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van Gaalen

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(54) **DELPHINIUM PLANT NAMED ‘DELGA STAM’**

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patent is extended or adjusted under 35
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(57) **ABSTRACT**

A new and distinct cultivar of Delphinium plant named
‘Delga Stam’, as described and illustrated, and particularly
characterized by green leaf color, violet blue/greyed-green
flower color, upward facing flowers, new flowers grow from
the center of existing flower after 4–8 weeks, flowers are
persistent without adding pretreatment, much higher stem
production per plant.

2 Drawing Sheets

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Latin name of the genus and species of the plant claimed:
Delphinium hybrid.
Variety denomination: ‘Delga Stam’.

BACKGROUND OF THE INVENTION

The present invention comprises a new and distinct cul-
tivar of Delphinium, botanically known as Delphinium
hybrid and hereinafter referred to by the cultivar name
‘Delga Stam’.

The new Delphinium was discovered by the inventor,
Irenaëus A. M. van Gaalen, in Den Hoorn, The Netherlands,
in May 2001 as a plant within the progeny from the cross
between *Delphinium belladonna* ‘Völkerfrieden’ (female,
unpatented) and Delphinium L. ‘Peacemaker’ (male,
unpatented).

Asexual propagation of the new cultivar by vegetative
cuttings cuttings taken at Den Hoorn, The Netherlands, has
shown that the unique features of this new Delphinium are
stable and reproduce true to type in successive generations.

BRIEF DESCRIPTION OF THE INVENTION

Plants of the cultivar ‘Delga Stam’ have not been
observed under all possible environmental conditions. The
phenotype may vary somewhat with variations in the envi-
ronment such as temperature, light intensity, day length, and
fertility level without, however, any variance in genotype.

The following observations, measurements and values
describe the new cultivar as grown in Den Hoorn, The
Netherlands in a normal glass greenhouse under average day
temperatures between 18 to 32 degrees Celsius and 10 to 18
degrees Celsius at night. No artificial lighting, photoperiodic
treatments or other cultural or environmental treatments are
conducted, no growth retardants are added. The plant
described was one year old and field grown under glass-
house structure.

The following traits have been repeatedly observed and
are determined to be the unique characteristics of ‘Delga
Stam’. These characteristics in combination distinguish
‘Delga Stam’ as a new and distinct cultivar:

1. green leaf color;
2. violet blue/greyed-green flower color;

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3. upward facing flowers;
4. new flowers grow from the center of existing flower
after 4–8 weeks;
5. flowers are persistent without adding pretreatment; and
6. much higher stem production per plant.

Compared to ‘Völkerfrieden’, ‘Delga Stam’ has upward
facing flowers whereas ‘Völkerfrieden’ has horizontally fac-
ing flowers. The flower color of ‘Delga Stam’ is violet-blue
with greyed-green whereas the flower color of ‘Völker-
frieden’ is blue. New flowers of ‘Delga Stam’ grow con-
tinuously from the center of existing flowers after 4–8 weeks
with sufficient light and temperature; ‘Völkerfrieden’ does
not do this. The flowers of ‘Delga Stam’ are persistent unlike
the flowers of ‘Völkerfrieden’. Völkerfrieden needs pretreat-
ment after cutting to avoid early flower drop, ‘Delga Stam’
does not need pretreatment. ‘Delga Stam’ has a much higher
temperature resistance than ‘Völkerfrieden’. ‘Delga Stam’
produces significantly more stems than ‘Völkerfrieden’.

Compared to *Delphinium belladonna* ‘Peacemaker’, the
sepals of ‘Delga Stam’ are violet blue with a broad greyed-
green lateral band in the center whereas ‘Peacemaker’ has
violet-blue sepals. The sepal shape of ‘Delga Stam’ is elliptic
whereas the sepal shape of ‘Peacemaker’ is obovate. ‘Delga
Stam’ has upward facing flowers whereas ‘Peacemaker’ has
horizontally facing flowers. New flowers of ‘Delga Stam’
grow from the center of existing flowers after 4–8 weeks
with sufficient light and temperature; ‘Peacemaker’ does not
do this. The flowers of ‘Delga Stam’ are persistent unlike the
flowers of ‘Peacemaker’. ‘Peacemaker’ needs pretreatment
after cutting to avoid early flower drop, ‘Delga Stam’ does
not need pretreatment.

