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Sato et al.

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(54) **NEW GUINEA *IMPATIENS* PLANT NAMED
'SAKIMP025'**

(50) Latin Name: *Impatiens hybrida* hort
Varietal Denomination: **SAKIMP025**

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(57) **ABSTRACT**

A New Guinea *Impatiens* plant particularly distinguished by
having an orange flower color, strong root system and a com-
pact plant growth habit, is disclosed.

1 Drawing Sheet

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Genus and species: *Impatiens hybrida* hort.
Variety denomination: 'SAKIMP025'.

BACKGROUND OF THE NEW PLANT

The present invention comprises of a new and distinct
cultivar of New Guinea *Impatiens*, botanically known as
Impatiens hybrida hort, and referred to by the variety name
'SAKIMP025'. *Impatiens* variety 'SAKIMP025' originated
from a hybridization in Misato, Japan between the female
Impatiens line 'NF-572A2', an unpatented proprietary *Impa-*
tiens breeding line with an orange flower color and the male
Impatiens line 'NG-422', an unpatented proprietary *Impa-*
tiens breeding line with a red flower color.

In October 2008, the female parent line 'NF-572A2' and
the male parent line 'NG-422' were crossed and a population
of F₁ plants was created. The F₁ plants were evaluated in
Misato, Japan in an open field trial. The criteria for plant
selection included a beautiful orange flower color, strong root
system and a compact plant growth habit. At the completion
of the trial, one single-plant selection was made based on the
aforementioned criteria and vegetatively propagated. From
May to August 2009, the selection was evaluated in an open
field in Misato, Japan. The selection subsequently was named
'SAKIMP025' and found to have its unique characteristics
reproduce true to type in successive generations of asexual
vegetative propagation.

SUMMARY

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

1. Orange flower color;
2. Strong root system; and
3. A compact plant growth habit.

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DESCRIPTION OF THE PHOTOGRAPHS

This *Impatiens* plant is illustrated by the accompanying
photographs which show the plant's overall plant habit
including form, foliage, and flowers. The photographs are of
a four-month-old plant grown in Salinas, Calif. under green-
house conditions in the spring of 2012. The colors shown are
as true as can be reasonably obtained by conventional photo-
graphic procedures.

FIG. 1 shows the overall plant habit of the plant grown in a
pot.

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

DESCRIPTION OF THE NEW VARIETY

The following detailed descriptions set forth the distinctive
characteristics of 'SAKIMP025'. The data which define these
characteristics were collected from asexual reproductions
carried out in Salinas, Calif. Data was collected on four-
month-old plants grown under greenhouse conditions in Sali-
nas, Calif. in the summer of 2012. Color references are to The
R.H.S. Colour Chart of The Royal Horticultural Society of
London (R.H.S.), 4th edition (2001).

Classification:

Family.—Balsaminaceae.

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

Common.—*Impatiens*.

Designation.—'SAKIMP025'.

Parentage:

Female parent.—Proprietary *Impatiens* line 'NF-
572A2' (unpatented).

Male parent.—Proprietary *Impatiens* line 'NG-422' (un-
patented).

Growth:

Time to produce a rooted cutting.—About 4 weeks.

Environmental conditions for plant growth.—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 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. 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 to 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.

Life cycle.—Tender perennial.

Height (from soil line to top of foliage).—15.0 cm.

Spread.—30.0 cm.

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

Temperature tolerances.—Plants observed to continue flowering in a temperature range of 5° C. to 36° C. Plants can withstand high heat and humidity.

Branches:

Number of branches.—3 main branches, 11 branches total.

Length of branches.—Approximately 2.0 cm from soil line to first node, approximately 9.0 cm total.

Diameter of branches.—1.0 cm for the main branch.

Color of branches.—Closest to but lighter than RHS N186C (Greyed-Purple) and RHS 143C (Green).

Stems:

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

Stem length.—5.0 cm.

Diameter.—0.5 cm.

Internode length.—2.0 cm.

Color.—Closest to but lighter than RHS N186C (Greyed-Purple).

Pubescence.—Slight, fine.

Pubescence color.—RHS N155A (White).

Anthocyanin color.—RHS N186D (Greyed-Purple).

Leaves:

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

Shape.—Lanceolate, curled.

Apex.—Acuminate.

Base.—Attenuate.

Margin.—Ciliate.

Surface appearance (both surfaces).—Dull, waxy.

