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Steering Committee on Trade Capacity and Standards

Working Party on Agricultural Quality Standards

Specialized Section on Standardization
of Fresh Fruit and Vegetables

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Item 6 (b) of the provisional agenda

Development of new standards:

Sweet potato

Proposed draft standard for sweet potato*

Submitted by the working group

At its 2022 session, the Specialized Section discussed a proposal by the delegations of Germany and South Africa to develop a new standard for sweet potato. As there were several comments on the draft standard, it decided to form a working group consisting of France, Germany, South Africa, Spain, United States of America and the Committee Linking Entrepreneurship-Agriculture-Development (COLEAD, formerly called COLEACP) to work on developing the proposed standard. The following proposal is submitted by the working group to the Specialized Section for consideration.

I. Definition of produce

This standard applies to sweet potatoes of varieties (cultivars) grown from *Ipomoea batatas* L. to be supplied fresh to the consumer, sweet potatoes for industrial processing being excluded.

II. Provisions concerning quality

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

However, if applied at stages following export/dispatch, products 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.

* This document was submitted late for processing since clearance in finalizing this document took longer than anticipated.



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 sweet potatoes must be:

- intact, tubers without tips are not regarded as a defect provided that the break/cut is clean and well cured [Germany proposes to specify sealed broken or missing tips under minimum requirements instead of under Classes I and II, as the requirements are identical in both classes – to read: intact, tubers with sealed broken or missing tips are not regarded as a defect provided that the break/cut is clean and well cured and measuring no more than a maximum diameter of 25 mm for the elongated type or 35 mm for the spherical/round type]
- sound; produce affected by rotting or deterioration such as to make it unfit for consumption is excluded
- firm
- clean, that is to say
 - practically free of any visible foreign matter if they are washed
 - practically free of excess dirt and impurities if they are not washed
- practically free from sprouts
- practically free from pests
- practically free from damage caused by pests affecting the flesh
- free of abnormal external moisture
- free of any foreign smell and/or taste.

The sweet potatoes must be sufficiently developed and display satisfactory maturity.

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

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

B. Classification

Sweet potatoes are classified in two classes, as defined below:

(i) Class I

Sweet potatoes in this class must be of good quality. They must be characteristic of the variety and/or commercial type.

They must be fresh in appearance.

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 in colouring
- slight fissures or cuts with a maximum depth of 5 mm
- slight skin defects including abrasions, healed bruises, discoloured areas and pest damage on not more than 25 per cent in total of the tuber surface

- skinning of no more than 20 per cent of the tuber surface provided that there are no signs of progressive development
- growth cracks with a depth of not more than 7 mm, a width of not more than 10 mm and not affecting more than 1/2 the length of the sweet potato in aggregate on round types or a 1/3 of the length on long types
- sprouts longer than 5 mm affecting no more than 10 per cent of the sweet potatoes in a lot
- sealed broken and missing tips measuring no more than a maximum diameter of 25 mm for the elongated type or 35 mm for the spherical/round type. [Germany suggests that this bullet could be removed if addressed in minimum requirements]

(ii) Class II

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

- defects in shape
- defects in colouring
- fissures or cuts with a maximum depth of 5 mm
- skin defects including abrasions, healed bruises, discoloured areas and pest damage on not more than 50 per cent in total of the tuber surface
- skinning of no more than 25 per cent of the tuber surface provided that there are no signs of progressive development
- growth cracks with a depth of not more than 7 mm, a width of not more than 10 mm and not affecting more than 3/4 of the length of the sweet potato in aggregate
- sprouts longer than 10 mm in not more than 10 per cent of the sweet potatoes in a lot
- sealed broken and missing tips measuring with no more than a maximum diameter of 25 mm for the elongated type or 35 mm for the spherical/round type. [Germany suggests that this bullet could be removed if addressed in minimum requirements]

III. Provisions concerning sizing

Size is determined by diameter, length, weight or a combination of these.

The minimum size shall be:

- 38 mm if sized by diameter
- 76 mm if sized by length
- 70 g if sized by weight.

To ensure uniformity in size, in Class I the largest sweet potato in the package must not be more than three times the weight of the smallest.

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.¹

¹ A conformity check shall be made by assessing primary or composite samples. It is based on the principle of presumption that the quality of the randomly taken samples is representative of the

A. Quality tolerances

(i) Class I

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

(ii) Class II

A total tolerance of 10 per cent, by number or weight, of sweet potatoes satisfying neither the requirements of the class nor the minimum requirements are 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 sweet potatoes not satisfying the requirements as regards sizing is allowed.

V. Provisions concerning presentation

A. Uniformity

The contents of each package (or lot for produce presented in bulk in the transport vehicle) must be uniform and contain only sweet potatoes of the same origin, quality, variety and size (if sized).

However, a mixture of sweet potatoes of distinctly different varieties may be packed together in a package, provided they are uniform in quality and, for each variety 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 in the transport vehicle) must be representative of the entire contents.

B. Packaging

Sweet potatoes 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.

Stickers individually affixed to the produce shall be such that, when removed, they neither leave visible traces of glue nor lead to skin defects. Information lasered on single fruit should not lead to flesh or skin defects.

Packages (or lots for produce presented in bulk in transport vehicle) must be free of all foreign matter.

quality of the lot. The OECD Operating Rules for Conformity Checks are recommended for application – also by operators – at the stages of dispatch as well as in wholesale and distribution centres and storerooms of food retail. <https://www.oecd.org/agriculture/fruit-vegetables/publications/oecd-fruit-and-vegetables-rules.htm>.

VI. Provisions concerning marking

Each package² must bear the following particulars, in letters grouped on the same side, legibly and indelibly marked, and visible from the outside:

For sweet potatoes transported in bulk (direct loading into a transport vehicle) these particulars must appear on a document accompanying the goods and attached in a visible position inside the transport vehicle.

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 authority³ if the country applying such a system is listed in the UNECE database.

B. Nature of produce

- Name of the produce if the contents are not visible from the outside
- Name of the variety (optional)
- “Mixture of sweet potatoes” or equivalent denomination, in the case of a mixture of sweet potatoes of distinctly different varieties.

The name of the variety can be replaced by a synonym. A trade name⁴ can only be given in addition to the variety or the synonym.

C. Origin of produce

- Country of origin⁵ and, optionally, district where grown, or national, regional or local place name.

In the case of a mixture of distinctly different varieties of sweet potatoes of different origins, the indication of each country of origin shall appear next to the name of the variety concerned.

D. Commercial specifications

- Class
- Size, expressed as minimum and maximum diameter, length, weight or a combination of these
- [Size code (optional)].

E. Official control mark (optional)

² These marking provisions do not apply to sales packages presented in packages bearing these particulars. However, they do apply to sales packages (pre-packages) presented individually.

³ 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-2) country/area code of the recognizing country, if not the country of origin.

⁴ A trade name can be a trademark for which protection has been sought or obtained or any other commercial denomination.

⁵ The full or a commonly used name should be indicated.