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(12) **United States Plant Patent**
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- (54) **OSTEOSPERMUM PLANT NAMED 'DAOSSYTEN'**
- (50) Latin Name: *Osteospermum ecklonis*
Varietal Denomination: Daossytten
- (75) Inventor: **Rune Harboe Nielsen**, Odense N (DK)
- (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 120 days.
- (21) Appl. No.: **13/064,538**
- (22) Filed: **Mar. 30, 2011**
- (65) **Prior Publication Data**
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- (51) **Int. Cl.**
A01H 5/00 (2006.01)
- (52) **U.S. Cl.**
USPC **Plt./360**
- (58) **Field of Classification Search**
USPC Plt./360
See application file for complete search history.

(56) **References Cited**

PUBLICATIONS

Application information from Community Plant Variety Office (CPVO) website for corresponding CPVO application No. 2010/0799 filed Apr. 6, 2010 (1 page) (<http://www.cpvoextranet.cpvo.europa.eu>).

Application information from Canadian Food Inspection Agency—Plant Varieties Journal No. 76 (Jul. 2010) for corresponding Canadian Plant Breeders' Rights application No. 10-6962 filed May 3, 2010 (1 page) (<http://www.inspection.gc.ca/english/plaveg/pbrpov/joubule.shtml>).

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(57) **ABSTRACT**

A new and distinct cultivar of *Osteospermum* plant named 'DAOSSYTEN', characterized by being a compact cultivar, with upright to spreading shape; ray florets with bright yellow color (RHS 12A) on the upper side and yellow (RHS 12B) on the underside, with a 2-4 mm wide, not uniform, brown (RHS 200C) stripe down the middle; and having a short production time that matches the white, pink and purple cultivars (yellow cultivars are often 1-3 weeks longer in production time compared with white, pink and purple cultivars).

5 Drawing Sheets**1**

Latin name of the genus and species of the claimed plant:
Osteospermum ecklonis.

Variety denomination: 'DAOSSYTEN'.

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 'DAOSSYTEN'.

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 a yellow colored *Osteospermum* variety designated 4923C (not patented). The male or pollen parent is a yellow colored *Osteospermum* variety designated 4925A (not patented).

Asexual reproduction of the new *Osteospermum* cultivar by terminal cuttings was first performed in November, 2006 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.

2**BRIEF SUMMARY OF THE INVENTION**

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

1. Compact cultivar, with upright to spreading shape;
2. Ray florets with bright yellow color (RHS 12A) on upper side;
3. Yellow (RHS 12B) ray floret underside, with a 2-4 mm wide, not uniform brown (RHS 200C) stripe down the middle; and
4. A short production time that matches the white, pink and purple cultivars (Yellow cultivars are often 1-3 weeks longer in production time).

Plants of the new *Osteospermum* 'DAOSSYTEN' differ from plants of the parents, 4923C (unpatented) and 4925A (unpatented) in the traits described in Table 1.

TABLE 1

Comparison with Parental Cultivars			
Trait	New Cultivar 'DAOSSYTEN'	Female Parent 4923C (unpatented)	Male Parent 4925A (unpatented)
Plant Size			
Height:	About 14 cm.	About 16 cm.	About 15 cm.
Diameter:	About 16 cm.	About 18 cm.	About 17 cm.

TABLE 1-continued

Comparison with Parental Cultivars			
Trait	New Cultivar 'DAOSSYTEN'	Female Parent 4923C (unpatented)	Male Parent 4925A (unpatented)
Overall Plant Shape:	Upright to spreading, with basal branching.	Upright to spreading, with basal branching.	Upright to spreading, with basal branching.
Stem			
Length:	About 6 cm.	About 7 cm.	About 6 cm
Diameter:	About 3 mm	About 5 mm.	About 4 mm.
Strength:	Medium strong.	Medium strong.	Stiff and strong.
Color:	RHS 146B (yellow-green).	RHS 146C (yellow-green)	RHS 146C (yellow-green).
Number of Inflorescence heads per Plant:	About 15.	About 10.	About 12.
Flower Size Diameter:	About 8 cm.	About 8.5 cm.	About 8 cm.
Mature Petal Color (upper surface):	RHS 12A (yellow).	RHS 12A (yellow), with stripes of 75B (purple), N79A (purple) near base.	RHS N81C (purple-violet) with stripes of 76C (purple)
Color of disc florets (as they appear when sitting in composite flower head).	RHS 152B (yellow-green) near center developing to RHS 152D (yellow-green) near the edge of disc.	RHS 23A (yellow-orange) near center developing to RHS 152D (yellow-green) near the edge of disc.	RHS 152B (yellow-green) near center developing to RHS 152D (yellow-green) near the edge of disc.

