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

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- (54) **CHRYSANTHEMUM PLANT NAMED 'PINK REFOCUS'**
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- (*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.
- (21) Appl. No.: **09/149,299**
- (22) Filed: **Sep. 9, 1998**
- (51) **Int. Cl.⁷** **A01H 5/00**
- (52) **U.S. Cl.** **Plt./297**
- (58) **Field of Search** **Plt./286, 297**

- (56) **References Cited**
PUBLICATIONS
UPOV-ROM, 1999/02, Plant Variety Database, GTI Jouve Retrieval Software, 2 Citations for 'Pink Refocus'.*
- * cited by examiner

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- (57) **ABSTRACT**
A chrysanthemum plant named Pink Refocus characterized by its small sized blooms with pink 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 (now U.S. Plant Patent No. 11,621)	Sep. 9, 1998	Refocus
09/149,460 (now U.S. Plant Patent No. 11,664)	Sep. 9, 1998	Red Refocus
09/149,657 (now U.S. Plant Patent No. 11,675)	Sep. 9, 1998	White Refocus

BACKGROUND OF THE INVENTION

The present invention comprises a new and 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 Noodeljik in a greenhouse in Ter Aar, Holland.

The first act of asexual reproduction 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 pink 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.

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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 pink ray florets and green-yellow disc 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 a phenotype as described, Pink Refocus may be planted year round under greenhouse conditions in Holland.

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

Botanical Description of Pink Refocus, Refocus, Red Refocus and White Refocus

CULTIVAR	PINK REFOCUS	Parent Cultivar REFOCUS
Bud		
Size	medium, cross section ± 1.2 cm, height ± 1.2 cm	medium, cross section ± 1.2 cm, height ± 1.2 cm
Outside Color	red-purple 58B	red-purple 70A
Bloom		
Size	Small	small
Fully Expanded	4½–5 cm	4–4½ cm
Borne	upper portion single flower per peduncle, lower portion plural flower per peduncle	upper portion single flower per peduncle, lower portion plural flower per peduncle

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Botanical Description of Pink Refocus, Refocus, Red Refocus and White Refocus		
Number of Blooms (per single stem)	average of 10	average of 10
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.
Peduncle Lateral Shoot, Attachment		
Peduncle Lateral Shoot, Angle	30°–35°	30°–35°
Form	single (daisy)	single (daisy)
Performance	good, 21 days (18°–20° C.)	good, 21 days (18°–20° C.)
CULTIVAR	RED REFOCUS	WHITE REFOCUS
Bud		
Size	small cross section ± 1.0 cm, height ± 1.2 cm	medium cross section ± 1.5 cm, height ± 1.0 cm
Outside Color Bloom	red 46B	yellow-orange 20D
Size Fully Expanded Borne	small 4–4½ cm upper portion single flower per peduncle, lower portion plural flower per peduncle	small 3½–4 cm upper portion single flower per peduncle, lower portion plural flower per peduncle
Number of Blooms (per single stem)	average of 10	average of 10
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.
Peduncle Lateral Shoot, Attachment		
Peduncle Lateral Shoot, Angle	30°	30°–35°
Form	single (daisy)	single (daisy)
Performance	good, 21 days (18°–20° C.)	good, 21 days (18°–20° C.)
CULTIVAR	PINK REFOCUS	Parent Cultivar REFOCUS
Color		
Center of Flower/disc floret	yellow-green 144B at an early stage of florescence, mature yellow-orange 14B near red-purple 58C	yellow-green 145A at an early stage of florescence, mature yellow-orange 14B red-purple 71C
Color of upper surface of the majority of the ray-florets		
Color of the lower surface of the majority of the ray-florets	red-purple 58C	purple violet 80 D
Tonality from Distance	a small pink/purple daisy	a small purple daisy
Discoloration	ray-florets to red-purple 58D disc-floret to yellow-orange 14B yellow-orange 14A	ray-florets to red-purple 72D disc-floret to yellow-orange 14B yellow-orange 14A
Pollen Ray florets		
Texture	upperside smooth, underside smooth	upperside smooth, underside smooth
Number	38–45 (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

