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(54) **CHRYSANTHEMUM PLANT NAMED ‘DLFAVAT3’**

(50) Latin Name: *Chrysanthemum X morifolium*
Varietal Denomination: **DLFAVAT3**

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

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(51) **Int. Cl.**
A01H 5/02 (2018.01)
A01H 6/14 (2018.01)

(52) **U.S. Cl.**
USPC **Plt./291**

(58) **Field of Classification Search**

USPC Plt./291
CPC ... A01H 5/02; A01H 5/00; A01H 6/14; A01H 6/1424

See application file for complete search history.

(56) **References Cited**

PUBLICATIONS

Eumundi Roses Falls Baby Pink, retrieved on Jul. 19, 2022 at <https://www.eumundiroses.com/products/falls-baby-pink>, one page. (Year: 2022).*

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(57) **ABSTRACT**

A new and distinct cultivar of *Chrysanthemum* plant named ‘DLFAVAT3’, characterized by its upright plant habit; uniform growth habit; vigorous growth habit and rapid growth rate; durable and robust dark green-colored leaves; strong upright flowering stems; pompon-type inflorescences with pink-colored ray florets; relative tolerance to high production temperatures; and good postproduction longevity.

2 Drawing Sheets

1

2

Botanical designation: *Chrysanthemum X morifolium*.
Cultivar denomination: ‘DLFAVAT3’.

STATEMENT REGARDING PRIOR DISCLOSURES BY INVENTOR/APPLICANT & ASSIGNEE

A Japanese Plant Breeder’s Rights application for the instant plant was filed by the Assignee, Deliflor Royalties B.V. of Maasdijk, The Netherlands on Oct. 14, 2020, application number 35005. Foreign priority is not claimed to this application.

A Columbian Plant Breeder’s Rights application for the instant plant was filed by the Assignee, Deliflor Royalties B.V. of Maasdijk, The Netherlands on Aug. 27, 2021, application number A212820. Foreign priority is not claimed to this application.

The Inventor/Applicant and Assignee assert that no publications nor advertisements relating to sales, offers for sale or public distribution occurred more than one year prior to the effective filing date of this application. Any information about the claimed plant would have been obtained from a direct or indirect disclosure from the Inventor/Applicant and/or the Assignee. Inventor/Applicant and Assignee claim a prior art exception under 35 U.S.C. 102(b)(1) for disclosure and/or sales prior to the filing date but less than one year prior to the effective filing date.

BACKGROUND OF THE INVENTION

The present invention relates to a new and distinct cultivar of *Chrysanthemum* plant, botanically known as *Chrysanthemum x morifolium*, typically grown as a cut flower *Chrysanthemum* and hereinafter referred to by the name ‘DLFAVAT3’.

The new *Chrysanthemum* plant is a product of a planned breeding program conducted by the Inventor in Maasdijk, The Netherlands. The objective of the breeding program is to create new cut flower *Chrysanthemum* plants with unique and attractive inflorescences.

The new *Chrysanthemum* plant originated from a cross-pollination in February, 2018 of a proprietary selection of *Chrysanthemum x morifolium* identified as code number KR 11472, not patented, as the female, or seed, parent with a proprietary selection of *Chrysanthemum x morifolium* identified as code number KR 2013.1399-1, not patented, as the male, or pollen, parent. The new *Chrysanthemum* plant was discovered and selected as a single flowering plant from within the progeny of the stated cross-pollination in a controlled greenhouse environment in Maasdijk, The Netherlands in November, 2018.

Asexual reproduction of the new *Chrysanthemum* plant by vegetative terminal cuttings in a controlled greenhouse environment in Maasdijk, The Netherlands since November, 2018 has shown that the unique features of this new *Chrysanthemum* plant are stable and reproduced true to type in successive generations of asexual reproduction.

SUMMARY OF THE INVENTION

The following traits have been repeatedly observed and are determined to be the unique characteristics of

'DLFAVAT3'. These characteristics in combination distinguish 'DLFAVAT3' as a new and distinct *Chrysanthemum* plant:

1. Upright plant habit; uniform growth habit.
2. Vigorous growth habit and rapid growth rate.
3. Durable and robust dark green-colored leaves.
4. Strong upright flowering stems.
5. Pompon-type inflorescences with pink-colored ray florets.
6. Relatively tolerant to high production temperatures.
7. Good postproduction longevity.

