

US00PP33853P3

(12) United States Plant Patent Post

(10) Patent No.: US PP33,853 P3

(45) **Date of Patent:** Jan. 11, 2022

(54) CHRYSANTHEMUM PLANT NAMED 'DLFDANT3'

- (50) Latin Name: *Chrysanthemum* **X** *morifolium* Varietal Denomination: **DLFDANT3**
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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.

(21) Appl. No.: 17/089,703

(22) Filed: Nov. 4, 2020

(65) Prior Publication Data

US 2021/0136983 P1 May 6, 2021

Related U.S. Application Data

- (60) Provisional application No. 62/973,983, filed on Nov. 5, 2019.
- (51) Int. Cl. A01H 5/02

A01H 5/02 (2018.01) **A01H 6/14** (2018.01)

(52) U.S. Cl.

USPC Plt./287

CPC *A01H 6/1424* (2018.05); *A01H 5/02* (2013.01)

(58) Field of Classification Search

(56) References Cited

PUBLICATIONS

http://pvpbkkt.doa.gov.my/Registration/Details.php?VarietyDenomination=DLFDANT3; May 20, 2021; 1 page.*

* cited by examiner

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(57) ABSTRACT

A new and distinct cultivar of *Chrysanthemum* plant named 'DLFDANT3', characterized by its upright plant habit; vigorous growth habit and rapid growth rate; dark green-colored leaves; uniform and freely flowering habit; strong upright flowering stems with numerous inflorescences; decorative-type inflorescences with ray florets that are initially purplish red in color becoming light purple with development; relative tolerance to low and high production temperatures; and good postproduction longevity.

2 Drawing Sheets

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Botanical designation: *Chrysanthemum* X *morifolium*. Cultivar denomination: 'DLFDANT3'.

STATEMENT REGARDING PRIOR DISCLOSURES BY INVENTOR/APPLICANT & ASSIGNEE

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 15 a prior art exemption 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 'DLFDANT3'.

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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 numerous attractive inflorescences.

The new *Chrysanthemum* plant is a naturally-occurring whole plant mutation of *Chrysanthemum* x *morifolium* 'Delidante', not patented. The new *Chrysanthemum* plant was discovered and selected as a single flowering plant from within a population of plants of 'Delidante' in a controlled greenhouse environment in Maasdijk, The Netherlands in October, 2012.

Asexual reproduction of the new *Chrysanthemum* plant by vegetative terminal cuttings since October, 2012 in a controlled greenhouse environment in Maasdijk, The Netherlands 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

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Plants of the new *Chrysanthemum* have not been observed under all possible combinations of environmental conditions and cultural practices. The phenotype may vary somewhat with variations 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 'DLFDANT3'. These characteristics in combination distinguish 'DLFDANT3' as a new and distinct *Chrysanthemum* plant:

- 1. Upright plant habit.
- 2. Vigorous growth habit and rapid growth rate.
- 3. Dark green-colored leaves.
- 4. Uniform and freely flowering habit.
- 5. Strong upright flowering stems with numerous inflo- 10 rescences.
- 6. Decorative-type inflorescences with ray florets that are initially purplish red in color becoming light purple with development.
- 7. Relatively tolerant to low and high production tem- 15 peratures.
- 8. Good postproduction longevity.

Plants of the new *Chrysanthemum* differ from plants of the mutation parent, 'Delidante', in ray floret color as plants of the new *Chrysanthemum* have darker purple-colored ray 20 florets than plants of 'Delidante'.

Plants of the new *Chrysanthemum* can be compared to plants of *Chrysanthemum* X *morifolium* 'Delibartica Pink', not patented. In side-by-side comparisons, plants of the new *Chrysanthemum* differ primarily from plants of 'Delibartica 25 Pink' in ray floret color as plants of the new *Chrysanthemum* are initially purplish red in color becoming light purple with development whereas ray florets of 'Delibartica Pink' are light pink in color.

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 35 reproductions of this type.

