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(12) **United States Plant Patent**
Bergman(10) **Patent No.:** US PP19,006 P2
(45) **Date of Patent:** Jul. 8, 2008(54) **CHrysanthemum PLANT NAMED
'YOHOLLISTER'**(50) Latin Name: *Chrysanthemum×morifolium*
Varietal Denomination: Yohollister(75) Inventor: **Wendy R. Bergman**, Lehigh Acres, FL
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A01H 5/00 (2006.01)(52) **U.S. Cl.** **Plt./295**
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See application file for complete search history.*Primary Examiner*—Kent Bell
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(74) *Attorney, Agent, or Firm*—C. A. Whealy(57) **ABSTRACT**

A new and distinct cultivar of *Chrysanthemum* plant named 'Yohollister', characterized by its upright and uniformly mounded plant habit; freely branching and vigorous growth habit; dark green-colored foliage; uniform flowering response; early flowering habit, seven-week response time; freely flowering habit; daisy-type inflorescences with intense yellow red-colored ray florets; and good postproduction longevity.

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Botanical designation: *Chrysanthemum×morifolium*.
Cultivar denomination: 'Yohollister'.

BACKGROUND OF THE INVENTION

The present invention relates to a new and distinct cultivar of *Chrysanthemum* plant, botanically known as *Chrysanthemum×morifolium*, commercially grown as a potted *Chrysanthemum* and hereinafter referred to by the name 'Yohollister'.

The objective of the breeding program is to create new potted *Chrysanthemum* cultivars that are suitable for year-round production with freely branching habit, uniform plant growth habit, good vigor, desirable inflorescence form and floret colors, fast response time and excellent postproduction longevity.

The new *Chrysanthemum* originated from a cross-pollination made by the Inventor in February, 2003, in Salinas, Calif. of the *Chrysanthemum×morifolium* cultivar Durban, not patented, as the female, or seed, parent with a proprietary *Chrysanthemum×morifolium* seedling selection identified as code number YB-A1635, not patented, as the male, or pollen, parent. The new *Chrysanthemum* was discovered and selected in December, 2003, by the Inventor as a single flowering plant within the progeny of the stated cross-pollination in a controlled environment in Fort Myers, Fla. The selection of this plant was based on its uniform plant growth habit, freely branching habit, vigor, desirable inflorescence form and floret colors, 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 March, 2004. Asexual reproduction by cuttings has shown that the unique features of this new *Chrysanthemum* are stable and reproduced true to type in successive generations.

SUMMARY OF THE INVENTION

Plants of the cultivar Yohollister have not been observed under all possible environmental conditions. The phenotype

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may vary somewhat with variations in environment such as temperature, daylength and light intensity, without, however, any variance in genotype.

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

1. Upright and uniformly mounded plant habit.
2. Freely branching and vigorous growth habit.
3. Dark green-colored foliage.
4. Uniform flowering response.
5. Typically grown as a center-budded or as natural spray type.
6. Early flowering habit, seven-week response time.
7. Freely flowering habit.
8. Daisy-type inflorescences with intense yellow-colored ray florets.
9. Good postproduction longevity with plants maintaining good substance and color for about four weeks in an interior environment.

Plants of the new *Chrysanthemum* differ from plants of the female parent, the cultivar Durban, in the following characteristics:

1. Plants of the new *Chrysanthemum* flower about two weeks earlier than plants of the cultivar Durban.
2. Plants of the new *Chrysanthemum* and the cultivar Durban differ in ray floret color as plants of the cultivar Durban have white-colored ray florets.

Plants of the new *Chrysanthemum* differ from plants of the male parent selection in the following characteristics:

1. Plants of the new *Chrysanthemum* flower about one week earlier than plants of the male parent selection.
2. Plants of the new *Chrysanthemum* and the male parent selection differ in ray floret color as plants of the male parent selection have white-colored ray florets.

Plants of the new *Chrysanthemum* can be compared to plants of the *Chrysanthemum* cultivar Yobrighton, disclosed in U.S. Plant Pat. No. 17,436. In side-by-side comparisons conducted in Fort Myers, Fla., plants of the new *Chrysanthemum* differed from plants of the cultivar Yobrighton in the following characteristics:

1. Plants of the new *Chrysanthemum* were more vigorous than plants of the cultivar Yobrighton.
2. Plants of the new *Chrysanthemum* flowered about one week earlier than plants of the cultivar Yobrighton.
3. Inflorescences of plants of the new *Chrysanthemum* and the cultivar Yobrighton differed in ray floret color as plants of the cultivar Yobrighton had less intense yellow-colored ray florets.

BRIEF DESCRIPTION OF THE PHOTOGRAPHS

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

The photograph at the bottom of the sheet comprises a side perspective view of typical flowering plants of 'Yohollister'.

The photograph at the top of the sheet is a close-up view of typical inflorescences of 'Yohollister'.

DETAILED BOTANICAL DESCRIPTION

The aforementioned photographs and following observations and measurements describe plants grown in Leamington, Ontario, Canada during the autumn in a glass-covered greenhouse and under conditions and practices which approximate those generally used in commercial potted *Chrysanthemum* production. During the production of the plants, day temperatures ranged from about 21° C., to 27° C. night temperatures ranged from about 17° C. to 19° C. and light levels ranged from 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 about two weeks later. At that time, the photoinductive short day/long night treatments were started. Plants used in the photographs and for the description were center-budded and were about eleven weeks old. 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. Observations and measurements were taken from a single plant.

