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Schoone

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

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

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(57) **ABSTRACT**

A new and distinct *Phalaenopsis* plant named 'Snowdrop' particularly characterized by flowers which are white, with some yellow, white and orange/brown 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

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Latin name of the genus and species of the plant claimed: *Phalaenopsis* hybrid.

Variety denomination: 'Snowdrop'.

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 'Snowdrop'.

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.

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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* 'Snowdrop' 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* 'Snowdrop' originated from a cross made by the inventor in 1999 in Strengweg, Heemskerk, The Netherlands. The female or seed parent is the *Phalaenopsis* cultivar designated 'Musashino', unpatented. The male or pollen parent is the *Phalaenopsis* cultivar designated 'Snow Parade', unpatented. The new *Phalaenopsis* 'Snowdrop' 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 July, 2007 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 'Snowdrop', which in combination distinguish this *Phalaenopsis* as a new and distinct cultivar:

1. flowers which are white, with some yellow, white and orange/brown 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 'Snowdrop', the female parent 'Musashino' has slightly triangular petals and the size of the flowers are about 11 cm. The male parent 'Snow Parade' has broadly ovate petals and the flowers are about 9 cm in size, whereas the petals of 'Snowdrop' are broadly ovate and the flowers are about 10 cm in size.

Presently, the most commercially similar cultivars to 'Snowdrop' are the parental cultivars, to which a comparison is provided above.

BRIEF DESCRIPTION OF THE PHOTOGRAPHS

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

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

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

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

DETAILED BOTANICAL DESCRIPTION

The new *Phalaenopsis* cultivar 'Snowdrop' 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 'Snowdrop' 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 'Snowdrop' is 27° C. during the day and at night. Then, during the flowering phase of 'Snowdrop', the ideal growing temperature is 20-22° C. during the day and 18° C. at night. Light levels for growing 'Snowdrop' 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 'Snowdrop' 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 'Snowdrop' plants described is 12 months after potting.

Classification:

Botanical.—*Phalaenopsis* hybrid.

Parentage:

Female or seed parent.—*Phalaenopsis* cultivar designated 'Musashino', unpatented.

Male or pollen parent.—*Phalaenopsis* cultivar designated 'Snow Parade', unpatented.

Propagation:

Type.—Tissue culture.

Rooting habit and description.—Fleshy; approximately 4 mm-9 mm wide and green in color (RHS NN155D/138D); 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 70 to 85 cm. Spread: about 50 to 65 cm.

Growth habit.—Large; 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 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.—Large leaves, oval, the tip is blunt and asymmetric.

Texture (*both surfaces*).—Smooth and leathery.

Pubescence.—None.

Mature leaf length.—About 15 to 25 cm.

Mature leaf width.—About 7 to 11 cm.

Mature leaf thickness.—About 1 mm.

Mature leaf color.—Upper side: RHS N137A. Lower side: RHS 146A.

Base.—Acute.

Margin.—Entire.

Venation.—Pattern: parallel. Color of midvein: upper side: green (RHS N137A). lower side: green (RHS 143A).

Raceme:

Quantity per plant.—About 1 to 2.

Number of flowers per raceme.—About 8 to 16.

Length.—About 70 to 90 cm.

Diameter.—About 6 to 7 mm.

Strength.—Strong.

Aspect.—Upright.

Texture.—Glabrous and smooth.

Color.—Dark green (RHS N189A/146A).

Internode.—Length: about 27 to 45 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 30 to 40 mm. Diameter (at midpoint): about 20 to 30 mm. Shape: oval/egg-shaped. Color: green (RHS 144D).

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 (of single bloom): Height: about 90 to 100 mm. Diameter: about 95 to 105 mm. Depth of tube: about 15 mm.

Quantity and arrangement.—Three petals and three sepals that are trimerous, overlapping and arranged in 2 whorls. Petals are more pronounced than sepals.

Petals.—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 55 to 70 mm. Width: about 40 to 50 mm. Texture: Upper surface: smooth and satiny. Under surface: smooth and satiny. Color (when fully opened): Main color is white (RHS NN155D). At the base some RHS 157D. The lower side is the same as the upper side. Only at the lateral petals there is some orange/brown (RHS 173B) and some yellow (RHS 3D) with on the lower edge a small brown mark (RHS 173A). 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. Length: about 18 to 25 mm. Width (not flattened): about 18 to 25 mm. Texture: Upper and lower surface: smooth and satiny. Color (when fully opened): Main color midlobe is white (RHS NN155D). On the top and in the center is orange/brown (RHS 173D) with below some yellow (RHS 154B). Main color lateral lobes is white (RHS NN155D), with orange/brown stripes (RHS 173C) and purple (RHS 71A). Lower side midlobe is RHS NN155D with on the tops RHS 151C and RHS 173D. In the center a line (RHS 141D). Lower side lateral lobes is white (RHS NN155D) with yellow (RHS 3A) and RHS 173A. Cirrhi: long. Color: white (RHS NN155D) and after that yellow (RHS 6C). Pestle (callosities): large. Length: about 5 mm. Width: about 5 mm. Height: about 7 mm. Color: Base is white (RHS NN155D). Sides and top are yellow (RHS 14D) with orange/brown stripes and spots (RHS 173D).

