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Wain

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- (54) **CHRYSANTHEMUM** PLANT NAMED ‘DOMDAYYEL’
- (50) Latin Name: *Chrysanthemum X morifolium*
Varietal Denomination: **Domdayyel**
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See application file for complete search history.

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(57) **ABSTRACT**

A new and distinct cultivar of *Chrysanthemum* plant named ‘Domdayyel’, characterized by its upright to outwardly spreading and uniformly and broadly mounded plant habit; moderately vigorous growth habit; freely branching habit; dense and full plant form; uniform and freely flowering habit; medium-sized decorative-type inflorescences with bright yellow-colored ray florets; early season flowering habit, grown under natural season conditions, plants begin flowering in early August in the United Kingdom; and good garden performance.

1 Drawing Sheet

1

Botanical designation: *Chrysanthemum X morifolium*.
Cultivar denomination: ‘DOMDAYYEL’.

BACKGROUND OF THE INVENTION

The present invention relates to a new and distinct *Chrysanthemum* plant, botanically known as *Chrysanthemum X morifolium*, commercially grown as a garden *Chrysanthemum* plant, referred to as code number 66564 in U.S. Provisional Patent Application Ser. No. 62/708,405 and hereinafter referred to by the name ‘Domdayyel’.

The new *Chrysanthemum* plant is a product of a planned breeding program conducted by the Inventor in Fareham, Hampshire, United Kingdom. The objective of the breeding program is to create new garden *Chrysanthemum* plants with numerous attractive inflorescences.

The new *Chrysanthemum* plant originated from a cross-pollination made in January, 2012 by the Inventor in Fareham, Hampshire, United Kingdom of a proprietary selection of *Chrysanthemum X morifolium* identified as code number 83327, not patented, as the female, or seed, parent with a proprietary selection of *Chrysanthemum X morifolium* identified as code number 802244, not patented, as the male, or pollen, parent. The new *Chrysanthemum* 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 Fareham, Hampshire, United Kingdom in September, 2012.

Asexual reproduction of the new *Chrysanthemum* plant by terminal vegetative cuttings was first conducted in Fareham, Hampshire, United Kingdom in December, 2012. Asexual reproduction by terminal vegetative cuttings has

2

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 combinations of environmental conditions and cultural practices. The phenotype may vary somewhat with variations in environmental conditions such as temperature, daylength and light intensity, without, however, any variance in genotype.

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

1. Upright to outwardly spreading and uniformly and broadly mounded plant habit.
2. Moderately vigorous growth habit.
3. Freely branching habit; dense and full plant form.
4. Uniform and freely flowering habit.
5. Medium-sized decorative-type inflorescences with bright yellow-colored ray florets.
6. Early season flowering habit, grown under natural season conditions, plants begin flowering in early August in the United Kingdom.
7. Good garden performance.

Plants of the new *Chrysanthemum* can be compared to plants of the female parent selection. Plants of the new *Chrysanthemum* differ primarily from plants of the female parent selection in the following characteristics:

1. Plants of the new *Chrysanthemum* flower earlier than plants of the female parent selection.
2. Plants of the new *Chrysanthemum* and the female parent selection differ in ray floret color as plants of the new *Chrysanthemum* have inflorescences with bright yellow-colored ray florets whereas plants of the female parent selection have inflorescences with dark yellow-colored ray florets.

Plants of the new *Chrysanthemum* can be compared to plants of the male parent selection. Plants of the new *Chrysanthemum* differ primarily from plants of the male parent selection in the following characteristics:

1. Plants of the new *Chrysanthemum* flower earlier than plants of the male parent selection.
2. Plants of the new *Chrysanthemum* and the male parent selection differ in ray floret color as plants of the new *Chrysanthemum* have inflorescences with bright yellow-colored ray florets whereas plants of the male parent selection have inflorescences with bronze and yellow bi-colored ray florets.

Plants of the new *Chrysanthemum* can be compared to plants of *Chrysanthemum X morifolium* 'Sunbeam Yellow', not patented. In side-by-side comparisons, plants of the new *Chrysanthemum* differ primarily from plants of 'Sunbeam Yellow' in the following characteristics:

1. Plants of the new *Chrysanthemum* are larger than plants of 'Sunbeam Yellow'.
2. Plants of the new *Chrysanthemum* flower earlier than plants of 'Sunbeam Yellow'.

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 is a top perspective view of a typical flowering plant of 'Domdayyel' grown in a container.

DETAILED BOTANICAL DESCRIPTION

The aforementioned photograph and following observations and measurements describe plants grown during the summer in 14-cm containers in a glass-covered greenhouse in Fareham, Hampshire, United Kingdom and under cultural practices typical of commercial garden *Chrysanthemum* production. During the production of the plants, day and night temperatures ranged from 17° C. to 21° C. and light levels averaged 6,000 lux. Plants were grown under long day/short night conditions for about five weeks (including propagation period) and then grown under short day/long night conditions to induce inflorescence initiation and development. Plants were twelve 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, Fifth Edition, except where general terms of ordinary dictionary significance are used. Botanical classification: *Chrysanthemum X morifolium* 'Domdayyel'.

Parentage:

Female, or seed, parent.—Proprietary selection of *Chrysanthemum X morifolium* identified as code number 83327, not patented.

Male, or pollen, parent.—Proprietary selection of *Chrysanthemum X morifolium* identified as code number 802244, not patented.

Propagation:

Type.—Terminal vegetative cuttings.

Time to initiate roots, summer.—About ten days at temperatures about 21° C.

