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

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(54) **OSTEOSPERMUM PLANT NAMED**
'DAOSTYVE'

(50) Latin Name: *Osteospermum ecklonis*
Varietal Denomination: **DAOSTYVE**

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(73) Assignee: **Dalina ApS**, Odense N (DK)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 43 days.

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A01H 5/00 (2006.01)

(52) **U.S. Cl.** **Plt./360**

(58) **Field of Classification Search** **Plt./360**
See application file for complete search history.

(56) **References Cited**

OTHER PUBLICATIONS

Printout of application information from Community Plant Variety Office (CPVO) website for corresponding CPVO application No. 2011/0691 filed Mar. 14, 2011 (1 page) (<http://www.cpvoextranet.cpvo.europa.eu>).

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(57) **ABSTRACT**

A new and distinct cultivar of *Osteospermum* plant named 'DAOSTYVE', characterized by its vigorous growth, with globular upright to spreading shape; well branching (4-6 per plant) habit, with stiff and strong lateral stems and thick leaves, color of leaves RHS 139A (upper side), RHS 137B (underside); ray florets with a unique color combination, purple (RHS 75B) with white tip and base at the upper side, and white with gray stripes (RHS; 188B) and stains of yellow (RHS 162C) at the tip, on the underside; and disc florets that appear grayed green (RHS 188B).

5 Drawing Sheets

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Latin name of the genus and species of the claimed plant: *Osteospermum ecklonis*.
Variety denomination: 'DAOSTYVE'.

BACKGROUND OF THE INVENTION

The present invention relates to a new and distinct cultivar of *Osteospermum* plant, botanically known as *Osteospermum ecklonis* (DC) T. Norl., commonly known as Cape Daisy and and hereinafter referred to by the cultivar name 'DAOSTYVE'.

The new *Osteospermum* cultivar is a product of a planned breeding program conducted by the inventor, Rune Nielsen, in Stige, Denmark. The objective of the breeding program is to develop a new *Osteospermum* cultivar with good garden performance, well branching growth, continuous flowering and an attractive inflorescence color.

The new *Ostospermum* cultivar originated from a cross made in a controlled breeding program by the inventor in 2007, in Stige, Denmark. The female or seed parent is *Osteospermum* variety designated 2045F (not patented). The male or pollen parent is a creme coloured *Osteospermum* variety designated 2010A (not patented).

Asexual reproduction of the new *Osteospermum* cultivar by terminal cuttings was first performed in November, 2008 in Stige, Denmark, and has demonstrated that the combination of characteristics as herein disclosed for the new cultivar are firmly fixed and retained through successive generations of asexual reproduction. The new cultivar reproduces true to type.

BRIEF SUMMARY OF THE INVENTION

The following traits have been repeatedly observed and are determined to be unique characteristics of 'DAOSTYVE', which in combination distinguish this *Osteospermum* as a new and distinct cultivar:

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1. Vigorous cultivar, with globular upright to spreading shape;
2. Well branching (4-6 per plant) with stiff and strong lateral stems and thick leaves. Color of leaves RHS 139A (upper side) RHS 137B (Underside);
3. Ray florets with a unique color combination, purple (RHS 75B) with white tip and base at the upper side, and white with gray stripes (RHS 188B) and stains of yellow (RHS 162C) at the tip, on the underside; and
4. Disc florets that appear grayed green (RHS 188B).

Plants of the new *Osteospermum* 'DAOSTYVE' differ from plants of the parents, 2045F (unpatented) and 2010A (unpatented) in the traits described in Table 1.

TABLE 1

Comparison with Parental Varieties			
Trait	New Cultivar 'DAOSTYVE'	Female Parent 2045F (unpatented)	Male Parent 2010A (unpatented)
Plant Size			
Height:	About 14 cm.	About 12 cm.	About 11 cm.
Diameter:	About 17 cm.	About 16 cm.	About 15 cm.
Overall Plant Shape:	Globular, upright to spreading, with basal branching.	Globular, upright to spreading, with basal branching.	Globular, upright to spreading, with basal branching.
Stem			
Length:	About 6 cm.	About 7 cm.	About 5 cm.
Diameter:	About 5 mm	About 3 mm.	About 5 mm.
Strength:	Stiff and strong.	Medium strong.	Stiff and strong.
Color:	RHS 146D (yellow-green).	RHS 144A (yellow-green)	RHS 146D (yellow-green).

