**DEAS 771: 2022** 



ICS 67.080.20

# **DRAFT EAST AFRICAN STANDARD**

Fresh sweet potato — Specification

# **EAST AFRICAN COMMUNITY**

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## **Foreword**

Development of the East African Standards has been necessitated by the need for harmonizing requirements governing quality of products and services in the East African Community. It is envisaged that through harmonized standardization, trade barriers that are encountered when goods and services are exchanged within the Community will be removed.

The Community has established an East African Standards Committee (EASC) mandated to develop and issue East African Standards (EAS). The Committee is composed of representatives of the National Standards Bodies in Partner States, together with the representatives from the public and private sector organizations in the community.

East African Standards are developed through Technical Committees that are representative of key stakeholders including government, academia, consumer groups, private sector and other interested parties. Draft East African Standards are circulated to stakeholders through the National Standards Bodies in the Partner States. The comments received are discussed and incorporated before finalization of standards, in accordance with the Principles and procedures for development of East African Standards. XXXXXX.

East African Standards are subject to review, to keep pace with technological advances. Users of the East African Standards are therefore expected to ensure that they always have the latest versions of the standards they are implementing.

The committee responsible for this document is Technical Committee EASC/TC 016, Fresh fruits, vegetables, tubers and flowers.

This second edition cancels and replaces the first edition (EAS 771:2012), which has been technically revised.

Attention is drawn to the possibility that some of the elements of this document may be subject of patent rights. EAC shall not be held responsible for identifying any or all such patent rights.

## Fresh sweet potato — Specification

## 1 Scope

This Draft East African Standard specifies the requirements, sampling and test methods for fresh sweet potato (*Ipomoea batatas* (L.) Lam). to be supplied fresh and either packaged or sold loose for human consumption.

#### 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EAS 38, General standard for labeling of prepackaged foods

EAS 39, Hygiene in the food and drink manufacturing industry - Code of practice

EAS 103, Schedule for permitted food additives

CAC/RCP 44, Code of practice for packaging and transport of fresh fruit and vegetables

CAC/RCP 53, Code of Hygienic Practice for Fresh Fruits and Vegetables

CODEX STAN 192, General Standard for Food Additives

CODEX STAN 193, Codex general standard for contaminants and toxins in food and feed

ISO 874, Fresh fruits and vegetables - Sampling

## 3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

ISO Online browsing platform: available at http://www.iso.org/obp

#### 3.1

#### sweet potato

roots obtained from a plant of the species Ipomoea batatas (L.) Lam

#### 3.2

#### firm

not soft, shrivelled or flabby

#### 3.3

#### fresh

roots obtained from a plant of the species *Ipomoea batatas* (L.) Lam having visual characteristics of colour, texture and firmness typical of variety just harvested sweet potato

#### 3.4

#### whole

fresh storage roots which have not been subjected to any mechanical damage or peeling of its initial harvested mass with the exemption of trimming.

#### 3.5

#### sound/wholesome

free from pests, diseases, serious deterioration (such as but not limited to decay, breakdown, freezing damage, or softness) or adulteration/contamination, that appreciably affects their appearance, edibility and the keeping quality of the produce or market value

#### 3.6

#### practically free

produce without defects in excess of those that can be expected to result from, and be consistent with good agronomical and handling practices employed in the production and marketing of the fresh sweet potatoes

#### 3.7

#### clean

practically free from dirt or staining or other foreign matter or extraneous matter

#### 3.8

#### food grade material

material which will safeguard the hygienic, safety, nutritional, technological and organoleptic qualities of the product

#### 3.9

#### extraneous matter

organic matter of plant origin other than the fresh sweet potato

#### 3.10

#### foreign matter

organic and inorganic materials (such as sand, soil, glass) other than extraneous matter in the fresh sweet potato

### 4 Requirements

## 4.1 General requirements

Fresh sweet potato should be carefully harvested after reaching an appropriate degree of physiological development taking into account the characteristics of the variety and the area in which they are grown. The fresh sweet potatoes shall have been carefully harvested.

## 4.2 Minimum requirements

Fresh sweet potatoes supplied to the market shall be:

- a) firm;
- b) fresh;
- c) wholesome/sound;

- d) not affected by rot, mould or deterioration as to make it unfit for consumption;
- e) clean, and practically free of any visible extraneous matter or foreign matter, except permitted substances used to prolong its shelf life;
- f) of colour, taste and texture characteristic of variety;
- g) free from pests and damage caused by pests;
- h) free from excess external moisture, adequately surface dried if they have been washed;
- i) free from any foreign smell and/or taste with exception of preservation agents allowed under clause 5;
- j) practically free from mechanical damage; and
- k) free from greening

## 4.3 Quality tolerances

Tolerances for the quality requirements shall be such that:

- a) a total of no more than 10 % of the fresh sweet potatoes in the lot may fail the requirements;
- b) no more than 3 % of the fresh sweet potatoes may be affected by rot, mould or deterioration as to make it unfit for consumption;
- c) no more than 3 % of the fresh sweet potatoes may be affected by damage caused by pests; and
- d) no more than 3 % of the fresh sweet potatoes may be affected by rot, mould or deterioration; and damage caused by pests in combination.

