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

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(54) **CHRYSANTHEMUM PLANT NAMED**  
**‘YOPLYMOUTH’**

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

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

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

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patent is extended or adjusted under 35  
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*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  
‘Yoplymouth’, characterized by its uniform, upright and  
somewhat outwardly spreading plant habit; strong and freely  
branching growth habit; dark green-colored foliage; uniform  
flowering habit; early flowering habit; numerous daisy-type  
inflorescences with spoon-shaped ray florets; red purple-  
colored ray florets with light purple-colored tubes; and  
excellent postproduction longevity with plants maintaining  
good substance and color for about four weeks in an interior  
environment.

**1 Drawing Sheet**

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

**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 ‘Yoplymouth’.

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 compact potted Chrysanthemum  
cultivars that are suitable for year-round production with  
uniform plant growth habit, good vigor, desirable inflores-  
cence form and floret colors, fast response time, and good  
postproduction longevity.

The new Chrysanthemum originated from a cross made  
by the Inventor in May, 1998, in Salinas, Calif., of a  
proprietary Chrysanthemum seedling selection identified as  
code number YB-3239, not patented, as the female, or seed,  
parent with a proprietary Chrysanthemum seedling selection  
identified as code number YB-5897, 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 March, 1999.  
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 June, 1999. 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 Yoplymouth 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 ‘Yoply-  
mouth’. These characteristics in combination distinguish  
‘Yoplymouth’ as a new and distinct Chrysanthemum:

1. Uniform, upright and somewhat outwardly spreading  
plant habit.
2. Strong and freely branching growth habit.
3. Dark green-colored foliage.
4. Uniform flowering habit.
5. Early flowering, 7-week response time.
6. Numerous daisy-type inflorescences with spoon-  
shaped ray florets.
7. Red purple-colored ray florets with light purple-colored  
tubes.
8. Excellent postproduction longevity with plants main-  
taining good substance and color for about four 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 red purple-  
colored ray florets whereas plants of the female parent  
selection have purple-colored ray florets. In addition, plants  
of the new Chrysanthemum flower about one week earlier  
than plants of the female parent selection.

Plants of the new Chrysanthemum differ primarily from  
plants of the male parent selection in ray floret coloration as  
plants of the new Chrysanthemum have red purple-colored  
ray florets whereas plants of the male parent selection have  
purple-colored ray florets. In addition, plants of the new  
Chrysanthemum are shorter and are more freely branching  
than plants of the male parent selection.



Plants of the new Chrysanthemum can be compared to plants of the cultivar Yoduluth, disclosed in U.S. Plant Pat. No. 11,993. In side-by-side comparisons conducted in Salinas, Calif., plants of the new Chrysanthemum differed from plants of the cultivar Yoduluth in the following characteristics:

1. Plants of the new Chrysanthemum were not as vigorous as plants of the cultivar Yoduluth.
2. Plants of the new Chrysanthemum flowered about two weeks earlier than plants of the cultivar Yoduluth.
3. Plants of the new Chrysanthemum flowered more uniformly than plants of the cultivar Yoduluth.
4. Ray florets of plants of the new Chrysanthemum had longer corolla tubes than ray florets of plants of the cultivar Yoduluth.
5. Ray florets of plants of the new Chrysanthemum were red purple in color whereas ray florets of plants of the cultivar Yoduluth were dark purple in color.

#### 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 'Yoplymouth' grown as spray-types.

The photograph at the bottom of the sheet comprises a close-up view of typical inflorescences of 'Yoplymouth' grown as spray-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 spray-types. Measurements and numerical values represent averages of typical flowering plants.

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

Commercial classification: Daisy-type potted Chrysanthemum.

Parentage:

*Female, or seed, parent.*—Proprietary *Chrysanthemum*×*morifolium* seedling selection identified as code number YB-3239, not patented.

*Male, or pollen, parent.*—Proprietary *Chrysanthemum*×*morifolium* seedling selection identified as code number YB-5897, 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 daisy-type potted Chrysanthemum that is typically grown as a spray-type. Uniform with lateral branches upright and somewhat outwardly spreading; uniformly mounded crown. Strong and freely branching growth habit; about six lateral branches develop after removal of terminal apex (pinching); dense and full plants.

*Plant height.*—About 32 cm.

*Plant width.*—About 44 cm.

*Lateral branches.*—Length: About 26 cm. Diameter: About 4 mm. Internode length: About 1.7 cm. Strength: Strong. Texture: Pubescent. Color: Close to 146A.

*Foliage description.*—Arrangement: Alternate; simple. Length: About 7.6 cm. Width: About 4.7 cm. Apex: Cuspidate. Base: Attenuate. Margin: Palmately lobed, sinuses between lateral lobes parallel to divergent. 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 1.8 cm. Petiole diameter: About 2.5 mm. Petiole color, upper and lower surfaces: 147B to 147C.

Inflorescence description:

*Appearance.*—Daisy-type inflorescence form with spoon-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 spray-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 seven weeks later.

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

*Quantity of inflorescences.*—Freely flowering, about 14 inflorescences develop per lateral branch.

*Inflorescence bud.*—Height: About 6 mm. Diameter: About 8 mm. Shape: Oblate. Color: Close to 146A.

*Inflorescence diameter.*—About 6.4 cm.

*Inflorescence depth (height).*—About 1.9 cm.

*Diameter of disc.*—About 1.7 cm.

*Receptacle diameter.*—About 6 mm.

*Ray florets.*—Shape: Spoon-shaped. Orientation: Initially upright, then to about 80° from vertical. Aspect: Straight and flat. Length: About 3.3 cm.

Corolla tube length: About 2.1 cm. Width: At spoon, about 7 mm; at base, about 2.5 mm. Apex: Rounded to emarginate. Base: Fused into a corolla tube. Margin: Entire. Texture: Smooth, glabrous, velvety. Number of ray florets per inflorescence: About 30 in a single whorl. Color: When opening, upper surface (throat): Close to 59A to 60A. When opening, lower surface (tube): Close to 155D underlain with close to 77A. Fully opened, upper surface (throat): Close to 61A. Fully opened, lower surface (tube): Close to 155D underlain with 77A.

*Disc florets*.—Arrangement: Massed at center of receptacle. Shape: Tubular, elongated. Apex: Five-pointed. Length: About 6.5 mm. Diameter, apex: About 2 mm. Diameter, base: About 1 mm. Number of disc florets per inflorescence: About 142. Color: Immature: Close to 154A. Mature: Apex: 9A. Mid-section: Close to 144D. Base: Close to 155D.

*Peduncles*.—Length: First peduncle: About 4.7 cm. Fourth peduncle: About 7.7 cm. Seventh peduncle: About 10.1 cm. Diameter: About 2 mm. Angle to

vertical: About 40 to 45° from vertical. Strength: Strong, flexible. Texture: Pubescent. Color: 146A.

*Phyllaries*.—Quantity per inflorescence: About 20. Length: About 7 mm. Width: About 3.5 mm. Shape: Deltoid. Apex: Acute. Base: Truncate. Margin: Entire. Texture, upper surface: Waxy, smooth. Texture, lower surface: Pubescent. Color, upper and lower surfaces: 146A.

*Reproductive organs*.—Androecium: Present on disc florets only. Anther color: Close to 9A. Pollen amount: Scarce. Pollen color: 17A. 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 'Yoplymouth', as illustrated and described.

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