



US00PP12533P2

(12) **United States Plant Patent**  
**Vandenberg et al.**

(10) **Patent No.:** **US PP12,533 P2**

(45) **Date of Patent:** **Apr. 9, 2002**

(54) **CHRYSANTHEMUM PLANT NAMED**  
**'YOBAY CITY'**

(58) **Field of Search** ..... Plt./286

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(57) **ABSTRACT**

(\*) **Notice:** Subject to any disclaimer, the term of this  
patent is extended or adjusted under 35  
U.S.C. 154(b) by 0 days.

A distinct cultivar of Chrysanthemum plant named 'Yobay  
City', characterized by its upright and uniformly mounded  
plant habit; dark green and glossy foliage; uniform flowering  
response; early flowering, eight-week response time; large  
daisy-type inflorescences that are about 7.9 cm in diameter;  
purple and white bi-colored ray florets and bright yellow  
disc florets; and excellent postproduction longevity with  
plants maintaining good substance and color for at least  
three weeks in an interior environment.

(21) **Appl. No.:** **09/774,369**

(22) **Filed:** **Feb. 1, 2001**

(51) **Int. Cl.<sup>7</sup>** ..... **A01H 5/00**

(52) **U.S. Cl.** ..... **Plt./286**

**1 Drawing Sheet**

**1**

**2**

**BACKGROUND OF THE INVENTION**

The present Invention relates to a new and distinct culti-  
var of Chrysanthemum plant, botanically known as *Chry-*  
*santhemum morifolium* and hereinafter referred to by the  
name 'Yobay City'.

temperature, daylength, and/or light level, without, however,  
any variance in genotype.

The new Chrysanthemum is a product of a planned  
breeding program conducted by the Inventors in Salinas,  
Calif. and Fort Myers, Fla. The objective of the breeding  
program is to create new potted Chrysanthemum cultivars  
that are suitable for year-round production with uniform  
plant growth habit, desirable inflorescence form and floret  
colors, fast response time, and excellent postproduction  
longevity.

The following traits have been repeatedly observed and  
are determined to be the unique characteristics of 'Yobay  
City'. These characteristics in combination distinguish  
'Yobay City' as a new and distinct Chrysanthemum:

1. Upright and uniformly mounded plant habit.
2. Dark green and glossy foliage.
3. Uniform flowering response.
4. Early flowering, eight-week response time.
5. Large daisy-type inflorescences that are about 7.9 cm in diameter.
6. Purple and white bi-colored ray florets and bright yellow disc florets.
7. Excellent postproduction longevity with plants maintaining good substance and color for at least three weeks in an interior environment.

The new Chrysanthemum originated from a cross made  
by the Inventors in May, 1993, in Salinas, Calif., of a  
proprietary Chrysanthemum seedling selection identified as  
code number YB-4168, not patented, as the female, or seed,  
parent with the Chrysanthemum cultivar Mobile, disclosed  
in U.S. Plant Pat. No. 9,335, as the male, or pollen, parent.  
The new Chrysanthemum was discovered and selected by  
the Inventors as a single flowering plant within the progeny  
of the stated cross grown in a controlled environment in Fort  
Myers, Fla. in November, 1996. The selection of this plant  
was based on its uniform plant growth habit, desirable  
inflorescence form and floret colors, fast response time, and  
excellent postproduction longevity. Plants of the new Chry-  
santhemum differ from plants of both parents primarily in  
ray floret coloration.

Plants of the new Chrysanthemum can be compared to  
plants of the Chrysanthemum cultivar New Yoorleans, dis-  
closed in U.S. Plant Pat. No. 11,215. In side-by-side com-  
parisons conducted by the Inventors in Salinas, Calif., plants  
of the new Chrysanthemum differ from plants of the cultivar  
New Yoorleans in the following characteristics:

1. Plants of the new Chrysanthemum are more compact than plants of the cultivar New Yoorleans.
2. Plants of the new Chrysanthemum have a more uniform spray formation than plants of the cultivar New Yoorleans.
3. Under low light or high temperature conditions, ray floret color of the new Chrysanthemum retention is better than ray floret color retention of the cultivar New Yoorleans.

