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# (12) United States Plant Patent

### Bergman

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# (54) CHRYSANTHEMUM PLANT NAMED 'DEEP YOPRESIDIO'

- (50) Latin Name: *Chrysanthemum*×*morifolium* Varietal Denomination: **Deep Yopresidio**
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(US)

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(\*) Notice: Subject to any disclaimer, the term of this

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U.S.C. 154(b) by 38 days.

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(58) **Field of Classification Search** ....................... Plt./287 See application file for complete search history.

#### (56) References Cited

#### **PUBLICATIONS**

PBR 04-4431 filed Jan. 31, 2005—from UPOV-CDROM.\*

\* cited by examiner

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#### (57) ABSTRACT

A new and distinct cultivar of *Chrysanthemum* plant named 'Deep Yopresidio', characterized by its uniform and somewhat outwardly spreading plant habit; strong and freely branching growth habit; dark green-colored foliage; uniform flowering response and habit; can be grown as a disbud-type, spray-type or without bud removal; early flowering habit; decorative-type inflorescences with elongated oblong-shaped ray florets; lavender-colored ray florets; and excellent postproduction longevity with plants maintaining good substance and color for about four weeks in an interior environment.

#### 2 Drawing Sheets

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Botanical designation: *Chrysanthemum*×*morifolium*. Cultivar denomination: 'Deep Yopresidio'.

#### BACKGROUND OF THE INVENTION

The present Invention relates to a new and distinct cultivar of *Chrysanthemum* plant, botanically known as *Chrysanthemum*×*morifolium* and hereinafter referred to by the name 'Deep Yopresidio'.

The new *Chrysanthemum* is a product of a planned 10 breeding program conducted by the Inventor in Salinas, Calif. and Alva, Fla. The objective of the program is to create or discover new potted *Chrysanthemum* cultivars that are suitable for year-round production with uniform plant growth habit, good vigor and strong branching habit, numerous inflorescences, desirable inflorescence form and floret colors, fast and uniform flowering response, and good postproduction longevity.

The new *Chrysanthemum* is a naturally-occurring whole plant mutation of the *Chrysanthemum×morifolium* cultivar Yopresidio, disclosed in U.S. Plant Pat. No. 13,896. The new *Chrysanthemum* was discovered and selected by the Inventor as a single flowering plant from within a population of plants of the cultivar Yopresidio in a controlled environment in Salinas, Calif. on Aug. 14, 2002. The selection of this plant was based on its uniform plant growth habit, good vigor and strong branching habit, desirable inforescence form and floret colors, fast and uniform flowering response, and good postproduction longevity.

Asexual reproduction of the new *Chrysanthemum* by vegetative tip cuttings was first conducted in Alva, Fla. in October, 2002. Asexual reproduction by cuttings has shown that the unique features of this new *Chrysanthemum* are stable and reproduced true to type in successive generations.

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#### SUMMARY OF THE INVENTION

The cultivar Deep Yopresidio has not been observed under all possible environmental conditions. The phenotype may vary somewhat with variations in environment such as temperature, daylength, and/or light level, without, however, any variance in genotype.

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

- 1. Uniform and somewhat outwardly spreading plant habit.
- 2. Strong and freely branching growth habit.
- 3. Dark green-colored foliage.
- 4. Uniform flowering response and habit.
- 5. Can be grown as a disbud-type, spray-type or without bud removal.
- 6. Early flowering, eight week response time.
- 7. Decorative-type inflorescences with elongated oblong-shaped ray florets.
- 8. Lavender-colored ray florets.
- 9. Excellent postproduction longevity with plants maintaining good substance and color for about four weeks in an interior environment.

Plants of the new *Chrysanthemum* can be compared to plants of the parent, the cultivar Yopresidio. Plants of the new *Chrysanthemum* differ from plants of the cultivar Yopresidio primarily in ray floret coloration as plants of the cultivar Yopresidio have light pink-colored ray florets. In addition, plants of the new *Chrysanthemum* flower about two days later than plants of the cultivar Yopresidio.

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Plants of the new *Chrysanthemum* can be compared to plants of the cultivar Yopatagonia, disclosed in a U.S. Plant patent application filed concurrently. In side-by-side comparisons conducted in Alva, Fla., plants of the new *Chrysanthemum* differed from plants of the cultivar Yopatagonia in the following characteristics:

- 1. Plants of the new *Chrysanthemum* were more upright than plants of the cultivar Yopatagonia.
- 2. Plants of the new *Chrysanthemum* had shorter internodes than plants of the cultivar Yopatagonia.
- 3. Plants of the new *Chrysanthemum* had smaller inflorescences with fewer ray florets than plants of the cultivar Yopatagonia.
- 4. Plants of the new *Chrysanthemum* and the cultivar Yopatagonia differed in ray floret coloration.

#### 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 on the first sheet comprises a side perspective view of typical flowering plants of 'Deep Yopresidio' grown as disbud-types.

The photograph on the second sheet comprises a close-up view of typical inflorescences of 'Deep Yopresidio' grown as disbud-types.

