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

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(54) **CHRYSANTHEMUM PLANT NAMED**
‘ZANMUAVAL’

(65) **Prior Publication Data**
US 2012/0023630 P1 Jan. 26, 2012

(50) Latin Name: *Chrysanthemum*×*morifolium* *Ramat.*
Varietal Denomination: **Zanmuaval**

(51) **Int. Cl.**
A01H 5/00 (2006.01)

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(52) **U.S. Cl.** **Plt./287**
(58) **Field of Classification Search** **Plt./287,**
Plt./292

See application file for complete search history.

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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.

(57) **ABSTRACT**

A *chrysanthemum* plant named ‘Zanmuaval’ characterized by
its medium sized blooms with purple ray florets and prolific
branching; natural season flower date October 15-22; bloom-
ing for a period of 5 weeks.

(21) Appl. No.: **12/805,257**

(22) Filed: **Jul. 21, 2010**

3 Drawing Sheets

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Botanical designation: *Chrysanthemum*×*morifolium*
Ramat.

Cultivar denomination: ‘Zanmuaval’.

RELATED CULTIVARS

This new plant cultivar ‘ZANMUAVAL’ is of the botanical
classification *Chrysanthemum*×*morifolium* *Ramat.*

BACKGROUND OF THE INVENTION

The present invention relates to a new and distinct cultivar
of *chrysanthemum* plant, botanically known as *Chrysanthemum*×*morifolium* *Ramat.*, commercially known as a garden
mum, and hereinafter referred to by the cultivar denomination
‘Zanmuaval’. ‘Zanmuaval’ is a product of a breeding and
selection program for outdoor pot mums (garden mums)
which had the objective of creating new cultivars with a
double type inflorescence, a natural season flower date
around October 15-22, blooming for a period of 5 weeks.
‘Zanmuaval’ is a seedling resulting from a crossing program
between the female parent id 3384 (non-patented) and male
parent id 19455 (non-patented). Plants of the new cultivar
‘Zanmuaval’ differ from plants of the female parent in the
following characteristics. (1) Inflorescence size. And (2)
Inflorescence color. (1) The inflorescences of the female par-
ent are smaller in size than those of the new plant. (2) The
inflorescences of the female parent are red, while those of the
new plant are purple.

Plants of the new cultivar ‘Zanmuaval’ differ from plants of
the male parent in the following characteristics. (1) Vigor.
And (2) Susceptibility for white rust. (1) Plants of the male
parent are more vigorous than those of the new plant. (2)
Plants of the male parent are more susceptible for white rust
than those of the new plant.

The new and distinct cultivar was discovered and selected
as a flowering plant by Wilhelmus Bernardus Blom on a
cultivated field in Rijsenhout, The Netherlands in 2006. The
first act of asexual production of ‘Zanmuaval’ was accom-

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plished when vegetative cuttings from the initial selection in
2006 were propagated further in a controlled environment in
Rijsenhout, The Netherlands. The new cultivar has been
found to retain its distinctive characteristics through succes-
sive propagations.

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 cul-
tivar.

FIG. 3 shows the various stages of foliage of the new
cultivar.

DESCRIPTION OF THE INVENTION

The observations and measurements were gathered from
plants grown out door in Rijsenhout, The Netherlands under
natural day length and temperature and planted in week 23 in
2009. The natural blooming date of this crop was October
15-22 (week 42/43). The average height of the plants was 30
cm. No growth retardants were used. Tests were tested on
susceptibility for infection by the fungus white rust *Puccinia*
horiana. No tests were done on cold or drought tolerance.
This new variety produces medium sized blooms with purple
ray florets blooming for a period of 5 weeks.

From the cultivars known to inventor the most similar
existing cultivar in comparison to ‘Zanmuaval’ is ‘Venus’
(U.S. Plant Pat. No. 14,378). When ‘Venus’ and ‘Zanmuaval’
are being compared the following difference is noticed: The
difference of ‘Venus’ and ‘Zanmuaval’ are (1) natural season
blooming date, and (2) difference in tonality of inflorescence
color. (1) Plants of ‘Venus’ flower in an earlier period than
those of ‘Zanmuaval’. (2) Inflorescences of ‘Venus’ are

evenly purple colored, while those of ‘Zanmuval’ are more two tone colored, purple with a dark center.

