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(12) **United States Plant Patent**
Dümmen

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- (54) **PELARGONIUM PLANT NAMED ‘DUEMARINE’**
- (50) Latin Name: *Pelargonium zonale*
Varietal Denomination: **Duemarine**
- (75) Inventor: **Tobias Dümmen**, Rheinberg (DE)
- (73) Assignee: **Capital Green Investments Ltd.**, Grand Cayman (KY)
- (*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.
- (21) Appl. No.: **12/586,397**
- (22) Filed: **Sep. 21, 2009**
- (51) **Int. Cl.**
A01H 5/00 (2006.01)
- (52) **U.S. Cl.** **Plt./329**

(58) **Field of Classification Search** Plt./329
See application file for complete search history.

(56) **References Cited**

OTHER PUBLICATIONS

Upov Plant Variety Database 2010/02 p. 1.*

* cited by examiner

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(57) **ABSTRACT**

A new and distinct cultivar of Zonal *Geranium* plant named ‘Duemarine’, characterized by its upright to outwardly spreading plant habit; vigorous growth habit; freely basal branching habit; dark green-colored leaves with zonation pattern; freely flowering habit; semi-double dark red purple-colored flowers; and good garden performance.

1 Drawing Sheet

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Botanical designation: *Pelargonium zonale*.

Cultivar denomination: ‘Duemarine’.

BACKGROUND OF THE INVENTION

The present invention relates to a new and distinct cultivar of Zonal *Geranium* plant, botanically known as *Pelargonium zonale*, and hereinafter referred to by the name ‘Duemarine’.

The new Zonal *Geranium* plant is a product of a planned breeding program conducted by the Inventor in Rheinberg, Germany. The objective of the breeding program is to create new vigorous Zonal *Geranium* plants with dark green-colored leaves and attractive flowers.

The new Zonal *Geranium* plant originated from a cross-pollination made by the Inventor in July, 2005 in Rheinberg, Germany of a proprietary selection of *Pelargonium zonale* identified as code number F-19-22, not patented, as the female, or seed, parent with a proprietary selection of *Pelargonium zonale* identified as code number F-12-15, not patented, as the male, or pollen, parent. The new Zonal *Geranium* 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 greenhouse environment in Rheinberg, Germany in May, 2008.

Asexual reproduction of the new Zonal *Geranium* plant by vegetative terminal cuttings in a controlled greenhouse environment in Rheinberg, Germany since May, 2008, has shown that the unique features of this new Zonal *Geranium* plant are stable and reproduced true to type in successive generations.

SUMMARY OF THE INVENTION

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

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

- 5 1. Upright to outwardly spreading plant habit.
2. Vigorous growth habit.
3. Freely basal branching habit.
4. Dark green-colored leaves with zonation pattern.
5. Freely flowering habit.
- 10 6. Semi-double dark red purple-colored flowers.
7. Good garden performance.

Plants of the new Zonal *Geranium* differ primarily from plants of the parent selections in flower color.

Plants of the new Zonal *Geranium* can be compared to plants of *Pelargonium zonale* ‘Flower Fairs Berry’, not patented. In side-by-side comparisons conducted in Rheinberg, Germany, plants of the new Zonal *Geranium* differed from plants of ‘Flower Fairs Berry’ in the following characteristics:

- 15 1. Plants of the new Zonal *Geranium* were taller and had longer internodes than plants of ‘Flower Fairs Berry’.
- 20 2. Plants of the new Zonal *Geranium* had larger leaves than plants of ‘Flower Fairs Berry’.
3. Plants of the new Zonal *Geranium* were more freely flowering than plants of ‘Flower Fairs Berry’.
- 25 4. Plants of the new Zonal *Geranium* and ‘Flower Fairs Berry’ differed slightly in flower color.

BRIEF DESCRIPTION OF THE PHOTOGRAPH

30 The accompanying colored photograph illustrates the overall appearance of the new Zonal *Geranium* plant, showing the colors as true as it is reasonably possible to obtain in colored reproductions of this type. Colors in the photograph may differ slightly from the color values cited in the detailed botanical description which accurately describe the colors of the new Zonal *Geranium* plant. The photograph comprises a side perspective view of a typical flowering plant of ‘Duemarine’ grown in a container.

DETAILED BOTANICAL DESCRIPTION

The aforementioned photograph and following observations and measurements describe plants grown in 10.5-cm containers in Rheinberg, Germany in a glass-covered greenhouse during the summer and under conditions which closely approximate commercial production. During the production of the plants, day and night temperatures averaged 18° C. and light levels averaged 4,500 lux. Plants were pinched one time three weeks after planting. Plants had been growing for 13 weeks when the photograph and the description were taken. In the detailed description, color references are made to The Royal Horticultural Society Colour Chart, 1995 Edition, except where general terms of ordinary dictionary significance are used.

Botanical classification: *Pelargonium zonale* 'Duemarine'.

Parentage:

Female, or seed, parent.—Proprietary selection of *Pelargonium zonale* identified as code number F-19-22, not patented.

Male or pollen parent.—Proprietary selection of *Pelargonium zonale* identified as code number F-12-15, not patented.

Propagation:

Type.—By vegetative terminal cuttings.

Time to initiate roots, summer.—About five days at temperatures of 20° C.

Time to initiate roots, winter.—About seven days at temperatures of 20° C.

