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

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(57) **ABSTRACT**

A distinct cultivar of Chrysanthemum plant named 'Zembla', characterized by its decorative inflorescence form with white-colored ray florets; dark green foliage; strong flowering stems; freely flowering habit; short response time; and excellent postproduction longevity.

**1 Drawing Sheet**



## BOTANICAL CLASSIFICATION/CULTIVAR DESIGNATION

*Chrysanthemum×morifolium* cultivar Zembla.

## BACKGROUND OF THE INVENTION

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

The new Chrysanthemum originated from a cross-pollination made by the Inventor in 's-Gravenzande, The Netherlands, of a proprietary selection of Chrysanthemum identified as code number DB 8713, not patented, as the female, or seed, parent with a proprietary selection of Chrysanthemum identified as code number DB 8556, not patented, as the male, or pollen, parent. The new Chrysanthemum was discovered and selected by the Inventor within the progeny of the stated cross in a controlled environment in 's-Gravenzande, The Netherlands, in January, 2001. The selection of this plant was based on its inflorescence form, color and good substance.

Asexual reproduction of the new Chrysanthemum by terminal cuttings harvested in 's-Gravenzande, The Netherlands since February, 2001, has shown that the unique features of this new Chrysanthemum are stable and reproduced true to type in successive generations.

## BRIEF SUMMARY OF THE INVENTION

The cultivar Zembla has not been observed under all possible environmental 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 determined to be the unique characteristics of 'Zembla'. These characteristics in combination distinguish 'Zembla' as a new and distinct cultivar:

1. Decorative inflorescence form with ray florets that are initially green in color becoming white in color with development; typically grown as a spray type.

2. Dark green foliage.

3. Strong flowering stems.



4. Freely flowering habit.

5. Short response time.

6. Excellent postproduction longevity.

Plants of the new Chrysanthemum can be compared to plants of the female parent, the selection DB 8713. In side-by-side comparisons conducted by the Inventor in 's-Gravenzande, The Netherlands, plants of the new Chrysanthemum differed from plants of the selection DB 8713 in the following characteristics:

1. Plants of the new Chrysanthemum were more vigorous than plants of the selection DB 8713.

2. Plants of the new Chrysanthemum had paler green-colored leaves than plants of the selection DB 8713.

3. Plants of the new Chrysanthemum had shorter peduncles than plants of the selection DB 8713.

4. Ray florets of plants of the new Chrysanthemum were elongated oblong in shape whereas ray florets of plants of the selection DB 8713 were quilled in shape.

5. Plants of the new Chrysanthemum flowered about two days later than plants of the selection DB 8713.

Plants of the new Chrysanthemum can be compared to plants of the male parent, the selection DB 8556. In side-by-side comparisons conducted by the Inventor in 's-Gravenzande, The Netherlands, plants of the new Chrysanthemum and the selection DB 8556 differed in the following characteristics:

1. Plants of the new Chrysanthemum had smaller inflorescences than plants of the selection DB 8556.

2. Plants of the new Chrysanthemum had fewer ray florets per inflorescence than plants of the selection DB 8556.

3. Developing ray florets of plants of the new Chrysanthemum were green in color whereas developing ray florets of plants of the selection DB 8556 were white in color.

4. Plants of the new Chrysanthemum flowered about six days earlier than plants of the selection DB 8556.

Plants of the new Chrysanthemum can also be compared to plants of the cultivar Calabria, not patented. In side-by-side comparisons conducted by the Inventor in 's-Gravenzande, The Netherlands, plants of the new Chrysanthemum and the cultivar Calabria differed in the following characteristics:

1. Plants of the new Chrysanthemum were more vigorous than plants of the cultivar Calabria.

2. Plants of the new Chrysanthemum had larger inflorescences than plants of the cultivar Calabria.

3. Developing ray florets of plants of the new Chrysanthemum were green in color whereas developing ray florets of plants of the cultivar Calabria were white in color.

## BRIEF DESCRIPTION OF THE PHOTOGRAPHS

The accompanying colored photographs illustrate the overall appearance of the new cultivar, showing the colors as true as it is reasonably possible to obtain in colored reproductions of this type. Colors in the photographs may differ slightly from the color values cited in the detailed botanical description which accurately describe the actual colors of the new Chrysanthemum.

The photograph at the top of the sheet comprises a side perspective view of a typical flowering stem of 'Zembla'.

The photograph at the bottom of the sheet comprises a close-up view of a typical leaf and a typical inflorescence of 'Zembla'.

