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United States Patent [19]

Polys

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[54] CHRYSANTHEMUM PLANT NAMED SOFT CHERIE

[75] Inventor: Susan M. Polys, Salinas, Calif.

[73] Assignee: Yoder Brothers, Inc., Barberton, Ohio

[21] Appl. No.: 62,199

[22] Filed: May 17, 1993

[51] Int. Cl.[5] A01H 5/00

[52] U.S. Cl. Plt./74.1

[58] Field of Search ..... Plt. 74.1, 82.4

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Primary Examiner—Howard J. Locker

Attorney, Agent, or Firm—Foley & Lardner

[57] ABSTRACT

A Chrysanthemum plant named Soft Cherie particularly characterized by its flat capitulum form; daisy capitulum type; light purple ray floret color; diameter across face of capitulum of 38 to 44 mm when fully opened, when grown as a pinched spray pot mum; very floriferous, with excellent display of many small flowers; photoperiodic flowering response of 50 to 51 days after start of short days; plant height, with 13 to 14 long days after sticking unrooted cuttings, and with 0 to 1 applications of 2500 ppm B-9 SP, ranges from 20 to 25 cm when grown as a pinched pot mum with 4 cuttings in a 15 cm pot; branching pattern is spreading and prolific, each plant having 7 to 8 laterals after pinch; and recommended as a spray pot mum.

2 Drawing Sheets

The present invention comprises a new and distinct cultivar of Chrysanthemum, botanically known as *Dendranthema grandiflora*, and referred to by the cultivar name Soft Cherie.

Soft Cherie, identified as 4259 (89-114D03) is a product of a mutation induction program. The new cultivar was discovered and selected by Susan M. Polys on Jan. 13, 1992, in a controlled environment in Salinas, Calif., as one flowering plant within a flowering block established as rooted cuttings from stock plants which had been exposed as unrooted cuttings to an X-ray source of 1750 rads in Fort Myers, Fla., on May 23, 1991. The irradiated parent cultivar was an unnamed proprietary seedling identified as 4207 (89-114003), and described as a daisy spray pot mum with a flat capitulum form; a very light pink ray floret color; diameter across face of capitulum of 32 to 48 mm when fully opened, flowering response period of 49 to 56 days after start of short days; plant height of 18 to 25 cm with 0 to 1 applications of 2500 ppm B-9 SP when grown as a pinched pot mum in a 15 cm pot; and spreading and prolific branching pattern, with 6 to 8 laterals after pinch. The parent cultivar has not been sold or offered for sale, or otherwise publicly disclosed.

The irradiation program resulting in Soft Cherie had as its primary objective the expansion of the color range of the parent seedling 4207, with the ray floret color of the parent considered to be too light for commercial introduction, while all other characteristics of the parent were considered to be excellent. The irradiation program comprised irradiating cuttings of the parent

cultivar at irradiation levels of 1500, 1750 and 2000 rads. A total of 2470 cuttings harvested from a total of 225 irradiated plants were planted on Sep. 9, 1991. Of these, 37 initial selections were made, which selections were then revegetated and reflowered. Three consecutive flowerings resulted in discarding 32 of the original 37 selections on Jul. 1, 1992. Five selections were retained and reflowered again, ultimately resulting in the decision to introduce all remaining selections as Soft Cherie, Dark Cherie, Honey Cherie, Sunny Cherie and Sweet Cherie. Applications are pending for the other induced mutations.

The first act of asexual reproduction of Soft Cherie was accomplished when vegetative cuttings were taken from the initial selection in March 1992 in a controlled environment in Salinas, Calif., by technicians working under supervision of Susan M. Polys.

Horticultural examination of controlled flowerings of successive plantings has shown that the unique combination of characteristics as herein disclosed for Soft Cherie are firmly fixed and are retained through successive generations of asexual reproduction.

Soft Cherie has not been observed under all possible environmental conditions. The phenotype may vary significantly with variations in environment such as temperature, light intensity and daylength, without, however, any variance in genotype.

The following observations, measurements and comparisons describe plants grown in Salinas, Calif. under

greenhouse conditions which approximate those generally used in commercial greenhouse practice.

