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(12) **United States Plant Patent**
Boeder

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(54) **CHRYSANTHEMUM PLANT NAMED**
'REDOCK WHITE'

(58) **Field of Search** Plt./294

(50) Latin Name: *Chrysanthemum morifolium*
Varietal Denomination: **Redock White**

(56) **References Cited**

PUBLICATIONS

(75) Inventor: **Mark Roland Boeder**, The Hague
(NL)

Communication from Community Plant Variety Office Jul. 1, 2005.*

UPOV-ROM Plant Variety Database 2004/04 for *chrysanthemum* plant cultivar redock white.*

(73) Assignee: **Chrysanthemum Breeders Assoc. NV**
(NL)

* cited by examiner

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 114 days.

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(21) Appl. No.: **10/841,482**

(57) **ABSTRACT**

(22) Filed: **May 10, 2004**

A *Chrysanthemum* plant named 'Redock White' characterized by its medium sized single type blooms with white ray-florets and yellow-green disc florets.

(51) **Int. Cl.**⁷ **A01H 5/00**

(52) **U.S. Cl.** **Plt./294**

3 Drawing Sheets

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RELATED CULTIVARS

'Redock White' is related to 'Redock Yellow' (copending U.S. Plant Pat. application), 'Redock Dark' (U.S. Plant Pat. pending), 'Redock Salmon' (U.S. Plant Pat. pending), and 'Redock Orange' (U.S. Plant Pat. pending). These varieties are all mutants of the original 'Redock' (unpatented).

BACKGROUND OF THE INVENTION

'Redock White' is a product of a breeding and selection program which had the objective of finding color mutants of 'Redock'. The new plant of the present invention comprises a new and distinct cultivar of *chrysanthemum* plant that is a natural occurring sport of a parent *chrysanthemum* named 'Redock' (unpatented). A comparison with Parent *chrysanthemum* 'Redock' is also made in this application. The new cultivar was discovered as a whole plant mutation in 2001 by Mark Roland Boeder in a controlled environment (greenhouse) in Rijnsenhout Holland. The first act of asexual reproduction of 'Redock White' was accomplished when vegetative cuttings were taken from the initial selection in 2001 in Rijnsenhout Holland.

SUMMARY OF THE INVENTION

The present invention is a new and distinct variety of *chrysanthemum* bearing medium sized blooms with white ray-florets and yellow-green disc florets.

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 bloom of the cultivar in various stages.

FIG. 3 shows the foliage of the cultivar.

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DESCRIPTION OF THE INVENTION

This new variety of *chrysanthemum* is of the botanical classification *Chrysanthemum morifolium* L. The observations and measurements were gathered from plants grown in April/May in a greenhouse in Rijnsenhout Holland in a photo-periodic controlled crop under conditions generally used in commercial practice. The greenhouse temperatures during this crop were at day-time between 18° C. and 25° C. and at night 20° C. After a long day period of 14 days the photo-periodic response time in this crop was 47 days. After the long day period to flowering growth retardants were applied 3 times in an average dose of 2.5 gram/liter water. No tests were done on disease or insect resistance or susceptibility. This new variety produces medium sized blooms with white ray-florets and yellow-green disc-florets blooming on the plant for 4 weeks. This new variety of *chrysanthemum* has been found to retain its distinctive characteristics throughout successive propagations however the phenotype may vary significantly with variations in environment such as light intensity and temperature. To show the phenotype as described 'Redock White' can be planted without assimilation lightning (high pressure sodium lamps) between week 1 and week 52 under greenhouse conditions in Holland. With assimilation light (minimum level 2500 lux) it can be planted year round under greenhouse conditions in Holland.

The difference between 'Redock' and its sport 'Redock White' is flower color. From the cultivars known to inventor the most similar existing cultivars in comparison to 'Redock White' are the original 'Redock' and its several sports and 'White Reagan' (U.S. Plant Pat. No. 8,784). When 'Redock White' is being compared with 'Redock', the following differences and similarities are noticed: The difference of 'Redock White', and 'Redock' is the (1) ray-floret color. The color of 'Redock White' is white, that of 'Redock' is pink. All other characteristics of members of the 'Redock' family are similar. While when 'Redock White' is being compared

with 'Reagan White', the following differences and similarities are noticed. (1) ray-floret color. Both 'Redock White' and 'White Reagan' have white florets. (2) height of bloom. The bloom height of 'Redock White' is high, while that of 'White Reagan' is low. (3) cross-section of ray-florets. This is strongly concave for 'Redock White', while it is flat for 'White Reagan'. (4) vigour. The plants of 'Redock White' are more vigorous than those of 'White Reagan'. (5) plant height. The plants of 'Redock White' are higher than 'White Reagan'.

