

PHILIPPINE NATIONAL STANDARD

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ICS 65.020.20

**Fresh cut flowers – Chrysanthemum (Spray type) –
Specification**



BUREAU OF PRODUCT STANDARDS

Foreword

This Philippine National Standard for Fresh Chrysanthemum (*Dendratherma*) cut flower spray 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 spray 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 spray type based on their physical characteristics and current practices existing in the sectors concerned.

1 Scope

This standard specifies requirements and establishes a system of grading and classifying chrysanthemum (*Dendratherma*) for fresh cut flowers (spray 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 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 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 curling of petals of chrysanthemum flower (Annex A)

3.5

fresh cut flower (spray type)

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

3.6

package

the smallest master carton with marking as specified in section 6.2 that contains the spray 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

shattering

individual petals of chrysanthemum separate from the flower, usually caused by rough handling and disease

3.9

spray type chrysanthemum

several flowers are borne in a single stem

3.10

unit presentation

the smallest unit of each presentation either in bundle or consumer pack

4 Minimum requirements

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

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

4.2 The spray shall be fresh, normally formed and free from visible parasites of animal or plant origin.

4.3 Foliage shall be present and uniformly green.

4.4 The condition of the spray mum 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 as follows:

- 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 and discoloration;
- free of malformation and 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 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 should not be 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 consists of spray mums which satisfy the minimum requirement specified in Section 4. The defects permitted shall not impair the keeping quality and appearance of flower. The flower 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 visible 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, stem specifications and minimum flower count per stem for each class shall be as as shown in Table 1.

Class	Minimum stem length (cm)	Minimum flower diameter (cm)	Minimum flowers per stalk
Extra class	80	7	9
Class I	70	6	8
Class II	60	5	7

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 Class I and Class II – Ten percent of the stems, by number, may have slight defects on condition that the uniformity of the flowers in a package is not affected and that the defects in question will not impair the utility of the flowers.

7.2 Size tolerance

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

8 Packaging

8.1 Flowers are packed in bulk or by count, the total amount depending on box size and customer order. A 104 cm x 51 cm x 18 cm box for example, shall contain not more than 40 bunches of bundles (10 blooms/bundle of bunch). A consumer pack (if not bunched) may contain, multiples of five depending on the size of the box.

8.2 Each unit presentation shall be properly bunched, tied and sleeved with appropriate material unless flowers are placed in the consumer pack unbunched.

8.3 Each package may contain the spray mums of any cultivar/hybrids and of length codes provided they are of the same quality classification.

8.4 Packaging 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 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 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** – A flower form that is similar to a daisy except the center is larger, forming a cushion that is surrounded by flower petals.
2. **Fuji** – A flower form similar to the spider except the petals may be shorter, droop less, and lack hooks on the ends.
3. **Incurve** – A flower form that is globose and formal with the individual petals curving upward and toward the top of the flower.
4. **Quill** – Flower form that features petals that 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** – A flower form that is less globose and formal than the incurve with overlapping petals that are curved downward.
6. **Spider** – A flower form that features petals that 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** – A flower form similar to the quill except the outer row petals are open and are flattened, resembling a spoon.

Annex B

Chrysanthemum (Spray type)

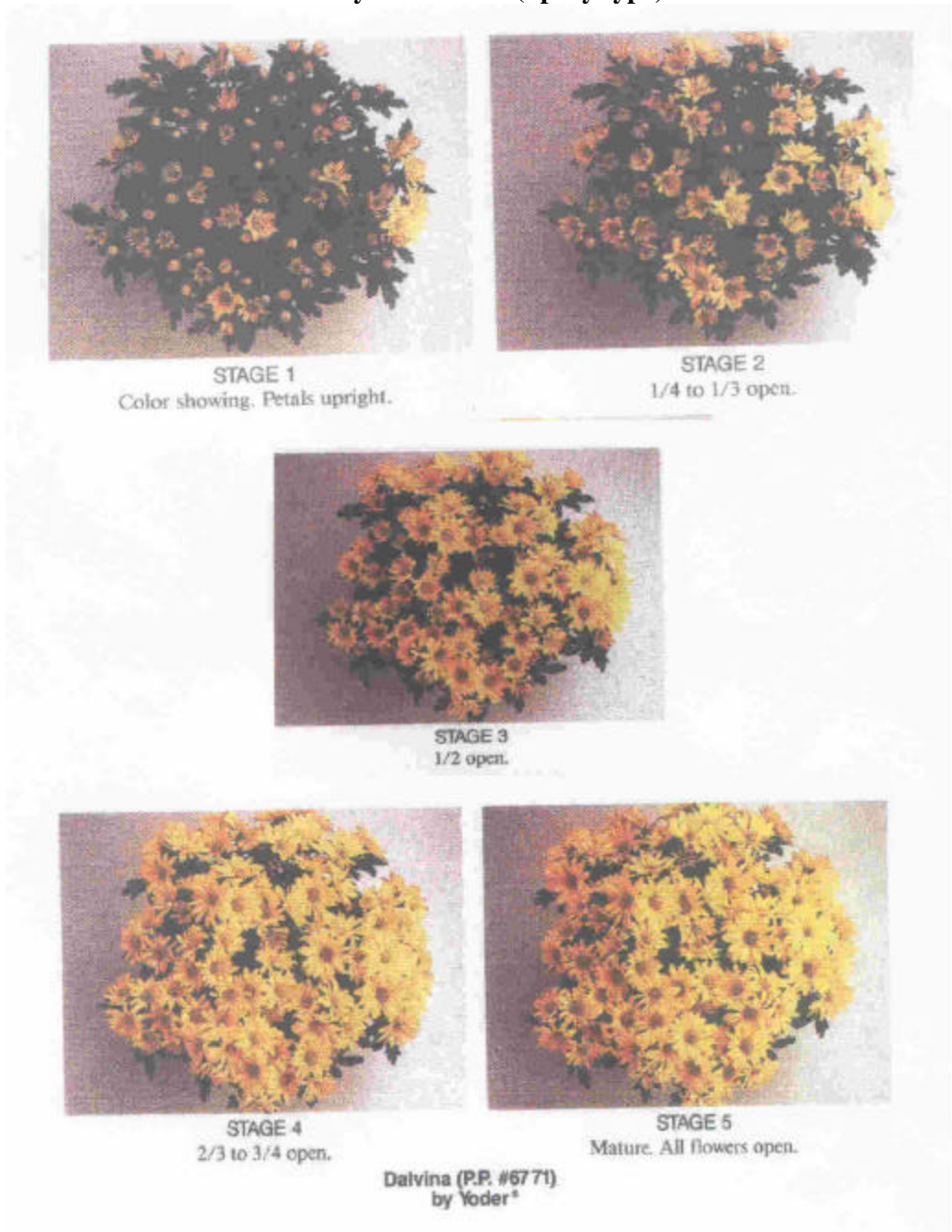


Figure B– Stages in flower development of daisy pot mums

References

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Malaysian Standards: Specification for Chrysanthemum Cut Flowers (Spray Type): Standard and Industrial Research Institute of Malaysia (SIRIM). 1992.

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

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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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