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Drewlow

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(54) **KALANCHOE PLANT NAMED 'FOREVER MAXI BRIGHT RED'**

(50) Latin Name: ***Kalanchoe blossfeldiana***
Varietal Denomination: **Forever Maxi Bright Red**

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(58) **Field of Search** Plt./341

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(57) **ABSTRACT**

A new and distinct cultivar of Kalanchoe plant named 'Forever Maxi Bright Red', characterized by its upright, dense and uniform plant habit; freely branching growth habit; numerous large bright red-colored flowers; dark green-colored leaves; and excellent postproduction longevity.

1 Drawing Sheet

Botanical classification/cultivar designation: *Kalanchoe blossfeldiana* cultivar Forever Maxi Bright Red.

BACKGROUND OF THE INVENTION

The present invention relates to a new and distinct cultivar of Kalanchoe plant, botanically known as *Kalanchoe blossfeldiana*, and hereinafter referred to by the cultivar name 'Forever Maxi Bright Red'.

The new Kalanchoe is a product of a planned breeding program conducted by the Inventor in Ashtabula, Ohio. The objective of the breeding program was to create new freely-branching and freely-flowering Kalanchoe cultivars with attractive leaf and flower coloration.

The new Kalanchoe originated from a cross-pollination made by the Inventor in November, 1997 of a proprietary selection of *Kalanchoe blossfeldiana* identified as code number 96-379-1, not patented, as the female, or seed, parent with a proprietary selection of *Kalanchoe blossfeldiana* identified as code number 95-153-8, not patented, as the male, or pollen, parent. The cultivar Forever Maxi Bright Red was discovered and selected by the Inventor as a flowering plant within the progeny of the stated cross-pollination in a controlled environment in Ashtabula, Ohio.

Asexual reproduction of the new Kalanchoe by terminal vegetative cuttings taken at Ashtabula, Ohio, since October, 1998, has shown that the unique features of this new Kalanchoe are stable and reproduced true to type in successive generations.

BRIEF SUMMARY OF THE INVENTION

The cultivar Forever Maxi Bright Red has not been observed under all possible environmental conditions. The phenotype may vary somewhat with variations in environment 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 'Forever Maxi Bright Red'. These characteristics in combination distinguish 'Forever Maxi Bright Red' as a new and distinct cultivar:

1. Upright, uniform and dense plant habit.
2. Freely branching growth habit.
3. Numerous large bright red-colored flowers.
4. Dark green-colored leaves.
5. Excellent postproduction longevity.

Plants of the new Kalanchoe differ from plants of the parent selections primarily in plant habit and flower color.

Plants of the new Kalanchoe can be compared to plants of the Kalanchoe cultivar Forever Maxi Red, disclosed in U.S. Plant Pat. No. 12,394. In side-by-side comparisons conducted by the Inventor in Lompoc, Calif., plants of the new Kalanchoe differed from plants of the cultivar Forever Maxi Red in the following characteristics:

1. Plants of the new Kalanchoe had slightly smaller leaves than plants of the cultivar Forever Maxi Red.
2. Plants of the new Kalanchoe had solid dark green-colored leaves whereas plants of the cultivar Forever Maxi Red had dark green-colored leaves with reddish margins.
3. Flower color of plants of the new Kalanchoe was brighter red than flower color of plants of the cultivar Forever Maxi Red.

Plants of the new Kalanchoe can also be compared to plants of the Kalanchoe cultivar Tenorio, disclosed in U.S. Plant Pat. No. 9,617. In side-by-side comparisons conducted by the Inventor in Lompoc, Calif., plants of the new Kalanchoe differed from plants of the cultivar Tenorio in the following characteristics:

1. Plants of the new Kalanchoe were more compact than plants of the cultivar Tenorio.
2. Plants of the new Kalanchoe were denser than and not as open in plant form as plants of the cultivar Tenorio.
3. Plants of the new Kalanchoe had darker green-colored lateral branches than plants of the cultivar Tenorio.
4. Plants of the new Kalanchoe were more freely flowering and had larger flowers than plants of the cultivar Tenorio.
5. Flower color of plants of the new Kalanchoe was brighter red than flower color of plants of the cultivar Tenorio.

6. Plants of the new Kalanchoe flowered about three to four days earlier than plants of the cultivar Tenorio.

BRIEF DESCRIPTION OF THE PHOTOGRAPH

The accompanying colored photograph illustrates the overall appearance of the new Kalanchoe, showing the colors as true as it is reasonably possible to obtain in colored reproductions of this type. Colors in the photograph may differ slightly from the color values cited in the detailed botanical description which accurately describe the colors of the new Kalanchoe. The photograph comprises a side perspective view of a typical potted plant of 'Forever Maxi Bright Red'.

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. Plants used for the aforementioned photograph and for the description were grown during the winter in Lompoc, Calif., in a fiberglass-covered greenhouse. During the production of the plants, day temperatures ranged from 20 to 22° C.; night temperatures ranged from 16 to 18° C.; and light levels ranged from 3,000 to 4,000 footcandles. Rooted cuttings were planted in 15-cm containers and received long day/short night conditions (more than 14 hours of light) for about one week; plants then received natural short day/long night conditions (minimum 14 hours darkness) until flowering. Plants were about 12 weeks from the start of the short day/long night treatment when the photograph and the description were taken.

