

PHILIPPINE NATIONAL STANDARD

PNS/BAFPS 04:2003
ICS 65.020.20

**Fresh cut flowers – Chrysanthemum (Standard) –
Specification**

Foreword

This Philippine National Standard for Fresh Chrysanthemum (*Dendrathera*) cut flower standard type was initially undertaken by the Sub-Committee on Ornamentals of the Technical Committee on Standards organized by the Bureau of Plant Industry in 1997.

In 2001, the Bureau of Agriculture and Fisheries Product Standards (BAFPS) conducted series of technical reviews and public consultations on the draft standards of fresh chrysanthemum cut flower standard type prior to its approval.

The Technical Committee and Sub-Committees of BAFPS organized through the Special Order No. 411, series of 2001 set the classification of fresh chrysanthemum cut flower standard type based on their physical characteristics and current practices existing in the sectors concerned.

Fresh cut flowers – Chrysanthemum (Standard type)

1 Scope

This standard specifies requirements and establishes a system of grading and classifying chrysanthemum (*Dendratherema*) for fresh cut flowers (standard type) of all genera and varieties for ornamental purposes.

2 References

Titles of standards published and other references of this standard are listed on the inside back cover.

3 Definitions

For purposes of this standard, the following definitions shall apply:

3.1**appropriate stage of development**

stage of harvesting or maturity index of chrysanthemum cut flowers that will ensure maximum flower opening after subsequent handling and/or storage

3.2**defects of development****3.2.1****burning**

Discoloration on the edges of the foliage caused by several factors such as over dose of pesticide.

3.2.2**deviation or curvature**

measurement of the straightness of the stem along a straight line and noting the natural deviation from the line

3.2.3**malformation**

abnormality in the shape of the petals or of the whole flower, foliage or stem that materially detracts from the appearance of the fresh cut flower

3.3**extraneous matter**

soil, pesticide residues and other dirt adhering on the flower, stem or foliage that impairs its quality

3.4

flower form

variation in the size, shape and curvature of petals of chrysanthemum flower (Annex A)

3.5

fresh cut flower (standard type)

a fresh flower complete with stem, foliage and flower; sometimes referred to as the "mum"

3.6

package

the smallest master carton with marking as specified in section 9.2 that contains the standard mum

3.7

pests of animal or plant origin

insects whether adult, larvae or eggs, signs of pathogenic infection and parasitic plants present on the fresh cut flower.

3.8

standard type chrysanthemum

consists of a single flower borne on the terminal portion of a single stem

3.9

unit presentation

the smallest unit of each presentation sold as a bundle, box or consumer pack

4 Minimum requirements

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

4.1 The mums shall have reached an appropriate stage of development (Annex B).

4.2 The mums shall be fresh, of a form typical of the variety and free of visible pests of animal or plant origin.

4.3 Foliage shall be present.

4.4 The condition of the mums shall be such as to enable it to withstand normal handling and transport until it arrives in satisfactory condition at the place of destination.

5 Classification

Mums shall be classified according to their general appearance and physical characteristics as follows:

5.1 Extra class – Mums in this class shall be of superior quality. They shall have all the characteristics of the genus and of the variety. All parts of the stem, foliage and flower shall be:

- of uniform color and/or stage of openness;
- free from damage caused by pests of animal and plant origin;
- free from soil, chemical pesticides and other extraneous matter affecting appearance;
- free of burning or discoloration;
- free of malformation and other defects of development;
- free from twisting or woodiness in the stem and deviation or curvature exceeding more than 2.5 cm (Annex C);
- free from shattering, bruising and other damage associated with handling and treatment.

5.2 Class I – Mums in this class shall be of good quality. They shall have all the characteristics of the genus and of the variety. All parts of the stem, foliage and flower shall be as follows:

- of uniform color and/or stage of openness;
- practically free from damage caused by pests of animal and plant origin;
- practically free of soil, chemical pesticides and other extraneous matter affecting the appearance;
- practically free of burning and discoloration;
- practically free of malformation and other defects of development;
- free from twisting or woodiness in the stem and deviation or curvature of more than 2.5 cm (Annex C);
- free from shattering, bruising and other damage associated with handling and treatment.

