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## Kawashima et al.

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(54) NEW GUINEA IMPATIENS PLANT NAMED 'SAKIMP011'

(50) Latin Name: *Impatiens*×*hybrida*Varietal Denomination: **SAKIMP011** 

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(57) ABSTRACT

A New Guinea *Impatiens* cultivar particularly distinguished by having red flowers, a strong root system, and a compact growth habit, is disclosed.

1 Drawing Sheet

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Genus and species: *Impatiens*×*hybrida* (hort). Variety denomination: 'SAKIMP011'.

#### BACKGROUND OF THE NEW PLANT

The present invention comprises a new and distinct cultivar of New Guinea *Impatiens*, botanically known as *Impatiens*×*hybrida* (hort), and hereinafter referred to by the cultivar name 'SAKIMP011'. 'SAKIMP011' originated from an interspecific hybridization between the female parent, 'NG-02SM-13', an unpatented proprietary orange-flowered *Impatiens* breeding line and the male parent, 'NB-42ZA', an unpatented proprietary lilac-flowered *Impatiens* breeding line in Misato, Japan.

In April 2002, the female parent line, 'NG-02SM-13' and the male parent line, 'NB-42ZA' were crossed and a population of F<sub>1</sub> plants was created. The F<sub>1</sub> plants were evaluated in Misato, Japan in an open field trial. The criteria for plant selection included bright red flower color, strong root system and a compact growth habit. At the completion of the trial, one single-plant selection was made based on the above criteria and vegetatively propagated. From May to August 2005, the selection was evaluated in an open field in Masato, Japan. Shoot-tip cuttings of the variety were then shipped to Salinas, Calif., where the plants were regenerated and reevaluated for stability of traits. The selection subsequently was named 'SAKIMP011' and found to have its unique characteristics reproduce true to type in successive generations of asexual propagation.

## SUMMARY OF THE INVENTION

The following are the most outstanding and distinguishing characteristics of this new cultivar when grown under normal horticultural practices in Salinas, Calif.

- 1. Red flowers;
- 2. A compact growth habit; and
- 3. A strong root system.

## DESCRIPTION OF THE PHOTOGRAPHS

This new *impatiens* plant is illustrated by the accompanying photographs which show overall plant habit including

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blooms, buds, and foliage of the plant; the colors shown are as true as can be reasonably obtained by conventional photographic procedures. The photographs are of plants that are 5 months from their transplanting date and 6 months from the stick date.

FIG. 1 shows overall plant habit including blooms, buds, and foliage.

FIG. 2 shows a close-up of the mature inflorescence.

# DETAILED DESCRIPTION OF THE NEW CULTIVAR

The following detailed descriptions set forth the distinctive characteristics of 'SAKIMP011'. The data which define these characteristics were collected from asexual reproductions carried out under greenhouse conditions in Salinas, Calif. The plant history was taken on plants grown for about five months from propagation by terminal cuttings under greenhouse conditions. Color references are primarily to the R.H.S. Colour Chart of The Royal Horticultural Society of London (R.H.S.) 4<sup>th</sup> edition (2001). Anatomic labels are from *The Cambridge Illustrated Glossary of Botanical Terms*, by M. Hickey and C. King, Cambridge University Press.

## DETAILED BOTANICAL DESCRIPTION

## Classification:

Family.—Balsaminaceae.

Botanical.—Impatiens interspecific cross Impatiens× hybrida (hort).

Common name.—Impatiens.

#### Parentage:

Female parent.—'NG-02SM-13', an unpatented proprietary orange flowered *Impatiens* breeding line.

Male parent.—'NB-42ZA', an unpatented proprietary lilac flowered *Impatiens* breeding line.

#### Growth:

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Time to produce a rooted cutting.—The terminal 1.0 to 1.5 inches of an actively growing stem was excised. The vegetative cuttings were propagated in five to six weeks. The base of the cuttings were dipped for 1 to

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2 seconds in a 1:9 solution of Dip 'N Grow (1 solution:9 water) root inducing solution immediately prior to sticking into the cell trays. Cuttings were stuck into plastic cell trays having 98 cells, and containing a moistened peat moss-based growing medium. The cuttings were misted with water from overhead for 10 seconds every 30 minutes until sufficient roots were formed.

Environmental conditions for plant growth.—Rooted cuttings were transplanted and grown in 6-inch plastic pots in a glass greenhouse located in Salinas, Calif. Pots contained a peat moss-based growing medium. Soluble fertilizer containing 20% nitrogen, 10% phosphorus and 20% potassium was applied once a day or every other day by overhead irrigation. Plants were fertilized every 2–3 days, 2 times in consecutive applications and then given one clear water application. Pots were top-dressed with a dry, slow release fertilizer containing 14% nitrogen, 14% phosphorus and 14% potassium. The typical average air temperature was 24° C.

Time to bloom from propagation.—6 to 8 weeks.

#### Plant description:

Habit.—Compact, branching, dense foliage.

Life cycle.—Tender perennial.

Height.—20.0 cm to 22.0 cm from soil line to top of foliage.

Spread.—45.0 cm to 47.0 cm.

Time to produce a rooted cutting.—4 weeks.

Flowering requirements.—Will flower so long as temperature is above 5° C.

Temperature tolerance.—Plants have been observed to continuously flower at a temperature range of 5° C.–36° C., with ability to withstand high heat and humidity.

#### Branches:

Number.—12 total with 4 main branches.

