

# PHILIPPINE NATIONAL STANDARD

PNS/BAFPS 61:2008  
ICS 67.080

---

---

## Fresh vegetables – Ampalaya



**BUREAU OF PRODUCT STANDARDS**

Member to the International Organization for Standardization (ISO)  
Standards and Conformance Portal: [www.bps.dti.gov.ph](http://www.bps.dti.gov.ph)

**Foreword**

The Philippine National Standard for Ampalaya, PNS/BAFPS 61:2008 was undertaken by the Bureau of Agriculture and Fisheries Product Standards (BAFPS) in order to reflect the recent technology developments in the industry, and the need for its harmonization with ASEAN standards and Codex requirements in Heavy Metals, Pesticide Residues and Hygiene.

PNS/BAFPS 61:2008 was based on the Specification for Ampalaya developed by the Philippine Trade Standard with PTS No. 054-03.10:1969.

A Technical Committee and Sub-Committee were organized by the Bureau of Agriculture and Fisheries Product Standards (BAFPS) through Special Order No. 411, series of 2001 and Special Order No. 169, series of 2007 to identify members and experts that shall be involved in the formulation of the PNS for Ampalaya. Modifications were made on the scope, definition of terms, minimum requirements, classification, sizing, packaging, marking and labeling. The draft standard was presented for technical reviews and public consultations in three major islands of the country prior to its finalization.

The PNS for Ampalaya aims to provide a common understanding on the established grading and classification system for Ampalaya being produced in the Philippines and supplied fresh to the consumers.

**Fresh vegetables – Ampalaya**

---

**1 Scope**

This standard establishes a system of grading and classifying ampalaya from *Momordica charantia*, Linn., produced in the Philippines to be supplied fresh to the consumer.

**2 References**

The title of the standard publications and other references of this standard are listed on the inside back cover.

**3 Definitions****3.1****badly misshapen**

ampalaya is twisted or curved

**3.2****clean**

is practically free from stains, dirt or other foreign material

**3.3****damage**

any defect or injury which materially affects the appearance, eating and shipping qualities of ampalaya

**3.4****fairly well-colored**

for green colored ampalaya, half of the ampalaya surface is medium green or darker in color. For white ampalaya, the color is fairly typical of the variety

**3.5****fairly well-formed**

ampalaya has a fairly typical shape of the variety, fairly symmetrical, not excessively tapered, and slightly curved. An ampalaya is slightly curved when the maximum distance obtainable between the concave side and the flat surface of the ampalaya is more than 1/6 in length

**3.6****firm**

ampalaya is not soft, flabby or shriveled

**3.7**

**insect damage**

scars, wormholes and other insect infestations which affect more than 5 % of the surface area

**3.8**

**length**

the distance in a straight line from the stem to the blossom-end excluding the portion of the ampalaya that is less than 5 mm in diameter

**3.9**

**mechanical damage**

bruises or scars, cuts, and other damages caused by improper handling

**3.10**

**overmature**

ampalaya is characterized with traces of yellow color, soft fleshy wall, the seed cavity turns red and not suitable for human consumption

**3.11**

**similar varietal characteristics**

ampalaya has similar shape and color

**3.12**

**well-colored**

when 4/5 of the rind surface of the ampalaya corresponds to the color of the variety. For green variety, the color is medium green or darker

**4 Minimum requirements**

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

- whole;
- fresh, firm, and not overmature;
- clean and free from living and dead insects, wormholes, and decays;
- free from mechanical damages such as bruises or scars and cuts;

The development and condition of ampalaya must enable it:

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

**5 Classification**

Ampalaya is classified into three classes as defined below:

**5.1 Extra class** – Ampalaya in this class must be of superior quality and have the characteristic of the variety and/or commercial type. It must be whole, fresh, clean, firm, well-formed, well-colored, not over-mature, free of decay, sunscald, bruises, and free of damages caused by disease, insect and mechanical or other means. Very slight superficial defects are allowed, provided these do not affect the general appearance of the produce, the quality, the keeping quality and presentation in the package.

**5.2 Class I** – Ampalaya in this class must be of good quality and have the characteristic of the variety and/or commercial type. It must be whole, fresh, clean, firm, fairly well-colored, not badly misshapen, not over-mature and which is reasonably free of decay, sunscald, bruises, and free of damages caused by disease, insect, mechanical or other means. Slight defects are allowed, provided these do not affect the general appearance of the produce, the quality, the keeping quality and presentation in the package.

**5.3 Class II** – This class includes ampalaya which do not qualify for inclusion in the higher classes, but satisfies the minimum requirements specified in Clause 4.