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

1. Ray florets of plants of the new *Chrysanthemum* are less concave than ray florets of plants of the female parent selection.
2. Ray florets of plants of the new *Chrysanthemum* are lighter pink in color than ray florets of plants of the female parent selection.

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

1. Plants of the new *Chrysanthemum* have larger inflorescences than plants of the male parent selection.
2. Ray florets of plants of the new *Chrysanthemum* are pink in color whereas ray florets of plants of the male parent selection are reddish purple in color.

Plants of the new *Chrysanthemum* can be compared to plants of *Chrysanthemum* X *morifolium* 'Delibonbon', not patented. In side-by-side comparisons, plants of the new *Chrysanthemum* differ primarily from plants of 'Delibonbon' in ray floret color as plants of the new *Chrysanthemum* have pink-colored ray florets whereas plants of 'Delibonbon' have light purple-colored ray florets.

BRIEF DESCRIPTION OF THE PHOTOGRAPHS

The accompanying 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.

The photograph on the first sheet (FIG. 1) is a side perspective view of a typical flowering stem of 'DLFAVAT3' grown as a disbud-type cut flower.

The photograph on the second sheet (FIG. 2) is a close-up view of upper (left) and lower (right) surfaces of typical inflorescences and typical leaves of 'DLFAVAT3'.

DETAILED BOTANICAL DESCRIPTION

The aforementioned photographs and following observations and measurements describe plants grown during the early spring in ground beds in a glass-covered greenhouse in Maasdijk, The Netherlands and under cultural practices typical of commercial cut *Chrysanthemum* production. 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 averaged 7 klux. Plants were grown as single-stem disbud-type plants and were ten weeks old when the photographs and the description were taken. In the following description, color references are made to The Royal Horticultural Soci-

ety Colour Chart, 2015 Edition, except where general terms of ordinary dictionary significance are used.

Botanical classification: *Chrysanthemum* X *morifolium* 'DLFAVAT3'.

Parentage:

Female, or seed, parent.—Proprietary selection of *Chrysanthemum* x *morifolium* identified as code number KR 11472, not patented.

Male, or pollen, parent.—Proprietary selection of *Chrysanthemum* x *morifolium* identified as code number KR 2013.1399-1, not patented.

Propagation:

Type.—Terminal vegetative cuttings.

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

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

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

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

Root description.—Fine, fibrous; typically creamy white in color, actual color of the roots is dependent on substrate composition, water quality, fertilizers, substrate temperature and physiological age of roots.

Rooting habit.—Freely branching, medium density.

Plant description:

Plant and growth habit.—Herbaceous pompon-type cut flower that is typically grown as a single stem disbud-type; upright plant habit; vigorous growth habit and rapid growth rate.

Plant height, soil level to top of foliar plane.—About 68.4 cm.

Plant height, soil level to top of inflorescence plane.—About 74.1 cm.

Plant (spray) diameter.—About 19.7 cm.

Flowering stem length.—About 66.8 cm.

Flowering stem diameter.—About 7 mm.

Flowering stem internode length.—About 3.2 cm.

Flowering stem strength.—Strong.

Flowering stem aspect.—Erect.

Flowering stem texture and luster.—Densely pubescent; slightly glossy.

Flowering stem color, developing.—Close to a blend of 143A and 144A.

Flowering stem color, developed.—Close to a blend of 144A and 146C; at the ridges, close to 144B.

Leaf description.—Arrangement: Alternate; simple.

Length: About 12.3 cm. Width: About 7.2 cm. Shape, in overall outline: Ovate to elliptic. Apex: Acute.

Base: Attenuate. Margin: Palmately lobed, coarsely dentate to serrate; sinuses divergent and medium to deep in depth; slightly undulate. Texture and luster, upper and lower surfaces: Moderately to densely pubescent, not rugose; slightly velvety; slightly glossy.

Venation pattern: Pinnate. Color: Developing leaves, upper surface: Close to 137A. Developing leaves, lower surface: Close to 147B. Fully developed leaves, upper surface: Close to NN137A; venation, close to 146B. Fully developed leaves, lower surface: Close to 147B; venation, close to 146C to 146D. Petioles: Length: About 2.4 cm. Diameter: About 3 mm by 4 mm. Strength: Moderately strong.

