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(12) **United States Plant Patent**
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- (54) **CHRYSANTHEMUM PLANT NAMED
'ZANMUSKYFA WHITE'**
- (50) Latin Name: *Chrysanthemum×morifolium*
Ramat.
Varietal Denomination: **Zanmuskyfa White**
- (71) Applicant: **Chrysanthemum Breeders Association Research B.V.**, Valkenburg ZH (NL)
- (72) Inventor: **Henricus Cornelius Maria Jacobs**,
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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 91 days.
- (21) Appl. No.: **14/757,489**
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- (65) **Prior Publication Data**
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- (51) **Int. Cl.**
A01H 5/02 (2006.01)
- (52) **U.S. Cl.**
USPC **Plt./288**
- (58) **Field of Classification Search**
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See application file for complete search history.

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ABSTRACT

A *chrysanthemum* plant named 'Zanmuskyfa White' characterized by its small sized blooms with white ray floret and a cream center, and prolific branching; natural season flower date October 19 (week 43); blooming for a period of 5 weeks.

3 Drawing Sheets**1**

Botanical designation: *Chrysanthemum×morifolium*
Ramat.
Cultivar denomination: "Zanmuskyfa White".

RELATED CULTIVARS

The new plant is a flower color mutant of 'Zanmuskyfa Purple'.

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 'Zanmuskyfa White'. 'Zanmuskyfa White' is a product of a breeding and selection program which had the objective of finding flower color mutants from existing parent plants. The new plant comprises a whole plant mutant of the parent *chrysanthemum* named 'Zanmuskyfa Purple' (unpatented). Plants from the new cultivar 'Zanmuskyfa White' differ from plants of the female parent in the color of the ray-florets. The ray-florets of the parent are purple, while those of the new plant are white.

In order to obtain color mutants, unrooted cuttings of the parent plant were irradiated in April 2013 at Ziekenhuis, Rotterdam, the Netherlands, with gamma radiation at a dose of 15 Gy. These treated cuttings were then planted in a controlled environment (greenhouse) in Rijenhout, the Netherlands. In this population of planted cuttings an individual plant was found by Henricus Cornelis Maria Jacobs in May 2013 which had white inflorescences. This flower color mutant was subsequently selected for further tests in the same controlled environment in Rijenhout, the Netherlands. The first act of asexual reproduction of 'Zanmuskyfa White' was accomplished when after planting of the selected plant as a motherplant in July 2013, vegetative cuttings from

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this motherplant were taken and propagated further in Rijenhout, the Netherlands. In summer, about 6-8 days are needed to initiate roots in cuttings of the new cultivar, after another 5 days rooted plants are formed. The new cultivar has been found to retain its distinctive characteristics through successive propagations.

BRIEF DESCRIPTION OF THE DRAWINGS

10 The present invention of a new and distinct variety of *chrysanthemum* (of about 22 weeks) 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.

15 FIG. 2 shows the various stages of blooms of the new cultivar.

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

DESCRIPTION OF THE INVENTION

The observations and measurements were gathered from plants in the period of 21 to 25 weeks of age grown outdoor in Rijenhout, the Netherlands, under natural day length and temperature and planted in week 23 in 2015. The natural blooming date of this crop was October 19 (week 43). The average height of the plants was 25 cm. No growth retardants were used. No tests were done on disease or insects resistance or susceptibility. No tests were done on cold or drought resistance. This new variety produces small sized blooms with white ray florets and a cream center blooming for a period of four weeks.

From the cultivars known to the inventor the most similar existing cultivar in comparison to 'Zanmuskyfa White' is its parent 'Zanmuskyfa Purple' (unpatented). When 'Zanmuskyfa Purple' and 'Zanmuskyfa White' are being com-

pared the following difference is noticed: 'Zanmuskyfa Purple' has purple blooms, while 'Zanmuskyfa White' has white blooms.

