



ASEAN STANDARD FOR MANGOSTEEN

1. DEFINITION OF PRODUCE

This standard applies to commercial varieties of mangosteen grown from *Garcinia mangostana L.* of the *Guttiferae* family, to be supplied fresh to the consumer, after preparation and packaging. Mangosteens for industrial processing are excluded.

2. PROVISIONS CONCERNING QUALITY

2.1 MINIMUM REQUIREMENTS

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

- whole
- pedicel intact and with or without calyx;
- sound, produce affected by rotting or deterioration such as to make it unfit for consumption is excluded;
- clean, practically free of any visible foreign matter;
- practically free of pests affecting the general appearance of the produce;
- practically free of damage caused by pests except netted skin fruit;
- free of abnormal external moisture , excluding condensation following removal from cold storage;
- free of any foreign smell and/or taste¹;
- fresh in appearance, have a shape, colour and taste characteristic of the species;
- free of pronounced blemishes; and
- practically easy to be cut open.

2.1.1 The development and condition of the mangosteen must be such as to enable them:

- to ensure the continuation of the ripening process until they reach the appropriate degree of ripeness (the skin should be at least pink in colour at time of harvest);
- to withstand transport and handling; and
- to arrive in satisfactory condition at the place of destination

¹ This provision allows for smell caused by conservation agents used in compliance with corresponding regulations

2.2 CLASSIFICATION

Mangosteens are classified in three classes defined below:

2.2.1 "Extra" Class

Mangosteen in this class must be of superior quality. It must be characteristic of the variety and/or commercial type. It must be practically free of defects, with the exception of slight superficial defects such as bruising, scratches or other mechanical damage, provided these do not affect the general appearance of the produce, the quality, the keeping quality and presentation in the package.

The total area affected shall not exceed 10% of the total surface

Yellowish latex stains on the fruit surface shall not exceed 5% by number or weight of the delivered lot.

2.2.2 Class I

Mangosteen in this class must be of good quality. It must be characteristic of the variety and/or commercial type. The following 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 on the peel such as bruising, scratches or other mechanical damage. The total area affected shall not exceed 30% of the total surface

Yellowish latex stains on the fruit surface shall not exceed 10% by number or weight of the delivered lot.

2.2.3 Class II

This class includes mangosteen which do not qualify for inclusion in the higher classes, but satisfy the minimum requirements specified in Section 2.1 above. The following may be allowed, provided the mangosteen retains their essential characteristics as regards the quality, the keeping quality and presentation:

- defects in shape;
- defects on the peel such as bruising, scratches or other mechanical damage. The total area affected shall not exceed 30% of the total surface.

Yellowish latex stains on the fruit surface shall not exceed 20% by number or weight of the delivered lot.



3. PROVISIONS CONCERNING SIZING

Size is determined by the weight or the diameter of the equatorial section of the fruit, in accordance with the following table:

Size Code	Weight (in grams)	Diameter (in millimeters)
1	> 125	> 62
2	101-125	59-62
3	76-100	53-58
4	51-75	46-52
5	30-50	38-45

4. PROVISIONS CONCERNING TOLERANCES

Tolerances in respect of quality and size shall be allowed in each package (or in each lot for produce presented in bulk) for produce not satisfying the requirements of the class indicated.

4.1 QUALITY TOLERANCES

4.1.1 "Extra" Class

Five percent by number or weight of mangosteens not satisfying the requirements of the class, but meeting those of Class I or, exceptionally, coming within the tolerances of that class.

4.1.2 Class I

Ten percent by number or weight of mangosteens satisfying neither the requirements of the class nor the minimum requirements, with the exception of produce affected by rotting or any other deterioration rendering it unfit for consumption.

4.1.3 Class II

Ten percent by number or weight of mangosteens satisfying neither the requirements of the class nor the minimum requirements and without rotten fruit.

4.2 SIZE TOLERANCES

For all classes, 10% by number or weight of mangosteens not satisfying the requirements as regards sizing, but falling within the size immediately above or below those indicated in Section 3.



5. PROVISIONS CONCERNING PRESENTATION

5.1 UNIFORMITY

The contents of each package (or lot for produce presented in bulk) must be uniform and contain only mangosteen of the same origin, quality and size. The visible part of the contents of the package (or lot for produce presented in bulk) must be representative of the entire contents.

5.2 PACKAGING

Mangosteens must be packed in such a way as to protect the produce properly. The materials used inside the package must be clean and of good 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.

Mangosteens shall be packed in each container in compliance with the Recommended International Code of Practice for Packaging and Transport of Tropical Fresh Fruits and Vegetables (CAC/RCP 44-1995, Amd. 1-2004).

5.2.1 Description of Containers

The containers shall meet the quality, hygiene, ventilation and resistance characteristics to ensure suitable handling, shipping and preserving of the mangosteens. Packages (or lot for produce presented in bulk) must be free of all foreign matter and smell.

6. MARKING OR LABELLING

6.1 CONSUMER PACKAGES

In addition to the requirements of the Codex General Standard for the Labelling of Prepackaged Foods (CODEX STAN 1-1985, Rev. 1-1991), the following specific provisions apply:

6.1.1 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 the name of the variety and/or commercial type.



6.2 NON-RETAIL CONTAINERS

Each package must bear the following particulars, in letters grouped on the same side, legibly and indelibly marked, and visible from the outside, or in the documents accompanying the shipment. For produce transported in bulk these particulars must appear on a document accompanying the goods.

6.2.1 Identification

Name and address of Exporter, Packer and/or Dispatcher. Identification code (optional).

6.2.2 Nature of Produce

Name of produce if the contents are not visible from the outside. Name of variety and/or commercial type.

6.2.3 Origin of Produce

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

6.2.4 Commercial Identification

- Class;
- Size (size code or average weight in grams);
- Number of units (optional);
- Net weight (optional).

6.2.5 Official Inspection Mark (optional)

7. CONTAMINANTS

7.1 PESTICIDE RESIDUES

Mangosteen shall comply with those maximum residue limits established by the Codex Alimentarius Commission and/or by authority for this commodity.

7.2 OTHER CONTAMINANTS

Mangosteen shall comply with those maximum levels for heavy metals established by the Codex Alimentarius Commission and/or by authority for this commodity.



8. HYGIENE

8.1 It is recommended that the product covered by the provisions of this Standard be prepared and handled in accordance with the appropriate sections of the Recommended International Code of Practice – General Principles of Food Hygiene (CAC/RCP 1-1969, Rev. 3-1997), and other relevant Codex texts such as Codes of Hygienic Practice and Codes of Practice.

8.2 The product should comply with any microbiological criteria established in accordance with the Principles for the Establishment and Application of Microbiological Criteria for Foods (CAC/GL 21-1997).

9. METHODS OF ANALYSIS AND SAMPLING

Analytical and sampling methods to be used for ascertaining conformance to the requirements of this specification shall be in accordance with relevant text in Codex Methods of Analysis and Sampling, Volume 13



References:

Proposed Draft Brunei Standard for Mangosteen. BS/FFV 07.10.01-2007.
Ministry of Agriculture and Primary Resources-Department of Agriculture.
Brunei Darussalam.

Codex Standards for Mangosteen (CODEX STAN 204-1997 AMD. 1-2005)

Draft Revised National Standard of Indonesia for Mangosteen (*Garcinia mangostana L.*). SNI-01-3211-1992.

Myanmar National Standard for Mangosteen

Philippine National Standard for Mangosteen (PNS/BAFPS 31:2005 ICS
065.020.20)

Thai Agricultural Commodity and Food Standard Mangosteens (TACFS 2-2003)