Texture and luster, upper and lower surfaces: Densely pubescent; slightly glossy. Color, upper

surface: Close to 148B; edges, slightly darker than 137A. Color, lower surface: Close to 146C to 146D; edges, close to 147B. Stipules: Quantity and appearance: Two leafy stipules, opposite, at the petiole attachment to the stem. Length: About 7 mm. Width: 5
About 3.5 mm. Shape: Elliptic; apex, short apiculate; base, broadly cuneate; margins, entire. Texture and luster, upper and lower surfaces: Moderately to densely pubescent; slightly glossy. Color, upper surface: 10
Close to NN137A. Color, lower surface: Close to 147B.

Inflorescence description:

Appearance.—Pompon-type inflorescence form with obovate-shaped ray florets and tubular disc florets; inflorescences, rotate and flattened globular in overall shape; inflorescences borne perpendicular to peduncles and face upright; ray and disc florets develop acropetally on a capitulum. 15

Fragrance.—Faintly fragrant; typical of *Chrysanthemums*. 20

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 47 days later when grown as a disbud-type. 25
30

Postproduction longevity.—Good postproduction longevity; after a seven-day storage period, cut flowers will maintain good color and substance for about two weeks in an interior environment; inflorescences 35
persistent.

Quantity of inflorescences.—Typically grown as a disbud-type, only the terminal inflorescence is allowed to develop; plants of the new *Chrysanthemum* can also be grown as spray-types and typically about 16 inflorescence buds will develop per flowering stem. 40

Inflorescence size.—Diameter: About 6 cm. Depth (height): About 3 cm. Disc diameter: About 4 mm; inconspicuous.

Receptacles.—Height: About 3 mm. Diameter: About 6 mm. Shape: Flattened globular. Color: Close to 145B. 45

Inflorescence buds.—Height: About 1 cm. Diameter: About 1.3 cm. Shape: Flattened globular. Texture and luster: Slightly pubescent; slightly glossy. Color: 50
Developing involucre bracts, close to 137C and 138C; developing ray florets, close to 76D to lighter than 76D.

Ray florets.—Quantity and arrangement: About 220 arranged in about eight whorls. Length: About 2.2 cm, varying between 0.9 cm and 2.8 cm. Width: 55
About 1.2 cm, varying between 0.1 cm and 1.8 cm. Shape: Obovate; moderately to strongly concave. Apex: Broadly and bluntly acute to shallowly praemorse with acute tips. Base: Attenuate. Margin: 60
Entire; not undulate. Aspect: About 30° from vertical, varying from -20° to 80° from vertical. Texture and luster, upper surface: Smooth, glabrous; slightly velvety; matte. Texture and luster, lower surface: Smooth, glabrous; slightly glossy. Color: When 65

opening, upper surface: Close to a blend of 76D and 69D. When opening, lower surface: Close to a blend of 76C and 76D. Fully opened, upper surface: Close to a blend of 76D and 69D; venation, similar to lamina colors; color does not change with subsequent development. Fully opened, lower surface: Close to 76D; venation, close to 76D; color does not change with subsequent development.

Disc florets.—Quantity and arrangement: About 15 randomly arranged at the center of the receptacle; disc florets typically do not fully develop. Length: About 5 mm. Diameter: About 1.25 mm. Shape: Tubular. Apex: Obtuse. Margin, free-part: Entire. Texture and luster, inner and outer surfaces: Smooth, glabrous; glossy. Color, when opening: Towards the apex, close to N144B; mid-section and towards the base, close to 1D; at the base, close to 145D. Color, fully opened: Towards the apex, close to N144A; mid-section and towards the base, close to 153D; at the base, close to 145D.

Involucral bracts.—Quantity and arrangement: About 24 arranged in about three whorls. Length: About 8 mm. Width: About 4 mm. Shape: Oblong to ovate. Apex: Bluntly acute. Base: Cuneate. Margin: Entire. Texture and luster, upper surface: Smooth, glabrous; glossy. Texture and luster, lower surface: Moderately pubescent; matte. Color, upper surface: Close to 144A; lateral margins, translucent and close to 196C to 196D and apical margins tinged with close to N199A. Color, lower surface: Close to 137B; lateral margins, translucent and close to 196C to 196D and apical margins tinged with close to N199A.

