



US00PP13238P2

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

(10) **Patent No.:** **US PP13,238 P2**

(45) **Date of Patent:** **Nov. 19, 2002**

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

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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.:** **09/708,595**

(22) **Filed:** **Nov. 9, 2000**

(51) **Int. Cl.⁷** **A01H 5/00**

(52) **U.S. Cl.** **Plt./295**

(58) **Field of Search** **Plt./295**

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(57) **ABSTRACT**

A Chrysanthemum plant named 'VYBOWL' characterized
by its medium sized blooms with yellow ray-florets and
brown disc florets.

5 Drawing Sheets

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RELATED CULTIVARS

'VYBOWL' is related to 'VYKING' (Ser. No. 09/708,
588). 'VYBOWL' is a sport of 'VYKING'.

BACKGROUND OF THE INVENTION

'VYBOWL' is a product of a breeding and selection
program which had the objective of finding color mutants of
'VYKING'. The new plant of the present invention com-
prises a new and distinct cultivar of chrysanthemum plant
that is a natural occurring sport of a parent chrysanthemum
named 'VYKING'. A comparison with Parent chrysanthe-
mum 'VYKING' and 'VYRON' (U.S. Plant Pat. No.
10,850) is also made in this application. The new cultivar
was discovered as a whole plant mutation in April 1999 by
Nol Vijverberg in a controlled environment (greenhouse) in
's-Gravenzande, Holland. The first act of asexual reproduc-
tion of 'VYBOWL' was accomplished when vegetative
cuttings were taken from the initial selection in June 1999 in
's-Gravenzande, Holland.

SUMMARY OF THE INVENTION

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

FIG. 2 shows the various stages of bloom of the cultivar.

FIG. 3 shows the foliage of the cultivar.

FIG. 4A shows a stem of 'VYKING' and 'VYBOWL'.

FIG. 4B shows the blooms of 'VYKING' and
'VYBOWL'.

DESCRIPTION OF THE INVENTION

This new variety of chrysanthemum is of the botanical
classification *Chrysanthemum morifolium*. The observations
and measurements were gathered from plants grown in

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April/May in a greenhouse in 's-Gravenzande, 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.
5 and at night 20° C. After a long day period of 14 days the
photo-periodic response time in this crop was 52 days. After
the long day period to flowering growth retardants were
applied 2 to 3 times in an average dose of 2.5 gram/liter
water. No tests were done on disease or insect resistance or
susceptibility. No tests were done on cold or drought resis-
tance. This new variety produces medium sized blooms with
yellow ray-florets and brown disc-florets blooming on the
plant for 3 weeks. This new variety of chrysanthemum has
been found to retain its distinctive characteristics throughout
15 successive propagations however the phenotype may vary
significantly with variations in environment such as light
intensity and temperature. To show the phenotype as
described 'VYBOWL' can be planted without assimilation
lightning (high pressure sodium lamps) between week 50
20 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 condi-
tions in Holland.

The variety 'VYKING' is a natural mutant of 'VYRON'.
25 The variety 'VYBOWL' is a natural mutant of 'VYKING'.
When 'VYKING', 'VYBOWL' and 'VYRON' are being
compared the following differences and similarities are
noticed: The differences of 'VYKING', 'VYBOWL' and
'VYRON' are (1) flower-side, (2) flower-form, (3) response-
30 time, (4) growth and (5) flower-count for which character-
istics 'VYBOWL' has been selected out of 'VYKING'. All
other characteristics of 'VYKING' and 'VYBOWL' are
similar.

(1) Flower-size: 'VYRON' and 'VYBOWL' have the
35 same flower-size, the flower of 'VYKING' is smaller
(illustrated by FIGS. 4A and 4B. (2) Flower-form: 'VYK-
ING' has a more "tidy" flower as 'VYRON'. The ray-florets
are more regular and the flower-disc is a little smaller.
'VYBOWL' has the flower form of 'VYKING'. (3)
40 Response-time: 'VYRON' has a response-time of 9 weeks
(62 days), 'VYKING' has a response-time of 56 days and
'VYBOWL' has a response-time of 49 days. (4) The growth
of 'VYBOWL' is more vigorous than the growth of both
'VYRON' and 'VYKING'. (5) The flower-count of

'VYBOWL' is higher than the flower-count of 'VYKING' and 'VYRON'.