Sepals.—Arrangement: Outer whorl comprises 3 sepals. Overall shape: Elliptical and weakly cupped. Margin: entire and weakly undulate. Length: about 40 to 55 mm. Width: about 35 to 40 mm. Apex: oval. Texture: Upper surface: smooth and satiny. Color (when fully opened): White (RHS NN155D). With lateral sepals at the base some yellow/green (RHS 154D). Lower side is the same as upper side.

Pedicel.—Length: about 25 to 40 mm. Diameter: about 4 mm. Texture: glabrous and smooth. Color: Green at the base (RHS 144D), in the center green (RHS 145B), near the flower white (RHS NN155C) with some purple (RHS 70B).

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 11 mm. Diameter: about 7 mm. Color: white (RHS NN155D).

Pollinia.—Quantity: Two. Size: about 1 mm. Color: orange (RHS 24C).

Ovary.—Length: about 4 mm. Diameter: about 6 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 'Snowdrop', as illustrated and described herein.

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FIG. 1

FIG. 2

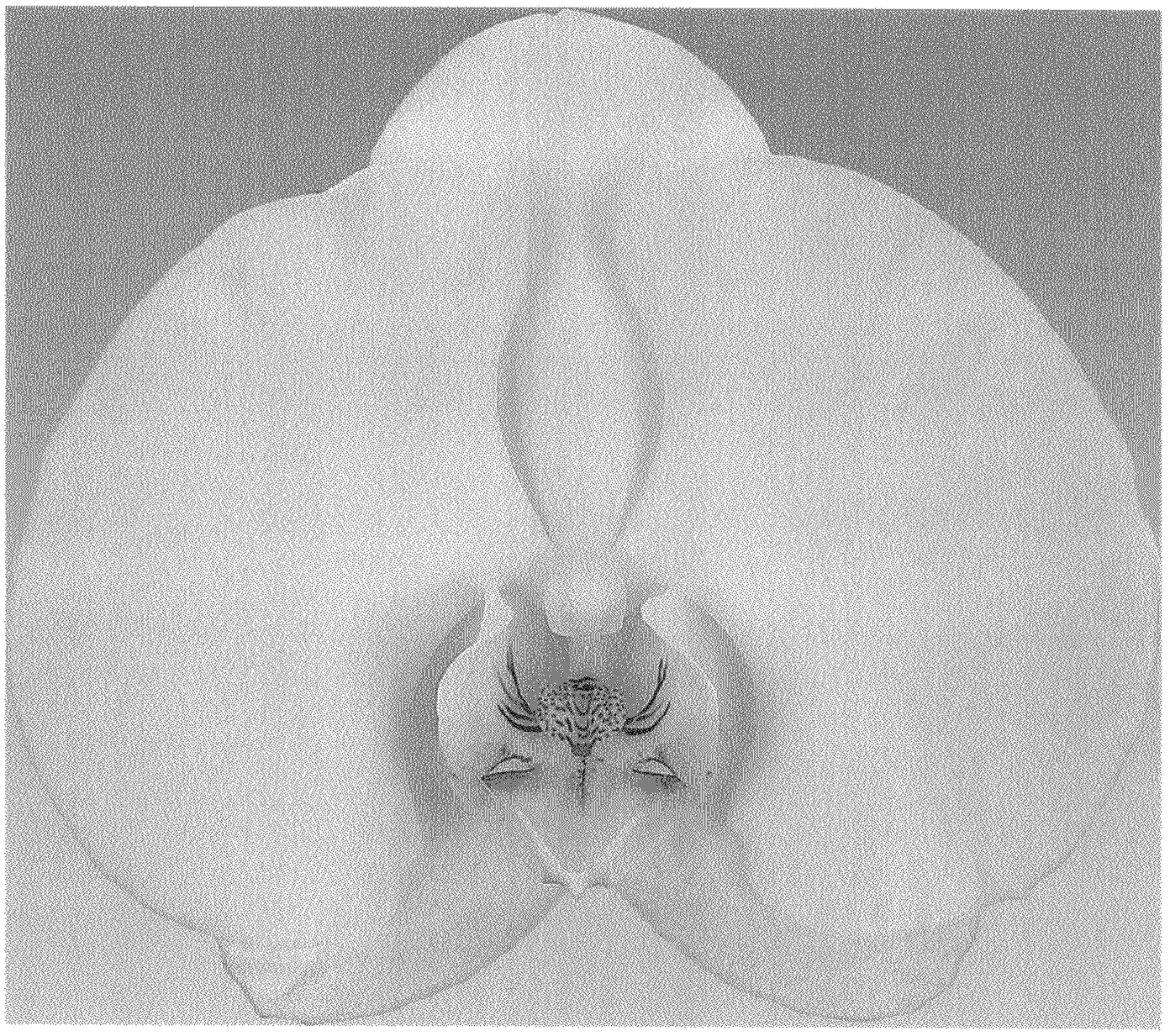

FIG. 3