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## W. H. JESSEL. JR., ET AL Plant Pat. 3,576

CHRYSANTHEMUM PLANT

Filed Jan. 31, 1973



1

3,576 CHRYSANTHEMUM PLANT

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1 Claim

The present invention comprises a new and distinct cultivar of daisy form chrysanthemum plant known by the varietal name Garland. The new cultivar is a seed- 10 ling of  $\#67100-55 \times \#67586-1$ . Both parents are unpatented and are identified for breeding purposes by the above breeding numbers.

The new cultivar is similar in many respects to the unpatented but commercially well known cultivar Bonnie 15 Jean, having the same characteristics as Bonnie Jean of:

- 1. Capable of being grown as a pot mum using tall treatment, and as a cut daisy spray.
  - 2. Similar flower size and daisy form.

3. Foliage color.

- 4. Prominent stipules at base of leaf.
- 5. Similar vigor.

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

- 1. Its ivory white flower color, as compared with the more pure white color of Bonnie Jean.
- 2. A greater responsiveness to B-9 for growth control. It is 4"-5" shorter with 4" more spread when grown as 30 a spray type pot mum in a 6" pot with 4 cuttings, given one application of 2500 p.p.m. of B-9 approximately two weeks after pinching, and tall treatment as defined in the timetables of Yoder Brothers, Inc., Barberton, Ohio, for the various seasons.
- 3. Approximately 4-5 days earlier response, and 4-5 days shorter crop time.
  - 4. Smaller and finer textured foliage.
- 5. A year round recommended period of use in the United States as compared to a recommended period of 40 May through October in the northern United States for Bonnie Jean (grown as a syray pot).

2

- 6. An absence of pollen resulting in an improved keeping quality and homelife of 4-5 days, as well as ray petals that are not marred with pollen.
- 7. A greater uniformity of flowering response, even when buds are initiated under low (54°-56°) temperature.
- 8. No known foliar sensitivities to present day green-house chemicals.
  - 9. Improved flower substance.
  - 10. Improved form retention in low light periods.

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 propagations.

The new cultivar when grown in the vicinity of Barberton, Ohio, has a response period of approximately 9 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 environment conditions such as temperature, day length, and light intensity. Suggested flowering in the northern and western United States as a spray pot mum is from January through December; coastal California, January through December, and in southern Florida, October through April. Suggested flowering as a cut daisy spray in the northern and western United States is from May through October; coastal California, April through November 15, and in southern Florida, October through April.

The accompanying photographic drawing is a specimen photograph of the new cultivar by itself, 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 Color Book, 1963 edition, and comparisons are made with the cultivar Bonnie Jean. Where a value or description appears only for the new cultivar, the same value or description applies to the cultivar Bonnie Jean.

Botanical classification: Chrysanthemum morifolium

	Garland	Bonnie Jean
Bloom:	· · · · · · · · · · · · · · · · · · ·	<del></del>
Size	3′′	
Fully expanded	$3\frac{1}{2}$	•
Borne.	Chiefare on alangated modicals	
Stems.	Clusters on elongated pedicals	
Form	Short and strong	•
Permanence.	·	
Color (Munsel Cascade):	12-14 days	7-10 days.
Center of flower		
Base of petals	Yellow-green, 2.5GY6/8 to yellow, 7.5Y8/12	Yellow-green, 2.5 GY6/8 to yellow, 10Y8.5/10.
Inside of petals	Light yellow-green, 2.5 GY7/8	Light yellow-green, 2.5 GY7/8.
<u> </u>	Light yellow, 10 Y9/4 to ivory white, 10 Y9/1	White, N9.5/.
Reverse of petals	Ivory, 10Y9/2 to ivory white, 10Y9/1	$\mathbf{D_{0}}$
Tonality from a distance	lvory	White.
Discoloration	Ivory white, 10Y9/1	White, N9.5/.
Petals:		11 11100, 14 9.0/.
Texture	Smooth	
Appearance and form	Open at base, shallow multiridge keel, tapers to a blunt	Onen of home breedening the contract of
	notched tip with recurved petal edges.	Open at base, broadening quickly to a broad fla
•	The second real boats off boats	keel, slight longitudinal petal roll, tapering to a
Arrangement.	Composite, whorled on a single receptacle	blunt tip.
Persistence	Resists shatter	
	Typical chrysanthemum	
Reproductive organs:	- 2 brows our 2 posterio contraction	
·	250-1-	
Pollen	250+ None	
Arrangement		Abundant.
Styles	Clustered in center of flower, if present	
Length	Present both ray and disc florets	
Ovaries		
Plant:	At the base of petal attached to receptacle.	
Form.	TT1	
	Herbaceous	
Growth.	Spreading.	Semi-upright.
Height (cut)	Approximately 34. To 38., grown as a single stam out flower	Approximately 34" to 22" movem on a simple of
	given 5-4 long day weeks and a total crop time of 12-12	Approximately 34" to 38" grown as a single stem
	weeks during the various seasons of recommended use	cut flower, given 3-4 long day weeks and a tota
	UMBY INFOUGH October) according to the timetables bub	crop time of 13-14 weeks during the variou
	lished by Yoder Brothers, Inc., Barberton, Ohio.	seasons of recommended use (May through
•		October) according to the timetables nublished
		by Yoder Brothers, Inc., Barberton, Ohio.

