the case of dry garlic.

Garlic 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

Garlic in this class must be of good quality. It must be characteristic of the variety and/or commercial type.

The bulbs must be:

- intact
- of fairly regular shape.

The cloves must be reasonably compact.

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 tears in the outer skin of the bulb.

(iii) Class II

This class includes garlic that does not qualify for inclusion in the higher classes but satisfies the minimum requirements specified above.

⁴ This provision does not preclude a specific smell and/or specific taste caused by smoking.

The following defects may be allowed, provided the garlic retains its essential characteristics as regards the quality, the keeping quality and presentation:

- tears in the outer skin or missing parts of the outer skin of the bulb
- staining that does not affect the outer skin (the skin of the clove) provided it does not cover more than half the bulb surface.
- healed injuries
- slight bruises
- irregular shape
- up to three cloves missing.
- physiological damage not progressive affecting up to two cloves.

RATIONALE 1: staining is a defect that occurs sometimes due to the fact that garlic grows directly in the soil and is dried in the orchard once harvested. This proposal allows staining in every bulb provided it does not cover more than half the bulb surface.

RATIONALE 2: this kind of physiological damage is proposed to be included in class II taking into account its nature and the particular characteristics of the produce:

- *It is a non-progressive defect that only affects to individual cloves. If there is a clove affected in a bulb, the defect will not progress to other cloves.*
- *If there is a single clove affected in a bulb (only the flesh is affected, not the skin of the clove), the other cloves are perfectly edible. Bearing in mind that the average number of cloves per bulb is 10 (it varies according commercial types and crop conditions), it would represent the 10 %.*
- *It is an internal defect, impossible to detect from the outside until a very advanced stage (when referring to a single clove, the defect progresses, but it does not spread to other cloves).*

The early symptoms appear as light yellow areas in the flesh of the clove, that turn into a deep yellow or amber colour and the clove is somewhat translucent and sticky or waxy to the touch. The outer dry protective skins of the clove are not affected and often no indication of the defect shows externally until the advanced stage is reached when shrinking of the clove.

III. Provisions concerning sizing

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

The minimum diameter shall be:

- 45 mm for "Extra" Class
- 30 mm for Classes I and II.

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

- 15 mm when the smallest bulb has a diameter of less than 40 mm
- 20 mm when the smallest bulb has a diameter equal to or more than 40 mm.

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 garlic 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 garlic not satisfying the requirements of the class but meeting those of Class II is allowed. Within this tolerance not more than 1 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.

Within this tolerance not more than 1 per cent by weight of bulbs may have cloves with externally visible sprouts.

- In addition to this tolerance, not more than 25 per cent, by number or weight, of bulbs showing staining that does not affect the outer skin (the skin of the clove), provided it does not cover more than a quarter of the bulb surface.

RATIONALE: It is a defect that occurs sometimes due to the fact that garlic grows directly in the soil and is dried in the orchard once harvested. This specific tolerance has been added in this section because the proposal aims that no more than 25 % of the bulbs should display staining in class I.

(iii) Class II

A total tolerance of 10 per cent, by number or weight, of garlic 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.

In addition to this tolerance, not more than 5 per cent by weight of bulbs may have cloves with externally visible sprouts.

B. Size tolerances

For all classes: a total tolerance of 10 per cent by weight of garlic not satisfying the requirements as regards sizing is allowed.

V. Provisions concerning presentation

A. Uniformity

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

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

B. Packaging

Garlic must be packed in such a way so 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 paper or stamps bearing trade specifications is allowed, provided the printing or labelling has been done with non-toxic ink or glue.

Stickers individually affixed to the produce shall be such that, when removed, they neither leave visible traces of glue nor lead to skin defects.

RATIONALE: It is in the Standard Layout.

Packages must be free of all foreign matter.

VI. Provisions concerning marking

Each package⁵ 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/shipper:

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 authority⁶.

B. Nature of produce

- "Fresh garlic", "Semi-dry garlic", "Dry garlic" or "Solo garlic" if the contents are not visible from the outside;
- Commercial type ("White garlic", "Pink garlic", etc.);
- "Smoked", where appropriate.

C. Origin of produce

Country of origin⁷ and, optionally, district where grown, or national, regional or local place name.

⁵ These marking provisions do not apply to sales packages presented in packages.

⁶ 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.

⁷ The full or a commonly used name should be indicated.

D. Commercial specifications

- Class
- Size expressed as minimum and maximum diameters of the bulbs.

E. Official control mark (optional)

Adopted 1966

Last revised 2011