Time to initiate roots, winter.—About twelve days at temperatures about 21° C.

Time to produce a rooted young plant, summer.—About three weeks at temperatures about 21° C.

Time to produce a rooted young plant, winter.—About four weeks at temperatures about 21° C.

Root description.—Fine, fibrous; typically light brown in color, actual color of the roots is dependent on substrate composition, water quality, fertilizer type and formulation, substrate temperature and physiological age of roots.

Rooting habit.—Freely branching; sparse.

Plant description:

Plant and growth habit.—Herbaceous decorative-type garden *Chrysanthemum*; stems upright to outwardly spreading giving a uniformly broadly mounded appearance to the plant; numerous lateral branches and relatively short internodes, dense and full plant form; moderately vigorous growth habit and medium growth rate.

Plant height.—About 26 cm.

Plant width.—About 42 cm.

Branching habit.—Freely branching habit; about five lateral branches develop after removal of terminal apex (pinching).

Lateral branches.—Length: About 18 cm. Diameter: About 5 mm. Internode length: About 7 mm. Strength: Strong. Aspect: About 85° from vertical and then bending upwardly. Texture: Fine pubescence. Color: Close to 146D.

Leaf description:

Arrangement.—Alternate, simple.

Length.—About 4.3 cm.

Width.—About 3.5 cm.

Shape.—Palmately-lobed; roughly ovate with three to five lobes.

Apex.—Cuspidate.

Base.—Attenuate.

Margin.—Slightly dentate and palmately lobed; sinuses between lateral lobes mostly divergent.

Texture, upper surface.—Fine pubescence; rough.

Texture, lower surface.—Fine pubescent; slightly rough; veins prominent.

Venation pattern.—Pinnate.

Color.—Developing leaves, upper surface: Close to 137A. Developing leaves, lower surface: Close to 137C. Fully expanded leaves, upper surface: Close to 138A; venation, close to 144D. Fully expanded leaves, lower surface: Close to 138B; venation, close to 144D.

Petioles.—Length: About 1.6 cm. Diameter: About 2 mm. Texture, upper surface: Fine pubescence; rough. Texture, lower surface: Fine pubescent; slightly rough. Color, upper and lower surfaces: Close to 144D.

Inflorescence description:

Form and flowering habit.—Decorative-type inflorescence form with ligulate-shaped ray florets; inflores-

cences borne on terminals above and beyond the foliar plane; disc and ray florets arranged acropetally on a capitulum; freely flowering habit with about 375 inflorescences developing per plant during the flowering season.

Fragrance.—Fragrant; pungent, herbaceous.

Flowering response.—Early season flowering habit, plants exposed to natural season conditions begin flowering in early August in the United Kingdom; plants flower uniformly and continuously during the flowering season.

Inflorescence longevity.—Inflorescences maintain good color and substance for about three to five weeks on the plant; inflorescences persistent.

Inflorescence buds.—Height: About 4 mm. Diameter: About 6 mm. Shape: Oblate. Color: Close to 138A.

Inflorescence diameter.—About 4.5 cm.

Inflorescence height.—About 1.3 cm.

Disc diameter.—Not conspicuous.

Receptacles.—Height: About 2 mm. Diameter: About 3 mm. Shape: Oblate. Color: Close to 144C.

Ray florets.—Number of ray florets per inflorescence: About 140 arranged in about 13 whorls. Orientation: Initially upright, then about 85° from vertical; weakly convex. Length: About 2.1 cm. Width: About 5 mm. Shape: Ligulate. Apex: Emarginate. Base: Fused into a short tube. Margin: Entire. Texture, upper and lower surfaces: Smooth, glabrous; double-keeled. Color: When opening and fully opened, upper surface: Close to 9A; color becoming closer to 8A with development. When opening and fully opened, lower surface: Close to 9A; color becoming closer to 8B with development.

Disc florets.—Number of disc florets per inflorescence: About 40 massed at the center of the receptacle; inconspicuous. Length: About 4 mm. Diameter:

About 1 mm. Shape: Tubular, elongated; apices, acute. Texture, inner and outer surfaces: Smooth, glabrous. Color, when opening and fully opened: Apex: Close to 13A. Mid-section: Close to 13C. Base: Close to 13B.

Phyllaries.—Number of phyllaries per inflorescence: About 28 arranged in about two whorls. Length: About 8 mm. Width: About 2 mm. Shape: Lanceolate. Apex: Acute. Base: Obtuse. Margin: Entire. Texture, upper surface: Smooth, glabrous; waxy. Texture, lower surface: Fine pubescence; waxy. Color, upper and lower surfaces: Close to 138A.

Peduncles.—Length, terminal peduncle: About 4 cm. Diameter, terminal peduncle: About 2 mm. Angle: Erect to about 15° from vertical. Strength: Moderately strong; flexible. Texture: Densely pubescent. Color: Close to 146B.

Reproductive organs.—Androecium: None observed. Gynoecium: Present only on ray florets. Pistil length: About 4 mm. Stigma shape: Bi-parted. Stigma color: Close to 9A. Style length: About 3 mm. Style color: Close to 1B. Ovary color: Close to 155C.

Seeds and fruits.—To date, seed and fruit production has not been observed on plants of the new *Chrysanthemum*.

Pathogen & pest resistance: To date, resistance to pathogens and pests common to *Chrysanthemum* plants has not been observed on plants of the new *Chrysanthemum*.

Garden performance: Plants of the new *Chrysanthemum* have demonstrated good garden performance and to tolerate temperatures from about 0° C. to about 35° C.

It is claimed:

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

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