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Noodelijk

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- [54] **CHRYSANTHEMUM PLANT NAMED 'RED REFOCUS'**
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- [73] Assignee: **Chrysanthemum Breeders Association N.V.**, Netherlands
- [21] Appl. No.: **09/149,460**
- [22] Filed: **Sep. 9, 1998**
- [51] **Int. Cl.⁷** **A01H 5/00**
- [52] **U.S. Cl.** **Plt./298**
- [58] **Field of Search** **Plt./298**

[56] References Cited

PUBLICATIONS

UPOU-ROM, Feb. 1999, Plant Variety Database, GTI Jouve Retrieval Software, 2 citations for 'Red Refocus'.

Primary Examiner—Howard J. Locker

[57] ABSTRACT

A chrysanthemum plant named 'Red Refocus' characterized by its small sized blooms with red ray florets and green-yellow disc florets.

2 Drawing Sheets

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The present invention is related to the plants in the following co-pending applications:

Application no.	Filing Date	Title
09/149,300	09/09/98	Refocus
09/149,299	09/09/98	Pink Refocus
09/149,657	09/09/98	White Refocus

BACKGROUND OF THE INVENTION

The present invention comprises a new a distinct cultivar of chrysanthemum plant that is a natural occurring sport of a parent chrysanthemum named Refocus. Parent chrysanthemum Refocus is also described in this application. The new cultivar was discovered as a whole plant mutation in May, 1993 by Rob Noodelijk in a greenhouse in Ter Aar, Holland.

The first act of asexual reproduction of Red Refocus was accomplished when vegetative cuttings were taken from the initial selection in August 1993 in a controlled environment in Ter Aar, Holland.

SUMMARY OF THE INVENTION

The present invention is a new and distinct variety of chrysanthemum bearing small sized blooms with red ray florets and green-yellow 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 the stem of the cultivar in full bloom.

FIG. 2 shows the various stages of bloom and foliage of the new cultivar.

DESCRIPTION OF THE INVENTION

This new variety of chrysanthemum is of the botanical classification *Dendranthema grandiflora*. When grown in the vicinity of Ter Aar, Holland, it has a response time of approximately 8 weeks. This new variety produces small sized blooms with red ray florets and green-yellow disc

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florets having a 3 week performance (i.e., vase life of 21 days). 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 Red Refocus may be planted year round under greenhouse conditions in Holland.

The following is a description of the plant and characteristics that distinguish Red Refocus 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.

CULTIVAR	RED REFOCUS	Parent Cultivar REFOCUS
Bud		
Size	small cross section + 1.0 cm, height ± 1.2 cm	medium, cross section ± 1.2 cm, height ± 1.2 cm
Outside Color Bloom	red 46B	red-purple 70A
25		
Size Fully Expanded	small 4-4½ cm	small 4-4½ cm
Borne	upper portion single flower per peduncle, lower portion plural flower per peduncle average of 10	upper portion single flower per peduncle, lower portion plural flower per peduncle average of 10
30		
Number of Blooms (per single stem)		
Peduncle Lengths	near the top ±10 cm, near the middle 20 cm, near the bottom 20 cm.	near the top ±10 cm, near the middle 20 cm, near the bottom 20 cm.
35		
Peduncle Lateral Shoot, Attachment	medium	medium
Peduncle Lateral Shoot, Angle	30°	30°-35°
Form	single (daisy)	single (daisy)
40		
Performance (blooming period)	good, 21 days (18°-20° C.)	good, 21 days (18°-20° C.)
Color		
Center of Flower/disc floret	yellow-green 144B at an early stage of inflorescence, mature yellow-orange 14B	yellow-green 15A at an early stage of inflorescence, mature yellow-orange 14B
Color of upper	red 45A	red-purple 71C

