



US00PP14814P2

(12) **United States Plant Patent**  
**Bergman**

(10) **Patent No.: US PP14,814 P2**  
(45) **Date of Patent: May 25, 2004**

(54) **CHRYSANTHEMUM PLANT NAMED YOOLYMPIA**

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

(75) Inventor: **Wendy R. Bergman**, Lehigh Acres, FL (US)

(73) Assignee: **Yoder Brothers, Inc.**, Barberton, OH (US)

(\*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 12 days.

(21) Appl. No.: **10/396,602**

(22) Filed: **Mar. 25, 2003**

(51) **Int. Cl.<sup>7</sup>** ..... **A01H 5/00**  
(52) **U.S. Cl.** ..... **Plt./288**  
(58) **Field of Search** ..... **Plt./288**

*Primary Examiner*—Bruce R. Campell  
*Assistant Examiner*—Anne Marie Grunberg  
(74) *Attorney, Agent, or Firm*—C. A. Whealy

(57) **ABSTRACT**

A distinct cultivar of Chrysanthemum plant named ‘Yoolympia’, characterized by its uniform, upright and outwardly spreading plant habit; strong and freely branching growth habit; dark green-colored foliage; uniform flowering habit; early flowering habit; large decorative-type inflorescences; white-colored ray florets; and excellent postproduction longevity with plants maintaining good substance and color for about five weeks in an interior environment.

**1 Drawing Sheet**

1

Botanical classification/cultivar designation: *Chrysanthemum*×*morifolium* cultivar Yoolympia.

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 ‘Yoolympia’.

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 postproduction longevity.

The new Chrysanthemum originated from a cross made by the Inventor in November, 1997, in Salinas, Calif., of a proprietary Chrysanthemum seedling selection identified as code number YB-4620, not patented, as the female, or seed, parent with a proprietary Chrysanthemum seedling selection identified as code number YB-5334, 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 Fort Myers, Fla. in December, 1998. The selection of this plant was based on its uniform plant growth habit, desirable inflorescence form and ray 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, 1999. 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

The cultivar Yoolympia has not been observed under all possible environmental conditions. The phenotype may vary

2

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 ‘Yoolympia’. These characteristics in combination distinguish ‘Yoolympia’ as a new and distinct Chrysanthemum:

1. Uniform, upright and outwardly spreading plant habit.
2. Strong and freely branching growth habit.
3. Dark green-colored foliage.
4. Uniform flowering habit.
5. Early flowering, 7.5-week response time.
6. Large decorative-type inflorescences.
7. White-colored ray florets.
8. Excellent postproduction longevity with plants maintaining good substance and color for about five weeks in an interior environment.

Plants of the new Chrysanthemum differ primarily from plants of the female parent selection in ray floret coloration as plants of the new Chrysanthemum have white-colored ray florets whereas plants of the female parent selection have golden bronze-colored ray florets. In addition, plants of the new Chrysanthemum flower about three to four days earlier than plants of the female parent selection.

Plants of the new Chrysanthemum differ primarily from plants of the male parent selection in inflorescence form as plants of the new Chrysanthemum have fully double (decorative)-type inflorescences whereas plants of the male parent selection have semi-double-type inflorescences.

Plants of the new Chrysanthemum can be compared to plants of the cultivar Surf, disclosed in U.S. Plant Pat. No. 4,585. In side-by-side comparisons conducted in Salinas, Calif., plants of the new Chrysanthemum differed from plants of the cultivar Surf in the following characteristics:

1. Plants of the new Chrysanthemum were larger, broader and more vigorous than plants of the cultivar Surf.
2. Plants of the new Chrysanthemum flowered about three or four days earlier than plants of the cultivar Surf.



3. Plants of the new Chrysanthemum had larger inflorescences than plants of the cultivar Surf.
4. Ray floret color of plants of the new Chrysanthemum did not "pink" when grown under cool growing conditions whereas ray floret color of plants of the cultivar Surf did "pink" when grown under cool growing conditions.

#### 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 typical flowering plants of 'Yoolympia' grown as disbud-types.

The photograph at the bottom of the sheet comprises a close-up view of typical inflorescences of 'Yoolympia' 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 fall 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. At the time of 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 Yoolympia.

Commercial classification: Daisy-type potted Chrysanthemum.

Parentage:

*Female, or seed, parent.*—Proprietary *Chrysanthemum*×*morifolium* seedling selection identified as code number YB-4620, not patented.

*Male, or pollen, parent.*—Proprietary *Chrysanthemum*×*morifolium* seedling selection identified as code number YB-5334, 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 is typically grown as a disbud-

type. Uniform with lateral branches upright and outwardly spreading; uniformly mounded crown. Strong and freely branching growth habit; about five lateral branches develop after removal of terminal apex (pinching); dense and full plants.

*Plant height.*—About 30 cm.

*Plant width.*—About 48 cm.

*Lateral branches (peduncles).*—Length: About 24 cm.

Diameter: About 5 mm. Internode length: About 1.3 cm. Stength: Strong. Texture: Pubescent. Color: Close to 146A.

*Foliage description.*—Arrangement: Alternate; simple.

Length: About 8.75 cm. Width: About 5.8 cm. Apex: Acute to cuspidate. Base: Attenuate with truncate tendencies. Margin: Palmately lobed, sinuses between lateral lobes mostly parallel. Texture, upper surface: Sparsely pubescent. Texture, lower surface: Pubescent; veins prominent. Color: Developing and fully expanded foliage, upper surface: 147A. Developing and fully expanded foliage, lower surface: Slightly darker than 147B. Venation, upper and lower surfaces: 147B. Petiole length: About 2 cm. Petiole diameter: About 4 mm. Petiole color, upper and lower surfaces: 147B to 147C.

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. Plants are typically grown as disbud-types.

*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 7.5 weeks later.

*Postproduction longevity.*—Inflorescences maintain good color and substance for about five 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 5 mm. Diameter: About 6 mm. Shape: Oblate. Color: Close to 147A.

*Inflorescence diameter.*—About 11.75 cm.

*Inflorescence depth (height).*—About 3 cm.

*Diameter of disc.*—About 4 mm; inconspicuous.

*Receptacle diameter.*—About 8.5 mm.

*Ray florets.*—Shape: Elongated oblong. Orientation: Initially upright, then perpendicular to the peduncle. Aspect: Initially incurved, then recurved. Length: About 5.75 cm. Corolla tube length: About 1.7 cm. Width: About 1.2 cm. Apex: Emarginate. Base: Fused into a corolla tube. Margin: Entire. Texture: Smooth, glabrous, satiny. Number of ray florets per inflorescence: About 205 arranged in numerous whorls. Color: When opening and fully, opened, upper surface: Close to 155D. When opening and fully opened, lower surface: close to 155D.

*Disc florets.*—Arrangement: Massed at center of receptacle. Shape: Tubular, elongated. Apex: Five-pointed. Length: About 4 mm. Diameter, apex:

About 1 mm. Diameter, base: About 1 mm. Number of disc florets per inflorescence: Less than 20. Color: Immature: Close to 154A. Mature: Apex: Close to 9A. Mid-section: Close to 17A. Base: Close to 155D. Phyllaries: Quantity per inflorescence: About 24. Length: About 1 cm. Width: About 3 mm. Shape: Deltoid. 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 147A. Reproductive organs: Androecium: Present on disc florets only. Anther color: Close to 9A. Pollen

amount: None observed. Gynoecium: Present on both ray and disc florets. Style color: Close to 144B 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 ‘Yoolympia’, as illustrated and described.  
\* \* \* \* \*



