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NEW GUINEA IMPATIENS PLANT NAMED 'DONGITARESTAR'

Latin Name: *Impatiens hawkeri* (50)Varietal Denomination: **DONGITARESTAR**

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ABSTRACT (57)

A new and distinct cultivar of Impatiens plant named 'Dongitarestar' characterized by its upright to somewhat outwardly spreading and uniformly mounding plant habit; moderately vigorous to vigorous growth habit; freely branching habit; large, glossy and very dark green-colored leaves with dark red-colored lower surfaces; freely and early flowering habit; large red and light red bi-colored flowers; and good garden performance.

2 Drawing Sheets

Botanical designation: Impatiens hawkeri. Cultivar denomination: 'DONGITARESTAR'.

BACKGROUND OF THE INVENTION

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

The new *Impatiens* plant is a product of a planned $_{10}$ breeding program conducted by the Inventor in Koka, Ethiopia and Encinitas, Calif. The objective of the breeding program is to create new early and freely flowering New Guinea *Impatiens* plants with attractive flowers and good garden performance.

The new *Impatiens* plant originated from a cross-pollination made by the Inventor in November, 2015 in Koka, Ethiopia of a proprietary selection of *Impatiens hawkeri* identified as code number NN13-002477-003, not patented, as the female, or seed, parent with a proprietary selection of 20 Impatiens hawkeri identified as code number NN13-000084-001, not patented, as the male, or pollen, parent. The new Impatiens plant 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 25 environment in Encinitas, Calif. in April, 2016.

Asexual reproduction of the new *Impatiens* plant by terminal vegetative cuttings in a controlled greenhouse environment in Encinitas, Calif. since June, 2016 has shown that the unique features of this new *Impatiens* plant are 30 stable and reproduced true to type in successive generations.

SUMMARY OF THE INVENTION

Plants of the new *Impatiens* have not been observed under 35 all possible combinations of environmental conditions and cultural practices. The phenotype may vary somewhat with

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 'Dongitarestar'. These characteristics in combination distinguish 'Dongitarestar' as a new and distinct *Impatiens* plant:

- 1. Upright to somewhat outwardly spreading and uniformly mounding plant habit.
- 2. Moderately vigorous to vigorous growth habit.
- 3. Freely branching habit.
- 4. Large, glossy and very dark green-colored leaves with dark red-colored lower surfaces.
- 5. Freely and early flowering habit.
 - 6. Large red and light red bi-colored flowers.
 - 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 not as vigorous as plants of the female parent selection.
- 2. Flower petals of plants of the new *Impatiens* are flat whereas flower petals of plants of the female parent selection are undulating and ruffled in appearance.
- 3. Flowers of plants of the new *Impatiens* are red and light red bi-colored whereas flowers of plants of the female parent selection are dark violet pink and pink bicolored.

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* have larger flowers than plants of the male parent selection.

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2. Flowers of plants of the new *Impatiens* are red and light red bi-colored whereas flowers of plants of the male parent selection are dark red and light pink bi-colored.

Plants of the new *Impatiens* can be compared to plants of *Impatiens hawkeri* 'Duepetrest', disclosed in U.S. Plant Pat. 5 No. 11,375. In side-by-side comparisons, plants of the new *Impatiens* differ primarily from plants of 'Duepetrest' in the following characteristics:

- 1. Plants of the new *Impatiens* are more vigorous than and not as compact as plants of 'Duepetrest'.
- 2. Plants of the new *Impatiens* have larger flowers than plants of 'Duepetrest'.
- 3. Flowers of plants of the new *Impatiens* are red and light red bi-colored whereas flowers of plants of 'Duepe-trest' are soft red and light lavender bi-colored.

