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Schoone

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

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

(75) Inventor: **René Schoone**, Assendelft (NL)

(73) Assignee: **Floricultura**, Heemskerk (NL)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 114 days.

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A01H 5/00 (2006.01)
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CPC *A01H 5/02* (2013.01)
USPC **Plt./311**

(58) **Field of Classification Search**
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USPC **Plt./311**
See application file for complete search history.

(56) **References Cited**
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(57) **ABSTRACT**
A new and distinct *Phalaenopsis* plant named 'Rubicon' particularly characterized by flowers which are white, within the labellum some yellow and some purple; plants which may be propagated economically and uniformly using tissue culture; plants which produce more than one inflorescence; long and sturdy inflorescences; and relatively short, dark-green foliage.

3 Drawing Sheets

Latin name of the genus and species of the plant claimed:
Phalaenopsis hybrid.
Variety denomination: 'Rubicon'.

BACKGROUND OF THE INVENTION

The present invention relates to a new and distinct cultivar of *Phalaenopsis* plant, botanically known as *Phalaenopsis* of the Orchidaceae family, and hereinafter referred to by the cultivar name 'Rubicon'.

Phalaenopsis comprises a genus of about 55 species of herbaceous perennials many of which, or the hybrids thereof, are suitable for cultivation in the home or greenhouse. *Phalaenopsis* is predominantly epiphytic or rock-dwelling, and is native to tropical Asia, the Malay Archipelago, and Oceania. The species typically has 2-ranked, fleshy, oblong or elliptic leaves affixed to a short central stem (monopodial growth), which vary in size from 5 to 8 inches to over 2 feet. The leaves may be entirely green or mottled with silver grey.

Phalaenopsis orchids, often referred to as 'Moth Orchids' in the horticultural trade, are frequently used to furnish cut flowers for the florist trade or sold as flowering potted-plants for home or interiorscape.

Phalaenopsis produces upright or pendent lateral racemes, often with many showy flowers which open in succession beginning with the lowermost. The flowers possess three sepals and three petals; the lateral ones being alike. The lowermost petal, called the labellum, is three-lobed and is

often more brightly-colored than the other flower segments. Flower colors include various shades of pink, white, yellow and red-brown.

Phalaenopsis orchids are typically propagated from seeds. Asexual propagation of *Phalaenopsis* is often done from off-shoots which frequently arise from the lower bracts of the inflorescence. The resulting plants are detached from the mother plant and may be planted in a suitable substrate.

The new *Phalaenopsis* 'Rubicon' is a product of a controlled breeding program conducted by the inventors, René Schoone, in Strengweg, Heemskerk, The Netherlands. The objective of the breeding program was to develop a new *Phalaenopsis* cultivar particularly characterized by its attractive and unique colored flowers, economical propagation via tissue culture, rapid growth, and a plant dimension suitable for packaging and shipping to the market.

The new *Phalaenopsis* 'Rubicon' originated from a cross made by the inventor in 1998 in Strengweg, Heemskerk, The Netherlands. The female or seed parent is the *Phalaenopsis* cultivar designated '(Winter Kaalaxamabilis)', unpatented. The male or pollen parent is the *Phalaenopsis* cultivar designated 'Spring Song', unpatented. The new *Phalaenopsis* 'Rubicon' was discovered and selected by the inventor as a single flowering plant within the progeny of the stated cross in a controlled environment in 2006 in Strengweg, Heemskerk, The Netherlands.

Asexual reproduction of the new *Phalaenopsis* cultivar by tissue culture was first performed in November, 2006 in

Cieweg 13, Heemskerk, The Netherlands, and has demonstrated that the combination of characteristics as herein disclosed for the new cultivar are firmly fixed and retained through successive generations of asexual reproduction. The new cultivar asexually reproduces true-to-type.

BRIEF DESCRIPTION OF THE INVENTION

The following traits have been repeatedly observed and are determined to be unique characteristics of 'Rubicon', which in combination distinguish this *Phalaenopsis* as a new and distinct cultivar:

1. flowers which are white, within the labellum some yellow and some purple;
2. plant produces more than one inflorescence;
3. plants may be propagated economically and uniformly using tissue culture;
4. inflorescence is long and sturdy; and
5. relatively short, dark-green foliage.

