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United States Patent [19][11] **Patent Number:** **Plant 8,784**

van der Jagt

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- [54] **CHRYSANTHEMUM NAMED WHITE REAGAN**
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- [73] Assignee: **Chrysanthemum Breeders Association, N.V.**, Netherlands Antilles
- [21] Appl. No.: **88,107**
- [22] Filed: **Jul. 8, 1993**

Related U.S. Application Data

- [63] Continuation of Ser. No. 780,233, Oct. 22, 1991, abandoned.
- [51] Int. Cl.⁵ **A01H 5/00**
- [52] U.S. Cl. **Plt./82.1**
- [58] Field of Search **Plt. 74.1, 82.1**

[56] **References Cited****PUBLICATIONS**

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[57] **ABSTRACT**

A new and distinct cultivar of Chrysanthemum plant named White Reagan, bearing medium sized white blooms with a yellow-green center and a performance of 24-28 days.

2 Drawing Sheets**1**

This is a continuation of application Ser. No. 07/780,233 filed Oct. 22, 1991, now abandoned.

The present application is related to the following co-pending applications:

Application No.	Filing Date	Title
07/780,305	October 22, 1991	Reagan
07/780,237	October 22, 1991	Orange Reagan
08/088,104	July 8, 1993	Dark Reagan
08/101,275	August 2, 1993	Coral Reagan
08/092,942	July 19, 1993	Sulfur Reagan
08/092,943	July 19, 1993	Yellow Reagan
08/092,941	July 19, 1993	Bronze Reagan
08/101,278	August 2, 1993	Salmon Reagan

ORIGIN AND HISTORY OF THE NEW PLANT

The new plant of the present invention comprises a new and distinct cultivar of Chrysanthemum plant which is a naturally occurring sport of a Chrysanthemum named Reagan, which in turn is a cross of unknown *Chrysanthemum morifolium* parents. The Chrysanthemum named Reagan is described in copending U.S. patent application Ser. No. 07/780,305. The new cultivar was discovered in 1989 as a whole plant mutation by Martinus van der Jagt, in a greenhouse in Holland. The plant has been asexually reproduced by cuttings in greenhouses at Ter Aar, Holland. The new cultivar has been found to retain all of its distinctive characteristics through successive propagations.

2**SUMMARY OF THE NEW PLANT**

The present invention is a new and distinct variety of chrysanthemum of a medium sized bloom and white color.

BRIEF DESCRIPTION OF THE DRAWINGS

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

Sheet 1 shows the full bloom of the new cultivar;

Sheet 2, top, shows various stages of bloom of the new cultivar; and

Sheet 2, bottom, shows the foliage and petiole of the new cultivar.

DESCRIPTION OF THE INVENTION

This new variety of Chrysanthemum is of the botanical classification *Chrysanthemum morifolium*, and is named White Reagan. When grown in the vicinity of Ter Aar, Holland, it has a response time of approximately 7½ weeks. This new variety produces medium sized white blooms with a yellow green center having a 4 week performance (i.e., a vase life of 24-28 days). This new variety of Chrysanthemum has been found to retain its distinctive characteristics throughout successive propagations and may be planted under greenhouse conditions in Holland between weeks fifty and thirty-five (i.e., between December 1 and August 30). Pest

resistance, disease resistance and frost tolerance are unknown. The following is a description of the plant and characteristics (color designations are from the RHS Colour Chart) that distinguish it over related known varieties and its antecedents:

Botanical classification: *Chrysanthemum morifolium*.

Bud:

Size.—Medium (cross section) ± 1.0 cm, Height ± 0.7 cm.

Form.—Round and flat.

Outside color.—Yellow 4 D.

Bloom:

Size.—Medium.

Fully expanded.— $6\frac{1}{2}$ –7 cm.

Borne.—Upper portion, single flower per peduncle; Lower portion, plural flowers per peduncle.

Stems.—Strong, thick.

Form.—Single (Daisy).

Performance.—Very good 24–30 days (18°–20° C.).

Color:

Center of flower.—Immature: Yellow green 151 C; Mature: Yellow green 154 A.

Base of petals.—White 155 D but whiter and brighter.

Inside of petals.—White 155 D but whiter and brighter.

Reverse of petals.—White 155 D but whiter and brighter.

Outer petals.—White 155 D but whiter and brighter.

Tonality from a distance.—A white daisy with a fresh looking center having little or no pollen.

Discoloration.—None.

Pollen.—Yellow-orange 14 A.

Petals:

Texture.—Upperside smooth, underside smooth.

Number.—24–30 (two rows).

Cross-section.—Flat, two keels.

