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# United States Patent [19]

[11] Patent Number: Plant 8,974

Van der Jagt

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## [54] CHRYSANTHEMUM PLANT NAMED CORAL REAGAN

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[73] Assignee: **Chrysanthemum Breeders Association, N.V.**, Netherlands Antilles

[21] Appl. No.: 101,275

[22] Filed: Aug. 29, 1993

### Related U.S. Application Data

[63] Continuation of Ser. No. 780,292, Oct. 22, 1991, abandoned.

[51] Int. Cl.<sup>5</sup> ..... A01H 5/00

[52] U.S. Cl. .... Plt./82.3

[58] Field of Search ..... Plt. 74.1, 82.2, 82.3

### [56] References Cited

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### [57] ABSTRACT

A new and distinct cultivar of chrysanthemum plant named Coral Reagan, bearing medium sized coral 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. 07/780,292 filed Oct. 22, 1991, now abandoned.

The present application is related to the following copending applications and patent:

Application No.	Filing Date	Title
07/780,237	October 22, 1991	Orange Reagan
08/092,941	July 19, 1993	Bronze Reagan
08/088,104	July 8, 1993	Dark Reagan
08/092,942	July 19, 1993	Sulphur Reagan
08/092,943	July 19, 1993	Yellow Reagan
08/088,107	July 8, 1993	White Reagan
08/101,278	August 2, 1993	Salmon Reagan
Patent No.	Issue Date	Title
U.S. Plant Pat. No. 8,642	March 15, 1994	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 U.S. Plant Pat. No. 8,642. The new cultivar was discovered in 1988 as a whole plant mutation in Holland, and has been asexually reproduced by cuttings in greenhouses at Ter Aar, Holland. The new cultivar has been found to retain

## 2

all of its distinctive characteristics through successive propagations.

### SUMMARY OF THE NEW PLANT

5 The present invention is a new and distinct variety of Chrysanthemum of a medium sized bloom and coral color.

### BRIEF DESCRIPTION OF THE DRAWINGS

10 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;

15 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

20 This new variety of Chrysanthemum is of the botanical classification *Chrysanthemum morifolium*, and is named Coral 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 coral 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 R.H.S. Colour Chart) that distinguish it over related known varieties and its antecedents:

Botanical classification: *Chrysanthemum morifolium*.

Bud:

*Size*.—Medium (cross section  $\pm 1.0$  cm, height  $\pm 0.7$  cm).

*Form*.—Round and flat.

*Outside color*.—Greyed-purple 186 A.

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; ( $18^{\circ}$ – $20^{\circ}$  C.).

Color:

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

*Base of petals*.—Greyed-red 179 C but redder.

*Inside of petals*.—Greyed-red 179 C but redder.

*Reverse of petals*.—Greyed-yellow 162 D tinged with red-purple 71 B Between ribs and margin.

*Outer petals*.—Greyed-red 179 C but redder.

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

*Discoloration*.—Some to yellow orange 23 C.

*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*.— $\pm 5$  mm.

*Stigmas*.—Yellow.

*Width*.— $\pm 1$  mm.

*Ovaries*.—Enclosed in calyx.

Plant:

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

*growth*.—Strong.

*Height*.—100–125 cm.

*Peduncle*.—Near the top  $\pm 14$  cm, near the middle  $\pm 24$  cm, near the bottom  $\pm 28$  cm.

*Internodes*.—3 cm.

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

Foliage:

*Color*.—Upper side green 137 A, Underside 137 C.

*Size*.—Length  $\pm 12$  cm, width  $\pm 9$  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.

Distinguishing characteristics of the Chrysanthemums of the Reagan family are summarized below in Tables IA and IB. Color designations therein are taken from the R.H.S. Colour Chart.

