



DRAFT TANZANIA STANDARD

Fresh okra — Specification

DRAFT FOR STAKEHOLDERS' COMMENTS

0 Foreword

Okra is an upright, annual, tropical, often much branched, herbaceous to slightly woody plant. It is grown for its fruits (pods) that are harvested for human consumption while still tender and immature. The young immature fruits are eaten fresh or cooked as vegetables and they can be frozen, canned or dried. Depending on the variety okra pods may be long or short, ridged or rounded, spined or spineless, curved or straight. Colours include green or red, as well as variegated. Young leaves and stem tips are used as cooked green vegetables. Okra is rich in minerals, fibre and vitamins.

This Tanzania Standard was prepared in order to provide guidance to producers and traders of okra as well as regulators and to act as a means for ensuring safety and quality of the product.

This third edition cancels and replaces the second edition TZS 1085: 2015.

In reporting the results of a test or analysis made in accordance with this Tanzania Standard, if the final value observed or calculated is to be rounded off, it shall be done in accordance with TZS 4 (see clause 2).

1 Scope

This Tanzania Standard specifies requirements, method of sampling and test for fresh okra varieties (cultivars) grown from *Abelmoschus esculentus* L. Moench of *Malvaceae* family intended for human consumption.

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.

TZS 4, *Rounding off numerical values*

TZS 109, *Code of hygiene for food processing unit — General*

CODEX STAN 193, *General standard for contaminants and toxins in food and feed*

TZS 538, *Packaging and labelling of foods*

TZS 1002, *Fresh fruits and vegetables — Sampling*

TZS 1003, *Guide to the pre-packaging of fresh fruits and vegetables*

TZS 1743, *National standard for Good Agricultural Practices and Good Handling Practices for fresh fruits and vegetables*

3 Terms and definitions

For the purpose of this Tanzania Standard the following terms and definitions shall apply:

3.1 damage

any defect, or any combination of defects, which materially detracts from the appearance, or the edible or marketing quality of the individual pod or of the lot as a whole

3.2 mature

Stages at which pod is ready for harvesting for intended market

3.3 pod

okra fruit

4 Requirements

4.1 General requirements

4.1.1 Okra shall be produced as per TZS 1743. In all classes, subject to the special provisions for each class and the tolerances allowed, the okra shall meet the following minimum requirements:

- a) whole with peduncle and intact tip;
- b) firm;
- c) sound and fresh in appearance; produce shall not be affected by rotting or deterioration such as to make it unfit for consumption;
- d) tender;
- e) clean; practically free of any visible foreign matter (including parts of the flowers) ;
- f) free from bruising;
- g) free of abnormal external moisture, excluding condensation following removal from cold storage;
- h) free from damage caused by low or high temperature;
- i) free of any foreign smell /or taste;
- j) free of damage caused by pests;
- k) sufficiently developed (should be plucked before fiber formation) ;
- l) free of hard seeds; and
- m) free from harmful chemicals.

4.1.2 The development and condition of okra shall be such as to enable them;

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

4.2 Specific requirements

4.2.1 Classification

Okra shall be classified as defined below:

4.2.1.1 Extra Class

Okra shall be of superior quality meeting the minimum requirements specified in clause 4.1. They shall be characteristic of the variety and free from defects with the exception of very slight superficial defects, provided they do not affect the general appearance of the produce, quality, keeping quality and presentation in the package.

4.2.1.2 Class I

Okra in this class shall be of good quality meeting the minimum requirements specified in Clause 4.1 and may have the following slight defects, provided they do not affect the general appearance of the produce, quality, keeping quality and presentation in the package:

- slight defects in colour;
- slight skin defects (scar, blemishes, scratches, bruises, scraps) not to exceed 2 % of the total surface area.

4.2.1.3 Class II

This class includes okra which do not qualify for inclusion in the extra class and class I, but satisfy the minimum requirements specified in Clause 4.1 and may have the following defects, provided they retain their essential characteristics as regards to quality, keeping quality and presentation in the package:

- defects in colour;
- defects in shape and development;
- defects in skin (scars, blemishes, scratches, bruises, scraps) not to exceed 5 % of the total surface area.

4.2.1.4 Unclassified

"Unclassified" consists of pods of okra which have not been classified in accordance with the previous classes. The term "unclassified" is not a grade within the meaning of this standard but is provided as a designation to show that no grade has been applied to the lot.

4.2.2 Size requirements

Size is determined by the length of the pod (in mm. without peduncle) in accordance with Table 1.

Table 1 — Size requirements

S/No	Size code	Length in mm
i.	A	40.1 – 65.0
ii.	B	65.1 – 90.0
iii.	C	90.1 – 115.0
iv.	D	115.1 and above

5 Tolerances

5.1 Quality tolerances

In order to allow for variations incident to proper grading and handling, the following tolerances, by weight and size are provided as specified:

5.1.1 *Extra class*

Five percent (5 %) by number or weight of Okra not satisfying the requirements of the grade, but meeting those of Class I or, exceptionally, coming within the tolerances of that grade.

5.1.2 *Class I*

Ten percent (10 %) by number or weight of Okra not satisfying the requirements of the grade, but meeting those of Class II or exceptionally, coming within the tolerances of that grade.

5.1.3 *Class II*

Ten percent (10 %) by number or weight of okra not satisfying the requirements of the grade, but meeting the minimum requirements.

5.2 Size tolerances

Lots containing 10 % by number or weight of okra not conforming to the size code specified in Table 1 shall be accepted.

6 Contaminants

6.1 Heavy metals

Okra shall comply with those maximum levels for heavy metals established by the CODEX Stan 193.

6.2 Pesticide residues

Okra shall comply with those maximum residue limits established by the CODEX Pesticides Residues in Food Online Database.

7 Hygiene

It is recommended that the produce covered by the provisions of this Tanzania Standard shall be prepared and handled in accordance with the TZS 109 (see clause 2)

8 Sampling and test

Representative samples of the okra shall be drawn as prescribed in TZS 1002 (see clause 2) and be tested in accordance to the methods described in this Tanzania Standard.

9 Packing, marking and labelling

9.1 Packing

9.1.1 Okra shall be properly packed in such a way as to protect the produce. The materials 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.

9.1.2 Okra shall also be packed in containers in accordance with TZS 1003 and TZS 538 (see clause 2)

9.2 Description of containers

The containers shall meet the quality, hygiene, ventilation and resistance characteristics to ensure suitable handling, shipping and preserving of the okra. Packages shall be free of all foreign matter and odour.

9.3 Marking and labelling

In addition to the requirements of the general Tanzania Standard TZS 538 (see clause 2); the following specific provisions apply for each package; legibly and indelibly marked;

- a) name of the produce (Fresh okra);
- b) name and address of the packer or dispatcher;
- c) origin of the produce – Name of the producing country where grown;
- d) commercial specification i.e. Class;
- e) net weight/mass (kg);
- f) brand or trade mark, if any
- g) identification code/batch number; and
- h) storage condition.

Date of harvest and packing

9.4 Standards Mark of Quality

Each container may also be marked with TBS Standards Mark of Quality.

NOTE — The TBS Standards Mark of Quality may be used by the manufacturers only under licence from TBS. Particulars of conditions under which the licences are granted may be obtained from TBS.

