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(12) **United States Plant Patent**
van Gaalen

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(54) **DELPHINIUM PLANT NAMED ‘DELGAAL’**

(50) Latin Name: *Delphinium* L.
Varietal Denomination: **Delgaal**

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(*) Notice: Subject to any disclaimer, the term of this
patent is extended or adjusted under 35
U.S.C. 154(b) by 71 days.

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(51) **Int. Cl.⁷ A01H 5/00**

(52) **U.S. Cl. Plt./263**

(58) **Field of Search** Plt./263

(56) **References Cited**
PUBLICATIONS
UPOV–ROM GTITM, Plant Variety Database 2002/06 GTI
Jouve Retrieval Software, Citation for Dephinium ‘Del-
gaal’.*
* cited by examiner
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(57) **ABSTRACT**
A new and distinct cultivar of Delphinium plant named
‘Delgaal’, as described and illustrated, and particularly
characterized by its green leaves, violet-blue colors, upright
growth habit, terminal raceme flower arrangement with
approximately 22 flowers per main stem; and inflorescence
of 40 cm in length (average) and 14 cm in diameter
(average).

4 Drawing Sheets

Genus and species of the plant claimed: *Delphinium* L.
Variety denomination: Delgaal.

BACKGROUND OF THE INVENTION

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

The new Delphinium was discovered by the inventor in
Den Hoorn, The Netherlands, in May, 2000 as a naturally
occurring mutation from *Delphinium belladonna* ‘V
ölkerfrieden’ (unpatented).

Asexual propagation of the new cultivar by tissue culture
conducted at Maasdijk, The Netherlands, starting in June
2000, has shown that the unique features of this new
Delphinium are stable and reproduce true to type in succes-
sive generations.

BRIEF DESCRIPTION OF THE INVENTION

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

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

1. upright growing
2. green leaf color
3. violet-blue flower color
4. terminal raceme flower arrangement with approxi-
mately 22 flowers per main stem; and

5. inflorescence 40 cm (average) and 14 cm in diameter
(average).

Of the many commercial cultivars known to the present
inventor, there are no widely know comparison varieties.

5 The most similar in comparison to ‘Delgaal’ is cultivar
Delphinium belladonna ‘Völkerfrieden’.

Compared to parental cultivar *Delphinium belladonna*
‘Völkerfrieden’ (unpatented) the flower color of ‘Delgaal’ is
violet-blue whereas the flowers or ‘Völkerfrieden’ are dark
10 blue. Another difference is that it has turned out that the
lasting time of ‘Delgaal’ as a cutflower is some 20 percent
longer than ‘Völkerfrieden’.

‘Delgaal’ has not been observed under all possible envi-
ronmental conditions. The phenotype of the new cultivar
15 may vary significantly with variations in environment such
as temperature, light intensity, and day length without any
change in the genotype of the plant. The following
observations, measurements and values describe the new
cultivar as grown in Den Hoorn, The Netherlands in a
20 normal glass greenhouse under average day temperatures of
between 18 to 32 degrees Celsius and 10 to 18 degrees
Celsius at night. No artificial lighting, photoperiodic treat-
ments or other cultural or environmental treatments are
conducted, no growth retardants are added. These conditions
25 closely approximate those generally used in commercial
practice.

BRIEF DESCRIPTION OF THE DRAWING(S)

30 The accompanying photographic drawings show typical
flower and foliage characteristics of ‘Delgaal’ with colors
being as true as possible with illustrations of this type. The
measurements were taken in Den Hoorn, The Netherlands,
in August 2001, 10 weeks after planting of tissue plants. The
35 plants had not been pinched.

The first drawing shows a close up of a 'Delgaal' flower.

The second drawing shows a comparison between 'Delgaal' on the right, and the cultivar 'Völkerfrieden' on the left.

The third drawing shows plantings of 'Delgaal'.

The fourth drawing shows a close-up side view of a 'Delgaal' flower.

DETAILED BOTANICAL DESCRIPTION

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 green-house in Den Hoon, The Netherlands, in August, 2001, in Boskoop, The Netherlands.

Propagation:

Type.—By vegetative cuttings or tissue culture.

Rooting habit.—Freely branching.

Plant description:

Crop time.—Approximately 30 weeks from rooted cutting.

Form.—Narrow inverted triangle with upright growth habit.

Branching habit.—Moderate; main shoots appear from base, some lateral shoots appear, bearing only flowers, no leaves.

Plant height.—Average 100 cm.

Area of spread.—Average: 50 cm.

Vigor.—Moderate to vigorous, approximately 30–40 cm per month.