	Garland	Bonnie Jean
Height (pot)	Approximately 12" to 15" when grown as a pinched spray pot in a 4-cutting, 6" pot given 1 application of 2500 p.p.m. B-9 approximately 2 weeks after pinching and 9 week tall treatment (1-2 weeks of long days) during the various seasons of recommended use (January through December) as defined in the timetables of Yoder Brothers, Inc., Barberton, Ohio.	Approximately 16"-20" when grown as a pinched spray pot in a 4-cuttings, 6" pot given 1 application of 2500 p.p.m. B-9 approximately 2 weeks after pinching and 10 week tall treatment (1-2 weeks of long days) during the various seasons of recommended use (April through November 15) as defined in the timetables published by Yoder Brothers, Inc., Barberton, Ohio.
Spread (pot)	Approximately 14"-16" when grown as a pinched spray pot, in a 4-cutting, 6" pot given 1 application of 2500 p.p.m. B-9 approximately 2 weeks after pinching and 9 week tall treatment (1-2 weeks of long days) during the various seasons of recommended use (January through December) as defined in the timetables published by Yoder Brothers, Inc., Barberton, Ohio.	Approximately 12"-14" when grown as a pinched spray pot in a 4-cutting, 6" pot given one application of 2500 p.p.m. B-9 approximately 2 weeks after pinching and 10 week tall treatment (1-2 weeks of long days) during the various seasons of recommended use (April through November 15) as defined in the timetables published by Yoder Brothers, Inc., Barbarton, Ohio.
Spread (cut	Slight to none	
Foliage:		
Top side	Dark green, 7.5 GY3/4.	Tanath to width natio 2.2 with langth up to 2"
Size	up to $2\frac{3}{4}$ ".	Length to width ratio 3:2 with length up to 8" and width up to 4".
Quantity	Numerus Spatulate lobed	
ShapeTexture	Spatmate toped	Coarse.
Ribs and veins	Prominent	<del> </del>
Edge	Slightly indented	Deeply indented.
Serration	Fine	Moderate.
Under side	$\dots$ Medium green, $7.5\mathrm{GY}_{5/4}$	•
Stipules	$oxed{Large}  ext{Prominent}$	

## We claim:

1. A new and distinct cultivar of chrysanthemum characterized particularly as to its uniqueness when compared to the unpatented cultivar Bonnie Jean by its ivory white flower color; approximately 4"-5" less vigor and 2" more spread when grown as a spray pot; approximately 4-5 days earlier response and 4-5 days shorter crop time; 30 smaller and finer textured foliage; year round recommended period of use; by its absence of pollen resulting in an improved keeping quality and homelife of 4-5 days,

as well as ray petals that are not marred with pollen; greater uniformity of flowering response, even when buds are initiated under low temperature; by its lack of sensitivity to present day greenhouse chemicals; improved flower substance, and improved form retention in low light periods.

No references cited.

ROBERT E. BAGWILL, Primary Examiner