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Kester

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(54) **CHRYSANTHEMUM PLANT NAMED**
'BALSAS'

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

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(57) **ABSTRACT**

A new and distinct cultivar of cut flower *Chrysanthemum* plant named 'Balsas', characterized by its upright growth habit; freely flowering habit; daisy-type inflorescences; attractive red purple-colored ray florets; response time about 51 days when grown at 18° C.; dark green-colored foliage; strong flowering stems and peduncles; and good postproduction longevity with inflorescences and foliage maintaining good substance and color for about two weeks in an interior environment.

1 Drawing Sheet

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Botanical classification/cultivar designation: *Chrysanthemum*×*morifolium* cultivar Balsas.

BACKGROUND OF THE INVENTION

The present invention relates to a new and distinct cultivar of cut flower *Chrysanthemum* plant, botanically known as *Chrysanthemum*×*morifolium* and hereinafter referred to by the name 'Balsas'.

The new *Chrysanthemum* is a product of a planned breeding program conducted by the Inventor in De Lier, The Netherlands. The objective of the breeding program is to create new high-yielding cut flower *Chrysanthemum* cultivars with attractive ray and disc coloration, good inflorescence form and substance and good post-production longevity.

The new *Chrysanthemum* originated from a cross-pollination made by the Inventor in January, 1999, in De Lier, The Netherlands, of the *Chrysanthemum*×*morifolium* cultivar Sheba, not patented, as the female, or seed, parent with a proprietary *Chrysanthemum*×*morifolium* selection identified as 748A 1, not patented, as the male, or pollen, parent.

The cultivar Balsas was discovered and selected by the Inventor as a flowering plant within the progeny of the stated cross-pollination in a controlled environment in De Lier, The Netherlands in August, 1999. The selection of this plant was based on its desirable inflorescence coloration and good form and substance.

Asexual reproduction of the new *Chrysanthemum* by vegetative tip cuttings in a controlled environment in De Lier, The Netherlands since January, 2000, has shown that the unique features of this new *Chrysanthemum* are stable and reproduced Balsas to type in successive generations.

SUMMARY OF THE INVENTION

Plants of the cultivar Balsas have not been observed under all possible environmental conditions. The phenotype may vary somewhat with variations in environment such as

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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 'Balsas'. These characteristics in combination distinguish 'Balsas' as a new and distinct cultivar:

1. Upright cut *Chrysanthemum* that is usually grown as a natural spray.
2. Freely flowering habit, about 19 inflorescences per flowering stem.
3. Daisy-type inflorescences.
4. Attractive red purple-colored ray florets.
5. Response time about 51 days when grown at 18° C.
6. Dark green-colored foliage.
7. Strong flowering stems and peduncles.
8. Good postproduction longevity with inflorescences and foliage maintaining good substance and color for about two weeks in an interior environment.

Plants of the new *Chrysanthemum* can be compared to plants of the female parent, the cultivar Sheba. In side-by-side comparisons conducted in De Lier, The Netherlands, plants of the new *Chrysanthemum* differed from plants of the cultivar Sheba in the following characteristics:

1. Flowering stems of plants of the new *Chrysanthemum* were shorter than flowering stems of plants of the cultivar Sheba.
2. Plants of the new *Chrysanthemum* had stronger flowering stems than plants of the cultivar Sheba.
3. Plants of the new *Chrysanthemum* flowered more uniformly than plants of the cultivar Sheba.
4. Plants of the new *Chrysanthemum* had larger inflorescences than plants of the cultivar Sheba.
5. Ray florets of plants of the new *Chrysanthemum* were red purple in color whereas ray florets of plants of the cultivar Sheba were white in color.

Plants of the new *Chrysanthemum* can be compared to plants of the male parent selection. In side-by-side compari-

sons conducted in De Lier, The Netherlands, plants of the new *Chrysanthemum* differed from plants of the male parent selection in the following characteristics:

1. Flowering stems of plants of the new *Chrysanthemum* were longer than flowering stems of plants of the male parent selection.
2. Plants of the new *Chrysanthemum* had larger inflorescences than plants of the male parent selection.

Plants of the new *Chrysanthemum* can also be compared to plants of the *Chrysanthemum*×*morifolium* cultivar Splendid Reagan, disclosed in U.S. Plant Pat. No. 10,205. In side-by-side comparisons conducted in De Lier, The Netherlands, plants of the new *Chrysanthemum* differed from plants of the cultivar Splendid Reagan in the following characteristics:

1. Flowering stems of plants of the new *Chrysanthemum* were longer than flowering stems of plants of the cultivar Splendid Reagan.
2. Plants of the new *Chrysanthemum* flowered about three days earlier than plants of the cultivar Splendid Reagan.
3. Plants of the new *Chrysanthemum* were more tolerant to low production temperatures than plants of the cultivar Splendid Reagan.

Plants of the new *Chrysanthemum* can also be compared to plants of the *Chrysanthemum*×*morifolium* cultivar Lineker, not patented. In side-by-side comparisons conducted in De Lier, The Netherlands, plants of the new *Chrysanthemum* differed from plants of the cultivar Lineker in the following characteristics:

1. Flowering stems of plants of the new *Chrysanthemum* were shorter than flowering stems of plants of the cultivar Lineker.
2. Plants of the new *Chrysanthemum* had larger inflorescences with larger discs than plants of the cultivar Lineker.
3. Ray florets of plants of the new *Chrysanthemum* were darker in color than ray florets of plants of the cultivar Lineker.

BRIEF DESCRIPTION OF THE PHOTOGRAPH

The accompanying colored photograph illustrates the overall appearance of the new *Chrysanthemum*, showing the colors as 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*.

The photograph comprises a side perspective view of a typical flowering stem of 'Balsas' grown as a natural spray.

