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Kobayashi

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

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

(71) Applicant: **DUMMEN GROUP B.V.**, De Lier
(NL)

(72) Inventor: **Ruth Kobayashi**, Carlsbad, CA (US)

(73) Assignee: **Dümmen Group B.V.**, De Lier (NL)

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patent is extended or adjusted under 35
U.S.C. 154(b) by 0 days.

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CPC **A01H 6/165** (2018.05)

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

Primary Examiner — Keith O. Robinson

(74) *Attorney, Agent, or Firm* — C. Anne Whealy

(57) **ABSTRACT**

A new and distinct cultivar of *Impatiens* plant named
'Dongirolwhi' characterized by its relatively compact,
upright to outwardly spreading and uniformly mounding
plant habit; moderately vigorous growth habit; freely
branching habit; glossy and dark green-colored leaves;
freely flowering habit; medium to large ruffled flowers that
are bright white in color; and good garden performance.

2 Drawing Sheets

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

**STATEMENT REGARDING PRIOR
DISCLOSURES BY INVENTOR &
APPLICANT/ASSIGNEE**

The Inventor and Applicant/Assignee assert that no pub-
lications nor advertisements relating to sales, offers for sale
or public distribution occurred more than one year prior to
the effective filing date of this application. Any information
about the claimed plant would have been obtained from a
direct or indirect disclosure from the Inventor and/or Appli-
cant/Assignee. Inventor and Applicant/Assignee claim a
prior art exception under 35 U.S.C. 102(b)(1) for disclosure
and/or sales prior to the filing date but less than one year
prior to the effective filing date.

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 'Don-
girolwhi'.

The new *Impatiens* plant is a product of a planned
breeding program conducted by the Inventor in Koka, Ethio-
pia and Encinitas, Calif. The objective of the breeding
program is to create new freely branching and early and
freely flowering New Guinea *Impatiens* plants with large
attractive flowers and good garden performance.

The new *Impatiens* plant originated from a cross-pollina-
tion made by the Inventor in November, 2017 in Koka,
Ethiopia of *Impatiens hawkeri* 'Rococo White 2017', not
patented, as the female, or seed, parent with *Impatiens
hawkeri* 'Rococo Blanca', 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

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within the progeny of the stated cross-pollination in a
controlled greenhouse environment in Encinitas, Calif. in
April, 2018.

Asexual reproduction of the new *Impatiens* plant by
terminal vegetative cuttings in a controlled greenhouse
environment in Rheinberg, Germany since June, 2018 has
shown that the unique features of this new *Impatiens* plant
are stable and reproduced true to type in successive genera-
tions.

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
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 'Dongi-
rolwhi'. These characteristics in combination distinguish
'Dongirolwhi' as a new and distinct *Impatiens* plant:

1. Relatively compact, upright to outwardly spreading and
uniformly mounding plant habit.
2. Moderately vigorous growth habit.
3. Freely branching habit.
4. Glossy and dark green-colored leaves.
5. Freely flowering habit.
6. Medium to large ruffled flowers that are bright white in
color.
7. Good garden performance.

Plants of the new *Impatiens* can be compared to plants of
the female parent, 'Rococo White 2017'. Plants of the new
Impatiens differ primarily from plants of 'Rococo White
2017' in the following characteristics:

1. Flowers of plants of the new *Impatiens* are more ruffled and undulating than flowers of plants of 'Rococo White 2017'.
2. Flowers of plants of the new *Impatiens* are bright white in color whereas flowers of plants of 'Rococo White 2017' are white in color slightly tinged with pink.

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

1. Plants of the new *Impatiens* have larger flowers than plants of 'Rococo Blanca'.
2. Flowers of plants of the new *Impatiens* are more ruffled and undulating than flowers of plants of 'Rococo Blanca'.
3. Flowers of plants of the new *Impatiens* are brighter white in color than flowers of plants of 'Rococo Blanca'.

Plants of the new *Impatiens* can be compared to plants of *Impatiens hawkeri* 'Kironanete', disclosed in U.S. Plant Pat. No. 26,753. In side-by-side comparisons, plants of the new *Impatiens* differ primarily from plants of 'Kironanete' in the following characteristics:

1. Plants of the new *Impatiens* are more compact than plants of 'Kironanete'.
2. Flowers of plants of the new *Impatiens* are more ruffled than flowers of plants of 'Kironanete'.
3. Flowers of plants of the new *Impatiens* are bright white in color whereas flowers of plants of 'Kironanete' are dark cherry red in color.

Plants of the new *Impatiens* can also be compared to plants of *Impatiens hawkeri* 'Moorea', disclosed in U.S. Plant Pat. No. 9,147. In side-by-side comparisons, plants of the new *Impatiens* differ primarily from plants of 'Moorea' in the following characteristics:

1. Plants of the new *Impatiens* have larger flowers than plants of 'Moorea'.
2. Flowers of plants of the new *Impatiens* are more ruffled and undulating than flowers of plants of 'Moorea'.
3. Flowers of plants of the new *Impatiens* are brighter white in color than flowers of plants of 'Moorea'.

