

## **1. DEFINITION OF PRODUCE**

This standard applies to commercial varieties of water convolvulus grown from *Ipomoea reptans* and *Ipomoea aquatica* of the Convolvulaceae family, to be supplied fresh to the consumer, after preparation and packaging. Water convolvulus 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 water convolvulus 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** Water convolvulus 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 water convolvulus 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

Water convolvulus is classified in two classes defined below:

#### 2.2.1 Class I

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

Water convolvulus 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 water convolvulus that do not qualify for inclusion in Class I but satisfy the minimum requirements specified above.

The following defects may be allowed, provided the water convolvulus 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 water convolvulus.

#### 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 water convolvulus 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 water convolvulus 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 water convolvulus 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

Water convolvulus 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.

Water convolvulus 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 water convolvulus. 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 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)

## 7. CONTAMINANTS

## 7.1 PESTICIDE RESIDUES

Water convolvulus 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

Water convolvulus 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 Water Convulvulus. 2014

Bureau of Agriculture and Fisheries Standards. 2015. Draft Philippine National Standard Vegetables – Water Convolvulus (*Ipomoea reptans* Poir and *Ipomoea aquatic* Forssk.) – Classification and Grading. Quezon City

Final Draft for Malaysia Standard MS XX:2015. Fresh Water convolvulus - Specification (First Revision) (ICS:XX.XX.XX)

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 WATER CONVOLVULUS IN THE ASEAN REGION

Country	Common Name
Brunei Darussalam	Kangkong
Cambodia	Tror Koun
Indonesia	Kangkung
Lao PDR	Pak Bong
Malaysia	Kangkung
Myanmar	Kan Zun Ywatt Kan Zun Yoe Ni Kan Zun Yoe Phyu Taiwan Kan Zun Lei Kan Zun
Philippines	Kangkong
Singapore	
Thailand	Puck Bung
Vietnam	