The following traits have been repeatedly observed and are determined to be basic characteristics of Soft Cherie, which, in combination, distinguish this Chrysanthemum as a new and distinct cultivar:

1. Flat capitulum form.
2. Daisy capitulum type.
3. Light purple ray floret color.
4. Diameter across face of capitulum of 38 to 44 mm when fully opened, when grown as a pinched spray pot mum.
5. Very floriferous, with excellent display of many small flowers.
6. Photoperiodic flowering response of 50 to 51 days after start of short days.
7. Plant height, with 13 to 14 long days after sticking unrooted cuttings and with 0 to 1 applications of 2500 ppm B-9 SP, ranges from 20 to 25 cm when grown as a pinched pot mum with 4 cuttings in a 15 cm pot.
8. Branching pattern is spreading and prolific, each plant having 7 to 8 laterals after pinch.
9. Recommended as a spray pot mum.

The accompanying photographic drawings show typical inflorescence and leaf characteristics of Soft Cherie, with the colors being as nearly true as possible with illustrations of this type.

Sheet **1** is a color photograph of a potted mum of Soft Cherie, with 4 cuttings in a 15 cm pot.

Sheet **2** is a black and white photograph showing the upper and under sides of the leaves of the Cherie series at three stages of development (mature, intermediate and immature). In sheet **2** a measuring tape in centimeters has been added.

Of the commercial cultivars known to the inventor, the most similar in comparison to Soft Cherie is the cultivar identified as Desiree, disclosed in U.S. Plant Pat. No. 7,500. Reference is made to attached Chart A, which compares certain characteristics of Soft Cherie with the same characteristics of Desiree.

Similar traits are capitulum form and type, branching pattern, and recommendation as a spray pot mum. The ray floret color of Soft Cherie is light purple, while the ray floret color of Desiree is a light purple with dark red-purple buds and dark red-purple of the underside of the ray florets. Soft Cherie has a larger diameter of capitulum than Desiree, a slower flowering response, and a taller plant height, requiring less long days to reach a commercially acceptable height than Desiree. The range of measurements of Desiree is much wider than the range of measurements of Soft Cherie, based on the fact that Desiree has been tested for many years, while Soft Cherie has been tested for only nine months at the time of the application.

When compared with the parent seedling, all traits of Soft Cherie are similar to those of the parent, except for the color of the ray florets. When comparing the description of Soft Cherie with the description of the parent, it is evident that the parent seedling has a much wider range of measurements than Soft Cherie. This is also based on evaluations over a long time period for the parent in comparison with the short time period that Soft Cherie has been tested.

In the following description color references are made to The Royal Horticultural Society Colour Chart. The color values were determined on plant material grown as a pinched spray pot mum in Salinas, Calif. on Feb. 23, 1993.

Classification:

Botanical.—*Dendranthema grandiflora* cv Soft Cherie.

Commercial.—Flat display spray pot mum.

INFLORESCENCE

A. Capitulum:
- *Form.*—Flat.
- *Type.*—Daisy.
- *Diameter across face.*—38 to 44 mm when fully opened.

B. Corolla of ray florets:
- *Color (general tonality from a distance of three meters).*—Light purple.
- *Color (upper surface).*—75B to 75C.
- *Color (under surface).*—75B to 75C.
- *Shape.*—Straight, oblong, slightly ribbed.

C. Corolla of disc florets:
- *Color (mature).*—14B.
- *Color (immature).*—14B, center overlaid with 144B.

D. Reproductive organs:
- *Androecium.*—Present on disc florets only; moderate pollen.
- *Gynoecium.*—Present on both ray and disc florets.

PLANT

A. General appearance:
- *Height.*—20 to 25 cm when grown as a pinched pot mum with 13 to 14 long days prior to start of short days, with 0 to 1 applications of 2500 ppm B-9 SP.
- *Branching pattern.*—Spreading and prolific, with 7 to 8 laterals after pinch.