TABLE 1-continued

Comparison with Parental Varieties			
Trait	New Cultivar 'DAOSTYVE'	Female Parent 2045F (unpatented)	Male Parent 2010A (unpatented)
Number of Inflorescence heads per Plant:	About 28.	About 30.	About 20.
Flower Size			
Diameter:	About 7,5 cm.	About 7 cm.	About 8 cm.
Mature Petal Color (upper surface):	RHS 75B (purple) with white tip and base.	RHS 73A (red-purple), with stripes of RHS 75B (purple). N79A (purple) near base.	RHS N81C (purple-violet) with stripes of RHS 76C (purple)

Of the many commercial cultivars known to the present inventor, the most similar in comparison to the new *Osteospermum* 'DAOSTYVE' is the *Osteospermum* cultivar 'Cape Daisy® Zanzibar Pink', in the characteristics described in Table 2.

TABLE 2

Comparison with Comparison Varieties		
Trait	New Cultivar 'DAOSTYVE'	Comparison Cultivar 'Cape Daisy ® Zanzibar Pink'
Plant Size		
Height:	About 14 cm.	About 9 cm.
Diameter:	About 17 cm.	About 16 cm.
Overall Plant Shape:	Globular, upright to spreading, with basal branching.	Globular, upright to spreading, with basal branching.
Branches		
Length:	About 6 cm.	About 5 cm.
Diameter:	About 5 mm	About 4 mm.
Strength:	Stiff and strong.	Medium strength.
Color:	RHS 146D (yellow-green).	RHS 145C (yellow-green).
Number of Inflorescence heads per Plant:	About 28.	About 30.
Flower Size		
Diameter:	About 7.5 cm.	About 6 cm.
Mature Petal Color (Upper side):	RHS 75B (purple) with white tip and base.	Outer half RHS N78D (purple), inner half White.
Mature Petal Color (Underside):	White with stripes of RHS 188B (greyed-green) and stains of RHS 162C (greyed-yellow) at the tip.	RHS 83D (violet) with stripes of RHS 83B (violet).

BRIEF DESCRIPTION OF THE PHOTOGRAPHS

The accompanying photographs illustrate the overall appearance of the new *Osteospermum* 'DAOSTYVE' showing the colors as true as is reasonably possible with colored reproductions of this type. Colors in the photographs may differ slightly from the color value cited in the detailed botanical description, which accurately describe the color of 'DAOSTYVE'.

FIG. 1 shows a close-up view of the composite flower head from 'DAOSTYVE'.

FIG. 2 shows a side view perspective of a typical flowering plant of 'DAOSTYVE' in a 11 cm pot, at 12 weeks of age after planting.

FIG. 3 shows a close-up view of the typical lateral stems with leaves and buds of 'DAOSTYVE'.

FIG. 4 shows a close-up view of the different leaf sizes of 'DAOSTYVE'.

FIG. 5 shows a comparison between '2010A (male parent)', 'CAPE DAISY® Zanzibar Pink' and 'DAOSTYVE', (Breeders reference: 6415A).

DETAILED BOTANICAL DESCRIPTION

The new *Osteospermum* 'DAOSTYVE' has not been observed under all possible environmental conditions. The phenotype of the new cultivar may vary with variations in environment such as temperature, light intensity, and day length without any change in the genotype of the plant.

The aforementioned photographs, together with the following observations, measurements and values describe the new *Osteospermum* 'DAOSTYVE' as grown in a glasshouse, equipped with heat, assimilation light and ebb/flood watering system in Odense, Denmark, under conditions which closely approximate those generally used in commercial practice. The plants was grown in 14° C., with a venting temperature on 16° C. Assimilation light was given when natural daylight was below 3000 lux and the day length was extended to 16 hours. The EC levels in the soil, was kept at about 2.5-3.5 and pH around 6.0 during the production. Plant growth was regulated 3 times during the production period, using 3‰ Cycocel (chlormequat-chloride) as a drench (80-100 ml/pot).

Color references are made to The Royal Horticultural Society Colour Chart (R.H.S.), Colour Chart 2001 edition, Color values were taken under March daylight conditions at approximately 10:00-14:00 in Stige, Denmark. The age of the 'DAOSTYVE' plants described is 12 weeks from potting.

Classification:

Botanical.—*Osteospermum ecklonis* (DC) Norl.

Parentage:

Female or seed parent.—*Osteospermum* variety designated 2045F (unpatented).

Male or pollen parent.—*Osteospermum* variety designated 2010A (Unpatented).

Propagation:

Type.—Vegetative terminal cuttings.

Time and temperature to initiate roots.—About 9 to 13 days at 19 to 21° C. in tunnels in a greenhouse.

Time and temperature to produce a rooted young plant.—About 4 to 5 weeks at 18° (initiation period benefits from 19-21° C.).

Rooting habit.—Vigorous, white to grayed yellow and well branched.

Plant description:

General appearance and form.—Globular, upright, with basal branching. Inflorescences in composite heads. Freely branching with lateral flowering branches forming at every node.

Growth rate.—Growing about 1 cm per week during production period.

Plant height.—About 12 cm to 16 cm.

Plant width (spread).—About 15 cm to 18 cm.

