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Pieters

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(54) **CHRYSANTHEMUM PLANT NAMED ‘LAVA RED’**

(50) Latin Name: *Chrysanthemum*×*morifolium*
Varietal Denomination: **Lava Red**

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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 73 days.

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(57) **ABSTRACT**

A new and distinct cultivar of *Chrysanthemum* plant named ‘Lava Red’, characterized by its upright, outwardly spreading and rounded plant habit; moderately vigorous growth habit; freely branching habit; dense and full plant habit; large dark green-colored leaves; uniform, early and freely flowering habit; medium-sized decorative-type inflorescences with dark red-colored ray florets that resist fading; and excellent garden performance.

1 Drawing Sheet

1

Botanical designation: *Chrysanthemum*×*morifolium*.
Cultivar denomination: ‘LAVA RED’.

BACKGROUND OF THE INVENTION

The present invention relates to a new and distinct cultivar of *Chrysanthemum* plant, botanically known as *Chrysanthemum*×*morifolium*, and hereinafter referred to by the name ‘Lava Red’.

The new *Chrysanthemum* plant is a product of a planned breeding program conducted by the Inventor in Oostnieuwkerke, Belgium. The objective of the breeding program is to create new freely flowering *Chrysanthemum* plants with unique and attractive ray floret coloration.

The new *Chrysanthemum* plant originated from a cross-pollination made by the Inventor in Oostnieuwkerke, Belgium in September, 2006 of *Chrysanthemum*×*morifolium* ‘PPP FORZ06’, disclosed in U.S. Plant Pat. No. 19,923, as the female, or seed, parent with *Chrysanthemum*×*morifolium* ‘Carpino Red’, not patented, as the male, or pollen, parent. The new *Chrysanthemum* plant was discovered and selected by the Inventor as a flowering plant from within the progeny of the stated cross-pollination in a controlled greenhouse environment in Oostnieuwkerke, Belgium in September, 2007.

Asexual reproduction of the new *Chrysanthemum* plant by vegetative cuttings was first conducted in a controlled greenhouse environment in Oostnieuwkerke, Belgium in January, 2008. Asexual reproduction by cuttings has shown that the unique features of this new *Chrysanthemum* plant are stable and reproduced true to type in successive generations.

SUMMARY OF THE INVENTION

Plants of the new *Chrysanthemum* have not been observed under all possible environmental conditions and cultural conditions. The phenotype may vary somewhat with variations in environmental conditions such as temperature, daylength 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 ‘Lava Red’. These characteristics in combination distinguish ‘Lava Red’ as a new and distinct *Chrysanthemum* plant:

1. Upright, outwardly spreading and rounded plant habit; moderately vigorous growth habit.
2. Freely branching habit; dense and full plant habit.
3. Large dark green-colored leaves.
4. Uniform, early and freely flowering habit.
5. Medium-sized decorative-type inflorescences with dark red-colored ray florets that resist fading.
6. Excellent garden performance.

Plants of the new *Chrysanthemum* differ primarily from the female parent, ‘PPP FORZ06’, in the following characteristics:

1. Plants of the new *Chrysanthemum* are not as vigorous as plants of ‘PPP FORZ06’.
2. Plants of the new *Chrysanthemum* have larger inflorescences than plants of ‘PPP FORZ06’.
3. Ray florets of plants of the new *Chrysanthemum* resist fading whereas ray florets of plants of ‘PPP FORZ06’ readily fade with development.

Plants of the new *Chrysanthemum* differ primarily from the male parent, ‘Carpino Red’, in the following characteristics:

1. Plants of the new *Chrysanthemum* have larger leaves than plants of ‘Carpino Red’.
2. Plants of the new *Chrysanthemum* have larger inflorescences than plants of ‘Carpino Red’.
3. Plants of the new *Chrysanthemum* flower earlier than plants of ‘Carpino Red’.

Plants of the new *Chrysanthemum* can also be compared to plants of *Chrysanthemum*×*morifolium* ‘Gedi Two Cam’, disclosed in U.S. Plant Pat. No. 14,472. In side-by-side comparisons conducted in Oostnieuwkerke, Belgium, plants of the new *Chrysanthemum* differed from plants of ‘Gedi Two Cam’ in the following characteristics:

1. Plants of the new *Chrysanthemum* were more vigorous than plants of ‘Gedi Two Cam’.

2. Plants of the new *Chrysanthemum* had larger leaves than plants of 'Gedi Two Cam'.
3. Ray florets of plants of the new *Chrysanthemum* were more intense in color than ray florets of plants of 'Gedi Two Cam'.
4. Ray florets of plants of the new *Chrysanthemum* resisted fading whereas ray florets of plants of 'Gedi Two Cam' readily faded with development.

BRIEF DESCRIPTION OF THE PHOTOGRAPH

The accompanying photograph illustrates the overall appearance of the new *Chrysanthemum* 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 *Chrysanthemum* plant. The photograph comprises a side perspective view of a typical flowering plant of 'Lava Red' grown in a container.

DETAILED BOTANICAL DESCRIPTION

The aforementioned photograph and following observations and measurements describe plants grown in 19-cm containers during the early autumn in an outdoor nursery in Oostnieuwkerke, Belgium and under cultural practices which approximate those generally used in commercial *Chrysanthemum* production. During the production of the plants, day temperatures ranged from 25° C. to 30° C. and night temperatures ranged from 15° C. to 20° C. Plants were 20 weeks old when the photograph and detailed description were taken. In the following description, color references are made to The Royal Horticultural Society Colour Chart, 2005 Edition, except where general terms of ordinary dictionary significance are used.

