

US00PP30744P2

(12) United States Plant Patent Koot et al.

(10) Patent No.: US PP30,744 P2

(45) **Date of Patent:** Jul. 23, 2019

(54) NEW GUINEA IMPATIENS PLANT NAMED 'DOIMMALAVEN'

- (50) Latin Name: *Impatiens hawkeri*Varietal Denomination: **Doimmalaven**
- (71) Applicant: **DUMMEN GROUP B.V.**, De Lier (NL)
- (72) Inventors: **Arjan Koot**, Oeffelt (NL); **Ruth Kobayashi**, Carlsbad, CA (US)
- (73) Assignee: Dümmen Group B.V., De Lier (NL)
- (*) 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.: **15/932,835**

(22) Filed: **May 1, 2018**

(51) Int. Cl. A01H 5/02 (2018.01)

(52) U.S. Cl.

Primary Examiner — Annette H Para (74) Attorney, Agent, or Firm — C. A. Whealy

(57) ABSTRACT

A new and distinct cultivar of *Impatiens* plant named 'Doimmalaven' characterized by its upright, outwardly spreading and mounding plant habit; moderately vigorous growth habit; freely branching habit; dark green-colored leaves; freely and early flowering habit; relatively large purple to red purple-colored flowers with white-colored centers; and good garden performance.

1 Drawing Sheet

1

Botanical designation: *Impatiens hawkeri*. Cultivar denomination: 'DOIMMALAVEN'.

BACKGROUND OF THE INVENTION

The present invention relates to a new and distinct cultivar of New Guinea *Impatiens* plant, botanically known as *Impatiens hawkeri* and hereinafter referred to by the name 'Doimmalaven'.

The new *Impatiens* plant is a product of a planned breeding program conducted by the Inventors in Koka, Ethiopia and Rheinberg, Germany. The objective of the breeding program is to create new early and freely flowering New Guinea *Impatiens* plants with large attractive flowers and good garden performance.

The new *Impatiens* plant originated from a cross-pollination made by the Inventors in November, 2013 in Koka, Ethiopia of a proprietary selection of *Impatiens hawkeri* identified as code number NN-0474, not patented, as the female, or seed, parent with a proprietary selection of *Impatiens hawkeri* identified as code number NN11-003606-002, not patented, as the male, or pollen, parent. The new *Impatiens* plant was discovered and selected by the Inventors as a single flowering plant from within the progeny of 25 the stated cross-pollination in a controlled greenhouse environment in Rheinberg, Germany in April, 2014.

Asexual reproduction of the new *Impatiens* plant by terminal vegetative cuttings in a controlled greenhouse environment in Rheinberg, Germany since June, 2014 has shown that the unique features of this new *Impatiens* plant are stable and reproduced true to type in successive generations.

SUMMARY OF THE INVENTION

Plants of the new *Impatiens* have not been observed under all possible combinations of environmental conditions and cultural practices. The phenotype may vary somewhat with

2

variations in environmental conditions such as temperature, daylight 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 'Doimmalaven'. These characteristics in combination distinguish 'Doimmalaven' as a new and distinct *Impatiens* plant:

- 1. Upright, outwardly spreading and mounding plant habit.
- 2. Moderately vigorous growth habit.
- 3. Freely branching habit.
- 4. Dark green-colored leaves.
- 5. Freely and early flowering habit.
- 6. Relatively large purple to red purple-colored flowers with white-colored centers.
- 7. Good garden performance.

Plants of the new *Impatiens* can be compared to plants of the female parent selection. Plants of the new *Impatiens* differ primarily from plants of the female parent selection in the following characteristics:

- 1. Plants of the new *Impatiens* are more vigorous than plants of the female parent selection.
- 2. Plants of the new *Impatiens* have larger flowers than plants of the female parent selection.

Plants of the new *Impatiens* can be compared to plants of the male parent selection. Plants of the new *Impatiens* differ primarily from plants of the male parent selection in the following characteristics:

- 1. Plants of the new *Impatiens* are more vigorous than plants of the male parent selection.
- 2. Plants of the new *Impatiens* have larger flowers than plants of the male parent selection.
- 3. Plants of the new *Impatiens* and the male parent selection differ in flower color as plants of the male parent selection have rose red and pinkish lavender bi-colored flowers.

Plants of the new *Impatiens* can be compared to plants of *Impatiens hawkeri* 'Kialdan', disclosed in U.S. Plant Pat.

