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## **DRAFT EAST AFRICAN STANDARD**

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**Passion fruit — 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.

In order to achieve this objective, the Community established an East African Standards Committee mandated to develop and issue East African Standards.

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.

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.

EAS 91 was prepared by Technical Committee EAS/TC 019.

## Passion fruit — Specification

### 1 Scope

This Draft East African Standard specifies requirements and **methods of sampling and test** for commercial varieties of passion fruit from the species golden passion fruit / sweet granadilla (*Passiflora ligularis* Juss), purple passion fruit (*Passiflora edulis* Sims forma *edulis*), yellow passion fruit (*Passiflora edulis* Sims forma *flavicarpa*) and their hybrids grown from the Passifloraceae family, to be supplied fresh for local and export markets. Passion fruits for industrial processing are excluded.

### 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.

*EAS 38, Labelling of prepackaged foods — Specification*

*ISO 874, Fresh fruits and vegetables – Sampling*

*ISO 6633, Fruits, vegetables and derived products -- Determination of lead content -- Flameless atomic absorption spectrometric method*

CAC/RCP 53-2003, Code of Hygienic Practice for Fresh Fruits and Vegetables

ISO 7558:1988 Guide to the prepacking of fruits and vegetables

### 3 Terms and definitions

For the purpose of this Draft East African Standard, the following definitions shall apply.

#### 3.1

##### **fresh**

firm Fruit with a smooth surface skin.

#### 3.2

##### **woody**

fruits with hard skins with very little juice

#### 3.3

##### **clean**

Practically free from dirt, earth, insect stains or other foreign substances and material.

#### 3.4

##### **damage**

any defect or injury which materially affects the appearance or storage quality of the fruit.

#### 3.5

##### **sound**

Not overripe, not soft and free from diseases or insect damage, or bruising or physical injuries affecting keeping quality of the fruit.

### 3.6

#### **Food grade packaging material**

Any material which when it comes in contact with food or if the area near food is unlikely to contaminate food with harmful materials

### 3.7

#### **firm**

not soft, flabby, or shriveled

## 4 Requirements

### 4.1 General requirements

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

- a) whole;
- b) fresh in appearance;
- c) firm;
- d) sound; produce affected by rotting or deterioration such as to make it unfit for consumption is excluded;
- e) clean, free of any visible foreign matter;
- f) practically free of pests and damage caused by them affecting the general appearance of the produce;
- g) free of abnormal external moisture, excluding condensation following removal from cold storage;
- h) free of any foreign smell and/or taste;
- i) the stem/stalk should be present. The fruit stalk shall not be more than 10 mm in length, however, its absence is not considered a defect on condition that the place of the stalk attachment is dry and intact. For golden passion fruits, the stalk shall be present to the first knot;
- j) free of surface depressions- applicable to golden passion fruits;
- k) free of cracking.

4.1.2 The development and condition of the passion fruit shall be such that enable them to:

- a) reach the appropriate stage of physiological maturity corresponding to the particular characteristics of the variety, and
- b) to withstand transport and handling;
- c) arrive in a satisfactory condition at the place of destination in order to ripen satisfactorily.

## 4.2 Specific requirements

### 4.2.1 Classification

The fruits shall be grouped into 3 classes: Extra class, class I and class II.

#### 4.2.1.1 Extra Class

Passion fruits in this class must be of superior quality. They must be characteristic of the variety. They must be free of 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.

#### 4.2.1.2 Class I

Passion fruits 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; - slight defects of the skin such as scratches, not exceeding more than 10% of the total surface area of the fruit; - slight defects in colouring. The defects must not, in any case, affect the flesh of the fruit.

#### 4.2.1.3 Class II

This class includes passion fruits which do not qualify for inclusion in the higher classes, but satisfy the minimum requirements specified in 4.1. The following defects, however, may be allowed, provided the passion fruits retain their essential characteristics as regards the quality, the keeping quality and presentation: - defects in shape including an extension in the zone of the stalk; - defects of the skin such as scratches or rough skin, not exceeding more than 20% of the total surface area of the fruit; - defects in colouring. The defects must not, in any case, affect the flesh of the fruit.

### 4.2.2 Sizing

Passion fruits may be sized by diameter, count or weight; or in accordance with pre-existing trading practices. When such is the case, the package must be labelled accordingly.

(A) When sized by count, size is determined by the number of individual fruit per package.

(B) When sized by diameter, size is determined by the maximum diameter of the equatorial section of each fruit. The following table is a guide and may be used on an optional basis.

Size Code	Diameter range (mm)
A	> 78
B	> 67 - 78
C	> 56 - 67
D	≤ 56*
* The minimum diameter for golden passion fruit is 56 mm	

(C) When sized by weight, size is determined based on the individual weight of each fruit. The following table is a guide and may be used on an optional basis.



Size Code	Weight range (g)
A	> 139
B	> 128 - 139
C	> 122 - 128
D	> 106 - 122
E	> 83 - 106
F	≥ 74 - 83

## 5 Tolerance

### 5.1 Quality tolerances

#### 5.1.1 Extra Class

5 per cent by weight or number fruits not meeting the requirements of the class but meeting those of class I.

#### 5.1.2 Class I

10 per cent by weight or number of fruits not meeting the requirements of the class but meeting those of class II.

#### 5.1.3 Class II

10 per cent by weight or number of fruits not meeting the requirements of the class but meeting minimum requirements. Fruits affected by rotting or severe deterioration are not included.

### 5.2 Size Tolerances

10 per cent by number or weight not satisfying the minimum diameter requirements.

## 6 Contaminants

### 6.1 Pesticide residues

Passion fruits shall comply with those maximum residue limits established by the Codex Committee on Pesticide Residues for this commodity.

### 6.2 Metal contaminants

When tested in accordance with ISO 6633, the Lead content in passion fruits shall not exceed 0.1 mg/kg.

## 7 Hygiene

Passion fruits shall be prepared and handled in accordance with CAC/RCP 53-2003.

## 8 Packaging

8.1 Passion fruits shall be packed in such a way as to protect the produce properly. The food grade packaging material used inside the package shall 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 from any foreign matter and the material shall be recyclable.

8.2 Passion fruits shall also be packed in containers in accordance with ISO 7558.

8.3 The contents of each package shall be uniform and consist exclusively of Passion fruits of the same origin, variety and/or commercial type, and quality. The visible part of the content of the package shall be representative of the entire contents.

## 9. Labeling

In addition to the requirements of the EAS 38; the following specific provisions apply for each package; legibly and indelibly marked.

- i) Name, postal and physical address of the packer or dispatcher
- ii) Name of the produce as " Passion fruits ",
- iii) Name of the variety or commercial type.
- iv) Origin of produce
- v) Harvest date
- vi) Net weight (kg).
- vii) Size expressed in accordance with any one of the following methods:
  - Count,
  - Size code and range, or
  - Size range.
- viii) Class
- ix) Identification code and/or batch number
- x) storage instructions

## 10 Sampling

Representative samples of passion fruit shall be sampled in accordance with ISO 874

## Bibliography

- [1] STANDARD FOR PASSION FRUITS CODEX STAN 316-2014

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