Peduncles.—Length: About 3.7 cm. Diameter: About 2.5 mm. Strength: Strong. Aspect: Upright. Texture and luster: Moderately pubescent; moderately glossy. Color: Close to 143A; at the ridges, close to 143B.

Reproductive organs.—Androecium: To date, stamen development has not been observed on plants of the new *Chrysanthemum*. Gynoecium: Present only on ray florets as disc florets do not fully develop. Quantity: One per floret. Pistil length: About 7 mm. Style length: About 6 mm. Style color: Close to 150C. Stigma diameter: About 1 mm. Stigma shape: Cleft, decurrent. Stigma color: Close to 154B to 154C. Ovary color: Close to 145D.

Seeds and fruits.—To date, seed and fruit development have not been observed on plants of the new *Chrysanthemum*.

Pathogen & pest resistance: Plants of the new *Chrysanthemum* have been observed to be resistant to *Fusarium* (*Fusarium oxysporum* f. sp. *chrysanthemi*) and Western Flower Thrips (*Frankliniella occidentalis*). To date, plants of the new *Chrysanthemum* have not been observed to be resistant to other pathogens and pests common to *Chrysanthemum* plants grown under commercial conditions. Temperature tolerance: Plants of the new *Chrysanthemum* have been observed to tolerate temperatures ranging from about -12° C. to 35° C. and to be suitable for USDA Hardiness Zones 8 to 10.

It is claimed:

1. A new and distinct *Chrysanthemum* plant named 'DLFAVAT3' as illustrated and described.

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FIG. 1

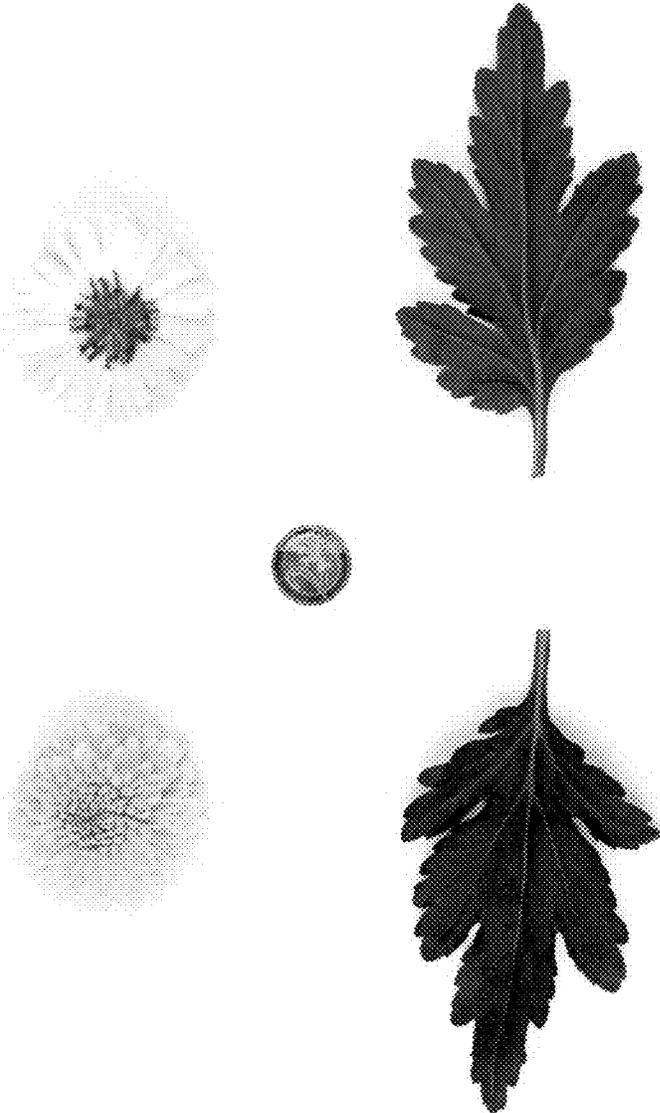


FIG. 2