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PHALAENOPSIS ORCHID PLANT NAMED 'LIVELY'

Latin Name: *Phalaenopsis hybrida* Varietal Denomination: Lively

Applicant: Floricultura, Heemskerk (NL)

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Assignee: Floricultura, Heemskerk (NL)

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ABSTRACT (57)

A new and distinct *Phalaenopsis* plant named 'Lively' particularly characterized by flowers which are white with some yellow in the labellum; 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 hybrida.

Variety denomination: 'Lively'.

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 'Lively'.

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, 15 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. 20 lands.

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, 25 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* 'Lively' is a product of a controlled breeding program conducted by the inventor, 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* 'Lively' originated from a cross made by the inventor in 2000 in Strengweg, Heemskerk, The Netherlands. The female or seed parent is the *Phalaenopsis* cultivar designated 'Hawaiian Pearl', unpatented. The male or pollen parent is an unnamed, unpatented cultivar of Phalaenopsis amabilis. The new Phalaenopsis 'Lively' was discovered and selected by the inventor as a single flowering plant within the progeny of the stated cross in a controlled environment in 2008 in Strengweg, Heemskerk, The Nether-

Asexual reproduction of the new *Phalaenopsis* cultivar by tissue culture (mericloning) was first performed in November, 2008 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 'Lively', which in combination distinguish this *Phalaenopsis* as a new and distinct cultivar:

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

In comparison with the parental cultivars of 'Lively', the female parent 'Hawaiian Pearl' has white colored flowers and they are about 12 cm in size, the male parent (unnamed, unpatented cultivar of *Phalaenopsis amabilis*) has white colored flowers and they are about 7 cm in size, whereas the flowers of 'Lively' are white and are about 9 cm in size.

Presently, the commercial cultivars to which 'Lively' can be meaningfully compared are 'Late Frost' (U.S. Plant patent application Ser. No. 13/999,402) and 'Honeymoon' (U.S. Plant Pat. No. 26,292). The size of the petals and sepals differs and the size of the cirrhi differs between these three cultivars. Also the amount of yellow on the cirrhi differs. The midlobe of 'Lively' has a red/purple edge on the upper side and 'Honeymoon' has a purple haze on the midlobe, whereas on the midlobe of 'Late Frost' there is orange/red and purple/violet. The amount of yellow on the midlobe also differs.

BRIEF DESCRIPTION OF THE PHOTOGRAPHS

The accompanying photographs illustrate the overall appearance of the new *Phalaenopsis* 'Lively' 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 'Lively'.

- FIG. 1 shows a side view perspective of a typical flowering plant of 'Lively' in a 12 cm pot, at 16 months of age.
- FIG. 2 shows a close-up view of a typical flower of 'Lively'.
- FIG. 3 shows a close-up view of the typical leaves of 'Lively'.

DETAILED BOTANICAL DESCRIPTION

The new *Phalaenopsis* cultivar 'Lively' has not been observed under all possible environmental conditions. The phenotype of the new cultivar may vary with variations in 45 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 'Lively' as grown in a greenhouse in Strengweg, 50 Heemskerk, The Netherlands, under conditions which closely approximate those generally used in commercial practice. Initially, the ideal temperature to grow plants of 'Lively' is 27° C. during the day and at night. Then, during the flowering phase of 'Lively', the ideal growing temperature is 20-22° C. during the day and 18° C. at night. Light levels for growing 'Lively' 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 'Lively' 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 65 the 'Lively' plants described is 12 months after potting.

Classification:

Botanical.—Phalaenopsis hybrida.

Parentage:

Female or seed parent.—Phalaenopsis cultivar designated 'Hawaiian Pearl', unpatented.

Male or pollen parent.—Unnamed, unpatented cultivar of Phalaenopsis amabilis.

Propagation:

Type.—Tissue culture (mericloning).

Rooting habit and description.—Fleshy; approximately 3 mm-6 mm wide and greyed/green in color (RHS 195A and RHS 198C); 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 65 to 70 cm. Spread: about 40 to 65 cm.

Growth habit.—Standard; green leaves (RHS N137A) 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 1-3 racemes with flowers appear.

Foliage:

Quantity per plant.—About 5 to 10 leaves are produced before flowering.

