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**Bergman**

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(54) **CHRYSANTHEMUM PLANT NAMED**  
**'YOHOMESTEAD'**

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patent is extended or adjusted under 35  
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(57) **ABSTRACT**

A distinct cultivar of Chrysanthemum plant named  
'Yohomestead', characterized by its uniform, upright and  
compact plant habit; strong and freely branching growth  
habit; dense dark green foliage; uniform and early flowering  
habit; decorative-type inflorescences with white-colored ray  
florets; excellent postproduction longevity with plants main-  
taining good substance and color for about four weeks in an  
interior environment; and tolerance to high production tem-  
peratures.

**1 Drawing Sheet**

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**BOTANICAL CLASSIFICATION/CULTIVAR  
DESIGNATION**

*Chrysanthemum*×*morifolium* cultivar Yohomestead.

**BACKGROUND OF THE INVENTION**

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

The new Chrysanthemum is a product of a planned  
breeding program conducted by the Inventor 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, good vigor, desirable inflorescence form  
and floret colors, fast response time, and good postproduc-  
tion longevity.

The new Chrysanthemum originated from a cross made  
by the Inventor in February, 1997, in Salinas, Calif., of a  
proprietary Chrysanthemum seedling selection identified as  
code number YB-0613, not patented, as the female, or seed,  
parent with a proprietary Chrysanthemum seedling selection  
identified as code number YB-5202, not patented, as the  
male, or pollen, parent. The new Chrysanthemum was  
discovered and selected by the Inventor as a single flowering  
plant within the progeny of the stated cross grown in a  
controlled environment in Salinas, Calif. The selection of  
this plant was based on its uniform plant growth habit,  
desirable inflorescence form and ray floret color, fast  
response time, and excellent postproduction longevity.

Asexual reproduction of the new Chrysanthemum by  
vegetative tip cuttings was first conducted in Fort Myers,  
Fla. in February, 1998. 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.

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**SUMMARY OF THE INVENTION**

The cultivar Yohomestead 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 'Yohome-  
stead'. These characteristics in combination distinguish  
'Yohomestead' as a new and distinct Chrysanthemum:

1. Uniform, upright and compact plant habit.
2. Strong and freely branching growth habit.
3. Dense dark green foliage.
4. Uniform flowering habit.
5. Early flowering, eight-week response time.
6. Decorative-type inflorescences.
7. White-colored ray florets.
8. Excellent postproduction longevity with plants main-  
taining good substance and color for about four weeks in an  
interior environment.
9. Tolerance to high production temperatures.

Compared to plants of the female parent selection, plants  
of the new Chrysanthemum have a more upright plant habit  
and flower more uniformly.

Compared to plants of the male parent selection, plants of  
the new Chrysanthemum flower more uniformly and are  
more tolerant to high production temperatures.

Plants of the new Chrysanthemum can be compared to  
plants of the cultivar White Diamond, disclosed in U.S.  
Plant Pat. No. 8,059. In side-by-side comparisons conducted  
by the Inventor in Salinas, Calif., plants of the new Chry-  
santhemum differed from plants of the cultivar White Dia-  
mond in the following characteristics:

1. Plants of the new Chrysanthemum were more upright  
and not as outwardly spreading as plants of the cultivar  
White Diamond.
2. Plants of the new Chrysanthemum had darker green  
foliage than plants of the cultivar White Diamond.

3. Plants of the new Chrysanthemum had smaller inflorescences than plants of the cultivar White Diamond.

4. Under low production temperatures, ray florets of plants of the new Chrysanthemum did not develop a pink cast whereas ray florets of plants of the cultivar White Diamond did develop a pink cast.

5. Plants of the new Chrysanthemum were more tolerant to high production temperatures than plants of the cultivar White Diamond.

Plants of the new Chrysanthemum can also be compared to plants of the cultivar Yotrenton, disclosed in U.S. Plant Pat. No. 12,789. In side-by-side comparisons conducted by the Inventor in Salinas, Calif., plants of the new Chrysanthemum differed from plants of the cultivar Yotrenton in the following characteristics:

1. Plants of the new Chrysanthemum were more upright than plants of the cultivar Yotrenton.

2. Plants of the new Chrysanthemum had darker green foliage than plants of the cultivar Yotrenton.

3. Plants of the new Chrysanthemum were more tolerant to high production temperatures than plants of the cultivar Yotrenton.

Plants of the new Chrysanthemum can also be compared to plants of the cultivar Yooakland, disclosed in a U.S. Plant patent application Ser. No. 10/094,326 filed concurrently. In side-by-side comparisons conducted by the Inventor in Salinas, Calif., plants of the new Chrysanthemum differed from plants of the cultivar Yooakland in the following characteristics:

1. Plants of the new Chrysanthemum were taller and more upright than plants of the cultivar Yooakland.

2. Leaves of plants of the new Chrysanthemum were shorter, broader and had shorter petioles than plants of the cultivar Yooakland.

