

### ASEAN STANDARD FOR JACKFRUIT (ASEAN Stan 17:2010)

# **1. DEFINITION OF PRODUCE**

This Standard applies to commercial varieties of jackfruit grown from *Artocarpus heterophyllus* Lam., of the Moraceae family to be supplied fresh to the consumer. Jackfruit intended for industrial processing and cooking is 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 jackfruit must be:

- whole;
- firm;
- 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 mechanical and/or physiological damage;
- practically free of pests and diseases, and internal damage caused by them affecting the general appearance of the produce;
- free of abnormal external moisture, excluding condensation following removal from cold storage;
- free of any foreign smell and/or taste;
- practically free of bruises and blemishes;

The stem or peduncle is firmly attached and well trimmed, not more than 5 cm beyond the shoulder of the fruit.

**2.1.1** The jackfruit should be harvested at a suitable maturity stage and have reached an appropriate degree of development and maturity in accordance with characteristics proper to the variety and to the area in which they are grown.

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

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

# 2.2 CLASSIFICATION

Jackfruit is classified in three classes defined below:

### 2.2.1 "Extra" Class

Jackfruit 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 provided that these do not affect the general appearance of the produce, the quality, the keeping quality and presentation in the package.

### 2.2.2 Class I

Jackfruit 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 of colour and shape;
- slight defect on the skin and other superficial defects not exceeding 10% of the total surface area.

The defects must not, in any case, affect the flesh of the fruit.

#### 2.2.3 Class II

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

- defects in shape and colour;
- defects on the skin and other superficial defects not exceeding 15% of the total surface area.

The defects must not, in any case, affect the flesh of the fruit.

### 3. PROVISIONS CONCERNING SIZING

Size is determined by weight with the following table.

Size Code	Weight (kg)
1	>25
2	21-25
3	16-20
4	10-15
5	<10

# 4. PROVISIONS CONCERNING TOLERANCES

Tolerances in respect of quality and size shall be allowed in each retail package (or 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 of jackfruit 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 of jackfruit not satisfying the requirements of the class, but meeting those of Class II or, exceptionally, coming within the tolerances of that class.

### 4.1.3 Class II

Ten percent by number of jackfruit 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.

### 4.2 SIZE TOLERANCES

For all classes, 10% by number or weight of jackfruit corresponding to the size immediately above or below those indicated in Section 3.

### 5. PROVISIONS CONCERNING PRESENTATION

#### **5.1 UNIFORMITY**

The contents of each lot must be uniform and contain only jackfruit of the same variety and/or commercial type, origin, quality and size. The visible part of the contents of the lot must be representative of the entire contents.

### 5.2 PACKAGING

Jackfruit must be properly packed in such a way as to protect the produce. 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.

Jackfruit shall be packed in each container in compliance with the Recommended International Code of Practice for Packaging and Transport of 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 jackfruit. Container must be practically free of 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

Each package should be labelled as to the name of the produce and may be labelled as to name of the variety.

### 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, 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;
- Net weight (optional).

# 6.2.5 Official Inspection Mark (optional)

# 7. CONTAMINANTS

### 7.1 PESTICIDE RESIDUES

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

### 7.2 OTHER CONTAMINANTS

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

### 8. HYGIENE

**8.1** It is recommended that the produce covered by the provisions of this Standard be prepared and handled in accordance with the appropriate sections of the Recommended International Code of Practice – General Principles of Food Hygiene (CAC/RCP 1-1969, Rev. 4-2003), Code of Hygienic Practice for Fresh Fruits and Vegetables (CAC/RCP 53-2003), and other relevant Codex texts such as Codes of Hygienic Practice and Codes of Practice.

**8.2** The produce 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:

Department of Agriculture – Ministry of Industry and Primary Resources. Brunei Darussalam. Proposed Draft Brunei Standard for Jackfruit. PBD/01/2009

Draft Indonesia National Standard for Jackfruit 2008.

Malaysian Standard MS 1055:1986. Specification for Fresh Jackfruits. SIRIM Standards & Industrial Research Institute of Malaysia.

Philippine National Standard. Fresh Vegetable - Jackfruit. PNS/BAFPS 55:2007.

# **APPENDIX I**

Vernacular Names Jackfruit in th	he ASEAN Region
----------------------------------	-----------------

Country	Vernacular Names
Brunei Darussalam	Nangka
Cambodia	Knol
Indonesia	Nangka
Laos PDR	Mak Mee
Malaysia	Nangka
Myanmar	Pein Ne Ein Pyawt Pein Ne Ein Mar Pein Ne (Pyar Yee)
Philippines	Langka
Thailand	Khanun
Vietnam	Mit