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van den Haak

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(54) ***PHLOX* PLANT NAMED 'APPOTWPU'**

(50) Latin Name: ***Phlox paniculata***
Varietal Denomination: **Appotwpu**

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(57) **ABSTRACT**

A new and distinct cultivar of *Phlox* plant named 'Appotwpu', characterized by its broadly upright and relatively compact plant habit; freely flowering habit, numerous small bright purple-colored flowers; long flowering period; and good garden performance.

2 Drawing Sheets

Botanical designation: *Phlox paniculata.*
Cultivar denomination: 'APPOTWPU'.

BACKGROUND OF THE INVENTION

The present invention relates to a new and distinct cultivar of *Phlox* plant, botanically known as *Phlox paniculata* and hereinafter referred to by the name 'Appotwpu'.

The new *Phlox* plant is a product of a planned breeding program conducted by the Inventor in Andijk and Hazerswoude-Dorp, The Netherlands. The objective of the breeding program was to create new compact and vigorous *Phlox* plants with numerous small flowers.

The new *Phlox* plant originated from a cross-pollination in August, 2011 in Andijk, The Netherlands, of a proprietary selection of *Phlox paniculata* identified as code number 9044-01, not patented, as the female, or seed, parent, with *Phlox paniculata* 'Appofamcer', disclosed in a U.S. Plant patent application Ser. No. 14/999,217, as the male, or pollen, parent. The new *Phlox* plant was discovered and selected by the Inventor as a single flowering plant from within the progeny of the stated cross-pollination in a controlled environment in Hazerswoude-Dorp, The Netherlands in August, 2012.

Asexual reproduction of the new *Phlox* plant by terminal cuttings in a controlled greenhouse environment in Andijk, The Netherlands since 2013 has shown that the unique features of this new *Phlox* plant are stable and reproduced true to type in successive generations.

SUMMARY OF THE INVENTION

Plants of the new *Phlox* have not been observed under all possible combinations of environmental conditions and cultural practices. The phenotype may vary somewhat with variations in environmental conditions such as temperature and light intensity without, however, any variance in genotype.

The following traits have been repeatedly observed and are determined to be the unique characteristics of 'Appotwpu'. These characteristics in combination distinguish 'Appotwpu' as a new and distinct *Phlox* plant:

1. Broadly upright and relatively compact plant habit.
2. Freely flowering habit, numerous small bright purple-colored flowers.
3. Long flowering period.
4. Good garden performance.

Plants of the new *Phlox* and the female parent selection differ primarily in the following characteristics:

1. Plants of the new *Phlox* are not as vigorous as plants of the female parent selection.
2. Plants of the new *Phlox* have larger flowers than plants of the female parent selection.
3. Plants of the new *Phlox* and the female parent selection differ in flower color as plants of the female parent selection have soft purple-colored flowers.

Plants of the new *Phlox* and the male parent, 'Appofamcer', differ primarily in the following characteristics:

1. Plants of the new *Phlox* have smaller flowers than plants of 'Appofamcer'.
2. Plants of the new *Phlox* and 'Appofamcer' differ in flower color as plants of 'Appofamcer' have red purple-colored flowers.

Plants of the new *Phlox* can be compared to plants of *Phlox paniculata* 'Purple Kiss', disclosed in U.S. Plant Pat. No. 19,514. In side-by-side comparisons, plants of the new *Phlox* and 'Purple Kiss' differ in the following characteristics:

1. Plants of the new *Phlox* have smaller flowers than plants of 'Purple Kiss'.
2. Plants of the new *Phlox* and 'Purple Kiss' differ in flower color as plants of 'Purple Kiss' have deep purple-colored flowers with white-colored centers.

BRIEF DESCRIPTION OF THE PHOTOGRAPHS

The accompanying photographs illustrate the overall appearance of the new *Phlox* plant showing the colors as true

as it is reasonably possible to obtain in 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 colors of the new *Phlox* plant.

The photograph on the first sheet is a side perspective view of a typical flowering plant of 'Appotwpu' grown in a container.

The photographs on the second sheet are close-up views of typical inflorescences (upper photograph) and typical leaves (lower photograph) of 'Appotwpu'.

DETAILED BOTANICAL DESCRIPTION

The aforementioned photographs and following observations and measurements describe plants grown during the summer in 15-cm containers in an outdoor nursery in Mijdrecht, The Netherlands and under cultural practices typically used in commercial *Phlox* production. During the production of the plants, day temperatures ranged from 10° C. to 25° C. and night temperatures ranged from 4° C. to 15° C. Plants were pinched five weeks after planting and were 19 weeks old when the photographs and description were taken. In the following description, color references are made to The Royal Horticultural Society Colour Chart, 2007 Edition, except where general terms of ordinary dictionary significance are used.

Botanical classification: *Phlox paniculata* 'Appotwpu'.

Parentage:

Female, or seed, parent.—Proprietary selection of *Phlox paniculata* identified as code number 9044-01, not patented.

Male, or pollen, parent.—*Phlox paniculata* 'Appofamcer', disclosed in a U.S. Plant Patent application filed concurrently.

Propagation:

Type.—By terminal cuttings.

Time to initiate roots, summer.—About 12 days at temperatures about 20° C.

Time to initiate roots, winter.—About 16 days at temperatures about 20° C.

Time to produce a rooted young plant, summer.—About 36 days at temperatures about 18° C.

Time to produce a rooted young plant, winter.—About 42 days at temperatures about 18° C.

Root description.—Medium in thickness, fleshy; typically white in color, actual color of the roots is dependent on substrate composition, water quality, fertilizer type and formulation, substrate temperature and physiological age of roots.

