CHRYSANTHEMUM PLANT

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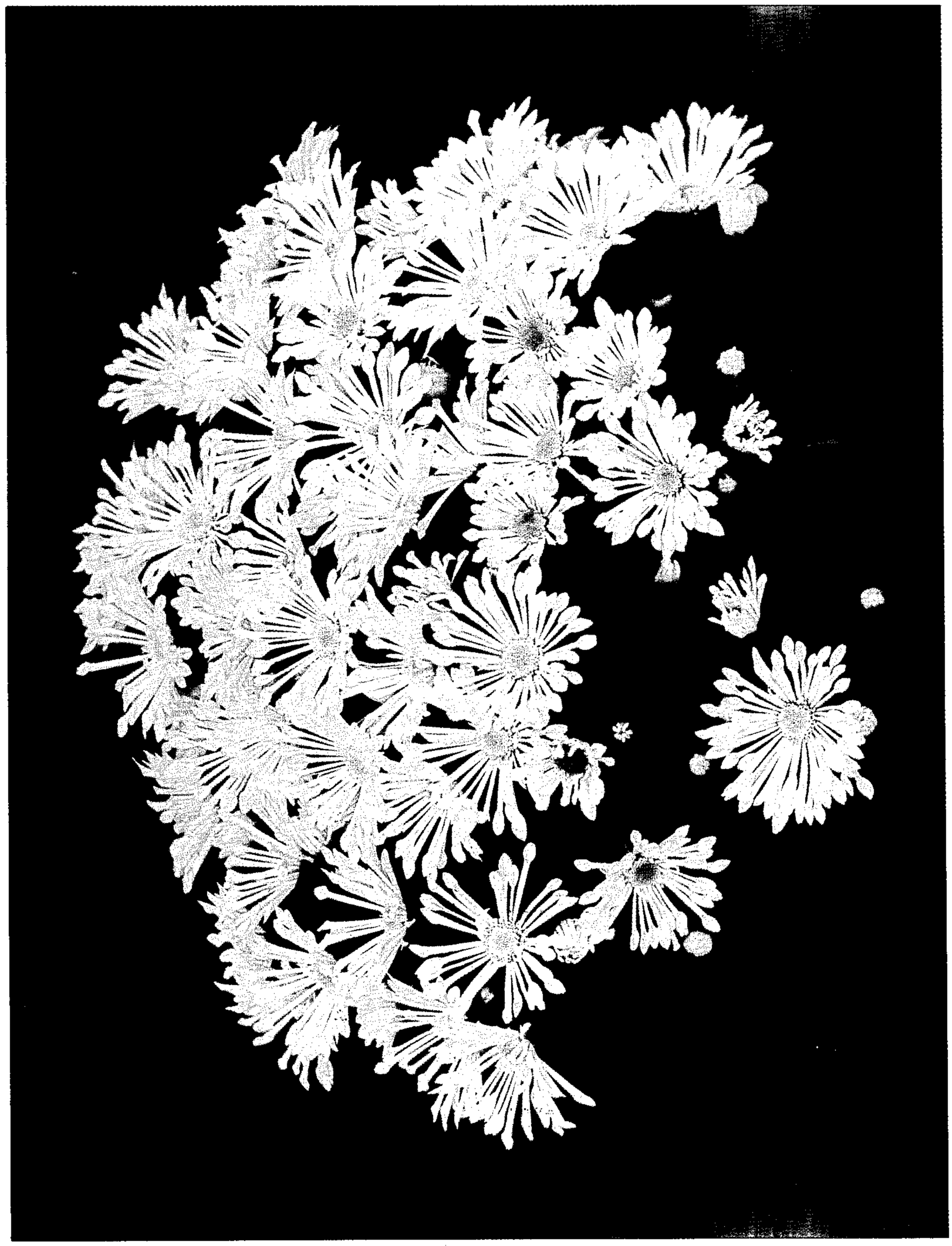

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CHRYSANTHEMUM PLANT

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U.S. Cl. Plt.—74 **1 Claim**

The present invention comprises a new and distinct cultivar of chrysanthemum plant having the varietal name Sugar which is a seedling of #60228002, an unpatented cultivar known commercially by the varietal name Neptune, × #21670E02, disclosed in U.S. Plant Pat. No. 3,379, issued July 31, 1973, to John R. Culbert and known by the varietal name Illini Spinwheel. Both cultivars are identified for breeding purposes by the above breeding numbers.

The new cultivar is similar in many respects to Illini Spinwheel, having the same characteristics of:

1. Function as white spooned daisy for spray pot culture.
2. Petal form.
3. Adaptability to various pot sizes.
4. Breaking action and total flower production.
5. Sensitivity to aerosol and other oil base insecticides when applied under water stress and/or high temperature conditions.

The new cultivar is distinguished from Illini Spinwheel by the following characteristics when grown under comparable conditions:

1. A year round recommended period of value. Illini Spinwheel is only recommended for April through November flowerings in northern latitudes.
2. Flowers are approximately ½" to 1" larger in diameter.
3. Reduced pollen development and better flower form retention provides 5 to 7 days longer bench life, and 10 to 12 days longer home life.
4. Improved flower form retention. The spoon tip of the petal does not tilt down with age as is the case with Illini Spinwheel.
5. A whiter flower color with less ivory tones at all finishing temperatures.

