



US00PP20573P2

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

(10) **Patent No.:** **US PP20,573 P2**
(45) **Date of Patent:** **Dec. 15, 2009**

(54) **KALANCHOE PLANT NAMED ‘ABBETA’**

(50) Latin Name: *Kalanchoe blossfeldiana*
Varietal Denomination: **Abbeta**

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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.: **12/228,282**

(22) Filed: **Aug. 11, 2008**

(51) **Int. Cl.**
A01H 5/00 (2006.01)

(52) **U.S. Cl.** **Plt./336**

(58) **Field of Classification Search** **Plt./336**
See application file for complete search history.

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(57) **ABSTRACT**

A new and distinct cultivar of *Kalanchoe* plant named ‘Abbeta’, characterized by its upright, somewhat outwardly spreading and uniform plant habit; vigorous growth habit; freely branching habit; dark green-colored leaves; early, uniform and freely flowering habit; white-colored flowers; and good postproduction longevity.

1 Drawing Sheet

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Botanical designation: *Kalanchoe blossfeldiana*.
Cultivar denomination: ‘Abbeta’.

BACKGROUND OF THE INVENTION

The present invention relates to a new and distinct cultivar of *Kalanchoe*, botanically known as *Kalanchoe blossfeldiana*, and hereinafter referred to by the name ‘Abbeta’.

The new *Kalanchoe* plant is a product of a planned breeding program conducted by the Inventor in De Kwakel and Middelburg, The Netherlands. The objective of the breeding program is to create new freely branching and compact *Kalanchoe* cultivars with attractive foliage and flower coloration.

The new *Kalanchoe* plant originated from a cross-pollination made by the Inventor in De Kwakel, The Netherlands in October, 2005, of a proprietary selection of *Kalanchoe blossfeldiana* identified as code number 203186-02, not patented, as the female, or seed parent with a proprietary selection of *Kalanchoe blossfeldiana* identified as code number 204102-05, not patented, as the male, or pollen, parent. The new *Kalanchoe* was discovered and selected by the Inventor as a single flowering plant from within the progeny of the stated cross-pollination in a controlled greenhouse environment in Middelburg, The Netherlands in August, 2006.

Asexual reproduction of the new *Kalanchoe* plant by vegetative terminal cuttings in a controlled greenhouse environment in De Kwakel, The Netherlands since August, 2006, has shown that the unique features of this new *Kalanchoe* plant are stable and reproduced true to type in successive generations.

SUMMARY OF THE INVENTION

Plants of the new *Kalanchoe* have not been observed under all possible environmental conditions. The phenotype may vary somewhat with variations in environment and cultural practices 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 ‘Abbeta’. These characteristics in combination distinguish ‘Abbeta’ as a new and distinct cultivar of *Kalanchoe*:

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1. Upright, somewhat outwardly spreading and uniform plant habit.
2. Vigorous growth habit.
3. Freely branching habit.
4. Dark green-colored leaves.
5. Early, uniform and freely flowering habit.
6. White-colored flowers.
7. Good postproduction longevity.

Plants of the new *Kalanchoe* can be compared to plants of the female parent selection. Plants of the new *Kalanchoe* differ primarily from plants of the female parent selection in flower color as plants of the female parent selection have light pink-colored flowers.

Plants of the new *Kalanchoe* can also be compared to plants of the male parent selection. Plants of the new *Kalanchoe* differ from plants of the male parent selection primarily in plant size color as plants of the new *Kalanchoe* are larger than plants of the male parent selection. In addition, plants of the new *Kalanchoe* have larger leaves than plants of the male parent selection.

Plants of the new *Kalanchoe* can be compared to plants of *Kalanchoe blossfeldiana* ‘White Sands’, disclosed in U.S. Plant Pat. No. 17,074. In side-by-side comparisons conducted in De Kwakel, The Netherlands, plants of the new *Kalanchoe* differed from plants of ‘White Sands’ in the following characteristics:

1. Plants of the new *Kalanchoe* were taller and narrower than plants of ‘White Sands’.
2. Plants of the new *Kalanchoe* had smaller leaves than plants of ‘White Sands’.
3. Plants of the new *Kalanchoe* had larger flowers than ‘White Sands’.

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 *Kalan-*

choe plant. The photograph comprises a side perspective view of a typical flowering plant of 'Abbeta' grown in a container.

DETAILED BOTANICAL DESCRIPTION

The aforementioned photograph and following observations, measurements and values describe plants grown in De Kwakel, The Netherlands in a glass-covered greenhouse during the spring and under conditions which closely approximate commercial *Kalanchoe* production. During the production of the plants, day and night temperatures averaged 20° C. and light levels averaged 500 watts per square meter. Unrooted cuttings were directly stuck in containers and received long day/short night conditions (more than 14 hours of light) for about four weeks; plants then received photoinductive short day/long night conditions (minimum 14 hours darkness) until flowering. Plants were four months from planting when the photograph and the description were taken. In the detailed description, color references are made to The Royal Horticultural Society Colour Chart, 2001 Edition, except where general terms of ordinary dictionary significance are used.

