

(12) **United States Plant Patent**
Dekker

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

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

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patent is extended or adjusted under 35
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See application file for complete search history.

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(57) **ABSTRACT**

A new and distinct cultivar of *Chrysanthemum* plant named
'Dekamiata', characterized by its single-type inflorescences
with oval to obovate-shaped, red-colored ray florets and
green-colored disc florets; strong and upright flowering
stems; freely flowering habit; early and uniform flowering
response; and good postproduction longevity.

2 Drawing Sheets

1

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

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 'Dekamiata'.

The new *Chrysanthemum* is a product of a planned breed-
ing program conducted by the Inventor in Hensbroek, The
Netherlands. The objective of the breeding program is to
create new freely flowering single-type *Chrysanthemum* cul-
tivars with unique ray floret coloration and excellent post-
production longevity.

The new *Chrysanthemum* originated from a cross-
pollination made by the Inventor in Hensbroek, The Nether-
lands on Dec. 16, 2005 of a proprietary selection of
Chrysanthemum×*morifolium* identified as code number
04.42347.01, not patented, as the female, or seed, parent
with a proprietary selection of *Chrysanthemum*×*morifolium*
identified as code number 04.42094.01, not patented. The
new *Chrysanthemum* was discovered and selected by the
Inventor as a flowering plant from within the progeny of the
stated cross-pollination in a controlled greenhouse environ-
ment in Hensbroek, The Netherlands on Apr. 12, 2006.

Asexual reproduction of the new *Chrysanthemum* by ter-
minal cuttings in a controlled greenhouse environment in
Hensbroek, The Netherlands since Jun. 2, 2006, has shown
that the unique features of this new *Chrysanthemum* 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.

2

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

1. Single-type inflorescences with red-colored ray florets
and yellow green-colored disc florets.
 2. Strong and upright flowering stems.
 3. Freely flowering habit.
 4. Early and uniform flowering response; plants flower
about 37 days after the start of photoinductive treat-
ments.
 5. Good postproduction longevity; plants maintain good
substance for about 25 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* are not as vigorous
as plants of the female parent selection.
 2. Plants of the new *Chrysanthemum* are more freely flow-
ering than plants of the female parent selection.
 3. Plants of the new *Chrysanthemum* have larger inflores-
cences than plants of the female parent selection.
 4. Plants of the new *Chrysanthemum* and the female par-
ent selection differ in ray floret color as plants of the
female parent selection have bronze-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* are more freely
branching than plants of the male parent selection.
 2. Plants of the new *Chrysanthemum* have smaller leaves
than plants of the male parent selection.
 3. Plants of the new *Chrysanthemum* flower earlier than
plants of the male parent selection.
 4. Plants of the new *Chrysanthemum* are more freely flow-
ering than plants of the male parent selection.
- Plants of the new *Chrysanthemum* can be compared to
plants of the *Chrysanthemum*×*morifolium* 'Deklinde White',

disclosed in U.S. Plant Pat. No. 17,815. In side-by-side comparisons conducted in Hensbroek, The Netherlands, plants of the new *Chrysanthemum* differed from plants of 'Deklindi White' in the following characteristics:

1. Plants of the new *Chrysanthemum* were not as vigorous as plants of 'Deklindi White'.
2. Plants of the new *Chrysanthemum* flowered earlier than plants of 'Deklindi White'.
3. Plants of the new *Chrysanthemum* and 'Deklindi White' differ in ray floret color as plants of 'Deklindi White' had white-colored ray florets.

BRIEF DESCRIPTION OF THE PHOTOGRAPHS

The accompanying colored photographs illustrate the overall appearance of the new *Chrysanthemum*. These photographs show 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 'Dekamiata' grown as a spray type.

The photograph on the second sheet is a close-up view of upper and lower surfaces of typical inflorescences (left) and typical leaves (right) of plants of 'Dekamiata'.

DETAILED BOTANICAL DESCRIPTION

In the following description, color references are made to The Royal Horticultural Society Colour Chart, 2001 Edition, except where general terms of ordinary dictionary significance are used. The aforementioned photographs and following observations and measurements describe plants grown during the winter and early spring in Hensbroek, The Netherlands, under commercial practice in a glass-covered greenhouse. Plants were initially given 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 kilolux. Plants were pinched one time and were about eight weeks from planting when the photographs and the description were taken.

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

Parentage:

Female, or seed, parent.—Proprietary selection of *Chrysanthemum*×*morifolium* identified as code number 04.42347.01, not patented.

Male, or pollen parent.—Proprietary selection of *Chrysanthemum*×*morifolium* identified as code number 04.42094.01, not patented.

