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Van Swieten

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(54) ***PHALAENOPSIS* ORCHID PLANT NAMED 'PHALGUPEO'**

(50) Latin Name: ***Phalaenopsis* hybrid**
Varietal Denomination: **PHALGUPEO**

(71) Applicant: **ANTHURA B.V.**, Bleiswijk (NL)

(72) Inventor: **Martinus Nicolaas Gerardus Van Swieten**, Utrecht (NL)

(73) Assignee: **ANTHURA B.V.**, Bleiswijk (NL)

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See application file for complete search history.

Primary Examiner — Susan McCormick Ewoldt
Assistant Examiner — Karen M Redden
(74) *Attorney, Agent, or Firm* — Jondle & Associates, P.C.

(57) **ABSTRACT**

A new and distinct variety of *Phalaenopsis* plant named 'PHALGUPEO', particularly characterized by having white flowers with red-purple lips, internode length from 2 cm to 3 cm, medium curvature of the lateral lobe, and is propagated by meristem tissue culture, is disclosed.

3 Drawing Sheets

Genus and species: *Phalaenopsis* hybrid.
Variety denomination: 'PHALGUPEO'.

BACKGROUND OF THE NEW PLANT

The present invention relates to a new and distinct cultivar of *Phalaenopsis* plant, botanically known as *Phalaenopsis* hybrid of the Orchidaceae family, commonly referred to as moth orchid, and hereinafter referred to by the variety name 'PHALGUPEO'.

The new *Phalaenopsis* plant is a product of a planned breeding program conducted by the inventor in Bleiswijk, the Netherlands. The objective of this breeding program was to create a new *Phalaenopsis* plant with numerous attractive white flowers with red-purple lips, suitable for potted plant production.

The new *Phalaenopsis* plant 'PHALGUPEO' is a result of cross-pollination made by the inventor in February 2005 in Bleiswijk, the Netherlands, of the proprietary female, or seed parent, *Phalaenopsis* hybrid '10003-05' (unpatented) with the proprietary male, or pollen parent, *Phalaenopsis* hybrid '6404-02' (unpatented).

The new *Phalaenopsis* was selected by the inventor as a single plant within the progeny of the stated cross-pollination in a controlled greenhouse in Bleiswijk, the Netherlands, in May 2012. Asexual reproduction of the new *Phalaenopsis* plant by meristem tissue culture since 2015 in Bleiswijk, the Netherlands, has demonstrated that the new variety reproduces true to type with all of the characteristics, as herein described, firmly fixed and retained through successive generations.

Community Plant Variety Rights for this variety have been applied for in the European Union on Sep. 25, 2018, by Applicant who obtained the subject matter disclosed directly from the inventor. 'PHALGUPEO' has not been made publicly available or sold anywhere in the world prior to the effective filing date of this application with the exception of sales or disclosures made one year or less before the

effective filing date of this claimed invention by Applicant who obtained 'PHALGUPEO' directly from the inventor.

SUMMARY OF THE INVENTION

The following are the most outstanding and distinguishing characteristics of this new cultivar when grown under normal horticultural practices in Bleiswijk, the Netherlands, and can be used to distinguish 'PHALGUPEO' as a new and distinct variety of *Phalaenopsis* plant:

1) White flowers with red-purple lips;
2) Internode length from 2 cm to 3 cm; and
3) Medium curvature of the lateral lobe.

DESCRIPTION OF THE PHOTOGRAPHS

This new *Phalaenopsis* plant is illustrated by the accompanying photographs which show the overall plant habit including blooms, buds, and foliage of the plant; the colors shown are as true as can be reasonably obtained by conventional photographic procedures. The photographs were taken in a greenhouse in Bleiswijk, the Netherlands, from 50-week-old plants in January 2020. Colors in the photographs may differ from the color values cited in the detailed botanical description, which accurately describe the actual colors of the new variety.

FIG. **1** shows the overall plant habit, including blooms, buds, and foliage of 'PHALGUPEO'.

FIG. **2** shows a close-up of a flower of 'PHALGUPEO'.

FIG. **3** shows an overhead view of the leaves of 'PHALGUPEO'.