The following is a description of the plant and characteristics that distinguish ‘Zanmuaval’ 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 2001.

TABLE 1

Botanical Description of <i>Chrysanthemum</i> x <i>morifolium</i> Ramat. ‘Zanmuaval’	
Bud	
Size	Small; cross-section 0.5 cm, height 0.3 cm
Shape	Oblate
Texture	Pubescent
Outside Color	Greyed-green 191B
Phyllaries	
Number	20-22, arranged in 3 rows
Shape	Elliptic
Apex	Acute
Base	Truncate
Margin	Entire
Color	Upper surface: Greyed-green 191B Lower surface: Green 138A
Length and width	1 cm; 0.1 cm
Texture	Pubescent
Inflorescence	
Type	Double
Height	1.5 cm
Diameter	5 cm
Peduncle length	5-6 cm
Peduncle color	Green 138C
Peduncle diameter	0.2 cm
Peduncle texture	Pubescent
Number per branch	Approx. 6 inflorescences
Duration of flowering	5 weeks
Seeds	Produced in small quantities, ovate, Greyed-brown 199A, length 1.5 mm, diameter 0.8 mm
Fragrance	Faint chrysanthemum odor
Color	
Center of inflorescences	Immature stage: Purple N79B Mature stage: Purple N79D Purple N79C
Color of upper surface of the ray-florets	
Color of the lower surface of the ray-florets	Purple 77C
Tonality from Distance	A garden mum with purple flowers with a dark center
Color of the ray-florets after aging of the plant	Purple 77D
Ray florets	
Texture	Upper and lower surface smooth
Number	240-260
Shape	Elliptic
Apex	Varying from acute to dentate
Base	Attenuate
Cross-section	Flat
Longitudinal axis of majority	Straight
Length of corolla tube	0.2-0.4 cm
Ray-floret margin	Entire
Ray-floret length	1-2.5 cm
Ray-floret width	0.2-0.5 cm
Ratio length/width	High
Disc florets	Absent

TABLE 1-continued

Botanical Description of <i>Chrysanthemum</i> x <i>morifolium</i> Ramat. ‘Zanmuaval’	
5	Receptacle
	Color Green 138C
	Shape Domed raised
	Height 0.3 cm
	Diameter 0.4 cm
10	Reproductive Organs
	Androecium Absent
	Pollen Not produced
	Gynoecium Present in ray-florets
	Style Length 3 mm
15	Stigma color Yellow 7A
	Stigma Width 1 mm
	Ovary Enclosed in calyx
	Plant
	Form Grown as a spray type pot mum, outdoor raised and mounded
20	Growth habit Spherical shape
	Growth rate Medium
	Height 30 cm
	Width 50 cm
	Stem Color Greyed-brown 199A
	Stem Strength Weak
25	Stem Brittleness Brittle
	Stem Anthocyanin Coloration Not observed
	Internode length 2-4 cm
	Length of lateral branch From top to bottom 20 cm
	Lateral branch color Green 137C
	Lateral branch, attachment Brittle
30	Lateral branch diameter 2 mm
	Branching (average number of lateral branches) Prolific with 8-9 breaks after pinching
	Natural season blooming date October 15-22 (week 42/43)
	Foliage
35	Leaf color Upper side: Green 139A Lower side: Green N138A
	Color midvein Upper side: Yellow-green 147D Lower side: Yellow-green 148D
	Size Small.; length 3-5 cm, width 2-3.5 cm
	Quantity (number per lateral branch) 15-17
40	Shape Elliptic
	Texture upper side Sparsely pubescent
	Texture under side Pubescent
	Venation arrangement Palmate
	Shape of the margin Serrated
	Shape of Base of Sinus Rounded
45	Between Lateral Lobes
	Margin of Sinus Between Lateral Lobes Diverging
	Shape of Base Truncate
	Apex Mucronulate
	Petiole length 0.3-0.8 cm
50	Petiole diameter 0.2-0.4 cm
	Petiole color Yellow-green 147D