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Botanical Description of Pink Refocus, Refocus, Red Refocus and White Refocus		
Disc Diameter	small to medium (1.0–1.2 cm)	Small to medium (15.0–1.2 cm)
CULTIVAR	RED REFOCUS	WHITE REFOCUS
Color		
Center of Flower/disc floret	yellow-green at an early stage of florescence, mature yellow-orange 14B red 45A	yellow-green 144A at an early stage of florescence, mature yellow-orange 14B pure white 155D (but whiter)
Color of upper surface of the majority of the ray-florets		
Color of the lower surface of the majority of the ray-florets	red 45C	pure white 155D (but whiter)
Tonality from Distance	a small red daisy	a clear white small daisy
Discoloration	ray-florets to red 45C disc-floret to yellow-orange 14B yellow-orange 14A	ray floret none, disc florets to yellow-orange 14B none
Pollen Ray florets		
Texture	upperside smooth, underside smooth	upperside smooth, underside smooth
Number	35–40 (2–3 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)
CULTIVAR	PINK REFOCUS	Parent Cultivar REFOCUS
Reproductive Organs		
Stamen (present in disc florets only)	yellow-green, thin, ±4 mm im length	Yellow-green, thin, ±4 mm im 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	±100–105 cm	±95–100 cm
Stem Color	yellow-green 146B	yellow-green 146B
Stem Strength	strong	Strong
Stem Brittleness	absent	Present
Stem Anthocyanin	Present	Absent
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

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Botanical Description of Pink Refocus, Refocus, Red Refocus and White Refocus		
CULTIVAR	RED REFOCUS	WHITE REFOCUS
<u>Reproductive Organs</u>		
Stamen (present in disc florets only)	yellow-green, thin, ±4 mm im length present, abundant	yellow-green, thin, ±4 mm im length not present
Pollen	yellow-green, thin	yellow-green, thin
Styles (present in both ray and disc florets)		
Style Length	±4 mm	±4 mm
Stigmas	yellow	yellow
Stigma Width	±1 mm	±1 mm
Ovaries	enclosed in calyx	enclosed in calyx
<u>Plant</u>		
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	±100–105 cm
Stem Color	yellow-green 146B	yellow-green 147B
Stem Strength	strong	strong
Stem Brittleness	absent	present
Stem Anthocyanin Coloration	present	present
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
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CULTIVAR	PINK REFOCUS	Parent Cultivar REFOCUS
<u>Foliage</u>		
Color	Upperside yellow-green 147A Underside yellow-green 147B	upperside yellow-green 147A Underside yellow-green 147B
Size	length 9 cm; width 6 cm	length 9 cm; width 6 cm
Quantity (per single stem)	28–32	28–32
Shape	egg-shaped	egg-shaped
Texture	Fleshy	Fleshy

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Botanical Description of Pink Refocus, Refocus, Red Refocus and White Refocus		
CULTIVAR	RED REFOCUS	WHITE REFOCUS
<u>Ribs and Veins</u>		
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 Lobes	Round	Round
Margin of Sinus Between Lateral Lobes	Converging	Converging
Shape of Base Apex	obtuse Cuspidate	rounded Mucronate
Year of Discovery	1993	1992
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CULTIVAR	RED REFOCUS	WHITE REFOCUS
<u>Foliage</u>		
Color	upperside yellow-green 147A underside yellow-green 147B	upperside 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	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 Between Lateral Lobes	round	round
Margin of Sinus Between Lateral Lobes	converging	converging
Shape of Base Apex	truncated mucronate	truncated mucronate
Year of Discovery	1993	1995

I claim:

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

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FIG. 1

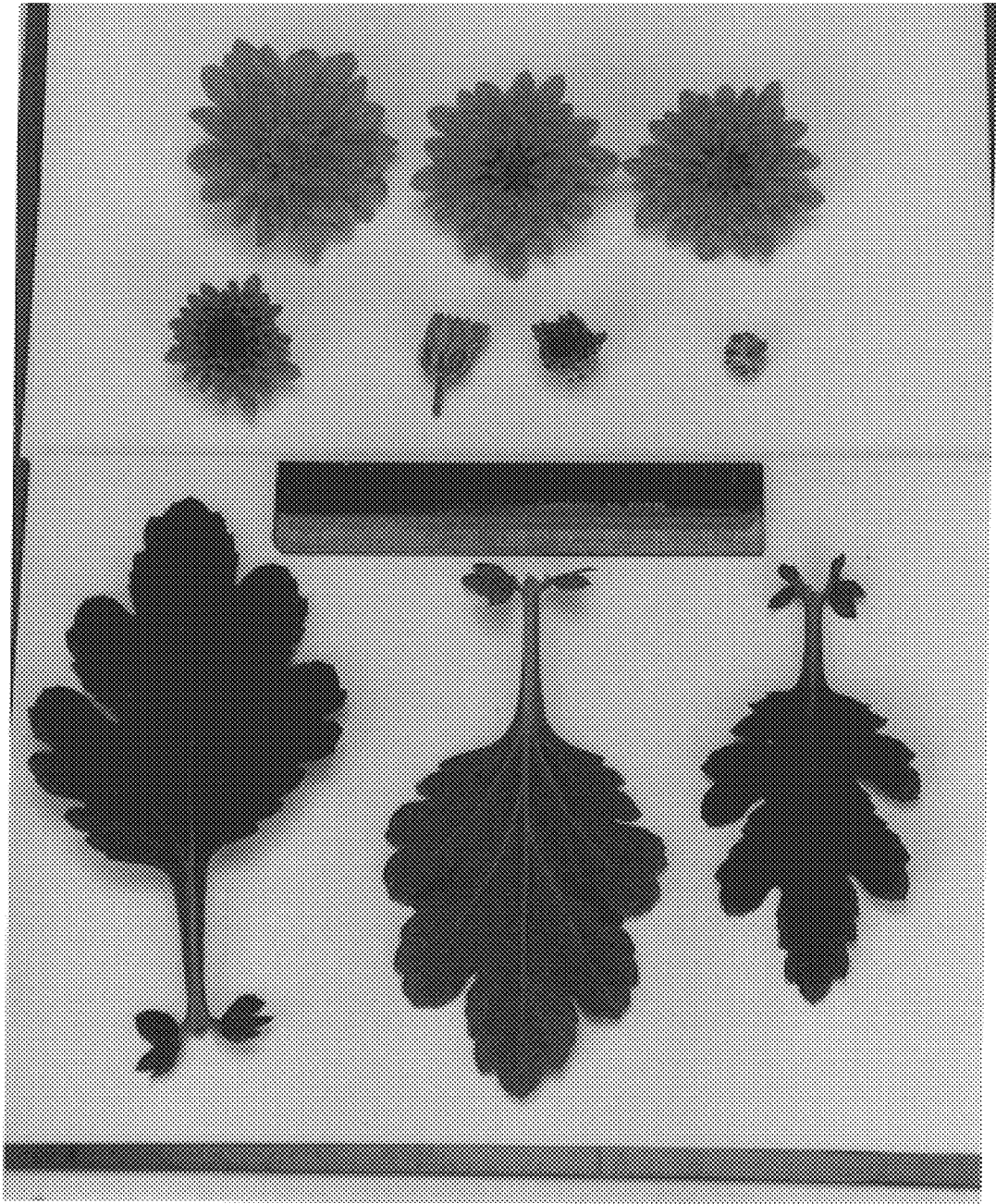


FIG. 2