

# PHILIPPINE NATIONAL STANDARD

PNS/BAFPS 03:2003  
ICS 65.020.20

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**Live flowering potted plants – Chrysanthemum**



**BUREAU OF PRODUCT STANDARDS**

**Foreword**

This Philippine National Standard for live flowering potted chrysanthemum (*Dendratherma*) plants 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 live flowering potted chrysanthemum plants prior to its approval.

The Technical Committee and Sub-Committees of BAFPS organized through the Special Order No. 411, series of 2001 made modifications on the definition of terms and set the classification of live flowering potted chrysanthemum plants based on their physical characteristics and current practices existing in the sectors concerned.

**Live flowering potted plants – Chrysanthemum**

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**1 Scope**

This standard specifies requirements and establishes a system of grading and classifying live potted flowering chrysanthemum (*Dendratherma*) plants of all genera and varieties for ornamental purposes.

**2 References**

The titles of 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 shall apply:

**3.1****appropriate stage of development**

maturity index of chrysanthemum flowers that will ensure maximum flower opening after subsequent handling and storage

**3.2****care tag**

this should give the product name, and use care information for water, light, temperature and other pertinent information

**3.3****live potted chrysanthemum**

this shall consist of one or more cuttings per pot, equally distributed around the pot or centered in the pot; the live flowering potted chrysanthemum shall be referred to as the “pot mums”

**3.4****multiple flower**

a stem or branch with numerous flowers, often in various stages of maturity

**3.5****product dimension of the pot**

plants prior to sleeving or six to eight hours after plants have been unsleeved

**3.6**

**package**

the smallest box with markings as specified in the section that will contain the pot mums

**3.7**

**single flower**

a stem or branch of the plant that terminates with one single flower, with all side buds removed

**3.8**

**stage of openness**

this should refer to the maximum obtainable shelf life, assuming plants will be going into an environment of 20°C - 22°C with a minimum light of 3,350 lux

**3.9**

**unit presentation**

the smallest unit of each presentation, that is the pot

**4 Minimum requirements**

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

**4.1** The plant must have reached an appropriate stage of developmental bearing flowers.

**4.2** The plant must be live, healthy and free of visible pests of animal or plant origin and symptoms.

**4.3** The condition of the plant shall be such as to enable it to withstand normal handling and transport until it arrives in satisfactory condition at the point of destination.

**5 Classification and sizing**

The quality of the plant shall be classified into six classes according to their general appearance and physical characteristics (Table 1) as follows:

**5.1 Miniature grade** – Pot mums belonging to this grade should have the following characteristics:

**5.1.1 Product dimensions** – There should be a good balance between the size of the plant and the pot. The plant should fill the pot enough to prevent the appearance of legginess. The height of the product should be from a minimum of 22.9 cm to a maximum of 30.5 cm as measured from the bottom of the pot to the top of the plant. The minimum width at the top of plants shall be 18 cm. Generally, miniature grade pot mums are grown in 10.2 cm - 11.3 cm pots.

**5.1.2 Number of flower buds** – The plant shall have a minimum of four (4) flowers to the degree of openness as specified. Pot mum shall also have a good floral display with uniform distribution of flowers about the pot.

**5.1.3 Stage of openness** – The stage of flower openness for decorative mums shall be  $\frac{1}{2}$  to  $\frac{3}{4}$  open. Daisy mums must have ? -  $\frac{1}{2}$  open (Annex A).

**5.1.4 Characteristics** – The foliage shall be healthy, with good color, showing no evidence of nutritional deficiencies, disease, insect damage, spray residues, or mechanical injury. Stems must be strong enough to support the flowers. The plant shall be sturdy in the pot with a healthy root system. Soil shall be damp.

**5.1.5 Care tags** – Care tags with proper product identification and care information shall be attached to the plant or pot.

**5.2 Small grade** – The plant belonging to this grade shall have the following characteristics:

**5.2.1 Product dimensions** – There shall be a good balance between the size of the plant and pot. The plant shall fill the pot enough to prevent the appearance of legginess. The height of the product shall be from a minimum of 28 cm to a maximum of 35.6 cm as measured from the bottom of the pot to the top of the plant. The minimum width at top of plants shall be 25 cm.

Generally, small grade pot mums are grown in 12.7 cm pots.