#### DETAILED BOTANICAL DESCRIPTION

In the following description, color references are made to The Royal Horticultural Society Colour Chart, 1995 Edition, except where general terms of ordinary dictionary significance are used. The aforementioned photographs, following observations and measurements describe plants grown and flowered during the spring in Salinas, Calif., in a fiberglasscovered greenhouse and under conditions which approximate those generally used in commercial potted *Chrysan*themum 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, 5,000 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 two weeks later. At the time of the pinch, the photoinductive short day/long night treatments were initiated. Plants used for the description were grown as disbud-types. Measurements and numerical values represent averages of typical flowering plants.

Botanical classification: *Chrysanthemum*×*morifolium* cultivar Deep Yopresidio.

Commercial classification: Decorative-type potted *Chrysan-themum*.

Parentage: Naturally-occurring whole plant mutation of the *Chrysanthemum*×*morifolium* cultivar Yopresidio, disclosed in U.S. Plant Pat. No. 13,896.

Propagation:

21° C.

*Type.*—Terminal tip cuttings.

Time to initiate roots.—About four days at 21° C. Time to produce a rooted cutting.—About ten days at

Root description.—Fibrous; white, close to 155D, in color.

Rooting habit.—Freely branching; moderately dense. Plant description:

Appearance.—Herbaceous decorative-type potted Chrysanthemum that can be grown as a disbud-type, spray-type or without bud removal. Upright with lateral branches somewhat outwardly spreading; uniformly mounded crown. Strong and freely branching growth habit; about four lateral branches develop after removal of terminal apex (pinching); dense and full plants.

Plant height.—About 28 cm.

Plant width.—About 35.5 cm.

Lateral branches (peduncles).—Length: About 19 cm. Diameter: About 4.5 mm. Internode length: About 1.3 cm. Strength: Strong. Texture: Pubescent. Color: Close to 146A.

Foliage description.—Arrangement: Alternate; simple. Length: About 7.3 cm. Width: About 5.4 cm. Apex: Mucronate. Base: Attenuate. Margin: Palmately lobed, sinuses between lateral lobes mostly divergent. Texture, upper and lower surfaces: Pubescent. Color: Developing foliage, upper surface: Darker green than 147A. Developing foliage, lower surface: Darker green than 147B. Fully expanded foliage, upper surface: Close to 147A. Fully expanded foliage, lower surface: Darker green than 147B. Venation, upper surface: Close to 147A. Venation, lower surface: Close to 146A. Petiole length: About 1.8 cm. Petiole diameter: About 3 mm. Petiole texture, upper and lower surfaces: Pubescent. Petiole color, upper surface: Close to 146A. Petiole color, lower surface: Close to 146A to 146B.

Inflorescence description:

Appearance.—Decorative-type inflorescence form with elongated oblong-shaped ray florets. Inflorescences borne on terminals above foliage. Disk and ray florets develop acropetally on a capitulum. Inflorescences not fragrant.

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). Uniform and early flowering habit; 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 about four weeks in an interior environment.

Quantity of inflorescences.—Grown as a disbud-type, only one inflorescence is allowed to develop per lateral branch.

Inflorescence bud.—Height: About 7 mm. Diameter: About 8 mm. Shape: Oblate. Color: Close to 146A to 147A.

Inflorescence diameter.—About 8.7 cm.

Inflorescence height.—About 3.6 cm.

Diameter of disc.—About 4 mm; inconspicuous.

Receptacle diameter.—About 8 mm.

Receptacle height.—About 6.5 mm.

Ray florets.—Length: About 4.4 cm. Width: About 1.2 cm. Corolla tube length: About 6 mm. Shape: Elongated oblong. Apex: Acute, rounded or emarginate.

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Base: Fused into a corolla tube. Margin: Entire. Orientation: Initially upright and incurved to eventually perpendicular to the peduncle. Texture, upper and lower surfaces: Smooth, glabrous; satiny. Number of ray florets per inflorescence: About 142 arranged in numerous whorls. Color: When opening, upper surface: Close to 155D overlain with close to 77A. When opening, lower surface: Close to 155D underlain with close to 77A. Fully opened, upper surface: Close to 155D more faintly overlain with close to 77A. Fully opened, lower surface: Close to 155D more faintly underlain with close to 77A.

Disc florets.—Arrangement: Massed at center of receptacle. Length: About 8 mm. Diameter, apex: About 2 mm. Diameter, base: About 1.5 mm. Shape: Tubular; elongated. Apex: Five-pointed. Number of disc florets per inflorescence: About five. Color: Immature: Close to 144A. Mature, apex: Close to 9A. Mature, mid-section and base: Close to 155D.

Phyllaries.—Quantity per inflorescence: About 30 arranged in about three whorls. Length: About 8 mm.

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Width: About 3 mm. Shape: Lanceolate. Apex: Acute. Base: Truncate. Margin: Entire. Texture, upper surface: Waxy, smooth. Texture, lower surface: Pubescent. Color, upper surface: Close to 146A. Color, lower surface: Close to 146A to 147A.

Reproductive organs.—Androecium: Present on disc florets only. Anther length: Less than 1 mm. Anther color: Close to 12A. Pollen amount: None observed. Gynoecium: Present on both ray and disc florets. Style length: About 5 mm. Style color: Close to 144C. Stigma color: Close to 9A.

Seed/fruit.—Seed and fruit production has not been observed.

Disease/pest resistance: Resistance to pathogens and pests 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 'Deep Yopresidio', as illustrated and described.

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