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## EAST AFRICAN STANDARD

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General standard for fruits and vegetables



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 East Africa. It is envisaged that through harmonized standardization, trade barriers which are encountered when goods and services are exchanged within the Community will be removed.

In order to meet the above objectives, the EAC Partner States have enacted an East African Standardization, Quality Assurance, Metrology and Test Act, 2006 (EAC SQMT Act, 2006) to make provisions for ensuring standardization, quality assurance, metrology and testing of products produced or originating in a third country and traded in the Community in order to facilitate industrial development and trade as well as helping to protect the health and safety of society and the environment in the Community.

East African Standards are formulated in accordance with the procedures established by the East African Standards Committee. The East African Standards Committee is established under the provisions of Article 4 of the EAC SQMT Act, 2006. The Committee is composed of representatives of the National Standards Bodies in Partner States, together with the representatives from the private sectors and consumer organizations. 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 procedures of the Community.

Article 15(1) of the EAC SQMT Act, 2006 provides that "Within six months of the declaration of an East African Standard, the Partner States shall adopt, without deviation from the approved text of the standard, the East African Standard as a national standard and withdraw any existing national standard with similar scope and purpose".

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.

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## Introduction

In the preparation of this East African Standard, the following sources were consulted extensively:

Codex Alimentarius website: [http://www.codexalimentarius.net/mrls/pestdes/jsp/pest\\_q-e.jsp](http://www.codexalimentarius.net/mrls/pestdes/jsp/pest_q-e.jsp)

USDA Foreign Agricultural Service website: <http://www.mrlsdatabase.com>

USDA Agricultural Marketing Service website: <http://www.ams.usda.gov/AMSV1.0/Standards>

USDA Plant Inspectorate Service website: [http://www.aphis.usda.gov/import\\_export/plants](http://www.aphis.usda.gov/import_export/plants)

European Union: [http://ec.europa.eu/sanco\\_pesticides/public](http://ec.europa.eu/sanco_pesticides/public)

Assistance derived from these sources and others inadvertently not mentioned is hereby acknowledged.

This standard has been developed to take into account:

- the needs of the market for the product
- the need to gain market access locally, regionally and internationally
- the structure of the CODEX, UNECE, USA, ISO and other internationally recognized standards
- the needs of the producers in gaining knowledge of market standards, conformity assessment, commercial cultivars and crop production process;
- the need to transport the product in a manner that ensures keeping of quality until it reaches the consumer;
- the need for the plant protection authority to certify, through a simplified form, that the product is fit for crossborder trade without carrying plant disease vectors; and
- the need to promote good agricultural practices that will enhance wider market access, involvement of small-scale traders and hence making fruit and vegetable production a viable means of wealth creation.

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*Draft for comments only — Not to be cited as East African Standard*

## General standard for fruits and vegetables

### 1 Scope

This East African Standard defines the general requirements to be possessed at the marketing/export control stage by produce placed in the domestic or international market and normally intended to be sold or delivered in its original condition to the consumer.

### 2 Normative references

The following referenced documents are indispensable for the application 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.

CAC/GL 21, *Principles for the Establishment and Application of Microbiological Criteria for Foods*

CAC/RCP 1, *Recommended International Code of Practice — General Principles of Food Hygiene*

CAC/RCP 44, *Recommended International Code of Practice for the Packaging and Transport of Tropical Fresh Fruit and Vegetables*

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

EAS 38, *Labelling of prepackaged foods — Specification*

CD/K/378:2010, *Horticultural industry — Code of practice*

CODEX STAN 228:2001 (Rev.1:2004), *General methods of analysis for contaminants*

CODEX STAN 230:2001 (Rev.1:2003), *Maximum levels for lead*

CODEX STAN 193:1995 (Rev.3:2007), *General Standard for Contaminants and Toxins in Foods*

### 3 Definition of produce

Each product for which commercial quality standards are established shall be defined in a relevant standard by the name of the genus and species to which it belongs (Latin botanical reference followed, as the case may be, by the author's name). For the products where there are no established East African Standards, this Standard shall be used, specifying the condition in which the product is marketed: fresh, dry or dried.