Arrangement and attachment.—Alternate, clasping. Overall shape of leaf.—Oval, the tip is blunt and asymmetric.

Texture (upper & underside).—Smooth and leathery. Pubescence.—None.

Mature leaf length.—About 15 to 21 cm.

Mature leaf width.—About 5 to 10 cm.

Mature leaf thickness.—About 2 mm.

Mature leaf color.—Upper side: green (RHS N137A), edges are green (RHS 146A). Under side: green (RHS 146A).

Leaf base.—Acute.

Margin.—Entire.

Venation.—Pattern: parallel. Color of midvein: upper side: green (RHS N137A). Under side: green (RHS 138B).

Inflorescence description:

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

Raceme.—Quantity per plant: about 1 to 3. Number of flowers per raceme: about 10. Length: about 50 to 70 cm.

Peduncle.—Diameter: about 4 to 5 mm. Strength: strong. Aspect: upright. Texture: glabrous and smooth. Color: green (RHS 143A).

Buds.—Height (from base to tip): about 15 to 30 mm. Diameter (at midpoint): about 15 to 22 mm. Shape: egg-shaped/oval. Color: yellow/green (RHS 145A and RHS 150C).

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.), 1-3 racemes appear with flower buds and flowers. First flowers can be expected

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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*; see FIG. 2. Size (of 10 single bloom): Height: about 75 to 95 mm. Diameter: about 80 to 100 mm. Quantity and arrangement: three petals and three sepals that are trimerous and arranged in 2 overlapping whorls. Inner whorl of 3 petals is comprised of 2 lateral petals and a labellum. Petals are 15 more pronounced than sepals.

Petals.—2 lateral petals: Overall shape: broadly ovate and weakly cupped. Apex: oval/round. Margin: entire and weakly undulate. Base: broadly ovate. Length: about 60 mm. Width: about 45 mm. Texture: Upper 20 surface: smooth and satiny. Under surface: smooth and satiny. Color (when fully opened): upper and under side: white (RHS NN155C). Labellum: Overall shape: 3-lobed with 2 prominent callosities at central junction of the lateral lobes and base of the midlobe. 25 Lateral lobes of labellum fold upward about the column; the midlobe extends forward and is terminated by 2 long 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. 30 Margin: entire and weakly undulate. Apex: oval. Length midlobe: about 20 mm. Width midlobe (not flattened): about 22 mm. Length lateral lobe: about 16 mm. Width lateral lobe(not flattened): about 17 mm. Depth of tube created by lateral lobes of labellum: 35 about 17 mm. Texture: Upper and under surface: smooth and satiny. Color (when fully opened): Midlobe, upper side: white (RHS NN155C). At the base in the center and in the corners yellow (RHS 6C). From base upper edge is red/purple (RHS 71A). Also a little 40 RHS 71A in the center at the base. Under side: white (RHS NN155C). At the base, the corners are yellow (RHS 6C). Upper edge at the base is red/purple (RHS 71A). Lateral lobes, upper side: white (RHS) NN155C). From base red/purple stripes (RHS 71A). 45 Part of the lower edge is yellow (RHS 6C). Under side: white (RHS NN155C) with yellow on a part of the lower edge (RHS 6C). Cirrhi: long and curly

(about 25 mm). Color: white (RHS NN155C) which runs into yellow (RHS 6D). Pestle (Callosities): Length: about 5 mm. Width (not flattened): about 10 mm. Pubescence: None. Color: main color is white (RHS NN155C) with red/purple spots and stripes (RHS 71A). The front and top edges are yellow (RHS 3A).

Sepals.—Arrangement: Outer whorl comprises 3 sepals, one dorsal and two lateral sepals. Overall shape: elliptical and weakly cupped. Margin: entire and weakly undulate. Length: about 43 mm. Width: about 32 mm. Apex: oval and little pointy. Texture: Upper and under surface: smooth and satiny. Color (when fully opened): Upper side, dorsal and lateral: main color is white (RHS NN155C). Some have a light yellow/green haze (RHS 151C). Lateral sepals have a red/purple mark close to the base (RHS 71C). Under side, dorsal and lateral: main color is white (RHS NN155C) with a yellow/green haze (RHS 151C).

