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

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(54) **CARNATION PLANT NAMED 'HILPURE'**

(50) Latin Name: ***Dianthus caryophyllus***
Varietal Denomination: **Hilpure**

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(58) **Field of Classification Search**
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(57) **ABSTRACT**

A new and distinct cultivar of Carnation plant named 'Hilpure', characterized by its upright, somewhat outwardly spreading and uniformly mounded plant habit; freely branching habit; freely flowering habit; large white-colored double flowers that are positioned above and beyond the foliar plane on strong peduncles; and good garden performance.

1 Drawing Sheet

1

Botanical designation: *Dianthus caryophyllus.*
Cultivar denomination: 'HILPURE'.

BACKGROUND OF THE INVENTION

The present invention relates to a new and distinct cultivar of Carnation plant, botanically known as *Dianthus caryophyllus*, grown commercially as a potted and garden plant and hereinafter referred to by the name 'Hilpure'.

The new Carnation plant is a product of a planned breeding program conducted by the Inventor in De Kwakel, The Netherlands. The objective of the breeding program is to create new potted Carnation plants that have uniform plant habit and numerous large and attractive flowers.

The new Carnation plant originated from a cross-pollination made by the Inventor in De Kwakel, The Netherlands in June, 2008 of a proprietary selection of *Dianthus caryophyllus* identified as code number A76063-01, not patented, as the female, or seed, parent with a proprietary selection of *Dianthus caryophyllus* identified as code number A56040-01, not patented, as the male, or pollen, parent. The new Carnation 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 De Kwakel, The Netherlands in September, 2009.

Asexual reproduction of the new Carnation plant by terminal cuttings propagated in a controlled greenhouse environment in De Kwakel, The Netherlands since October, 2009 has shown that the unique features of this new Carnation plant are stable and reproduced true to type in successive generations of asexual reproduction.

SUMMARY OF THE INVENTION

Plants of the new Carnation have not been observed under all possible 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.

2

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

1. Upright, somewhat outwardly spreading and uniformly mounded plant habit.
2. Freely branching habit.
3. Freely flowering habit.
4. Large white-colored double flowers that are positioned above and beyond the foliar plane on strong peduncles.
5. Good garden performance.

Plants of the new Carnation differ from plants of the female parent selection in the following characteristics:

1. Plants of the new Carnation are not as dense as plants of the female parent selection.
2. Plants of the new Carnation flower later than plants of the female parent selection.
3. Flowers of plants of the new Carnation are fuller with more petals and petaloids than flowers of plants of the female parent selection.
4. Plants of the new Carnation and the female parent selection differ in flower color as plants of the female parent selection have light yellow-colored flowers.

Plants of the new Carnation differ from plants of the male parent selection in the following characteristics:

1. Plants of the new Carnation flower later than plants of the male parent selection.
2. Flowers of plants of the new Carnation are more fragrant than flowers of plants of the male parent selection.
3. Plants of the new Carnation have longer peduncles than plants of the male parent selection.

Plants of the new Carnation can be compared to plants of *Dianthus caryophyllus* 'Kocosmo', disclosed in U.S. Plant Pat. No. 20,080. In side-by-side comparisons conducted in De Kwakel, The Netherlands, plants of the new Carnation differed from plants of 'Kocosmo' in the following characteristics:

1. Plants of the new Carnation had thicker stems than plants of 'Kocosmo'.

2. Plants of the new Carnation had smaller leaves than plants of 'Kocosmo'.
3. Plants of the new Carnation had larger flowers than plants of 'Kocosmo'.
4. Flower petals of plants of the new Carnation were more deeply praemorse than flower petals of plants of 'Kocosmo'.

BRIEF DESCRIPTION OF THE PHOTOGRAPH

The accompanying photograph illustrates the overall appearance of the new Carnation 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 Carnation plant.

The photograph comprises a side perspective view of a typical flowering plant of 'Hilpure' grown in a container.

DETAILED BOTANICAL DESCRIPTION

Plants used in the aforementioned photograph and following observations and measurements describe plants grown during the late winter and early spring in 10.5-cm containers in a glass-covered greenhouse in Aalsmeer, The Netherlands and under cultural practices which approximate those generally used in commercial potted Carnation production. During the production of the plants, day and night temperatures averaged 12° C. and light levels averaged 7,000 lux. Plants were pinched one time five weeks after planting. Plants used for the description were 20 weeks old and plants used for the photograph were 25 weeks old. 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: *Dianthus caryophyllus* 'Hilpure'.

Parentage:

Female, or seed, parent.—Proprietary selection of *Dianthus caryophyllus* identified as code number A76063-01, not patented.

Male, or pollen, parent.—Proprietary selection of *Dianthus caryophyllus* identified as code number A56040-01, not patented.

Propagation:

Type.—By terminal cuttings.

Time to initiate roots, summer.—About six days at 20° C. to 25° C.