The photograph on the first sheet comprises a side perspective view of a typical flowering stem of 'DLFDANT3' grown as a spray-type cut flower.

The photograph on the second sheet is a close-up view of 40 upper (top of the photographic sheet) and lower (bottom of the photographic sheet) surfaces of typical leaves (left) and inflorescences (right).

DETAILED BOTANICAL DESCRIPTION

The aforementioned photographs and following observations and measurements describe plants grown during the late spring in ground beds in a glass-covered greenhouse in Maasdijk, The Netherlands and under cultural practices 50 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 55 temperatures ranged from 20° C. to 22° C. and light levels averaged 8 klux. Plants were grown as single-stem spraytype plants and were nine weeks old when the photographs and the description were taken. In the following description, color references are made to The Royal Horticultural Soci- 60 ety Colour Chart, 2015 Edition, except where general terms of ordinary dictionary significance are used.

Botanical classification: *Chrysanthemum* X *morifolium* 'DLFDANT3'.

Parentage: Naturally-occurring whole plant mutation of 65 *Chrysanthemum* x *morifolium* 'Delidante', 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 light brown 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 decorative-type cut flower that is typically grown as a single stem spray-type; upright plant habit; vigorous growth habit and rapid growth rate.

Plant height, soil level to top of foliar plane.—About 81.3 cm.

Plant height, soil level to top of inflorescence plane.— About 85.1 cm.

Plant (spray) diameter.—About 28.5 cm.

Flowering stem length.—About 80.8 cm.

Flowering stem diameter.—About 7 mm.

Flowering stem internode length.—About 2.8 cm.

Flowering stem strength.—Strong.

Flowering stem aspect.—Erect.

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

Flowering stem color, developing.—Close to 144A. Flowering stem color, developed.—Close to between 143A and 144A.

Leaf description.—Arrangement: Alternate; simple. Length: About 14.8 cm. Width: About 7.9cm. Shape: Ovate to broadly ovate. Apex: Apiculate. Base: Attenuate. Margin: Palmately lobed, coarsely serrate to dentate; sinuses divergent and medium to deep in depth. Texture and luster, upper surface: Moderately pubescent, not rugose; moderately velvety; very slightly glossy. Texture and luster, lower surface: Densely pubescent, prominent venation; slightly velvety; very slightly glossy. Venation pattern: Pinnate, reticulate. Color: Developing leaves, upper surface: Close 137A. Developing leaves, lower surface: Close to 147B. Fully developed leaves, upper surface: Slightly darker than NN137A; venation, close to 146B. Fully developed leaves, lower surface: Close to 147B; venation, close to 147C. Petioles: Length: About 2.3 cm. Diameter: About 3 mm by 4.5 mm. Strength: Moderately strong. Texture and luster, upper and lower surfaces: Densely pubescent; slightly glossy. Color, upper surface: Close to 147C; edges, close to between NN137A and 147A. Color, lower surface: Close to 148C; edges, close to 138A. Stipules: Quantity and appearance: Two leafy stipules, opposite, at the petiole attachment to the stem. Length: About 9 mm. Width: About 7 mm. Shape: Broadly ovate. Texture and luster, upper surface: Moderately pubescent, not rugose; moderately velvety; very slightly glossy. Texture and luster, lower surface: Densely pubescent, prominent venation; 5

slightly velvety; very slightly glossy. Color, upper surface: Slightly darker than NN137A. Color, lower surface: Close to 147B.

Inflorescence description:

Appearance.—Decorative-type inflorescence form 5 with narrowly obovate to oblanceolate-shaped ray florets and tubular disc florets; inflorescences borne perpendicular to peduncles and face mostly upright to slightly outwardly; ray and disc florets develop acropetally on a capitulum.

Fragrance.—Faintly fragrant; typical of Chrysanthemums.

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 54 days later when grown as a spraytype.

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

Quantity of inflorescences.—Freely flowering habit; when grown as a spray-type, about 13 inflorescences 30 develop per flowering stem.

