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Noodelijk

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(54) **CHRYSANTHEMUM PLANT NAMED 'VIRUNGA'**

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(52) **U.S. Cl.** **Plt./296**
(58) **Field of Search** Plt./296

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(57) **ABSTRACT**

A Chrysanthemum plant named 'Virunga' characterized by its Large sized blooms with Yellow-Orange ray-florets and Yellow-Green disc florets.

2 Drawing Sheets

RELATED CULTIVARS

'Virunga' is related to Yellow 'Virunga' (copending U.S. application Ser. No. 09/561,933). Yellow 'Virunga' is a color mutant from 'Virunga'.

BACKGROUND OF THE INVENTION

'Virunga' is a product of a breeding-program which had the objective of creating new chrysanthemum cultivars with a daisy type flower, a 7 week response and a medium plant height. The new plant of the present invention comprises a new and distinct cultivar of Chrysanthemum plant. 'Virunga' is a seedling from a cross in a breeding program maintained under the control of inventor. The female parent is #94.005—unpatented—, an unamed seedling not available to inventor for description. The male parent is unknown, being a mixed pollation of a group of male parents. The new and distinct cultivar was discovered and selected as a flowering plant within the progeny of the stated cross by Rob Noodelijk in a controlled environment (greenhouse) in Rijsenhout Holland in May 1996. The first act of asexual reproduction of 'Virunga' was accomplished when vegetative cuttings were taken from the initial selection in August 1996 in a controlled environment in Rijsenhout Holland.

SUMMARY OF THE INVENTION

The present invention is a new and distinct variety of chrysanthemum bearing large sized blooms with yellow-orange 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 various stages of bloom of the new cultivar;

FIG. **3** shows the various stages of foliage and petiole of the new cultivar.

DESCRIPTION OF THE INVENTION

This new variety of chrysanthemum is of the botanical classification *dendranthema grandiflora*. The observations and measurements were gathered from plants grown in a greenhouse in Rijsenhout 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. The photo-periodic response time in this crop was 53 days after an average of eight long days. After this long day period to flowering growth retardants were applied 6 times in an average dose of 1.5 gram/liter water. No tests were done on disease or insect resistance or susceptibility. This new variety produces large sized blooms with yellow-orange ray-florets and yellow-green disc-florets blooming on the plant for 5 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 'Virunga' can be planted without assimilation lightning (high pressure sodium lamps) between week 50 and week 40 of the next year under greenhouse conditions in Holland. With assimilation lightning (minimum level 2500 lux) it can be planted year round under greenhouse conditions in Holland.

From the cultivars known to inventor the most similar existing cultivar in comparison to 'Virunga' is Yellow 'Virunga'. When Yellow 'Virunga' and 'Virunga' are being compared the following difference is noticed: The differences of Yellow 'Virunga' and 'Virunga' is the ray-floret color. 'Virunga' is yellow-orange, Yellow 'Virunga' is clear yellow.

From other commercial available varieties known to the inventor 'Orange Blush' (U.S. Plant Pat. No. 9,451) is most similar. The most obvious differences are (1) Flower form and color. The color of 'Virunga' is deeper orange, the ray-florets are less reflexing. (2) Vigor. 'Virunga' is more vigorous than 'Orange Blush'.

The following is a description of the plant and characteristics that distinguish 'Virunga' 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 color chart, edition 1995.

TABLE 1

Botanical Description of CULTIVAR 'VIRUNGA'

Bud	
Size	Large; cross-section 1.0 cm, height 1.0 cm
Outside Color	Yellow-orange 22 C
Involucral bracts	2 rows, length 7 mm, width 3 mm
Involucral bracts among disc-florets	Not present
Involucral bracts color	Yellow-green 146 D
Bloom	
Type	Daisy
Height	Flat
Size	Large
Fully Expanded	6.5–7.0 cm.
Number of blooms per branch	Approx. 4 blooms per branch
Performance on the plant	5 weeks
Seeds	Not produced
Fragrance	Typical chrysanthemum
Color	
Center of the flow (disc-florets)	Immature yellow-green 144 A Mature yellow-orange 15 C
Color of upper surface of the ray-florets	Yellow-orange 22 A with a pattern of Yellow 15 A, Yellow 15 A at the tips
Color of the lower surface of the ray-florets	Yellow-orange 18 A
Tonality from Distance	A pot mum with pale orange flowers and a green disc
Discoloration to color	Yellow-orange 22 B
Ray florets	
Texture	Upper and under side smooth.
Number	27–30
Cross-section	Concave
Longitudinal axis of majority	Reflexing
Length of corolla tube	Short
Ray-floret length	3.0–3.2 cm.
Ray-floret width	0.8–1.0 cm.
Ratio length/width	Medium
Shape of tip	Pointed
Disc florets	
Disc diameter	1.2–1.5 cm.
Distribution of disc florets	Numerous clearly visible at all stages of flowering.
Shape	Tubular
Color	Yellow-green 144 A
Receptacle shape	Conical raised
Reproductive Organs	
Stamen (present in disc florets only)	Yellow-green, thick, 4 mm.
Number of stamen	Grown together as one
Stamen color	Yellow-green 144 C
Pollen	Present at mature stage
Pollen color	Yellow-orange 12 A
Styles (present in both ray and disc florets)	Yellow-green, thin
Style color	Yellow-green 144 C
Style Length	5 mm.

