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Glicenstein

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[54] CHRYSANTHEMUM PLANT NAMED ‘RED CROWN JEWEL’
[75] Inventor: Leon Glicenstein, State College, Pa.
[73] Assignee: Yoder Brothers, Inc., Barberton, Ohio
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Primary Examiner—Howard J. Locker
Attorney, Agent, or Firm—C. A. Whealy

[57] ABSTRACT

A distinct cultivar of Chrysanthemum plant named ‘Red Crown Jewel’, characterized by its uniformly mounded plant habit; daisy-type inflorescences that are about 4.75 cm in diameter; attractive red ray florets and bright yellow disc florets; numerous inflorescences per plant; and excellent garden performance.

1 Drawing Sheet

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The present invention relates to a new and distinct cultivar of Chrysanthemum plant, botanically known as *Dendranthema grandiflora* and referred to by the cultivar name Red Crown Jewel.
The new cultivar is a product of a mutation induction breeding program conducted by the inventor in Fort Myers, Fla., and Salinas, Calif. The objective of the breeding program is to create new garden-type Chrysanthemum cultivars having inflorescences with desirable inflorescence form and floret colors and good garden performance.
The new cultivar originated by exposing 75 unrooted cuttings of the Chrysanthemum cultivar Empire Crown Jewel (disclosed in U.S. Plant Pat. No. 9,738) to an x-ray radiation level of 2,000 rads in February, 1994. Following the radiation treatment, the cuttings were rooted and terminal apices were removed (pinched) three times to promote lateral branch development. After lateral branches from the third pinch reached sufficient size, 528 terminal cuttings were harvested, planted and flowered in a controlled environment in Salinas, Calif. The cultivar Red Crown Jewel was discovered and selected by the inventor as a single flowering plant within this population in August 1994. The selection of this plant was based on its desirable ray floret color, good form and excellent garden performance.
Asexual reproduction of the new cultivar by terminal cuttings taken in a controlled environment in Salinas, Calif., has shown that the unique features of this new Chrysanthemum are stable and reproduced true to type in successive generations.
The cultivar Red Crown Jewel 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.

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The following traits have been repeatedly observed and are determined to be the unique characteristics of ‘Red Crown Jewel’. These characteristics in combination distinguish ‘Red Crown Jewel’ as a new and distinct cultivar:
1. Uniformly mounded plant habit.
2. Daisy-type inflorescences that are about 4.75 cm in diameter.
3. Attractive red ray florets and bright yellow disc florets.
4. Numerous inflorescences per plant.
5. Excellent garden performance.
The new Chrysanthemum differs from its parent cultivar, Empire Crown Jewel, in ray floret color as plant of the new Chrysanthemum have ray florets that are red in color whereas ray florets of plants of the cultivar Empire Crown Jewel are red purple in color. In addition, plants of the new Chrysanthemum are most freely branching and fuller and disc floret color is darker yellow than plants of the cultivar Empire Crown Jewel.

BRIEF DESCRIPTION OF THE PHOTOGRAPHS

The accompanying photographs illustrate the overall appearance of the new cultivar.
The photograph at the top of the sheet comprises a side perspective view of a typical flowering plant of ‘Red Crown Jewel’.
The photograph at the bottom of the sheet comprises a close-up view of typical inflorescences of the cultivar ‘Red Crown Jewel’. These photographs show the colors as true as it is reasonably possible to obtain in colored reproductions of this type. Floret and foliage colors in the photographs may differ from the actual colors due to light reflectance.

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 following observations and measurements describe plants grown in Salinas, Calif., under conditions which approximate those generally used in commercial garden Chrysanthemum production. One unrooted cutting was directly stuck in a 15-cm container and plants were grown in a greenhouse with night interruption lighting for two weeks during late May/early June. At the end of the night interruption lighting period, plants were pinched (terminal apices removed). Three days later, plants were moved into an outdoor production area. Plants flowered about eight weeks later. Measurements and numerical values represent averages for typical flowering containers.

Botanical classification: *Dendranthema grandiflora* cultivar Red Crown Jewel.

Commercial classification: Daisy-type garden chrysanthemum.

Parentage: Induced mutation of *Dendranthema grandiflora* cultivar Empire Crown Jewel, disclosed in U.S. Plant Pat. No. 9,738.

Propagation:

Type.—Terminal tip cuttings.

Time to rooting.—Seven to ten days with soil temperatures of 21° C.

Rooting habit.—Fine, fibrous and well-branched.

Plant description:

Appearance.—Perennial herbaceous daisy-type garden Chrysanthemum. Inverted triangle. Stems initially upright, then spreading giving a uniformly mounded appearance to the plant. Very freely branching; about ten lateral branches develop after removal of terminal apex (pinching). Numerous secondary lateral branches develop at every node.

Plant height.—About 29 cm.

Foliage description.—Leaf arrangement: Alternate. Length: About 7 cm. Width: About 6.25 cm. Apex: Mucronate. Base: Attenuate. Margin: Palmately lobed, sinuses parallel. Texture: Upper and lower surfaces slightly pubescent. Veins prominent on lower surface. Petiole length: About 3.75 cm. Color: Young foliage upper surface: 147A. Young foliage lower surface: 147B. Mature foliage upper surface: 147A. Mature foliage lower surface: 147B. Venation upper surface: 147A/147B. Venation lower surface: 147B.

Inflorescence description:

Appearance.—Daisy-type inflorescence form with flat oblong-shaped ray florets. Inflorescences axillary and borne on terminals above foliage. Disk and ray florets arranged acropetally on a capitulum. One inflorescence per terminal with numerous inflorescences per plant.

Flowering response.—Under natural conditions, plant flowers in the early autumn. Plants exposed to 1.5 to 2 weeks of long day/short night conditions after planting followed by short day/long night conditions flower about 56 days later.

Inflorescence size.—Diameter: About 4.75 cm. Depth (height): About 1 cm. Diameter of disc: About 1.5 cm.

Ray florets.—Shape: Flat, oblong, fused at base. Length: About 2.3 cm. Width: About 7.5 mm. Apex: Dentate to rounded. Margin: Entire. Texture: Smooth, glabrous. Orientation: Slightly upright to horizontal to the peduncle. Number of ray florets per inflorescence: About 57. Color: When opening: Darker than 179A. Opened inflorescence: Upper surface: 45A to redder than 179A, iridescent. Lower surface: Close to 182A with yellowish streaks.

Disc florets.—Shape: Tubular, apex dentate. Length: About 6 mm. Width: Apex: About 2 mm. Base: About 1 mm. Number of disc florets per inflorescence: Numerous, more than 75. Color: Immature: 13A. Mature: Apex: 13A. Mid-section: Light green. Base: White.

Peduncle.—Aspect: Flexible, angled outwardly about 45 to 50° to the stem. Length: First peduncle: About 5 cm. Fourth peduncle: About 10 cm. Texture: Pubescent. Color: 143A.

Reproductive organs.—Androecium: Present on disc florets only. Anther color: 14A. Pollen color: 17A. Amount of pollen: Moderate. Gynoecium: Present on both ray and disc florets.

Disease resistance: No known Chrysanthemum diseases observed to date on plants grown under commercial production conditions.

Seed production:

Seed production has not been observed.

It is claimed:

1. A new and distinct cultivar of Chrysanthemum plant named 'Red Crown Jewel', as illustrated and described.

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