TABLE IA

TITLE	REAGAN	WHITE REAGAN
BUD OUTSIDE COLOR	GREYED-PURPLE 186D BUT PALER	YELLOW 4D
CENTER OF FLOWER		
IMMATURE:	YELLOW-GREEN 151C	YELLOW-GREEN 151C
MATURE:	YELLOW-GREEN 154A	YELLOW-GREEN 154A
BASE OF PETALS	PURPLE 75B	WHITE 115D BUT WHITER AND BRIGHTER
INSIDE OF PETALS	PURPLE 75B	WHITE 155D BUT WHITER AND BRIGHTER
REVERSE OF PETALS	RED-PURPLE 69A BUT PALER	WHITE 155D BUT WHITER AND BRIGHTER
OUTER PETALS	PURPLE 75B	WHITE 155D BUT WHITER AND BRIGHTER
PETAL CROSS-SECTION	FLAT	FLAT
TITLE	CORAL REAGAN	DARK REAGAN
BUD OUTSIDE COLOR	GREYED-PURPLE 186A	BETWEEN GREYED PURPLE 186A AND B
CENTER OF FLOWER		
IMMATURE:	YELLOW-GREEN 151C	YELLOW-GREEN 151C
MATURE:	YELLOW-GREEN 154A	YELLOW-GREEN 154A
BASE OF PETALS	GREYED-RED 179C BUT REDDER	RED-PURPLE 69B LIGHTLY OVERLAID WITH RED-PURPLE 72A GIVING AN OVERALL IMPRESSION OF PURPLE 75A BUT PINKER
INSIDE OF PETALS	GREYED-RED 179C BUT REDDER	RED-PURPLE 69B LIGHTLY OVERLAID WITH RED-PURPLE 72A GIVING AN OVERALL IMPRESSION OF PURPLE 75A BUT PINKER
REVERSE OF PETALS	GREYED-YELLOW 162D TINGED WITH RED-PURPLE 71B BETWEEN RIBS AND MARGIN	RED-PURPLE 69C WITH A LIGHT TESSELLATION OF RED-PURPLE 72A
OUTER PETALS	GREYED-RED 179C BUT REDDER	RED-PURPLE 69B LIGHTLY OVERLAID WITH RED-PURPLE 72A GIVING AN OVERALL IMPRESSION OF PURPLE 75A BUT PINKER
PETAL CROSS-SECTION	FLAT	CONVEX

TABLE IA-continued

TABLE IB-continued

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

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

TABLE IB

TITLE	REAGAN	WHITE REAGAN
<u>STEM INFORMATION</u>		
STEM: GREEN COLOR	YELLOW-GREEN 144A	NEAREST GREEN 143C
STEM: ANTHOCYANIN	ABSENT	ABSENT

TABLE IB-continued

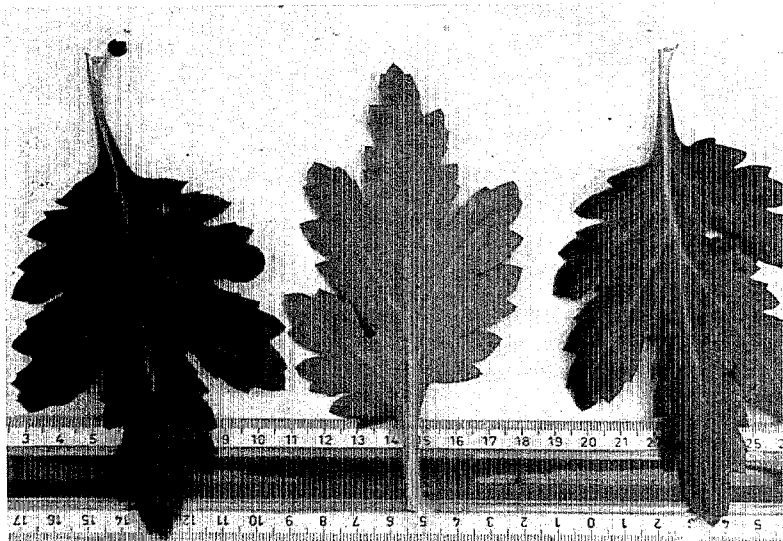
GROWTH:		
DIFFERENCE IN AVERAGE LENGTH (IN CMS)		
	-5	0
RESPONSE TIME:		
DIFFERENCE IN DAYS OF AVERAGE RESPONSE		
	+1	+½
RESPONSE ON ALAR:		
DOSE THAT HAS TO BE USED TO GET AN AVERAGE LENGTH OF ABOUT 90 CMS (DOSE IN GRAMS PER 100 LITER OF WATER)		
	250	300
YEAR OF DISCOVERY		
	1988	1988
TITLE		
	ORANGE REAGAN	BRONZE REAGAN
STEM INFORMATION		
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
PEDUNCLE INFORMATION		
LATERAL SHOOT:		
ATTACHMENT TO STEM	MEDIUM	WEAK
LATERAL SHOOT:		
ANGLE BETWEEN LATERAL SHOOT AND STEM	SMALL	SMALL
ADDITIONAL FOLIAGE INFORMATION		
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:		
DIFFERENCE IN AVERAGE LENGTH (IN CMS)		
	+10	0
RESPONSE TIME:		
DIFFERENCE IN DAYS OF AVERAGE RESPONSE		
	-1	-½
RESPONSE ON ALAR:		
DOSE THAT HAS TO BE USED TO GET AN AVERAGE LENGTH OF ABOUT 90 CMS (DOSE IN GRAMS PER 100 LITER OF WATER)		
	450	250
YEAR OF DISCOVERY		
	1988	1988
TITLE		
	YELLOW REAGAN	SULPHUR REAGAN
STEM INFORMATION		
STEM:		
GREEN COLOR	YELLOW-GREEN 146B	NEAREST GREEN 143C
STEM:		
ANTHOCYANIN COLORATION	ABSENT	ABSENT
STEM:		
STRENGTH	MEDIUM	MEDIUM TO STRONG
STEM:		
BRITTLINESS	ABSENT	ABSENT