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 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 (FIG. 1) is a side perspective view of a typical flowering plant of 'Dongirolwhi' grown in a container.

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

DETAILED BOTANICAL DESCRIPTION

The aforementioned photographs and following observations, measurements and values describe plants grown during the summer 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 25° C., night temperatures averaged 20°

C. and light levels ranged from 4,000 to 4,500 lux. Plants were 14 weeks old when the photographs and description were taken. In the following description, color references are made to The Royal Horticultural Society Colour Chart, 2015 Edition, except where general terms of ordinary dictionary significance are used.

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

Female, or seed, parent.—*Impatiens hawkeri* 'Rococo White 2017', not patented.

Male, or pollen, parent.—*Impatiens hawkeri* 'Rococo Blanca', 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.—Relatively compact, upright to outwardly spreading and uniformly mounding plant habit; broad inverted triangle in overall shape; freely branching habit; bushy and dense appearance; moderately vigorous growth habit and moderate growth rate; strong and sturdy plants.

Plant height.—About 23 cm.

Plant diameter.—About 42 cm.

Lateral branch description:

Branching habit.—Freely branching with about five to seven primary lateral branches each with multiple secondary branches.

Length.—About 19 cm.

Diameter.—About 1.5 cm.

Internode length.—About 5 cm to 7 cm.

Strength.—Strong, flexible.

Aspect.—Initially upright to about 60° from vertical.

Texture and luster.—Smooth, glabrous; glossy.

Color, developing and developed.—Close to 144A.

Leaf description:

Arrangement.—Typically in whorls or opposite; simple; leaves are durable.

Length.—About 11 cm.

Width.—About 4 cm.

Shape.—Elliptic.

Apex.—Acuminate.

Base.—Attenuate.

Margin.—Serrate with ciliation.

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

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

Venation pattern.—Pinnate; arcuate.

Color.—Developing leaves, upper surface: Darker green than 147A. Developing leaves, lower surface: Close to 147B. Fully expanded leaves, upper surface: Darker green than between 147A and N189A; mid-vein, proximally, close to 144A to 144B and distally, close to 147A; and lateral venation, darker green

than between 147A and N189A. Fully expanded leaves, lower surface: Close to 147B; midvein, proximally, close to 144A to 144B and distally, close to 144B; and lateral venation, close to 146A.

Petiole length.—About 5.1 cm.

Petiole diameter.—About 4 mm.

Petiole texture and luster, upper surface.—Smooth, glabrous; moderately glossy.

Petiole texture and luster, lower surface.—Smooth, glabrous; slightly glossy.

Petiole color, upper and lower surfaces.—Close to 144B.

Flower description:

Flower type and flowering habit.—Medium to large ruffled single axillary flowers that are rounded to rounded rectangular in shape; freely flowering habit, typically about five to six flower buds and opened flowers per lateral branch; flowers are 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; 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, plants typically begin flowering about ten weeks from unrooted cuttings.

Flower buds.—Length: About 1.1 cm. Diameter: About 8 mm. Shape: Ovoid. Texture and luster: Smooth, glabrous; glossy. Color: Close to 144A to 144B.

Flower diameter.—Medium to large, about 6.3 cm by 6.7 cm.

Flower depth.—About 1.75 cm.

Petals.—Quantity and arrangement: Five per flower in a single whorl with one banner petal, two lateral petals and two lower petals. Length, banner petal: About 3.5 cm. Length, lateral petals: About 3 cm. Length, lower petals: About 3.3 cm. Width, banner petal: About 5.6 cm. Width, lateral petals: About 3.5 cm. Width, lower petals: About 4.3 cm. Shape, all petals: Broadly obcorate. Apex, all petals: Emarginate. Base, all petals: Attenuate. Margin, all petals: Entire; undulate and ruffled with occasional indentations. Texture and luster, all petals, upper and lower surfaces: Smooth, glabrous; slightly glossy; iridescent. Color, all petals: When opening and fully opened, upper surface: Close to NN155D; venation, close to NN155D; color does not change with development. When opening and fully opened, lower surface: Close to NN155D; faint central blush, close to 144A; venation, close to NN155D with exception of banner midvein which is close to 144A; color does 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 9 mm. Lateral sepal width: About 6 mm. Lateral sepal shape: Broadly deltoid to ovate. Lateral sepal apex: Acuminate. Lateral sepal base: Truncate. Lateral sepal margin: Entire, not undulate. Lateral sepal texture and luster, upper and lower surfaces: Smooth, glabrous; slightly glossy. Lateral sepal color, upper surface: Close to NN155D variably tinged with close to 144B to 144C. Lateral sepal color, lower surface: Close to NN155D variably tinged with close to 144A. Spurred sepal length (not including spur): About 1.5 cm. Spurred sepal width (proximally): About 1.1 cm. Spurred sepal shape (proximally): Broadly ovate. Spurred sepal base: Cordate to truncate. Spurred sepal margin (proximally): Entire, not undulate. Spurred sepal texture and luster (proximally), upper and lower surfaces: Smooth, glabrous; slightly glossy. Spurred sepal color (proximally), upper and lower surfaces: Close to NN155D; towards the apex, close to 144A. Spur length: About 3.5 cm. Spur diameter: At flower, about 2 mm; at apex, less than 1 mm. Spur shape: Acicular, curved. Spur texture and luster: Smooth, glabrous; moderately glossy. Spur color: Close to NN155D variably tinged with close to 144A.