BRIEF DESCRIPTION OF THE DRAWINGS

The accompanying photographic drawings shows typical
flower and foliage characteristics of ‘Delga Stam’ with
colors being as true as possible with illustrations of this type.
The drawing on the left side of the first sheet shows a plant
with mature flowers grown in a green house. The drawing on
the right side of the first sheet shows a close-up of flowers
between immature and mature stage. The drawing on the left
side of the second sheet shows a comparison between
‘Völkerfrieden’ (left) and ‘Delga Stam’ (right). The drawing

on the top middle of the second sheet shows a close-up of an immature flower. The drawing on the top right of the second sheet shows a close-up of an immature flower. The drawing on the bottom right of the second sheet show a close-up of a mature flower.

DETAILED BOTANICAL DESCRIPTION

The following measurements were taken in Den Hoorn, The Netherlands, on May 27, 2002, 12 months after planting of rooted cuttings into 9 inch pots. The plants had not been pinched.

In the following description color references are made to The Royal Horticultural Society Colour Chart (R.H.S.). The color values were determined indoors from flowers developed in a greenhouse in May 2002, in Den Hoorn, The Netherlands.

Plant description:

- Type*.—Herbacaeos perennial.
- Crop time*.—20 weeks from rooted cutting.
- Shape*.—Narrow triangular.
- Branching habit*.—Heavily branched; main (flowering) shoots appear from base, no lateral shoots. No lateral branches; average number of main stems: 15.
- Rooting habit*.—Freely branching.
- Plant height*.—Average 85 cm.
- Area of spread*.—Average 55 cm.
- Vigor*.—Moderate, 30–40 cm per month.
- Growth rate*.—Moderate, 30–40 cm per month.
- Growth habit*.—Upright.
- High temperature tolerance*.—At least tolerant to temperatures up to 35° C.
- Low temperature tolerance*.—At least hardy to USDA Zone 7.

Stem:

- Internode length*.—Average 7.5 cm (main stems).
- Color*.—Green, RHS 143A.
- Stem appearance/shape*.—Smooth, not very glossy, no pubescence.
- Stem aspect*.—Circular to somewhat flattened.
- Stem strength*.—Strong.
- Stem length*.—Average main stem length 85 cm.
- Stem diameter*.—Average main stem diameter 6 mm.
- Number of harvestable stems per year*.—Average 30.

Peduncle:

- Length*.—Average 38 cm.
- Diameter*.—Average 3 mm.
- Angle*.—0° to 10° (straight on top of branch=0°).
- Strength*.—Strong.
- Color*.—Green, RHS 143B.

Foliage description:

- Arrangement*.—Alternate.
- Compound or single*.—Single.
- Quantity per flower stem*.—Main branches: average 15.
- Length*.—Average 11.2 cm.
- Width*.—Average 15.5 cm.
- Aspect*.—Flat.
- Shape*.—Pedately cleft to very deep pedately lobed.
- Apex*.—Acute.
- Base*.—Attenuate.
- Margin*.—Incised to laciniate.
- Texture*.—Smooth, dull, no leaf pubescence.
- Immature leaf color*.—Color of upper surface: Green, RHS 137A. Color of lower surface: Green, RHS 138B.

Mature leaf color.—Color of upper surface: Green, RHS 139A. Color of lower surface: Green; RHS N138B to N138C.

Venation.—Laciniate.

Petiole length.—Average 15 cm, basal leaf petiole longer, average 26 cm.

Petiole diameter.—Average 2 mm.

Petiole color.—Green, RHS 143B.

Vein color upper side.—Green, RHS 143A to 143B.

Vein color under side.—Green, RHS 143B.

Flower description:

Inflorescence type/form.—Raceme.

Inflorescence height.—Average 40 cm.

Inflorescence diameter.—Average 25 cm.

Flower arrangement.—Terminal raceme.

Flower type.—Single.

Flower aspect.—Upright.

Natural flowering season.—Summer, June–August.

Flower longevity.—Average 6.5 weeks on plant, average 17 days as cut flower.

Quantity.—Average 300 per plant, average 20 per lateral stem.

Fragrance.—None.

Flowering habit.—Once a year, continuously.

Time to flower.—Approximately 9 months.