Pedicel.—Length: about 35 mm. Diameter: about 3 mm. Texture: glabrous and smooth. Color: green/white (RHS 157C) with a red/purple haze (RHS 71A). Closer to the raceme it turns green/yellow (RHS 144A).

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 or fruit.

Column.—Length: about 8 mm. Diameter: about 5 mm. Color: white (RHS NN155C).

Pollinia.—Quantity: two. Diameter: about 1 mm. Color: yellow/orange (RHS 22A).

Ovary.—Length: about 2 mm. Diameter: about 3 mm. Color: white (RHS NN155C).

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 'Lively', as illustrated and described herein.

* * * *

FIG. 1

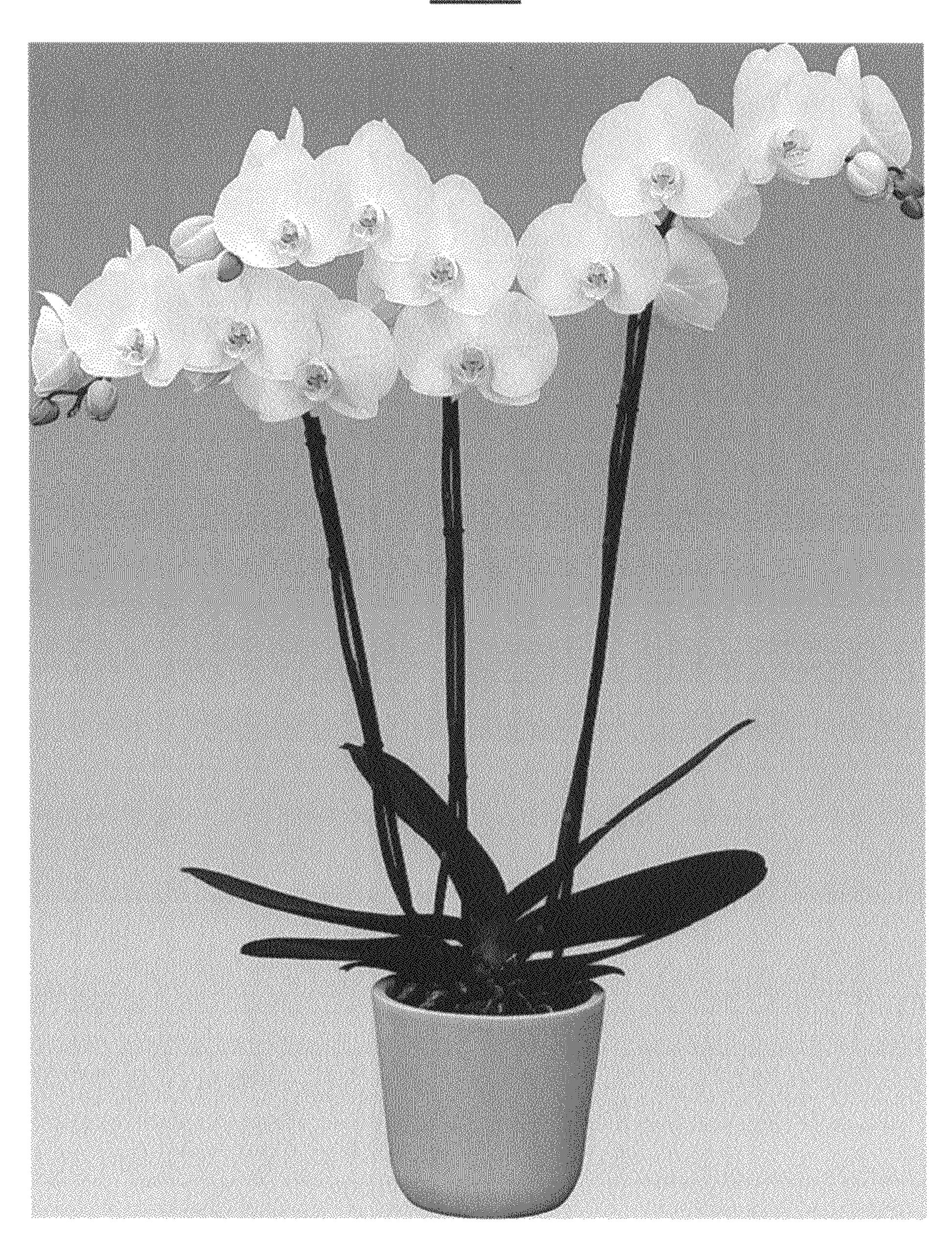


FIG. 2

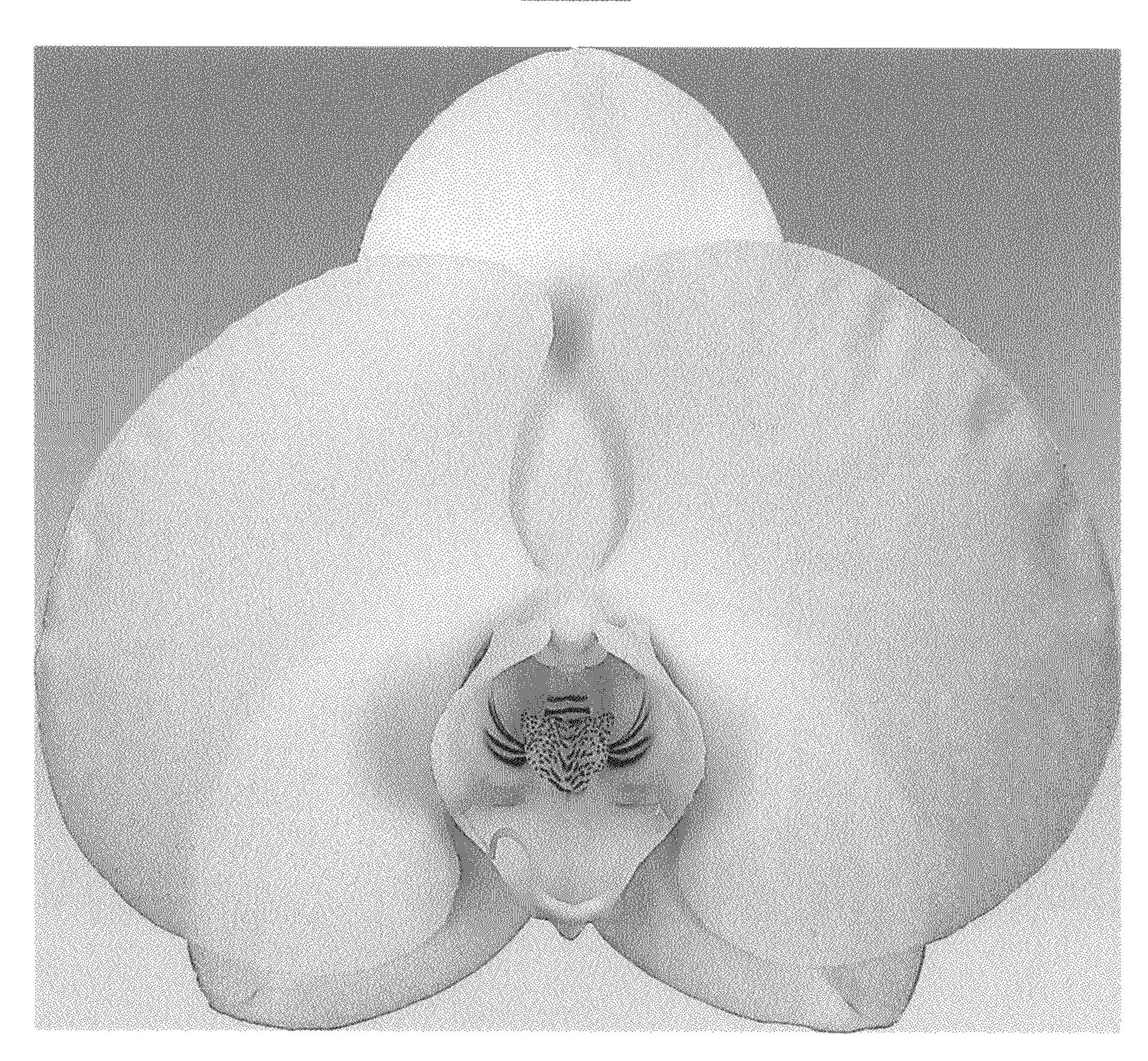


FIG. 3