**5.2.2 Number of flower buds** – The plant shall have a minimum of 10 single flowers of 25 multiple flowers to the degree of openness as specified. They shall also have a good floral display with uniform distribution of flowers about the pot.

**5.2.3 Stage of openness** – The stage of openness for decorative mums shall be  $\frac{1}{2}$  to  $\frac{3}{4}$  open. Daisy mums must be ? to  $\frac{1}{2}$  open (Annex A).

**5.2.4 Characteristics** – The foliage shall be healthy, with good color, showing no evidence of nutritional deficiencies, disease, insect, spray residues or mechanical injury. Stems must be strong enough to support the flowers. The plant shall be sturdy in the pot with a healthy root system. Soil shall be damp.

**5.2.5 Care tags** – Care tags with proper product identification and care information shall be attached to the plant or pot.

**5.3 Medium Grade** – Pot mums belonging to this grade shall have the following characteristics:

**5.3.1 Product dimensions** – There shall be a good balance between the size of the plant and pot. The plant should fill the pot enough to prevent the appearance of legginess. The height of the product shall be from a minimum of 30.5 cm to a maximum of 38.1 cm as measured from the bottom of the pot to the top of the plant. The minimum width at top of plant shall be 28 cm.

**5.3.2 Number of flower buds** – The plants shall have a minimum of single flowers or 27 multiple flowers to the degree of openness specified. The plant shall also have a good floral display with uniform distribution of flowers about the pot.

**5.3.3 Stage of openness** – The stage of openness for decorative mums shall be  $\frac{1}{2}$  to  $\frac{3}{4}$  open. Daisy mums must be  $\frac{1}{2}$  to  $\frac{3}{4}$  open (Annex A).

**5.3.4 Characteristics** – The foliage shall be healthy with good color, showing no evidence of nutritional deficiencies, disease, insect damage, spray residues, or mechanical injury. Stems shall be strong enough to support the flowers. The plant shall be sturdy in the pot with a healthy root system. Soil shall be damp.

**5.3.5 Care tags** – Care tags with proper product identification and care information shall be attached to the plant or pot.

**5.4 Large grade** – Pot mums belonging to this grade shall have the following characteristics:

**5.4.1 Product dimensions** – There shall be a good balance between the size of the plant and pot. The plant shall fill the pot enough to prevent the appearance of legginess. The height of the product shall be from a minimum of 33 cm to a maximum of 43 cm as measured from the bottom of the pot to the top of the plant. The minimum width at top of plant shall be 30 cm.

Generally, large grade mums are grown in 15.2 cm pot.

**5.4.2 Number of flower buds** – The plant shall have a minimum of 12 single flowers or 30 multiple flowers to the degree of openness as specified. They shall also have good floral display with uniform distribution of flowers about the pot.

**5.4.3 Stage of openness** – The stage of flower openness for decorative mums shall be  $\frac{1}{2}$  to  $\frac{3}{4}$  open. Daisy mums must be  $\frac{1}{2}$  to  $\frac{3}{4}$  open (Annex A).

**5.4.4 Characteristics** – The foliage shall be healthy, with good color, showing no evidence of nutritional deficiencies, disease, insect damage, spray residues, or mechanical injury. Stems shall be strong enough to support the flowers. The plant shall be sturdy in the pot with a healthy root system. Soil shall be damp.

**5.4.5 Care tags** – Care tags with proper product identification and care information shall be attached to the plant or pot.

**5.5 Extra large grade** – Pot mums in this grade shall have the following characteristics:

**5.5.1 Product dimensions** – There shall be a good balance between the size of the plant or pot. The plant should fill the pot enough to prevent the appearance of legginess. The height of the product shall be from a minimum of 35.6 cm to a maximum of 45.7 cm as measured from the bottom of the pot to the top of the plant. The minimum width at top of plant shall be 36 cm.

Generally, extra large mums are grown in 16.5 cm pots.

**5.5.2 Number of flower buds** – The plant shall have a minimum of 15 single flowers or 37 multiple flowers to the degree of openness as specified. They shall also have a good floral display with uniform distribution of flowers about the pot.

**5.5.3 Stage of openness** – The stage of flower openness for decorative purposes shall be  $\frac{1}{2}$  to  $\frac{3}{4}$  open. Daisy mums must be  $\frac{1}{2}$  to  $\frac{3}{4}$  open (Annex A).