Plants of the new *Impatiens* can also be compared to plants of *Impatiens hawkeri* 'Tamar Purple Bicolor', disclosed in U.S. Plant Pat. No. 15,462. In side-by-side comparisons, plants of the new *Impatiens* differ primarily from 20 plants of 'Tamar Purple Bicolor' in the following characteristics:

- 1. Plants of the new *Impatiens* have larger flowers than plants of 'Tamar Purple Bicolor'.
- 2. Plants of the new *Impatiens* flowers about one week 25 earlier than plants of 'Tamar Purple Bicolor'.
- 3. Flowers of plants of the new *Impatiens* are red and light red bi-colored whereas flowers of plants of 'Tamar Purple Bicolor' are red purple and light red purple bi-colored.

BRIEF DESCRIPTION OF THE PHOTOGRAPHS

The accompanying colored photographs illustrate the overall appearance of the new *Impatiens* plant showing the 35 colors as true as it is reasonably possible to obtain in colored reproductions of this type. Colors in the photographs may differ slightly from the color values cited in the detailed botanical description which accurately describe the colors of the new *Impatiens* plant.

The photograph on the first sheet (sheet 1 of 2) is a side perspective view of a typical flowering plant of 'Dongitar-estar' grown in a container.

The photograph on the second sheet (sheet 2 of 2) is a close-up view of a typical flowering plant of 'Dongitarestar'. 45

DETAILED BOTANICAL DESCRIPTION

The aforementioned photographs and following observations, measurements and values describe plants grown during the winter and spring in 20-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 18 weeks old when the photographs and description were taken. In the following description, color references are made to The Royal Horticultural Society Colour Chart, 2017 Edition, except where general terms of ordinary dictionary significance are used.

Botanical classification: *Impatiens hawkeri* 'Dongitarestar'. Parentage:

Female, or seed, parent.—Proprietary selection of Impatiens hawkeri identified as code number NN13- 65 002477-003, not patented.

Male, or pollen, parent.—Proprietary selection of Impatiens hawkeri identified as code number NN13-000084-001, not patented.

Propagation:

Type.—By terminal vegetative cuttings.

Time to initiate roots, summer and winter.—About five to seven days at day temperatures about 27° C. and night temperatures about 20° C.

Time to produce a rooted young plant, summer and winter.—About three weeks at day temperatures about 27° C. and night temperatures about 20° C.

Root description.—Fine, fibrous; typically white in 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 somewhat outwardly spreading and uniformly mounding plant habit; broad inverted triangle in overall shape; freely branching habit; bushy and dense appearance; moderately vigorous to vigorous growth habit and moderate to rapid growth rate.

Plant height.—About 36 cm.

Plant diameter.—About 57 cm.

Lateral branch description:

Branching habit.—Freely branching with about 14 to 16 primary lateral branches each with multiple secondary branches.

Length.—About 29 cm.

Diameter.—About 1.5 cm.

Internode length.—About 8.5 cm.

Strength.—Strong, flexible.

Aspect.—Initially upright to outwardly spreading, about 45° from vertical.

Texture and luster.—Smooth, glabrous; glossy.

Color, developing.—Close to 146A tinged with close to 187A.

Color, developed.—Close to 146A slightly tinged with close to 187A; at the internodes, close to 187A.

Leaf description:

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Arrangement.—Typically in whorls or opposite; simple.

Length.—About 12 cm.

Width.—About 4.25 cm.

Shape.—Elliptic.

Apex.—Long acuminate.

Base.—Attenuate.

Margin.—Serrate with ciliation.

Texture and luster, upper and lower surfaces.—Smooth to slightly rugose, glabrous; glossy.

Venation pattern.—Pinnate; arcuate.

Color.—Developing leaves, upper surface: Close to 147A to darker green than 147A. Developing leaves, lower surface: Close to 187A. Fully expanded leaves, upper surface: Darker green than N189A; venation, close to 187A. Fully expanded leaves, lower surface: Close to 187A; venation, close to 187A.

Petiole length.—About 6.1 cm.

Petiole diameter.—About 4 mm.

Petiole texture and luster, upper and lower surfaces.— Smooth, glabrous; glossy.

