

PHILIPPINE NATIONAL STANDARD

PNS/BAFPS 50:2007
ICS 65.020.20

Fresh vegetables – Ginger – Grading and classification



BUREAU OF PRODUCT STANDARDS

Foreword

The revision of the Philippine National Standard for Ginger (PNS/BAFPS 50:2007) was undertaken in order to reflect the recent technology developments in the industry and the need for harmonization with Codex requirements in Heavy Metals, Pesticide Residues and Hygiene.

PNS/BAFPS 50:2007 supersedes the existing standard for ginger developed by the Philippine Trade Standards (PTS No. 054-09.15: 1968).

Technical Committee (TC) and Sub-Committee were organized by Bureau of Agriculture and Fisheries Product Standards (BAFPS) through the Special Order No. 411, series of 2001 to identify members and experts that shall be involved in the formulation of the revised PNS for Ginger. Modifications were made concerning definition of terms, minimum requirements, classification, packaging, marking and labeling. The draft standard was presented for technical review and public consultations in the three major islands of the country.

The PNS for Ginger aims to provide common understanding on the scope, definition, varieties, minimum requirements, classification, sampling, packaging, marking and labeling, contaminants and hygiene.

Fresh vegetables – Ginger – Grading and classification

1 Scope

This standard establishes a system of grading and classifying mature ginger of the varieties or commercial types grown from *Zingiber officinale* Roscoe.

2 References

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

3 Definitions

For the purpose of this standard, the following definitions apply:

3.1**clean**

practically free from dirt, stains, other foreign materials or absence of caked dirt on the rhizome or between segment of the rhizome

3.2**compact and plump**

the segments are reasonably short, close together and well-rounded

3.3**damage**

any defect which materially affects the appearance of the edible and shipping quality of ginger such as decay, dirt or other foreign matter, mechanical damage, sprout, shriveling, sunburn, and root/rootlets

3.4**dry**

ginger rhizomes are free from external wetness

3.5**fairly well-matured (physiological maturity)**

the skin is tight and reasonably tough, slight brown to dark brown, tender skin permitted on terminal segments or segments adjacent to them, but there is practically no more than slight skinning on brown tender area

3.6**firmness**

the rhizome is unyielding to moderately heavy pressure and is not wilted

3.7

good skin

is characterized as shiny, dry and not moldy

3.8

insect damage

presence of holes and other insect damage usually more than 1 cm or 2 cm long or affects more than 10 % of surface area

3.9

rhizome

a subterranean stem, horizontally elongated which form roots at lower side of the nodes and shoots on the upper side

3.10

well-trimmed

all shoots are removed to have a reasonably smooth scar

4 Minimum requirements

Ginger must meet the following requirements:

- 4.1 Whole, mature, sound and firm;
- 4.2 Clean, with good skin, free from any foreign matter, smell and taste;
- 4.3 Free from damages (as defined in Section 3.3 and 3.8);
- 4.4 Pungent taste based on variety (Annex A); and
- 4.5 Sufficiently dry shiny skin for intended use.

5 Classification

5.1 Extra class – Ginger in this class must be of superior quality and have the characteristic of the variety and/or commercial type. The rhizomes must be clean, well-shaped, and free from defects with the exception of slight superficial defects, provided these do not affect the general appearance of the produce, quality and presentation in the package.

5.2 Class I – Ginger in this class must be of good quality and must have the characteristic of the variety and/or commercial type. The rhizomes must be clean, firm, free from shriveling and without evidence of sprouting. The slight skin defects due to rubbing may be allowed, provided they are healed and dry, the total surface area affected not exceeding 10 per cent and do not affect the general appearance, quality and presentation in the package.

5.3 Class II – This class includes ginger which do not qualify for inclusion in the higher classes, but satisfy the minimum requirements specified in Clause 4. The rhizome should be reasonably firm and the following defects may be allowed provided these do not affect the general appearance, the quality and presentation in the package: (a) slight defects due to rubbing, provided they are healed, dry and the total surface area affected not exceeding 15 %; (b) early signs of sprouting (not more than 10 % by weight by unit presentation); (c) slight markings caused by pests; and (d) healed suberized cracks provided they are completely dry, with very slight traces of soil and bruises.

6 Size classification

Size is determined by the weight of ginger (g) as follows:

Size	Weight (g)
Large	> 300
Medium	150 - 300
Small	< 150

7 Tolerances

7.1 Quality tolerance (physical)

7.1.1 Extra class I – Five per cent by number or weight of ginger not satisfying the requirements of the class but meeting those of Class II or, exceptionally, coming within the tolerance of that class.

7.1.2 Class I – Ten per cent by number or weight of ginger not satisfying the requirements of the class, but meeting those of Class II or, exceptionally coming within the tolerance of that class.

7.1.3 Class II – Ten per cent by number or weight of ginger 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.

7.2 Size tolerance

Extra class – Five per cent, and for **Classes I and II**, 10 % by number or weight of ginger not satisfying the requirements of the class.

8 Sampling

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

9 Packaging

Ginger must be packed in suitable containers that will avoid causing any external or internal damage to the produce. The containers shall meet the quality, hygiene, ventilation and resistance characteristics to ensure suitable handling, shipping and preserving of ginger.

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 weight (kg);
- 10.4** Name and address of producer, trader and exporter; and
- 10.5** Product of the Philippines.

11 Contaminants

11.1 Heavy metals

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

11.2 Pesticide residues

Ginger shall comply with those 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 Codes of Hygienic Practice and Codes of Practice.

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

Annex A

Table 1 – Varieties of ginger grown in the Philippines.

Varieties	Size of rhizomes	Pungency
1. Native	Small	Strongly pungent
2. Taiwan	Medium	Moderately pungent
3. Hawaiian	Large	Less pungent

References

PNS/BAFPS 50:2007

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.

Codex Standard for Ginger. Codex Standard 218, 1999.

Guidelines for Procurement/Acceptance, Handling and Quality Inspection for Vegetables: Food Terminal Inc. 1981.

Philippine Trade Standards Specifications for Ginger. PTS 054-09.15, 1968.

PNS/ISO 874: 1980 (e): Fresh Fruits and Vegetables – Sampling.

B P S

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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.



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