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VandenBerg

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[54] CHRYSANTHEMUM PLANT NAMED
'LAGUNA'

[75] Inventor: Cornelis P. VandenBerg, Salinas, Calif.

[73] Assignee: Yoder Brothers, Inc., Barberton, Ohio

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Primary Examiner—Howard J. Locker

Attorney, Agent, or Firm—C. A. Whealy

[57] ABSTRACT

A distinct cultivar of Chrysanthemum plant named 'Laguna', characterized by its medium sized daisy-type inflorescences that are about 8 cm in diameter; attractive dark red ray florets and bright yellow disc florets; and excellent postproduction longevity with flowering stems maintaining good substance and color for three to four weeks in an interior environment after one week of cool storage.

2 Drawing Sheets

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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 'Laguna'.

The new cultivar 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 Chrysanthemum cultivars having inflorescences with desirable colors and good form and substance.

The new cultivar originated from a cross made by the inventor in March, 1993, in Salinas, Calif. of two unnamed proprietary seedling selections. The female parent, seedling number 2355, is a daisy-type cut Chrysanthemum with pink and white bi-colored ray florets. The male parent, seedling number 0617, is a daisy-type cut Chrysanthemum with red ray florets.

The cultivar 'Laguna' 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 April, 1994. The selection of this plant was based on its desirable inflorescence color and good form and substance.

Asexual reproduction of the new cultivar 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.

The cultivar 'Laguna' 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 'Laguna'. These characteristics in combination distinguish 'Laguna' as a new and distinct cultivar:

1. Medium sized daisy-type inflorescences that are about 8 cm in diameter.

2. Attractive dark red ray florets and bright yellow disc florets.

3. Excellent postproduction longevity with flowering stems maintaining good substance and color for three to four weeks in an interior environment after one week of cool storage.

The new Chrysanthemum is similar in ray floret color to the Chrysanthemum cultivars Foxy (disclosed in U.S. Plant Pat. No. 5,414) and 'Omaha' (disclosed in U.S. Plant patent application Ser. No. 08/709,748). However in side-by-side comparisons in Salinas, Calif. under commercial practice, plants of the new Chrysanthemum are shorter, flower earlier,

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have shorter peduncles, and have bright yellow mature disc florets compared to plants of the cultivars 'Foxy' and 'Omaha'. Plants of the new Chrysanthemum have smaller inflorescences than plants of the cultivar 'Foxy'. Compared to plants of the cultivar 'Omaha', plants of the new Chrysanthemum have fewer inflorescences per flowering stem. Additionally, plants of the new Chrysanthemum have daisy-type inflorescences whereas plants of the cultivar Omaha have anemone-type inflorescences.

The accompanying colored photographs illustrate the overall appearance of the new cultivar, showing the colors as true as it is reasonably possible to obtain in colored reproductions of this type.

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

The second photograph comprises a top perspective view of adaxial (left) and abaxial (right) surfaces of typical inflorescences of the cultivar 'Laguna'.

The third photograph comprises a top perspective view of the adaxial (bottom of photograph) and abaxial (top of photograph) surfaces of leaves of the cultivar 'Laguna' at three different stages of development showing the differences in size and lobation development.

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

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 commercial practice in a polyethylene-covered greenhouse. Rooted cuttings were planted Nov. 7, 1996 and cut flowers were harvested on Jan. 13, 1997. After planting rooted cuttings of the new cultivar, plants received 14 long day/short nights following by short day/long nights until flowering. Measurements and numerical values represent averages for six typical flowering stems.

Botanical classification: *Dendranthema grandiflora* cultivar 'Laguna'.

Commercial classification: Daisy spray-type cut Chrysanthemum.

Parentage:

Male or pollen parent.—Unnamed proprietary *Dendranthema grandiflora* seedling selection number 0617.

Female or seed parent.—Unnamed proprietary *Dendranthema grandiflora* seedling selection number 2355.

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 76 cm.

Foliage description.—Leaf arrangement: Alternate. Leaf size, fully expanded: Length: About 11.5 cm. Width: About 8.5 cm. Leaf apex: Cuspidate. Leaf base: Attenuate. Leaf margin: Palmately lobed. Leaf texture: Abaxial and adaxial surfaces slightly pubescent. Veins prominent on abaxial surface. Color: Young foliage adaxial surface: 147A. Young foliage abaxial surface: 147B. Mature foliage adaxial surface: 147A. Mature foliage abaxial surface: 147B. Venation adaxial surface: 147A. Venation abaxial surface: 147B. Petiole: Length: About 3.5 cm. Color: 147B.

Flowering description:

Appearance.—Daisy-type inflorescence form. Inflorescences borne on terminals, arising from leaf axils. Disk 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 two weeks of long day/short night conditions after planting followed by photoinductive short day/long night conditions flower about 51 days later.

Postproduction longevity.—In an interior environment, flowering stems will maintain good color and sub-

stance for three or four weeks in an interior environment after one week of cool storage.

Quantity of inflorescences.—About 6 inflorescences per flowering stem.

Inflorescence size.—Diameter: About 8 cm. Depth (height): About 1.25 cm. Diameter of disc: About 2 cm.

Ray florets.—Shape: Oblong. Size: Length: About 4 cm. Width: About 1.25 cm. Apex: Cuspidate or emarginate. Base: Attenuate. Margin: Entire. Texture: Satiny, smooth, glabrous, ribbed lengthwise. Aspect: Mostly flat. Number of ray florets per inflorescence: About 32. Color: When opening: Adaxial surface: 46A with 9A at base. Abaxial surface: 173B. Mature: Adaxial surface: 46A with 9A at base. Color does not fade with further development. Abaxial surface: 173B/173C. Color does not fade with further development.

Disc florets.—Shape: Tubular. Size: Length: About 7 mm. Width: Apex: About 2 mm. Base: About 1 mm. Number of disc florets per inflorescence: About 180. Color: Immature: 154A. Mature: Apex: 9A. Base: White. Throat: 46A.

Peduncle.—Aspect: Strong and angled about 45° to the stem. Length: First peduncle: About 5.75 cm. Fourth peduncle: About 9.25 cm. Texture: Pubescent. Color: 147B.

Reproductive organs.—Androecium: Present on disc florets only. Anther color: 9A. Pollen: Moderate, 9A in color. Gynoecium: Present on both ray and disc florets.

Disease resistance: No known Chrysanthemum diseases observed to date on plants grown under commercial greenhouse conditions.

Seed production: Seed production has not been observed. It is claimed:

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

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