5.3 Class II – This class comprises of mums which satisfy the minimum requirements specified. The defects permitted shall not impair the keeping quality and appearance of the flowers. The flowers or any of its parts may have the following defects:

- slight discoloration;
- slight damage caused by diseases and pests;
- slight presence of soil, chemical pesticides and other extraneous matter;
- slight bruising;
- slight malformation as long as it does not affect normal flower opening;
- slight stem deviation or curvature not exceeding 3.5 cm;

The foliage should be uniformly green for at least upper 2/3.

6 Size classification

6.1 The length shall be measured from the base of the stem to the tip of the terminal flower. Stem length within a unit presentation shall be uniform.

6.2 Flower diameter and stem specifications for each class shall be as follows:

Class	Minimum Stem Length (cm)	Minimum Flower Diameter (cm)	
		Half-bloom	Full bloom
Extra Class	80	9	14
Class I	70	8	12
Class II	60	7	10

7 Tolerances

7.1 Quality tolerances

7.1.1 Extra Class – Five percent of the stems by number, may have slight defects on condition that the uniformity of the flowers in a package is not affected.

7.1.2 Classes I and II – Ten percent of the stems, by number may have slight defects provided that uniformity in a package is not affected the utility of the flower is not impaired.

7.2 Size tolerance

Length tolerance shall be permitted in a package. In all classes, ten percent of the mums by number may differ from the length requirements of the length code provided the difference does not exceed 5 cm.

8 Packaging

8.1 A unit presentation shall consist of a multiple of five of the mums depending on the size of the package.

8.2 Each unit presentation shall be properly bunched, tied and sleeved with appropriate material.

8.3 Each package may contain mums of any genera and of length codes provided they are of the same quality classification.

8.4 Packing shall provide adequate protection. The materials used for the insides of the package in contact with the flowers shall be clean, and of such quality as to avoid external or internal damage to flowers.

9 Labeling

The label of each package shall have the following information:

9.1 Name of product, cultivar and color

9.2 Quality classification, length code and flower form

9.3 Number of stems

9.4 Name and address or registered code of supplier and/or exporter

9.5 Country of origin

10 Sampling

Sampling size for certification purposes shall be based on the accepted statistical sampling scheme as agreed upon between the certifying agency and the supplier and/or exporter

11 Compliance with specification

When found to comply with the requirements specified in this Philippine Standard Specification, the lot, the batch or the consignment from which the samples have been drawn, shall be deemed to comply with this Philippine Standard Specification and shall be provided with the Philippine Standard (PS) mark.

Annex A

Flower forms

1. **Anemone** - Similar to a Daisy except the center is larger, forming a cushion that is surrounded by flower petals.
2. **Fuji** – Similar to the spider except the petals may be shorter, droop less, and lack hooks on the ends.
3. **Incurve** - Globose and formal with the individual petals curving upward and toward the top of the flower.
4. **Quill** - Petals are tubular, elongated on the outside, and short near the center of the flower, resembling feather quills. Ends of petals are open and not flattened.
5. **Reflexed** – Less globose and formal than the incurve with overlapping petals that are curved downward.
6. **Spider** – Petals are tubular and elongated in the outer rows but short in the center of the flower. The drooping outer row of petals are sometimes hooked on the ends
7. **Spoon** – Similar to the quill except the outer row petals are open and are flattened, resembling a spoon.

Annex B

Chrysanthemum – (Standard type)



STAGE 1



STAGE 2



STAGE 3



STAGE 4

Figure B – Chrysanthemum – Stages of Development

References

PNS/BAFPS 04:2003

Malaysian Standards: Specification for Chrysanthemum Cut Flowers (Standard type):
Standard and Industrial Research Institute of Malaysia (SIRIM).

Recommended Grades and Standards for Fresh Cut Flowers. Floral Marketing Association, 1500 Cacho Mill Road, P.O. Box 6036, Newark, Delaware 19714-6036.

B P S

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