In comparison with the parental cultivars of 'Rubicon', the female parent '(Winter Kaalaxamabilis)' has white flowers and they are about 9 cm in size, the male parent 'Spring Song' has white colored flowers and they are about 12 cm in size, whereas the flowers of 'Rubicon' are white and are about 10 cm in size.

Presently, the most commercially similar cultivars to the instant cultivar 'Rubicon' are the parent cultivars '(Winter Kaalaxamabilis)' and 'Spring Song', to which a comparison has been provided above.

BRIEF DESCRIPTION OF THE PHOTOGRAPHS

The accompanying photographs illustrate the overall appearance of the new *Phalaenopsis* 'Rubicon' showing the colors as true as is reasonably possible with 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 color of 'Rubicon'.

FIG. 1 shows a side view perspective of a typical flowering plant of 'Rubicon' in a 12 cm pot, at 16 months of age.

FIG. 2 shows a close-up view of the typical buds and flowers of 'Rubicon'.

FIG. 3 shows a close-up view of the typical leaves of 'Rubicon'.

DETAILED BOTANICAL DESCRIPTION

The new *Phalaenopsis* cultivar 'Rubicon' has not been observed under all possible environmental conditions. The phenotype of the new cultivar may vary with variations in environment such as temperature, light intensity, and day length without any change in the genotype of the plant.

The aforementioned photographs, together with the following observations, measurements and values describe plants of 'Rubicon' as grown in a greenhouse in Strengweg, Heemskerk, The Netherlands, under conditions which closely approximate those generally used in commercial practice. Initially, the ideal temperature to grow plants of 'Rubicon' is 27° C. during the day and at night. Then, during the flowering phase of 'Rubicon', the ideal growing temperature is 20-22° C. during the day and 18° C. at night. Light levels for growing 'Rubicon' are a minimum of 5,000 lux and a maximum of 10,000 lux. A balanced fertilizer with level of

200 ppm N, 87 ppm P, 168 ppm K is applied. Duration of growth of 'Rubicon' from potting size is between 10 and 14 months.

Color references are made to The Royal Horticultural Society Colour Chart (R.H.S.), 2007 edition, except where general colors of ordinary significance are used. Color values were taken under daylight conditions at approximately noon in Zaandammerweg, Assendelft, The Netherlands. The age of the 'Rubicon' plants described is 12 months after potting.

Classification:

Botanical.—*Phalaenopsis* hybrid.

Parentage:

Female or seed parent.—*Phalaenopsis* cultivar designated '(Winter Kaalaxamabilis)', unpatented.

Male or pollen parent.—*Phalaenopsis* cultivar designated 'Spring Song', unpatented.

Propagation:

Type.—Tissue culture.

Rooting habit and description.—Fleshy; approximately 6 mm-9 mm wide and greyed/green (RHS 190C and RHS 195A) in color; freely branching. It takes 12 weeks for plants growing in tissue culture to initiate roots.

Plant:

Size at maturity.—Height (from bottom of pot to highest flower): about 60 cm. Spread: about 58 cm.

Growth habit.—Standard; green leaves (RHS N137B) and a relatively normal raceme.

Vigor.—Moderate.

Crop time.—Following asexual propagation, at about 26 weeks 2 leaves appear; at about 30 weeks 3-4 leaves appear; after a cold treatment of about 4-8 weeks at a temperature of about 19° C. about 2 racemes with flowers appear.

Foliage:

Quantity per plant.—About 6 to 8 leaves are produced before flowering.

Arrangement and attachment.—Half up/horizontal and on two sides.

Overall shape of leaf.—Oval, the tip is blunt and asymmetric.

Texture (upper and under surface).—Smooth and leathery.

Pubescence.—None.

Mature leaf length.—About 20 to 22 cm.

Mature leaf width.—About 8 to 10 cm.

Mature leaf thickness.—About 2 mm.

Mature leaf color.—Upper surface: green (RHS N137B). Under surface: yellow/green (RHS 146B).

Leaf base.—Acute.

Margin.—Entire.

Venation.—Pattern: parallel. Color of midvein: upper surface: green (RHS N137B). Under surface: yellow/green (RHS 146B).

Raceme:

Quantity per plant.—About 1 to 2.

Number of flowers per raceme.—About 10 to 14.

Length.—About 55 to 65 cm.

Diameter.—About 5 mm.

Strength.—Strong.

Aspect.—Upright.

Texture.—Glabrous and smooth.