Length.—2.0 cm from soil line to first node; 16.0 cm to 18.0 cm total.

Diameter (main branch).—1.0 cm.

Color.—RHS 187B (Greyed-Purple).

## Stems:

Length.—4.0 cm from first to second node; 11.0 cm to 12.0 cm total.

Diameter.—0.5 cm to 0.6 cm.

Internode length.—2.0 cm to 2.5 cm.

Color.—RHS 187C (Greyed-Purple).

Stem description.—Strong; circular cross-section, smooth and shiny.

Pubescence.—Absent.

Anthocyanin color.—RHS 187C (Greyed-Purple).

## Leaves:

Arrangement.—Whorled with up to 5 leaves per node, opposite if only two leaves at one node.

Length.—10.0 cm to 11.0 cm.

Width.—4.5 cm.

Shape.—Lanceolate, curled.

Apex.—Acuminate.

Base.—Attenuate.

*Margin.*—Ciliate.

*Texture*.—Dull; waxy.

Color.—Upper surface: RHS 139A (Green). Lower surface: RHS 147B (Yellow-Green) with blotches of RHS 187C (Greyed-Purple).

Variegation.—Absent.

Fragrance.—Absent.

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Pubescence.—Absent.

Venation.—Pinnate.

Venation color.—Upper surface: RHS 139D (Green). Lower surface: RHS 185B (Greyed-Purple).

Petioles.—Length: 1.5 cm to 2.0 cm. Diameter: 0.2 cm to 0.3 cm. Color: RHS 185C (Greyed-Purple). Texture: Smooth, glabrous.

#### Flower buds:

Shape.—Deltoid, longitudinal cross-section.

Length.—1.5 cm.

Diameter.—1.5 cm.

Color.—RHS 44A (Red) with RHS 187A (Greyed-Purple).

Texture.—Glabrous.

#### Inflorescence:

Inflorescence type.—Single flower with spur.

Number of flowers per node.—1 to 2 in bloom at one time; about 4 to 6 flower buds per node.

Number of flowers per plant.—24 in bloom at one time. Lastingness of individual blooms on the plant.—14 days.

Fragrance.—Absent.

#### Peduncles:

*Length.*—4.0 cm to 4.2 cm.

Diameter.—0.2 cm.

Color.—RHS 146D (Yellow-Green).

Texture.—Smooth, glabrous.

#### Corolla:

Shape.—Roughly circular with 5 radial petals.

Diameter.—6.0 cm.

*Depth.*—0.2 cm to 0.3 cm.

## Petals:

Shape.—Obcordate.

*Length.*—3.0 cm to 3.3 cm.

*Width.*—3.0 cm to 3.1 cm.

Apex.—Emarginate (cleaved).

Base.—Attenuate.

*Margin.*—Entire.

*Pubescence*.—Glabrous.

Color.—Upper surface: RHS 44B (Red). Lower surface: RHS 44C (Red). Eye zone: RHS 46A (Red).

## Spur:

Shape.—Tubular and curved downward.

Color.—RHS 44D (Red).

Length.—4.5 cm.

Diameter.—0.2 cm.

## Sepals:

Shape.—Lanceolate.

*Number.*—Two.

Color.—RHS N144D (Yellow-Green).

Length.—1.3 cm.

Diameter.—0.6 cm.

*Apex.*—Caudate.

Base.—Subcordate.

*Margin.*—Entire.

*Texture*.—Glabrous.

#### Reproductive organs:

Stamens.—Form: Fused; split into 4 lobes. Number: Many. Filament length: 0.4 cm. Filament color: RHS 44D (Red). Anther length: 0.4 cm. Anther color: RHS N155A (White). Pollen amount: Abundant. Pollen color: RHS N155A (White). Pollen description: Powdery.

Pistil.—Number: 5. Stigma color: RHS 143A (Green). Style color: RHS 143A (Green).

Ovary arrangement.—Parietal.

Ovary surface color.—RHS 144B (Yellow-Green).

Fruit and seed set: No seed set observed.

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Disease and insect resistance: No particular resistance or susceptibility has been observed.

# COMPARISON WITH PARENTAL AND KNOWN CULTIVARS

'SAKIMP011' differs from the female parent, 'NG-02SM-13', an unpatented proprietary *Impatiens* plant, in that 'SAKIMP011' has a compact growth habit, while 'NG-02SM-13' has a branching growth habit.

'SAKIMP011' differs from the male parent, 'NB-42ZA', an unpatented proprietary *Impatiens* plant in that 'SAKIMP011' has orange flowers, while 'NB-42ZA' has lilac flowers. Additionally, 'SAKIMP011' has a compact growth habit, while 'NB-42ZA' has a branching growth habit.

'SAKIMP011' is similar to the commercial *Impatiens* variety 'Misato FG2' (U.S. Plant Pat. No. 17,663) however, there are differences, as listed in the table below:

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## TABLE 1

Comparison of Characteristics between 'SAKIMP011' and 'Misato FG2'		
Characteristic	'SAKIMP011'	'Misato FG2'
Growth habit Petal color, Upper surface	Compact RHS 44B (Red)	Upright RHS N30C (Orange-red)
Spur color	RHS 44D (Red)	RHS 63A (Red-purple) at base fading to RHS 62D (Red-purple) at tip

I claim:

1. A new and distinct cultivar of new Guinea *Impatiens* plant as shown and described herein.

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Fig. 1



Fig. 2