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Vandenberg

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(54) **CHRYSANTHEMUM PLANT NAMED 'MAKE-UP'**

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(58) **Field of Search** Plt./286

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(57) **ABSTRACT**

A distinct cultivar of Chrysanthemum plant named 'Make-Up', characterized by its large daisy-type inflorescences that are about 6.8 cm in diameter; attractive dark red and yellow bi-colored ray florets; very freely flowering habit with numerous inflorescences per stem; early flowering, response time about 50 days; dark green foliage; strong stems; and excellent postproduction longevity with inflorescences maintaining good substance and color for about four weeks in an interior environment.

2 Drawing Sheets

BACKGROUND OF THE INVENTION

The present invention relates to a new and distinct cultivar of Chrysanthemum plant, botanically known as *Chrysanthemum×morifolium* and hereinafer referred to by the name 'Make-Up'.

The new Chrysanthemum is a product of a planned breeding program conducted by the Inventor in Salinas, Calif. and Alva, Fla. The objective of the breeding program is to create new cut Chrysanthemum cultivars having inflorescences with desirable colors and good form and substance.

The new Chrysanthemum originated from a cross made by the Inventor in July, 1995, in Salinas, Calif., of a proprietary Chrysanthemum seedling selection identified as code number D050, not patented, as the female, or seed, parent with a proprietary Chrysanthemum seedling selection identified as D777, not patented, as the male, or pollen, parent.

The cultivar Make-Up was discovered and selected by the Inventor as a flowering plant within the progeny of the stated cross in a controlled environment in Alva, Fla., in November, 1996. The selection of this plant was based on its desirable inflorescence colors and good form and substance.

Asexual reproduction of the new Chrysanthemum by terminal cuttings taken in a controlled environment in Salinas, Calif., 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 Make-Up 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 'Make-Up'. These characteristics in combination distinguish 'Make-Up' as a new and distinct cultivar:

1. Large daisy-type inflorescences that are about 6.8 cm in diameter.

2. Attractive dark red and yellow bi-colored ray florets.

3. Very freely flowering with numerous inflorescences per stem.

4. Early flowering, response time about 50 days.

5. Dark green foliage.

6. Thick and strong stems.

7. Excellent postproduction longevity with inflorescences maintaining good substance and color for about four weeks in an interior environment.

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 slightly 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 a typical flowering stem of 'Make-Up' grown as a spray-type cut Chrysanthemum.

The photograph on the second sheet comprises a close-up view of typical inflorescences of 'Make-Up'.

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 commercial practice in a double-layer polyethylene-covered greenhouse. Two-week old rooted cuttings were planted on Jun. 7, 2000 and received 12 long day/short nights followed by short day/long nights until flowering. Plants were grown as single-stem cut chrysanthemums. During the production time, the following environmental conditions were measured: day temperatures, 18

to 27° C.; night temperatures, 16 to 18° C.; and light levels, 2,000 to 4,000 foot-candles. Measurements and numerical values represent averages for six to ten typical flowering stems and were taken during the week of Aug. 20, 2000.

Botanical classification: *Chrysanthemum×morifolium* cultivar Make-Up.

Commercial classification: Daisy spray-type cut Chrysanthemum.

Parentage:

Female or seed parent.—Proprietary *Chrysanthemum×morifolium* seedling selection identified as code number D050, not patented.

Male or pollen parent.—Proprietary *Chrysanthemum×morifolium* seedling selection identified as code number D777, not patented.

Propagation:

Type.—Terminal tip cuttings.

Time to rooting.—Seven to ten days with soil temperatures of 21° C.

Root description.—Fine, fibrous and well-branched.

Plant description:

Appearance.—Herbaceous daisy spray-type cut flower.

Flowering stem description.—Aspect: Erect. Length: About 96.5 cm. Spray width: About 18.5 cm. Diameter: About 7.5 mm. Texture: Pubescent. Color: 146A.

