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**Vandenberg**

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

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(57) **ABSTRACT**

A distinct cultivar of Chrysanthemum plant named 'Shock', characterized by its anemone-type inflorescences that are about 5.7 cm in diameter with large anemone centers; attractive purple-colored ray and disc florets; very freely flowering habit with numerous inflorescences per stem; response time about 55 days; dark green foliage; strong stems; and good postproduction longevity with inflorescences maintaining good substance and color for about four weeks in an interior environment.

**2 Drawing Sheets**

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**BACKGROUND OF THE INVENTION**

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

The new Chrysanthemum is a product of a planned breeding program conducted by the Inventor in Salinas, Calif. 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 November, 1994, in Salinas, Calif., of the Chrysanthemum cultivar Anila, not patented, as the male, or pollen, parent with the Chrysanthemum cultivar Trillion, not patented, as the female, or seed, parent. Plants of the new Chrysanthemum differ from plants of the parent cultivars primarily in ray floret color.

The cultivar Shock 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, 1995. 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 Alva, Fla., 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 Shock 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 'Shock'. These characteristics in combination distinguish 'Shock' as a new and distinct cultivar:

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1. Anemone-type inflorescences that are about 5.7 cm in diameter and with large anemone centers.
2. Attractive purple-colored ray and disc florets.
3. Very freely flowering with numerous inflorescences per stem.
4. Response time about 55 days.
5. Dark green foliage.
6. Thick and strong stems.
7. Good 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 'Shock' grown as a spray-type cut Chrysanthemum.

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

**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 Feb. 10, 2000 and received 18 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 Apr. 30, 2000.

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

Commercial classification: Anemone spray-type cut Chrysanthemum.

Parentage:

*Male or pollen parent.*—*Chrysanthemum*×*morifolium* cultivar Anila, not patented.

*Female or seed parent.*—*Chrysanthemum*×*morifolium* cultivar Trillion, 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 anemone spray-type cut flower.

*Flowering stem description.*—Aspect: Erect. Length: About 88.9 cm. Spray width: About 13 cm. Diameter: About 7.5 mm. Internode length: About 2.8 cm. Texture: Pubescent. Color: 144A to 146A with longitudinal streaks of anthocyanin, close to 187A.

*Foliage description.*—Arrangement: Alternate. Length: About 9.5 cm. Width: About 7.75 cm. Apex: Mucronate. Base: Mostly truncate. Margin: Palmately lobed; sinuses mostly convergent, occasionally 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: 147A; venation, close to 147A to 147B. Mature foliage lower surface: 147B; venation, close to 147B. Petiole: Length: About 2.25 cm. Diameter: About 3 mm. Color: Close to 147B.

Flowering description:

*Appearance.*—Anemone 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 three weeks of long

day/short night conditions after planting followed by photoinductive short day/long night conditions flower about 55 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 5.7 cm. Depth (height): About 1.75 cm. Diameter of disc: About 3.7 cm. Diameter of receptacle: About 6 mm.

*Ray florets.*—Shape: Elongated oblong. Length: About 2.9 cm. Width: About 1 cm. Apex: Mostly rounded, acute, or occasionally emarginate. Base: Attenuate. Margin: Entire. Texture: Velvety, smooth, glabrous; longitudinally ridged. Aspect: Concave. Aspect: Initially upright; when mature, about 90° from vertical. Number of ray florets per inflorescence: About 48 arranged in three rows. Color: When opening, upper and lower surfaces: Darker than 77A. Mature, upper surface: Close to 61A; color does not fade with subsequent development. Mature, lower surface: Close to 71A.

*Disc florets.*—Shape: Enlarged tubular; flared. Length: About 1.7 cm. Width: Apex: About 8 mm. Base: About 1 mm. Number of disc florets per inflorescence: Numerous, typically about 132. Color: Immature: 187A. Mature, tube: Apex: 59A. Mid-section: 77A. Base: 154A to white, close to 155D. Mature, throat: 59A.

*Peduncle.*—Aspect: Strong, angled about 35 to 40° from vertical. Length: First peduncle: About 7.4 cm. Fourth peduncle: About 9.5 cm. Seventh peduncle: About 10.6 cm. Diameter: About 2.5 mm. Texture: Very fine pubescence. Color: 144A to 146A.

*Reproductive organs.*—Androecium: Present on disc florets only. Anther color: 9A. Amount of pollen: None observed to date. 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 good 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 'Shock', as illustrated and described.

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