Surface pubescence (both surfaces).—Very slight.

Surface pubescence color (both surfaces).—RHS N155A (White).

Length.—6.0 cm.

Width.—3.0 cm.

Color.—Upper surface: Darker than RHS 137A (Green). Lower surface: RHS 138B (Yellow-Green).

Venation.—Pinnate.

Venation color (upper and lower surfaces).—RHS 145C (Yellow-Green).

Variegation.—Absent.

Fragrance.—Absent.

Petiole.—Length: 1.0 cm. Diameter: 0.2 cm. Color: RHS 145C (Yellow-Green). Texture: Smooth, glabrous.

Flowers:

Total number of flowers per node.—1 to 3 in bloom, about 4 to 6 flower buds per node.

Total number of flower per plant.—Approximately 70 in bloom.

Inflorescence type.—Single flower with spur.

Lastingness of individual blooms on the plant.—14 days.

Fragrance.—Absent.

Flower bud:

Surface texture.—Glabrous.

Length.—1.5 cm.

Diameter.—1.0 cm.

Shape.—Deltoid, longitudinal cross-section.

Color.—RHS 41A (Red) with RHS 143C (Green).

Peduncle:

Length.—5.0 cm.

Diameter.—0.2 cm.

Color.—RHS 51B (Red).

Surface texture.—Smooth, glabrous.

Corolla:

Shape.—Roughly circular with 5 radial petals.

Diameter.—Approximately 4.0 cm.

Depth.—0.5 cm to 1.0 cm.

Petals.—Shape: Obcordate. Apex: Emarginate (cleaved). Base: Attenuate. Margin: Entire. Pubescence (both surfaces): Glabrous. Length: 5.0 cm. Width: 1.5 cm. Color: Upper: Closest to but darker than RHS 45A (Red). Lower: Closest to but darker than RHS 58B (Red-Purple). Eye zone: RHS 187B (Greyed-Purple) and RHS 187D (Greyed-Purple).

Spur:

Shape.—Tubular; curved downward.

Length.—4.5 cm.

Diameter.—0.1 cm.

Color.—RHS N30B (Orange-Red).

Calyx:

Arrangement.—Composed of 2 sepals.

Sepals.—Shape: Lanceolate. Apex: Caudate. Base: Subcordate. Margin: Entire. Surface texture: Glabrous. Color: RHS 145C (Yellow-Green). Length: 0.8 cm. Diameter: 0.3 cm.

Reproductive organs:

Stamen number.—Many.

Stamen form.—Fused; split into 4 lobes.

Filament length.—0.5 cm.

Filament color.—RHS 50C (Red).

Anther length.—0.3 cm.

Anther color.—RHS 155A (White).

Pollen color.—RHS 155D (White).

Pollen amount.—Abundant.

Pollen description.—Powdery.

Ovary.—Parietal.

Ovary surface color.—RHS 145A (Yellow-Green).

Pistil number.—5.

Stigma color.—RHS 143A (Green).

Style length.—0.4 cm.
Style color.—RHS 143A (Green).
Seed production.—Absent.
Disease and insect resistance: No particular resistance or susceptibility observed.

COMPARISON WITH PARENTAL LINES AND
KNOWN VARIETY

‘SAKIMP025’ is a new and unique variety of *Impatiens* owing to its orange flower color, strong root system and a compact plant growth habit. ‘SAKIMP025’ is distinguished from its parents mainly by flower color as shown in Table 1 below:

TABLE 1

Comparison with Parental Lines			
Characteristic	‘SAKIMP025’	Female Parent ‘NF-572A2’	Male Parent ‘NG-422’
Flower color	Bright Orange	Orange	Red
Flower size	Flower size is smaller than ‘NF-572A2’	Flower size is larger than ‘SAKIMP025’	Information not available
Flowering time	Earlier flowering than ‘NF-572A2’	Later flowering than ‘SAKIMP025’	Information not available
Branches	3 main branches, 11 branches total	Has less branches than ‘SAKIMP025’	Information not available

‘SAKIMP025’ is a new and unique variety of *Impatiens* owing to its orange flower color, strong root system and a compact plant growth habit. ‘SAKIMP025’ is most similar to the commercial *Impatiens* variety ‘Misato FG2’ (U.S. Plant Pat. No. 17,663), commercially known as SunPatiens® ‘Vigorous Orange’; however there are differences as described in the table below.