B. Foliage:
- *Color (upper surface).*—147A.
- *Color (under surface).*—147B.
- *Shape.*—See photograph.

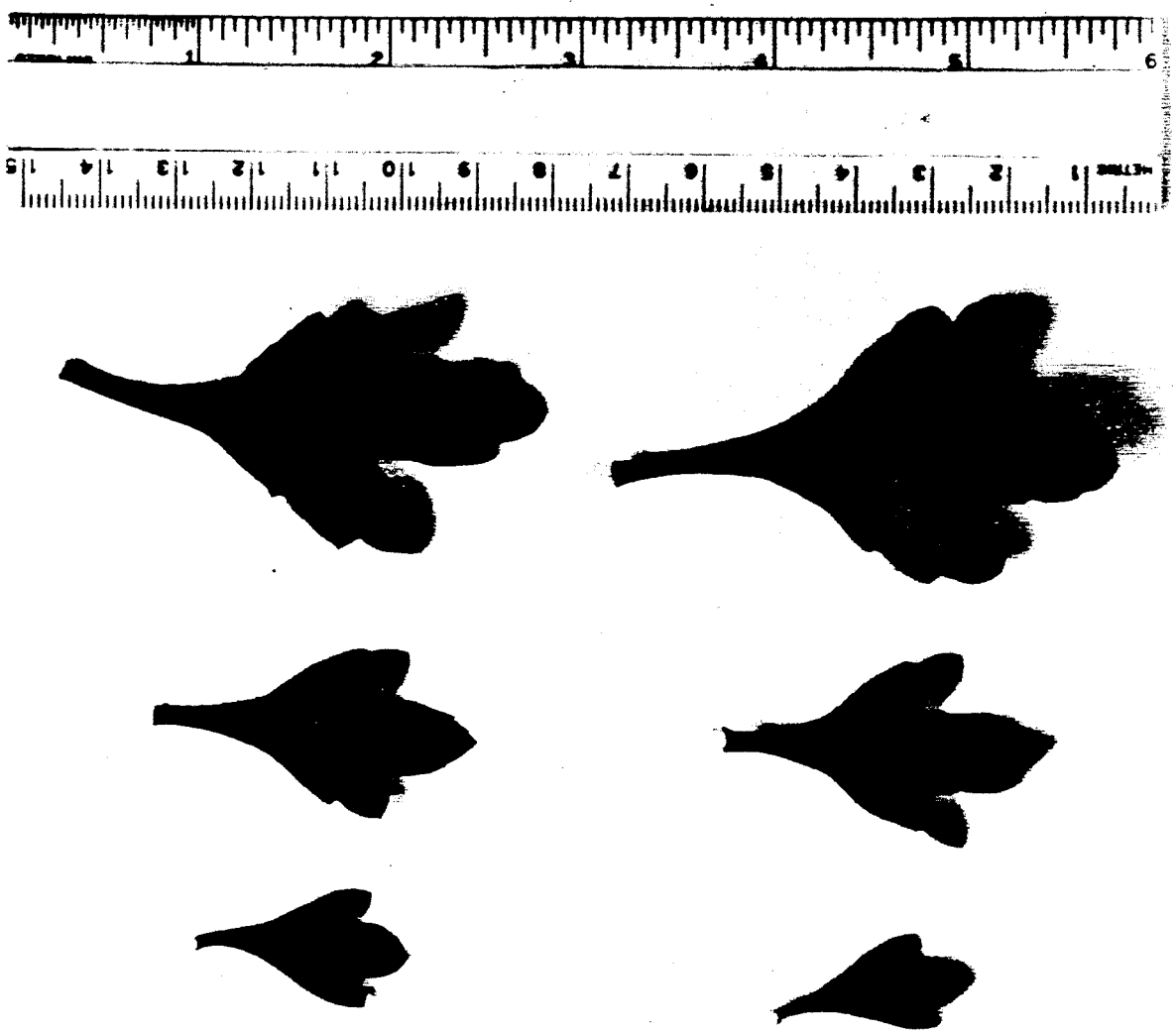
CHART A

CULTIVAR	SOFT CHERIE	DESIREE
Ray floret color	Light purple	Light purple with darker buds and underside
Capitulum form and type	Flat Daisy	Flat Daisy
Diameter across face of capitulum	38 to 44 mm	25 to 29 mm
Flowering Response	50 to 51 days	45 to 47 days
Plant height with		
13 to 14 long days	20 to 25 cm	
14 to 23 long days		18 to 25 cm
Branching pattern	Spreading	Spreading
	7 to 8 laterals	5 to 8 laterals
Recommended as	Spray pot mum	Spray pot mum
COMPARISONS MADE OF PLANTS GROWN AS PINCHED SPRAY POT MUMS IN SALINAS, CALIFORNIA		

I claim:

1. A new and distinct Chrysanthemum plant named Soft Cherie, as described and illustrated.

* * * * *



UNITED STATES PATENT AND TRADEMARK OFFICE

CERTIFICATE OF CORRECTION

PATENT NO. : Plant 8,802
DATED : June 28, 1994
INVENTOR(S) : Susan M. POLYS

It is certified that error appears in the above-indentified patent and that said Letters Patent is hereby corrected as shown below:

Column 4, line 7, "display" should read --daisy--.

Signed and Sealed this

Eighteenth Day of October, 1994

Attest:

BRUCE LEHMAN

Attesting Officer

Commissioner of Patents and Trademarks