Botanical classification: *Kalanchoe blossfeldiana* 'Abbeta'.

Parentage:

Female, or seed, parent.—Proprietary selection of *Kalanchoe blossfeldiana* identified as code number 203186-02, not patented.

Male or pollen parent.—Proprietary selection of *Kalanchoe blossfeldiana* identified as code number 204102-05, not patented.

Propagation:

Type.—By vegetative terminal cuttings.

Time to initiate roots, summer.—About ten days at temperatures of 20° C.

Time to initiate roots, winter.—About two weeks at temperatures of 20° C.

Time to produce a rooted young plant, summer.—About three weeks at temperatures of 20° C.

Time to produce a rooted young plant, winter.—About 25 days at temperatures of 20° C.

Root description.—Fine, fibrous; brown in color.

Rooting habit.—Freely branching; moderately dense.

Plant description:

Plant habit.—Upright, somewhat outwardly spreading and uniform plant habit; rounded crown.

Growth habit.—Vigorous; rapid growth rate.

Plant height.—About 21 cm.

Plant diameter.—About 18 cm.

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

Lateral branch description:

Length.—About 17 cm to 18 cm.

Diameter.—About 5 mm.

Internode length.—About 2 cm to 4 cm.

Aspect.—Erect.

Strength.—Strong.

Texture.—Smooth, glabrous.

Color.—Close to 137B.

Foliage description:

Arrangement.—Opposite, simple; generally symmetrical.

Length.—About 9 cm to 10 cm.

Width.—About 6 cm to 7 cm.

Shape.—Ovate.

Apex.—Obtuse.

Base.—Cuneate.

Margin.—Crenate.

Texture, upper and lower surfaces.—Smooth, glabrous.

Venation pattern.—Pinnate.

Color.—Developing leaves, upper surface: Close to 137B. Developing leaves, lower surface: Close to 146A. Fully expanded leaves, upper surface: Close to 147A; venation, close to 147A. Fully expanded leaves, lower surface: Close to 147B; venation, close to 147B.

Petiole.—Length: About 5 mm. Diameter: About 5 mm.

Texture, upper and lower surfaces: Smooth, glabrous.

Color, upper and lower surfaces: Close to 147B.

Flower description:

Flower arrangement and habit.—Single flowers arranged in compound axillary cymes. Uniform and freely flowering habit with usually about 30 to 50 flowers developing per lateral stem.

Natural flowering season.—Plants of the new *Kalanchoe* flower naturally in the fall. Flower initiation and development can also be induced under artificial short day/long conditions (at least 14 hours of darkness) year-round in a greenhouse environment.

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

Post-production longevity.—Excellent post-production longevity; plants maintain good foliage and flower substance for about five weeks under interior environmental conditions; flowers persistent.

Fragrance.—Not detected.

Flower diameter.—About 1.8 cm.

Flower length (height).—About 1.8 cm.

Flower bud.—Shape: Elliptical. Length: About 1 cm. Diameter: About 3 mm. Color: Close to 4C.

Petals.—Arrangement: About four in a single whorl fused at the base. Length: About 8 mm. Width: About 6 mm. Aspect: Upright to eventually perpendicular to the pedicel. Shape: Ovate. Apex: Acuminate to cuspidate. Margin: Entire. Texture, upper and lower surfaces: Smooth, glabrous. Color: When opening, upper and lower surfaces: Close to 4D. Fully opened, upper and lower surfaces: Close to 155D.

Sepals.—Appearance: Four fused at the base. Length: About 1 cm. Width: About 2 mm. Shape: Lanceolate. Apex: Acute. Base: Obtuse. Margin: Entire. Texture, upper and lower surfaces: Smooth; glabrous. Color, immature, upper and lower surfaces: Close to 143C. Color, mature, upper and lower surfaces: Close to 143C.

Peduncles.—Length: About 3 cm to 4 cm. Diameter: About 4 mm. Aspect: Mostly erect. Strength: Strong. Texture: Smooth, glabrous. Color: Close to 137B.

Pedicels.—Length: About 3 mm to 4 mm. Diameter: About 1 mm. Aspect: Erect to about 90° from vertical. Strength: Strong. Texture: Smooth, glabrous. Color: Close to 137B.

Reproductive organs.—Androecium: Stamen number: About eight per flower. Anther shape: Oval. Anther length: About 1 mm. Anther color: Close to 3B. Amount of pollen: Abundant. Pollen color: Close to 6C. Gynoecium: Pistil number: About four per flower.

Pistil length: About 4 mm. Style length: About 3 mm.
Style color: Close to 144D. Stigma shape: Round.
Stigma color: Close to 155C. Ovary color: Close to
144A.

Seeds.—Quantity per flower: Abundant. Length: Less
than 1 mm. Diameter: Less than 1 mm. Color: Close to
200A.

Temperature tolerance: Plants of the new *Kalanchoe* have
been observed to tolerate temperatures from about 17° C.
to about 40° C.

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

It is claimed:

1. A new and distinct *Kalanchoe* plant named 'Abbeta' as
illustrated and described.

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