**5.5.4 Characteristics** – The foliage shall be healthy, with good color, showing no evidence of nutritional deficiencies, disease, insect damage, spray residues, or mechanical injury. Stems shall be strong enough to support the flowers. The plant shall be sturdy in the pot with a healthy root system. Soil shall be damp.

**5.5.5 Care tags** – Care tags with proper product identification and care information should be attached to the plant or pot.

**5.6 Jumbo grade** – Pot mums belonging to this grade shall have the following characteristics:

**5.6.1 Product dimensions** – There should be a good balance between the size of the plant and pot. The plant should fill the pot enough to prevent the appearance of legginess. The height of the product should be from a minimum of 38.1 cm to a maximum of 50.8 cm as measured from the bottom of the pot to the top of the plant. The minimum width at top of plants should be 38 cm.

Generally, jumbo grade mums are grown in 17.8 cm to 20.3 cm pots.

**5.6.2 Number of flower buds** – The plant should have a minimum of 18 single flowers or 45 multiple flowers to the degree of openness as specified. Plant should also have a good floral display with uniform distribution of flowers about the pot.

**5.6.3 Stage of openness** – The stage of flower openness for decorative mums must be  $\frac{1}{2}$  to  $\frac{3}{4}$  open. Daisy mums must be  $\frac{1}{2}$  to  $\frac{3}{4}$  open (Attachment 1).

**5.6.4 Characteristics** – The foliage must be healthy, with good color, showing no evidence of nutritional deficiencies, disease, insect damage, spray residues, or mechanical injury. Stems must be strong enough to support the flowers. The plant must be sturdy in the pot with a healthy root system. Soil must be damp.

**5.6.5 Care tags** – Care tags with proper product identification and care information must be attached to the plant or pot.

## 6 Tolerances

Quality tolerance has not yet been established for live potted plants.

**7 Packaging**

Packaging shall provide adequate protection. The materials used should be properly rigid to protect the plants from compression damage due to stacking and properly immobilized to minimize damage due to vibration during handling and transport.

**8 Labeling**

The label of each package shall have the following information:

- 8.1** Name of product, commercial type
- 8.2** Classification and size
- 8.3** Number of pot mums
- 8.4** Name and address or registered code of supplier and/or exporter
- 8.5** Country of origin

**9 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.

**10 Compliance with specification**

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



**Table 1 – Product characteristics of live pot mums.**

<b>Grade</b>	<b>Product dimension</b>	<b>No. of flower bud</b>	<b>Stage of openness</b>	<b>Characteristics</b>	<b>Care tags</b>
Miniature	Height: 22.9-30.5 cm Top width: 18 cm Pot size: 10.2-11.3 cm	Minimum of 4	Decorative mums: 1/2-3/4 open	Healthy foliage, strong stem, healthy root, damp soil	Yes
Small	Height: 28-35.6 cm Top width: 25 cm Pot size: 12.7 cm	At least 10 singles; 25 multiples	Decorative mums: 1/2-3/4 open Daisy mums: ? -1/2 open	Healthy foliage, strong stem; healthy root system; damp soil	Yes
Medium	Height: 30.5-38 cm Top width: 28 cm Pot size: 14 cm	At least 11 singles; 27 multiples	Decorative mums: 1/2-3/4 open Daisy mums: ? -1/2 open	Healthy foliage, strong stem, healthy root system, damp soil	Yes
Large	Height: 33-43 cm Top width: 30 cm Pot size: 15.2 cm	At least 12 singles; 30 multiples	Decorative mums: 1/2-3/4 open Daisy mums: ? -1/2 open	Healthy foliage, strong stem. Healthy root system, damp soil	Yes
Extra Large	Height: 38.1-45.7 cm Top width: 36 cm Pot size: 16.5 cm	At least 15 singles; 37 multiples	Decorative mums: 1/2-3/4 open Daisy mums: ? -1/2 open	Healthy foliage, strong stem, healthy root system, damp soil	Yes
Jumbo	Height: 38-50.8 cm Top width: 38 cm Pot size: 17.8-20.3 cm	At least 18 singles; 45 multiples	Decorative mums: 1/2-3/4 open Daisy mums: ? -1/2 open	Healthy foliage, strong stem, healthy root system, damp soil	Yes

Source: Recommended Grades and Standards for Potted Plants. Floral Marketing Association/Society of American Florists.