DESCRIPTION OF THE NEW VARIETY

The following detailed description sets forth the distinctive characteristics of 'PHALGUPEO'. Plants of the new *Phalaenopsis* have not been observed under all possible environmental conditions. The phenotype may vary some-

what with variations in environment such as temperature, light intensity and day length, without, however, any variance in genotype. The chart used in the identification of colors described herein is The R.H.S. Colour Chart of The Royal Horticultural Society, London, England, 2015 edition, except where general color terms of ordinary significance are used. The color values were determined under 4000-6000 lux natural light in a greenhouse in Bleiswijk, the Netherlands. Observations and measurements were made in January 2020 on flowering plants which were planted in 12-centimeter (diameter) pots. After in vitro propagation, the plants were grown in nursery trays for 20-24 weeks, followed by transplantation to 12-centimeter pots and grown in a greenhouse between 27° C. to 29° C. for 30 weeks, continued by a cooling period of 8 weeks between 18° C. to 20° C. and 12 weeks in a greenhouse of 21° C. Flowering occurs after 50 weeks in 12-centimeter pots.

DETAILED BOTANICAL DESCRIPTION

Classification:

Family.—Orchidaceae.

Botanical.—*Phalaenopsis* hybrid.

Common name.—Moth orchid.

Variety name.—'PHALGUPEO'.

Parentage:

Female parent.—*Phalaenopsis* cultivar '10003-05' (unpatented).

Male parent.—*Phalaenopsis* cultivar '6404-02' (unpatented).

Propagation:

Type.—Meristem tissue culture.

Roots:

Root description.—Greyed-green (between RHS 190B and 190C) colored roots with branching lateral roots having light yellow-green (between RHS 145A and 145B) colored root tips.

Plant:

Commercial crop time to flowering.—Following asexual propagation (in vitro), the rooted cuttings grow for 20-24 weeks. After transplantation into 12-cm pots, the plants are finished after 48 to 50 weeks.

Growth habit of the peduncle.—Upright to slightly pendent with raceme inflorescence.

Height (from soil level to top of inflorescence).—Approximately 49.0 cm to 54.0 cm.

Width (measured from leaf tips).—About 34.0 cm to 36.0 cm.

Vigor.—Strong.

Leaves:

Mature leaves.—Quantity per plant: 7 to 9 leaves are produced before flowering. Length (fully expanded): 16.0 cm to 20.0 cm. Width: 7.0 cm to 8.0 cm. Position of the broadest part of the leaf: In the middle. Shape: Oblong. Base shape: Moderately elongated. Apex: Unequal obtuse. Leaf blade angle with the petiole (measured from the horizontal position): Between 15 degrees and 40 degrees. Leaf margin: Entire. Color: Upper surface: RHS 146A. Lower surface: RHS 146B. Texture (both upper and lower surfaces): Smooth. Thickness: 2.8 mm to 3.3 mm. Variegation: Absent. Venation: Pattern: Parallel. Color of the midvein: Upper surface: RHS 146A. Lower surface: RHS 146B.

Peduncle:

Quantity per plant.—1 to 2.

Number of flowers per peduncle.—7 to 10.

Length.—49.0 cm to 54.0 cm.

Diameter.—5.0 mm to 6.0 mm.

Strength.—Strong.

Aspect.—Upright to slightly pendent.

Texture.—Smooth.

Color.—Mix of brown (RHS 200B) and yellow-green (RHS 146C).

Internode length.—2.0 cm to 3.0 cm.

Inflorescence description:

Appearance.—Upright to slightly pendent, raceme inflorescence with bilaterally symmetrical flowers that open in succession beginning with the lowermost flower.

Number of inflorescences.—1 to 2.

Inflorescence size.—Height (from base to tip): 150.0 mm to 200.0 mm.

Flowering time.—First flowers can be expected 10 to 11 months after planting in a 12-cm pot.

Flower.—Height: 75.0 mm to 80.0 mm. Diameter: 90.0 mm to 95.0 mm. Depth of lip: 25.0 mm to 27.0 mm.

Flower longevity.—On the plant: 12 to 17 weeks.

Flower shape.—Flat.

Fragrance.—Absent.

Flower bud.—Average size: Medium to large. Length: 21.0 mm to 23.0 mm. Width: 16.0 mm to 18.0 mm. Shape: Egg shaped. Color: Light yellow-green (RHS 145C) with a touch of diluting purplish-red (RHS N77B).

Petals.—Arrangement: Open/free. Shape: Semi-circular. Apex: Obtuse to rounded asymmetric. Margin: Entire. Length (from base to tip): 42.0 mm to 45.0 mm. Width: 53.0 mm to 55.0 mm. Position of the broadest part of the petal: Toward the base. Color (when fully opened): Upper surface: Basic color: White (RHS NN155C). Over color: Absent. Lower surface: Basic color: White (RHS NN155C). Over color: Light purple region (RHS 76B) in the middle. Number of spots and stripes on the petals (upper surface): None. Color of spots and stripes on the petals (upper surface): None. Density of netting of the petals (upper surface): None. Color of the netting (upper surface): None.