Botanical classification: *Kalanchoe blossfeldiana* cultivar Forever Maxi Bright Red.

Parentage:

Female or seed parent.—Proprietary selection of *Kalanchoe blossfeldiana* identified as code number 96-379-1, not patented.

Male, or pollen, parent.—Proprietary selection of *Kalanchoe blossfeldiana* identified as code number 95-153-8, not patented.

Propagation:

Type cutting.—Terminal vegetative cuttings.

Time to initiate roots.—Summer: About 10 days at 21° C. Winter: About 12 days at 21° C.

Time to produce a rooted cutting.—Summer: About 21 days at 21° C. Winter: About 23 days at 21° C.

Root description.—Fine, fibrous, freely branching, and grayed white in color.

Plant description:

Form.—Upright, uniform and dense plant habit. Freely flowering with numerous compound cymes. Inverted triangle; mounded crown. Appropriate for 10 to 15-cm containers; vigorous growth habit.

Plant height at flowering.—About 18 to 20 cm.

Plant diameter at flowering.—About 20 to 22 cm.

Branching habit.—Freely branching habit; typically ten to twelve lateral branches develop per plant. Pinching (removal of terminal apex) is not required but will enhance lateral branch development.

Lateral branch description.—Length: About 10 to 16 cm. Diameter: About 3 to 4 cm. Internode length: About 1 to 1.5 cm. Aspect: About 35 to 40° from vertical. Strength: Strong. Texture: Smooth, glabrous. Color: 146A.

Foliage description.—Arrangement: Opposite, simple. Length: About 9 to 10 cm. Width: About 5 to 6 cm. Shape: Ovate to oval. Apex: Obtuse. Base: Acute to rounded. Margin: Crenate, shallow lobed. Texture, upper and lower surfaces: Coriaceous, glabrous and succulent. Venation pattern: Pinnate. Color: Developing leaves, upper surface: 146A. Developing leaves, lower surface: 146B. Fully expanded leaves, upper surface: 147A. Fully expanded leaves, lower surface: 147B. Venation, upper surface: 147A. Venation, lower surface: 147B. Petiole length: About 1 cm. Petiole diameter: About 5 mm. Petiole texture: Smooth, glabrous. Petiole color, upper surface: 147A. Petiole color, lower surface: 147B.

Flower description:

Flower type and habit.—Single flowers arranged in axillary compound dichasial cymes. Freely flowering; more than 30 flowers per lateral branch and more than 250 flowers per plant. Flowers not persistent. Flowers not fragrant. Flowers face mostly upright.

Natural flowering season.—Plants of the new Kalanchoe initiate and develop flowers under short day/long night conditions or during the late autumn/winter/early spring. Flower initiation and development can also be induced under artificial short day/long night conditions (at least 14 hours of darkness).

Time to flower.—Under short day/long night photoinductive conditions, about 9.5 to 10 weeks are required. Actual time to flower is primarily dependent upon temperature and light intensity.

Post-production longevity.—Excellent post-production longevity; plants maintain good foliage and flower substance for at least four weeks under interior environmental conditions. Individual flowers last about two weeks on the plant.

Flower diameter.—About 2 cm.

Flower height.—About 1.4 cm.

Flower buds.—Shape: Oblong. Length: About 1.5 cm. Width: About 4 mm. Color: 146C, towards apex, 41B.

Petals.—Quantity: Four fused at base. Length: About 1 cm. Width: About 9 mm. Shape: Ovate to rounded. Apex: Cuspidate. Margin: Entire. Texture, upper and lower surfaces: Glabrous, smooth, satiny. Color: When opening, upper surface: 45A. When opening, lower surface: 48C. Fully opened, upper surface: 44A; color does not fade with development. Fully opened, lower surface: 49A.

Sepals.—Quantity: Four fused at base. Length: About 6 mm. Width: About 3 mm. Shape: Lanceolate. Apex: Acuminate. Base: Rounded. Margin: Entire. Texture, upper and lower surfaces: Glabrous, smooth. Color: Immature and mature, upper surface: 146C. Immature and mature, lower surface: 146D.

Peduncles.—Length: About 1.5 cm. Diameter: About 3 mm. Angle: About 45° from vertical. Strength: Strong, flexible. Texture: Smooth, glabrous. Color: 146A.

Pedicels.—Length: About 3 mm. Diameter: About 2 mm. Angle: About 45° from vertical. Strength: Strong, flexible. Texture: Smooth, glabrous. Color: 146A.

Reproductive organs.—Stamens: Quantity per flower: Eight. Anther shape: Elliptic; flat. Anther size: Less than 1 mm. Anther color: Yellowish green. Pollen

amount: Abundant. Pollen color: Close to 12A. Pistils: Quantity per flower: Four. Style length: About 3 mm. Style color: Light yellow green. Stigma shape: Flat, rounded. Stigma color: Close to 155D. Ovary color: 146C.

Seed.—Length: Less than 1 mm. Diameter: Less than 1 mm. Color: Close to 166C.

Disease/pest resistance: Plants of the new Kalanchoe have not been observed to be resistant to pathogens and pests common to Kalanchoes.

Temperature tolerance: Plants of the new Kalanchoe have been observed to tolerate low temperatures of 10° C. and high temperatures of 35° C.

It is claimed:

1. A new and distinct cultivar of Kalanchoe plant named 'Forever Maxi Bright Red', as illustrated and described.

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