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

CULTIVAR 'VYBOWL'

Bud:

Size.—Medium, cross-section 1.5 cm height 1.2 cm.
Outside color.—Yellow-orange 15 B
Involucral bracts.—2 rows, length 7 mm, width 3 mm.
Involucral bracts among disc-florets.—Not present.
Involucral bracts color.—Yellow-green 146 A.

Bloom:

Type.—Single.
Height.—Flat, 1.3–1.7 cm.
Size.—Medium.
Fully expanded.—5–5.5 cm.
Number of blooms per stem.—Average of 10.
Performance on the plant.—3 weeks.
Seeds (if crossed).—Produced in small quantities, ovate shaped. Grey-brown 199 A, 2 mm in length.
Fragrance.—Typical chrysanthemum, slight.

Color:

Center of the flower (disc-florets).—Immature greyed-orange 166 A. Mature greyed-orange 165 A.
Color of upper surface of the ray-florets.—Yellow 12 A.
Color of the lower surface of the ray-florets.—Yellow 8 A.
Tonality from distance.—A spray mum with yellow flowers and a brown disc.
Color of the upper surface of the ray-florets after aging of the plant.—Yellow 12 A.

Ray florets:

Texture.—Upper and under side smooth.
Number.—55–65, three rows.
Cross-section.—Concave, one keel.
Longitudinal axis of majority.—Straight.
Length of corolla tube.—Short, 0.4–0.7 cm.
Ray-floret margin.—Entire.
Ray-floret length.—1.7–2.2 cm.
Ray-floret width.—0.5–0.8 cm.
Ratio length/width.—Medium.
Shape of tip.—Rounded, sometimes dentate.

Disc florets:

Disc diameter.—1.5 cm.
Distribution of disc florets.—Numerous clearly visible at all stages of flowering.
Shape.—Tubular.
Color.—Yellow-green 144 A, greyed-orange 166 A at the tip.
Receptacle shape.—Conical raised.

Reproductive organs:

Stamen (present in disc florets only).—Thick, 4 mm in length.
Number of stamen.—4.
Stamen color.—Yellow-green 144 A.
Pollen.—Not present.
Styles (present in both ray and disc florets).—Thick.
Style color.—Yellow-green 144 A.
Style length.—5 mm.
Stigmas color.—Yellow-green 144 A.
Stigma width.—1 mm.
Ovaries.—Enclosed in calyx.

Plant:

Form.—A spray mum meant for erect culture.
Growth habit.—Upright.
Growth rate.—Rapid.
Height.—125 cm.
Internodes.—2.5–3.0 cm.
Spray formation.—Corymbiform.
Stem color.—Yellow-green 146 A.
Stem strength.—Strong.
Stem brittleness.—Present.
Stem anthocyanin coloration.—Present, a thin layer of greyed-red 181 A mainly at the base of the stem.
Peduncle length.—Near the top 8 cm, near the middle 14 cm, near the bottom 18 cm.
Peduncle color.—Yellow-green 146 A.
Flowering response (photo-periodic controlled crop, not natural season).—52 days.

Foliage:

Color mature.—Upper side yellow-green 147 A. Under side yellow-green 147 B.
Color immature.—Upper side yellow-green 146 A. Under side yellow-green 146 B.
Size.—Large; length 12 cm, width 7 cm.
Quantity (number per single stem).—32–34.
Shape.—Ovate.
Texture upper side.—Fleshy and glabrous.
Texture under side.—Pubescent.
Venation arrangement.—Palmate.
Shape of the margin.—Crenated.
Shape of base of sinus between lateral lobes.—Round.
Margin of sinus between lateral lobes.—Converging.
Shape of base.—Truncate.
Apex.—Mucronate.

