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Sorensen

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

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

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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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(52) **U.S. Cl.** **Plt./360**
(58) **Field of Search** Plt./360

(56) **References Cited**

U.S. PATENT DOCUMENTS

PP10,340 P * 4/1998 Sorensen Plt./360
PP10,596 P * 9/1998 Kanno Plt./360

OTHER PUBLICATIONS

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(57) **ABSTRACT**

A new and distinct cultivar of *Osteospermum* plant named 'Aknai', characterized by its uniformly mounded plant habit; freely branching growth habit; full and dense plants; freely flowering habit; dark green-colored foliage; inflorescences with white-colored ray florets; and high temperature tolerance.

1 Drawing Sheet

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Botanical classification/cultivar designation: *Osteospermum ecklonis* cultivar Aknai.

BACKGROUND OF THE INVENTION

The present Invention relates to a new and distinct cultivar of *Osteospermum* plant, botanically known as *Osteospermum ecklonis,* and hereinafter referred to by the name 'Aknai'.

The new *Osteospermum* is a product of a planned breeding program conducted by the Inventor in Aabyhøj, Denmark. The objective of the breeding program is to create new *Osteospermum* cultivars with uniform plant habit, interesting floret colors and high temperature tolerance.

The new *Osteospermum* originated from a cross-pollination made by the Inventor during the spring of 1999 of the *Osteospermum ecklonis* cultivar Akkali, not patented, as the female, or seed, parent with the *Osteospermum ecklonis* cultivar Brightside, disclosed in U.S. Plant Pat. No. 10,596, as the male, or pollen, parent. The new *Osteospermum* was discovered and selected by the Inventor as a single flowering plant within the progeny of the stated cross-pollination grown in a controlled environment in Aabyhøj, Denmark during the spring of 2000.

Asexual reproduction of the new *Osteospermum* by vegetative tip cuttings was first conducted in Aabyhøj, Denmark in February, 2000. Asexual reproduction by cuttings has shown that the unique features of this new *Osteospermum* are stable and reproduced true to type in successive generations.

SUMMARY OF THE INVENTION

The cultivar Aknai has not been observed under all possible environmental conditions. The phenotype may vary

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somewhat with variations in environment such as temperature 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 'Aknai'. These characteristics in combination distinguish 'Aknai' as a new and distinct *Osteospermum*:

1. Uniformly mounded plant habit.
2. Freely branching growth habit; full and dense plants.
3. Freely flowering habit.
4. Dark green-colored foliage.
5. Inflorescences with white-colored ray florets.
6. Tolerant to high temperatures.

In side-by side comparisons conducted in Aabyhøj, Denmark, plants of the new *Osteospermum* differed from plants of the female parent, the cultivar Akkali, in the following characteristics:

1. Plants of the new *Osteospermum* were more upright and mounded than plants of the cultivar Akkali.
2. Plants of the new *Osteospermum* had broader leaves than plants of the cultivar Akkali.

In side-by-side comparisons conducted in Aabyhøj, Denmark, plants of the new *Osteospermum* differed from plants of the male parent, the cultivar Brightside, in the following characteristics:

1. Plants of the new *Osteospermum* more were compact than plants of the cultivar Brightside.
2. Plants of the new *Osteospermum* were more freely flowering than plants of the cultivar Brightside.
3. Plants of the new *Osteospermum* were stronger and healthier than plants of the Brightside.

Plants of the new *Osteospermum* can be compared to plants of the cultivar Nairobi, not patented. In side-by-side comparisons conducted in Aabyhøj, Denmark, plants of the new *Osteospermum* differed from plants of the cultivar Nairobi, in the following characteristics:

1. Plants of the new *Osteospermum* were more freely branching than plants of the cultivar Nairobi.
2. Plants of the new *Osteospermum* had shorter peduncles than plants of the cultivar Nairobi.
3. Plants of the new *Osteospermum* were more high temperature-tolerant than plants of the cultivar Nairobi.

BRIEF DESCRIPTION OF THE PHOTOGRAPHS

The accompanying colored photographs illustrate the overall appearance of the new *Osteospermum* showing the colors as true as it is reasonably possible to obtain in colored reproductions of this type. Colors in the photographs may differ from the color values cited in the detailed botanical description which accurately describe the colors of the new *Osteospermum.*

The photograph at the top of the sheet comprises a side perspective view of a typical flowering plant of 'Aknai' grown in container.

The photograph at the bottom of the sheet is a close-up view of typical leaves and inflorescences of 'Aknai'.

DETAILED BOTANICAL DESCRIPTION

In the following description, color references are made to The Royal Horticultural Society Colour Chart, 1995 Edition, except where general terms of ordinary dictionary significance are used.

The aforementioned photographs, following observations and measurements describe plants grown during the late winter and early spring in Encinitas, Calif., in a polyethylene-covered greenhouse and under conditions which approximate those generally used in commercial *Osteospermum* production. Single plants were grown in one-gallon containers and pinched once. During the production of the plants, day temperatures were about 24° C., night temperatures were about 19° C., and light levels were about 4,000 foot-candles. Measurements and numerical values represent averages of typical flowering plants about 20 weeks after planting.

Botanical classification: *Osteospermum ecklonis* cultivar Aknai.

Parentage:

Female, or seed, parent.—*Osteospermum ecklonis* cultivar Akkali, not patented.

