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**Bergman**

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

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

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See application file for complete search history.

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(57) **ABSTRACT**

A new and distinct cultivar of *Chrysanthemum* plant named 'Yoottawa', characterized by its uniform and 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 or as a spray-type; early flowering habit; decorative-type inflorescences with elongated oblong-shaped ray florets; white-colored ray florets; and good postproduction longevity with plants maintaining good substance and color for about four to five weeks in an interior environment.

**2 Drawing Sheets**

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

**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 'Yoottawa'.

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 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* originated from a cross-pollination made by the Inventor in January, 2000, in Salinas, Calif., of a proprietary *Chrysanthemum* seedling selection identified as code number YB-A0238, not patented, as the female, or seed, parent with a proprietary *Chrysanthemum* seedling selection identified as code number YB-A0161, not patented, as the male, or pollen, parent. The new *Chrysanthemum* was discovered and selected by the Inventor in November 2000, as a single flowering plant from within the resulting progeny of the stated cross-pollination grown in a controlled environment in Fort Myers, Fla.

The selection of this plant was based on its 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.

Asexual reproduction of the new *Chrysanthemum* by vegetative tip cuttings was first conducted in Fort Myers, Fla. in March, 2001. Asexual reproduction by cuttings has

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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 Yoottawa 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 'Yoottawa'. These characteristics in combination distinguish 'Yoottawa' as a new and distinct *Chrysanthemum*:

1. Uniform and 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 or as a spray-type.
6. Early flowering, 7.5 week response time.
7. Decorative-type inflorescences with elongated oblong-shaped ray florets.
8. White-colored ray florets.
9. Good postproduction longevity with plants maintaining good substance and color for about four to five weeks in an interior environment.

Plants of the new *Chrysanthemum* can be compared to plants of the female parent selection. Plants of the new *Chrysanthemum* differ from plants of the female parent selection primarily in branching habit as plants of the female parent selection are not as freely branching as plants of the new *Chrysanthemum*. In addition, plants of the new *Chrysanthemum* have better inflorescence form retention than plants of the female parent selection.

Plants of the new *Chrysanthemum* can be compared to plants of the male parent selection. Plants of the new



*Chrysanthemum* differ from plants of the male parent selection primarily in ray floret coloration as plants of the male parent selection have ivory white-colored ray florets. In addition, inflorescences of plants of the new *Chrysanthemum* have few to no disc florets whereas inflorescences of plants of the male parent selection have numerous disc florets.

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 Fort Myers, Fla., plants of the new *Chrysanthemum* differed from plant of the cultivar Surf in the following characteristics:

1. Plants of the new *Chrysanthemum* had larger inflorescences than plants of the cultivar Surf.
2. Plants of the new *Chrysanthemum* flowered about three to four days earlier than plants of the cultivar Surf.
3. Under low temperatures, ray florets of plants of the new *Chrysanthemum* did not "pink" whereas ray florets of plants of the cultivar Surf "pinked".

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

The photograph on the second sheet comprises a close-up view of typical inflorescences of 'Yoottawa' 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 autumn 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 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 spray-types. Measurements and numerical values represent averages of typical flowering plants.

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

Commercial classification: Decorative-type potted *Chrysanthemum*.

Parentage:

*Female, or seed, parent.*—Proprietary *Chrysanthemum*×*morifolium* seedling selection identified as code number YB-A0238, not patented.

*Male, or pollen, parent.*—Proprietary *Chrysanthemum*×*morifolium* seedling selection identified as code number YB-A0161, 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; moderately dense.

Plant description:

*Appearance.*—Herbaceous decorative-type potted *Chrysanthemum* that can be grown as a spray or as a disbud-typed. Upright with lateral branches 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 27 cm.

*Plant width.*—About 40 cm.

*Lateral branches.*—Length: About 21 cm. Diameter: About 4.5 mm. Internode length: About 2.5 cm. Strength: Strong. Texture: Pubescent. Color: Close to 144A.

*Foliage description.*—Arrangement: Alternate; simple. Length: About 7.9 cm. Width: About 5.7 cm. Apex: Mucronate. Base: Truncate. Margin: Palmately lobed, sinuses between lateral lobes mostly divergent. Texture, upper and lower surfaces: Pubescent. Color: Developing foliage, upper surface: Close to 147A. Developing foliage, lower surface: Close to 147B. Fully expanded foliage, upper surface: More green than 147A. Fully expanded foliage, lower surface: Close to 147B. Venation, upper surface: Close to 147A to 147B. Venation, lower surface: Close to 147B. Petiole length: About 2.4 cm. Petiole diameter: About 2.5 mm. Petiole color, upper surface: Close to 147A to 147B. Petiole color, lower surface: Close to 147B.

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). 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 four to five weeks in an interior environment.

*Quantity of inflorescences.*—Grown as a spray-type, about seven inflorescences develop per lateral branch.

*Inflorescence bud.*—Height: About 6 mm. Diameter: About 8 mm. Shape: Oblate. Color: More green than 144A.

*Inflorescence diameter.*—About 6.3 cm.

*Inflorescence depth (height).*—About 2.5 cm.

*Diameter of disc.*—If disc florets develop, about 3 mm.

*Receptacle diameter*.—About 6 mm.

*Ray florets*.—Shape: Elongated oblong. Orientation: Initially upright, eventually perpendicular to the peduncle. Aspect: Incurved to straight. Length: About 3.2 cm. Width: About 1.1 cm. Corolla tube length: About 4 mm. Corolla tube diameter: About 2 mm. Apex: Acute or emarginate. Base: Fused into a corolla tube. Margin: Entire. Texture, upper and lower surfaces: Smooth, glabrous; Satiny. Number of ray florets per inflorescence: About 170 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. Apex: Five-pointed. Length: About 6 mm. Diameter, apex: About 1.5 mm. Diameter, base: About 1 mm. Number of disc florets per inflorescence: Less than 10; disc florets may not develop. Color: Immature: Close to 144A. Mature, apex: 9A. Mature, mid-section and base: Close to 155D.

*Phyllaries*.—Quantity per inflorescence: About 22. Length: About 1 cm. Width: About 3.5 mm. Shape:

Lanceolate. Apex: Acute. Base: Truncate. Margin: Entire. Texture, upper surface: Waxy, smooth. Texture, lower surface: Pubescent. Color, upper surface: More green than 144A. Color, lower surface: Close to 146A.

*Peduncles*.—Length, terminal peduncle: About 3.3 cm. Length, fourth peduncle: About 5 cm. Diameter: About 2 mm. Strength: Strong. Texture: Pubescent. Color: Close to 144A to 146A.

*Reproductive organs*.—Androecium: Present on disc florets only. Anther color: Close to 12A. 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 'Yoottawa', as illustrated and described.

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