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Dekker

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(54) **CHRYSANTHEMUM PLANT NAMED**
'DEKJOMBE PURPLE'

(52) **U.S. Cl.** **Plt./298**

(58) **Field of Classification Search** **Plt./298**
See application file for complete search history.

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

Primary Examiner — Annette Para

(75) Inventor: **Cornelis W. Dekker**, Hensbroek (NL)

(74) *Attorney, Agent, or Firm* — C. A. Whealy

(73) Assignee: **Dekker Breeding B.V.**, Hensbroek (NL)

(57) **ABSTRACT**

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

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

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(51) **Int. Cl.**
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2 Drawing Sheets

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Botanical designation: *Chrysanthemum*×*morifolium*.
Cultivar denomination: 'DEKJOMBE PURPLE'.

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 'Dekjombe Purple'.

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 November, 2008, of a proprietary selection of *Chrysanthemum*×*morifolium* identified as code number 06.51207.02, not patented, as the female, or seed, parent with a proprietary selection of *Chrysanthemum*×*morifolium* identified as code number 07.60515.01, not patented. 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 May, 2009.

Asexual reproduction of the new *Chrysanthemum* plant by terminal cuttings in a controlled greenhouse environment in Hensbroek, The Netherlands since June, 2009 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. 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 'Dekjombe

Purple'. These characteristics in combination distinguish 'Dekjombe Purple' as a new and distinct *Chrysanthemum* plant:

1. Relatively small single type inflorescences with bright red purple-colored ray florets.
2. Strong and upright flowering stems.
3. Short response time.
4. Uniform and freely flowering habit.
5. Good postproduction longevity; plants maintain good substance for about 18 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* flower about three days later 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 shape and color as plants of the female parent selection have quilled 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* flower about two days earlier than plants of the male parent selection.
2. Plants of the new *Chrysanthemum* and the male parent selection differ in ray floret color as plants of the male parent selection have red-colored ray florets.

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

1. Plants of the new *Chrysanthemum* flowered about five days earlier than plants of 'Dekallkind'.
2. Plants of the new *Chrysanthemum* had smaller inflorescences than plants of 'Dekallkind'.
3. Plants of the new *Chrysanthemum* and 'Dekallkind' differed in ray floret color as plants of 'Dekallkind' had red-colored ray florets.

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 'Dekjombe Purple' 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 'Dekjombe Purple'.

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 commercial cut *Chrysanthemum* cultural practices. Plants were initially given two weeks 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 were about 7,000 lux. Plants were eight 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* 'Dekjombe Purple'.

Parentage:

Female, or seed, parent.—Proprietary selection of *Chrysanthemum* × *morifolium* identified as code number 06.51207.02, not patented.

Male, or pollen, parent.—Proprietary selection of *Chrysanthemum* × *morifolium* identified as code number 07.60515.01, 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 60 cm. Stem diameter: About 5 mm. Spray diameter: About 15 cm to 20 cm. Internode length: About 1 cm to 2 cm. Texture: Densely pubescent; longitudinally ridged. Color: Close to 148A.

Foliage description.—Arrangement: Alternate; simple. Length: About 5 cm to 8 cm. Width: About 3 cm to 4.5 cm. Apex: Acute. Base: Attenuate. Margin: Palmately lobed, serrate; sinuses parallel. 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 147B. Fully developed leaves, upper surface: Close to N137D; venation, close to 147C. Fully developed leaves, lower surface: Close to 147B; venation, close to 146D. Petiole: Length: About 0.5 cm to 1.5 cm. Diameter: About 2 mm to 3 mm. Texture, upper and lower surfaces: Slightly rough. Color, upper surface: Close to 147C. Color, lower surface: Close to 146D.

Inflorescence description:

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

Fragrance.—Slightly 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 weeks of long day/short night conditions after planting followed by photoinductive short day/long night conditions flower about 38 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 18 days; inflorescences persistent.

Quantity of inflorescences.—Freely flowering habit; when grown as a spray type, about 85 inflorescences develop.

Inflorescence size.—Diameter: About 2 cm to 2.5 cm. Depth (height): About 5 mm to 8 mm. Disc diameter: About 8 mm. Receptacle height: About 4 mm. Receptacle diameter: About 4 mm. Receptacle color: Close to 145B.

Inflorescence buds.—Shape: Flattened spherical. Height: About 2 mm. Diameter: About 4 mm. Color: Close to 144A and 149D.

Ray florets.—Length: About 1.2 cm to 1.5 cm. Width: About 5 mm to 7 mm. Shape: Oval to oblong. Apex: Rounded or tri-dentate. Base: Attenuate or fused. Margin: Entire. Texture, upper and lower surfaces: Smooth, glabrous; satiny. Number per inflorescence: About 20 arranged in one or two whorls. Aspect: About 30° from horizontal to horizontal. Color: When opening, upper surface: Close to 59A. When opening, lower surface: Close to 70A to 70B. Fully opened, upper surface: Close to 72A. Fully opened, lower surface: Close to 77B to 77C.

Disc florets.—Shape: Fused tubular, erect and elongated. Apex: Dentate. Length: About 3 mm to 4 mm. Diameter: About 0.5 mm to 1 mm. Number per inflorescence: About 175 massed at the center of the receptacle in numerous whorls. Color, when opening: Apex: Close to 145B. Mid-section: Close to 4A. Base: Close to 145D. Color, fully opened: Apex and mid-section: Close to 3B. Mid-section: Close to 2C. Base: Close to 145D.

Involutal bracts.—Length: About 3 mm to 6 mm. Width: About 1 mm to 3 mm. Shape: Ovate. Apex:

Rounded. Base: Rounded to truncate. Margin: Entire. Texture, upper and lower surfaces: Smooth, glabrous. Number per inflorescence: About 20 arranged in about two to three whorls. Color, upper and lower surfaces: Close to 137C to 137D.

Peduncles.—Length: About 5 cm. Diameter: About 1 mm to 1.5 mm. Strength: Moderately strong. Angle: About 30° from the flowering stem axis. Texture: Pubescent. Color: Close to 146C.

Reproductive organs.—Androecium: Not observed. Gynoecium: Present on both ray and disc florets. Style length: About 3 mm. Style color: Greenish yellow. Stigma color: Yellowish.

Seed/fruit.—Seed and fruit production have not been observed.

Disease/pest resistance: Resistance to pathogens and pests common to *Chrysanthemums* has not been observed on plants grown under commercial conditions.

It is claimed:

1. A new and distinct *Chrysanthemum* plant named 'Dek-jombe Purple' as illustrated and described.

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