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

TABLE 2

Comparison with Comparison Cultivar		
Trait	New Cultivar 'DAOSSYTEN'	Comparison Cultivar 'Cape Daisy ® Tambero'
Plant Size		
Height:	About 14 cm.	About 15 cm.
Diameter:	About 16 cm.	About 17 cm.
Overall Plant Shape:	Upright to spreading, with basal branching.	Upright to spreading, with basal branching.
Stem		
Length:	About 6 cm.	About 4-6 cm.
Diameter:	About 3 mm	About 5 mm.
Strength:	Medium strong.	Strong.
Color:	RHS 146B (yellow-green).	RHS 146B (yellow-green).
Number of Inflorescence heads per Plant:	About 15.	About 12.
Flower Size Diameter:	About 8 cm.	About 8 cm.
Mature Petal Color (upper surface):	RHS 12A (yellow).	Outer half RHS 12B (yellow), inner half RHS 11B (yellow). 152B (yellow-green)
Color of disc florets (as they appear when sitting in composite flower head).	RHS 152B (yellow-green) near center developing to RHS 152D (yellow-green) near the edge of disc.	

BRIEF DESCRIPTION OF THE PHOTOGRAPHS

The accompanying photographs illustrate the overall appearance of the new *Osteospermum* 'DAOSSYTEN' 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 'DAOSSYTEN'.

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

FIG. 2 shows a side view perspective of a typical flowering plant of 'DAOSSYTEN' 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 'DAOSSYTEN'.

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

FIG. 5 shows a comparison between 'CAPE DAISY® Tambero' and 'DAOSSYTEN', (Breeders reference: 5694D).

DETAILED BOTANICAL DESCRIPTION

The new *Osteospermum* 'DAOSSYTEN' 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* 'DAOSSYTEN' as grown in a glass-house, 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 'DAOSSYTEN' plants described is 12 weeks from potting.

Classification:

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

Parentage:

Female or seed parent.—*Osteospermum* cultivar designated 4923C (unpatented).

Male or pollen parent.—*Osteospermum* variety designated 4925A (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.—Upright, with basal branching. Inflorescences in composite heads. Freely branching with lateral flowering branches forming at every node.

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

Plant height.—About 12 cm to 15 cm.

Plant width (spread).—About 15 cm to 17 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.

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Stem:

Shape.—Round.

Length.—About 4 cm to 6 cm.

Diameter.—About 3 mm to 5 mm.

Strength.—Medium strong.

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Aspect.—Upright.

Texture.—Smooth and glabrous.

Color.—Mature: RHS 146B. Immature: RHS 146C.

Branches:

Branching habit.—Basal branching with lateral branching.

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Number of branches per plant.—About 3-5.

Length (including flowers).—About 12 cm to 13 cm.

Diameter.—About 4 mm.

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Strength.—Medium strong.

Aspect.—Upright to spreading.

Texture.—Smooth and glabrous.

Color.—Mature: RHS 146B. Immature: RHS 146C.

Internode length.—About 4 to 10 mm.

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Internode color.—RHS 146C.

Foliage description:

Arrangement.—Alternate.

Number of leaves per branch.—About 8 to 11 per branch.

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Length.—About 4 cm to 7 cm.

Width.—About 1.5 cm to 4 cm.

Overall shape of leaf.—Obovate to spatulate with 3 to 5 acuminate teeth on some of the leaves.

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Shape at apex.—Obtuse.

Shape at base.—Attenuate.

Margin.—Dentate (2-5 lobes on each leaf).

Texture.—Upper surface: Pubescent with scattered short, stiff hairs. More hairs on the edges of leaf. Lower surface: Pubescent with scattered short, stiff hairs. More hairs along veins and on the edges of leaf. Young leaves appear more hairy than older.

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

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

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Lower surface: RHS 137B.

Venation pattern.—Trinerved with veins along nerves.

Venation color.—Upper surface: RHS 147B. Lower surface: RHS 146C.

Inflorescence description:

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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 0-4 cm above the foliage. Inflorescences face upright to 70° angle from vertical.

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

Quantity of inflorescences heads.—Freely flowering; about 15-18 buds and open inflorescences per plant.

Fragrance.—Very discreet smell.

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 14 mm. Diameter: About 10 mm. Shape: Semiglobose. Texture: Pubescent with small hairs. Color: RHS 144A at base to 138A at apex.

Peduncle.—From both terminal and axillary shoots Length: About 4-6 cm. Diameter: About 2 mm. Angle: About 0-30° from vertical. Strength: Medium strong. Texture: Pubescent with small white hairs. Color: RHS 144A.

Inflorescence head.—Depth: About 10 mm. Diameter: About 8 cm. Disc Diameter: 15 mm. Receptacle (phoranthium) Surface Shape: Slightly Rounded.

Ray florets.—Quantity per Inflorescence head: 18-22. Length: 35 mm. Widths: 8-10 mm. Overall shape: Spatulate. Shape at apex: Acute with small clefts (praemorse). Shape at base: Acute. Margin: Entire. Texture: Upper surface: smooth, matt, slightly furrowed. Lower surface: smooth, matt slightly furrowed. Color upper side: RHS 12A. Color underside: Yellow (RHS 12B), with a 2-4 mm wide brown (RHS 200C) stripe down the middle.

