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**Vandenberg**

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(54) **CHRYSANTHEMUM PLANT NAMED**  
**'DAZZLING YOSTACY'**

(75) Inventor: **Cornelis P. Vandenberg**, Salinas, CA  
(US)

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

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(56) **References Cited**

**U.S. PATENT DOCUMENTS**

4,616,099 A \* 10/1986 Sparkes ..... 47/58

**OTHER PUBLICATIONS**

Shukla, et al., 1993, "Mutation studies on early and late  
varieties of garden chrysthemums", J. Nuclear Agric. Biol.,  
22(3-4):138-142.\*

Broertjes, et al., 1980, "A mutant of a mutant of a . . .  
Irradiation of progressive radiation induced mutants in a  
mutation breeding programme with *Chrysanthemum mori-*  
*folium*", Euphytica, 29:525-530.\*

Gosling, ed., 1979, "The Chrysanthemum Manual—6<sup>th</sup> edi-  
tion", The National Chrysanthemum Society, London, Essex  
Telegraph Press, Ltd., pp. 329-336.\*

Broertjes, et al., 1978, "Application of Mutation Breeding  
Methods in the Improvement of Vegetatively Propagated  
Crops", Elsevier Sci. Pub. Co., New York, pp. 162-175.\*

Searle, et al., 1968, "Chrysanthemums the Year Round",  
Blanford Press, London, pp. 27-29, 320-327.\*

Chan, 1966, "Chrysanthemum and rose mutations induced  
by x-rays", Ann. Soc. Hort. Sci. Proc., pp. 613-620.\*

Broertjes, 1966, "Mutation breeding of chrysanthemums",  
Euphytica, 15:156-162.\*

Dowrick, et al., 1966, "The induction of mutations in  
chrysanthemum using X- and gamma radiation", Euphytica,  
15:204-210.\*

\* cited by examiner

*Primary Examiner*—Howard J. Locker

(74) *Attorney, Agent, or Firm*—C. A. Whealy

(57) **ABSTRACT**

A distinct cultivar of Chrysanthemum plant named 'Daz-  
zling Yostacy', characterized by its upright plant habit;  
freely branching growth habit; uniform and freely flowering  
habit; daisy-type inflorescences; and red and yellow  
bi-colored ray florets.

**1 Drawing Sheet**

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**BACKGROUND OF THE INVENTION**

The present invention relates to a new and distinct cultivar  
of Chrysanthemum plant, botanically known as *Chrysan-*  
*themum x morifolium* and hereinafter referred to by the name  
'Dazzling Yostacy'.

The new cultivar 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 garden-type Chrysanthemum cultivars having  
inflorescences with desirable inflorescence forms, attractive  
florete colors and good garden performance.

The new Chrysanthemum is a naturally-occurring whole  
plant mutation of a proprietary induced mutation that origi-  
nated by exposing unrooted cuttings of the Chrysanthemum  
cultivar Stacy, disclosed in U.S. Plant Pat. No. 11,852, to  
X-ray radiation in March, 1997, in Fort Myers, Fla. The new  
Chrysanthemum was discovered and selected by the Inven-  
tor as a single flowering plant within a population of  
flowering plants of the irradiated selection in October, 1997  
in a controlled environment in Salinas, Calif. The selection  
of this plant was based on its desirable inflorescence form,  
attractive ray floret color and good garden performance.

Asexual reproduction of the new cultivar by terminal  
cuttings taken in a controlled environment in Salinas, Calif.  
since December, 1997, has shown that the unique features of

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this new Chrysanthemum are stable and reproduced true to  
type in successive generations.

**SUMMARY OF THE INVENTION**

The cultivar Dazzling Yostacy has not been observed  
under all possible environmental conditions. The phenotype  
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 'Dazzling  
Yostacy'. These characteristics in combination distinguish  
'Dazzling Yostacy' as a new and distinct cultivar:

1. Upright plant habit.
2. Freely branching, dense, full plants.
3. Uniform and freely flowering.
4. Daisy-type inflorescences.
5. Yellow and red bi-colored ray florets.

Compared to plants of the cultivar Stacy, plants of the new  
Chrysanthemum flower slightly later and differ in ray floret  
color.

**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 top of the sheet comprises a side perspective view of a typical flowering plant of 'Dazzling Yostacy'.

The photograph at the bottom of the sheet comprises a close-up view of typical inflorescences of the cultivar 'Dazzling Yostacy'.

#### DETAILED BOTANICAL DESCRIPTION

In the following description, color references are made to The Royal Horticultural Society Colour Chart except where general terms of ordinary dictionary significance are used. The following observations and measurements describe plants grown in Salinas, Calif., under conditions which approximate those generally used in commercial garden Chrysanthemum production. One rooted cutting was planted in a 15-cm container in July, 2000 and plants were grown under natural season conditions. Plants were not pinched, that is, the terminal apex was not removed to enhance branching. Measurements and numerical values represent averages for typical flowering plants.