TABLE IB-continued

PEDUNCLE INFORMATION		
LATERAL SHOOT:		
ATTACHMENT TO STEM	WEAK TO MEDIUM	WEAK TO MEDIUM
LATERAL SHOOT:		
ANGLE BETWEEN LATERAL SHOOT AND STEM	SMALL	SMALL
ADDITIONAL FOLIAGE INFORMATION		
LEAF:		
SHAPE OF BASE OF SINUS BETWEEN LATERAL LOBES	ROUND	ROUND
LEAF:		
MARGINS OF SINUS BETWEEN LATERAL LOBES	PARALLEL	PARALLEL
LEAF:		
SHAPE OF BASE	ASYMMETRIC	ASYMMETRIC
LEAF: APEX		
	MUCRONATE	MUCRONATE
GROWTH:		
DIFFERENCE IN AVERAGE LENGTH (IN CMS)		
	0	+10
RESPONSE TIME:		
DIFFERENCE IN DAYS OF AVERAGE RESPONSE		
	+1	-1
RESPONSE ON ALAR:		
DOSE THAT HAS TO BE USED TO GET AN AVERAGE LENGTH OF ABOUT 90 CMS (DOSE IN GRAMS PER 100 LITER OF WATER)		
	280	450
YEAR OF DISCOVERY		
	1990	1990
TITLE		
	SALMON REAGAN	
STEM INFORMATION		
STEM:		
GREEN COLOR	YELLOW GREEN 144A	
STEM:		
ANTHOCYANIN COLORATION	PRESENT	
STEM:		
STRENGTH	MEDIUM	
STEM:		
BRITTLINESS	PRESENT	
PEDUNCLE INFORMATION		
LATERAL SHOOT:		
ATTACHMENT TO STEM	MEDIUM	
LATERAL SHOOT:		
ANGLE BETWEEN LATERAL SHOOT AND STEM	MEDIUM	
ADDITIONAL FOLIAGE INFORMATION		
LEAF:		
SHAPE OF BASE OF SINUS BETWEEN LATERAL LOBES	ROUND	
LEAF:		
MARGINS OF SINUS BETWEEN LATERAL LOBES	PARALLEL	
LEAF:		
SHAPE OF BASE	ASYMMETRIC	
LEAF: APEX		
	CUSPIDATE	
GROWTH:		
DIFFERENCE IN AVERAGE LENGTH (IN CMS)		
	+10	
RESPONSE TIME:		
DIFFERENCE IN DAYS OF AVERAGE RESPONSE		
	0	
RESPONSE ON ALAR:		
DOSE THAT HAS TO BE USED TO GET AN AVERAGE LENGTH OF ABOUT 90 CMS (DOSE IN GRAMS PER 100 LITER OF WATER)		
	350	
YEAR OF DISCOVERY		
	1987	
STEM INFORMATION		
STEM:		
GREEN COLOR	YELLOW-GREEN 146B	
STEM:		
ANTHOCYANIN COLORATION	ABSENT	
STEM:		
STRENGTH	MEDIUM TO STRONG	
STEM:		
BRITTLINESS	ABSENT	

What is claimed:  
 1. A new and distinct cultivar of Chrysanthemum plant named Coral Reagan, as described and illustrated.  
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UNITED STATES PATENT AND TRADEMARK OFFICE  
**CERTIFICATE OF CORRECTION**


PATENT NO. : Plant 8,974  
DATED : November 8, 1994  
INVENTOR(S) : Martinus Van der Jagt

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

On the title page: Item [22], change "August 29, 1993"  
to --August 2, 1993--.

Signed and Sealed this  
Twenty-first Day of February, 1995

Attest:



BRUCE LEHMAN

Attesting Officer

Commissioner of Patents and Trademarks