Time to initiate roots, winter.—About eight days at 18° C.

Time to produce a rooted young plant, summer.—About three weeks at 20° C. to 25° C.

Time to produce a rooted young plant, winter.—About five weeks at 18° C.

Root description.—Medium in thickness, fibrous; white in color.

Rooting habit.—Moderate branching; medium density.

Plant description:

Plant type and form.—Herbaceous perennial; upright, somewhat outwardly spreading and uniformly mounded plant habit; broad inverted triangle.

Branching habit.—Freely-branching growth habit; when pinched, about six primary branches develop, each with about five secondary branches; dense and bushy growth habit.

Plant height.—About 11.7 cm.

Plant diameter or spread.—About 21.1 cm.

Lateral branches.—Length: About 7.8 cm. Diameter: About 3 mm. Internode length: About 1.7 cm. Strength: Strong. Texture: Smooth, glabrous; waxy. Color: Close to 136B; waxy cuticle, close to 188A.

Leaf description.—Arrangement: Opposite, simple; sessile. Length: About 7.7 cm. Width: About 6 mm. Shape: Narrowly oblanceolate. Apex: Acute. Base: Attenuate, decurrent. Margin: Entire. Texture, upper and lower surfaces: Smooth, glabrous; waxy. Venation pattern: Parallel. Color: Developing leaves, upper and lower surfaces: Close to N138B; towards the base, close to 145C. Fully expanded leaves, upper surface: Close to N137C; waxy cuticle, close to N189B and N189C; venation, close to N137C and N189B to N189C. Fully expanded leaves, lower surface: Close to N137C; waxy cuticle, close to 189B; venation, close to to 143A.

Flower description:

Flower type and habit.—Rotate double flowers usually arranged in terminal sprays; freely flowering habit with typically about 50 flowers developing per plant; flowers positioned above and beyond the foliar plane on strong peduncles; flowers face mostly upright to outwardly.

Fragrance.—Moderately fragrant; clove-like, sweet.

Natural flowering season.—Flowering is continuous through the summer and late summer in The Netherlands; plants begin flowering about twelve weeks after planting.

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

Spray height.—About 5.6 cm.

Spray diameter.—About 6.3 cm.

Flower diameter.—About 5.8 cm.

Flower depth.—About 4.4 cm.

Flower buds.—Length: About 2.2 cm. Diameter: About 1 cm. Shape: Ovate to elliptic. Color: Close to 137B; base, close to 143A and 143B; upper half covered with waxy cuticle, close to 189A to 189B.

Petals and petaloids.—Quantity and arrangement: About 40 petals and petaloids per flower arranged in numerous whorls. Length: About 4.2 cm. Width: About 2.8 cm. Shape: Spatulate. Apex: Praemorse. Base: Acute. Margin: Entire. Texture, upper and lower surfaces: Smooth, glabrous; velvety. Color: When opening, upper and lower surfaces: Close to 155C; towards the base, close to 145C to 145D. Fully opened, upper surface: Close to NN155D; towards the base, close to 145C to 145D. Fully opened, lower surface: Close to NN155C to NN155D; towards the base, close to 145C to 145D.

Sepals.—Quantity and arrangement: Five in a single whorl; proximal 65% of the sepals are fused. Length: About 2.2 cm. Width: About 7 mm. Shape: Oblong. Apex: Broadly acute. Margin: Entire. Texture, upper and lower surfaces: Smooth, glabrous. Color: When opening, upper surface: Close to 138C. When opening, lower surface: Close to 137B; towards the base, close to 143A and 143B; upper half covered with waxy cuticle, close to 189A to 189B. Fully opened, upper surface: Close to 138C. Fully opened, lower surface: Close to 137A; towards the base, close to 144A; upper half covered with waxy cuticle, close to 189B.

Peduncles.—Length: About 2 mm to 10 mm. Diameter: About 2 mm to 2.5 mm. Strength: Strong. Aspect: Erect to about 45° from vertical. Texture: Smooth, glabrous. Color: Close to 136B; waxy cuticle, close to 188A.

Reproductive organs.—Stamens: Quantity: About eight, mostly deformed. Anther length: About 3 mm. Anther shape: Irregularly oblong; many partially transformed into petaloids. Anther color: Close to 155A. Pollen: None observed. Pistils: Quantity: About two per flower. Pistil length: About 2.2 cm. Stigma shape: Pointed; curved. Stigma color: Close to NN155C to NN155D. Style length: About 2 cm. Style color: Close to NN155C to NN155D. Ovary color: Close to 144B. Fruits and seeds: Fruit and seed development have not been observed on plants of the new Carnation.

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

Garden performance: Plants of the new Carnation have been observed to have good garden performance and to tolerate wind, rain and temperatures ranging from about 5° C. to about 35° C. and to be hardy to USDA Hardiness Zone 9.

It is claimed:

1. A new and distinct Carnation plant named 'Hilpure' as illustrated and described.

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