Petiole color, upper and lower surfaces.—Close to 187A.

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Flower description:

Flower type and flowering habit.—Single axillary flowers that are roughly rectangular in shape; freely flowering habit, typically about four to five opening and fully opened flowers per lateral branch; flowers 5 are mostly flat and positioned above and beyond the foliar plane, flowers typically face mostly upright to outwardly.

Flower longevity.—Flowers typically last about four to seven days on the plant under greenhouse conditions; 10 petals self-cleaning, gynoecium persistent.

Fragrance.—None detected.

Natural flowering season.—Year-round under greenhouse conditions; in the garden, flowering from spring until fall in California; early flowering habit, 15 plants typically begin flowering about twelve weeks from unrooted cuttings.

Flower buds.—Length: About 1.75 cm. Diameter: About 7 mm. Shape: Ovoid. Texture and luster: Smooth, glabrous; somewhat glossy Color: Close to 20 53A.

Flower diameter.—Large, about 7 cm by 6.5 cm. Flower depth.—About 1 cm.

Petals.—Quantity and arrangement: Five per flower in a single whorl with one banner petal, two lateral 25 petals and two lower petals. Length, banner petal: About 3.1 cm. Length, lateral petals: About 4.5 cm. Length, lower petals: About 3.2 cm. Width, banner petal: About 3.5 cm. Width, lateral petals: About 3.5 cm. Width, lower petals: About 3.2 cm. Shape, 30 banner petals: Broadly cordate. Shape, lateral and lower petals: Cordate. Apex, all petals: Cordate. Base, all petals: Attenuate. Margin, all petals: Entire, not undulate. Texture and luster, all petals, upper and lower surfaces: Smooth, glabrous; somewhat glossy; 35 iridescent. Color, all petals: When opening, upper surface: Center, close to 45A; towards the margins, close to 55B. When opening, lower surface: Close to between 42A and 43A. Fully opened, upper surface: Center, close to between 42A and 45A; towards the 40 margins, close to 55A to 55B; venation, similar to lamina; light red coloration becomes more dominant with development. Fully opened, lower surface: Close to between 42A and 43A; venation, similar to lamina; colors do not change with development.

Sepals.—Quantity and arrangement: Three in a single whorl; two laterals are opposite and the third modified into an elongated spur. Lateral sepal length: About 1.1 cm. Lateral sepal width: About 5 mm. Lateral sepal shape: Narrowly deltoid. Lateral sepal apex: Long acuminate. Lateral sepal base: Truncate, fused. Lateral sepal margin: Entire. Lateral sepal texture and luster, upper and lower surfaces: Smooth, glabrous; somewhat glossy. Lateral sepal color, upper surface: Close to 55B to 55C. Lateral sepal color, lower surface: Close to 53A. Spur length: About 3.7 cm. Spur diameter: At flower, about 3 mm; at apex, less than 1 mm. Spur shape: Acicular, curved. Spur texture and luster: Smooth, glabrous; somewhat glossy. Spur color: Close to 145A, proximally tinged with close to 53A.

Peduncles.—Length: About 5.5 cm. Diameter: About 2 mm. Angle: About 30° to 45° from vertical. Strength: Strong; flexible. Texture and luster: Smooth, glabrous; moderately glossy. Color: Close to 144A to 144B.

Reproductive organs.—Stamens: Quantity: Five fused at anthers; filaments free. Filament length: About 4 mm. Filament color: Close to 158A. Anther length: About 4 mm. Anther shape: Oblong. Anther color: Close to N155B. Pollen amount: Moderate. Pollen color: Close to 158A. Pistils: Quantity per flower: One. Pistil length: About 5 mm. Stigma shape: Crested. Stigma color: Close to 144A. Style length: About 4 mm. Style color: Close to 144A. Ovary color: Close to 144A and 187A.

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

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.

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 'Dongitar-estar' as illustrated and described.

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