Disc florets.—Quantity per Inflorescence head: 70-80. Length: 9 mm. Diameter: 1 mm. Color RHS 157 translucent upper half, RHS 157A lower half.

Phyllary.—15-20. Length: 12-14 mm. Width: 1-2 mm. Overall shape: Lanceolate. Apex: Narrow Acuminate. Base: Fused. Margin: Entire. Color: RHS 138A.

Reproductive organs:

Androecium.—Location: Disc florets only. Stamen number: 5 fused. Stamen length: About 7 mm. Anther shape: Linear, fused. Anther length: About 3 mm. Pollen amount: Medium amount. Pollen color: RHS 14A.

Gynoecium.—Location: Ray and disc florets. Quantity: 1. Pistil length: About 6 mm. Stigma shape: Brush-like, cleft 2 mm deep. Stigma length: About 2 mm. Stigma color: RHS 103A on tip and along edges, rest 155A. Style length: About 3 mm. Style color: RHS 155A. Ovary color: RHS 145B.

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.

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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.

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What is claimed is:

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

* * * * *

FIG. 1



FIG. 2



FIG. 3



FIG. 4

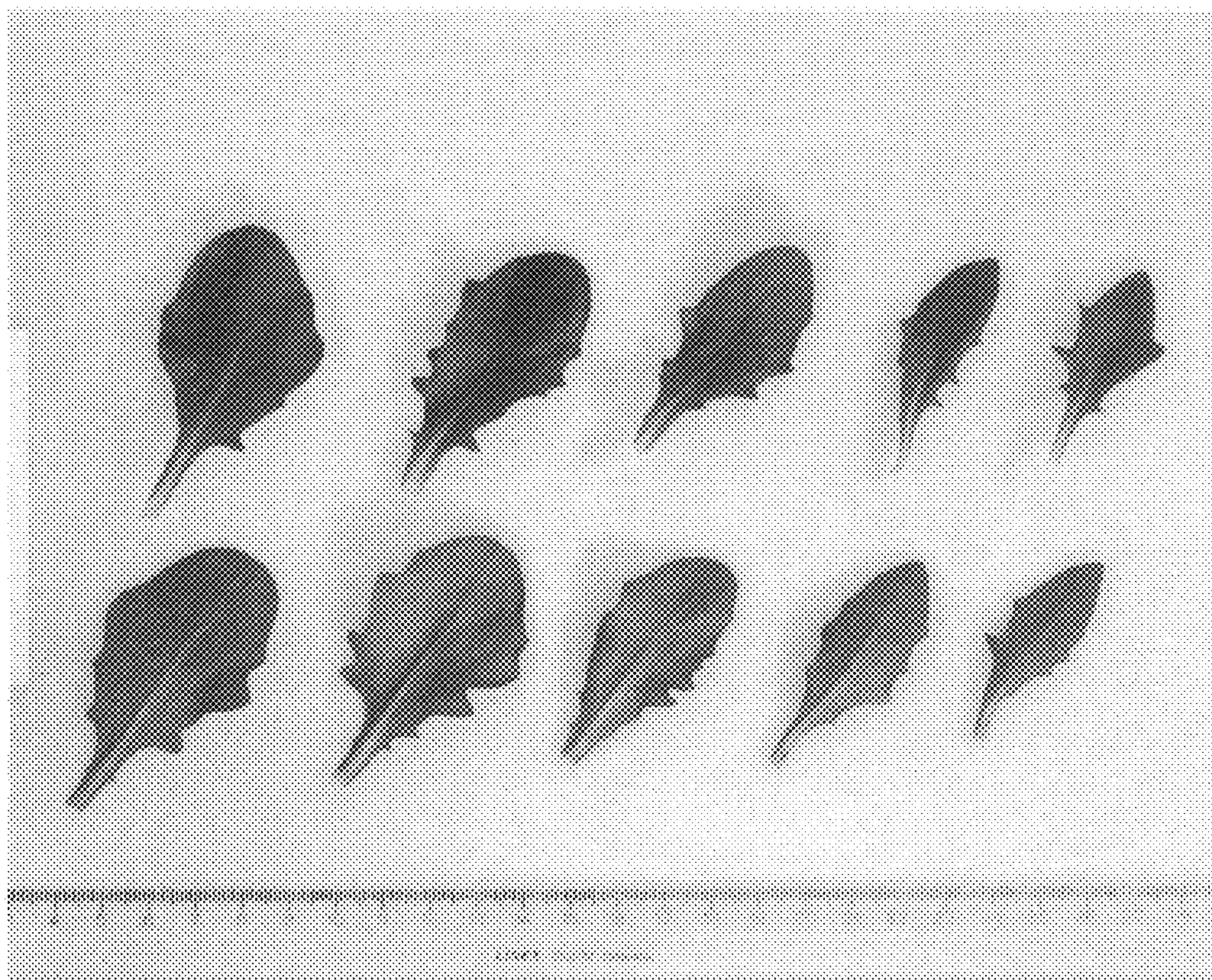


FIG. 5