**6 Size classification**

Size is determined by length of ampalaya, in accordance with the table below:

Size	Length of ampalaya (cm)
Extra small	3 - 9
Small	10 - 17
Medium	18 - 25
Large	26 - 32
Extra large	> 32

**7 Tolerances**

**7.1 Quality tolerance**

**7.1.1 Extra class** – Five percent by number of ampalaya not satisfying the requirements of the class but meeting those of Class I or, exceptionally, coming within the tolerance of that class.

**7.1.2 Class I** – Ten percent by number of ampalaya is satisfying neither the requirements of the class nor the minimum requirements, with the exception of produce affected by rotting or other deterioration rendering it unfit for consumption.

**7.1.3 Class II** – Ten percent by number of ampalaya not satisfying neither the requirements of the class nor the minimum requirements and without exception of produce affected by rotting or any other deterioration rendering it unfit for consumption.

## **7.2 Size tolerance**

**7.2.1 Extra class** – Five percent by number or weight of ampalaya for both off-size and damage not satisfying the requirements of the class.

**7.2.2 Class I** – Ten percent by number or weight of ampalaya for off-size and five percent for damage not satisfying the requirements of the class.

**7.2.3 Class II** – Ten percent by number or weight of ampalaya for both off-size and damage not satisfying the requirements of the class.

## **8 Sampling**

Sampling to be used for ascertaining conformance shall be in accordance with PNS/ISO 874.

## **9 Packaging**

Ampalaya must be packed in suitable containers as specified by the buyer that will protect from any external or internal damage. The containers shall meet the quality, hygiene, ventilation and resistance characteristics to ensure suitable handling, shipping and preserving of ampalaya.

## **10 Marking and labeling**

Each container shall be legibly labeled with the following information:

**10.1** Name of produce, variety and/or commercial type;

**10.2** Class and size;

**10.3** Net content, number or weight (kg)/pieces/pack;

**10.4** Name and address of producer, trader and exporter;

**10.5** Province where grown;

**10.6** Date of harvest;

**10.7** Shelf-life of the produce (optional);

**10.8** Product certification (optional); and

**10.9** Product of the Philippines.

## **11 Contaminants**

### **11.1 Heavy metals**

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

### **11.2 Pesticide residues**

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

## **12 Hygiene**

**12.1** It is recommended that the produce covered by the provision 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. 2 – 1985), and other relevant Codex texts such as Code of Hygienic Practice and Code of Practice.

**12.2** Ampalaya shall comply with microbial criteria established in accordance with the Principles for the Establishment of Microbiological Criteria for Foods (CAC/GL 21- 1997).

## **References**

**PNS/BAFPS 61:2008**

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

PNS/ISO 874 (e): Fresh Fruits and Vegetables – Sampling

Specification for Ampalaya. 1969. Philippine Trade Standard 054 –03.10.



**Department of Agriculture  
Bureau of Agriculture and Fisheries Product Standards  
Technical Sub-Committee on Crops**

**Chair**

- 1 Dr. Elda B. Esguerra  
Postharvest Horticulture Training and Research Center, UP Los Baños

**Members**

- |   |   |   |   |
|---|---|---|---|
| 2 | Dr. Leonila M. Varca<br>National Crop Protection Center<br>UP Los Baños                           | 5 | Dr. Rene Rafael C. Espino<br>National Program Director<br>GMA – HVCC Program<br>Department of Agriculture |
| 3 | Dr. Dario S. Sabularse<br>Fertilizer and Pesticide Authority                                      | 6 | Ms. Josephine Garcia<br>Bureau of Plant Industry<br>San Andres, Malate, Manila                            |
| 4 | Dr. Edralina P. Serrano<br>Postharvest Horticulture Training<br>and Research Center, UP Los Baños |   |   |

**Expert Involved**

- 7 Dr. Rodel G. Maghirang  
Crop Science Cluster  
Institute of Plant Breeding  
UP Los Baños

**Secretariat on Crops**

**Chairman**

- 1 Director Gilberto F. Layese  
Bureau of Agriculture and Fisheries Product Standards

**Members**

- 2 Ms. Angelina A. Bondad  
Chief Science Research Specialist  
Bureau of Agriculture and Fisheries Product Standards
- 3 Mr. Clarence F. Agustin  
Senior Science Research Specialist  
Bureau of Agriculture and Fisheries Product Standards

*your partner in product quality and safety*



**BUREAU OF PRODUCT STANDARDS**

---

---

3F Trade and Industry Building  
361 Sen. Gil J. Puyat Avenue, Makati City 1200, Metro Manila, Philippines  
T/ (632) 751.3125 / 751.3123 / 751.4735  
F/ (632) 751.4706 / 751.4731  
E-mail : [bps@dti.gov.ph](mailto:bps@dti.gov.ph)  
[www.dti.gov.ph](http://www.dti.gov.ph)