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Dekker

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

(50) Latin Name: ***Chrysanthemum×morifolium***
Varietal Denomination: **Dekalero**

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(58) **Field of Classification Search**
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(57) **ABSTRACT**

A new and distinct cultivar of *Chrysanthemum* plant named 'Dekalero', characterized by its single-type inflorescences with white-colored ray florets and bright green-colored developing disc florets; strong and upright flowering stems; relatively short response time; uniform and freely flowering habit and good postproduction longevity.

2 Drawing Sheets

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Botanical designation: *Chrysanthemum×morifolium.*
Cultivar denomination: 'DEKALERO'.

BACKGROUND OF THE INVENTION

The present invention relates to a new and distinct cultivar of *Chrysanthemum* plant, botanically known as *Chrysanthemum×morifolium*, commercially grown as a cut flower and hereinafter referred to by the name 'Dekalero'.

The new *Chrysanthemum* plant is a product of a planned breeding program conducted by the Inventor in Hensbroek, The Netherlands. The objective of the breeding program is to create new freely-flowering cut *Chrysanthemum* plants with single inflorescences, strong flowering stems, short response time and excellent postproduction longevity.

The new *Chrysanthemum* plant originated from a cross-pollination made by the Inventor in Hensbroek, The Netherlands in February, 2010, of a proprietary selection of *Chrysanthemum×morifolium* identified as code number 07.58908.03, not patented, as the female, or seed, parent with a proprietary selection of *Chrysanthemum×morifolium* identified as code number 08.81756.01, not patented as the male, or pollen, parent. The new *Chrysanthemum* plant was discovered and selected by the Inventor as a single flowering plant from within the progeny of the stated cross-pollination in a controlled greenhouse environment in Hensbroek, The Netherlands in November, 2010.

Asexual reproduction of the new *Chrysanthemum* plant by terminal cuttings in a controlled greenhouse environment in Hensbroek, The Netherlands since December, 2010 has shown that the unique features of this new *Chrysanthemum* plant are stable and reproduced true to type in successive generations.

SUMMARY OF THE INVENTION

Plants of the new *Chrysanthemum* have not been observed under all possible environmental conditions and cultural practices. The phenotype may vary somewhat with variations

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in environmental conditions 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 'Dekalero'. These characteristics in combination distinguish 'Dekalero' as a new and distinct *Chrysanthemum* plant:

1. Single-type inflorescences with white-colored ray florets and bright green-colored developing disc florets.
2. Strong and upright flowering stems.
3. Relatively short response time.
4. Uniform and freely flowering habit.
5. Good postproduction longevity; plants maintain good substance for about 20 days in an interior environment.

Plants of the new *Chrysanthemum* differ from plants of the female parent selection in the following characteristics:

1. Plants of the new *Chrysanthemum* have smaller leaves than plants of the female parent selection.
2. Plants of the new *Chrysanthemum* have smaller inflorescences than plants of the female parent selection.
3. Plants of the new *Chrysanthemum* and the female parent selection differ in ray floret color as plants of the female parent selection have pink-colored ray florets.

Plants of the new *Chrysanthemum* differ from plants of the male parent selection in the following characteristics:

1. Plants of the new *Chrysanthemum* have smaller leaves than plants of the male parent selection.
2. Plants of the new *Chrysanthemum* are more freely flowering than plants of the male parent selection.
3. Plants of the new *Chrysanthemum* have smaller inflorescences than plants of the male parent selection.

Plants of the new *Chrysanthemum* can be compared to plants of *Chrysanthemum×morifolium* 'Bacardi', not patented. In side-by-side comparisons conducted in Hensbroek, The Netherlands, plants of the new *Chrysanthemum* differed from plants of 'Bacardi' in the following characteristics:

1. Plants of the new *Chrysanthemum* were more vigorous than plants of 'Bacardi'.

2. Plants of the new *Chrysanthemum* had slightly smaller inflorescences than plants of 'Bacardi'.
3. Plants of the new *Chrysanthemum* flowered earlier than plants of 'Bacardi'.

BRIEF DESCRIPTION OF THE PHOTOGRAPHS

The accompanying colored photographs illustrate the overall appearance of the new *Chrysanthemum* plant 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* plant.

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

The photograph on the second sheet comprises close-up views of the upper (top of the photograph) and lower surfaces (bottom of the photograph) of typical inflorescences and leaves of 'Dekalero'.

DETAILED BOTANICAL DESCRIPTION

The aforementioned photographs and following observations and measurements describe plants grown during the winter in ground beds in a glass-covered greenhouse in Hensbroek, The Netherlands and under cultural practices typical of commercial cut *Chrysanthemum* production. Plants were initially given 17 days of long day/short night treatments followed by short day/long night treatments to induce flower initiation and development. During the production of the plants, day temperatures ranged from 18° C. to 25° C., night temperatures ranged from 20° C. to 22° C. and light levels averaged 9,000 lux. Plants were 9.5 weeks old when the photographs and the description were taken. In the following description, color references are made to The Royal Horticultural Society Colour Chart, 2007 Edition, except where general terms of ordinary dictionary significance are used.

Botanical classification: *Chrysanthemum×morifolium* 'Dekalero'.

