

PHILIPPINE NATIONAL STANDARD

PNS/BAFPS 17:2005
ICS 65.020.20

**Vegetables – Cabbage (*Brassica oleracea* var, *capitata* L.) –
Grading and classification**

Foreword

The formulation of this **PNS/BAFPS 17:2005**, Philippine National Standard for Vegetables – Cabbage (*Brassica oleracea* var, *capitata* L.) – Grading and classification, was initially drafted by the Bureau of Agriculture and Fisheries Product Standards (BAFPS) with reference to Philippine Trade Standard Specification for Fresh Cabbage (1968); Food Terminal Inc. Quality and Grade Specifications for Cabbage (1981); US Standards for Grades of Cabbage (1987) and CBT Product Grades, Packaging, Storage and Seasonality (1994).

This standard was reviewed by the BAFPS' Technical Committee prior to its presentation in a public consultation in the three major islands of the country. Comments from the stakeholders were carefully evaluated and were inputted accordingly in the final draft.

The Technical Committee created by BAFPS for this purpose was composed of experts from DA-AMAS, DA-NAFC, PHTRC-UPLB, IPB-UPLB and the Vegetables Growers Association

**Vegetables – Cabbage (*Brassica oleracea* var, *capitata* L.) –
Grading and classification**

1 Scope

This standard applies to fresh cabbage, *Brassica oleracea* var, *capitata* L.

2 References

The titles of the standards publications referred to in this standard are listed on the inside back cover.

3 Definitions**3.1 Product definition****3.1.1
cabbage**

a head-bearing plant belonging to the Brassicacea family whose main axis is short and thick and the leaves are densely packed into gigantic bud of head. The heads are of various shapes: flat, round, egg-shaped, oval and conical. The leaves vary also in color: light yellowish green, dark green, blue green, dark red or purple

**3.1.2
wrapper leaves**

leaves which do not enfold the head fairly more than two-thirds the distance from the base to the top

3.2 Essential composition and quality factors**3.2.1 Quality factors****3.2.1.1
clean**

the head is practically free from dirt, filth or other foreign matter, including dead and live insects

**3.2.1.2
closely trimmed**

the head of cabbage have no wrapper leaves

**3.2.1.3
compact head**

the head is firm to fairly firm, not soft or puffy; does not yield readily to pressure

**3.2.1.4
fairly well-trimmed**

the head of cabbage shall not have more than seven (7) wrapper leaves

3.2.1.5

fresh

turgid to relatively turgid wrapper and outer leaves

3.2.1.6

similar varietal characteristics

cabbage in each container/crate shall have the same general varietal characteristics

3.2.1.7

well-trimmed

the head of the cabbage shall not have more than four (4) wrapper leaves; stem does not extend more than 1.5 cm beyond the point of attachment of the outermost leaf

3.2.2 Defects

Examples of Cabbage with and without defect are shown in Annex A.

3.2.2.1

black leaf speck

small, sharply sunken brown or black spots affecting the wrapper or outer head leaves

3.2.2.2

burst head

opening of the head as a result of over-maturity or growth pressure

3.2.2.3

decay

softening of tissue caused by rot-causing organisms characterized by softening of tissue and a foul odor in the advanced stage

3.2.2.4

excessively trimmed

the outer head leaves have been removed exposing the tender white inner leaves

3.2.2.5

insect injury

holes perforating to a depth of more than 1 ½ cm into the head

3.2.2.6

mechanical damage

torn leaves, bruises and other physical injuries which seriously affect the appearance and marketability of the cabbage

3.2.2.7

puffy head

the head is very light in weight relative to its size due to the presence of fairly large air spaces in the inner portion of the head causing it to yield readily to moderate pressure

3.2.2.8

tip burn

browning/blackening of the leaf margin of the outer and inner leaves of the cabbage head

3.2.2.9

wilting

withering of wrapper or outer leaves due to loss of turgidity

4 Classification

4.1 Cabbage shall be classified according to its type or varietal characteristics:

4.1.1 Highland or moderately-high elevation variety

4.1.1.1 Savoy – light green, curly leaves; rounded head

4.1.1.2 White – white leaves, rounded head

4.1.1.3 Red – red leaves, rounded head

4.1.2 Lowland variety – Light green leaves, flat head

4.2 Cabbage that are well trimmed shall be classified according to head size:

4.2.1 Small – <0.50 kg

4.2.2 Medium – 0.51 kg - 1.0 kg

4.2.3 Large – 1.1 kg - 1.5 kg

4.2.4 Extra Large – >1.5 kg

5 Grading

5.1 Grade 1 – Consist of cabbage heads which meet the following requirements:

5.1.1 Cabbage head is clean, of similar varietal characteristics, solid or compact, shall have no more than four (4) wrapper leaves, well trimmed and stem shall be cut to within 1.5 cm below the wrapper leaves

5.1.2 Free from damage due to:

- a) decay
- b) excessive trimming
- c) mechanical damage
- e) burst head
- f) tip burn
- g) insect injury
- h) black leaf speck
- i) wilting
- j) other means

5.2 Grade 2 – Shall consist of heads of cabbage which is fairly well trimmed to closely trimmed which meet the requirements for Grade 1.

5.3 Grade 3 – Shall consist of cabbage which does not meet the requirements specified in Grade 2 but which do not show signs of decay, and extent/severity of mechanical injuries must be no more than ten percent of the surface head.