Time to produce a rooted young plant, summer.—About three weeks at temperatures of 20° C.

Time to produce a rooted young plant, winter.—About four weeks at temperatures of 20° C.

Root description.—Fine, fibrous; white in color.

Rooting habit.—Freely branching.

Plant description:

General appearance.—Upright to outwardly spreading plant habit; uniformly rounded; densely foliated.

Growth and branching habit.—Vigorous growth habit; freely basal branching habit with about three basal branches developing per plant; pinching enhances lateral branch development.

Plant height to top of flower umbels.—About 25 cm.

Plant height to top of foliar plane.—About 18 cm.

Plant width.—About 23 cm.

Lateral branches.—Length: About 6 cm. Diameter: About 1 cm. Internode length: About 1 cm. Texture: Pubescent. Strength: Moderately strong. Color: Close to 144A to 144B.

Foliage description:

Arrangement.—Alternate; simple.

Length.—About 6.5 cm.

Width.—About 8.5 cm.

Shape.—Reniform.

Apex.—Acute.

Base.—Cordate.

Margin.—Crenate.

Venation pattern.—Palmate.

Texture, upper surface.—Pubescent.

Texture, lower surface.—Smooth, glabrous.

Color.—Developing leaves, upper surface: Close to 137A to 137B. Developing leaves, lower surface: Close to 137A. Fully expanded leaves, upper surface: Close to 137A; venation, close to 144B. Fully expanded leaves, lower surface: Close to 137A; vena-

tion, close to 144A. Zonation pattern: Distinct. Distance from margin: About 2 mm. Width: About 1.3 cm. Color: Close to 200B.

Petiole.—Length: About 7 cm. Diameter: About 2.8 mm.

Texture, upper and lower surfaces: Smooth, glabrous.

Color, upper surface: Close to 143A. Color, lower surface: Close to 143B.

Flower description:

Flower arrangement.—Semi-double rotate flowers arranged in rounded hemispherical umbels arising from apical leaf axils; umbels displayed above the foliage on moderately strong peduncles; flowers face upright to outward.

Fragrance.—Not detected.

Quantity of flowers.—Freely flowering habit; about 24 flowers and flower buds per umbel.

Flowering season.—Year-round under greenhouse conditions; in outdoor nurseries and gardens in Germany flowering is continuous from spring throughout the summer; plants begin flowering about eight weeks after planting.

Flower longevity.—Individual flowers last about five to seven days on the plant; flowers persistent.

Umbel height.—About 5.5 cm.

Umbel diameter.—About 9 cm.

Flower diameter.—About 5 cm.

Flower depth (height).—About 2.2 cm.

Flower buds.—Length: About 1.4 cm. Diameter: About 7.6 mm. Shape: Ovoid. Color: Close to 57A and 144A.

Petals.—Quantity per flower: About five. Length: About 2.9 cm. Width: About 2.6 cm. Shape: Obovate. Apex: Rounded. Base: Attenuate. Margin: Sinuate. Texture, upper and lower surfaces: Smooth, glabrous. Color: When opening and fully opened, upper surface: Close to 66A; color becoming closer to 66B with development. When opening and fully opened, lower surface: Close to 66B.

Petaloids.—Quantity per flower: About two. Length: About 1.9 cm. Width: About 1.4 cm. Shape: Obovate. Apex: Rounded. Base: Attenuate. Margin: Sinuate. Texture, upper and lower surfaces: Smooth, glabrous. Color: When opening and fully opened, upper surface: Close to 66A. When opening and fully opened, lower surface: Close to 66B.

Sepals.—Quantity per flower: Five, arranged in a single whorl. Length: About 1.1 cm. Width: About 2.7 mm. Shape: Ensiform. Apex: Apiculate. Base: Acute. Margin: Entire. Texture, upper and lower surfaces: Smooth, glabrous. Color, upper and lower surfaces: Close to 144A.

Peduncle (umbel stem).—Length: About 12 cm. Diameter: About 3.3 mm. Strength: Moderately strong. Texture: Smooth, glabrous. Color: Close to 144A.

Pedice (individual flower stem).—Length: About 2.7 cm. Diameter: About 1.5 mm. Strength: Moderately strong. Texture: Smooth, glabrous. Color: Close to 178A.

Reproductive organs.—Androecium: Stamen quantity per flower: About five or six. Filament length: About 7 mm. Filament color: Close to 155C. Anther length: About 2 mm. Anther shape: Oval. Anther color: Close to 61A. Pollen amount: Moderate. Pollen color: Close to 28A. Gynoecium: Pistil quantity per flower: One. Pistil length: About 8 mm. Stigma shape: Parted.

Stigma color: Close to 45A to 45B. Style length:
About 2 mm. Style color: Close to 46A. Ovary color:
Close to 144A.

Seed/fruit.—Seed and fruit development have not been
observed.

Disease/pest resistance: Plants of the new *Zonal Geranium*
have not been observed to be resistant to pathogens and
pests common to *Zonal Geraniums*.

Garden performance: Plants of the new *Zonal Geranium* have
been observed to tolerate rain, wind, and temperatures
ranging from about 5° C. to about 40° C. and have demon-
strated good garden performance.

It is claimed:

1. A new and distinct *Zonal Geranium* plant named 'Due-
marine' as illustrated and described.

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