

## **1. DEFINITION OF PRODUCE**

This standard applies to commercial varieties of mature coconut harvested from *Cocos nucifera* L. of Arecaceae family to be supplied fresh to the consumer. The mature coconut for industrial processing is excluded. This standard does not include young coconut fruits.

## 2. PROVISIONS CONCERNING QUALITY

### 2.1 MINIMUM REQUIREMENTS

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

- whole<sup>1</sup>;
- untrimmed (with husk) or trimmed (semi-dehusked mature coconut, dehusked mature coconut except for the perianth area, fully dehusked);
- brown or green colour<sup>2</sup> depending on the characteristic of the variety;
- free of germination;
- free of cracks on the shell;
- practically free of pests and damage caused by them affecting the general appearance and the meat quality;
- sound; produce affected by rotting or deterioration such as to make it unfit for human consumption is excluded;
- clean, practically free of any visible foreign matter;
- free of abnormal external moisture, excluding condensation following removal from cold storage; and
- free of any foreign odour and/or taste.
- **2.1.1** Mature coconut should be harvested and have reached an appropriate degree of development for harvesting depending on variety, season and area in which they are grown.

<sup>&</sup>lt;sup>1</sup> Unsplit coconut

 $<sup>^{2}</sup>$  When the fruit starts to mature, the colour of the husk will become golden brown to dark brown or green depending on the characteristic of the variety

The development and condition of the mature coconut should 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

Mature coconut is classified into three classes defined below:

## 2.2.1 "Extra" Class

Mature coconuts in this class must be of superior quality. It must be characteristic of the variety and/or commercial type. It 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.

## 2.2.2 Class I

Mature coconuts 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;
- slight defect in shape;
- slight defects on the skin/husks/shell due to mechanical damage and blemishes not exceeding 5 % of the total surface area.

The defects must not, in any case, affect the meat and water of the fruit.

### 2.2.3 Class II

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

- defects in shape and colour;
- defects on the skin/husks/shell due to mechanical damage and blemishes not exceeding 10 % of the total surface area

The defects must not, in any case, affect the meat and water of the fruit.

# **3. PROVISIONS CONCERNING SIZING**

Size code is determined by weight of the fruit in accordance with the following table:

Table 1: Classification of untrimmed mature coconut based on weight

Size code	Weight (kg)
1	> 2.0
2	>1.5- 2.0
3	>1.0 – 1.5
4	0.5 - 1.0

 Table 2: Classification of trimmed mature coconut based on weight

Size code	Weight (kg)
1	>1.2
2	>0.8 – 1.2
3	0.3 - 0.8

## 4. PROVISIONS CONCERNING TOLERANCES

Tolerances in respect of quality 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 mature coconut 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 mature coconut satisfying the requirements of the class, but meeting those of Class II or exceptionally, coming within tolerances of that class.

### 4.1.3 Class II

Ten percent by number or weight of mature coconut 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 mature coconut 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 uniformed and contained only mature coconut of the same origin, variety, 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

Mature coconut 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.

### **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 mature coconut. Packages (or lot for produce presented in bulk) must be free from foreign matter and odour.

### 6. MARKING OR LABELLING

### 6.1 CONSUMER PACKAGES

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

## 6.1.1 Name 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 Name 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

- Produce name;
- Variety name (optional)
- Class;
- Size;
- Number of units; and/or net weight

### 6.2.5 Official Inspection Mark (optional)

### 7. CONTAMINANTS

7.1 Mature coconut shall comply with maximum residue limits for pesticides established by the Codex Alimentarius Commission, ASEAN Harmonized MRLs of Pesticides and/or by authority for this commodity.

7.2 Mature coconut shall comply with the maximum levels of the General Standard for Contaminants and Toxins in Food and Feed (CXS 193-1995).

## 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* (CXC 1-1969), 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* (CXG 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.

#### **References:**

ASEAN Harmonized MRLs of Pesticides.

Codex General Standard for the Labelling of Prepackaged Foods (CODEX STAN 1-1985, Rev. 1-1991),

Draft Malaysian Standard. Fresh Mature Coconut.

Good Agricultural Practices in Coconut Production, GAP-Coconut, Severino S. Magat, , Philippine Coconut Authority, 2000

Information for Brunei Darussalam on Mature Coconut, 2017

National Bureau of Agricultural Commodity and Food Standards, Coconut TAS 18-2011

Principles for the Establishment and Application of Microbiological Criteria for Foods (CXG 21-1997).

Recommended International Code of Practice for Packaging and Transport of Tropical Fresh Fruits and Vegetables. (CXC 44-1995, Amd. 1-2004).

Recommended International Code of Practice – General Principles of Food Hygiene (CXC 1-1969, Rev 4-2003)

The Coconut Palm by Yan Fremond, Robert Ziller, M. De Nuce De Lamothe, from the Research Institute For Oils and Oil Plants (I.R.H.O), Paris,/France, 1966

# ANNEX 1

# VERNACULAR NAMES OF MATURE COCONUT IN THE ASEAN REGION

Country	Vernacular Name
Brunei Darussalam	Kelapa tua
	Piasau tua
Cambodia	Daung Tum
Indonesia	Kelapa dalam
	Kelapa
Lao PDR	Makphao hao
Malaysia	Kelapa
	Nyiur
Myanmar	Ohn thee
Philippines	Niyog
Singapore	Mature coconut
Thailand	Ma Prow
Viet Nam	Dua