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Van Rosmalen

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(54) **PHALAEOPSIS ORCHID PLANT NAMED**
'PHALCARDOK'

(50) Latin Name: *Phalaenopsis* Blume
Varietal Denomination: **PHALCARDOK**

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

(72) Inventor: **Nicolaas Arnoldus Maria Van**
Rosmalen, Velp (NL)

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

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Primary Examiner — Annette Para

(74) *Attorney, Agent, or Firm* — Jondle & Associates, P.C.

(57) **ABSTRACT**

A new and distinct variety of *Phalaenopsis* plant named
'PHALCARDOK', particularly characterized by white flow-
ers with green-white lip, 1 to 2 peduncles, a long and sturdy
inflorescence, a narrow obovate leaf shape, and propagated
by tissue culture is disclosed.

3 Drawing Sheets

1

Genus and species: *Phalaenopsis* Blume.
Variety denomination: 'PHALCARDOK'.

BACKGROUND OF THE NEW PLANT

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

Phalaenopsis comprises a genus of about 60 species of
herbaceous perennials many of which, or the hybrids thereof,
are suitable for cultivar 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 12 to 20 cm to over 60 cm.
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 petals, 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 arise from the lower bracts of the inflores-
cence. The resulting plants are detached from the mother
plants and may be planted in a suitable substrate.

The new *Phalaenopsis* 'PHALCARDOK' is particularly
characterized by its attractive and unique white flowers, eco-

2

nomical propagation by tissue culture, rapid growth, and a
plant dimension suitable for packaging and shipping to the
market.

'PHALCARDOK' is a product of a planned breeding pro-
gram conducted in Bleiswijk, The Netherlands.

The new *Phalaenopsis* 'PHALCARDOK' was originated
from a cross made in July 2001 in Bleiswijk, The Nether-
lands. The female parent is a white *Phalaenopsis* pot plant
named '01-0454' (unpatented) and the male parent is white
Phalaenopsis pot plant named '6134-03' (unpatented). A
single plant was selected in December 2005 and has been
asexually reproduced repeatedly by tissue culture in
Bleiswijk, The Netherlands over a 6-year period. The new
variety has been found to retain its distinctive characteristics
through successive asexual propagations.

Asexual reproduction of 'PHALCARDOK' by tissue cul-
ture was first performed in March 2009 in Bleiswijk, The
Netherlands and has demonstrated that the new cultivar is
firmly fixed and retained through successive generations of
asexual reproduction.

Plant Breeder's Rights for this variety have been applied
for in Europe on Apr. 25, 2012. 'PHALCARDOK' has not
been made publicly available or sold anywhere in the world
more than one year prior to the filing date of this application.

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.

- 1) White flower with green-white lip;
- 2) 1 to 2 peduncles;
- 3) Inflorescence is long and sturdy;
- 4) The shape of the leaf is narrow obovate; and
- 5) Plants are propagated by tissue culture.

DESCRIPTION OF THE PHOTOGRAPHS

This new *Phalaenopsis* plant is illustrated by the accom-
panying 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 are of a 50-week old plant grown in a greenhouse in Bleiswijk, The Netherlands in February 2013.

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

FIG. 2 shows a close-up of the flower of 'PHALCARDOK'.

FIG. 3 shows a close-up of the leaves of 'PHALCARDOK'.

DESCRIPTION OF THE NEW VARIETY

The following detailed description sets forth the distinctive characteristics of 'PHALCARDOK'. The data which define these characteristics were collected from asexual reproductions carried out in Bleiswijk, The Netherlands. The plant history was taken on 50-week old plants which were planted from tissue culture in 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. Observations were made in February 2013. Color readings were taken under 4000 till 6000 lux natural light in the greenhouse. Color references are primarily to The R.H.S. Colour Chart of The Royal Horticultural Society of London (R.H.S.) (2001).

DETAILED BOTANICAL DESCRIPTION

Classification:

Family.—Orchidaceae.

Botanical.—*Phalaenopsis* Blume.

Common name.—*Phalaenopsis*.

Variety name.—'PHALCARDOK'.

Parentage:

Female parent.—*Phalaenopsis* cultivar '01-0454' (unpatented).

Male parent.—*Phalaenopsis* cultivar '6134-03' (unpatented).

Propagation:

Type.—Tissue culture.

Plant:

Crop time (time to produce a finished flowering plant).—48 to 50 weeks for a 12 cm pot.

Growth habit of inflorescence.—Standard type, green leaves and normal raceme.

Height (measured including pot and including inflorescence).—65 cm to 70 cm.

Width (measured from leaf tips).—40 cm to 45 cm.

Vigor.—Moderate to strong.

