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(12) **United States Plant Patent**  
**VandenBerg**(10) **Patent No.:** **US PP12,007 P2**  
(45) **Date of Patent:** **Jul. 24, 2001**(54) **CHRYSANTHEMUM PLANT NAMED  
'CHOICE'**P.P. 8,043 \* 11/1992 van der Knaap ..... Plt./295  
P.P. 8,045 \* 11/1992 van der Knaap ..... Plt./295(75) Inventor: **Cornelis P. VandenBerg**, Salinas, CA  
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patent is extended or adjusted under 35  
U.S.C. 154(b) by 0 days.(57) **ABSTRACT**(21) Appl. No.: **09/383,524**

A distinct cultivar of Chrysanthemum plant named 'Choice', characterized by its large daisy-type inflorescences that are about 7.8 cm in diameter; attractive light bronze to dark yellow ray and bright green to bright yellow disc florets; very floriferous with numerous inflorescences per stem; early flowering, response time about 53 days; dark green foliage; strong stems; and good postproduction longevity with inflorescences maintaining good substance and color for about three weeks in an interior environment.

(22) Filed: **Aug. 26, 1999****3 Drawing Sheets**(51) **Int. Cl.<sup>7</sup>** ..... **A01H 5/00**  
(52) **U.S. Cl.** ..... **Plt./295**  
(58) **Field of Search** ..... Plt./295, 296(56) **References Cited****U.S. PATENT DOCUMENTS**

P.P. 7,511 \* 4/1991 Vandenberg ..... Plt./295

**1****BACKGROUND OF THE INVENTION**

The present invention relates to a new and distinct cultivar of Chrysanthemum plant, botanically known as *Dendranthema grandiflora* and referred to by the cultivar name Choice.

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 May, 1995, in Salinas, Calif., of a proprietary Chrysanthemum seedling selection identified as 0384 as the female, or seed, parent with a proprietary Chrysanthemum seedling selection identified as 1849, as the male, or pollen, parent.

The cultivar Choice 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 March, 1996. The selection of this plant was based on its desirable inflorescence color 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 Choice 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.

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The following traits have been repeatedly observed and are determined to be the unique characteristics of 'Choice'. These characteristics in combination distinguish 'Choice' as a new and distinct cultivar:

- 5 1. Large daisy-type inflorescences that are about 7.8 cm in diameter.  
10 2. Attractive light bronze to dark yellow ray and bright green to bright yellow disc florets. Disc florets are slow to mature and maintain green coloration for a long period of time.  
15 3. Very floriferous with numerous inflorescences per stem.  
4. Early flowering, response time about 53 days.  
5. Dark green foliage.  
6. Strong stems.  
20 7. Good postproduction longevity with inflorescences maintaining good substance and color for about three 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.

The photograph on the first sheet comprises a side perspective view of a typical flowering stem of 'Choice' grown as a spray-type cut Chrysanthemum.

25 The photograph on the second sheet comprises another side view of typical inflorescences of the cultivar Choice.

The photograph at the top of the third sheet comprises a close-up view of upper and lower surfaces of typical inflorescences of the cultivar Choice.

30 35 The photograph at the bottom of the third sheet comprises a close-up view of typical young and mature leaves of the

cultivar Choice. Floret and foliage colors in the photographs may differ from the actual colors due to light reflectance.

#### 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. 11, 1999 and received 21 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 ranging from 18 to 27° C.; night temperatures ranging from 16 to 18° C.; and light level of about 2,000 to 4,000 foot-candles. Measurements and numerical values represent averages for six to ten typical flowering stems.

**Botanical classification:** *Dendranthema grandiflora* cultivar Choice.

**Commercial classification:** Daisy spray-type cut Chrysanthemum with elongated oblong-shaped ray florets.

**Parentage:**

**Female or seed parent.**—Proprietary *Dendranthema grandiflora* seedling selection, code number 0384.

**Male or pollen parent.**—Proprietary *Dendranthema grandiflora* seedling selection, code number 1849.

**Propagation:**

**Type.**—Terminal tip cuttings.

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

**Rooting habit.**—Fine, fibrous and well-branched.

**Plant description:**

**Appearance.**—Perennial herbaceous daisy spray-type cut flower. Stems upright, uniform habit and freely branching.

**Flowering stem length.**—About 97 cm.

**Stem color.**—144A.

**Foliage description.**—Arrangement: Alternate. Length: About 11.4 cm. Width: About 8.8 cm. Apex: Cuspidate. Base: Truncate. Margin: Palmately lobed. Texture: Upper and lower surfaces slightly pubescent. Veins prominent on lower surface. Color: Young foliage upper surface: Much darker than 147A. Young foliage lower surface: Darker than 147B. Mature foliage upper surface: 147A. Mature foliage lower surface: 147B. Venation upper surface: 147A–147B. Venation lower surface: 147B. Petiole: Length: About 2.1 cm. Diameter: About 3 mm. Color: Upper, 147C; lower, 147B–147C; margins, 147A.

**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 three weeks of long day/short night conditions after planting followed by photoinductive short day/long night conditions flower about 53 days later.

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

**Quantity of inflorescences.**—Very floriferous with about 23 inflorescences per flowering stem.

**Inflorescence size.**—Diameter: About 7.8 cm. Depth (height): About 1.4 cm. Diameter of disc: About 1.8 cm. Diameter of receptacle: About 8 mm.

**Ray florets.**—Shape: Elongated oblong. Length: About 3.8 cm. Width: About 1.1 cm. Apex: Rounded to slightly dentate. Base: Attenuate. Margin: Entire. Texture: Satiny, smooth, glabrous. Aspect: Initially upright; lower rays perpendicular to peduncle, inner rays 30° to peduncle. Number of ray florets per inflorescence: Numerous, multiple whorls, about 52. Color: When opening, upper surface: Close to 163A. When opening, lower surface: Close to 163A. Mature, upper surface: 163A–163B to 13A-12A, dulled. Mature, lower surface: 12B.

**Disc florets.**—Shape: Elongated, flared, tubular. Length: About 7 mm. Width: Apex, about 1.5 mm; base, about 1 mm. Number of disc florets per inflorescence: Numerous, typically more than 150. Color: Immature: Green, 144A. Mature: Disc florets are slow to mature and maintain green coloration for a long period of time. Apex: Close to 9A. Mid-section: Very light green. Base: White.

**Peduncle.**—Aspect: Strong and angled about 45 to 50° to the stem. Length: First peduncle: About 5.9 cm. Fourth peduncle: About 9.7 cm. Seventh peduncle: About 11.6 cm. Texture: Very fine pubescence. Color: 144A.

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

**Disease resistance:** Resistance to diseases 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 temperatures as low as 5° C.

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

**It is claimed:**

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

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