Propagation:

Type.—Terminal vegetative cuttings.

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

Time to produce a rooted young plant.—About 13 to 15 days at 20° C.

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

Rooting habit.—Freely branching, moderately dense.

Plant description:

Appearance/growth habit.—Herbaceous single-type cut flower that is typically grown as a spray-type. Moderately vigorous growth habit.

Flowering stem description.—Aspect: Erect. Length: About 60 cm. Spray diameter: About 15 cm. Diameter: About 4 mm to 5 mm. Number of lateral branches: About 15. Lateral branch length: About 10 cm to 20 cm. Lateral branch diameter: About 4 mm to 7 mm. Internode length: About 1.5 cm to 2 cm. Texture: Finely pubescent; longitudinally ridged. Color: Close to 146B.

Foliage description.—Arrangement: Alternate; simple. Length: About 3.5 cm to 7 cm. Width: About 2 cm to 3 cm. Apex: Cuspidate. Base: Attenuate. Margin: Palmately lobed; sinuses parallel. Texture, upper and lower surfaces: Pubescent, slightly rough; veins prominent on lower surface. Venation pattern: Pinnate, reticulate. Color: Developing foliage, upper surface: Slightly lighter than 146A. Developing foliage, lower surface: Close to 146B. Fully expanded foliage, upper surface: Lighter than 147A; venation, close to 148B. Fully expanded foliage, lower surface: Close to 147B; venation, 146B. Petiole: Length: About 5 mm to 10 mm. Diameter: About 2 mm. Texture, upper, and lower surfaces: Smooth to slightly rough. Color, upper and lower surfaces: Close to 146C.

Inflorescence description:

Appearance.—Single-type inflorescence form with obovate-shaped ray florets. Inflorescences borne on terminals, arising from leaf axils. Ray and disc florets develop acropetally on a capitulum. Inflorescences 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). Early and uniform flowering response; plants exposed to two weeks of long day/short night conditions after planting followed by photoinductive short day/long night conditions flower about 37 days later when grown as a spray-type.

Postproduction longevity.—In an interior environment, inflorescences and foliage will maintain good color and substance for about 25 days. Inflorescences persistent.

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

Inflorescence size.—Diameter: About 2 cm to 2.5 cm. Depth (height): About 1 cm. Disc diameter: About 8 mm. Receptacle height: About 2 mm. Receptacle diameter: About 3.5 mm. Receptacle color: Close to 144B.

Inflorescence buds.—Shape: Flattened spherical to rounded. Height: About 3 mm. Diameter: About 5 mm. Color: Between 137C and 144D.

Ray florets.—Length: About 1.1 cm to 1.3 cm. Width: About 4 mm to 6 mm. Shape: Obovate. Apex: Obtuse or emarginate. Base: Attenuate. Margin: Entire. Angle: Initially upright to close to 45° from vertical. Texture, upper and lower surfaces: Smooth, glabrous; satiny. Number per inflorescence: About 20 to 25 arranged in one to two whorls. Color: When opening, upper surface: Close to 187C. When opening, lower surface: Close to 185A. Fully opened, upper surface: Close to 53A; color becoming closer to 46A with development. Fully opened, lower surface: Close to 178B; color becoming closer to 173A with development.

Disc florets.—Shape: Fused tubular, elongated. Apex: Dentate. Length: About 2 mm to 4 mm. Diameter: About 0.5 mm to 1 mm. Number per inflorescence: About 200 in numerous whorls. Color: Immature: Apex: Close to 145A. Mid-section: Close to 4A. Base: Close to 145D. Mature: Apex: Close to 3A. Mid-section: Close to 145C to 145D. Base: Close to 145D.

Involucral bracts.—Length: About 3 mm to 6 mm. Width: About 1 mm to 3 mm. Shape: Ovate. Apex: Rounded, obtuse. Base: Obtuse to truncate. Margin: Entire. Texture, upper and lower surfaces: Smooth, glabrous. Number per inflorescence: About 25 arranged in three whorls. Color, upper and lower surfaces: Between 137C and 147A.

Peduncles.—Length, fourth peduncle: About 8 cm to 9 cm. Length, seventh peduncle: About 10 cm. Diam-

eter: About 2 mm to 3 mm. Angle: About 30° from vertical. Strength: Moderately strong to strong. Texture: Pubescent; longitudinally ridged. Color: Close to 146A.

Reproductive organs.—Androecium: Not observed.

Gynoecium: Present on both ray and disc florets.

Style length: About 5 mm. Style color: Close to 4D.

Seed/fruit.—Seed and fruit production has 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 'Dekamiata' as illustrated and described.

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