The following is a description of the plant and characteristics that distinguish 'Redock White' 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 'Redock White'	
<u>Bud</u>	
Size	Small, cross-section 0.7 cm height 0.9 cm
Outside Color	White 155A
Involucral bracts	3 rows, length 8 mm, width 3 mm
Involucral bracts among disc-florets	Not present
Involucral bracts color	Green 147B
<u>Bloom</u>	
Type	Single
Height	High
Size	Medium
Fully Expanded	7.0 cm
Number of blooms per single stem	Average of 15-20
Seeds	Not produced
Performance (blooming period)	4 weeks
Fragrance	Typical <i>chrysanthemum</i>
<u>Color</u>	
Center of the flower (disc-florets)	Immature yellow-green 144A Mature yellow-green 151C White 155D
Color of upper surface of the majority of the ray-florets	White 155D
Color of the lower surface of the majority of the ray-florets	White 155D
Tonality from Distance	A spray mum with white flowers and a yellow-green disc
Color of the upper surface of the ray-florets after aging of the plant	White 155D
<u>Ray florets</u>	
Texture	Upper and under side smooth
Number	26-28
Cross-section	Strongly concave
Longitudinal axis of majority	Reflexing
Length of corolla tube	Short
Ray-floret length	3.3 cm
Ray-floret width	1.0 cm
Ratio length/width	Medium
Shape of tip	Pointed, very occasionally round
<u>Disc florets</u>	
Disc diameter	0.8-1.0 cm
Distribution of disc florets	Numerous, clearly visible at all stages of flowering
Shape	Tubular
Color	Yellow-green 144A
Receptacle shape	Conical raised
<u>Reproductive Organs</u>	
Stamen (present in disc florets only)	Thin 3 mm in length
Stamen color	Yellow-green 144B

TABLE 1-continued

Botanical Description of CULTIVAR 'Redock White'	
Pollen	No pollen present
Pollen color	Not applicable
Styles (present in both ray and disc florets)	Thin
Style color	Yellow-green 144B
Style Length	4 mm
Stigma color	Yellow-green 144B
Stigma Width	2 mm
Ovaries	Enclosed in perianth
<u>Plant</u>	
Form	A spray mum meant for erect culture
Growth habit	Upright
Growth rate	Very vigorous
Height	125-135 cm
Internodes	2.5-3.0 cm
Spray formation	Corymbiform
Stem Color	Yellow-green 147B
Stem Strength	Medium
Stem Brittleness	Present
Stem Anthocyanin Coloration	Absent
Peduncle length	Near the top 16 cm, near the middle 23 cm, near the bottom 28 cm
Peduncle color	Green 147B
Peduncle, attachment	Brittle
Peduncle, angle with stem	Small, 30° C.
Flowering Response (photo-periodic controlled crop, not natural season)	47 days
<u>Foliage</u>	
Color	Upper side yellow-green 147A Under side green 138B
Size	large; length 12.0-14.0 cm, width 7.0-8.0 cm
Quantity (number per single stem)	30-34
Shape	Ovate and deeply lobed
Texture upper side	Fleshy and glabrous
Texture under side	Pubescent
Ribs and veins upper side	Ribs and veins well developed
Ribs and veins under side	Ribs and veins well developed
Venation arrangement	Palmate
Shape of the margin	Lobed
Shape of Base of Sinus Between Lateral Lobes	Round
Margin of Sinus Between Lateral Lobes	Converging
Shape of Base	Rounded
Apex	Mucronate
Petiole length	2.5 cm
Petiole diameter	4-5 mm
Petiole color	Green 147B

TABLE 2

	Differences with the comparison Varieties		
	'Redock White'	'Redock'	'White Reagan'
Ray-floret color	White 155D	Purple 75C	White 155D
Bloom height	High	High	Low
Cross-section of ray-floret	Strongly concave	Strongly concave	Flat
Vigour	Very vigorous	Very vigorous	Vigorous
Plant height	125-135 cm	125-135 cm	100-125 cm

I claim:

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



FIG. 1

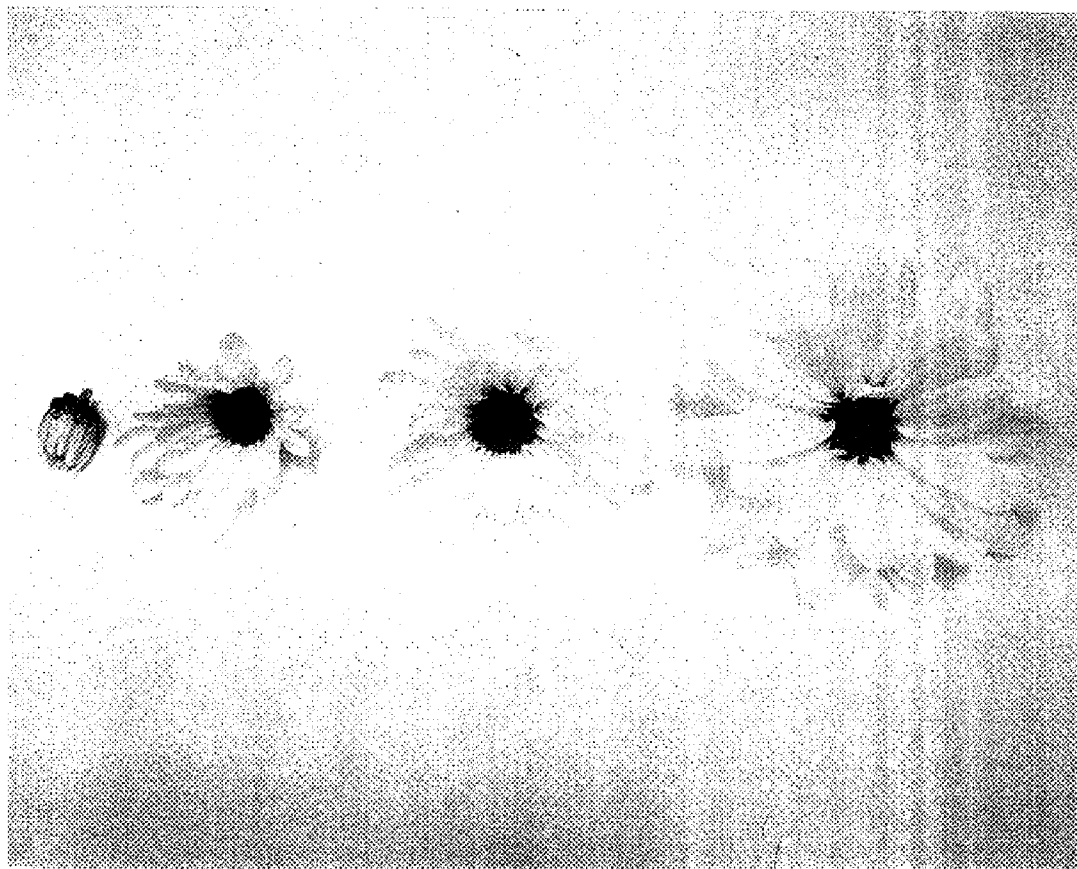


FIG. 2

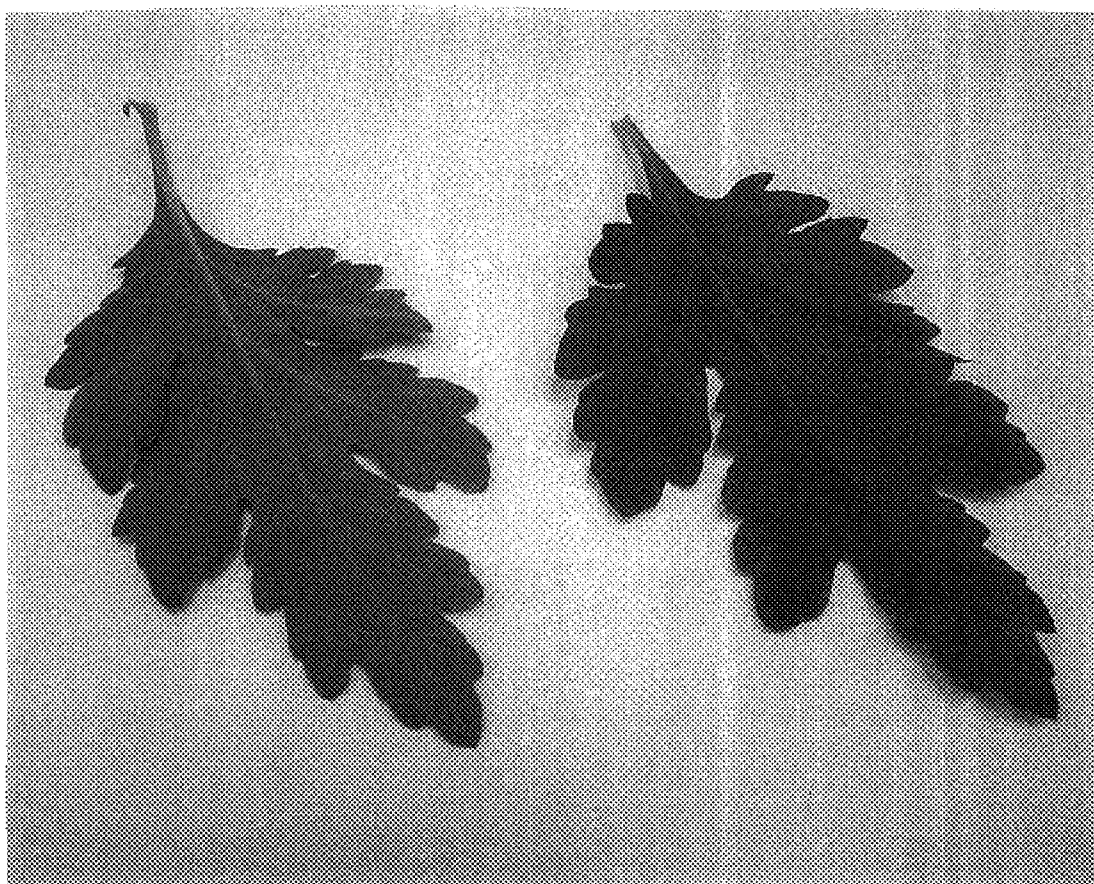


FIG. 3