Foliage description.—Arrangement: Alternate. Length: About 11.75 cm. Width: About 9.8 cm. Apex: Cuspidate to mucronate. Base: Mostly truncate. Margin: Palmately lobed; sinuses mostly convergent and overlapping. Texture: Upper and lower surfaces pubescent; veins prominent on lower surface. Color: Young foliage upper surface: Darker than 147A. Young foliage lower surface: Darker than 147B. Mature foliage upper surface: Close to 147A; venation, close to 147A. Mature foliage lower surface: Close to 147B; venation, close to 146B. Petiole: Length: About 2.3 cm. Diameter: About 3.5 mm. Color: Close to 146B.

Flowering description:

Appearance.—Daisy spray-type inflorescence form with elongated oblong-shaped ray florets. Inflorescences borne on terminals, arising from leaf axils. Disc and ray florets arranged acropetally on a capitulum.

Flowering response.—Under natural conditions, plant flowers 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). Plants exposed to about two weeks of long day/short night conditions after planting followed by photoinductive short day/long night conditions flower about 50 days later.

Postproduction longevity.—In an interior environment, flowering stems will maintain good color and substance for about four weeks in an interior environment after one week of cool storage.

Quantity of inflorescences.—Freely flowering with about 15 inflorescences per flowering stem.

Inflorescence size.—Diameter: About 6.8 cm. Depth (height): About 2.6 cm. Diameter of disc: About 1.7 cm. Diameter of receptacle: About 8 mm.

Ray florets.—Shape: Elongated oblong. Length: About 3.6 cm. Width: About 1.1 cm. Corolla tube length: About 4 mm. Corolla tube diameter: Less than 1 mm. Apex: Rounded or emarginate. Base: Attenuate. Margin: Entire. Texture: Satiny, smooth, glabrous; longitudinally ridged. Aspect: Initially concave, then flattening, subsequently convex. Aspect: Initially upright and incurved; when mature, about 90° from vertical and reflexed. Number of ray florets per inflorescence: About 64 arranged in four or five rows. Color: When opening, upper surface: Apex, dark red, 46A to 53A; midsection, alternating longitudinal stripes of dark red and yellow, 46A to 53A and 9A, respectfully; base, yellow, 9A. When opening, lower surface: Ground color, yellow, 9B, underlain with dark red, 59A. Fully opened, upper surface: Apex, dark red, 46A to 53A; midsection, alternating longitudinal stripes of dark red and yellow, 46A to 53A and 9A, respectfully; base, yellow, 9A. Yellow coloration becomes more dominant with subsequent development. Fully opened, lower surface: Ground color, yellow, 9B to 8A; mid-section and apex, underlain with longitudinal stripes of dark red, 59A.

Disc florets.—Shape: Tubular; slightly flared at apex. Length: About 6.5 mm. Width. Apex: About 1.5 mm. Base: About 1 mm. Number of disc florets per inflorescence: Numerous, about 198. Color: Immature: 144A to 145A to 154A. Mature: Apex: 9A. Mid-section: 154D. Base: Close to 155D.

Peduncle.—Aspect: Strong, angled about 45° from vertical. Length: First peduncle: About 5.5 cm. Fourth peduncle: About 7.8 cm. Seventh peduncle: About 13 cm. Diameter: About 3 mm. Texture: Very fine pubescence. Color: 146A.

Reproductive organs.—Androecium: Present on disc florets only. Anther color: 9A. Amount of pollen: Moderate. Pollen color: 13A to 15A. Gynoecium: Present on both ray and disc florets.

Seed.—Seed production has not been observed.

Disease resistance: Resistance to pathogens common to Chrysanthemums has not been observed on plants grown under commercial conditions.

Temperature tolerance: Plants of the new Chrysanthemum have demonstrated tolerance to night temperatures as low as 5° C. and day temperatures lower than 40° C.

It is claimed:

1. A new and distinct cultivar of Chrysanthemum plant named 'Make-Up', as illustrated and described.

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