Botanical classification: *Chrysanthemum*×*morifolium* 'Lava Red'.

Parentage:

Female, or seed, parent.—*Chrysanthemum*×*morifolium* 'PPP FORZ06', disclosed in U.S. Plant Pat. No. 19,923.

Male, or pollen, parent.—*Chrysanthemum*×*morifolium* 'Carpino Red', not patented.

Propagation:

Type.—Terminal vegetative cuttings.

Time to initiate roots, summer.—About 14 days at temperatures of about 20° C.

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

Time to produce a rooted young plant, summer.—About 30 days at temperatures of about 20° C.

Time to produce a rooted young plant, winter.—About 40 days at temperatures of about 20° C.

Root description.—Fine, fibrous; light brown in color.

Rooting habit.—Freely branching; medium density.

Plant description:

Appearance.—Perennial decorative-type *Chrysanthemum*; stems upright and outwardly spreading giving a uniformly rounded appearance to the plant; plants roughly spherical; very freely branching habit, about 25 to 30 primary lateral branches develop, each primary lateral branch with multiple secondary branches; pinching enhances lateral branch development; dense and full plant habit; moderately vigorous growth habit; plants flexible, not brittle.

Plant height.—About 45 cm.

Plant width.—About 60 cm.

Lateral branches.—Length: About 25 cm. Diameter: About 2 mm to 3 mm. Internode length: About 2.5 cm. Strength: Strong, flexible. Texture: Pubescent; longitudinally ridged. Color: Close to 136A.

Leaves.—Arrangement: Alternate, simple. Length: About 6.5 cm to 8 cm. Width: About 4 cm to 5 cm. Apex: Rounded to cuspidate. Base: Attenuate. Margin: Palmately lobed and serrate, sinuses between lateral lobes divergent to parallel. Texture, upper and lower surfaces: Slightly pubescent. Color: Developing and fully expanded leaves, upper surface: Close to 136A; venation, close to 148C. Developing and fully expanded leaves, lower surface: Close to 137A; venation, close to 147B to 147C. Petiole: Length: About 1 cm. Diameter: About 2 mm. Texture, upper and lower surfaces: Slightly pubescent and rough. Color, upper surface: Close to 136A. Color, lower surface: Close to 137A.

Inflorescence description:

Appearance.—Decorative inflorescence form; inflorescences borne on terminals above foliar plane; disc and ray florets arranged acropetally on a capitulum.

Fragrance.—Slightly fragrant, pungent.

Flowering response.—Under natural season conditions, plants flower in late September in Belgium; flowering response time, about six weeks.

Postproduction longevity.—Inflorescences maintain good color and substance for about six weeks in an outdoor nursery; inflorescences persistent.

Quantity of inflorescences.—About 30 inflorescences develop per lateral branch.

Inflorescence bud.—Height: About 6 mm. Diameter: About 8 mm. Shape: Globular. Color: Close to 137A.

Inflorescence size.—Diameter: About 5.5 cm. Depth (height): About 4 cm. Disc diameter: About 2 mm. Receptacle diameter: About 3 mm. Receptacle height: About 2.5 mm to 3 mm. Receptacle color: Close to 144B.

Ray florets.—Length: About 3.5 cm to 5 cm. Width: About 7 mm. Shape: Oval. Apex: Rounded. Base: Attenuate. Margin: Entire. Aspect: Mostly flat. Texture, upper and lower surfaces: Smooth, glabrous. Number of ray florets per inflorescence: About 150 to 200 arranged in about ten whorls. Color: When opening and fully opened, upper surface: Close to 53A; color does not change with development. When opening and fully opened, lower surface: Close to 185B; color does not change with development.

Disc florets.—Length: About 3 mm. Diameter: About 0.5 mm to 1 mm. Shape: Tubular, elongated; apices acute. Number of disc florets per inflorescence: About 20 massed at the center of the inflorescence. Color, immature: Close to 145A. Color, mature: Close to 12A.

Phyllaries.—Number of phyllaries per inflorescence: About 25 arranged in two or three whorls. Length: About 4 mm to 6 mm. Width: About 2 mm to 3 mm. Shape: Ovate. Apex: Rounded. Base: Rounded to truncate. Margin: Entire. Texture, upper and lower surfaces: Smooth, glabrous. Color, upper surface: Close to 137A. Color, lower surface: Close to N137B.

Peduncles.—Length, terminal peduncle: About 5 cm. Length, fourth peduncle: About 5 cm. Length, seventh

peduncle: About 5 cm. Diameter: About 2 mm. Angle: About 30° from vertical. Strength: Moderately strong. Texture: Slightly pubescent. Color: Close to 136A. *Reproductive organs*.—Androecium: Not observed. Gynoecium: Not observed. *Seeds and fruits*.—Seed and fruit production have not been observed on plants of the new *Chrysanthemum*. Disease & pest resistance: Resistance to pathogens and pests common to *Chrysanthemums* has not been observed on plants grown under commercial conditions.

Garden performance: Plants of the new *Chrysanthemum* have demonstrated excellent garden performance and will tolerate temperatures ranging from about 0° C. to about 45° C.

It is claimed:
1. A new and distinct *Chrysanthemum* plant named ‘Lava Red’ as illustrated and described.

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