



US00PP13045P2

(12) **United States Plant Patent**  
**Noodelijk**(10) **Patent No.:** **US PP13,045 P2**  
**(45) Date of Patent:** **Oct. 1, 2002**(54) **CHrysanthemum plant named  
'AURORA'**(75) Inventor: **Robert Noodelijk**, Woubrugge (NL)(73) Assignee: **Chrysanthemum Breeders Association NV** (NL)

(\*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) Appl. No.: **09/734,656**(22) Filed: **Dec. 13, 2000**(51) Int. Cl.<sup>7</sup> ..... **A01H 5/00**(52) U.S. Cl. ..... **Plt./294**(58) Field of Search ..... **Plt./294**

Primary Examiner—Bruce R. Campell

Assistant Examiner—Anne Marie Grünberg

(74) Attorney, Agent, or Firm—Parkhurst &amp; Wendel, L.L.P.

**(57) ABSTRACT**

A chrysanthemum plant named 'AURORA' characterized by its medium sized blooms with white ray florets and prolific branching; natural season flower date September 11–16; blooming for a period of 5 weeks.

**3 Drawing Sheets****1****BACKGROUND OF THE INVENTION**

'AURORA' is a product of a breeding and selection program for outdoor pot mums (garden mums) which had the objective of creating new chrysanthemum cultivars with a daisy type flower, a natural season flower date around September 11–16; blooming for a period of 5 weeks. The new plant of the present invention comprises a new and distinct cultivar of Chrysanthemum plant. 'AURORA' is a seedling resulting from the open pollination among groups of chrysanthemum cultivars maintained under the control of the inventor for breeding purposes. The new and distinct cultivar was discovered and selected as one flowering plant by Rob Noodelijk on a cultivated field in Rijsenhout, Holland in September 1998. The plant has been asexually reproduced by cuttings in greenhouses at Rijsenhout, Holland. The new cultivar has been found to retain its distinctive characteristics through successive propagations.

**BRIEF DESCRIPTION OF THE DRAWINGS**

The present invention of a new and distinct variety of chrysanthemum is shown in the accompanying drawings, the color being as nearly true as possible with color photographs of this type.

FIG. 1 shows a plant of the cultivar in full bloom.

FIG. 2 shows the various stages of bloom of the new cultivar.

FIG. 3 shows the various stages of foliage and petiole of the new cultivars.

**DESCRIPTION OF THE INVENTION**

This new variety of chrysanthemum is of the botanical classification *Chrysanthemum morifolium*. The observations and measurements were gathered from plants grown outdoors in Rijsenhout, Holland under natural day length and temperature and planted week 22 in 1999 and 2000. The natural blooming date of this crop was September 11–16 (week 37). The average height of the plants was 36–40 cms. No growth retardants were used. No tests were done on disease or insects resistance or susceptibility. No tests were done on cold or drought resistance. This new variety produces medium sized blooms with white ray florets and a yellow disc-florets blooming for a period of 5 weeks.

**2**

From the cultivars known to inventor the most similar existing cultivar in comparison to 'AURORA' is 'ILLUSION' (U.S. Plant Pat. No. 6,644). When 'ILLUSION' and 'AURORA' are being compared the following differences are noticed: The differences of 'ILLUSION' and 'AURORA' are (1) Natural blooming date. 'AURORA' flowers earlier (2) Flower-size. 'AURORA' has smaller flowers (3) Plant shape. The plant of 'AURORA' is more upright.

This application is not related to the applications of 'AURORA PINK' and 'AURORA PURPLE'. The resemblance in name only expresses the similarity in flower shape.

The following is a description of the plant and characteristics that distinguish 'AURORA' as a new and distinct variety.

The color designations are taken from the plant itself. Accordingly, any discrepancies between the color designations and the colors depicted in the photographs are due to photographic tolerances. The color chart used in this description is: The Royal Horticultural Society Colour Chart, edition 1995.

Table 1: Botanical Description of Cultivar 'Aurora'

## Bud:

Size.—Small; cross-section 0.9 cm, height 0.7 cm.