Crop time to produce a mature flowering plant.—It requires 4-5 weeks to produce a young plant in a 35 mm propagation plug. After potting 12-14 weeks are required to produce finished flowering plants in 11 cm pots.

Stem:

Shape.—Round.

Length.—About 5 cm to 7 cm.

Diameter.—About 4 mm to 5 mm.

Strength.—Stiff and strong.

Aspect.—Upright.

Texture.—Smooth and glabrous.

Color.—Mature: RHS 144A. Immature: RHS 144B.

Branches:

Branching habit.—Basal branching with lateral branching.

Number of branches per plant.—About 4-6.

Length (including flowers).—About 14 cm to 16 cm.

Diameter.—About 4 mm.

Strength.—Stiff and strong.

Aspect.—Upright to spreading.

Texture.—Smooth and glabrous.

Color.—Mature: RHS 144A. Immature: RHS 144B.

Internode length.—About 3 to 10 mm.

Internode color.—RHS 144A.

Foliage description:

Arrangement.—Alternate.

Number of leaves per branch.—About 10 to 14 per branch.

Length.—About 4 cm to 7 cm.

Width.—About 2 cm to 3.5 cm.

Overall shape of leaf.—Obovate to spatulate with 2 to 4 acuminate teeth on some of the leaves.

Shape at apex.—Obtuse.

Shape at base.—Attenuate.

Margin.—Entire to dentate (2 lobes on each side of some of the leaves).

Texture.—Upper surface: Pubescent with few scattered short, stiff hairs. More hairs on the edges of leaf. Lower surface: Pubescent with few scattered short, stiff hairs. More hairs along veins and on the edges of leaf.

Color of developing foliage.—Upper surface: RHS 137A. Lower surface: RHS 138A.

Color of mature foliage.—Upper surface: RHS 139A. Lower surface: RHS 137B.

Venation pattern.—Trinerved with veins along nerves.

Venation color.—Upper surface: RHS 145A. Lower surface: RHS 146C.

Inflorescence description:

Arrangement and shape.—Tubular disc floret and flat, lanceolate ray florets in composite flower heads, developed from terminal and axillary shoots. The peduncles lift the Inflorescences 2-4 cm above the foliage. Inflorescences face upright to 80° angle from vertical.

Natural flowering season.—*Osteospermum* is a bedding plant, with a flowering season from early spring to late autumn. Temperatures below 20° C. will increase flowering, temperatures above 20° C. will reduce flowering.

Time to flower.—65 to 85 days.

Inflorescence longevity on the plant.—Inflorescence will maintain good color and substance for about 5-10 days; however, the longevity of individual inflores-

cence is highly dependent on temperature and light conditions. Inflorescence persistent.

Quantity of inflorescences heads.—Freely flowering; about 30 buds and open inflorescences per plant.

Fragrance.—Sweet, fresh and discreet.

Bud (inflorescences head).—Rate of opening (from showing color to fully open flower): 1 to 5 days. The rate of opening is highly dependent on temperature and light conditions. Length: About 12 mm. Diameter: About 10 mm. Shape: Acuminate. Texture: Pubescent with small hairs. Color: RHS 144A at base to 139B at apex.

Peduncle.—From both terminate and axillary shoots. Length: About 7 cm. Diameter: About 2 mm. Angle: About 0-20° from vertical. Strength: Stiff and strong. Texture: Pubescent with small white hairs. Color: RHS 138A. Exposed to sun, small stains of RHS 200A appear, and give the peduncle a reddish look.

Inflorescence head.—Length: About 10 mm. Diameter: About 7.5 cm.

Ray florets.—Quantity per Inflorescence head: 17-22. Length: 35 mm. Widths: 8-10 mm. Overall shape: Spatulate. Shape at apex: Obtuse. Shape at base: Acute. Margin: Entire. Texture: Upper surface: smooth, matt, slightly furrowed. Lower surface: smooth, matt slightly furrowed. Color upper side: RHS 75B with white tip and base. Color underside: RHS 188B, with and stains of RHS 162C at the tip.

Disc florets.—Quantity per Inflorescence head: 60-70. Length: 6 mm. Diameter: 1 mm. Color: White translucent, white at base.

Phyllary.—15-20. Length: 9-11 mm. Width: 1-3 mm. Overall shape: Lanceolate. Apex: Narrow Acuminate. Base: Fused. Margin: Entire. Color: RHS 139B.

Reproductive organs:

Androecium.—Location: Disc florets only. Stamen number: 5 fused. Stamen length: About 2 mm. Anther shape: Linear, fused. Anther length: About 2 mm. Pollen amount: Medium amount. Pollen color: RHS N25D.

