



(12) **United States Plant Patent**  
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(54) **CHRYSANTHEMUM PLANT NAMED**  
**‘PURPLE MIST’**

(50) Latin Name: *Chrysanthemum*×*morifolium*  
Varietal Denomination: **Purple Mist**

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(52) **U.S. Cl.**  
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(58) **Field of Classification Search**  
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See application file for complete search history.

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(57) **ABSTRACT**

A new cultivar of *chrysanthemum* plant botanically known as  
*Chrysanthemum*×*morifolium*, and commercially referred to  
by the varietal name ‘Purple Mist’. The new cultivar has a  
single inflorescence form with purple ray florets, uniform  
habit and flowering response that is late, strong stems,  
medium green foliage color, good garden habit, and excellent  
shelf life.

**3 Drawing Sheets**

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Latin name of the genus and species of the plant named:  
*Chrysanthemum*×*morifolium*.  
Variety denomination: ‘Purple Mist’.

#### FIELD OF THE INVENTION

The present invention relates to a new *Chrysanthemum*  
plant botanically known as *Chrysanthemum*×*morifolium*, and  
hereinafter referred to by the varietal name ‘Purple Mist’.

#### BACKGROUND OF THE INVENTION

‘Purple Mist’ is a product of a planned breeding program  
that focuses on obtaining new cultivars of garden *chrysanthemums*  
in a range of flower colors that bloom late in the season  
after other fall mums have passed. These plants exhibit superior  
winter hardiness suitable for northern climates and provide  
much needed food for bees and beneficial insects.

‘Purple Mist’ originated from a controlled cross in 2005 in  
Coatesville, Pa. The female parent was a plant of the species  
*Chrysanthemum indicum*, a semi-double daisy form with yellow  
and pink ray florets, and medium upright habit. The male  
parent of ‘Purple Mist’ is a plant of *Chrysanthemum*×*morifolium*  
(seedling), with single flowers of pink floret color, and a  
well-branched habit, producing an abundant amount of pollen.  
‘Purple Mist’ was selected as one flowering plant within the  
progeny of the stated cross in November 2005, and grown out  
of doors in Coatesville, Pa.

The first act of asexual reproduction of ‘Purple Mist’ was  
accomplished when vegetative cuttings were propagated from  
the initial selection in April 2008, in a controlled environment  
in Coatesville, Pa.

#### SUMMARY OF THE INVENTION

‘Purple Mist’ has a single inflorescence form with purple  
ray florets, uniform habit and flowering response that is late,  
strong stems, medium green foliage color, good garden habit,  
and excellent shelf life.

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Horticultural examination of plants grown from cuttings of  
the plant initiated in April 2008 and continuing thereafter, has  
demonstrated that the combination of characteristics as  
herein disclosed for ‘Purple Mist’ are firmly fixed and are  
retained through successive generations of asexual reproduction.

‘Purple Mist’ has not been observed under all possible  
environmental conditions. The phenotype may vary significantly  
with variations in environment such as temperature, light  
intensity and day length.

‘Purple Mist’ has not been made publically available for  
more than one year prior to this filing.

The following traits have been repeatedly observed and are  
determined to be basic characteristics of the new variety. The  
combination of these characteristics distinguishes ‘Purple  
Mist’ from all other varieties of *chrysanthemum* known to the  
inventors.

#### BRIEF DESCRIPTION OF THE PHOTOGRAPHS/DRAWINGS

The accompanying photographic drawing shows typical  
inflorescence and foliage characteristics of ‘Purple Mist’ with  
colors being as true as possible with an illustration of this  
type.

FIG. 1 shows a plant of the cultivar in full bloom;

FIG. 2 shows the various stages of bloom of the new cultivar;  
and

FIG. 3 shows the foliage of the new cultivar.

#### DETAILED BOTANICAL DESCRIPTION

The plant descriptions and measurements were taken in St.  
Albans, Vt. in October 2010 under greenhouse conditions.  
The aforementioned photographs were taken in a studio in St.  
Albans, Vt. in October 2010. The plants were started and  
grown in Coatesville, Pa., then shipped to St. Albans, Vt. in



July 2010. Plants were grown under greenhouse conditions typical for herbaceous perennial plant production. Color references are made to The Royal Horticultural Society Colour Chart (R.H.S.) 2007.

TABLE 1

Difference between the new variety 'Purple Mist' And 'Sheffield'		
	'Purple Mist'	'Sheffield'
Inflorescence Color:	Purple	Pink
Inflorescence Size:	8-9.5 cm	7-8 cm
Plant Height:	55-60 cm	60-75 cm
Bloom Time:	October-November	September-October

Plant:

*Form, growth and habit.*—Herbaceous garden-type; medium and upright, freely branching. Suitable for garden and pot production.  
*Plant height.*—10-15 cm.  
*Plant height (inflorescence included).*—55-60 cm.  
*Plant width.*—45 cm.