Roots:

Root description.—Grey-green-colored roots with light branching lateral roots having grey-green-colored root tips.

Leaves:

Mature leaves.—Quantity per plant: 6 to 7 leaves are produced before flowering. Length (fully expanded): 20 cm to 22 cm. Width: 7 cm to 8 cm. Shape: narrow obovate. Apex: mucronate, asymmetric. Base: cuneate. Leaf blade angle with the petiole: Between 55 degrees and 65 degrees. Leaf margin: entire. Color: Upper surface: RHS 137 B. Lower surface: RHS 138 B. Texture: smooth. Thickness: 2 mm. Venation: Pattern: parallel. Color of the midvein: Upper surface: RHS 137 A. Lower surface: RHS 139 C.

Peduncle:

Quantity per plant.—1 to 2.

Number of flowers per peduncle.—10 to 18.

Length.—55 cm.

Diameter.—About 0.7 cm.

Strength.—Strong.

Aspect.—Upright.

Texture.—Smooth.

Color.—Brown (RHS 200 A).

Internode length.—60 mm to 90 mm.

Inflorescence description:

Appearance.—Upright to slightly pendant, raceme inflorescence.

Inflorescence size.—Height (from base to tip): 160 mm to 190 mm. Diameter: 220 mm to 240 mm.

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

Flower.—Height: 90 mm to 100 mm. Diameter: 100 mm to 110 mm. Depth of lip: 27 mm to 29 mm.

Flower longevity.—On the plant: 10 to 14 weeks.

Fragrance.—Absent.

Petals.—Arrangement: open. Shape: semi-circular.

Apex: mucronate and symmetric. Margin: entire.

Length: 61 mm to 63 mm. Width: 51 mm to 53 mm.

Color (when fully opened): Main color: white (RHS 155 C). At the base: white (RHS 155 C).

Dorsal sepal.—Shape: elliptic. Length: 52 mm to 54 mm. Width: 34 mm to 36 mm. Color (when fully opened): Main color: white (RHS 155 C). At the base: white (RHS 155 C).

Lateral sepals.—Shape: ovate. Length: 54 mm to 56 mm. Width: 31 mm to 33 mm. Color (when fully opened): Main color: white (RHS 155 C). At the base: white with a touch of green (RHS 155 C/149 D).

Labellum (lip).—Margin: entire and a bit undulate. Length: 26 mm to 28 mm. Width: 26 mm to 28 mm (measured at apical lobe).

Lateral lobe.—Shape: type V. Color: white (RHS 155 C) with green (RHS 151 A) shade and red (RHS 46 A) stripes.

Apical lobe.—Shape: obdeltoid. Color: white (RHS 155 C) with green (RHS 151 A) shade and red (RHS 46 A) shade.

Callus.—Color: orange with red dots (RHS 168 C).

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 pollinia, which are covered by an anther cap. The stigma as located under the column behind the pollinia. The ovary is inferior with three carpels present.

Column.—Length: 10 mm to 11 mm. Diameter: 6 mm to 7 mm. Color: white (RHS 155 C).

Pollinia.—Quantity: 2. Size: 1 mm to 1.1 mm. Color: orange (RHS 26 A).

Ovary.—Length: 7 mm to 9 mm (cutted open). Diameter: 5 mm to 6 mm.

Pedical.—Length: 40 mm to 45 mm. Diameter: 3 mm to 4 mm.

Disease, pest, and stress resistance: No specific resistance or susceptibility observed.

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

COMPARISON WITH PARENTAL VARIETIES

'PHALCARDOK' differs from the female parent '01-0454' (unpatented) in that 'PHALCARDOK' has a plant height of 65 cm to 70 cm and a flower diameter of 100 mm to 110 mm, whereas '01-0454' has a plant height of 50 cm and a flower diameter of 75 mm.

'PHALCARDOK' differs from the male parent '6134-03' (unpatented) in that 'PAHLCARDOK' has a plant height of 65 cm to 70 cm and a flower diameter of 100 mm to 110 mm, whereas '6134-03' has a plant height of 95 cm and a flower diameter of 115 mm.

Presently there is no commercial cultivar to which 'PHALCARDOK' can be meaningfully compared.