Inflorescence size.—Diameter: About 8.4 cm. Depth (height): About 3.1 cm. Disc diameter: About 5 mm; inconspicuous.

Receptacles.—Height: About 5 mm. Diameter: About 8 mm. Shape: Flattened globular. Color: Close to 145C.

Inflorescence buds.—Height: About 1 cm. Diameter: About 1.3 cm. Shape: Flattened globular. Texture and luster: Distally, smooth and glabrous; proximally, moderately to densely pubescent; moderately glossy. Color: Close to 137A, 137B, 138A and 138B; immature ray florets, close to 60A to 60B.

Ray florets.—Quantity and arrangement: About 240 arranged in about seven whorls. Length: About 3.1 45 cm; varying between 1 cm and 4.3 cm. Width: About 1 cm; varying between 0.2 cm and 1.5 cm. Shape: Obovate to oblanceolate; slightly recurved and moderately to strongly carinate. Apex: Acute to shallowly emarginate. Base: Attenuate. Margin: Entire; not 50 undulate. Aspect: Initially upright to horizontal. Texture and luster, upper surface: Smooth, glabrous; moderately velvety; matte. Texture and luster, lower surface: Smooth, glabrous; slightly velvety; slightly glossy. Color: When opening, upper surface: Close 55 to 70A. When opening, lower surface: Close to 70A; distally, tinged with close to 72A. Fully opened, upper surface: Close to between 75C and 76B; venation, similar to lamina colors; color becoming closer to between 75D and 76D with development. 60 Fully opened, lower surface: Close to between 75C

and 76B; venation, similar to lamina colors; color does not change with development.

Disc florets.—Quantity and arrangement: About 50 massed at the center of the receptacle; disc florets inconspicuous. Length: About 5.5 mm. Diameter: About 1 mm. Shape: Lower 80% fused into a tube; upper 20% free. Apex: Narrowly acute. Margin, free-part: Entire. Texture and luster, inner and outer surfaces: Smooth, glabrous; glossy. Color, when opening, inner and outer surfaces: Distally, close to 150D; at the apex, close to N144A; and proximally, close to 145D. Color, fully opened, inner and outer surfaces: Distally, close to 150D; at the apex, close to N144A; and proximally, close to 145D.

Involucral bracts.—Quantity and arrangement: About 24 arranged in about two whorls. Length: About 1.3 cm. Width: About 4 mm. Shape: Narrowly ovate. Apex: Obtuse. Base: Cuneate. Margin: Entire. Texture and luster, upper surface: Smooth, glabrous; glossy. Texture and luster, lower surface: Densely pubescent; matte. Color, upper surface: Close to 146C; margins, translucent and close to 157D and N199A. Color, lower surface: Close to NN137A and 143B; margins, translucent and close to 157D and N199A.

Peduncles.—Length, terminal peduncle: About 7.6 cm. Diameter, terminal peduncle: About 3.5 mm. Length, third peduncle: About 13.2 cm. Diameter, third peduncle: About 3 mm. Strength: Strong. Aspect, terminal peduncle: Mostly upright. Aspect, third peduncle: About 35° from the flowering stem axis. Texture and luster: Densely pubescent; moderately glossy. Color: Close to 138A; venation, close to 137B.

Reproductive organs.—Androecium: Present on disc florets only. Quantity: About five per floret. Filament length: About 1.5 mm. Filament color: Close to 145D. Anther size: About 0.5 mm by 1.5 mm. Anther shape: Narrowly oblong. Anther color: Close to 22A. Pollen amount: Moderate. Pollen color: Close to 17A. Gynoecium: Present on both ray and disc florets. Quantity: One per floret. Pistil length: About 8 mm. Style length: About 7 mm. Style color: Close to 145B. Stigma diameter: About 1 mm. Stigma shape: Cleft, decurrent. Stigma color: Close to 5A. Ovary color: Close to 145C.

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

Pathogen & pest resistance: To date, plants of the new *Chrysanthemum* have not been observed to be resistant or tolerant to 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 'DLFDANT3' as illustrated and described.