Dorsal sepal.—Shape: Elliptic. Apex: Emarginated symmetric. Margin: Entire. Length (from base to tip): 44.0 mm to 46.0 mm. Width: 32.0 mm to 34.0 mm. Position of the broadest part of the dorsal sepals: At the middle. Color (when fully opened): Upper surface: Basic color: White (RHS NN155C). Over color: Absent. Lower surface: Basic color: White (RHS NN155C). Over color: Hint of light yellow-green (RHS 145D) and light reddish-purple (RHS N78D) in the middle. Number of spots and stripes on the dorsal sepals (upper surface): None. Color of spots and stripes on the dorsal sepals (upper surface): None. Density of netting of the dorsal sepals (upper surface): None. Color of the netting (upper surface): None.

Lateral sepals.—Shape: Ovate. Apex: Obtuse symmetric. Margin: Entire. Length (from base to tip): 46.0 mm to 48.0 mm. Width: 28.0 mm to 30.0 mm. Position of the broadest part of the lateral sepals: Toward the base. Color (when fully opened): Upper

surface: Basic color: White (RHS NN155C). Over color: Hint of light yellow-green (RHS 145C) at the base and reddish-purple stripes (RHS N78B). Lower surface: Basic color: White (RHS NN155C). Over color: Light yellow-green (RHS 145C to 145D) in the middle with a hint of light reddish-purple (RHS N78D) toward the tip. Number of spots and stripes on the lateral sepals (upper surface): Few stripes. Color of spots and stripes on the lateral sepals (upper surface): Reddish-purple (RHS N78B). Density of netting of the lateral sepals (upper surface): None. Color of the netting (upper surface): None.

Labellum (*lip*).—Whiskers: Present. Length of whiskers: 19.0 mm to 21.0 mm. Color of whiskers: Reddish-purple (RHS N78B) with a light greenish-yellow tip (RHS 8C). Pubescence on the lip: Absent.

Lateral lobe.—Shape: Type V (as described in the International Union for the Protection of New Varieties of Plants (UPOV) Test Guidelines for *Phalaenopsis*); spatulate. Margin: Entire. Length: 20.0 mm to 22.0 mm. Width: 15.0 mm to 17.0 mm. Color: Upper surface: White (RHS NN155C) with a hint of light greenish-yellow (RHS 8C) at the base and red stripes (RHS 60A); red margin (RHS 60A) on one side; reddish-purple (RHS N78B to N78C) in the middle and white (RHS NN155C) toward the other margin. Lower surface: White (RHS NN155C) at the base; red margin (RHS 183D) on one side and reddish-purple (RHS N78B to N78C) toward the other side. Number of spots and stripes on the lateral lobe: Few. Color of spots and stripes on the lateral lobe: RHS N78C. Density of netting of the lateral lobe: None. Color of the netting: None.

Apical lobe.—Shape: Triangular. Margin: Entire. Length: 23.0 mm to 25.0 mm. Width: 25.0 mm to 27.0 mm. Color: Upper surface: Red wings (RHS 183C) and reddish-purple region (RHS N78A) toward whiskers. Lower surface: White (RHS NN155B) in the middle; reddish-purple (RHS N78A) and red (RHS 183D) toward the margin. Number of spots and stripes on the apical lobe: None. Color of spots and stripes on the apical lobe: None. Density of netting of the apical lobe: None. Color of the netting: None.

Callus.—Average size: Medium. Height: 6.0 mm to 7.0 mm. Length: 5.0 mm to 6.0 mm. Width: 3.0 mm to 4.0 mm. Color: Yellow (RHS 7B) with red spots (RHS 178A).

Reproductive organs:

Column.—Length: 7.0 mm to 9.0 mm. Diameter: 5.0 mm to 6.0 mm. Color: White (RHS NN155C).

Pollinia.—Quantity: 2. Diameter: 0.8 mm to 1.0 mm. Color: Orange (RHS 25A).

Ovary.—Length: 11.0 mm to 13.0 mm. Diameter: 2.0 mm to 3.0 mm.

Pedicel.—Length: 33.0 mm to 35.0 mm. Diameter: 3.0 mm to 4.0 mm. Texture: Smooth. Color: Hint of brown (RHS N199B) at the base; light yellow-green (RHS 145C to 145D) toward the flower.