Color.—Brown (RHS N200A) with yellow/green spots (RHS 144C).

Internode.—Length: about 40 mm.

Inflorescence description:

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

Buds.—Height (from base to tip): about 18 mm to 28 mm. Diameter (at midpoint): about 15 mm to 22 mm. Shape: oval/egg-shaped. Color: yellow/green (RHS 145A and RHS 145B) with some purple/violet (RHS N81B). Orientation: same orientation as the flowers (forward facing).

Flowering time.—For an untreated plant (flowering plant that has not undergone cold-treatment where the plant grows at a temperature of 18° C. to 19° C. for about 4 to 8 weeks after a period of about 30 weeks at a temperature of 25° C.), 2 racemes appear with about 16 to 20 flower buds and flowers per inflorescence. First flowers can be expected approximately 4 to 6 months after planting a plant with a leaf diameter of 3 to 5 cm. Flowers persistent.

Flowering longevity.—On the plant: about 4 to 6 months; lastingness of cut flowers: has not been observed.

Fragrance.—No fragrance.

Flower.—Rate of opening: Flowers fully opened about 2 to 3 days after petal and sepal separation. Orientation at opening: slanted upward and outward. Shape: Typical shape of *Phalaenopsis* orchid; see FIG. 2. Size: Height (of a single bloom): about 85 mm. Diameter (of a single bloom): about 100 mm. Depth of tube: about 18 mm.

Petals.—Quantity and arrangement: three petals and three sepals that are trimerous, overlapping and arranged in 2 whorls. Petals are more pronounced than sepals. Arrangement: Inner whorl comprises 3 petals: 2 lateral petals and labellum. 2 lateral petals: Overall shape: broadly ovate and weakly cupped. Apex: oval. Margin: entire and weakly undulate. Base: broadly ovate. Length: about 60 mm. Width: about 50 mm. Texture: Upper surface: smooth and satiny. Under surface: smooth and satiny. Color (when fully opened): upper and under surface: white (RHS NN155D).

Labellum.—Overall shape: 3-lobed with 2 prominent callosities at central junction of the lateral lobes and base of the midlobe. Lateral lobes of labellum fold upward about the column; the midlobe extends forward and is terminated by 2 filiform appendages at the apex. Lateral lobes of the labellum are ovate in shape while the midlobe is triangular with a bump and a rib on it. Margin: entire and weakly undulate. Apex: oval. Length: about 25 mm. Width (not flattened): about 24 mm. Texture: Upper & under surface: smooth and satiny. Color (when fully opened): Upper surface: the

main color is white (RHS NN155D). At the base of the lateral lobes some purple stripes (RHS 59B) and at the bottom edges yellow/green (RHS 1A), yellow (RHS 12A) and purple (RHS 183D). The mid lobe is white (RHS NN155D) with at the base yellow (RHS 1A/RHS 12A) and some purple (RHS 183D). Under surface: midlobe: main color is white (RHS NN155D). At the base yellow (RHS 12A/RHS 1A) and some purple (RHS 183D). Lateral lobes: main color is white (RHS NN155D). Bottom edges are yellow/green (RHS 1A/RHS 1B). At the base also some purple (RHS 59C). Cirrhi: long (about 28 mm). color: white (RHS NN155D) and yellow (12A). Pestle (Callosities): Length: about 6 mm. Width (not flattened): about 7 mm. Color: yellow (RHS 13B) with purple (RHS 59B) spots.

Sepals.—Arrangement: Outer whorl comprises 3 sepals. Overall shape: Elliptical and weakly cupped. Margin: entire and weakly undulate. Length: about 50 mm. Width: about 35 mm. Apex: oval/round; lateral are little more pointy. Texture: Upper & under surface: smooth and satiny. Color (when fully opened): Upper surface: white (RHS NN155D). On the lateral sepals there is a haze of green/yellow (RHS 1D) and red/purple (RHS 64B). Under surface: white (RHS NN155D) with yellow/green in the center (RHS 154C and RHS 154B) and red/purple (RHS 64B).

Pedicel.—Length: about 35 mm to 40 mm. Diameter: about 4 mm. Color: white (RHS NN155B) with a purple haze (RHS N78B) which runs into yellow/green (RHS 145C) and RHS 146C.