6 Sampling and Methods of Analysis

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

7 Tolerance

7.1 Grade 1 – The sample examined must not show more than five percent (5%) total defects

7.2 Grade 2 – The sample examined must not show more than ten percent (10%) total defects.

7.3 Grade 3 – The sample examined must not show more than fifteen percent (15%) total defects

8 Packing

Fresh cabbage of the same variety shall be packed in plastic/wooden crates, similar containers to protect them against mechanical damage and to facilitate handling and transport. The weight of the produce must be within the capacity of the container but not to exceed 25 kg.

9 Marking

The outside of each container shall have a label of legible characters grouped on the same side, stamped to provide the following:

- 9.1** Name of the product;
- 9.2** Type/variety;
- 9.3** Name and address of grower (s)/supplier(s); and
- 9.4** Net weight in kilograms.

10 Contaminants

Pesticide residues

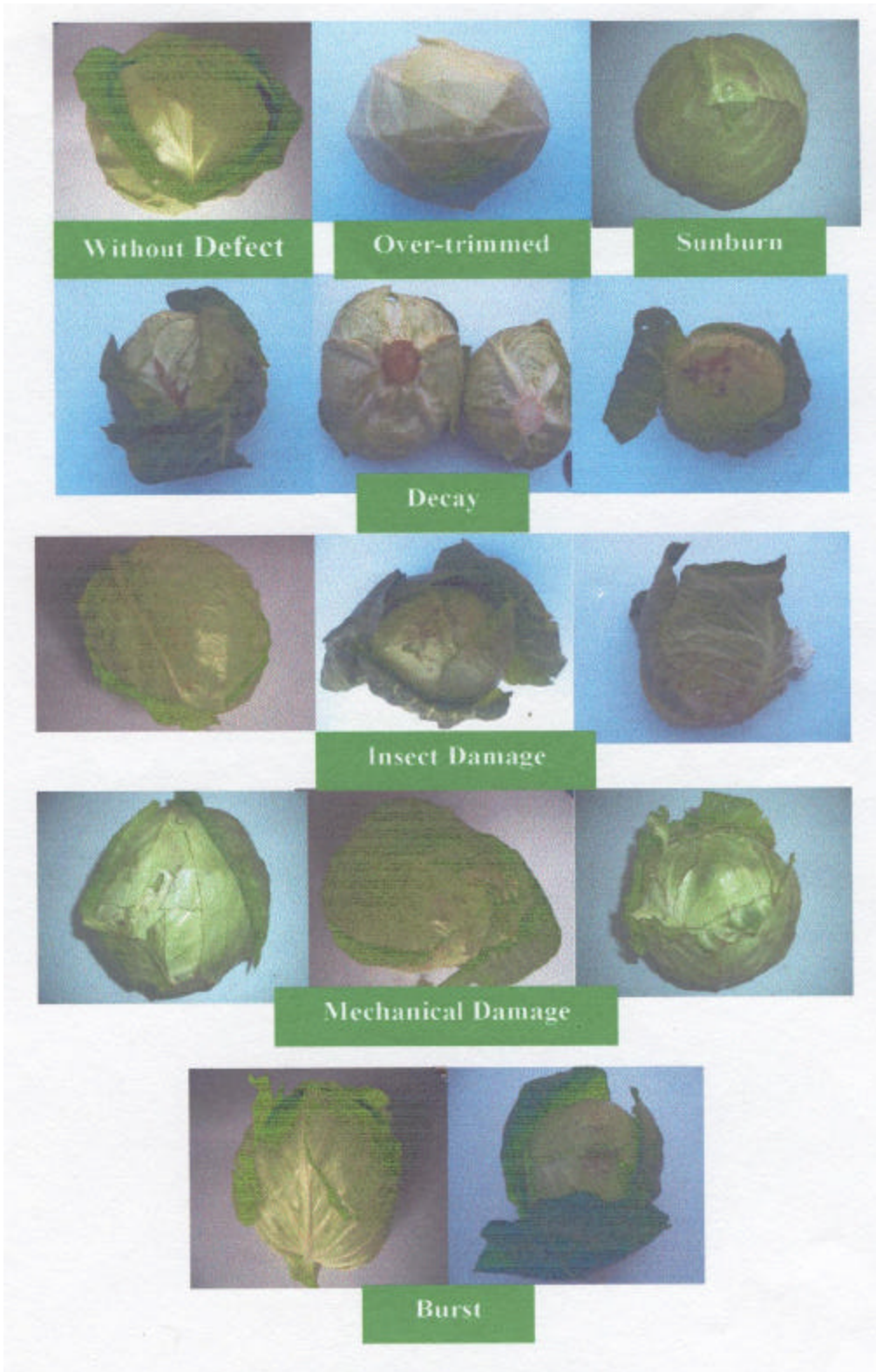
Fresh cabbage shall comply with those maximum residue levels established by the Codex Alimentarius Commission for this produce.

11 Hygiene

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. 3 – 1997, Amd. (1999), and other relevant Codex texts such as Codes of Hygiene Practice and Codes of Practice.

Annex A

Examples of Cabbage with and without defect



References

PNS/BAFPS 17:2005

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

CAC Vol. 2 (1993), Pesticide Residue in Foods

CAC/RCP 1 – 1969, Rev. 3 – 1997, Amd. (1999), Recommended International Code of Practice General Principles of Food Hygiene

Food Terminal Inc. Quality and Grade Specifications for Cabbage (1981)

Philippine Trade Standard Specification for Fresh Cabbage (1968)

PNS/ISO 874-Sampling and Methods of Analysis

US Standards for Grades of Cabbage (Revised 1997)

CBT Product Grades, Packaging, Storage and Seasonality (1994)

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.



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