20

3

No. 14,029. In side-by-side comparisons, plants of the new *Impatiens* differ primarily from plants of 'Kialdan' in the following characteristics:

- 1. Plants of the new *Impatiens* have larger flowers than plants of 'Kialdan'.
- 2. Plants of the new *Impatiens* and 'Kialdan' differ in flower color as plants of 'Kialdan' have light purple-colored flowers with white-colored centers.

Plants of the new *Impatiens* can also be compared to plants of *Impatiens hawkeri* 'Duemagwis', disclosed in U.S. 10 Plant Pat. No. 26,782. In side-by-side comparisons, plants of the new *Impatiens* differ primarily from plants of 'Duemagwis' in the following characteristics:

- 1. Plants of the new *Impatiens* have larger flowers than plants of 'Duemagwis'.
- 2. Plants of the new *Impatiens* and 'Duemagwis' differ in flower color as plants of 'Duemagwis' have light red-colored flowers.

BRIEF DESCRIPTION OF THE PHOTOGRAPHS

The accompanying colored photographs illustrate the overall appearance of the new *Impatiens* plant showing the colors as true as it is reasonably possible to obtain in colored reproductions of this type. Colors in the photographs may 25 differ slightly from the color values cited in the detailed botanical description which accurately describe the colors of the new *Impatiens* plant.

The photograph at the bottom of the sheet comprises a side perspective view of a typical flowering plant of 'Doim- 30 malaven' grown in a container.

The photograph at the top of the sheet is a close-up view of a typical flowering plant of 'Doimmalaven'.

DETAILED BOTANICAL DESCRIPTION

The aforementioned photographs and following observations, measurements and values describe plants grown during the winter in 16.5-cm containers in a polyethylene-covered greenhouse in Encinitas, Calif. and under cultural practices typical of commercial New Guinea *Impatiens* production. During the production of the plants, day temperatures averaged 26° C., night temperatures averaged 18° C. and light levels ranged from 4,500 to 5,500 lux. Plants were 25 weeks old when the photographs and description were taken. In the following description, color references are made to The Royal Horticultural Society Colour Chart, 2007 Edition, except where general terms of ordinary dictionary significance are used.

Botanical classification: *Impatiens hawkeri* 'Doimmalaven'. 50 Parentage:

Female, or seed, parent.—Proprietary selection of Impatiens hawkeri identified as code number NN-0474, not patented.

Male, or pollen, parent.—Proprietary selection of 55 Impatiens hawkeri identified as code number NN11-003606-002, not patented.

Propagation:

Type.—By terminal vegetative cuttings.

Time to initiate roots, summer and winter.—About five 60 to seven days at temperatures about 20° C.

Time to produce a rooted young plant, summer and winter.—About three to four weeks at temperatures about 20° C.

Root description.—Fine, fibrous; typically white in 65 color, actual color of the roots is dependent on

substrate composition, water quality, fertilizers, substrate temperature and age of roots.

Rooting habit.—Freely branching; dense.

Plant description:

Plant and growth habit.—Upright to outwardly spreading and mounding plant habit; freely branching habit with about eight primary lateral branches each with about four to six secondary lateral branches developing per plant; moderately vigorous growth habit and moderate to rapid growth rate.

Height, soil level to top of foliar plane.—About 24 cm. Height, soil level to top of floral plane.—About 25.5 cm.

Plant diameter or spread.—About 52 cm.

Lateral branch description:

Length.—About 24 cm.

Diameter, primary lateral branches.—About 1.2 cm. Diameter, secondary lateral branches.—About 7 mm.

Internode length.—About 6 cm.

Strength.—Strong.

Aspect.—About 25° to 45° from vertical.

Texture and luster.—Smooth, glabrous; glossy.

Color, when developing and fully developed.—Close to 146A.

Leaf description:

Arrangement.—Opposite or in whorls of four or five leaves; simple.

Length.—About 12.5 cm.

Width.—About 4.2 cm.

Shape.—Elliptical.

Apex.—Acuminate.

Base.—Attenuate.

Margin.—Entire with ciliation.

Texture and luster, upper surface.—Smooth, glabrous; slightly glossy.

Texture and luster, lower surface.—Smooth, glabrous; matte.

Venation pattern.—Pinnate; arcuate.

Color.—Developing leaves, upper surface: Close to 146A. Developing leaves, lower surface: Close to 146B. Fully expanded leaves, upper surface: Close to 139A; venation, close to 146D. Fully expanded leaves, lower surface: Close to 147B; venation, close to 147D.