However, a group of products may be the subject of a more general standard in so far as the characteristics of the products permit.

### 4 Provisions concerning quality

#### 4.1 General

The purpose of the standard is to define the quality requirements of fruits and vegetables at the market 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 shall be responsible for observing such conformity.

## **4.2 Minimum quality requirements**

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

- (a) intact: not having any mutilation or injury spoiling the integrity of the produce, such as cuts or punctures or other significant physical damage sustained during harvesting or post harvest handling.
- (b) sound; products affected by rotting or deterioration such as to make them unfit for consumption are excluded. The produce must be free from disease or serious deterioration which appreciably affects its appearance, edibility, or market value. In particular, this excludes produce affected by rotting, even if the signs are very slight but liable to make the produce unfit for consumption upon arrival at its destination.
- (c) clean, practically free of any visible foreign matter. The produce must be practically free of visible soil, dust, chemical residues or other visible foreign matter.
- (d) practically free from pests. The produce must be practically free from insects, mites or any other pests. The presence of pests can detract from the commercial presentation and acceptance of the produce.
- (e) practically free from damage caused by pests affecting the flesh. The produce must be free from damage caused by insects, mites or any other pests that affects the fruit flesh. Pest damage affecting the flesh makes the produce unfit for consumption.
- (f) free of abnormal external moisture. This provision applies to excessive moisture, for example, free water lying inside the package but does not include condensation on produce following release from cool storage or refrigerated vehicle. However, a certain amount of external moisture may be necessary for quality preservation and is allowed.
- (g) free of any foreign smell and/or taste. This refers particularly to produce which have been stored on badly kept premises or have travelled in a badly maintained vehicle, especially produce which has acquired strong smell from other produce stored on the same premises or travelling in the same vehicle. It does not refer to any smell emanating from products used in conformity with the regulations for their use to improve keeping properties. For example, care should be taken to use only non-smelling materials as protection in packaging.
- (h) fresh in appearance: Wilting/shrivelling is not allowed. Produce should be packed as soon as possible after harvesting. Pre-cooling of the produce is recommended. During preparation and loading the produce must not show any signs of wilting/shrivelling.

**4.2.2** The produce must have been carefully picked and have reached an appropriate degree of development and/or ripeness account being taken of criteria proper to the variety, the time of picking and the growing area.

**4.2.3** The produce must be of normal development. The development and condition of the produce must be such as to enable it:

- (a) to withstand transport and handling,
- (b) to arrive in satisfactory condition at the place of destination.

#### 4.2.4 Minimum maturity requirements

The products must be sufficiently developed and display satisfactory maturity.

The development and state of maturity of the products must be such as to enable them to continue their ripening process and to reach a satisfactory degree of ripeness.

#### 4.3 Classification

Products may be classified in three classes, designated Extra, I and II, and defined according to their quality characteristics and the extent to which they have certain defects. In cases where a three-tier classification is not practicable, the product shall still meet the minimum requirements and be suitably identified.

### 5 Provisions concerning sizing

In the case of produce subject to sizing, sizing may be determined, according to product, by reference to one or more of the following criteria:

Diameter, circumference, length, weight and/or, in relation to these criteria, maximum dimensions of the items of produce in a package;

- Number of items per kilogram
- Number of items in a given package
- Size of bunch.

### 6 Provisions concerning tolerances

#### 6.1 Quality tolerances

A tolerance of 10 % by number or weight of product not fulfilling the minimum quality requirements of may be allowed in each package, but in general this tolerance shall not exceed 5 % cent in the "Extra" class.<sup>1</sup>

The tolerances shall not extend to produce affected by rot, visibly mouldy, or with serious bruises, unhealed cracks or any other form of deterioration making the produce unfit for consumption.