Disease, pest, and stress resistance: No specific resistance or susceptibility observed to pathogens and pests common to *Phalaenopsis* to date.

Fruit and seeds: Fruit and seed development has not been observed on plants of the new *Phalaenopsis* to date.

COMPARISON WITH PARENTAL LINES AND MOST SIMILAR VARIETIES

The female parent plant of 'PHALGUPEO', cultivar '10003-05' (unpatented), is no longer in existence, therefore a meaningful comparison cannot be made.

'PHALGUPEO' differs from male parent plant '6404-02' (unpatented) in that 'PHALGUPEO' has emarginated dorsal sepal apexes and medium curvature of the lateral lobe, whereas '6404-02' has obtuse dorsal sepal apexes and strong curvature of the lateral lobe.

'PHALGUPEO' is most similar to the commercial *Phalaenopsis* plants named 'PHALGEMAQ' (unpatented) and 'PHALDANCIP' (unpatented). 'PHALGUPEO' differs from the commercial variety 'PHALGEMAQ' in that 'PHALGUPEO' has white columns, whereas 'PHALGEMAQ' has white columns with a very small light purple region at the middle.

'PHALGUPEO' differs from the commercial variety 'PHALDANCIP' in that 'PHALGUPEO' has flowers with an even pattern, emarginated dorsal sepal apexes, and white columns, whereas 'PHALDANCIP' has flowers with a striped pattern, obtuse dorsal sepal apexes, and white columns with a reddish-purple region toward the tip. Additionally, 'PHALGUPEO' has wider lateral sepals and wider leaves than 'PHALDANCIP'.

I claim:

1. A new and distinct variety of *Phalaenopsis* plant named 'PHALGUPEO', substantially as described and illustrated herein.

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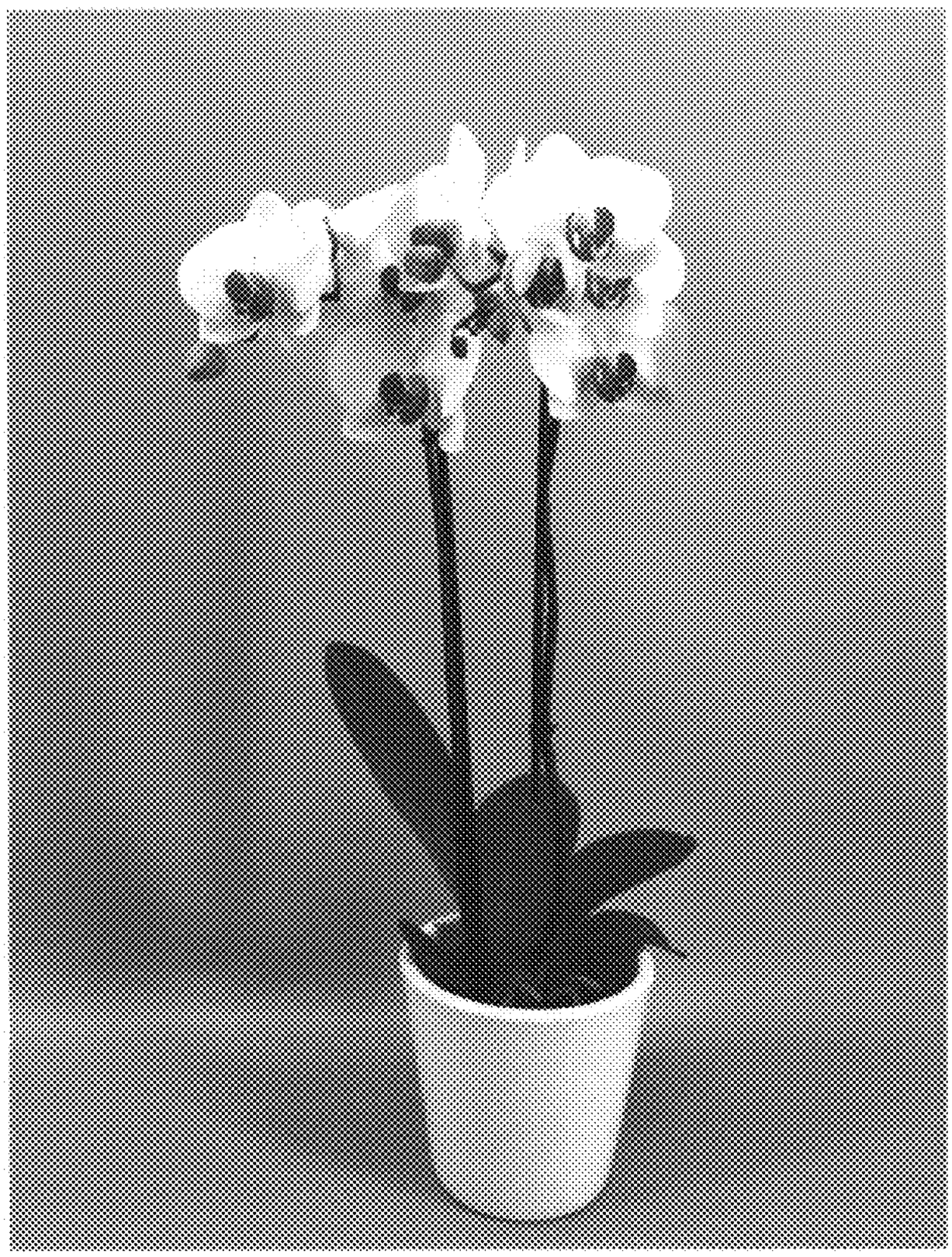

