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# (12) United States Plant Patent **Pieters**

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CHRYSANTHEMUM PLANT NAMED 'PAVIA (54)RED'

Latin Name: *Chrysanthemum*×*morifolium* Varietal Denomination: Pavia Red

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ABSTRACT (57)

A new and distinct cultivar of *Chrysanthemum* plant named 'Pavia Red', characterized by its uniform, upright, outwardly spreading and rounded plant habit; moderately vigorous growth habit; freely branching habit; dense and full plant habit; uniform and freely flowering habit; large decorativetype inflorescences with red purple-colored ray florets; and excellent garden performance.

1 Drawing Sheet

Botanical designation: *Chrysanthemum*×*morifolium*. Cultivar Denomination: 'PAVIA 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 'Pavia Red'.

The new *Chrysanthemum* plant is a product of a planned 10 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 crosspollination made by the Inventor in Oostnieuwkerke, Belgium in September, 2004 of Chrysanthemum×morifolium 'PPP OLW 07', disclosed in U.S. Plant Pat. No. 20,393, as the female, or seed, parent with Chrysanthemum×morifolium 20 'Carmini', not patented. 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, 2005.

Asexual reproduction of the new *Chrysanthemum* plant by vegetative cuttings was first conducted in a controlled greenhouse environment in Oostnieuwkerke, Belgium in January, 2006. Asexual reproduction by cuttings has shown that the unique features of this new *Chrysanthemum* plant are stable <sup>30</sup> 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 environment such as temperature, daylength and light intensity, without, however, any variance in genotype.

The following traits have been repeatedly observed and are 40 determined to be the unique characteristics of 'Pavia Red'.

These characteristics in combination distinguish 'Pavia Red' as a new and distinct *Chrysanthemum* plant:

- 1. Uniform, upright, outwardly spreading and rounded plant habit; moderately vigorous growth habit.
- 2. Freely branching habit; dense and full plant habit.
- 3. Uniform and freely flowering habit.
- 4. Large decorative-type inflorescences with red purplecolored ray florets.
- 5. Excellent garden performance.

Plants of the new *Chrysanthemum* differ primarily from the female parent, 'PPP OLW 07', in the following characteristics:

- 1. Plants of the new *Chrysanthemum* flower earlier than plants of 'PPP OLW 07'.
- 2. Plants of the new *Chrysanthemum* and 'PPP OLW 07' differ in ray floret color as plants of 'PPP OLW 07' have red-colored ray florets.

Plants of the new *Chrysanthemum* differ primarily from the male parent, 'Carmini', in the following characteristics:

- 1. Plants of the new *Chrysanthemum* are larger than plants of 'Carmini'.
- 2. Plants of the new *Chrysanthemum* have larger leaves than plants of 'Carmini'.
- 3. Plants of the new *Chrysanthemum* have larger inflorescences than plants of 'Carmini'.
- 4. Inflorescences of plants of the new Chrysanthemum are decorative in form whereas inflorescences of plants of 'Carmini' are semi-decorative in form.

Plants of the new *Chrysanthemum* can also be compared to plants of Chrysanthemum×morifolium 'Raquel', disclosed in U.S. Plant Pat. No. 8,982. In side-by-side comparisons conducted in Oostnieuwkerke, Belgium, plants of the new Chrysanthemum differed from plants of 'Raquel' in the following characteristics:

- 1. Plants of the new *Chrysanthemum* were more rounded than and not as upright as plants of 'Raquel'.
- 2. Plants of the new *Chrysanthemum* were flexible and not brittle like plants of 'Raquel'.

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3. Plants of the new *Chrysanthemum* flowered later than plants of 'Raquel'.

#### 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 10 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 'Pavia Red' grown in a container.

## DETAILED BOTANICAL DESCRIPTION

The aforementioned photograph and following observations and measurements describe plants grown in 19-cm containers in an outdoor nursery in Oostnieuwkerke, Belgium during the summer and autumn and under conditions and 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 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* 'Pavia Red'.

## Parentage:

Female, or seed, parent.—Chrysanthemum×morifolium 'PPP OLW 07', disclosed in U.S. Plant Pat. No. 35 20,393.

Male, or pollen, parent.—Chrysanthemum×morifolium 'Carmini', 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 45 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.

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Plant description:

Appearance.—Perennial decorative-type Chrysanthemum; stems upright and outwardly spreading giving a

Appearance.—Perennial decorative-type Chrysanthemum; stems upright and outwardly spreading giving a uniformly rounded appearance to the plant; very freely branching habit, about 25 to 30 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 35 cm.

Plant width.—About 50 cm.

Lateral branches.—Length: About 25 cm. Diameter: About 2 mm to 3 mm. Internode length: About 3 cm. Strength: Strong. Texture: Pubescent; longitudinally 65 ridged. Color: Close to 138A.

Leaves.—Arrangement: Alternate, simple. Length: About 3.5 cm to 5 cm. Width: About 3.5 cm to 4 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.—Faintly fragrant, pungent.

Flowering response.—Under natural season conditions, plants flower in mid-September in Belgium; flowering response time, about five 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 4.5 cm. Depth (height): About 3 cm. Disc diameter: About 3 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, upper surface: Close to 59B. When opening, lower surface: Close to 185B. Fully opened, upper surface: Close to 58A; color does not change with development. Fully opened, lower surface: Close to 58A; 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 30 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.

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Garden performance: Plants of the new *Chrysanthemum* have demonstrated excellent garden performance and will tol-

erate temperatures ranging from about 0° C. to about 45° C. It is claimed:

1. A new and distinct *Chrysanthemum* plant named 'Pavia Red' as illustrated and described.

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Reproductive organs.—Androecium: Not observed. Gynoecium: Not observed.

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

Disease/pest resistance: Resistance to pathogens and pests common to *Chrysanthemums* has not been observed on plants grown under commercial conditions.