Reproductive organs:

Arrangement.—The stamens, style and stigmas are fused into a single, short structure called the column, possessing one terminal anther with pollen grains united into a pollinia, which are covered by an anther cap. The stigma is located under the column behind the pollinia. The ovary is inferior with three carpels present. The plant has not produced seed.

Column.—Length: about 8 mm. Diameter: about 6 mm. Color: white (RHS NN155D).

Pollinia.—Quantity: Two. Size: about 1 mm. Color: orange (RHS 26B).

Ovary.—Length: about 5 mm. Diameter: about 5 mm. Color: white (RHS NN155D).

Disease/pest resistance/susceptibility: No specific resistance or susceptibility observed.

Temperature tolerance: Tolerant to a low temperature of about 15° C. and to a high temperature about 30° C.

What is claimed is:

1. A new and distinct *Phalaenopsis* plant named 'Rubicon', as illustrated and described herein.

* * * * *

FIG. 1

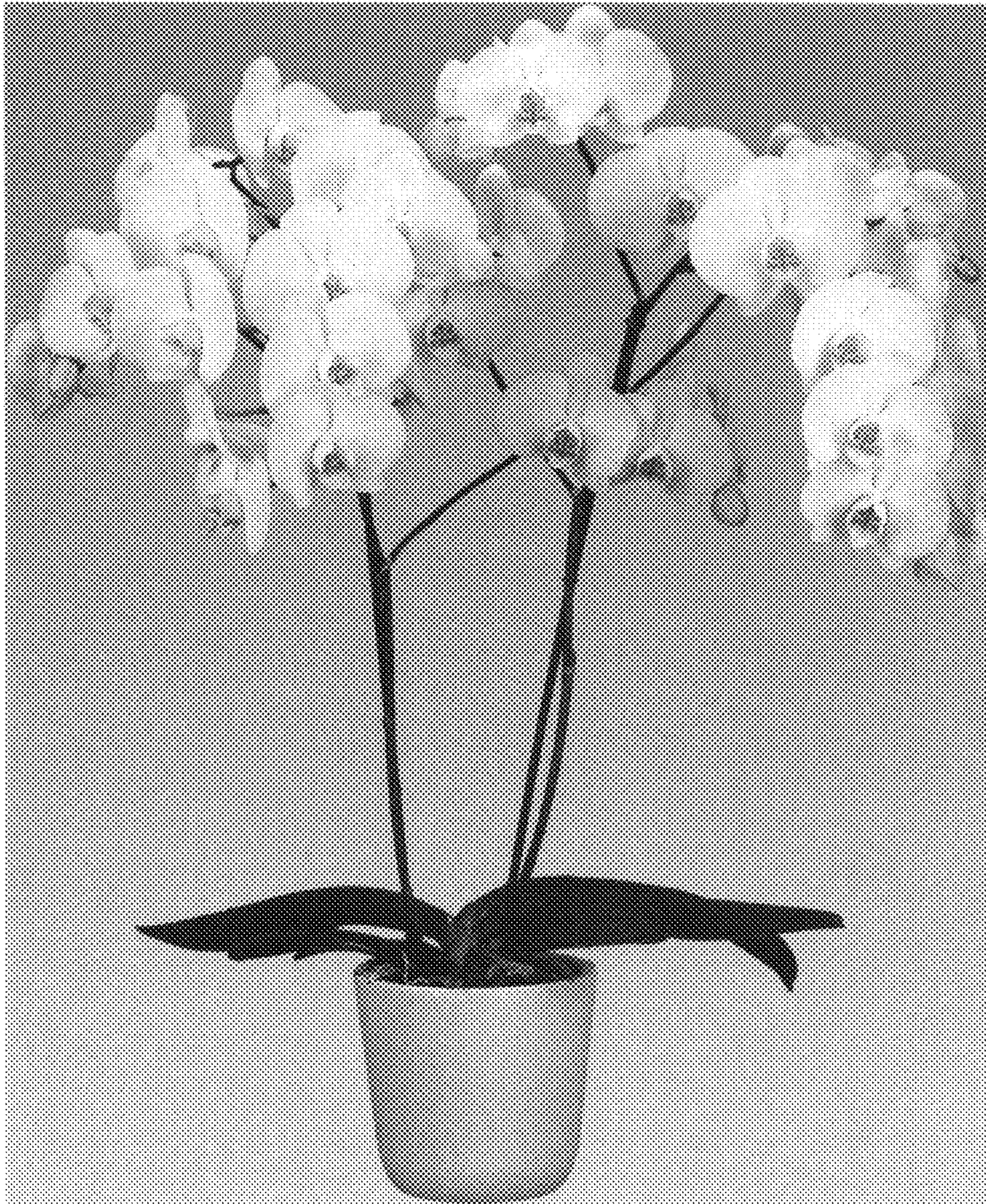


FIG. 2

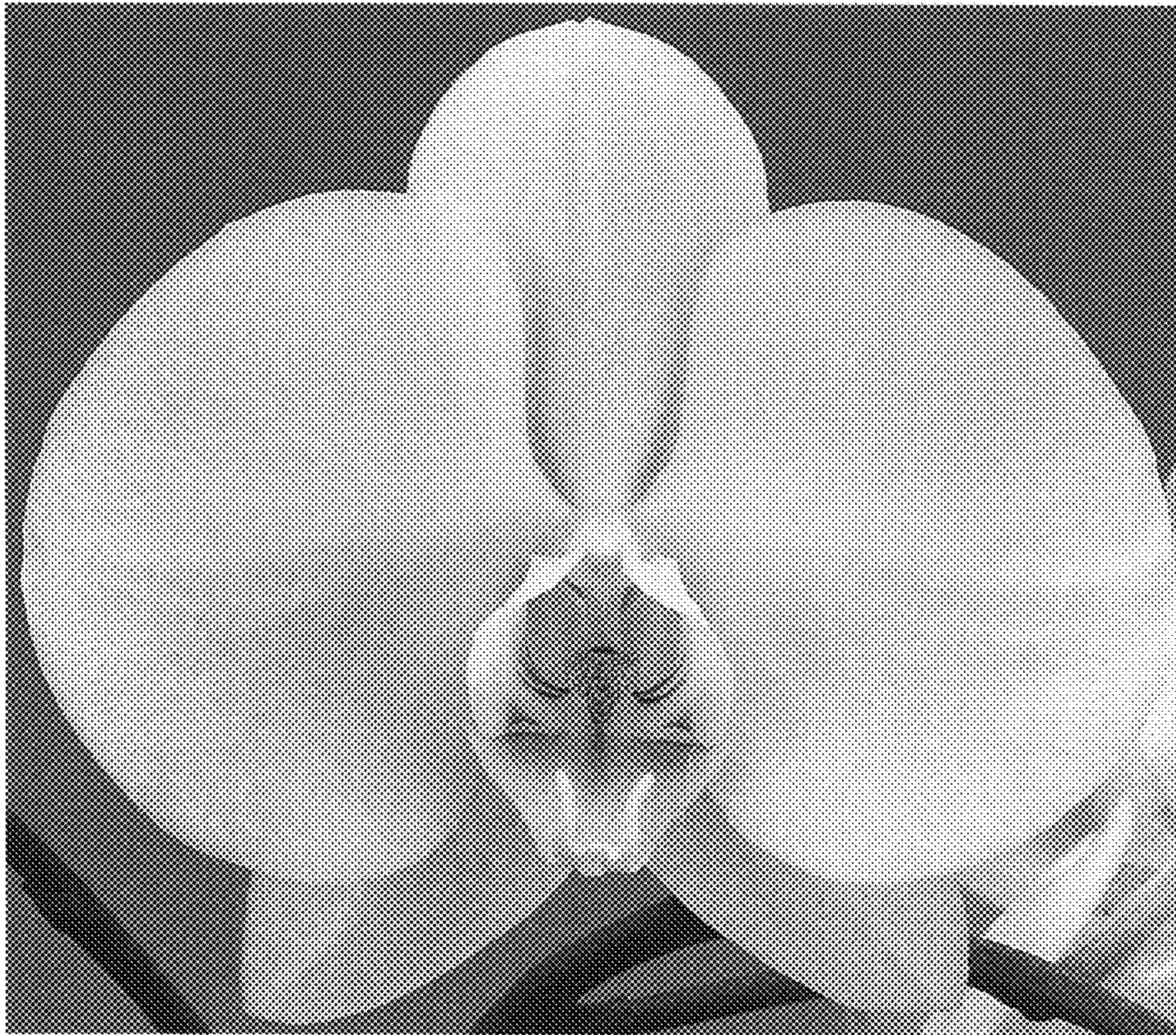


FIG. 3