FIG. 1

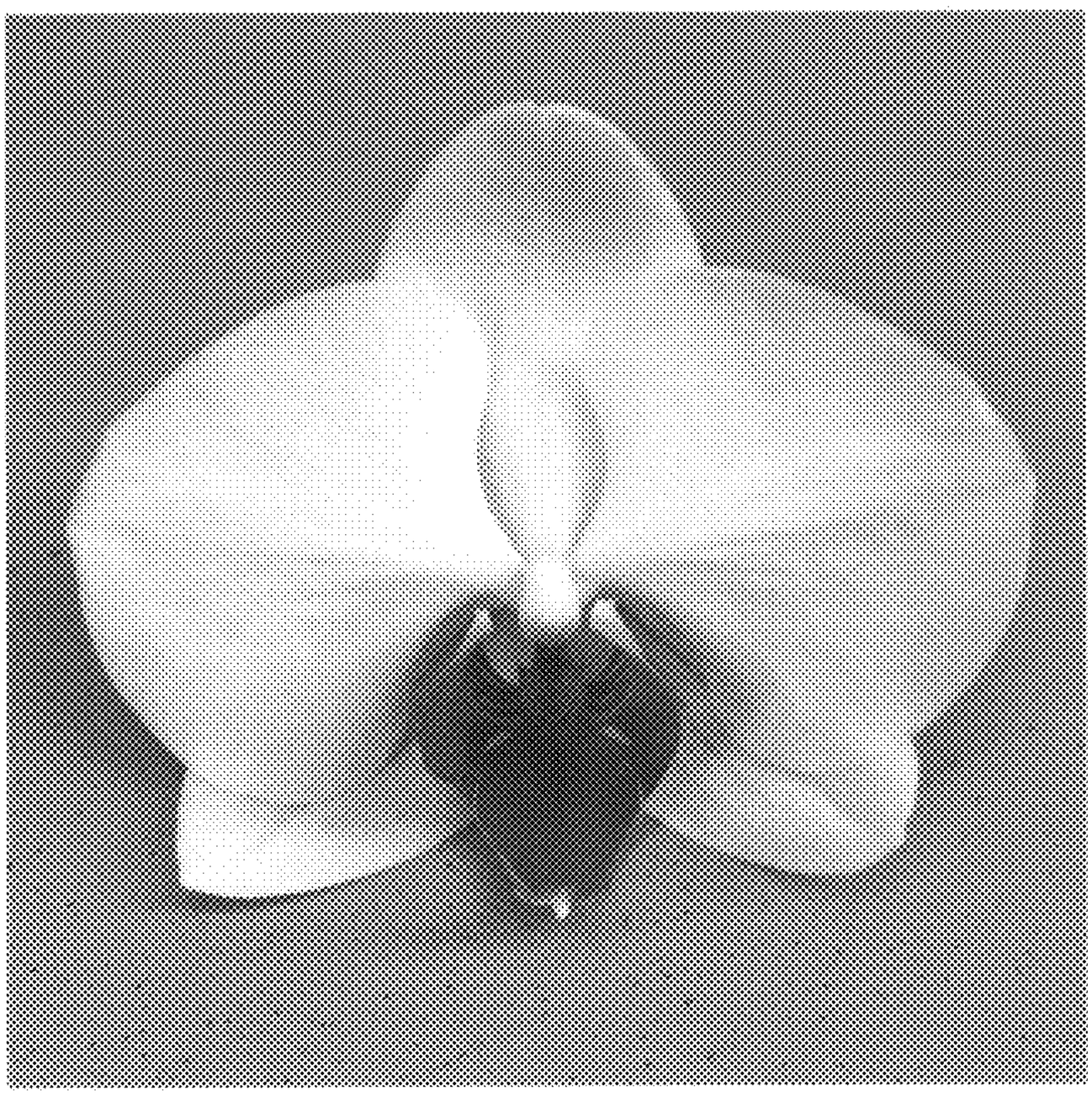