#### 6.2 Size tolerances

A certain percentage, by number or weight, of items not corresponding to the stated size and/or the specified size limits may be allowed in each package, but this tolerance shall not exceed 10 per cent in any class.

### 7 Provisions concerning presentation

#### 7.1 Uniformity

All the produce in each package shall be of the same origin, variety (or commercial type) quality and of the same crop year. In addition, homogeneity of size may be required in the case of produce subject to sizing.

In the case of produce pre-packed for direct sale to the consumer, a mixture of varieties, commercial types or species may be allowed provided this is appropriately indicated in the marking.

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<sup>1</sup> The packer/exporter should do everything possible to ensure that the produce arrives at its destination in good condition. He should therefore refrain from deliberately exploiting the full tolerances indicated above as they are only to allow for material or human errors which may occur in packing, handling or transport.

The visible part of the contents of the package shall be representative of the whole.

## **7.2 Packaging**

The packaging shall be sufficiently strong and the contents so packed as to ensure that the produce is adequately protected. The packing materials used inside the packages shall be new, clean and not liable to cause internal or external deterioration of the produce. The use of paper or stamps with commercial markings is authorized subject to the provision that non-toxic ink or adhesive shall be used for the printing or labelling.

Subject to the tolerances allowed for each type of produce, packages shall not contain any foreign matter.

## **7.3 Presentation**

If necessary, the mode or modes of presentation are defined taking into account the natural characteristics of the product.

Dispatch in bulk in a transport unit may be authorized only for specified types of class II produce which are sufficiently resistant to withstand such carriage. The conditions for such authorization shall be made taking into account the natural characteristics of the product.

NOTE 1 Consignment "in bulk" is not normally allowed for produce in the "Extra" class and in Class I. In these classes consignment "in bulk" is strictly prohibited for all fruits but may be used in the case of certain particularly resistant vegetables, such as cabbages;

NOTE 2 Consignment "in bulk in packages" in principle applies only to produce in Classes I and II and only in exceptional circumstances may it be accepted for produce in the "Extra" class which has a low unit value.

## **8 Marking and labelling**

### **8.1 Consumer packages**

In addition to the requirements of EAS 38, the following specific provisions apply:

#### **8.1.1 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 name of the variety and/or commercial type.

#### **8.2 Non-retail containers**

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. For produce 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.

##### **8.2.1 Identification**

The exporter, packer and/or dispatcher shall be identified by 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>

<sup>2</sup> Package units of produce prepacked for direct sale to the consumer shall not be subject to these marking provisions but shall conform to the national requirements. However, the markings referred to shall in any event be shown on the transport packaging containing such package units.

<sup>3</sup> 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.

### 8.2.2 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 name of the variety and/or commercial type.

### 8.2.3 Origin of produce

Full name of the country of origin and, optionally, national, regional or local place name in a language understandable by the consumers of destination country.

### 8.2.4 Commercial specifications

- Class
- Size expressed by minimum and maximum diameters
- Net weight.

### 8.2.5 Official control mark (optional)

## 9 Contaminants

### 9.1 Pesticide residues

The product shall comply with those maximum pesticide residue limits established by the Codex Alimentarius Commission for this commodity. Current MRLs are as provided in Annex B.

### 9.2 Heavy metals and contaminants

The product shall comply with those maximum levels for contaminants established by the Codex Alimentarius Commission for this commodity.

## 10 Hygiene

**10.1** It is recommended that the produce covered by the provisions of this Standard be prepared and handled in accordance with the appropriate sections of CAC/RCP 1, CAC/RCP 53, and other relevant Codex texts such as Codes of Hygienic Practice and Codes of Practice.

**10.2** The produce should comply with any microbiological criteria established in accordance with CAC/GL 21.



Mixed fruits and vegetables



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