3. Ray florets of plants of the new Chrysanthemum were not as incurved as ray florets of plants of the cultivar Yooakland.

#### 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 side perspective view of a typical flowering plant of 'Yohomestead' grown as a disbud-type.

The photograph at the bottom of the sheet comprises a close-up view of typical inflorescences of 'Yohomestead' grown as a disbud-type.

#### 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 winter 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, 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 14 days later. One week after the pinch, the photoinductive short day/long night treatments were initiated. Plants used for the photographs and description were grown as disbud-types. Measurements and numerical values represent averages of typical flowering plants.

Botanical classification: *Chrysanthemum* × *morifolium* cultivar Yohomestead.

Commercial classification: Decorative-type potted Chrysanthemum.

Parentage:

*Female, or seed, parent.*—Proprietary *Chrysanthemum* × *morifolium* seedling selection identified as code number YB-0613, not patented.

*Male, or pollen, parent.*—Proprietary *Chrysanthemum* × *morifolium* seedling selection identified as code number YB-5202, not patented.

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.*—White, close to 155D; fibrous.

*Rooting habit.*—Freely branching.

Plant description:

*Appearance.*—Herbaceous decorative-type potted Chrysanthemum that can be grown as a disbud or as a spray-type. Stems mostly upright and somewhat outwardly spreading; uniform crown. Freely branching, about three to four lateral branches develop after removal of terminal apex (pinching); dense and full plants.

*Plant height.*—About 26.5 cm.

*Plant width.*—About 37 cm.

*Lateral branches (peduncles).*—Length: About 19 cm. Diameter: About 3.5 mm. Internode length: About 9 mm. Strength: Strong. Texture: Pubescent. Color: 146A.

*Foliage description.*—Arrangement: Alternate. Length: About 8.4 cm. Width: About 7.4 cm. Apex: Cuspidate. Base: Truncate. Margin: Palmately lobed, sinuses between lateral lobes parallel to divergent. Texture: Upper surface: Sparsely pubescent. Lower surface: Pubescent; veins prominent. Color: Young and mature foliage, upper surface: Darker than 147A. Young and mature foliage, lower surface: Darker than 147B. Venation, upper surface: Close to 147A. Venation, lower surface: Close to 147B. Petiole length: About 2.1 cm. Petiole diameter: About 2 mm. Petiole color, both surfaces: 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 arranged acropetally on a capitulum. Not fragrant. Can be grown as a disbud or 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 three 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 about four weeks in an interior environment.

*Quantity of inflorescences*.—Grown as a disbud-type, only one inflorescence, the terminal inflorescence, develops per lateral branch.

*Inflorescence bud*.—Height: About 7 mm. Diameter: About 9 mm. Shape: Oblate. Color: Close to 147A.

*Inflorescence size*.—Diameter: About 9.75 cm. Depth (height): About 3.3 cm. Diameter of disc: About 6 mm. Receptacle diameter: About 9 mm.

*Ray florets*.—Shape: Elongated-oblong. Orientation: Initially upright, then perpendicular to the peduncle, reflexed with subsequent development. Aspect: Mostly incurved. Length: About 4.7 cm. Width: About 1.1 cm. Apex: Emarginate, rounded acute. Base: Fused into a corolla tube. Corolla tube length: Short, about 5 mm. Margin: Entire. Texture: Smooth, glabrous, satiny. Number of ray florets per inflorescence: About 253 arranged in numerous rows. Color: When opening, upper and lower surfaces: Closest to 155D. Fully expanded, upper and lower surfaces: Closest to 155D.

*Disc florets*.—Arrangement: Massed at center of receptacle. Shape: Tubular, elongated. Apex: Five-

pointed. Length: About 5.5 mm. Width: Apex: About 1.5 mm. Base: About 1 mm. Number of disc florets per inflorescence: Less than 50. Color: Immature: 154A. Mature: Apex: Close to 9A. Mid-section and base: Close to 146B.

*Phyllaries*.—Quantity per inflorescence: About 24. Length: About 8 mm. Width: About 3.5 mm. Shape: Ligulate. Apex: Acute. Base: Truncate. Texture: Upper surface: Waxy, smooth. Lower surface: Pubescent. Color: Upper surface: Between 146A and 147A. Lower surface: Close to 147A.

*Reproductive organs*.—Androecium: Present on disc florets only. Anther color: 12A. Pollen amount: None observed. Gynoecium: Present on both ray and disc florets. Style color: Close to 146C. Stigma color: Close to 12A.

*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.

High temperature tolerance: Plants of the new Chrysanthemum have been observed to be tolerant to high temperature conditions when grown during the summer under greenhouse conditions in southwest Florida.

It is claimed:

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

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