TABLE 1-continued

Botanical Description of CULTIVAR 'VIRUNGA'

Stigmas	Yellow-green
Stigma Width	2 mm.
Ovaries	Enclosed in calyx
Plant	
Form	A pot mum meant for indoor use
Growth habit	Spreading
Growth rate	Rapid
Height	24–26 cm.
Width	26–28 cm.
Stem Color	Yellow-green 146 D
Stem Strength	Medium to strong
Stem Brittleness	Absent
Stem Anthocyanin Coloration	Absent
Length of lateral branch	From top to bottom 12–13 cm
Lateral branch color	Yellow-green 146 D
Lateral branch, attachment	Weak
Branching (average number of lateral branches)	Poor with 3 breaks after pinching
Peduncle length	3.0–4.5 cm.
Peduncle color	Yellow-green 146 D
Flowering Response (photo-periodic controlled crop, not natural season	53 Days
Foliage	
Color	Upper side green 137 A Under side green 147 B
Size	Medium; length 7.0 cm, width 5.0 cm
Quantity (number per lateral branch)	6–8
Shape	Ovate
Texture upper side	Glabrous
Texture under side	Pubescent
Venation arrangement	Palmate
Shape of the margin	Serrated
Shape of Base of Sinus Between Lateral Lobes	Round
Margin of Sinus Between Lateral Lobes	Converging
Shape of Base	Rounded (sometimes asymmetric)
Apex	Mucronate

TABLE 2

Differences with the comparison varieties

	'VIRUNGA'	'YELLOW VIRUNGA'	'ORANGE BLUSH'
Ray-floret color	Yellow-orange 22 A	Yellow 3 A	Yellow-orange 20 B
Growth rate	rapid	rapid	Slow

I claim:

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

* * * * *

FIG. 1

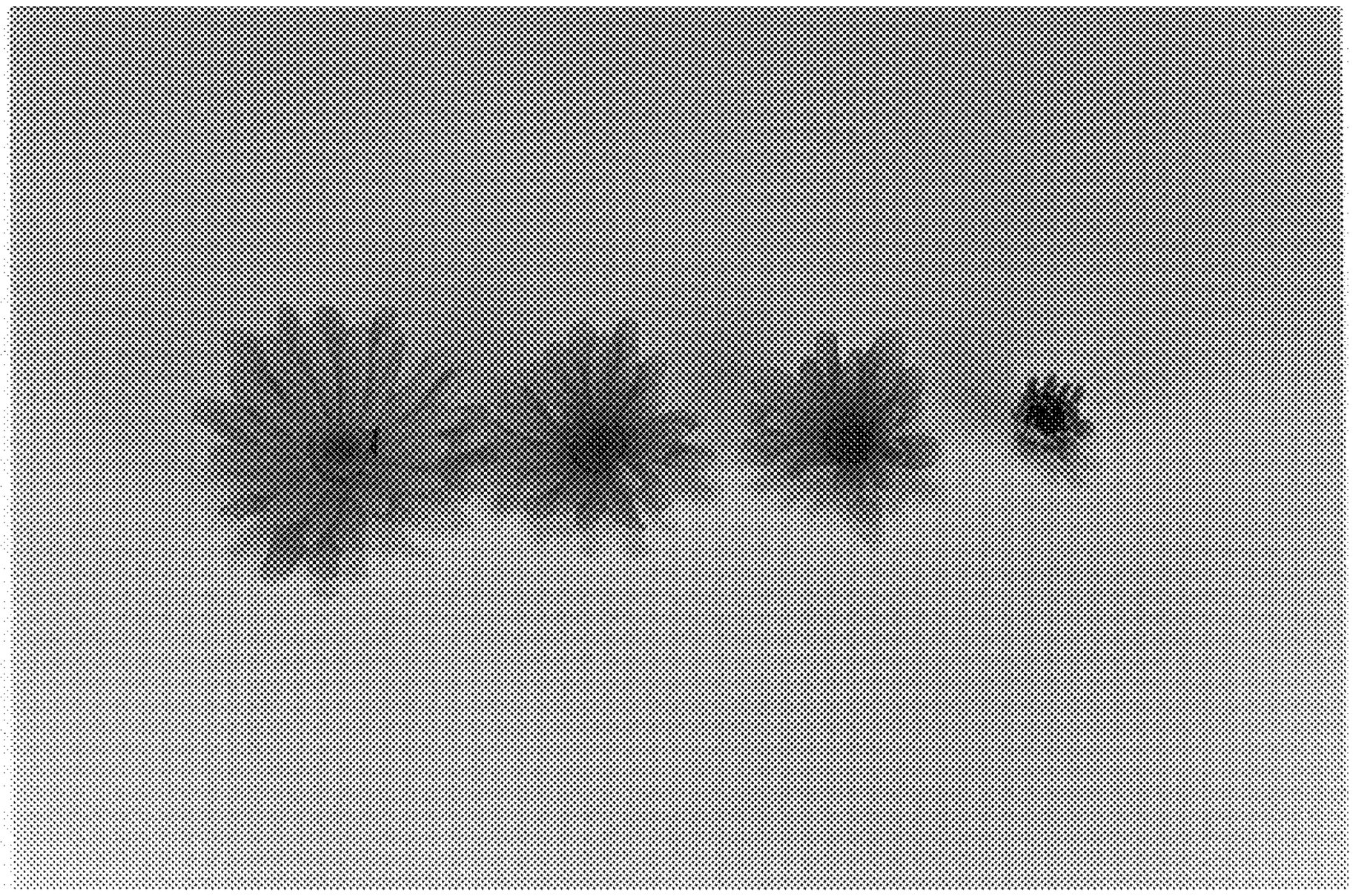

FIG. 2

FIG. 3