

#### ASEAN STANDARD FOR MUSTARD GREENS (ASEAN Stan 43:2015)

## **1. DEFINITION OF PRODUCE**

This standard applies to commercial varieties of mustard greens grown from *Brassica juncea* (L.) Czern. of the Brassicaceae family, to be supplied fresh to the consumer, after preparation and packaging. Mustard greens 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 mustard greens must be:

- whole
- fresh;
- intact;
- well-trimmed;
- tender;
- characteristic of the variety;
- 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 and damage caused by them affecting the general appearance of the produce;
- free of mechanical and/or physiological damage such as low and /or high temperature;
- free of abnormal external moisture, excluding condensation following removal from cold storage; and
- free of any foreign smell and/or taste.
- **2.1.1** Mustard greens should be harvested and have reached an appropriate degree of development in accordance with criteria proper to the variety and to the area in which they are grown.

The development and condition of the Mustard greens 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

Mustard greens are classified in two classes defined below:

## 2.2.1 Class I

Mustard greens in this class must be of good quality. They must be characteristic of the variety and/or commercial type.

Mustard greens presented in rosettes must be free from root tufts.

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:

- slightly damaged leaves, such as cracks, holes or tears; and
- slight defects in colouring.

## 2.2.2 Class II

This class includes mustard greens that do not qualify for inclusion in Class I but satisfy the minimum requirements specified above.

The following defects may be allowed, provided the mustard greens retain their essential characteristics as regards the quality, the keeping quality and presentation:

- damaged leaves, such as cracks, bruises, holes or tears;
- defects in colouring;
- slight lack of freshness;
- small root tuft; and
- slight ribbiness.

#### 3. PROVISIONS CONCERNING SIZING

There is no sizing requirement for mustard greens.

# 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

# 4.1.2 Class I

Ten percent by weight of mustard greens 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 weight of mustard greens satisfying neither the requirements of the class nor the minimum requirements, with the exception of produce affected by rotting or any other deterioration.

## 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 mustard greens 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

Mustard greens 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.

Mustard greens 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 mustard greens. 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

Each package shall be labelled as to the name of the produce and may be labeled 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<sup>1</sup> 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

- Produce name;
- Variety name (optional);
- Class;
- Number of units (optional); and
- Net weight (optional).

#### 6.2.5 Official Inspection Mark (optional)

<sup>&</sup>lt;sup>1</sup> Impossible to remove

# 7. CONTAMINANTS

# 7.1 PESTICIDE RESIDUES

Mustard greens shall comply with those maximum residue limits established by the Codex Alimentarius Commission, ASEAN Harmonized MRLs of Pesticides, and/or by authority for this commodity.

## 7.2 OTHER CONTAMINANTS

Mustard greens 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. 4-2003), 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.

#### References:

ASEAN Harmonized MRLs of Pesticides.

Information for Brunei Darussalam on Mustard. 2014

Malaysia Standard MS 1323:2008. Fresh Mustards- Specification (First Revision) (ICS: 67.080.20)

Bureau of Agricutlure and Fisheries Product Standards. 2010. Philippine National Standard PNS/BAFS 94:2010 Fresh vegetables – Mustard greens (Brassica juncea L. Czern) - Classification and grading. Quezon City.

United Nations Economic Commission for Europe. 2010. UNECE Standard FFV-58 Concerning the marketing and commercial quality control of leafy vegetables. Agricultural Standards Unit: Geneva, Switzerland.

# ANNEX 1

# VERNACULAR NAMES OF MUSTARD GREENS IN THE ASEAN REGION

Country	Common Name
Brunei Darussalam	Sawi Pahit
Cambodia	Spey Khiev, Spey Cheung Tea
Indonesia	Sawi Pahit
Lao PDR	Pak Kad Khew Pak Kad Timy
Malaysia	Sawi
Myanmar	Mou Hnjin Mou Hnjin Phyu Mou Hnjin Seinn Thaiwan Mou Hnjin
Philippines	Mustasa
Singapore	
Thailand	Puck Kard Kheaw, Puck Kard Kheaw Plee
Vietnam	