Rooting habit.—Freely branching; dense.

Plant description:

Plant and growth habit.—Herbaceous perennial; broadly upright and relatively compact plant habit; overall shape, obovate; low vigor to moderately vigorous growth habit.

Plant height.—About 40.7 cm.

Plant width (spread).—About 34.8 cm.

Lateral branches.—Quantity: About ten primary lateral branches per plant. Length: About 24.6 cm. Diameter: About 4 mm. Internode length: About 3.5 cm. Strength: Strong. Aspect: Upright to about 25° from vertical. Texture and luster: Smooth, glabrous; slightly glossy. Color: Close to 144A to 144B.

Leaf description:

Arrangement.—Opposite, simple.

Length.—About 9.8 cm.

Width.—About 3.3 cm.

Shape.—Narrowly ovate to elliptic; slightly to moderately carinate.

Apex.—Long apiculate to acute.

Base.—Truncate.

Margin.—Entire; very finely serrate, inconspicious.

Texture and luster, upper and lower surfaces.—Glabrous; slightly rugose; slightly glossy.

Venation pattern.—Pinnate.

Color.—Developing leaves, upper surface: Close to 137A to 137B. Developing leaves, lower surface: Close to between 138A and 138B. Fully expanded leaves, upper surface: Close to N137D; venation, close to 144B. Fully expanded leaves, lower surface: Close to 147B; venation, close to 145B.

Petioles.—Length: About 3.5 mm. Diameter: About 3 mm by 3 mm. Texture, upper and lower surfaces: Smooth, glabrous. Color, upper surface: Close to 145A; towards the margins, moderately tinged with close to 187A.

Flower description:

Flower type and flowering habit.—Single rotate and salverform flowers arranged in compound terminal panicles; flowers face upright to outwardly; panicles roughly hemispherical in shape; freely flowering habit with about 180 flowers developing per inflorescence and about 1,800 flowers developing per plant during the flowering season.

Fragrance.—Moderately fragrant; sweet, pleasant.

Natural flowering season.—Plants begin flowering about nine months after planting; long flowering period, plants flower continuously from July through September in The Netherlands.

Flower longevity.—Flowers last about ten days on the plant; flowers not persistent.

Flower buds.—Height: About 1.5 cm. Diameter: About 4.5 mm. Shape: Narrowly elliptic. Color: Close to 86A; developing calyx, close to 148B to 148C heavily flushed and tinged with close to N186D.

Inflorescence height.—About 11.2 cm.

Inflorescence diameter.—About 11.7 cm.

Flower diameter.—About 2.2 cm.

Flower depth.—About 1.4 cm.

Petals.—Quantity per flower: Typically five in a single whorl; petals fused at the base into a narrow tube; free parts separate to imbricate. Length: Overall, about 1.9 cm; lower fused portion, about 9 mm. Lobe width: About 9 mm. Shape: Free part, spatulate. Apex: Obtuse to slightly uneven. Margin: Entire. Texture and luster, upper surface: Smooth, glabrous; velvety; matte. Texture and luster, lower surface: Smooth, glabrous; slightly glossy. Color: When opening, upper surface: Close to N74A; towards the throat, close to 76C to 76D; throat, close to N79D. When opening, lower surface: Close to N81B to N81C; towards the tube, close to NN155D; tube, close to N79D. Fully opened, upper surface: Slightly darker and more intense than N74A; throat, close to N79C; color does not change with development. Fully opened, lower surface: Close to N81B to N81C; tube, close to N79C.

Sepals.—Quantity per flower: Typically five in a single whorl, fused towards the base; calyx, campanulate.

Length: About 9 mm. Width: About 1 mm. Shape: Lanceolate. Apex: Narrowly apiculate. Margin: Entire. Texture and luster, upper and lower surfaces: Smooth, glabrous; slightly glossy. Color: When opening and fully opened, upper surface: Close to 148C. When opening and fully opened, lower surface: Close to 148B to 148C heavily flushed and tinged with close to N186D.

Peduncles.—Length, primary peduncles: About 9.1 cm. Diameter, primary peduncles: About 3 mm. Length, secondary peduncles: About 4.6 cm. Diameter, secondary peduncles: About 1.25 mm. Aspect, primary peduncles: Erect. Aspect, secondary peduncles: About 40° from vertical. Strength: Strong. Texture: Smooth, glabrous. Color: Close to 144B.

Pedicels.—Length: About 4 mm. Diameter: About 1 mm. Angle: About 40° from the peduncle axis. Strength: Strong. Texture: Smooth, glabrous. Color: Close to 144B.

Reproductive organs.—Stamens: Quantity per flower: Typically five; filaments fused with petals. Filament length: About 0.5 mm. Filament color: Close to N77B. Anther length: About 1 mm. Anther shape: Oblong; basifixed. Anther color: Close to 165C. Pollen amount: Scarce. Pollen color: Close to 11D. Pistils: Quantity per flower: One. Pistil length: About 9 mm. Stigma shape: Cleft, three-parted. Stigma color: Close to 150D. Style length: About 8 mm. Style color: Close to N77C. Ovary color: Close to 143B.

Seeds and fruits.—Seed and fruit development have not been observed on plants of the new *Phlox*.

Garden performance: Plants of the new *Phlox* have been observed to have good garden performance and tolerate rain, wind, high temperatures about 35° C. and to be winter hardy to USDA Hardiness Zone 6.

Pathogen & pest resistance: Plants of the new *Phlox* have been not been observed to be resistant to pathogens and pests common to *Phlox* plants.

It is claimed:

1. A new and distinct *Phlox* plant named 'Appotwpu' as illustrated and described.

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