Arrangement.—Imbricated.

Persistence.—Good. Petals keep straight or reflex somewhat at the edge at the end of blooming.

Fragrance.—Typical Chrysanthemum.

Disc diameter.—1.5 cm.

Reproductive organs:

Stamen.—Yellow, thick, 3 mm in length.

Pollen.—Appears at a late stage of blooming, yellow-orange in color.

Styles.—Green thick. Length: ± 5 mm.

Stigmas.—Yellow. Width: ± 1 mm.

Ovaries.—Enclosed in calyx.

Plant:

Form.—Spray mum meant for erect culture. Herbaceous.

Growth.—Strong.

Height.—100–125 cm.

Peduncle.—Near the top ± 14 cm, near the middle ± 24 cm, near the bottom ± 28 cm.

Internodes.—3 cm.

Flowering response.— $7\frac{1}{2}$ weeks.

Foliage:

Color.—Upperside green 137 A, underside 137 C.

Size.—Length ± 12 cm, width ± 9 cm.

Quantity.—22–28.

Shape.—Lobed, see photograph.

Texture.—Upperside rough, underside smooth slightly hirsute.

Ribs and veins.—Ribs well developed, veins not so developed.

Edge.—Crenated.

5 Distinguishing characteristics of the Chrysanthemum of the Reagan family are summarized below in Tables IA and IB. Color designations therein are taken from the RHS Colour Chart.

TABLE IA

TITLE	REAGAN	WHITE REAGAN
BUD	GREYED-PURPLE	YELLOW 4D
OUTSIDE	186D BUT PALER	
COLOR		
CENTER OF		
FLOWER		
IMMATURE:	YELLOW-GREEN 151C	YELLOW-GREEN 151C
MATURE:	YELLOW-GREEN 154A	YELLOW-GREEN 154A
BASE OF	PURPLE 75B	WHITE 155D BUT
PETALS		WHITER AND
		BRIGHTER
INSIDE	PURPLE 75B	WHITE 155D BUT
OF		WHITER AND
PETALS		BRIGHTER
REVERSE	RED-PURPLE 69A	WHITE 155D BUT
OF	BUT PALER	WHITER AND
PETALS		BRIGHTER
OUTER	PURPLE 75B	WHITE 155D BUT
PETALS		WHITER AND
		BRIGHTER
PETAL	FLAT	FLAT
CROSS-		
SECTION		
TITLE	CORAL REAGAN	DARK REAGAN
BUD	GREYED-PURPLE	BETWEEN GREYED
OUTSIDE	186A	PURPLE 186A
COLOR		AND B
CENTER OF		
FLOWER		
IMMATURE:	YELLOW-GREEN 151C	YELLOW-GREEN 151C
MATURE:	YELLOW-GREEN 154A	YELLOW-GREEN 154A
BASE OF	GREYED-RED	RED-PURPLE 69B
PETALS	179C BUT	LIGHTLY
	REDDER	OVERLAID WITH
		RED-PURPLE 72A
		GIVING AN
		OVERALL
		IMPRESSION OF
		PURPLE 75A BUT
		PINKER
		RED-PURPLE 69B
		LIGHTLY
		OVERLAID WITH
		RED-PURPLE 72A
		GIVING AN
		OVERALL
		IMPRESSION OF
		PURPLE 75A BUT
		PINKER
		RED-PURPLE 69C
		WITH A LIGHT
		TESSELLATION
		OF RED-PURPLE
		72A
		RED-PURPLE 69B
		LIGHTLY
		OVERLAID WITH
		RED-PURPLE 72A
		GIVING AN
		OVERALL
		IMPRESSION OF
		PURPLE 75A BUT
		PINKER
		CONVEX