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surface of the majority of the ray-florets		
Color of the lower surface of the majority of the ray-florets	red 45C	purple violet 80D
Tonality from Distance	a small red daisy	a small purple daisy
Discoloration	ray-florets to red 45C disc-floret to yellow-orange 14B	ray-florets to red-purple 72D disc-floret to yellow-orange 14B
Pollen Ray florets	yellow-orange 14A	yellow-orange 14A
Texture	upper side smooth, under-side smooth	upper side smooth, under-side smooth
Number	35-40 (2-3 rows)	35-40 (2-3 rows)
Cross-section	concave	concave
Longitudinal axis of majority	straight	straight
Shape of tip	pointed	pointed
Fragrance	typical chrysanthemum	typical chrysanthemum
Disc Diameter	small to medium (1.0-1.2 cm)	small to medium (1.0-1.2 cm)
Reproductive Organs		
Stamen (present in disc florets only)	yellow-green, thin, ± mm in length	yellow-green, thin, ± mm in length
Pollen	present, abundant	present, abundant
Styles (present in both ray and disc florets)	yellow-green, thin	yellow-green, thin
Style Length	±4 mm	±4 mm
Stigmas	yellow	yellow
Stigma Width	±1 mm	±1 mm
Ovaries	enclosed in calyx	enclosed in calyx
Plant		
Form	spray mum meant for erect culture. Herbaceous	spray mum meant for erect culture. Herbaceous
Growth	short to medium	short to medium
Height	±95-100 cm	±95-100 cm
Stem Color	yellow-green 146B	yellow-green 146B
Stem Strength	strong	strong
Stem Brittleness	absent	present
Stem	present	absent
Anthocyanin Coloration		
Internodes	short (1.5-2.0 cm)	short (1.5-2.0 cm)
Flowering Response (photoperiodic controlled crop, no natural growing)	8 weeks	8 weeks
Foliage		
Color	upper side yellow-green 147A underside yellow-green 147B	upper side yellow-green 147A underside yellow-green 147B
Size	length 10 cm; width 7 cm	length 9 cm; width 6 cm
Quantity (per single stem)	28-32	28-32
Shape	egg-shaped	egg-shaped
Texture	fleshy	fleshy
Ribs and Veins	both ribs and veins well developed	both ribs and veins well developed
Edge	crenated	crenated
Shape of Base of Sinus Between Lateral	round	round

Lobes		
Margin of Sinus Between Lateral Lobes	converging	converging
Shape of Base	truncated	rounded
Apex	mucronate	mucronate
Year of Discovery	1993	1992
CULTIVAR	PINK REFOCUS	WHITE REFOCUS
Bud		
Size	medium, cross section ± 1.2 cm, height ±1.2 cm	medium cross section ± 1.5 cm, height ±1.0 cm
Outside Color Bloom	red-purple 58B	yellow-orange 20D
Size Fully Expanded	4½-5 cm	3½-4 cm
Borne	upper portion single flower per peduncle, lower portion plural flower per peduncle average of 10	upper portion single flower per peduncle, lower portion plural flower per peduncle average of 10
Number of Blooms (per single stem)		
Peduncle Lengths	near the top ±10 cm, near the middle 20 cm, near the bottom 20 cm. medium to strong	near the top ±10 cm, near the middle 20 cm, near the bottom 20 cm. medium
Peduncle Lateral Shoot, Attachment		
Peduncle Lateral Shoot, Angle	30°-35°	30°-35°
Form	single (daisy)	single (daisy)
Performance (blooming period)	good, 21 days (18°-20° C.)	good, 21 days (18°-20° C.)
Color		
Center of Flower/disc floret	yellow-green 144B at an early stage of inflorescence, mature yellow-orange 14B	yellow-green 144A at an early stage of inflorescence, mature yellow-orange 14B
Color of upper surface of the majority of the ray-florets	near red-purple 58C	pure white 155D (but whiter)
Color of the lower surface of the majority of the ray-florets	red-purple 58C	pure white 155D (but whiter)
Tonality from Distance	a small pink/purple daisy	a clear white small daisy
Discoloration	ray-florets to red-purple 58D disc-floret to yellow-orange 14B	Ray florets none, disc florets to yellow-orange 14B
Pollen Ray florets	Yellow-orange 14A	none
Texture	upper side smooth, under-side smooth	upper side smooth, under-side smooth
Number	38-45 (3 rows)	22-26 (2 rows)
Cross-section	concave	convex (no keels)
Longitudinal axis of majority	straight	reflexing
Shape of tip	pointed	rounded
Fragrance	typical chrysanthemum	typical chrysanthemum
Disc Diameter	small to medium (1.0-1.2 cm)	small to medium (1.2-1.5 cm)
Reproductive Organs		
Stamen (present in disc florets only)	yellow-green, thin, ±4 mm in length	yellow-green, thin, ±4 mm in length
Pollen	present, abundant	none

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Styles (present both ray and disc florets)	yellow-green, thin	yellow-green, thin
Style Length	±4 mm	±4 mm
Stigmas	yellow	yellow
Stigma Width	±1 mm	±1 mm
Ovaries	enclosed in calyx	enclosed in calyx
Plant		
Form	spray mum meant for erect culture. Herbaceous	spray mum meant for erect culture. Herbaceous
Growth	short to medium	short to medium
Height	±100-105 cm	±100-105 cm
Stem Color	yellow-green 146B	yellow-green 147B
Stem Strength	strong	strong
Stem Brittleness	absent	present
Stem	present	present
Anthocyanin Coloration		
Internodes	short (1.5-2.0 cm)	short (1.5-2.0 cm)
Flowering	8 weeks	8 weeks
Response (photoperiodic controlled crop, no natural growing)		