Asexual reproduction of the new Chrysanthemum by  
vegetative tip cuttings was first conducted in Fort Myers,  
Fla. in February, 1997. Asexual reproduction by cuttings has  
shown that the unique features of this new Chrysanthemum  
are stable and reproduced true to type in successive genera-  
tions.

Plants of the new Chrysanthemum can be compared to  
plants of the Chrysanthemum cultivar Tijuana, disclosed in  
U.S. Plant Pat. No. 9,083. In side-by-side comparisons  
conducted by the Inventors in Salinas, Calif., plants of the  
new Chrysanthemum differ from plants of the cultivar  
Tijuana in the following characteristics:

**SUMMARY OF THE INVENTION**

The cultivar Yobay City has not been observed under all  
possible environmental conditions. The phenotype may vary  
somewhat with variations in environment such as

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1. Plants of the new *Chrysanthemum* are more compact and more outwardly spreading than plants of the cultivar Tijuana.
2. Plants of the new *Chrysanthemum* are stronger and sturdier than plants of the cultivar Tijuana.
3. Plants of the new *Chrysanthemum* have thicker, darker green and glossier foliage than plants of the cultivar Tijuana.
4. Ray floret color of the new *Chrysanthemum* is more blue purple than ray floret color of Tijuana.

#### BRIEF DESCRIPTION OF THE PHOTOGRAPHS

The accompanying colored photographs illustrate the overall appearance of the new *Chrysanthemum* showing the colors as true as it is reasonably possible to obtain in colored reproductions of this type. Colors in the photographs may differ from the color values cited in the detailed botanical description which accurately describe the colors of the new *Chrysanthemum*.

The photograph at the top of the sheet comprises a top perspective view of a typical flowering plant of 'Yobay City' grown as a natural spray-type.

The photograph at the bottom of the sheet comprises a close-up view of typical inflorescences of 'Yobay City' grown as a natural spray-type.

#### DETAILED BOTANICAL DESCRIPTION

In the following description, color references are made to The Royal Horticultural Society Colour Chart except where general terms of ordinary dictionary significance are used. The following observations and measurements describe plants grown and flowered during the late autumn in Salinas, Calif., in a fiberglass-covered greenhouse and under conditions which approximate those generally used in commercial potted *Chrysanthemum* production. During the production of these plants, the following conditions were measured: day temperatures, 21 to 27° C.; night temperatures, 17 to 19° C.; and light levels, 4,000 to 6,000 foot-candles. Four unrooted cuttings were directly stuck in 15-cm containers, exposed to long day/short night conditions, and pinched once about 14 days later. At that time, the photoinductive short day/long night treatments were started. Plants used for this description were grown as natural spray-types. Measurements and numerical values represent averages of typical flowering plants.

Botanical classification: *Chrysanthemum* × *morifolium* cultivar Yobay City.

Commercial classification: Daisy-type potted *Chrysanthemum*.

Parentage:

*Female, or seed, parent.*—Proprietary *Chrysanthemum* × *morifolium* seedling selection identified as code number YB-4168, not patented.

*Male, or pollen, parent.*—*Chrysanthemum* × *morifolium* cultivar Mobile, disclosed in U.S. Plant Pat. No. 9,335.

Propagation:

*Type.*—Terminal tip cuttings.

*Time to initiate roots.*—About four days at 21° C.

*Time to produce a rooted cutting.*—About ten days at 21° C.

*Root description.*—Fibrous and well-branched.

Plant description:

*Appearance.*—Herbaceous daisy-type potted *Chrysanthemum* typically grown as a natural spray-type. Stems upright and outwardly spreading giving a uniformly mounded appearance to the plant. Freely branching, about four lateral branches develop after removal of terminal apex (pinching); dense and full plants. Moderate vigor. Relatively compact.

*Plant height.*—About 23 cm.

*Plant width.*—About 39.5 cm.

*Lateral branches.*—Length: About 18 cm. Diameter: About 4 mm. Internode length: About 2.4 cm. Strength: Strong. Texture: Pubescent. Color: 146A.