I claim:

1. A new and distinct variety of *Phalaenopsis* plant named 'PHALCARDOK' as shown and described herein.

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FIG. 1

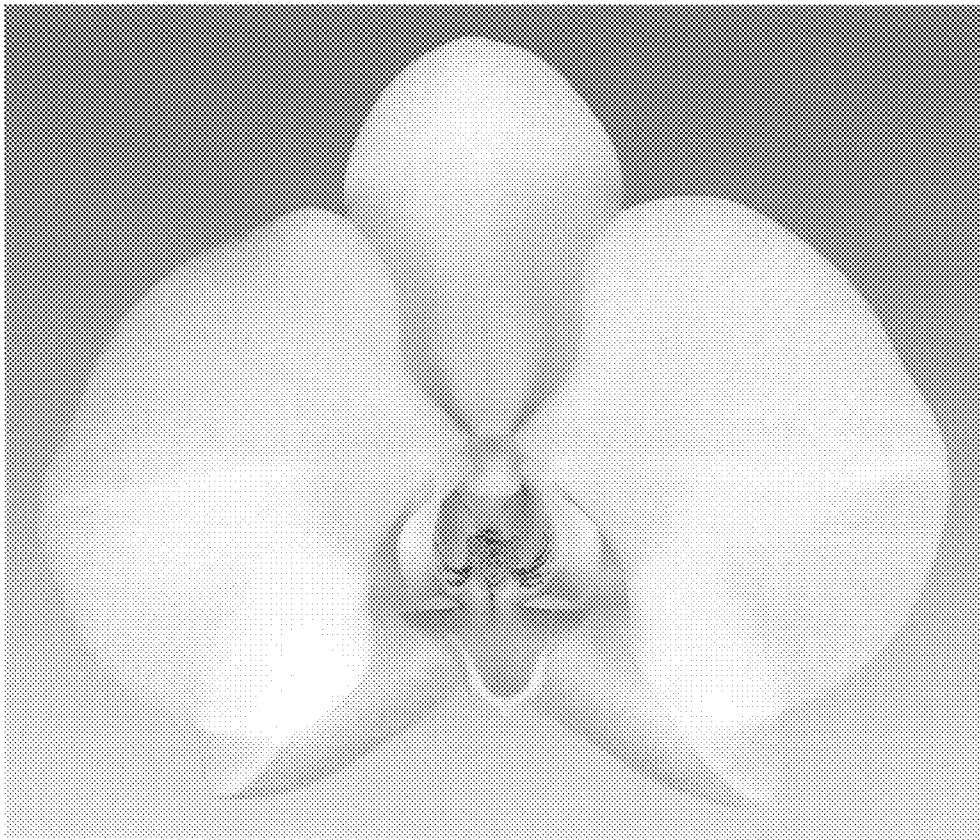


FIG. 2

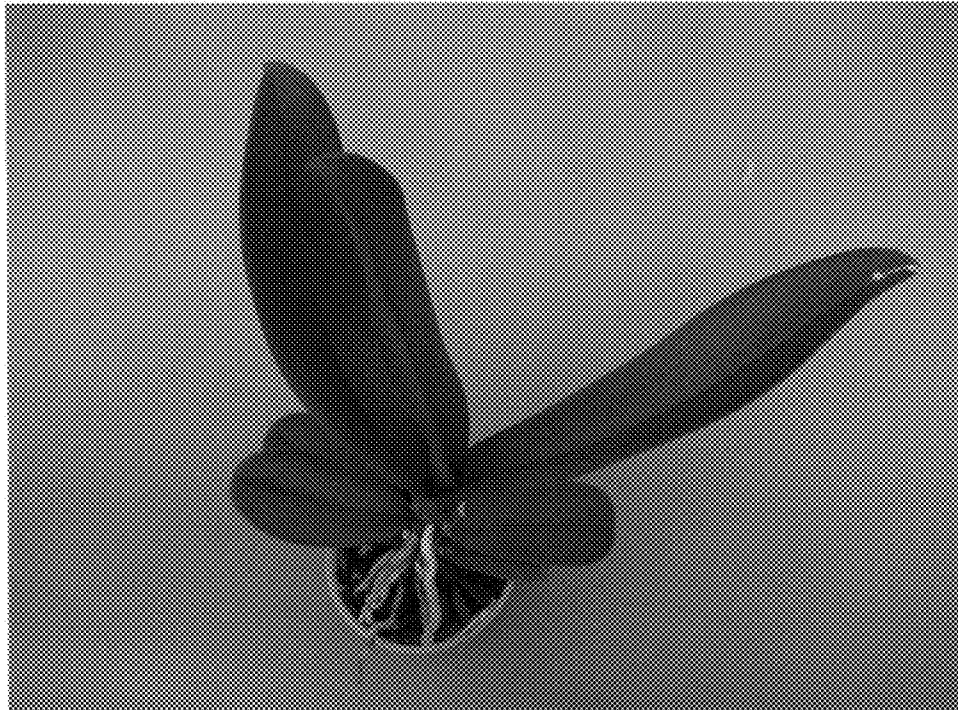


FIG. 3