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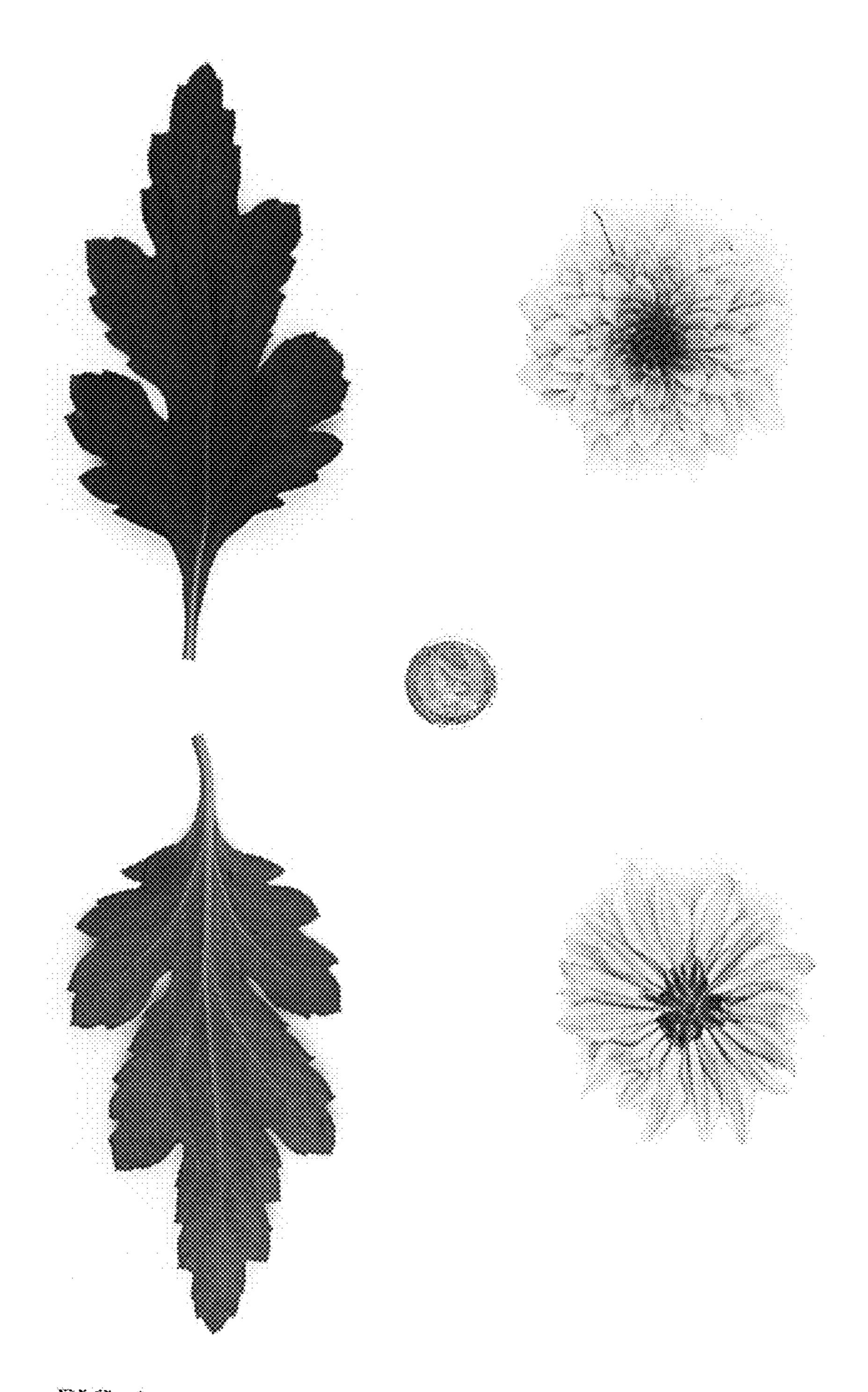


FIG. 2