Outside color.—Yellow-white 158 C.

Involucral bracts.—2 rows, length 7 mm, width 3 mm.

Involucral bracts among disc-florets.—Not present.

Involucral bracts color.—Green 138 C.

## Bloom:

Type.—Daisy.

Height.—Flat, 1.2–1.5 cm.

Size.—Medium.

Fully expanded.—5.5–6.0 cm.

Number of blooms per branch.—Approx. 4–5 blooms per branch.

Performance on the plant.—5 weeks.

Seeds (if crossed).—Produced in large quantities, oval shaped. Grey-brown 199 A, 2 mm in length.

Fragrance.—Typical chrysanthemum, slight.

## Color:

Center of the flower (disc-florets).—Immature yellow-green 153 D. Mature yellow 12 A.

Color of upper surface of the ray-florets.—White 155 D.

- Color of the lower surface of the ray-florets.*—White 155 D.  
*Tonality from distance.*—A garden mum with white flowers and a yellow disc.  
*Color of the upper surface of the flowers after aging of the plant.*—White 155 D.
- Ray florets:  
*Texture.*—Upper and under side smooth.  
*Number.*—65–68.  
*Cross-section.*—Tubular.  
*Longitudinal axis of majority.*—Straight.  
*Length of corolla tube.*—Long, 1.8–2.0 cm.  
*Ray-floret margin.*—Entire.  
*Ray-floret length.*—2.2–2.5 cm.  
*Ray-floret width.*—0.3–0.5 cm.  
*Ratio length/width.*—High.  
*Shape of tip.*—Spatulate.
- Disc florets:  
*Disc diameter.*—1.5 cm.  
*Distribution of disc florets.*—Numerous, clearly visible at all stages of flowering.  
*Shape.*—Tubular.  
*Color.*—Yellow-green 154 A.  
*Receptacle shape.*—Conical raised.
- Reproductive organs:  
*Stamen (present in disc florets only).*—Thick, 4 mm in length.  
*Stamen color.*—Yellow-green 144 A.  
*Pollen.*—Present.  
*Pollen color.*—Yellow 7 A.  
*Styles.*—Thin.  
*Style color.*—Yellow-green 144 A.  
*Style length.*—4 mm.  
*Stigmas color.*—Yellow-green 144 A.  
*Stigma width.*—1 mm.  
*Ovaries.*—Enclosed in calyx.
- Plant:  
*Shape.*—Grown as a spray-type pot-mum, outdoor semi upright, corymbiform.  
*Growth habit.*—Spreading.  
*Growth rate.*—Rapid.  
*Height.*—36–40 cms.  
*Width.*—30–35 cms.

- Stem color.*—Green 138 C.  
*Stem strength.*—Strong.  
*Stem brittleness.*—Present.  
*Stem anthocyanin coloration.*—Absent.  
*Length of lateral branch.*—From top to bottom 16–17 cm.  
*Lateral branch color.*—Green 138 C.  
*Lateral branch, attachment.*—Strong.  
*Branching (average number of lateral branches).*—Prolific with 6–8 breaks after pinching.  
*Peduncle length.*—4.0–4.5 cm.  
*Peduncle color.*—Green 138 C.  
*Natural season blooming date.*—September 11–16.
- Foliage:  
*Color of mature leaves.*—Upper side green 146 A.  
Under side green 147 C.  
*Color of immature leaves.*—Upper side green 146 A.  
Under side green 147 C.  
*Size.*—Very small; length 4.5 cm, width 3.5 cm.  
*Quantity (number per lateral branch).*—8–10.  
*Shape.*—Round.  
*Texture upper side.*—Glabrous.  
*Texture under side.*—Pubescent.  
*Venation arrangement.*—Palmate.  
*Shape of the margin.*—Serrated.  
*Shape of base of sinus between lateral lobes.*—Acute.  
*Margin of sinus between lateral lobes.*—Diverging.  
*Shape of base.*—Asymmetrical.  
*Apex.*—Cuspidate.

