



US00PP09829P

United States Patent [19]**Wain**[11] **Patent Number:** **Plant 9,829**[45] **Date of Patent:** **Mar. 18, 1997**[54] **CHRYSANTHEMUM PLANT NAMED
'SUNNY TIME'**[75] **Inventor:** **Peter Wain**, Hants, United Kingdom[73] **Assignee:** **Cleangro Ltd.**, Chicester, United
Kingdom[21] **Appl. No.:** **627,498**[22] **Filed:** **Apr. 4, 1996**[51] **Int. Cl.⁶** **A01H 5/00**[52] **U.S. Cl.** **Plt./78**[58] **Field of Search** **Plt./78, 82.2***Primary Examiner*—Howard J. Locker*Attorney, Agent, or Firm*—C. A. Whealy[57] **ABSTRACT**

A distinct cultivar of Chrysanthemum plant named Sunny Time, characterized by its flat capitulum form; moderately vigorous and compact growth habit; freely branching plant habit; medium decorative-type inflorescences; bright yellow ray florets; and numerous inflorescences per plant.

1 Drawing Sheet**1**

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 Sunny Time.

The new cultivar is a product of a planned breeding program conducted by the inventory in Havant, Hampshire, United Kingdom. The objective of the breeding program was to create new Chrysanthemum cultivars having a fast flowering response, desirable inflorescence colors, and inflorescences and foliage with good substance.

The new cultivar originated from a cross made by the inventor of the inventor's proprietary Chrysanthemum selection No. P55-8 as the male or pollen parent with the inventor's proprietary Chrysanthemum selection No. P63-89 as the female or seed parent.

The cultivar Sunny Time was discovered and selected by the inventory as a flowering plant within the progeny of the stated cross in a controlled environment in Havant, Hampshire, United Kingdom.

Asexual reproduction of the new cultivar by terminal cuttings taken at Havant, Hampshire, United Kingdom, has shown that the unique features of this new Chrysanthemum are stable and reproduced true to type in successive generations.

The following traits have been repeatedly observed and are determined to be the unique characteristics of Sunny Time. These characteristics in combination distinguish Sunny Time as a new and distinct cultivar:

1. Flat capitulum form.
2. Moderately vigorous and compact growth habit.
3. Freely branching plant habit.
4. Medium decorative-type inflorescences.
5. Bright yellow ray florets.
6. Numerous inflorescences per plant.

The cultivar Sunny Time 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.

In side-by-side comparisons in Havant, Hampshire, United Kingdom, under commercial practice, plants of the new Chrysanthemum have larger inflorescences, lighter yellow ray floret color, and are earlier to flower than plants of the male parent, the proprietary selection P55-8. In the same comparisons, plants of the new Chrysanthemum have large inflorescences and leaves than plants of the female parent, the proprietary selection P63-89. In addition, the ray floret color of plants of the female parent is white.

Plants of the new Chrysanthemum are similar to the cultivar Tip (disclosed in U.S. Plant Pat. No. 3,867) in ray

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floret color. However, in side-by-side comparisons conducted in Oxnard, Calif., under commercial practice, plants of the new Chrysanthemum differed from plants of the cultivar Tip in the following characteristics:

1. Plants of the new Chrysanthemum are more compact and have shorter lateral branches than plants of the cultivar Tip.

2. Plants of the new Chrysanthemum are not as freely branching as plants of the cultivar Tip.

3. Leaves of plants of the new Chrysanthemum are longer than leaves of plants of the cultivar Tip.

4. Plants of the new Chrysanthemum have fewer ray florets, but more disc florets per inflorescence than plants of the cultivar Tip.

5. Disc florets are longer on plants of the new chrysanthemum compared to disc florets on plants of the cultivar Tip.

6. The peduncle angle of plants of the new Chrysanthemum is more obtuse than the peduncle angle of plants of the cultivar Tip.

A detailed comparison of plants of the new Chrysanthemum and the cultivar Tip appears in Chart A at the end of the specification.

The accompany colored photograph illustrates the overall appearance of the new cultivar, showing the colors as true as it is reasonably possible to obtain in colored reproduction of this type. The photograph comprises a top perspective view of a typical flowering 16.5-cm container of Sunny Time with five cuttings in the container and the terminal inflorescences removed (center-budded pot chrysanthemum).

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 Oxnard, Calif., under commercial practice in a glass-covered greenhouse with average night temperatures of 18° C., average day temperatures of 30° C., and light levels of 2,000 (cloudy conditions) to 9,000 (sunny conditions) footcandles.

After sticking unrooted cuttings of the new cultivar, plants received 21 long day/short nights followed by short day/long nights until flowering. Four weeks after the start day/long night treatment, plants received one spray application of daminozide growth retardant at a rate of 2500 ppm. Measurements and numerical values represent ranges or averages for six typical flowering plants.