Gynoecium.—Location: Ray and disc florets. Quantity: 1. Pistil length: About 4 mm. Stigma shape: Brush-like, cleft 1.5 mm deep. Stigma length: About 2 mm. Stigma color: RHS 103A. Style length: About 2 mm. Style color: RHS 103C. Ovary color: RHS 144D.

Seed/fruit: Seed and fruit production has not been observed. *Disease/pest resistance*: Resistance to pathogens and pests common to *Osteospermum* has not been observed.

Disease/pest susceptibility: Susceptibility to pathogens and pests common to *Osteospermum* has not been observed.

Temperature tolerance: Plants of the new *Osteospermum* have exhibited good tolerance rain, wind and drought; however, flowering may cease during hot periods (temperatures above 25° C.). Low temperature tolerance to 1° C.

What is claimed is:

1. A new and distinct cultivar of *Osteospermum* plant named 'DAOSTYVE', as illustrated and described herein.

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FIG. 1

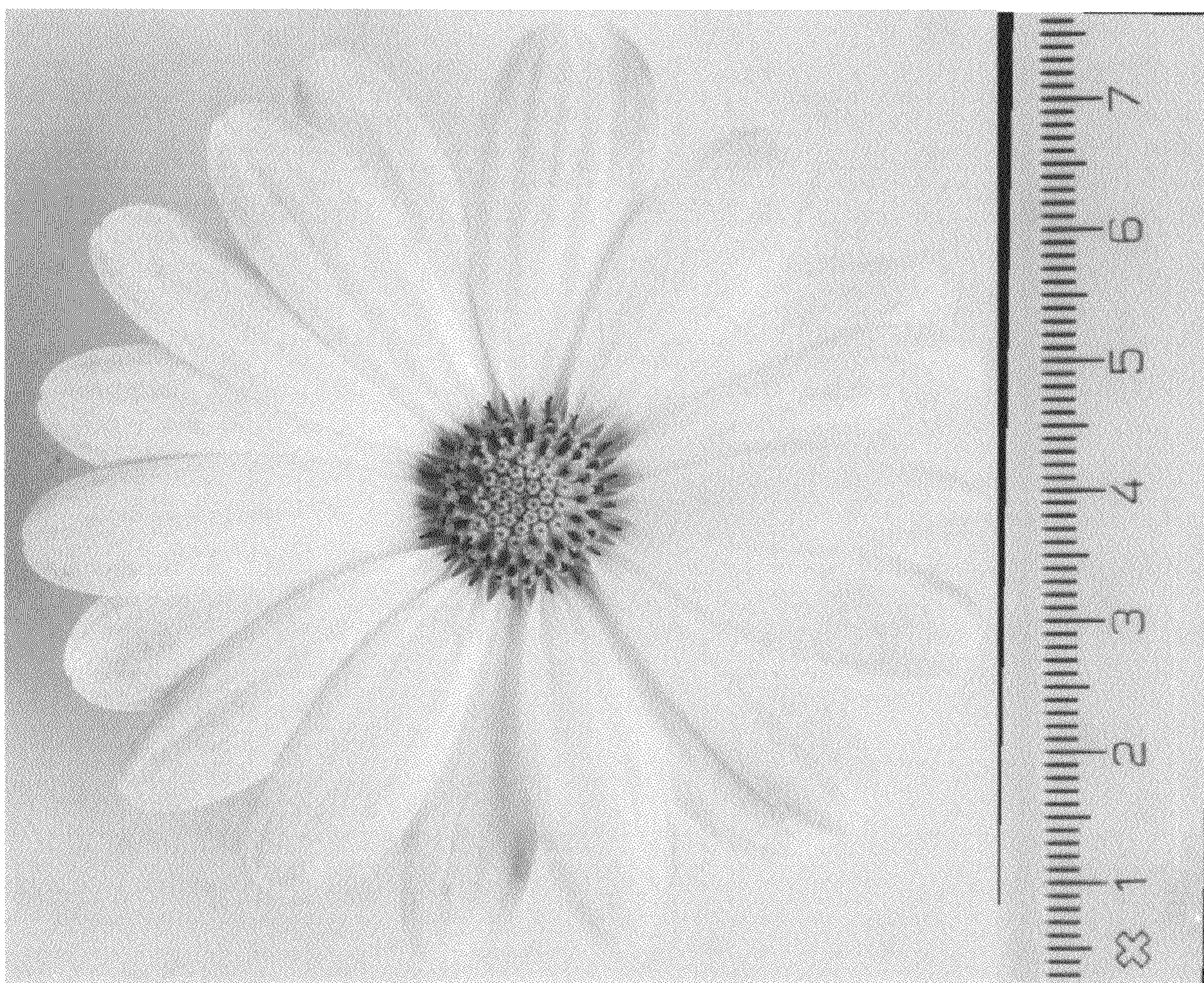


FIG. 2



FIG. 3



FIG. 4



FIG. 5

