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Noodelijk

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(54) **CHRYSANTHEMUM PLANT NAMED
‘VIRUNGA YELLOW’**

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(*) **Notice:** Subject to any disclaimer, the term of this
patent is extended or adjusted under 35
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(57) **ABSTRACT**

A Chrysanthemum plant named ‘VIRUNGA YELLOW’
characterized by its LARGE sized blooms with YELLOW
ray-florets and YELLOW-GREEN disc florets.

2 Drawing Sheets

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RELATED CULTIVARS

‘VIRUNGA YELLOW’ is related to VIRUNGA (copend-
ing U.S. application Ser. No. 09/561,939). ‘VIRUNGA
YELLOW’ is a color mutant of VIRUNGA.

BACKGROUND OF THE INVENTION

‘VIRUNGA YELLOW’ is a product of a breeding and
selection program which had the objective of finding color
mutants of VIRUNGA. The new plant of the present inven-
tion comprises a new and distinct cultivar of chrysanthemum
plant that is a natural occurring sport of a parent chrysan-
themum named VIRUNGA. A comparison with Parent chry-
santhemum VIRUNGA is also made in this application. The
new cultivar was discovered as a whole plant mutation in
September 1998 by Rob Noodelijk in a controlled environ-
ment (greenhouse) in Rijsenhout Holland. The first act of
asexual reproduction of ‘VIRUNGA YELLOW’ was accom-
plished when vegetative cuttings were taken from the initial
selection in November 1998 in Rijsenhout Holland.

SUMMARY OF THE INVENTION

The present invention is a new and distinct variety of
chrysanthemum bearing large sized blooms with yellow
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 photo-
graphs 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 con-
trolled crop under conditions generally used in commercial

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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 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 YELLOW’ 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 light
(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 YELLOW’ is
VIRUNGA. When VIRUNGA YELLOW and ‘VIRUNGA
YELLOW’ are being compared the following differences
and similarities are noticed: The difference of VIRUNGA
and ‘VIRUNGA’ is the ray-floret color for which character-
istics ‘VIRUNGA YELLOW’ has been selected out of
VIRUNGA. ‘VIRUNGA YELLOW’ is yellow, VIRUNGA
is yellow-orange. All other characteristics of VIRUNGA and
‘VIRUNGA YELLOW’ are similar.

From other commercial available varieties known to
inventor ‘MIRAMAR’ (U.S. Plant Pat. No. 7,469) is most
similar to ‘VIRUNGA YELLOW’. Both varieties have a
large yellow daisy flower. Plant habit and shape, foliage
form and color are general differences, but also flower color
and shape are different. ‘virunga yellow’ has a lemon yellow
flower and the ray-florets are smaller/longer than the ray-
florets of ‘MIRAMAR’. (3) The disc-floret of ‘VIRUNGA
YELLOW’ is smaller.

The following is a description of the plant and character-
istics that distinguish ‘VIRUNGA YELLOW’ 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 photo-
graphs 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 ‘VIRUNGA YELLOW’	
<u>Bud</u>	
Size	Large; Cross-section 1.0 cm height 1.0 cm
Outside Color	Green-yellow 1 A
Involucral bracts	2 rows, length 7 mm, width 3 mm
Involucral bracts among disc-florets	Not present
Involucral bracts color	Yellow-green 146 D
<u>Bloom</u>	
Type	Daisy
Height	Flat
Size	Large
Fully Expanded	6.5–7.0 cm.
Borne (number of blooms per branch)	Approx. 4 blooms per branch
Performance on the plant	5 weeks
Seeds	Not produced
Fragrance	Typical chrysanthemum
<u>Color</u>	
Center of the flower (disc-florets)	Immature yellow-green 144 A Mature yellow-orange 15 C
Color of upper surface of the ray-florets	Yellow 3 A
Color of the lower surface of the ray-florets	Yellow 4 B
Tonality from Distance	A pot mum with large yellow flowers and a green disc
Discoloration to color	None
<u>Ray florets</u>	
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	3.2–3.5 cm.
Ray-floret width	0.8–1.0 cm.
Ratio length/width	Medium
Shape of tip	Pointed
<u>Disc florets</u>	
Disc diameter	1.2–1.4 cm.
Distribution of disc florets	Numerous clearly visible at all stages of flowering.
Shape	Tubular
Color	Yellow-green 144 A
Receptacle shape	Conical
<u>Reproductive Organs</u>	
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

TABLE 1-continued

Botanical Description of CULTIVAR ‘VIRUNGA YELLOW’	
Style color	Yellow-green 14 C
Style Length	5 mm.
Stigmas	Yellow-green
Stigma Width	2 mm.
Ovaries	Enclosed in calyx
<u>Plant</u>	
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, attachment	Weak
Branching (average number)	Poor with 3 breaks after pinching
Peduncle length	3.5–4.5 cm.
Peduncle color	Yellow-green 146 D
Flowering	53 days
Response (photo-periodic controlled crop, not natural season)	
<u>Foliage</u>	
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’	‘MIRAMAR’
Ray-floret color	Yellow 3 A	Yellow-orange 22 A	Yellow 5 A
Disc-floret size	1.2–1.4 cm.	1.2–1.4 cm.	1.4–1.7 cm.