Differences with the comparison Varieties

	'VYBOWL'	'VYKING'	'VYRON'
Flower size	5–5.5 cm	4–4.5 cm	5–5.5 cm
Response time	52 days	56 days	62 days
Growth	Rapid	Slow	Slow
Flower-count per stem	Average of 10	Average of 8	Average of 8

I claim:

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

* * * * *



FIG. 1

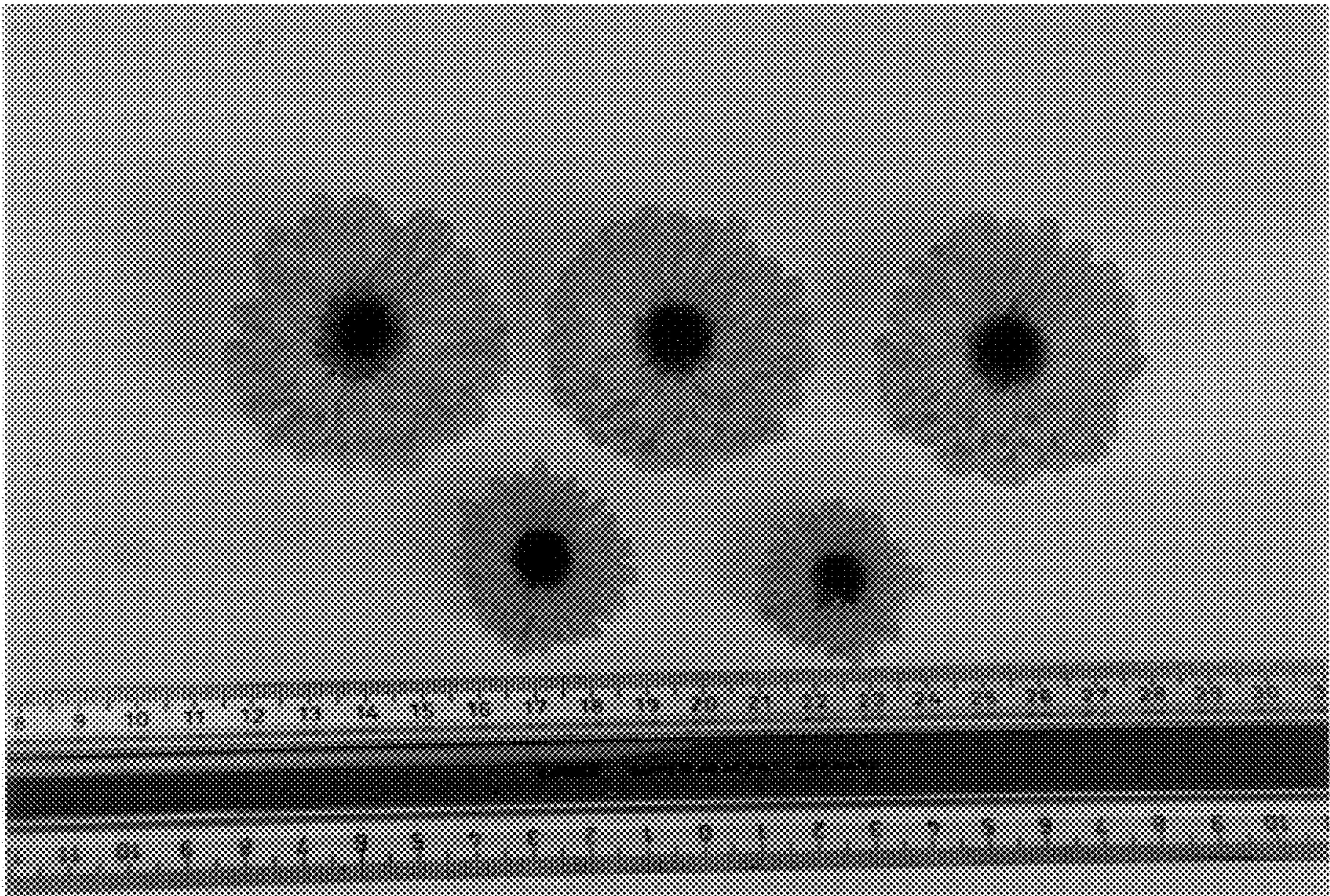


FIG. 2

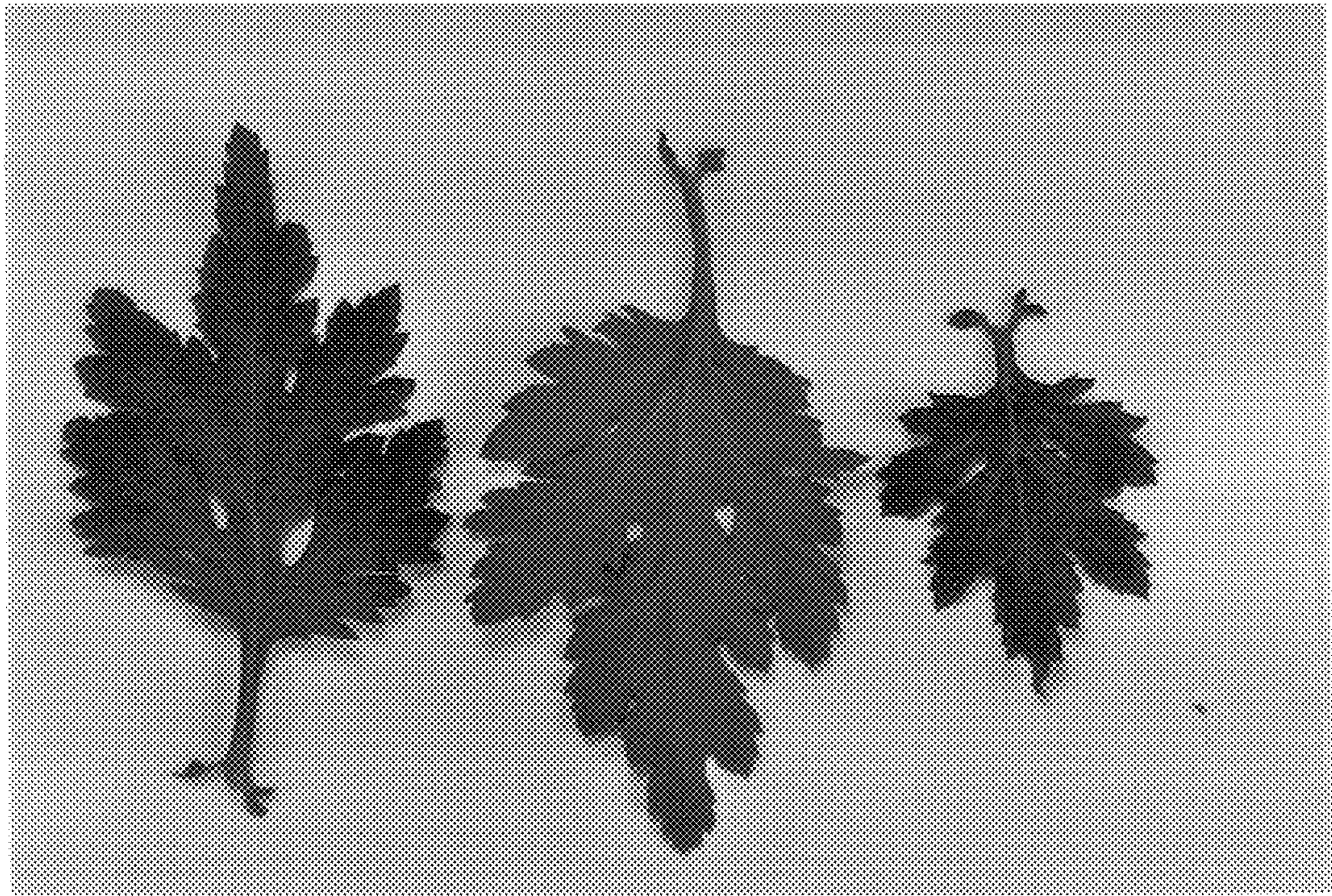


FIG. 3

Comparison Vyking <--> Vybowl

Left is Vyking
Right is Vybowl



FIG. 4A

Comparison Vyking <--> Vybowl

Left is Vyking
Right is Vybowl



FIG 4B