Petioles.—Length: About 2.2 cm. Diameter: About 4 mm. Strength: Strong. Texture, upper and lower surfaces: Smooth, glabrous; matte. Color, upper surface: Close to 195B. Color, lower surface: Close to 147C.

Flower description:

Flower type and flowering habit.—Relatively large single rounded axillary flowers; freely flowering habit, typically about 120 flowers developing per plant; flowers positioned above and beyond the foliar plane; flowers typically face mostly upright to outwardly.

Flower longevity.—Flowers typically last about two to three days on the plant under greenhouse conditions; petals self-cleaning, gynoecium persistent.

Fragrance.—None detected.

Natural flowering season.—Year-round under greenhouse conditions; in the garden, flowering continuous from spring until fall in California; early flowering habit, plants typically begin flowering about twelve weeks after planting. 5

Flower buds.—Length: About 3 cm. Diameter: About 2.2 cm. Shape: Ovate. Texture and luster: Smooth, glabrous; slightly glossy. Color: Close to 77C to 77D.

Flower diameter.—About 8 cm by 8.2 cm. Flower depth.—About 2 cm; with spur, about 4.8 cm. *Petals.*—Quantity and arrangement: Five per flower in a single whorl. Banner petals, length: About 3.2 cm. Banner petals, width: About 5.6 cm. Lateral petals, length: About 3.5 cm. Lateral petals, width: About 4 10 cm. Lower petals, length: About 4.5 cm. Lower petals, width: About 5.1 cm. Shape: Cordate. Apex: Emarginate. Base: Attenuate. Margin: Entire. Texture and luster, upper and lower surfaces: Smooth, glabrous; velvety; matte. Color: When opening, 15 upper surface: Close to N78B to N78C. When opening, lower surface: Close to 77C. Fully opened, upper surface: More intense and more rosy than N74C; towards the base, close to NN155D; venation, close to N74C; color becomes closer to 77C with ²⁰ development. Fully opened, lower surface: Close to 75B; venation, close to 75B; color becomes closer to 77D with development.

Sepals.—Quantity and arrangement: Three in a single whorl; two lateral sepals and one center sepal modified into an elongated spur. Lateral sepals, length: About 1.6 cm. Lateral sepals, width: About 8 mm. Center sepals, length: About 2.2 cm. Center sepals, width: About 1.4 cm. Shape: Elliptical. Apex: Acuminate. Base, lateral sepals: Truncate. Base, center sepal: Modified into a curved spur, fused into a slender tube. Margin: Entire. Texture and luster, upper and lower surfaces: Smooth, glabrous; slightly glossy. Color: When opening, upper surface: Close to 145A. When opening, lower surface: Close to

6

146D. Fully opened, upper surface: Close to 157B; towards the apex, tinted with close to 75B. Fully opened, lower surface: Close to 157B; towards the apex, blushed with close to 75C. Spur length: About 6.5 cm. Spur diameter: At the flower, about 3 mm. Spur texture and luster: Smooth, glabrous; slightly glossy. Spur color: Close to 145A.

Peduncles.—Length: About 4.7 cm to 5.5 cm. Diameter: About 2 mm. Angle: About 45° from branch axis. Strength: Strong. Texture and luster: Smooth, glabrous; matte. Color: Close to 146B.

Reproductive organs.—Stamens: Quantity: Five fused at anthers; filaments free. Filament length: About 2 mm. Filament color: Close to N155B. Anther size: About 4 mm by 5 mm. Anther shape: Oblong. Anther color: Close to 158A. Pollen amount: Moderate. Pollen color: Close to 158B. Pistils: Quantity per flower: One. Pistil length: About 8 mm. Stigma diameter: About 1.5 mm. Stigma shape: Rounded. Stigma color: Close to 145B. Style length: About 1 mm. Style color: Close to 145B. Ovary color: Close to 146A.

Seeds and fruits.—To date, seed and fruit production has not been observed on plants of the new *Impatiens* to date.

Pathogen & pest resistance: To date, plants of the new *Impatiens* have not been observed to be resistant to pathogens and pests common to *Impatiens* plants to date. Garden performance: Plants of the new *Impatiens* have been observed to have good garden performance and tolerate temperatures ranging from about 5° C. to about 40° C. It is claimed:

1. A new and distinct *Impatiens* plant named 'Doimma-laven' as illustrated and described.

* * * *