I claim:

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

* * * * *



FIG. 1



FIG. 2

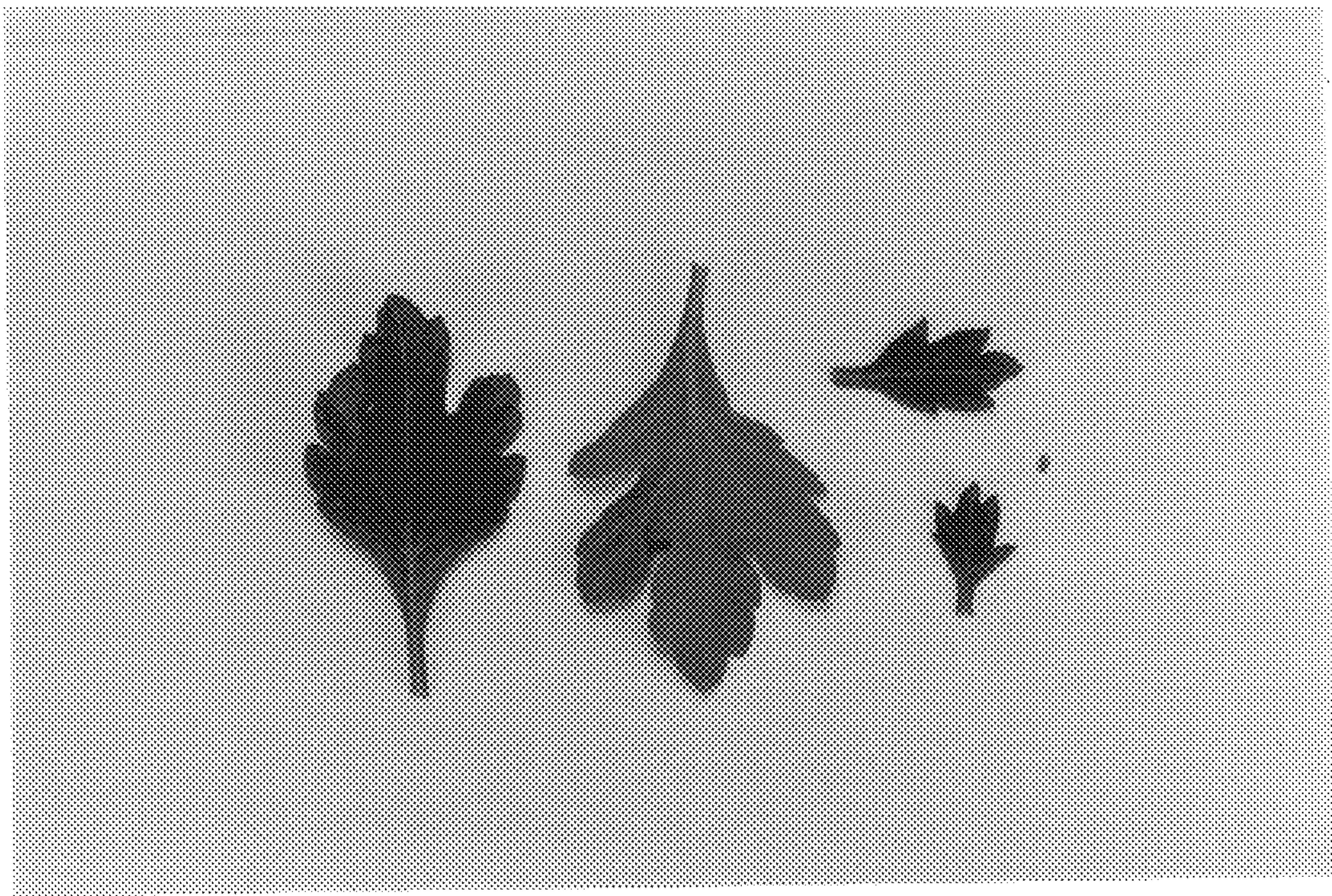


FIG. 3