*Foliage description.*—Arrangement: Alternate. Quantity of leaves per lateral stem: About 10. Length: About 7.4 cm. Width: About 6.6 cm. Apex: Cuspidate. Base: Mostly truncate to attenuate. Margin: Palmately lobed, sinuses between lateral lobes mostly divergent. Texture: Upper and lower surfaces with very fine pubescence; veins prominent on lower surface. Thick and leathery. Color: Young foliage, upper surface: Much darker than 147A; glossy. Young foliage, lower surface: 147A. Mature foliage, upper surface: Much darker than 147A; glossy. Mature foliage, lower surface: Darker than 147B. Venation, upper surface: 147A. Venation, lower surface: 147B. Petiole length: About 2 cm. Petiole diameter: About 3 mm. Petiole color: 147B.

Inflorescence description:

*Appearance.*—Daisy-type inflorescence form with elongated oblong-shaped ray florets. Inflorescences borne on terminals above foliage. Disk and ray florets arranged acropetally on a capitulum. Not fragrant. Typically grown as a natural spray-type.

*Flowering response.*—Under natural conditions, plants flower in the autumn/winter in the Northern Hemisphere. At other times of the year, inflorescence initiation and development can be induced under short day/long night conditions (at least 13.5 hours of darkness). Early flowering; plants exposed to two weeks of long day/short night conditions followed by photoinductive short day/long night conditions flower about eight weeks later.

*Postproduction longevity.*—Inflorescences maintain good color and substance for at least three weeks in an interior environment.

*Quantity of inflorescences.*—Freely flowering, about 5 inflorescences develop per lateral stem, or about 20 inflorescences per plant.

*Inflorescence bud.*—Height: About 6 mm. Diameter: About 8 mm. Color: Close to 143A.

*Inflorescence size.*—Diameter: About 7.9 cm. Depth (height): About 1.3 cm. Diameter of disc: About 1.9 cm. Receptacle diameter: About 7 mm.

*Ray florets.*—Shape: Elongated-oblong. Orientation: Initially upright, then about 65° from vertical. Aspect: Initially incurved, then mostly flat. Length: About 3.7 cm. Width: About 1.1 cm. Corolla tube length: About 1 mm. Apex: Emarginate. Base: Attenuate; very short corolla tube. Margin: Entire. Texture: Smooth, glabrous, satiny. Number of ray florets per inflorescence: About 22 arranged in one row. Color: When opening, upper and lower surfaces: Apex, mid-section and longitudinal stripes towards base, 77A; base and longitudinal lines toward mid-section, 155D. Fully opened, upper surface: Apex, mid-section and longitudinal stripes

towards base, 70A to 71A; base and longitudinal lines toward mid-section, 155D. Color does not fade with subsequent development. Fully opened, lower surface: Apex, mid-section and longitudinal stripes towards base, 155D underlain with 77A; base and longitudinal lines toward mid-section, 155D.

*Disc florets*.—Arrangement: Massed at center of receptacle. Shape: Tubular, elongated. Apex: Five-pointed. Length: About 6 mm. Width: Apex, about 2 mm; base, about 1 mm. Number of disc florets per inflorescence: About 155. Color: Immature: Close to 154A. Mature: Apex: 9A. Mid-section: 145D. Base: 155D.

*Peduncles*.—Length: First peduncle: About 4.9 cm. Fourth peduncle: About 7.1 cm. Diameter: About 2

mm. Angle to vertical: About 45° from vertical. Strength: Strong, flexible. Color: Close to 143A to 146A.

*Reproductive organs*.—Androecium: Present on disc florets only. Anther color: 12A. Pollen amount: None. Gynoecium: Present on both ray and disc florets.

*Seed*.—Seed production has not been observed.

Disease resistance: Resistance to pathogens common to *Chrysanthemums* has not been observed on plants grown under commercial greenhouse conditions.

It is claimed:

1. A new and distinct cultivar of *Chrysanthemum* plant named 'Yobay City', as illustrated and described.

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