Botanical classification: *Dendranthema grandiflora* cultivar Sunny Time.

Commercial classification: Decorative potted Chrysanthemum.

Parentage:
Male, or pollen, parent.—Proprietary selection P55-8.
Female, or seed, parent.—Proprietary selection P63-89.

Propagation:
Type.—Terminal tip cuttings.
Time to rooting.—7 to 10 days with soil temperature of 21° C.
Rooting habit.—Fine, fibrous and well-branched.

Plant description:
Appearance.—Perennial herbaceous decorative potted plant. Stems upright, uniform habit and freely branching. Moderately vigorous and compact growth habit.
Plant height.—23 to 24 cm.
Lateral branch length.—15 to 18 cm.
Quantit of lateral branches after removal of apical meristem.—About 3.5.
Stem color.—147B.
Foliage description.—Number of leaves per lateral branch: 14 to 15. Leaf arrangement: Alternate. Leaf size, fully expanded: Length: 11.5 to 13 cm. Width: 6.5 to 7.5 cm. Leaf apex: Acuminate. Leaf base: Attenuate. Leaf margin: Palmately lobed. Leaf texture: Upper and under surfaces slightly pubescent, smooth and dull. Veins prominent on under surface. Petiole length: About 2 cm. Color: Young foliage upper surface: 147A. Young foliage under surface: 147B. Fully expanded foliage upper surface: 147A. Fully expanded foliage under surface: 147B. Venation upper surface: 147B. Venation under surface: 147B. Petiole: 147A.

Flowering description:
Appearance.—Decorative inflorescence form. Inflorescences borne on terminals above foliage, arising from leaf axils. Disc and ray florets arranged acropetally on a flat capitulum.
Flowering response.—Under natural conditions, plant flowers in the autumn/winter in the Northern Hemisphere. 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 2 to 3 weeks of long day/short night conditions after sticking followed by photoinductive short day/long night conditions, flower about 57 to 59 days later.
Postproduction longevity.—In an interior environment, inflorescences and foliage of flowering plants will maintain good color and substance for at least 2 weeks in an interior environment.
Quantity of Inflorescences.—About 6.5 inflorescences per flowering stem.
Inflorescence size.—Diameter: 9 to 9.5 cm. Depth (height): About 2.7 cm. Diameter of disc: About 1 cm.

Ray florets.—Shape: Long, narrow. Size: Length: 4.3 to 4.5 cm. Width: 1.2 to 1.3 cm. Apex: Rounded. Base: Acute. Margin: Entire. Texture: Satiny, smooth and glabrous. Aspect: Flat. Number of ray florets per inflorescence: About 180. Color: When opening, upper surface: 9A. When opening, under surface: 9A. Mature, upper surface: 6A, ray floret color does not fade with subsequent development. Mature, under surface: 6C.
Disc florets.—Shape: Tubular. Size: Length: About 7 mm. Width: About 1 mm. Number of disc florets per inflorescence: About 77. Color: Immature: 154A. Mature: 12A.
Peduncle.—Aspect: Strong and angled 45° to 50° to the stem. Length: 4 to 5 cm. Texture: Glabrous. Color: 147B.
Reproductive organs.—Androecium: Present on disc florets only. Anther color: 12A. Pollen: Moderate, 12A in color. Gynoecium: Present on both ray and disc florets. Style color: 154A.

Disease resistance:
No known Chrysanthemum diseases observed to date on plants grown under commercial greenhouse conditions.
Seed production:
Seed production has not been observed.

CHART A		
CHARACTERISTIC	SUNNY TIME	TIP
PLANT HEIGHT	23 to 24 cm	28 to 29 cm
QUANTITY OF LATERAL BRANCHES AFTER REMOVAL OF TERMINAL APEX	About 3.5	About 5
LATERAL BRANCH LENGTH	15 to 18 cm	20 to 22 cm
LEAF LENGTH	11.5 to 13 cm	8.5 to 10 cm
RAY FLORET COLOR, WHEN OPENING, UPPER SIDE	9A	9A
RAY FLORET COLOR, MATURE, UPPER SIDE	6A	6A
RAY FLORET COLOR, MATURE, UNDER SIDE	6C	6C
NUMBER OF RAY FLORETS PER INFLORESCENCE	About 180	About 255
DISC FLORET LENGTH	About 7 mm	About 4 mm
DISC FLORET QUANTITY PER INFLORESCENCE	About 77	About 9
DIAMETER OF DISC	About 1 cm	About 2.5 mm
PEDUNCLE ANGLE	45 to 50°	About 25°

It is claimed:
1. A new and distinct cultivar of Chrysanthemum plant named Sunny Time, as illustrated and described.

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U.S. Patent

Mar. 18, 1997

Plant 9,829