FIG. 2

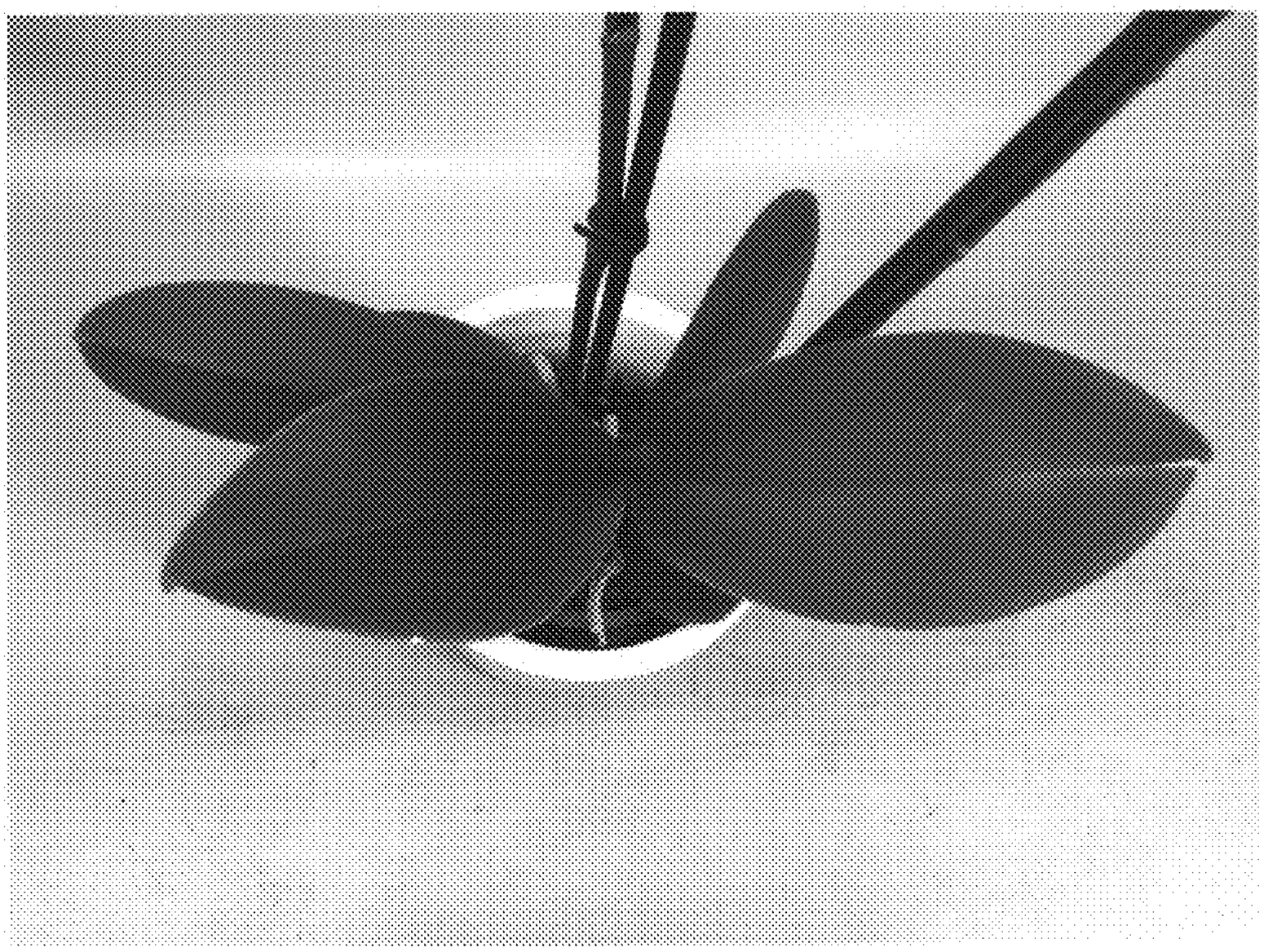

FIG. 3