DETAILED BOTANICAL DESCRIPTION

The aforementioned photograph and following observations and measurements describe plants grown in De Lier, The Netherlands, under conditions which approximate commercial practice in a glass-covered greenhouse in June. Cuttings were planted in ground beds and received two weeks of long day/short nights followed by short day/long nights until flowering. Plants were grown as single-stem natural spray cut *Chrysanthemums*. During the production of the flowering plants, day and night temperatures averaged 18.5° C. The photograph and botanical description were taken about ten weeks after planting. In the following description, color references are made to The Royal Horti-

cultural Society Colour Chart, 2001 Edition, except where general terms of ordinary dictionary significance are used.

Botanical classification: *Chrysanthemum*×*morifolium* cultivar Balsas.

Commercial classification: Daisy-type cut flower *Chrysanthemum*.

Parentage:

Female or seed parent.—*Chrysanthemum*×*morifolium* cultivar Sheba, not patented.

Male or pollen parent.—Proprietary *Chrysanthemum*×*morifolium* selection identified as code number 748A 1, not patented.

Propagation:

Type.—Vegetative tip cuttings.

Time to initiate roots.—Summer: About five days at temperatures of 20° C. Winter: About six days at temperatures of 20° C.

Time to produce a rooted young plant.—Summer: About 11 days at temperatures of 20° C. Winter: About 15 days at temperatures of 20° C.

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

Rooting habit.—Freely branching.

Plant description:

Appearance/growth habit.—Herbaceous daisy-type cut flower that is typically grown as a natural spray. Narrow columnar; moderately vigorous to vigorous.

Flowering stem description.—Aspect: Erect. Length: About 77 cm. Diameter (natural spray diameter): About 22 cm. Diameter: About 7 mm. Internode length: About 2.4 cm. Texture: Pubescent; longitudinally ridged. Strength: Strong. Color: Between 137C and 143A.

Foliage description.—Arrangement: Alternate; single. Length: About 10.3 cm. Width: About 5.9 cm. Apex: Broadly acute. Base: Attenuate. Margin: Palmately lobed; sinuses convergent to parallel. Texture, upper and lower surfaces: Sparsely pubescent; rough. Color: Developing and fully expanded foliage, upper surface: 137A. Developing and fully expanded foliage, lower surface: 137C. Venation, upper and lower surface: 138B. Petiole: Length: About 1.9 cm. Diameter: About 3 mm. Color, upper and lower surfaces: 138B.

Flowering description:

Appearance.—Daisy-type inflorescence form with obovate-shaped ray florets. Inflorescences borne on terminals, arising from leaf axils. Disc and ray florets develop acropetally on a capitulum.

Flowering response.—Under natural conditions, plants flower mid-October to early November in The Netherlands. At other times of the year, inflorescence initiation and development can be induced under short day/long night conditions (at least 13.5 hours of darkness). Plants exposed to two weeks of long day/short night conditions after planting followed by photoinductive short day/long night conditions flower about 51 days later when grown as a natural spray.

Postproduction longevity.—In an interior environment, inflorescences and foliage will maintain good color and substance for about two weeks in an interior environment.

Quantity of inflorescences.—Freely flowering habit, about 19 inflorescences per flowering stem.

Inflorescence size.—Diameter: About 6.6 cm. Depth (height): About 2.6 cm. Disc diameter: About 1.6 cm. Receptacle diameter: About 1.9 cm. Receptacle height: About 7 mm.

Inflorescence buds.—Shape: Oblate. Height: About 6 mm. Diameter: About 9 mm. Color: Between 137A and 143A.

Ray florets.—Shape: Obovate. Length: About 2.7 cm. Width: About 1 cm. Apex: Obtuse. Base: Attenuate. Texture: Smooth, glabrous; longitudinally ridged. Aspect: Initially upright; when fully expanded horizontal to about 35° from horizontal. Number of ray florets per inflorescence: About 41 arranged in four rows. Color: When opening, upper surface: Close to 72B. When opening, lower surface: 77C to 77D; towards the base, 76D. Fully opened, upper surface: Close to 72B. Fully opened, lower surface: 77C to 77D; towards the base, 76C to 76D.

Disc florets.—Arrangement: Massed at center of receptacle. Shape: Tubular, elongated. Apex: Five-pointed. Length: About 5.5 mm. Width: Apex: About 1.5 mm. Base: About 1 mm. Number of disc florets per inflorescence: About 275. Color: Immature: 17B to 17C; towards the apex, N144B. Mature: Apex: 151B. Mid-section and base: 145B to 145C.

Phyllaries.—Quantity per inflorescence: About 18. Length: About 9 mm. Width: About 4 mm. Shape:

Ovate. Apex: Obtuse. Base: Broadly cuneate. Margin: Entire. Texture, upper and lower surfaces: Densely pubescent. Color, upper surface: 139A; towards the base, 143A. Color, lower surface: Between 137A and 143A.

Peduncles.—Length: First peduncle: About 8.3 cm. Fourth peduncle: About 7.6 cm. Seventh peduncle: About 9 cm. Diameter: About 3 mm. Angle: About 30° from vertical. Strength: Strong. Texture: Densely pubescent. Color: 138A.

Reproductive organs.—Androecium: Present on disc florets only. Anther color: 12A. Pollen amount: Moderate. Pollen color: 13A. Gynoecium: Present on both ray florets. Stigma color: 12A. Ovary color: 145B.

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

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

Temperature tolerance: Plants of the new *Chrysanthemum* have demonstrated good tolerance to low temperatures of 10° C. and high temperatures of 35° C.

It is claimed:

1. A new and distinct cultivar of cut flower *Chrysanthemum* plant named 'Balsas', as illustrated and described.

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