Male, or pollen, parent.—*Osteospermum ecklonis* cultivar Brightside, disclosed in U.S. Plant Pat. No. 10,596.

Propagation:

Type.—Terminal cuttings.

Time to initiate roots, summer.—About 10 days at 18° C.

Time to initiate roots, winter.—About 12 days at 18° C.

Time to develop roots, summer.—About 22 days at 18° C.

Time to develop roots, winter.—About 24 days at 18° C.

Root description.—Fibrous, fine; white in color.

Rooting habit.—Freely branching.

Plant description:

Appearance.—Perennial herbaceous container and garden plant. Uniformly mounded plant habit; upright and somewhat outwardly spreading; inverted triangle. Freely branching, about 16 primary lateral branches each with three or four secondary lateral branches; dense and full plants. Vigorous growth habit.

Plant height.—About 38 cm.

Plant width or area of spread.—About 56 cm.

Lateral branches.—Length: About 32 cm. Diameter: About 5.5 mm. Internode length: About 2.3 cm. Aspect: Initially upright then bending outwardly. Strength: Strong. Texture: Glabrous, smooth. Color: 144A.

Foliage description.—Arrangement: Alternate; simple. Length: About 4.7 cm. Width: About 2.2 cm. Shape: Roughly oblanceolate to spatulate. Apex: Broadly acute. Base: Attenuate. Margin: Irregularly dentate. Venation pattern: Pinnate. Texture, upper and lower surfaces: Slightly rough, leathery, glandular and glabrous. Color: Developing foliage, upper surface: 146A. Developing foliage, lower surface: 146B. Fully expanded foliage, upper surface: 147A. Fully expanded foliage, lower surface: 147B. Venation, upper and lower surfaces: 146C. Petiole: Length: About 2.2 cm. Diameter: About 4 mm. Texture, upper and lower surfaces: Glabrous. Color, upper and lower surfaces: 144A.

Inflorescence description:

Appearance.—Terminal and axillary inflorescences held above and beyond the foliage. Composite inflorescence form, radially symmetrical, with ligulate-shaped ray florets and disc florets massed at the center; ray and disc florets arranged acropetally on a capitulum. Inflorescences face upright or outwardly.

Flowering response.—Plants flower continuous and freely from the spring through the fall.

Postproduction longevity.—Inflorescences maintain good color and substance for about ten days on the plant when grown in an outdoor environment. Inflorescences persistent.

Quantity of inflorescences.—Freely flowering; more than 100 open inflorescences and inflorescence buds per plant.

Fragrance.—None detected.

Inflorescence bud (at stage of showing color).—Length: About 1.5 cm. Diameter: About 8 mm. Shape: Ovoid. Color: 148C.

Inflorescence size.—Diameter: About 4.3 cm. Depth (height): About 1.7 cm. Disc diameter: About 7 mm. Receptacle diameter: About 1.8 cm. Receptacle height: About 9 mm.

Ray florets.—Length: About 2.2 cm. Width: About 5 mm. Shape: Ligulate. Apex: Emarginate. Base: Attenuate. Margin: Entire. Texture, upper and lower surfaces: Smooth; velvety. Orientation: Initially 30° from vertical, with development, close to 60° from vertical. Number of ray florets per inflorescence: About 13 in a single whorl. Color: When opening, upper surface: 155A. When opening, lower surface: Ground color, 157A; alternating longitudinal stripes, 188B and 146C. Fully opened, upper surface: 155D. Fully opened, lower surface: Ground color, 157A; alternating longitudinal stripes, 188B and 146C.

Disc florets.—Shape: Tubular, elongated. Apex: Five-pointed. Length: About 6 mm. Width: At apex: About

2 mm. At base: Less than 1 mm. Number of disc florets per inflorescence: About 46. Color: Immature: More gray than 94B. Mature: Apex: 97B. Mid-section: 155A. Base: 157A.

Phyllaries.—Length: About 1.1 cm. Diameter: About 1 mm. Shape: Linear. Apex: Acuminate. Base: Fused. Margin: Entire. Texture, upper and lower surfaces: Slightly pubescent. Number per inflorescence: About 15 in a single whorl. Color, upper surface: 147B. Color, lower surface: 146A.

Peduncles.—Length, terminal peduncle: About 7 cm. Length, second peduncle: About 9.5 cm. Length, third peduncle: About 9 cm. Diameter: About 1 mm. Angle: Terminal peduncles, erect; secondary and tertiary peduncles, about 30 to 45° from vertical. Strength: Strong. Texture: Coarse with tiny scattered short hairs; glandular. Color: 144A.

Reproductive organs.—Androecium: Present on disc florets only. Stamen number: Five per floret; fused around style. Anther shape: Oblong. Anther length: Less than 1 mm. Anther color: 103A. Pollen amount: Scarce. Pollen color: 23A. Gynoecium: Present on both ray and disc florets. Pistil number: One per floret. Pistil length: About 6 mm. Stigma shape: Two-parted. Stigma color: 103A. Style length: About 3 mm. Style color: 103A. Ovary color: 144C.

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 on plants grown under commercial greenhouse or outdoor conditions.

Temperature tolerance: Plants of the new *Osteospermum* have been observed to tolerate temperatures from 0 to 40° C.

It is claimed:

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

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