## DETAILED BOTANICAL DESCRIPTION

In the following description, color references are made to The Royal Horticultural Society Colour Chart except where general terms of ordinary dictionary significance are used. The aforementioned photographs, following observations and measurements describe plants grown in ground beds in 's-Gravenzande, The Netherlands, under commercial practice in a glass-covered greenhouse. Plants were initially given short nyctoperiods followed by long nyctoperiods to induce flower initiation and development. Average day and night temperatures were 18 and 19° C., respectively. Plants were grown as single-stem spray types and were about 11 weeks from planting when the photographs and description were taken.

Botanical classification: *Chrysanthemum×morifolium* cultivar Zembla.

Commercial classification: Cut Chrysanthemum with decorative inflorescence form; typically grown as a spray-type.

Parentage

*Female or seed parent.*—Proprietary selection of *Chrysanthemum×morifolium* identified as code number DB 8713, not patented.

*Male or pollen parent.*—Proprietary selection of *Chrysanthemum×morifolium* identified as code number DB 8556, not patented.

Propagation:

*Type.*—Terminal tip cuttings.

*Time to initiate roots, summer.*—About 5 days at 20° C.

*Time to initiate roots, winter.*—About 6 days at 20° C.

*Root description.*—Fine, fibrous and well-branched.

Plant description:

*Appearance.*—Herbaceous cut Chrysanthemum with decorative inflorescence form; typically grown as a spray type. Upright with strong stems.

*Growth rate.*—Moderate; vigorous.

*Crop time.*—For cut flowers, about 11 weeks are required to produce flowering stems.

*Flowering stem description.*—Length: About 80 cm. Diameter, at base: About 6 mm. Strength: Strong. Aspect: Upright. Branching habit: Plants are typically grown as single stems. Color: 144A.

*Foliage description.*—Arrangement: Alternate. Length: About 14.25 cm. Width: About 6.75 cm. Apex: Mucronate. Base: Obtuse to truncate. Margin: Palmately lobed. Texture, upper and lower surfaces: Rough; pubescent. Petiole length: About 2.1 cm. Color: Young foliage, upper surface: 139A. Young foliage, lower surface: 137C. Fully expanded foliage, upper surface: 147A. Fully expanded foliage, lower surface: 147B. Venation, upper and lower surfaces: 143C. Petiole: 144A.

Inflorescence description:

*Appearance.*—Decorative inflorescence form. Inflorescences borne on terminals, arising from leaf axils. Ray and disc florets arranged acropetally on the receptacle.

*Flowering response.*—Under natural conditions, plant typically flowers in November in the Northern Hemisphere. At other times of the year, inflorescence initiation and development can be induced under long nyctoperiod conditions (at least 13.5 hours of darkness). Early flowering; plants exposed to short nyctoperiods conditions after planting followed by photoinductive long nyctoperiod conditions flower about 7.5 to 8 weeks later.

*Postproduction longevity.*—Inflorescences will maintain good substance and form for about 5 weeks on the plant and for about 3 weeks after harvesting cut flowering stems.

*Quantity of inflorescences per flowering stem.*—About 14.

*Inflorescence size.*—Diameter: About 9 cm. Depth (height): About 3 cm. Diameter of disc: Less than 5 mm; inconspicuous.

*Inflorescence buds.*—Length: About 8 mm. Diameter: About 1.1 cm. Shape: Oblate. Color: 138A.

*Ray florets.*—Length: About 4.5 cm. Width: About 1.7 cm. Shape: Elongated oblong. Apex: Rounded, slightly dentate. Base: Acute to attenuate. Margin: Entire. Texture: Smooth, glabrous. Number of ray florets per inflorescence: About 250. Color: When opening, upper and lower surfaces: 145C. Fully opened, upper and lower surfaces: 155C.

*Disc florets.*—Shape: Oblong, tubular. Length: About 4 mm. Width: About 1 mm. Number of disc floret per inflorescence: About 10. Color: Immature: 145C. Mature: 144B.

*Peduncles.*—Length, terminal peduncle: About 10.5 cm. Length, fourth peduncle: About 9.5 cm. Diameter: About 2.5 mm. Angle: About 60° to main stem. Texture: Pubescent. Color: 146B.

*Reproductive organs.*—Androecium: Present on disc florets only. Anther color: 12A. Amount of pollen: Moderate. Pollen: 12A. Gynoecium: Present on both ray and disc florets.

*Seed.*—Seed production has not been observed.

Disease/pest Resistance: Resistance to known Chrysanthemum pathogens and pests has not been observed on plants of the new Chrysanthemum.

It is claimed:

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

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