TABLE IA-continued

SECTION	ORANGE REAGAN		BRONZE REAGAN
TITLE	ORANGE REAGAN		BRONZE REAGAN
BUD	GREYED-RED		GREYED-RED
OUTSIDE	180A		179C
COLOR			
CENTER OF			
FLOWER			
IMMATURE:	YELLOW-GREEN		YELLOW-GREEN
	151C		151C
MATURE:	YELLOW-GREEN		YELLOW-GREEN
	154A		154A
BASE OF	BETWEEN GREYED		YELLOW 8A WITH
PETALS	ORANGE 169A		AN OVERLAY OF
	AND B		GREYED RED 179B
INSIDE	BETWEEN GREYED		YELLOW 8A WITH
OF	ORANGE 169A		AN OVERLAY OF
PETALS	AND B		GREYED RED 179B
REVERSE	NEAREST TO		YELLOW 8C
OF	GREYED-ORANGE		TINGED ALONG
PETALS	163B TINGED		THE CENTER
	WITH RED		WITH GREYED
	BETWEEN THE		RED 179B IN A
	RIBS		TESSELATED
			PATTERN
OUTER	BETWEEN		YELLOW 8A WITH
PETALS	GREYED-ORANGE		AN OVERLAY OF
	169A AND B		GREYED RED 179B
	CONVEX		FLAT
PETAL			
CROSS-			
SECTION			
TITLE	YELLOW	SULPHUR	SALMON
	REAGAN	REAGAN	REAGAN
BUD	YELLOW	YELLOW	NEAREST TO
OUTSIDE	9C	10C	YELLOW-
COLOR			ORANGE 23D
CENTER OF			
FLOWER			
IMMATURE:	YELLOW-	YELLOW-	YELLOW-
	GREEN	GREEN	GREEN
	151C	151C	151C
MATURE:	YELLOW-	YELLOW-	YELLOW-
	GREEN	GREEN	GREEN
	154A	154A	154A
BASE OF	YELLOW	YELLOW	NEAREST TO
PETALS	5C	6D	ORANGE 29C
INSIDE	YELLOW	YELLOW	NEAREST TO
OF	5C	6D	ORANGE 29C
PETALS			
REVERSE	YELLOW	YELLOW	NEAREST TO
OF	4C	6D	YELLOW-
PETALS			ORANGE 22D
OUTER	YELLOW	YELLOW	NEAREST TO
PETALS	5C	6D	ORANGE 29C
PETAL	FLAT	FLAT	FLAT
CROSS-			
SECTION			

TABLE IB

TITLE	REAGAN	WHITE REAGAN
<u>STEM INFORMATION</u>		
STEM:	YELLOW-GREEN	NEAREST
GREEN COLOR	144A	GREEN 143C
STEM:	ABSENT	ABSENT
ANTHOCYANIN		
COLORATION		
STEM:	MEDIUM	MEDIUM TO
STRENGTH		STRONG
STEM:	PRESENT	PRESENT
BRITTLENESS		
<u>PEDUNCLE INFORMATION</u>		
LATERAL	MEDIUM	WEAK TO
SHOOT:		MEDIUM
ATTACHMENT		
TO STEM		
LATERAL	MEDIUM	MEDIUM
SHOOT:		
ANGLE		

TABLE IB-continued

BETWEEN		
LATERAL		
SHOOT		
AND STEM		
<u>ADDITIONAL FOLIAGE INFORMATION</u>		
LEAF: SHAPE OF	ROUND	ROUND
BASE OF SINUS		
BETWEEN		
LATERAL LOBES		
LEAF:	CONVERGING	CONVERGING
MARGINS OF		
SINUS BETWEEN		
LATERAL LOBES		
LEAF:	ROUND	ASYMMETRIC
SHAPE OF BASE		
LEAF: APEX	CUSPIDATE	MUCRONATE
GROWTH:		
<u>DIFFERENCE IN AVERAGE LENGTH (CM)</u>		
	0	0
RESPONSE TIME:		
<u>DIFFERENCE IN DAYS OF AVERAGE RESPONSE</u>		
	0	0
RESPONSE ON ALAR: DOSE THAT HAS TO BE USED		
TO GET AN AVERAGE LENGTH OF ABOUT 90 CM		
(DOSE IN GRAMS PER 100 LITER OF WATER)		
	300	300
YEAR OF	1986	1989
DISCOVERY		
TITLE	CORAL REAGAN	DARK REAGAN
<u>STEM INFORMATION</u>		
STEM:	YELLOW-GREEN	YELLOW-GREEN
GREEN COLOR	144A	144A
STEM:	PRESENT	PRESENT
ANTHOCYANIN		
COLORATION		
STEM:	MEDIUM	MEDIUM
STRENGTH		
STEM:	ABSENT	PRESENT
BRITTLENESS		
<u>PEDUNCLE INFORMATION</u>		
LATERAL	WEAK TO	MEDIUM
SHOOT:	MEDIUM	
ATTACHMENT		
TO STEM		
LATERAL	SMALL	MEDIUM
SHOOT:		
ANGLE		
BETWEEN		
LATERAL		
SHOOT		
AND STEM		
<u>ADDITIONAL FOLIAGE INFORMATION</u>		
LEAF: SHAPE OF	ROUND	ROUND
BASE OF SINUS		
BETWEEN		
LATERAL LOBES		
LEAF:	CONVERGING	CONVERGING
MARGINS OF		
SINUS BETWEEN		
LATERAL LOBES		
LEAF:	ASYMMETRIC	ASYMMETRIC
SHAPE OF BASE		
LEAF: APEX	CUSPIDATE	MUCRONATE
GROWTH:		
<u>DIFFERENCE IN AVERAGE LENGTH (CM)</u>		
	-5	0
RESPONSE TIME:		
<u>DIFFERENCE IN DAYS OF AVERAGE RESPONSE</u>		
	+1	+1
RESPONSE ON ALAR: DOSE THAT HAS TO BE USED		
TO GET AN AVERAGE LENGTH OF ABOUT 90 CM		
(DOSE IN GRAMS PER 100 LITER OF WATER)		
	250	300
YEAR OF	1988	1988
DISCOVERY		
TITLE	ORANGE	BRONZE
	REAGAN	REAGAN