TABLE 2

Differences with the comparison variety			
	‘Zanmuaval’	‘Venus’	
55	Natural season blooming date	Week 42/43	Week 35
	Color center inflorescence	Purple N79B	Red-purple 60A
60	Color upper surface ray florets	Purple N79C	Red-purple 60A

I claim:

1. A new and distinct *chrysanthemum* plant named ‘Zanmuaval’ as described and illustrated.

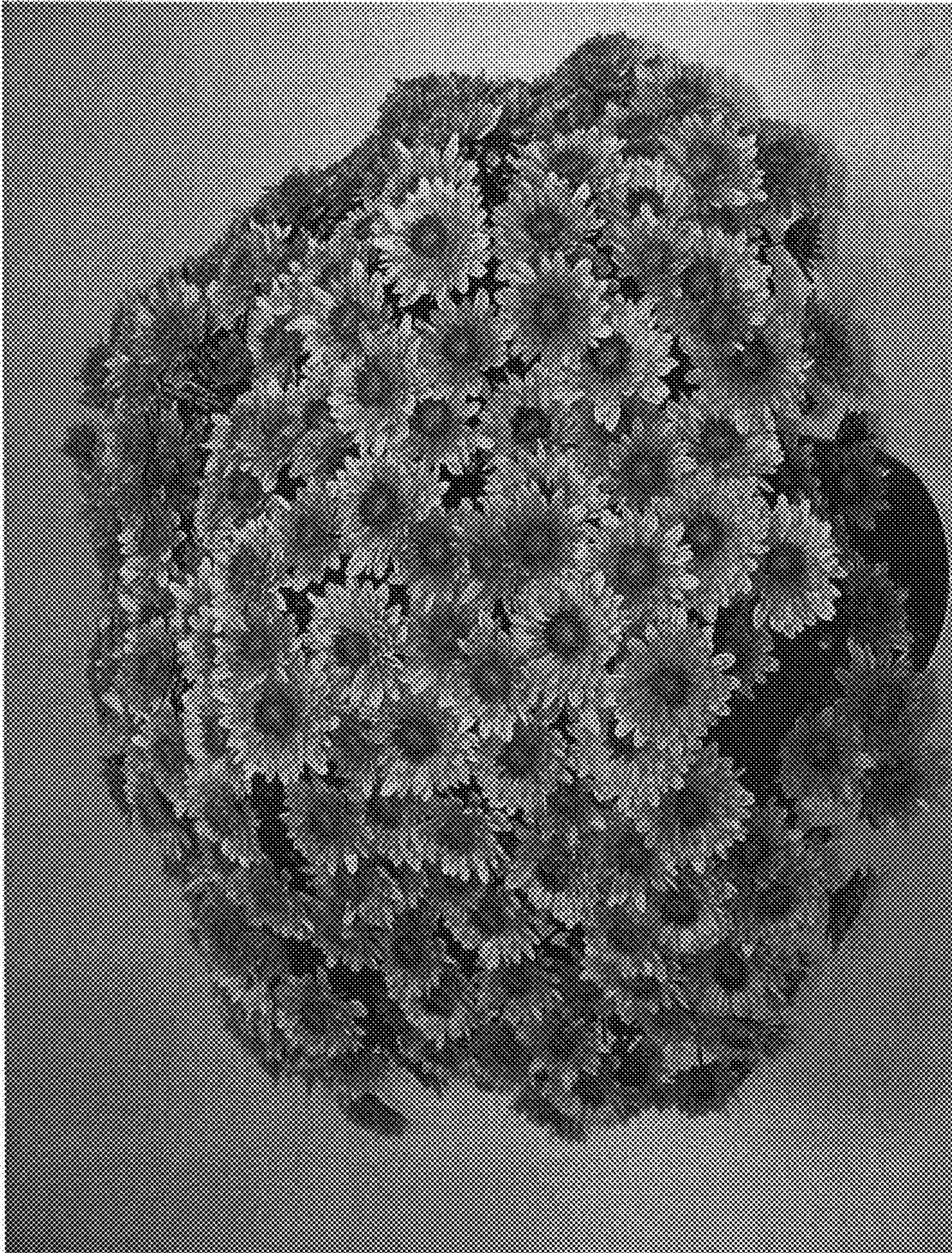


FIG. 1

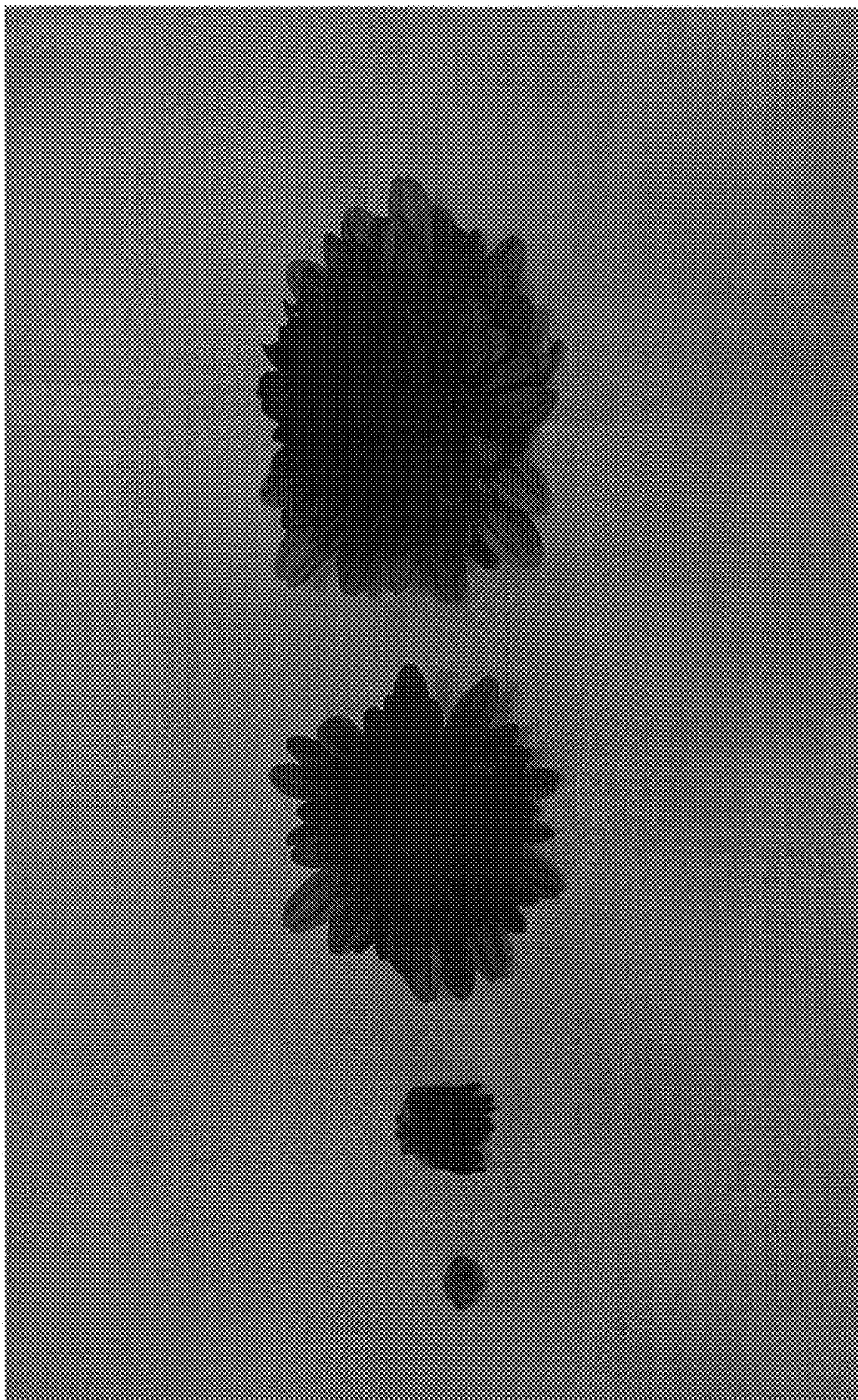


FIG. 2

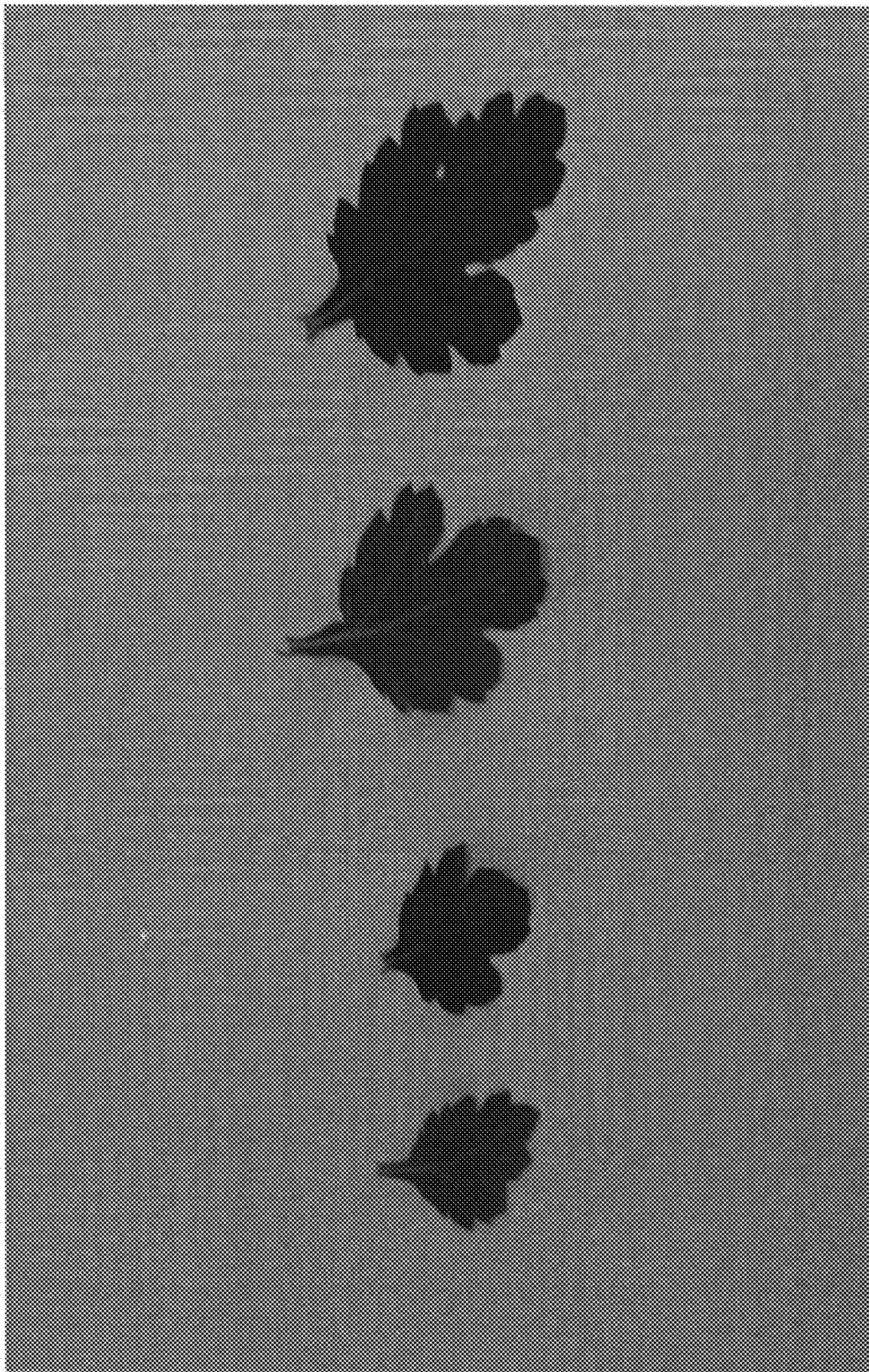


FIG. 3