Botanical classification: *Chrysanthemum × morifolium* cultivar Yohollister.

Parentage:

Female, or seed, parent.—*Chrysanthemum × morifolium* cultivar Durban, not patented.

Male, or pollen, parent.—Proprietary selection of *Chrysanthemum × morifolium* identified as code number YB-A1635, not patented.

Propagation:

Type.—Terminal vegetative cuttings.

Time to initiate roots.—About four days at temperatures of about 21° C.

Time to produce a rooted young plant.—About ten days at temperatures of about 21° C.

Root description.—Fine to thick, fibrous; white in color.

Rooting habit.—Freely branching; moderately dense.

Plant description:

Appearance.—Herbaceous daisy-type potted *Chrysanthemum* typically grown as a center-budded or as a natural spray type. Stems upright and outwardly spreading giving a uniformly mounded appearance to the plant. Freely branching habit, about four to five lateral branches develop after removal of terminal apex (pinching); dense and full plant habit. Strong and vigorous growth habit.

Plant height.—About 28 cm.

Plant width.—About 25 cm.

Lateral branches.—Length: About 25 cm. Diameter: About 4 mm. Internode length: About 2 cm. Strength: Strong. Texture: Pubescent. Color: 148A.

Foliage description:

Arrangement.—Alternate, simple.

Length.—About 6.2 cm.

Width.—About 5 cm.

Shape.—Palmately lobed.

Apex.—Cuspidate.

Base.—Attenuate.

Margin.—Palmately lobed, sinuses between lateral lobes mostly parallel.

Texture, upper and lower surfaces.—Fine pubescence; veins prominent on lower surface.

Color.—Developing foliage, upper and lower surfaces: 147B. Fully expanded foliage, upper surface: 147A; venation, 147B. Fully expanded foliage, lower surface: 147B; venation, 147B.

Petiole.—Length: About 2.3 cm. Diameter: About 3 mm. Texture, upper and lower surfaces: Pubescent. Color, upper surface: Close to 147C. Color, lower surface: Close to 147B.

Inflorescence description:

Appearance.—Daisy-type inflorescence form with narrowly obovate-shaped ray florets. Inflorescences borne on terminals above foliage. Disk and ray florets arranged acropetally on a capitulum. Inflorescence not fragrant. Typically grown as a center-budded or 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 habit; plants exposed to two weeks of long day/short night conditions followed by photoinductive short day/long night conditions flower about seven weeks later.

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

Quantity of inflorescences.—Freely flowering, about 22 inflorescences develop per plant.

Inflorescence bud.—Height: About 1.7 cm. Diameter: About 1.2 cm. Shape: Ovoid. Color: 8A.

Inflorescence size.—Diameter: About 7.5 cm. Depth (height): About 1.4 cm. Diameter of disc: About 1.5 cm. Receptacle height: About 6 mm. Receptacle diameter: About 1.8 cm. Receptacle color: 148A.

Ray florets.—Shape: Narrowly obovate. Orientation: Initially upright, then about 90° from vertical or per-

pendicular to peduncle. Aspect: Initially incurved, then mostly flat. Length: About 3.5 cm. Width: About 1 cm. Apex: Emarginate. Base: Attenuate; short corolla tube. Margin: Entire. Texture, upper and lower surfaces: Smooth, glabrous; velvety. Number of ray florets per inflorescence: About 28 arranged in about one or two whorls. Color: When opening and fully opened, upper surface: Close to 7A. When opening and fully opened, lower surface: Close to 7B.

Disc florets.—Arrangement: Massed at center of receptacle. Shape: Tubular, elongated. Apex: Five-pointed. Length: About 6 mm. Width: About 2 mm. Number of disc florets per inflorescence: About 155. Color, immature: Apex: Close to 150B. Mid-section: Close to 150D. Base: Close to 150D. Color, mature: Apex: Close to 1A. Mid-section: Close to 150D. Base: Close to 150D.

Phyllaries.—Number of phyllaries per inflorescence: About 22 arranged in about two whorls. Length: About 7 mm. Width: About 3 mm. Shape: Elliptical. Apex: Acute. Base: Truncate. Margin: Entire. Texture, upper surface: Smooth, waxy. Texture, lower surface: Pubescent. Color, upper surface: Close to 147B. Color, lower surface: Close to 148A.

Peduncles.—Length: First peduncle: About 5.2 cm. Fourth peduncle: About 8.8 cm. Diameter (first

peduncle): About 2 mm. Angle: About 45° to 50° from vertical. Strength: Strong, flexible. Texture: Pubescent. Color: Close to 147B.

Reproductive organs.—*Androecium*: Present on disc florets only. Filament length: About 3 mm. Filament color: Close to 157A. Anther shape: Narrowly oblong. Anther length: About 2 mm. Anther color: Close to 21A. Pollen amount: Sparse. Pollen color: Close to 21A. *Gynoecium*: Present on both ray and disc florets. Pistil length: About 7 mm. Stigma shape: Bi-parted. Stigma color: Close to 4A. Style length: About 4 mm. Style color: Close to 145C. Ovary color: Close to 155A.

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 conditions.

Temperature tolerance: Plants of the new *Chrysanthemum* have demonstrated good tolerance to low temperatures of about 5° C. and high temperatures of about 38° C.

It is claimed:

1. A new and distinct *Chrysanthemum* plant named 'Yohollister' as illustrated and described.

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