TABLE IB-continued

<u>STEM INFORMATION</u>			
STEM: GREEN COLOR	BETWEEN YELLOW-GREEN 144A AND 146B	YELLOW-GREEN 144A	
STEM: ANTHOCYANIN COLORATION	PRESENT	PRESENT	
STEM: STRENGTH	MEDIUM	MEDIUM	
STEM: BRITTLINESS	PRESENT	ABSENT	
<u>PEDUNCLE INFORMATION</u>			
LATERAL SHOOT: ATTACHMENT TO STEM	MEDIUM	WEAK	
LATERAL SHOOT: ANGLE BETWEEN LATERAL SHOOT AND STEM	SMALL	SMALL	
<u>ADDITIONAL FOLIAGE INFORMATION</u>			
LEAF: SHAPE OF BASE OF SINUS BETWEEN LATERAL LOBES	ROUND	ROUND	
LEAF: MARGINS OF SINUS BETWEEN LATERAL LOBES	CONVERGING	CONVERGING	
LEAF: SHAPE OF BASE	TRUNCATE	ASYMMETRIC	
LEAF: APEX	CUSPIDATE	CUSPIDATE	
GROWTH:			
<u>DIFFERENCE IN AVERAGE LENGTH (CM)</u>			
	+10	0	
RESPONSE TIME:			
<u>DIFFERENCE IN DAYS OF AVERAGE RESPONSE</u>			
	-1	-1	
RESPONSE ON ALAR: DOSE THAT HAS TO BE USED TO GET AN AVERAGE LENGTH OF ABOUT 90 CM (DOSE IN GRAMS PER 100 LITER OF WATER)			
	450	250	
YEAR OF DISCOVERY	1988	1988	
<u>TITLE</u>			
	YELLOW REAGAN	SULPHUR REAGAN	SALMON REAGAN
<u>STEM INFORMATION</u>			

TABLE IB-continued

STEM: GREEN COLOR	YELLOW-GREEN 146B	NEAREST GREEN 143C	YELLOW-GREEN 144A
5 STEM: ANTHOCYANIN COLORATION	ABSENT	ABSENT	PRESENT
STEM: STRENGTH	MEDIUM	MEDIUM TO STRONG	MEDIUM
10 STEM: BRITTLINESS	ABSENT	ABSENT	PRESENT
<u>PEDUNCLE INFORMATION</u>			
LATERAL SHOOT: ATTACHMENT TO STEM	WEAK TO MEDIUM	WEAK TO MEDIUM	MEDIUM
15 LATERAL SHOOT: ANGLE BETWEEN LATERAL SHOOT AND STEM	SMALL	SMALL	MEDIUM
<u>ADDITIONAL FOLIAGE INFORMATION</u>			
LEAF: SHAPE OF BASE OF SINUS BETWEEN LATERAL LOBES	ROUND	ROUND	ROUND
25 LEAF: MARGINS OF SINUS BETWEEN LATERAL LOBES	PARALLEL	PARALLEL	PARALLEL
LEAF: SHAPE OF BASE	ASYM-METRIC	ASYM-METRIC	ASYM-METRIC
30 LEAF: APEX	MUC-RONATE	MUC-RONATE	CUSPIDATE
GROWTH:			
<u>DIFFERENCE IN AVERAGE LENGTH (CM)</u>			
	0	+10	+10
RESPONSE TIME:			
<u>DIFFERENCE IN DAYS OF AVERAGE RESPONSE</u>			
	+1	-1	0
RESPONSE ON ALAR: DOSE THAT HAS TO BE USED TO GET AN AVERAGE LENGTH OF ABOUT 90 CM (DOSE IN GRAMS PER 100 LITER OF WATER)			
	280	450	350
40 YEAR OF DISCOVERY	1990	1990	1987
What is claimed:			
45	1. A new and distinct cultivar of Chrysanthemum plant named White Reagan, as described and illustrated.		
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