Roots:

*Number of days to initiate roots.*—6 days at 18 degrees C.  
*Number of days to produce a rooted cutting.*—12 days at 18 degrees C.  
*Type.*—Fine, fibrous, free branching.  
*Color.*—RHS N155A.

Foliage:

*Arrangement.*—Alternate, simple.  
*Immature leaf color upper surface.*—RHS N137D.  
*Lower surface.*—RHS 137C.  
*Mature leaf color, upper surface.*—RHS 137D.  
*Lower surface.*—RHS 137D.  
*Length.*—6-6.5 cm.  
*Width.*—5-5.5 cm.  
*Shape.*—Ovate.  
*Base shape.*—Acuminate.  
*Apex shape.*—Mucronulate.  
*Margin.*—Palmately lobed, somewhat serrate.  
*Texture, upper surface.*—Glabrous.  
*Lower surface.*—Pubescent.  
*Color of veins, upper surface.*—RHS 139D.  
*Color of veins, lower surface.*—RHS 139D.  
*Petiole color.*—RHS 146A.  
*Length.*—6.5-7.2 cm.  
*Diameter.*—0.2-0.3 cm.  
*Texture, upper surface.*—Glabrous.  
*Lower surface.*—Pubescent.

Stem:

*Quantity of main branches per 2 year old 2 gallon plant.*—32.  
*Quantity of leaves per branch.*—16-18.  
*Color of stem.*—RHS 146C.  
*Length of stem.*—45-50 cm.  
*Diameter.*—0.3-0.4 cm.  
*Length of internodes.*—2-3 cm.  
*Texture.*—Glabrous.  
*Color of peduncle.*—RHS 146A.  
*Length of peduncle.*—5-7 cm.  
*Peduncle diameter.*—0.2 cm.  
*Texture.*—Glabrous.

Inflorescence:

*Type.*—Composite type, solitary inflorescence (decorative-type) borne terminally above the foliage, ray florets arranged acropetally on a capitulum.  
*Quantity of short days to flowering (response time).*—48 days.  
*Quantity of inflorescences per stem.*—14-16.  
*Lastingness of individual blooms on the plant.*—35 days.  
*Fragrance.*—Slight.

Bud (just before opening/showing color):

*Color.*—RHS 138A.  
*Length.*—1-1.5 cm.  
*Width.*—0.8-1.2 cm.  
*Shape.*—Oblate.

Immature inflorescence:

*Diameter.*—5 cm.  
*Depth (Length).*—1-1.5 cm.  
*Color of ray florets, upper surface.*—RHS 64A.  
*Lower surface.*—RHS 64C.

Mature inflorescence:

*Diameter.*—8.5-9.5 cm.  
*Depth (Length).*—1-1.5 cm.  
*Total diameter of disc.*—2 cm.

Ray florets:

*Average quantity of florets.*—22-26.  
*Color of florets, upper surface.*—RHS N78D.  
*Lower surface.*—Slightly darker than RHS 75B with a deep purple more heavily in the center and apex.  
*Length.*—4-4.5 cm.  
*Width.*—0.8-0.9 cm.  
*Shape.*—Oblong.  
*Apex shape.*—Irregularly rounded.  
*Base.*—Attenuate.  
*Margin.*—Entire.  
*Texture, upper surface.*—Papillose.  
*Lower surface.*—Papillose.

Disc florets:

*Average quantity of florets.*—Approximately 250-270.  
*Color of florets.*—RHS 9A.  
*Length.*—0.7 cm.  
*Width.*—0.2 cm.  
*Shape.*—Tubular, elongated.  
*Apex shape.*—Acute, 5 pointed.

Phyllaries:

*Quantity.*—About 25-28.  
*Color, upper surface.*—RHS 143A, with RHS 144D margins which become papery and opaque.  
*Lower surface.*—RHS 139B, with RHS 144D margins which become papery with age and opaque.  
*Length.*—0.8-1.0 cm.  
*Width.*—0.4-0.5 cm.  
*Shape.*—Lanceolate.  
*Apex shape.*—Acute.  
*Base.*—Fused.  
*Margins.*—Entire, becoming papery with age.  
*Texture, upper surface.*—Glossy and smooth.  
*Lower surface.*—Pubescent.

Reproductive organs:

*Pistil.*—1.  
*Length.*—0.7 cm.  
*Style color.*—RHS N144B.  
*Stigma color.*—RHS 9A.  
*Stigma shape.*—Bi-parted.  
*Ovary color.*—RHS 149D.  
*Stamens.*—4.