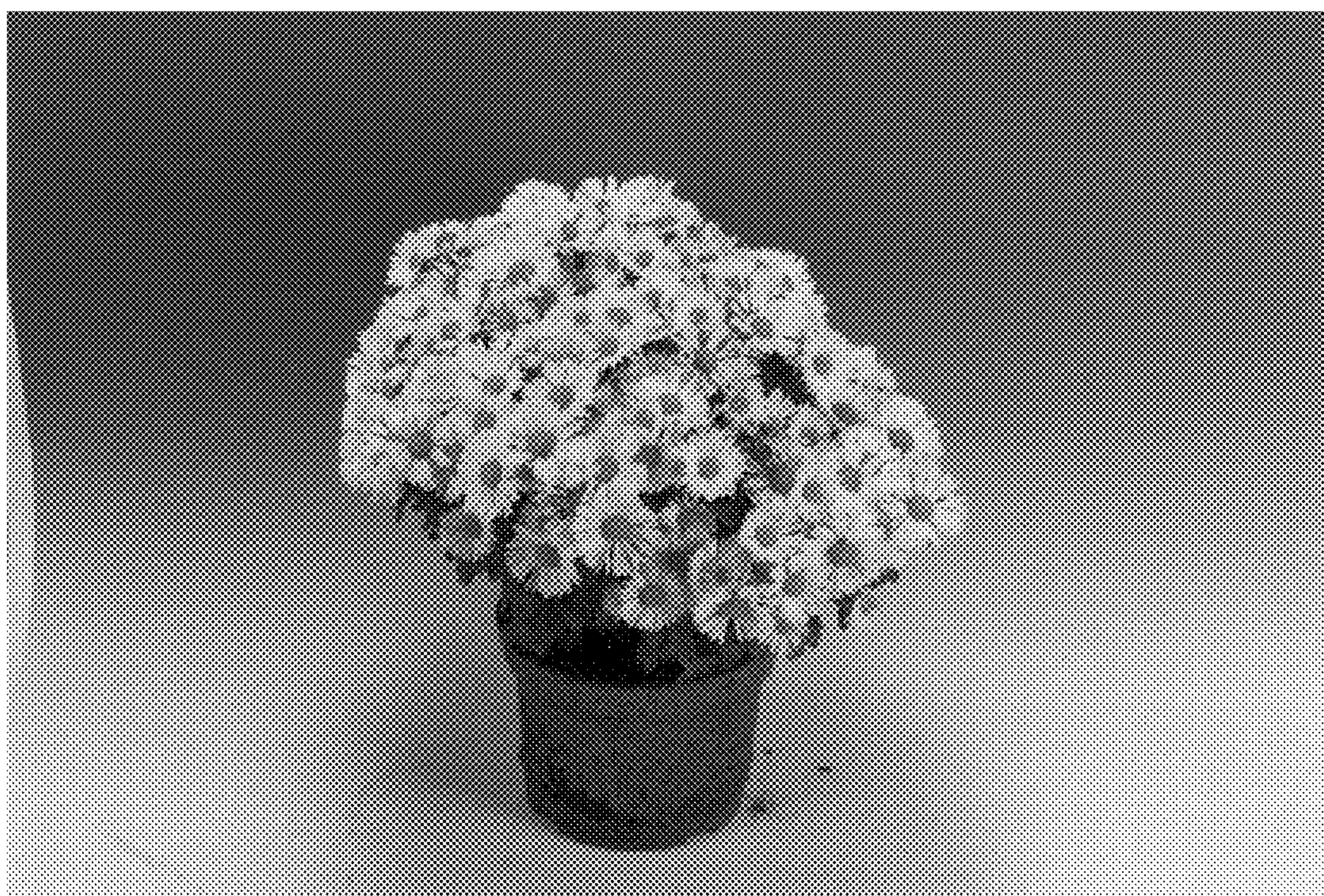
TABLE 2

<u>Differences with the comparison varieties (when grown under the same conditions)</u>		
	'AURORA'	'ILLUSION'
Natural blooming date	September 11–16	September 21–25
Flower size	5.5–6.0 cm	6.0–6.5 cm
Plant shape	Semi-upright	Ball shaped

