PHILIPPINE NATIONAL STANDARD

PNS/BAFPS 30:2005 ICS 065.020.20

Fresh fruit – Calamondin/Calamansi – Grading and classification



BUREAU OF PRODUCT STANDARDS

Foreword

The formulation of this Philippine National Standard for Fresh Calamondin/Calamansi – Grading and classification, PNS/BAFPS 30:2005 was initially taken from the Standards Administrative Order (SAO), 1971, Department of Trade and Industry. SAO for Fresh Calamondin/Calamansi was subjected for further review and revision.

The Bureau of Agriculture and Fisheries Product Standards (BAFPS) conducted series of technical reviews and public consultations nationwide on the revised draft standards for fresh calamondin/calamansi prior to its approval.

The Sub-Committees of BAFPS organized through Special Order No. 411, series of 2001 set the classification of fresh calamondin/calamansi based on their physical characteristics and current practices existing in the market.

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1 Scope

This standard applies to commercial varieties of calamondin/calamansi fruits grown from *Citrofortunella microcarpa W.* produced in the Philippines to be supplied fresh to the consumer. Calamansi fruits for industrial processing are excluded.

2 References

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

3 Definitions

3.1

clean

practically free from foreign matter

3.2

damage

any defect such as bruises, necrotic rind which materially affects the appearance and quality of the fruit

3.2.1

discoloration

any deviation from the normal rind which include sunscald or sunburn

3.2.2

sunscald

causes appreciable flattening of the fruit, drying of the skin, change in color of the skin due to direct exposure to sun

3.2.3

scab

gray spots on the rind caused by fungus

3.3

diameter

the greatest dimension taken at right angles to the longitudinal axis

3.4

fairly well formed

the fruit has the shape typical of the variety and is not materially lopsided or otherwise deformed

3.5

fairly smooth texture

the fruit is comparatively free from lumpiness and not abnormally coarse

3.6

firm

the fruit is not soft or flabby

3.7

fresh

absence of shriveling and signs of normal deterioration that progresses with time

3.8

similar varietal characteristics

the fruits in any container are similar in shape, color and texture

3.9

well formed

the fruit is symmetrical and has the shape typical of the variety

3.10

well trimmed

the peduncle is firmly attached to and is cut at right angles to the shoulders

4 Minimum requirements

In all classes subject to the special provisions for each class and tolerances allowed, calamondin/calamansi fruits shall meet the following requirements:

- **4.1** Mature, whole, firm, fresh, clean and sound in appearance.
- **4.2** Free from mechanical damage and damage caused by pests and diseases.

5 Classification

Calamondin/calamansi fruits are classified into three classes according to its general appearance, quality and condition.

5.1 Extra class

Calamondin/calamansi fruits in this class must be of superior quality and consist of fruits with similar varietal characteristics, mature, firm, well formed, well trimmed, free from superficial defects such as discoloration, disease and insect damages.

5.2 Class I

Calamondin/calamansi fruits in this class must be of good quality and consist of fruits with similar varietal characteristics, mature, firm, fairly well formed, well trimmed, and free from decay, foreign material, discoloration, and damages caused by disease and insects. Slight defects in shape and appearance may be allowed.

5.3 Class II

Calamomdin/calamansi fruits in this class which do not qualify for inclusion in the higher classes but shall meet the minimum requirements specified in Clause 4.

- 6 Calamondin/calamansi are classified according to its size:
- **6.1 Big** Calamondin/calamansi fruit with a diameter > 2.8 cm
- **6.2 Medium** Calamondin/calamansi fruit with a diameter of 2.0 to < 2.8 cm
- **6.3** Small Calamondin/calamansi fruit with a diameter of 1.5 to < 2.0 cm

7 Tolerance

In all classes, ten percent by number or weight of the calamondin/calamansi fruits in any lot may fail to meet the requirements of the class.

8 Sampling

Sampling method to be used for ascertaining conformance to the requirements of this specification shall be in accordance with PNS/ISO 874.

9 Packaging

Calamondin/calamansi fruits must be packed in suitable container to protect them from mechanical damage. The containers must meet the quality, hygiene, ventillation and resistance characteristics to ensure suitable handling and shipping of calamondin/calamansi fruits. The use of paper or stamps bearing trade specification is allowed provided the printing or labeling has been done with non-toxic ink or glue.

10 Marking and labeling

Each container must have a label or legible characters grouped on the same side, stamped in indelible ink to provide the following:

- 10.1 Name of product;
- 10.2 Class and size;
- 10.3 Net weight (in kilograms);
- 10.4 Name of producer or exporter;
- 10.5 Province where grown (optional); and
- 10.6 The words "Product of the Philippines".

11 Hygiene

- 11.1 It is recommended that the produce covered by the provisions of this standard be prepared and handled in accordance with 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 Codes of Hygienic Practice and Codes of Practice.
- 11.2 The produce must comply with microbial criteria established in accordance with the Principles for the Establishment and Application of Microbiological Criteria for Foods (CAC/GL 21 1997).

References PNS/BAFPS 30:2005

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 references document (including any amendments) applies.

Javier, F.B and R. T. Calendacion. 1995. Citrus Production. Horticulture Extension Bulletin Series No.2, Department of Horticulture, College of Agriculture, UP at Los Baños, College, Laguna.

Pesticide residues in food. Maximum residue limits. 2000. Codex Alimentarius. Vol. 2B pp. 75, 85, 261 and 309.

Standards Administrative Order. 1971. The standards for Fresh Calamansi. Bureau of Trade and Industry.

Verheij, E. W. M. and R. E. Coronel. 1991. Edible fruits and nuts. Plant Resources of South-East Asia. No.2, Pudoc Wageningen.

BPS

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The use of the PS Certification Mark is governed by the provisions of Department Administrative Order No. 01 series of 1997 – Revised Rules and Regulations Concerning the Philippine Standard (PS) Quality and / or Safety Certification Mark Scheme by the Bureau of Product Standards. This mark on a product/container is an assurance by the manufacturer/producer that the product conforms with the requirements of a Philippine standard. Details of conditions under which a license to use the PS Certification Mark may be granted can be obtained from the Bureau of Product Standards, Department of Trade and Industry, 361 Sen. Gil J. Puyat Avenue, Makati City.



Department of Agriculture Bureau of Agriculture and Fisheries Product Standards

Sub-Committee on Crops

Chair

Dr. Elda B. Esguerra
 Postharvest Horticulture Training
 and Research Center
 University of the Philippines Los Baños

Members

- 2 Dr. Leonila M. Varca NCPC-UPLB
- 3 Mrs. Paz B. Austria Bureau of Plant Industry Department of Agriculture
- 4 Dr. Leoncio Raymundo FST-UPLB
- 5 Dr. Dario S. Sabularse Fertilizers and Pesticides Authority Department of Agriculture

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Bureau of Agriculture and Fisheries
Product Standards

Members

Mrs. Angelina A. Bondad
 Mrs. Mary Grace R. Mandigma
 Ms. Lara G. Vivas
 Bureau of Agriculture and Fisheries
 Product Standards

Expert involved

6 Dr. Pablito P. Pamplona USM, Kabacan, Cotabato City