Parentage:

Female, or seed, parent.—Proprietary selection of *Chrysanthemum×morifolium* identified as code number 07.58908.03, not patented.

Male, or pollen, parent.—Proprietary selection of *Chrysanthemum×morifolium* identified as code number 08.81756.01, not patented.

Propagation:

Type.—Terminal vegetative cuttings.

Time to initiate roots, summer.—About four days at 20° C.

Time to initiate roots, winter.—About six days at 20° C.

Time to produce a rooted young plant, summer.—About 13 days at 20° C.

Time to produce a rooted young plant, winter.—About 15 days at 20° C.

Root description.—Fine, fibrous; light brown in color.

Rooting habit.—Freely branching, medium density.

Plant description:

Appearance and growth habit.—Herbaceous single-type cut flower that is typically grown as a spray-type; moderately vigorous growth habit.

Flowering stem description.—Aspect: Erect. Strength: Strong. Length: About 80 cm. Stem diameter: About 8 mm. Spray diameter: About 25 cm. Internode length: About 3 cm. Texture: Pubescent; longitudinally ridged. Color: Close to 146D.

Leaf description.—Arrangement: Alternate; simple. Length: About 8 cm to 10 cm. Width: About 6 cm to 7 cm. Apex: Mucronulate. Base: Attenuate. Margin: Palmately lobed, serrate; sinuses parallel to convergent. Texture, upper and lower surfaces: Pubescent, slightly rough; veins prominent on lower surface. Venation pattern: Pinnate, reticulate. Color: Developing leaves, upper surface: Close to 146A. Developing leaves, lower surface: Close to 148B. Fully developed leaves, upper surface: Close to 147A; venation, close to 147B. Fully developed leaves, lower surface: Close to 147B; venation, close to 147C. Petioles: Length: About 1.5 cm to 2.5 cm. Diameter: About 2 mm to 4 mm. Texture, upper and lower surfaces: Slightly rough. Color, upper and lower surfaces: Close to 147C.

Inflorescence description:

Appearance.—Single-type inflorescence form with oval to slightly obovate-shaped ray florets and tubular disc florets; inflorescences borne perpendicular to axillary laterals (peduncles); ray and disc florets develop acropetally on a capitulum.

Fragrance.—Moderately fragrant.

Flowering response.—Under natural conditions, plant flower 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); uniform flowering habit and short response time, plants exposed to two to three weeks of long day/short night conditions after planting followed by photoinductive short day/long night conditions flower about 49 days later when grown as a spray-type.

Postproduction longevity.—Good postproduction longevity; in an interior environment, inflorescences and foliage will maintain good color and substance for about 20 days; inflorescences persistent.

Quantity of inflorescences.—Freely flowering habit; when grown as a spray type, about 25 inflorescences develop.

Inflorescence size.—Diameter: About 7 cm. Depth (height): About 2 cm. Disc diameter: About 1.5 cm. Receptacle height: About 4 mm. Receptacle diameter: About 6 mm by 8 mm. Receptacle color: Close to 144D.

Inflorescence buds.—Shape: Flattened spherical. Height: About 4 mm to 5 mm. Diameter: About 8 mm. Color: Close to 137C and 149D.

Ray florets.—Length: About 2.8 cm to 3.2 cm. Width: About 1.2 cm to 1.4 cm. Shape: Oval to slightly obovate. Apex: Rounded, occasionally emarginate. Base: Attenuate. Margin: Entire. Texture, upper and lower surfaces: Smooth, glabrous; satiny. Number per inflorescence: About 25 arranged in two to three whorls. Aspect: About 20° from horizontal. Color: When opening, upper and lower surfaces: Close to NN155D. Fully opened, upper and lower surfaces: Close to NN155D.

Disc florets.—Shape: Fused tubular, erect and elongated. Apex: Dentate. Length: About 6 mm. Diameter: About 1.5 mm. Number per inflorescence: About 225 massed at the center of the receptacle in numerous whorls. Color, when opening: Apex: Close to

145A. Mid-section: Close to 3D. Base: Close to 145D. Color, fully opened: Apex and mid-section: Close to 5C. Mid-section and base: Close to 145D.

Involucral bracts.—Length: About 6 mm to 12 mm. Width: About 2 mm to 5 mm. Shape: Ovate. Apex: Rounded. Base: Rounded to truncate. Margin: Entire. Texture, upper and lower surfaces: Smooth, glabrous. Number per inflorescence: About 35 to 40 arranged in about three whorls. Color, upper surface: Close to 137B. Color, lower surface: Close to N137C.

Peduncles.—Length: About 7 cm to 8 cm. Diameter: About 2.5 mm. Strength: Strong. Angle: About 30° from the flowering stem axis. Texture: Pubescent. Color: Close to 146B.

Reproductive organs.—Androecium: Not observed. Gynoecium: Present on both ray and disc florets. Style length: About 6 mm. Style color: Greenish. Stigma color: Yellowish.

Seeds and fruits.—Seed and fruit production have not been observed on plants of the new *Chrysanthemum*.

Disease & pest resistance: Resistance to pathogens and pests common to *Chrysanthemum* plants has not been observed on plants of the new *Chrysanthemum* grown under commercial conditions.

It is claimed:

1. A new and distinct *Chrysanthemum* plant named 'Dekalero' as illustrated and described.

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