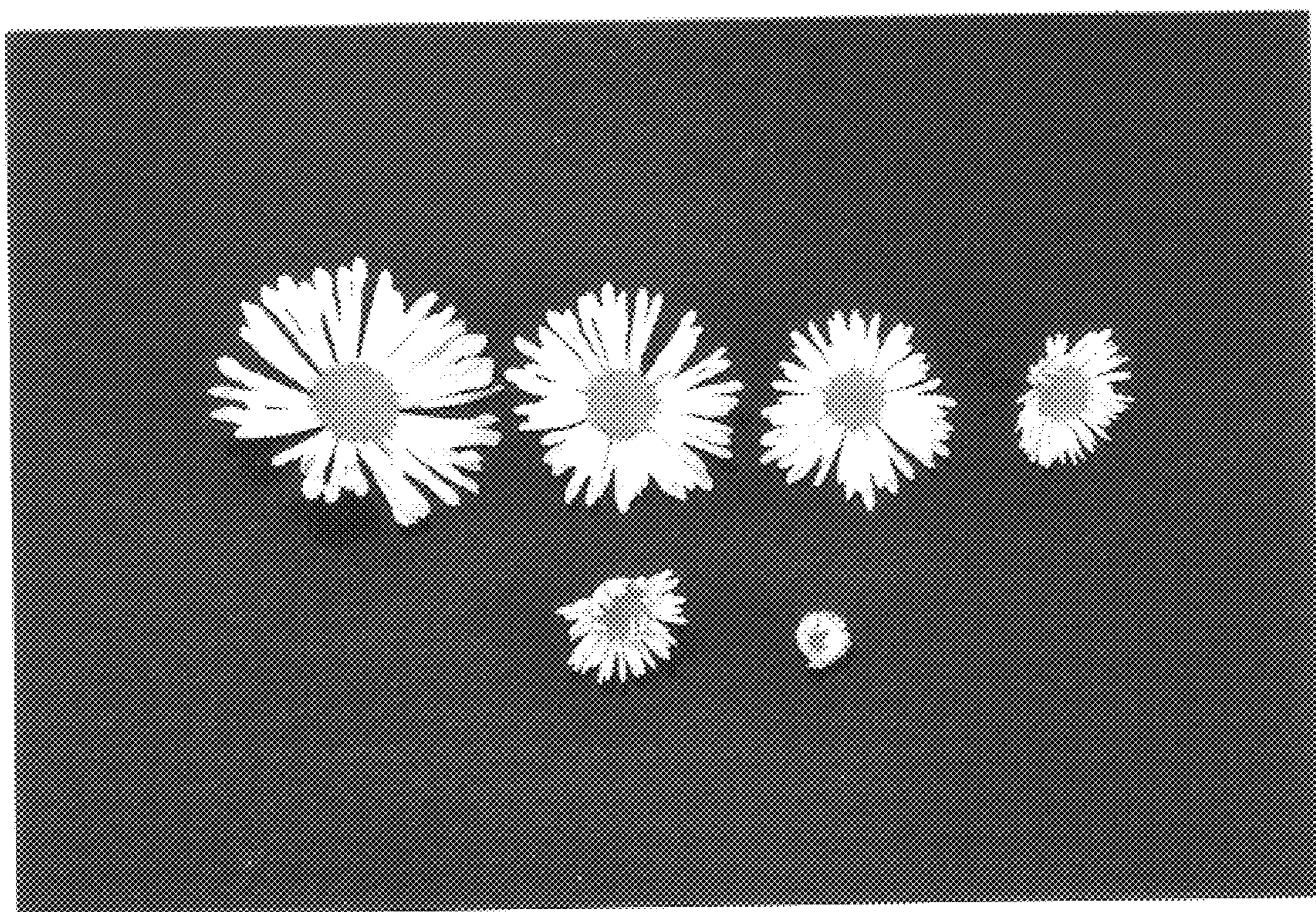
I claim:

1. A new and distinct variety of chrysanthemum plant as described and illustrated.

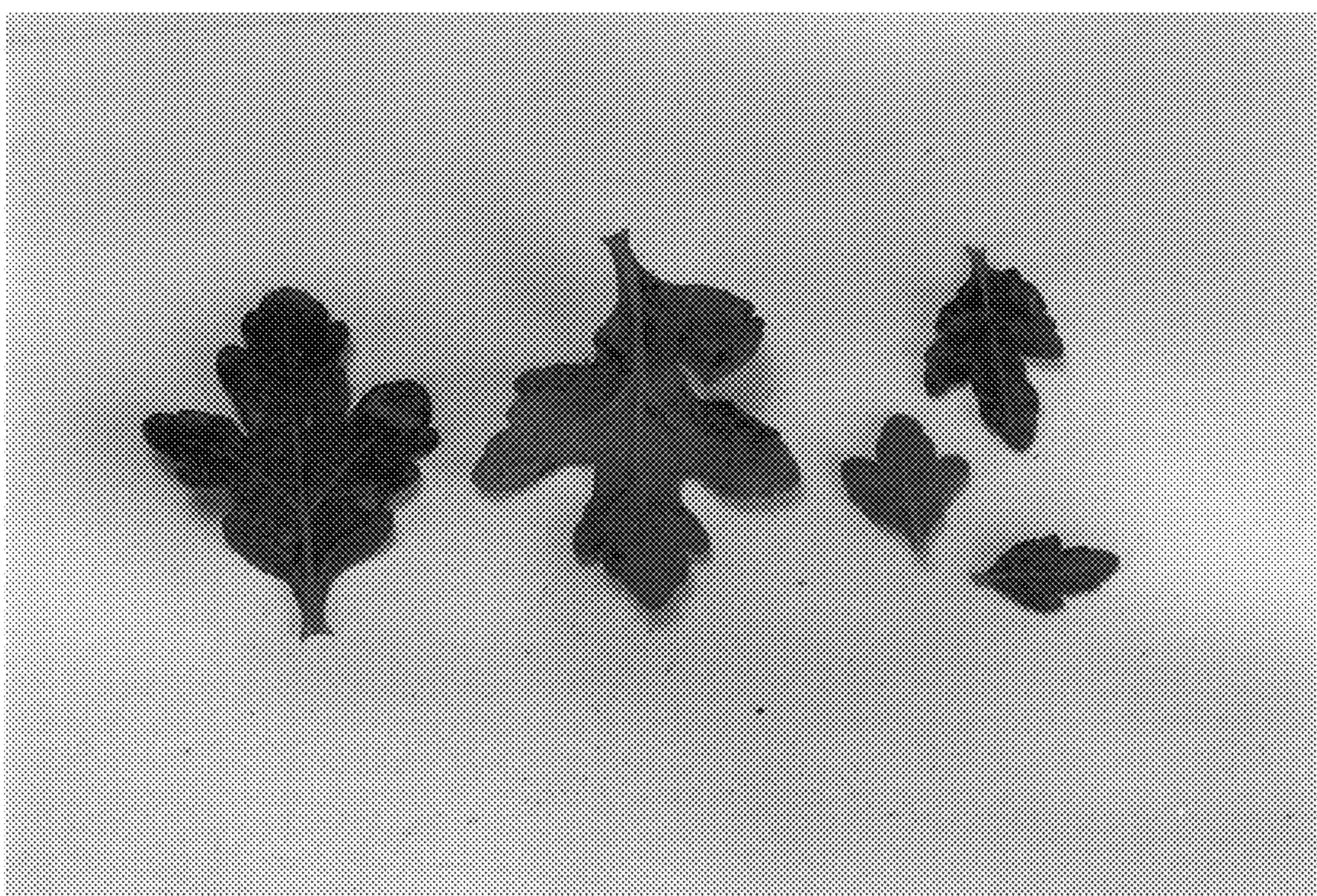
\* \* \* \* \*



**FIG. 1**



**FIG. 2**



**FIG. 3**