6. Improved color clarity. Flowers do not pink with age or when finished at temperflatures less than 60° F.
7. A higher petal count. Sugar has approximately 20%–25% more petals per flower than Illini Spinwheel.
8. Will initiate and develop buds uniformly at temperatures as low as 52° F. Illini Spinwheel requires 60° F. for uniform bud initiation and development.
9. A greater tolerance to marginal low light conditions for uniform and efficient bud initiation. Illini Spinwheel does not initiate and develop buds as uniformly under similar conditions.
10. Approximately 3 to 5 days earlier flowering response.
11. A shorter, more controllable pot mum habit. Sugar requires short treatment year round. Illini Spinwheel should be grown on medium treatment which requires 1 less week of long days.

The new cultivar was selected from the progeny of the designated cross, and when asexually reproduced by cuttings at Barberton, Ohio, has been found to retain its distinctive characteristics through successive propagation.

The new cultivar, when grown in the vicinity of Barberton, Ohio, has a response period of approximately 8 weeks, and the following detailed description is based on observations made of the new cultivar in a greenhouse in Barberton, Ohio. The response time, blooming period, color, and total vigor may vary significantly with varying environmental conditions such as temperature, daylength, and light intensity. Suggested flowering in the northern United States, southeastern United States, southwestern United States, and coastal California is Jannuary through December, in southern Florida, under outdoor conditions, November through April.

The accompanying color photographic drawing shows the unique characteristics of the new cultivar, with the color being as nearly true as possible with color illustrations of this type.

In the following description, color references are made to the Munsell Book of Color, 1963 edition, and comparisons are made with the cultivar Illini Spinwheel. Where only a single value or description appears for the new cultivar Sugar, the same value of description applies as well to Illini Spinwheel.

Botanical classification: *Chrysanthemum morifolium*, Ramat.

	Sugar	Illini Spinwheel
Bloom:		
Size	2¼" to 2½"	1¾" to 2".
Fully expanded	3¼"	2¼".
Borne	In terminal clusters on elongated pedicels	
Stems	Strong and wiry	
Form	Spooned daisy	
Permanence	14–20 days	10–12 days.
Color:		
Center of flower	Yellow-green, 2.5GY5/8 to yellow, 3.75Y8/12	Yellow-green, 2.5GY6/10 to yellow, 3.75Y8/10;
Base of petals	Light yellow-green, 2.5GY7/10	Yellow-green, 2.5GY8/10.
Inside of petals	Ivory white, 10Y9/1 to white, N9.5/	Ivory, 10Y9/2 with tinges of pink, 5R5/8 under cool (less than 60° F.) finishes.
Reverse of petals	Ivory white, 10Y9/1 to white, N9/	Ivory white, 10Y9/1.
Tonality from a distance	White	Ivory white.
Discoloration	White, N9.5/	Ivory white, 10Y9/1 streaked pink, 5R5/8.
Petals:		
Texture	Smooth	
Appearance and form	Tubular, flaring at tip, tapering to a blunt multi-notched tip.	
Arrangement	Composite, whorled on a single receptacle	
Persistence	Resists shatter	
Fragrance	Typical chrysanthemum	
Reproductive organs:		
Stamen, anthers	150–200	
Pollen	Abundant to none (functional sterility)	
Arrangement	Clustered in center of flower if present	
Styles	Present both ray and disc florets	
Length	Short	
Ovaries	At the base of petal attached to receptacle	
Plant:		
Form	Herbaceous	
Growth	Spreading	
Height	Approximately 11"–13" in a 4-cutting, 6" pot, grown as a spray pot given one 2,500 p.p.m. application of B–9 approximately 2 weeks after pinching and 8 week short treatment (2–3 weeks of long days) as defined in the timetables of Yoder Brothers, Inc., Barberton, Ohio, for the various seasons.	Approximately 11"–13" in a 4-cutting, 6" pot, grown as a spray pot given one 2,500 p.p.m. application of B–9 approximately 2 weeks after pinching and 9 week medium treatment (1–2 weeks of long days) as defined in the timetables of Yoder Brothers, Inc., Barberton, Ohio, for the various recommended seasons.

	Sugar	Illini Spinwheel
Spread	Approximately 7"–9" in a 4-cutting, 6" pot, grown as a spray pot given one 2,500 p.p.m. application of B-9 approximately 2 weeks after pinching and 8 week short treatment (2–3 weeks of long days) as defined in the timetables of Yoder Brothers, Inc., Barberton, Ohio, for the various recommended seasons.	Approximately 7"–9" in a 4-cutting, 6" pot, grown as a spray pot given one 2,500 p.p.m. application of B-9 approximately 2 weeks after pinching and 9 week medium treatment (1–2 weeks of long days) as defined in the timetables of Yoder Brothers, Inc., Barberton, Ohio, for the various recommended seasons.
Foliage:		
Top side	Dark green, 7.5GY3/4	
Size	Length to width ratio 18:11 with length to 4½" and width to 2¾".	Length to width ratio 5:3 with length to 6½" and width to 3¾".
Quantity	Numerous	
Shape	Spatulate lobed	
Texture	Smooth	
Ribs and veins	Prominent	
Edge	Moderately indented	Deeply indented.
Serration	Deeply serrated	
Under side	Light greyed-green, 7.5GY5/4	
Stipules	Rudimentary	

We claim:

1. A new and distinct cultivar of chrysanthemum of spooned daisy form characterized particularly as to uniqueness by its year round recommended period of value; flowers 2¼" to 2½" in diameter and 3¼" when fully expanded; reduced pollen development and excellent flower form retention, having a permanence of 14–20 days with no tilting down of the spoon tip with age; a white flower color and excellent color clarity, with no pinking with age or when finished at temperatures less than 60° F.; high petal count; by its ability to initiate and develop buds uniformly at temperatures as low as 52° F. and under marginal low light conditions; eight week response period, and by its controllable pot mum habit which requires short treatment year round.

No references cited.

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