Botanical classification: *Chrysanthemum* × *morifolium* cultivar Dazzling Yostacy.

Commercial classification: Daisy-type garden Chrysanthemum.

Parentage: Naturally-occurring whole plant mutation of a proprietary *Chrysanthemum* × *morifolium* induced mutation, 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, fine and fibrous.

*Rooting habit*.—Freely branching.

Plant description:

*Appearance*.—Perennial herbaceous daisy-type garden Chrysanthemum. Inverted triangle; upright plant form. Stems initially upright, then somewhat outwardly spreading giving a uniformly mounded appearance to the plant. Freely branching with about 8 lateral branches per plant.

*Plant height*.—About 20 cm.

*Plant diameter*.—About 25 cm.

*Lateral branches*.—Length: About 17 cm. Diameter: About 4.5 mm. Internode length: About 1.6 cm. Aspect: Mostly upright. Texture: Pubescent. Color: 146A, overlain with anthocyanin, close to 187A, most prominent at the nodes.

*Foliage description*.—Leaf arrangement: Alternate. Length: About 4.7 cm. Width: About 3.7 cm. Apex: Cuspidate to mucronate. Base: Attenuate. Margin: Palmately lobed, sinuses mostly divergent. Texture: Both surfaces, pubescent; veins prominent on lower surface. Color: Young foliage upper surface: 147A. Young foliage lower surface: 147B. Mature foliage upper surface: 147A. Mature foliage lower surface: 147B. Venation upper surface: 147B. Venation lower surface: 146B. Petiole length: About 1.6 cm. Petiole

diameter: About 2 mm. Petiole color, both surfaces: 146B to 146C.

Inflorescence description:

*Appearance*.—Daisy-type inflorescence form with elongated oblong-shaped ray florets. Inflorescences borne on terminals above foliage, arising from leaf axils. Disk and ray florets arranged acropetally on a capitulum. About 15 inflorescences per lateral; about 120 inflorescences per plant.

*Flowering response*.—Under natural season conditions, plants flower in mid to late September in the Northern Hemisphere and continue to flower for at least three weeks depending on weather conditions.

*Inflorescence bud (before showing color)*.—Height: About 5 mm. Diameter: About 7 mm. Phyllary color: 143A.

*Inflorescence size*.—Diameter: About 4.6 cm. Depth (height): About 1.1 cm. Disc diameter: About 1.3 cm. Receptacle diameter: About 5 mm.

*Ray florets*.—Shape: Elongated oblong. Length: About 2.2 cm. Corolla tube length: About 4 mm. Width: About 5 mm. Apex: Acute, emarginate or dentate. Margin: Entire. Texture: Smooth, glabrous, satiny. Orientation: Initially upright and concave, then perpendicular to the peduncle and slightly convex. Number of ray florets per inflorescence: About 63 in two to three rows. Color: When opening, upper surface: Towards apex: 46A to 53A. Mid-section: Longitudinal stripes of 46A to 53A and longitudinal stripes of 9A, alternating. Towards base: Yellow, 9A. When opening, lower surface: Towards apex: 9A underlain with 59A. Mid-section: Longitudinal stripes of 9A underlain with 59A and longitudinal stripes of 9A, alternating. Towards base: 9A. Opened inflorescence, upper surface: Towards apex: 46A to 53A. Mid-section: Longitudinal stripes of 46A to 53A and longitudinal stripes of 9A, alternating. Towards base: 9A. Opened inflorescence, lower surface: Towards apex: 9B underlain with 59A. Mid-section: Longitudinal stripes of 9B underlain with 59A and longitudinal stripes of 9B, alternating. Towards base: 9B.

*Disc florets*.—Shape: Tubular, apex dentate. Length: About 5.5 mm. Width: Apex: About 2 mm. Base: About 1 mm. Number of disc florets per inflorescence: About 91. Color: Immature: 144A to 145A. Mature: Apex: 9A to 12A. Mid-section: 154D. Base: 144D.

*Peduncle*.—Aspect: Flexible, angled about 50 to 55° from the stem. Length: First peduncle: About 4.6 cm. Fourth peduncle: About 6.1 cm. Diameter: About 2 mm. Texture: Pubescent. Color: 146A.

*Reproductive organs*.—Androecium: Present on disc florets only. Anther color: 15A. Pollen: None. Gynoecium: Present on both ray and disc florets.

*Seed*.—Seed production has not been observed.

Disease resistance: Plants of the new Chrysanthemum have not been shown to be resistant to pathogens common to Chrysanthemums.

Garden performance: Plants of the new Chrysanthemum have been observed to be tolerant to rain and wind.

It is claimed:

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

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