Stem.—Internode length/diameter: Average: 7 cm in length (main stems, for lateral branches don't have leaves). Color: Green; RHS 143 A to 143 B. Pubescence: None. Appearance/shape: Smooth, not very glossy. Aspect: Circular. Strength: Strong.

Foliage description:

Arrangement.—Alternate.

Quantity per flower stem.—Main branches, average 16.

Length.—Average 13 cm.

Width.—Average 14 cm.

Aspect.—Flat.

Shape.—Pedately cleft to almost three-parted or very deeply pedately lobed.

Apex.—Acute.

Base.—Attenuate.

Margin.—Incised to lacinate.

Texture.—Smooth, dull, no pubescence.

Color of upper surface, young leaf.—Green; RHS 137 A to 139 A.

Color of upper surface, mature leaf.—Green, RHS 137 A.

Color of lower surface, young leaf.—Green, RHS 138 A.

Color of lower surface, mature leaf.—Green, RHS 138 B.

Petiole length.—Average 9 cm.

Petiole diameter.—Average width 2.5 mm, average height 1.5 mm.

Petiole color.—Green, RHS 143 A.

Flower description:

Flower type/habit.—Single, inflorescence type is raceme.

Natural flowering season.—Summer (June–August).

Flower longevity.—10 days as cut flower, 10–14 days on plant.

Quantity.—Average 22 per main stem.

Number of flowering racemes per plant.—Average 7.

Fragrance.—No.

Buds:

Length.—Average 4 cm (incl. spur).

Spur length.—Average 2 cm.

Diameter.—1 cm.

Shape.—Elliptic to oval.

Rate of opening.—Approximately 1 week from stage described above.

Color.—Greyed-green; RHS 192 A to 192 C tipped green; RHS 143 C to 143 D.

Flower size.—Average 6 cm in length and 5 cm in width.

Spur length.—Average 2.8 cm.

Flower shape.—Zygomorphic.

Flower aspect.—Outward.

Petals:

Quantity.—4.

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

Margin.—Entire.

Length.—Lower petals average 1.1 cm; upper petals average 1 cm.

Width.—Lower petals average 5 mm; upper petals average 4 mm.

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

Upper surface color.—When opening lower petals violet blue; RHS 96 A with yellow; RHS 5 A to B, hairs in the center; upper petals violet-blue; RHS 96 A. Fully opened lower petals violet-blue; RHS 96 B with yellow hairs in the centre; RHS 5 B. upper petals violet-blue; RHS 96 A.

Lower surface color.—When opening lower petals violet-blue; RHS 96 A, upper petals violet-blue; RHS 96 B. Fully opened lower petals violet-blue; RHS 96 A, upper petals violet-blue; RHS 96 B.

Sepals:

Quantity.—5.

Shape.—Obovate.

Length.—Two lower sepals average: 2.9 cm. Two 'side' sepals average: 2.6 cm. Upper sepal average: 2.5 cm.

Diameter.—Average 1.5 cm.

Texture.—Smooth, dull.

Color upper side.—Immature upper side: Violet blue; RHS 91 A to 92 B with green spots at the tips; RHS 138 A to 138 B. Spur violet-blue; RHS 92 B at the base and paler towards the tip. Mature: Violet blue; RHS 91 A to 92 B with green spots at the tips; RHS 138 A to 138 B. Spur violet-blue; RHS 92 B at the base and paler towards the tip.

Color under side.—Immature: Violet blue; RHS 91 A to 92 B with green spots at the tips; RHS 138 A to B. Spur violet-blue; RHS 92 B at the base and paler towards the tip. Mature: Violet-blue; RHS 91 A to 92 B with green spots at the tips; RHS 138 A to 138 B. Spurs violet-blue; RHS 92 B at the base and paler towards the tip.

Stem:

Length.—Average 38 mm.

Diameter.—Average 2.5 mm.

Surface texture.—Smooth.

Color.—Green, RHS 143 A to RHS 143 B.

Pedicels:
 Length.—Average 6 cm.
 Width.—1 mm.
 Angle.—60 degrees to 70 degrees (0 degrees=straight on top of peduncle).
 Strength.—Strong.
 Texture.—Smooth.
 Color.—Green; RHS 143 A to 143 B.

Reproductive organs:
 Stamens.—Number of stamens: Average: 25.
 Anthers.—Anther shape: Basifixed, oblong. Anther size: Average 2 mm. Anther color: Greyed-green; RHS 189 A. Pollen: Amount: Very low. Color: Approximately green-white; RHS 157 A to 157 B.

Pistils.—Number of pistils: 4 . Length of pistils: 1.1. cm.
Stigma.—Stigma shape: 2-parted. Stigma color: Green-white; approximately RHS 157 D.
Seed.—No observations to date.
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 ‘Delgaal’, as described and illustrated herein.

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