Peduncles.—Length: About 2.8 cm. Diameter: About 2.5 mm. Angle: About 45° to 90° from vertical, arching. Strength: Strong; flexible. Texture and luster: Smooth, glabrous; glossy. Color: Close to 144A.

Reproductive organs.—Stamens: Quantity: Five fused at anthers; filaments free. Filament length: About 3.75 mm. Filament color: Close to 158A. Anther length: About 2.75 mm. Anther shape: Oblong. Anther color: Close to N155B. Pollen amount: Scarce. Pollen color: Close to 158A. Pistils: Quantity per flower: One. Pistil length: About 4.75 mm. Stigma shape: Crested. Stigma color: Close to 144A. Style length: About 4.25 mm. Style color: Close to 144A. Ovary color: Close to 144A.

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 'Dongrolwhi' as illustrated and described.

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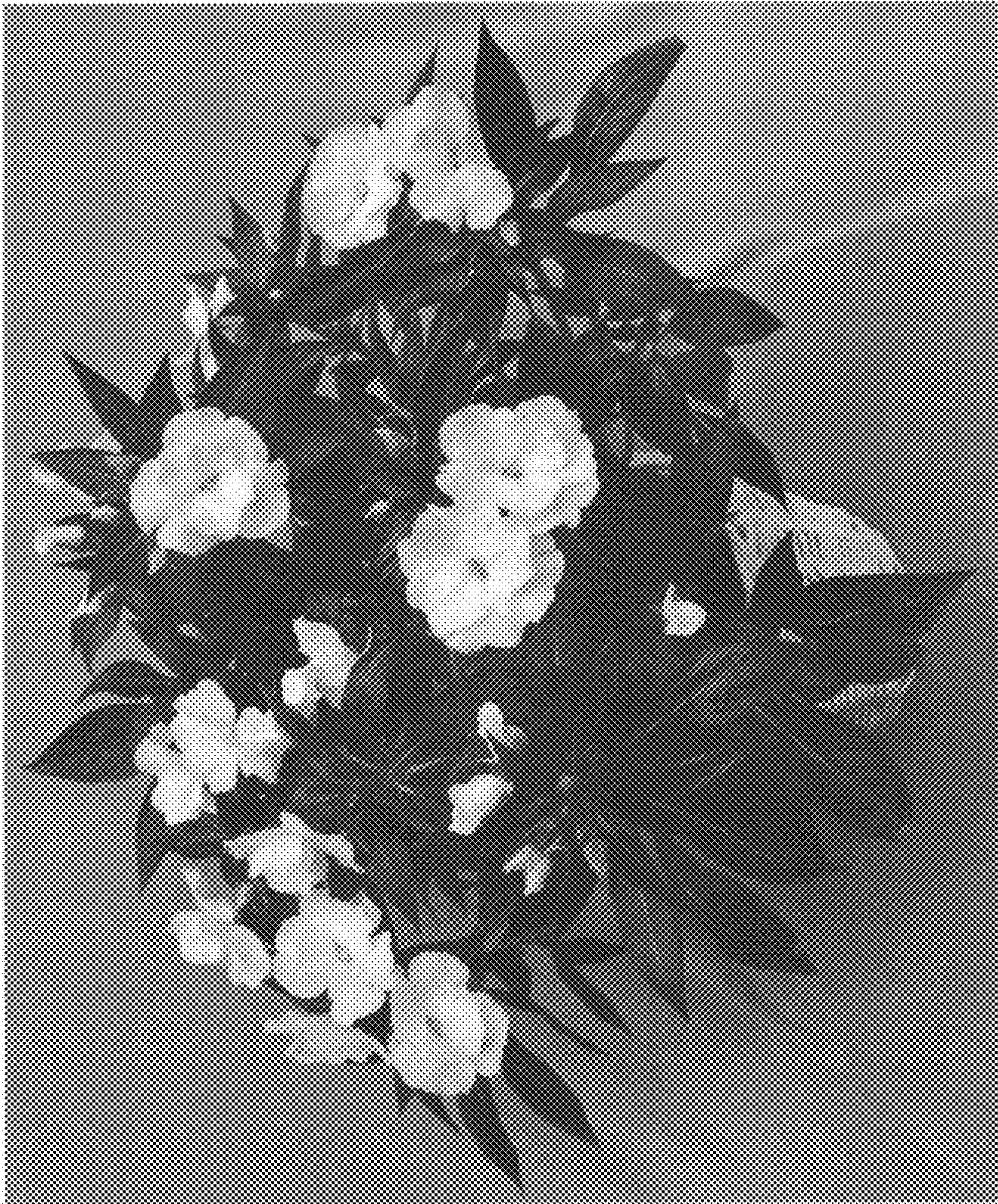


FIG. 1



FIG. 2