#### 5 Food additives

Fresh sweet potatoes may be preserved by use of food additives such as wax, in accordance with Codex Stan 192

## 6 Classification

## 6.1 Types of classes

Fresh sweet potatoes may be classified.

Where classification is done the following grades shall be used in accordance with the requirements of each class and the quality tolerances in Clause 7.1

- extra class;
- class I; and
- class II.

## 6.2 Class requirements

#### 6.2.1 Extra class

Fresh sweet potatoes shall meet the minimum requirements in Clause 4.2 and shall be:

- a) of superior quality in terms of texture and appearance; and
- b) characteristic of the variety and uniform in shape and size.

Fresh sweet potatoes shall be free from defects, with the exception of defects on the surface affecting not more than 2 % of the fresh sweet potatoes

#### 6.2.2 Class I

Fresh sweet potatoes shall meet the minimum requirements in Clause 4.2 and shall be;

- a) of good quality; and
- b) uniform in shape and size that are characteristic of the variety.

The following slight defects may be allowed, provided these do not affect the general appearance, the quality, the keeping quality and presentation of fresh sweet potatoes:

- a) defects in shape not exceeding 5% of the fresh sweet potatoes;
- b) bruising, not exceeding 10% of the surface area of the fresh sweet potatoes;
- c) scraped areas, not exceeding 20% of the surface area of the fresh sweet potatoes; and
- d) scarred and healed damage, not exceeding 5% of the surface area of the fresh sweet potatoes.

#### 6.2.3 Class II

Fresh sweet potatoes shall meet the minimum requirements in Clause 4.2 but may not qualify for inclusion in the higher classes. The following defects may be allowed:

- a) defects in shape not exceeding 10% of the fresh sweet potatoes;
- b) bruising, not exceeding 20% of the surface area of fresh sweet potatoes
- c) scraped areas, not exceeding 30% of the surface area of fresh sweet potatoes and
- d) scarred and healed damage, not exceeding 10% of the surface area of the fresh sweet potatoes.

#### 7 Tolerances

#### 7.1 Quality tolerances

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

The following tolerance limits may be allowed for specific classes:

a. Extra class: 5 % by weight of fresh sweet potatoes not satisfying the requirements of extra class, but meeting those of Class I or exceptionally coming within the tolerances of class I.

- b. Class I: 10 % by weight of fresh sweet potatoes not satisfying the requirements of class I, but meeting those of Class II or exceptionally, coming within the tolerances of class II.
- c. Class II: 10 % by weight of fresh sweet potatoes not satisfying the minimum requirements, with the exception of produce affected by rotting or any other deterioration rendering it unfit for consumption.

#### 7.2 Size tolerances

For all classes, 10% by number or weight of fresh sweet potatoes corresponding to the size immediately above and/or below that indicated on the package.

## 8 Sizing

Fresh sweet potatoes may be designated by size in accordance with Table 1. When the designations in Table 1 are used the sizes shall be within the specification in Table 1. Size is determined by weight.

Size code	Size	Weight, g		
А	Large	> 650		
В	Medium	450 - 650		
С	Small	< 450		

Table 1 — Size for fresh sweet potatoes

## 9 Contaminants

### 9.1 Heavy metals

Fresh sweet potatoes shall comply with those maximum levels of CODEX STAN 193.

## 9.2 Pesticide residues

Fresh sweet potatoes shall comply with those maximum residue limits for pesticide residues established by Codex Alimentarius Commission for this commodity.

## 10 Hygiene

Fresh sweet potatoes shall be handled in hygienic manner in accordance with EAS 39 and CAC/RCP 53.

## 11 Packaging

Fresh sweet potatoes shall be packaged in food grade material. Fresh sweet potatoes shall be packaged in each container in compliance with CAC/RCP 44.

## 13 Labelling

- **13.1** In addition to the requirements of EAS 38, the following specific requirements shall apply and shall be legibly and indelibly marked:
  - a) name of the produce to be shown on the label shall be "Fresh sweet potatoes";

- b) name and location address of the manufacturer/exporter/packer;
- c) country of origin of the produce;
- d) place of origin;
- e) grade (only when classified);
- f) Variety;
- g) size (size code), when applicable;
- h) net weight (in metric system);
- i) lot identification (batch number);
- j) declaration of preservatives, if used;
- k) date of harvest;
- packing date;
- m) storage conditions; and
- n) Indication "for human food".
- **13.2** When labelling non-retail packages, information for non-retail packages shall either be given on the packages or in accompanying documents, except that the name of the produce, lot identification and the name and address of the producer or packer shall appear on the package.

## 14 Sampling

Sampling of fresh sweet potato shall be done in accordance with ISO 874.

# **Bibliography**

[1] EAS 771:2021, Fresh sweet potatoes — Specification