Other characteristics.—On both sides of each pedicel is one bract (alternate); length 3.7 cm, linear shaped, acute tip, green in color: upper side RHS 139A, lower side RHS 138A.

From the center of each flower grows a “pedicel” straight and upright (angle: 0°), average length 1.9 cm, average width 1.5 mm, green in color RHS 137C, densely covered with very short light green hairs; on top of this pedicel are 3 (three) “leaves” with their margins fused, thus creating a closed, tubular leaf; shaped narrow oblanceolate; top aristate; average length 3.9 cm, average width 4 mm; green in color RHS 137C (both surfaces), densely covered with very short light green hairs; only the under side of these leaves is visible, because the margins are fused, the upper side is inside the “tube”.

Buds:

Length.—Average 1 cm, diameter is 7 mm.

Spur length.—Average 5 mm.

Shape.—Obovate.

Color.—Green RHS 143A, base lighter RHS 143C.

Quantity.—Average 20.

Flower size.—Average 6.5 cm in depth (including spur), average 5 cm in diameter.

Flower appearance.—Zygomorphic.

Rate of flower opening.—Approximately 20% of the flowers are opened at one stage; flowering period is about 2.5 months.

Petals:

Arrangement.—Zygomorphic, placed above ovary.

Quantity.—4 (rarely 5), not fused.

Appearance.—Dull.

Texture.—Smooth, lower petals with hairs in the centers.

Shape.—Lower petals spatulate to flabellate, upper petals narrow spatulate to almost oblong.

Margin.—Entire.

Length.—Lower petals average 1.4 cm, upper petals average 1.3 cm.

Width.—Lower petals average 7 mm, upper petals average 3.5 mm.

Tip.—Lower petals retused, upper petals obtuse.

Upper surface color when opening.—Lower petals violet-blue, RHS 90B to 90C, center greyed-green RHS 189A with lighter (RHS 189C) hairs; upper petals violet-blue RHS 94A.

Lower surface color.—Lower petals violet-blue RHS 90C to 90D, center greyed-green RHS 189A, upper petals violet-blue RHS 93A.

Upper surface color fully opened.—Lower petals violet-blue; RHS 90B to 90C, center greyed-green RHS 189A with lighter (RHS 189C) hairs; upper petals violet-blue RHS 94A.

Lower surface color fully opened.—Lower petals violet-blue RHS 90C to 90D, center greyed-green RHS 189A; upper petals violet-blue RHS 93A; petal color does not fade, there are no petaloids.

Sepals:

Quantity.—5.

Appearance.—Smooth, dull.

Arrangement.—Rotate, zygomorphic.

Shape.—Elliptic (only rarely obovate).

Length.—Average 4.6 cm.

Diameter.—Average 1.8 cm.

Texture.—Smooth, dull.

Margin.—Entire.

Color immature upper side.—Green, darker than but closest to RHS 139A, with violet-blue margins RHS 98B.

Color immature under side.—Green RHS 137C with violet-blue margins RHS 98B.

Color mature upper side.—Green, darker than but closest to RHS 139A, with violet-blue margins RHS 98B.

Color mature under side.—Green; RHS 137C with violet-blue margins RHS 98B.

Sepal apex.—Acute.

Sepal base.—Narrow cuneate, but upper sepal ending in a spur; average length of spur 8 mm.

Pedicels:

Length.—Average 20.5 cm.

Width.—1.5 mm.

Angle.—10° to 450° (0°=straight on top of peduncle).

Strength.—Strong.

Color.—Green RHS 141A to 141B.

Reproductive organs:

Stamens.—Number of stamens: Average 30.

Anthers.—Anther shape: Basifixed, kidney-shaped.

Anther size: Average 1.5 mm. Anther color: Greyed-green RHS 197A. Pollen: Amount: Very low. Color: Green-white; approximately RHS 157A.

Pistils.—None.

Stigma.—None.

Calyx.—Calyx shape: Rotate, slightly cup-shaped.

Calyx length: Average 2.5 cm (excluding spur).

Calyx diameter: Average 5 cm.

Ovary color.—Yellow-green; RHS 144D.

Seed.—None.

Pest/disease resistance/susceptibility.—Not more susceptible to pests and diseases than other Delphinium varieties.

I claim:

1. A new and distinct cultivar of Delphinium plant named ‘Delga Stam’, as described and illustrated.

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