*Color of filaments.*—RHS N144C.  
*Length of filaments.*—0.3 cm.  
*Anther color.*—RHS 14A.  
*Anther length.*—0.1 cm.  
*Anther shape.*—Oblong.  
*Color of pollen.*—RHS 17A.  
*Pollen amount.*—Moderate.  
*Fertility seed set.*—Has not been observed on this hybrid.

Disease/pest resistance: Disease susceptibility or resistance has not been observed on this hybrid.

What is claimed is:

- 5    1. A new and distinct variety of *Chrysanthemum* plant named ‘Purple Mist’, substantially as illustrated and described herein.

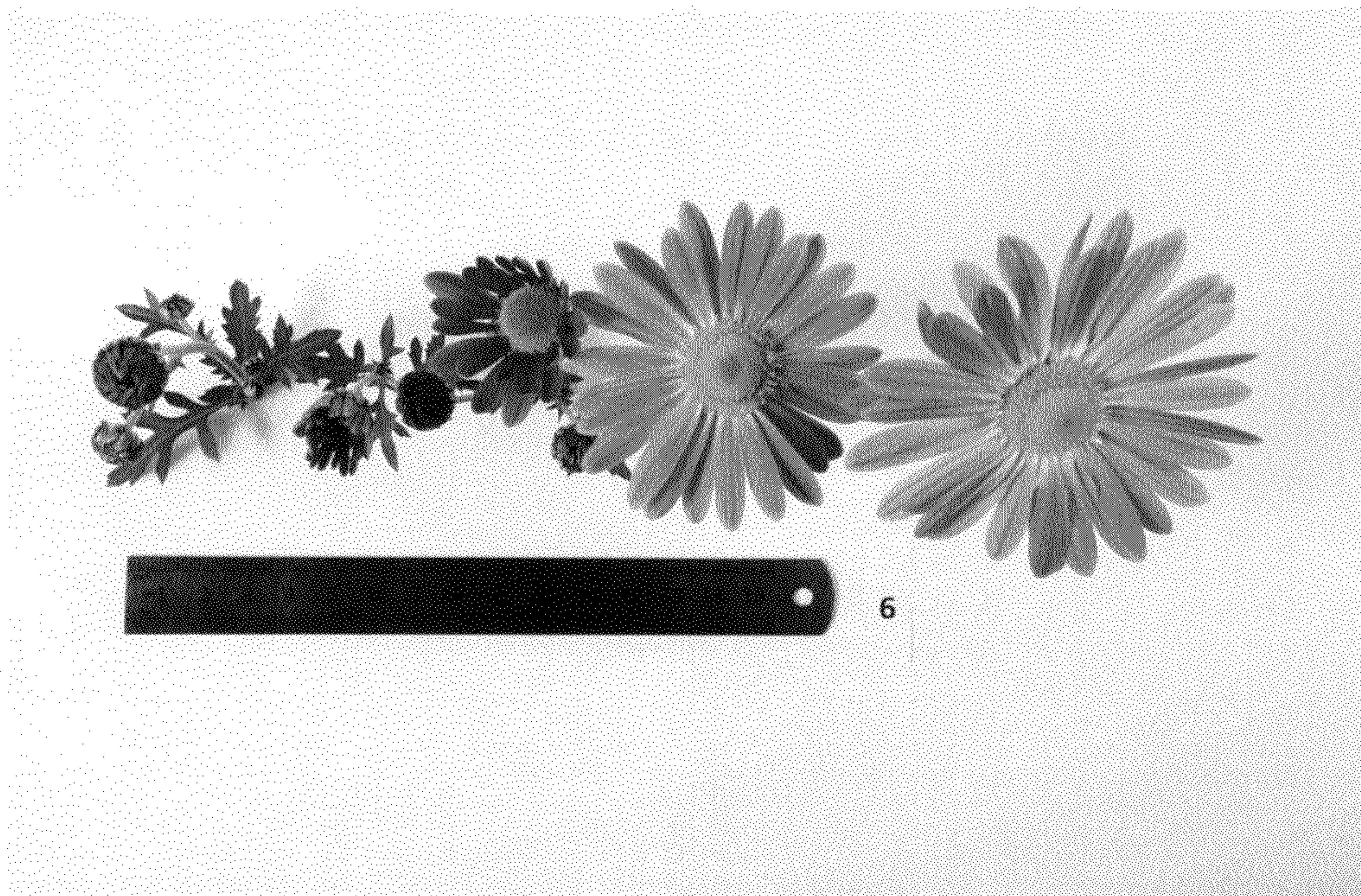
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**FIG. 1**





*FIG. 2*





**FIG. 3**