TABLE 2

Comparison with Similar Variety		
Characteristic	‘SAKIMP025’	‘Misato FG2’
Petal color, upper surface	RHS N30B (Orange-Red)	RHS N30C (Orange-Red)
Petal color, lower surface	RHS 40C (Red)	RHS 41D (Red)
Spur color	Closest to RHS 51A (Red)	RHS 63A (Red-Purple)
Plant growth habit	Compact	Vigorous

We claim:

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

* * * * *



FIG. 1

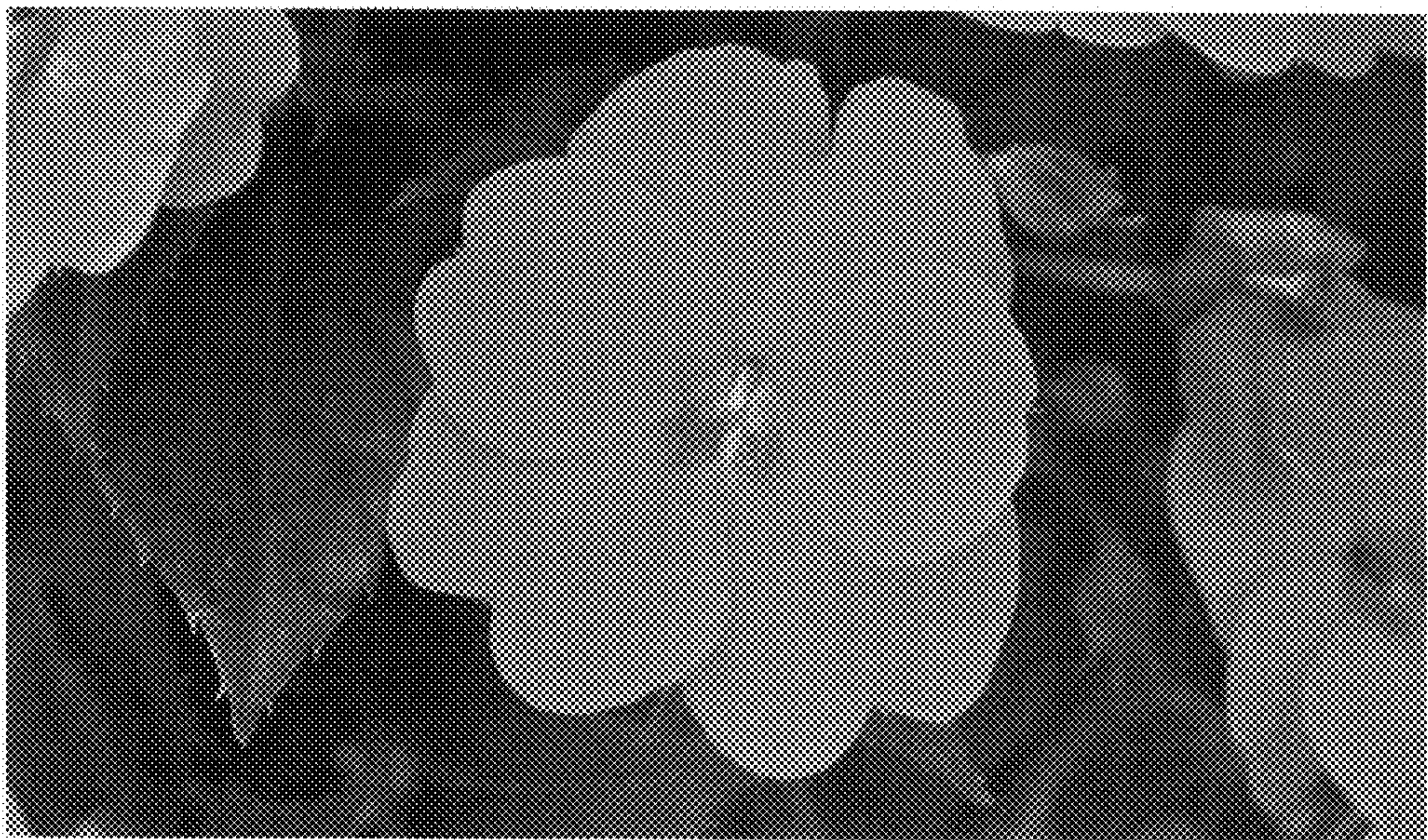


FIG. 2