Annex A

Live flowering potted plants - Chrysanthemum

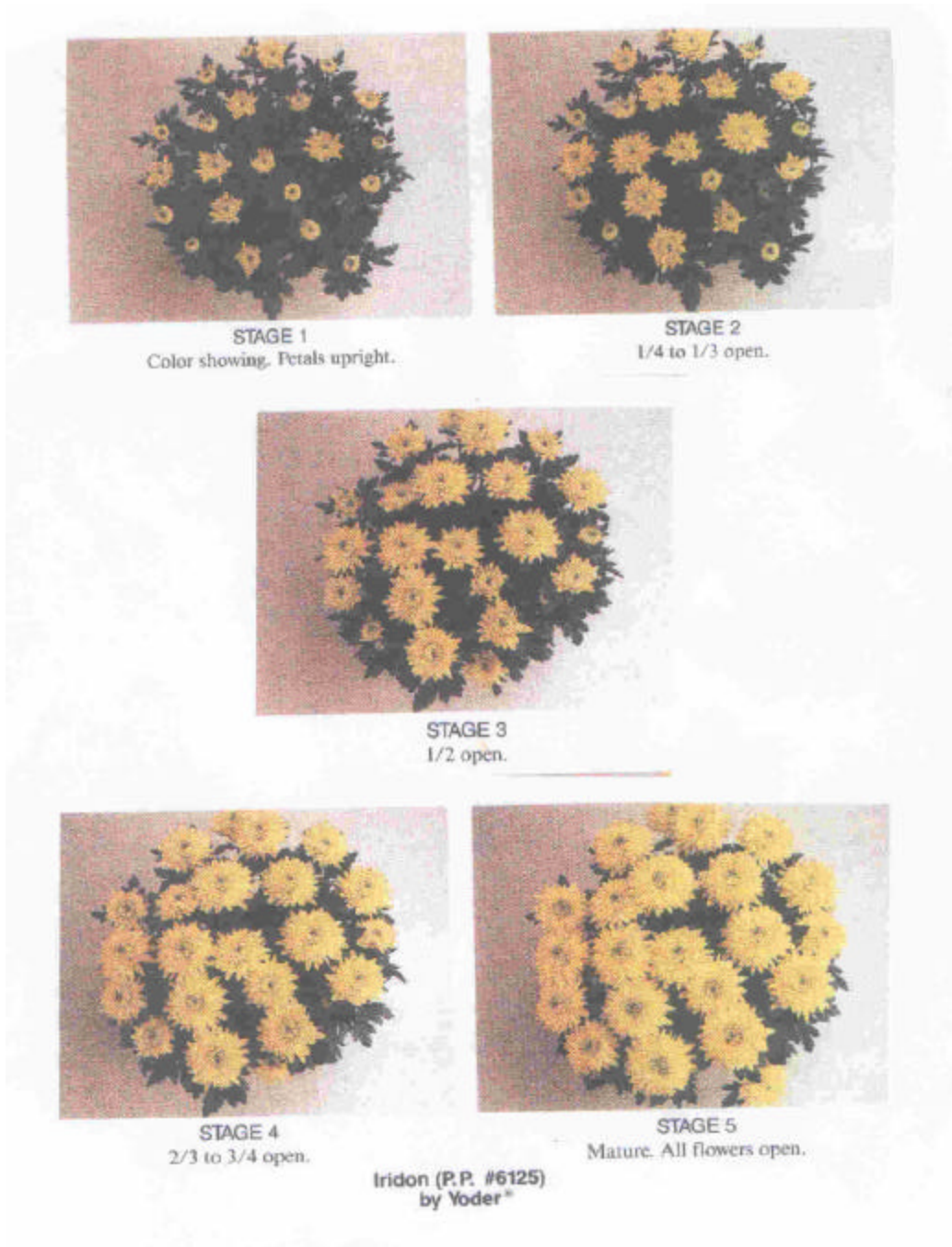


Figure A – Stages in flower development of decorative pot mums

## Reference

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Recommended Grades and Standards for Potted Plants. Floral Marketing Association/  
Society of American Florists.

**B P S**

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