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<u>Foliage</u>		
Color	upperside yellow-green 147A	upperside yellow-green 147A
	underside yellow-green 147B	underside yellow-green 147B
Size	length 9 cm; width 6 cm	length 9 cm; width 6 cm
Quantity (per single stem)	28-32	30-35
Shape	egg-shaped	egg-shaped
Texture	fleshy	fleshy
Ribs and Veins	both ribs and veins well developed	both ribs and veins well developed
Edge	crenated	crenated
Shape of Base of Sinus	round	round
Between Lateral Lobes		
Margin of Sinus Between Lateral Lobes	converging	converging
Shape of Base	obtuse	truncated
Apex	cuspidate	mucronate
Year of Discovery	1993	1995

I claim:

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

* * * * *



FIG. 1

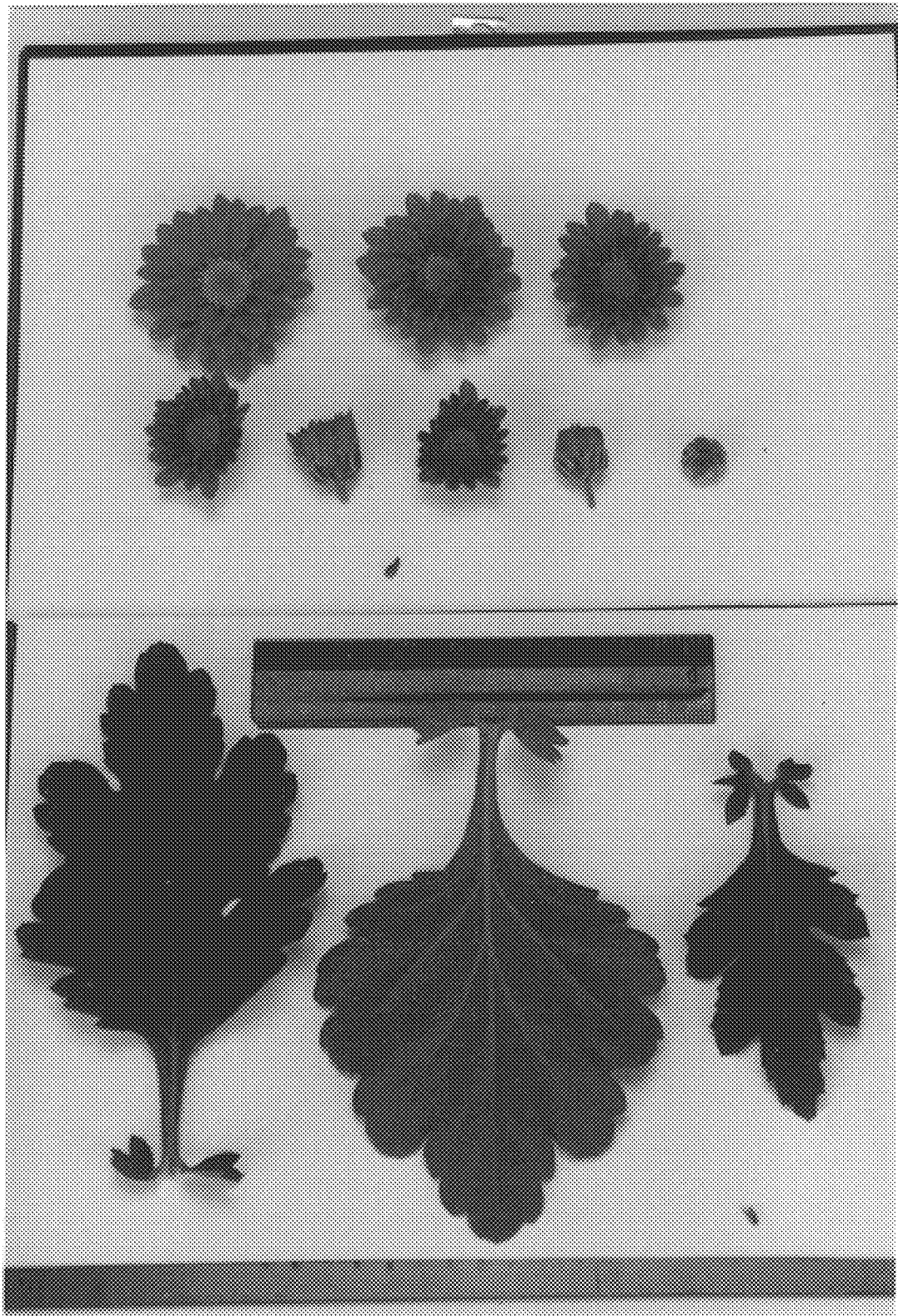


FIG. 2