The following is a description of the plant and characteristics that distinguish "Zanmuskyfa White" 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 × morifolium</i> Ramat. 'Zanmuskyfa White'	
Bud	
Size:	Small; cross-section 4 mm, height 2 mm
Shape:	Round
Texture:	Pubescent
Outside color:	Greyed-green 191A
Phyllaries	
Number:	18-21., arranged in 3 rows
Shape:	Elliptic
Apex:	Acute
Base:	Truncate
Margin:	Entire
Color:	Upper side: Greyed-green 191A Lower side: Green 143A
Length and width:	3-4 mm; 1.5 mm
Texture:	Pubescent
Inflorescences	
Type:	Double
Height:	0.8 cm
Diameter:	3 cm
Peduncle length:	5-5.5 cm
Peduncle color:	Green 138B
Peduncle diameter:	1.5 mm
Peduncle texture:	Pubescent
Peduncle strength:	Weak
Number per branch:	About 5-6 inflorescences
Duration of flowering:	5 weeks
Seed set:	Has not been determined to date
Fragrance:	Faint chrysanthemum odor
Color inflorescences	
Center of inflorescence:	White 155A
Color of upper side of ray florets:	Outer rows: White N155D; Inner rows: White 155A
Color of lower side of ray florets:	Outer rows: White N155D; Inner rows: White 155A
Tonality from distance:	A garden mum with white blooms and a cream center
Color of ray florets after aging of the plant:	White 155A
Ray florets	
Number of types:	One
Type:	Ligulate
Texture:	Upper and lower side smooth
Number:	140-150
Shape:	Narrowly elliptic to Elliptic
Apex:	Pointed
Base:	Acute
Cross-section:	Flat
Longitudinal axis:	Straight
Length of corolla tube:	2 mm
Diameter corolla tube:	1 mm
Ray floret margin:	Entire
Ray floret length:	0.6-1.2 cm

TABLE 1-continued

Botanical Description of <i>Chrysanthemum × morifolium</i> Ramat. 'Zanmuskyfa White'		
5	Ray-floret width:	2-5 mm
	Disc florets	Absent
	Receptacle	
10	Color:	Yellow-green 145D
	Shape:	Domed raised
	Height	2 mm
	Diameter:	2 mm
	Reproductive Organs	
15	Androecium:	Absent
	Pollen:	Absent
	Gynoecium:	Present on ray florets
	Style color:	Yellow-green 154C
	Style length:	4 mm
20	Stigma color:	Yellow 7A
	Stigma width:	1 mm
	Ovary:	Enclosed in calyx
	Ovary color:	Yellow-green 149D
	Plant	
25	Type:	Bushy
	Growth habit:	Spherical shape
	Growth rate:	Medium
	Height:	20-25 cm
30	Width:	45 cm
	Stem color:	Greyed-brown 199A
	Stem strength:	Weak
	Stem brittleness:	Brittle
	Stem anthocyanin coloration:	absent
	Internode length:	0.8-2.5 cm
35	Length of lateral branch:	From top to bottom 14-15 cm
	Lateral branch color:	Green 138C
	Lateral branch, attachment:	Weak
	Lateral branch diameter:	2 mm
	Lateral branch texture:	Rough with ribs
40	Branching (average number of lateral branches):	Dense- with 10 to 12 breaks after pinching
	Natural season blooming date:	October 19 (week 43) in Rijsenhout, the Netherlands.
	Root habits:	Fine, freely branching
45	Root color:	White 155D; 6-8 days, formation rooted plants: 12-14 days
	Rooting time:	
	Foliage	
50	Leaf glossines:	Upper side: weak; Lower side: absent
	Leaf color:	Upper side: Yellow-green 147A; Lower side: Green 138A
	Color midvein:	Upper side: Yellow-green 147D; Lower side: Yellow-green 148D
	Size:	Small; length 3-4.5 cm, width 1.8-2.5 cm
	Quantity (number per lateral branches):	14-15
55	Shape:	Elliptic
	Texture upper side:	Sparsely pubescent
	Texture under side:	Pubescent
	Venation arrangement:	Pinnate
60	Shape of margin:	Serrated
	Shape of base of sinus between lateral lobes:	Rounded
	Margin of sinus between lateral lobes:	Diverging
65	Shape of base:	Acute to truncate

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TABLE 1-continued

Botanical Description of <i>Chrysanthemum × morifolium</i> Ramat. ‘Zanmuskyfa White’	
Apex:	Mucronulate
Petiole altitude:	Strongly upwards
Petiole length:	0.5-0.8 cm
Petiole diameter:	15 mm
Petiole color:	Yellow-green 147D
Stipule:	very small, about 0.5 mm

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TABLE 2

Differences with the comparison variety, when grown under identical conditions		
	“Zanmuskyfa White”	‘Zanmuskyfa Purple’
Color ray-florets	white	purple
I claim:		
10 1. A new and distinct <i>chrysanthemum</i> plant named ‘Zanmuskyfa White’ as described and illustrated.		

* * * * *

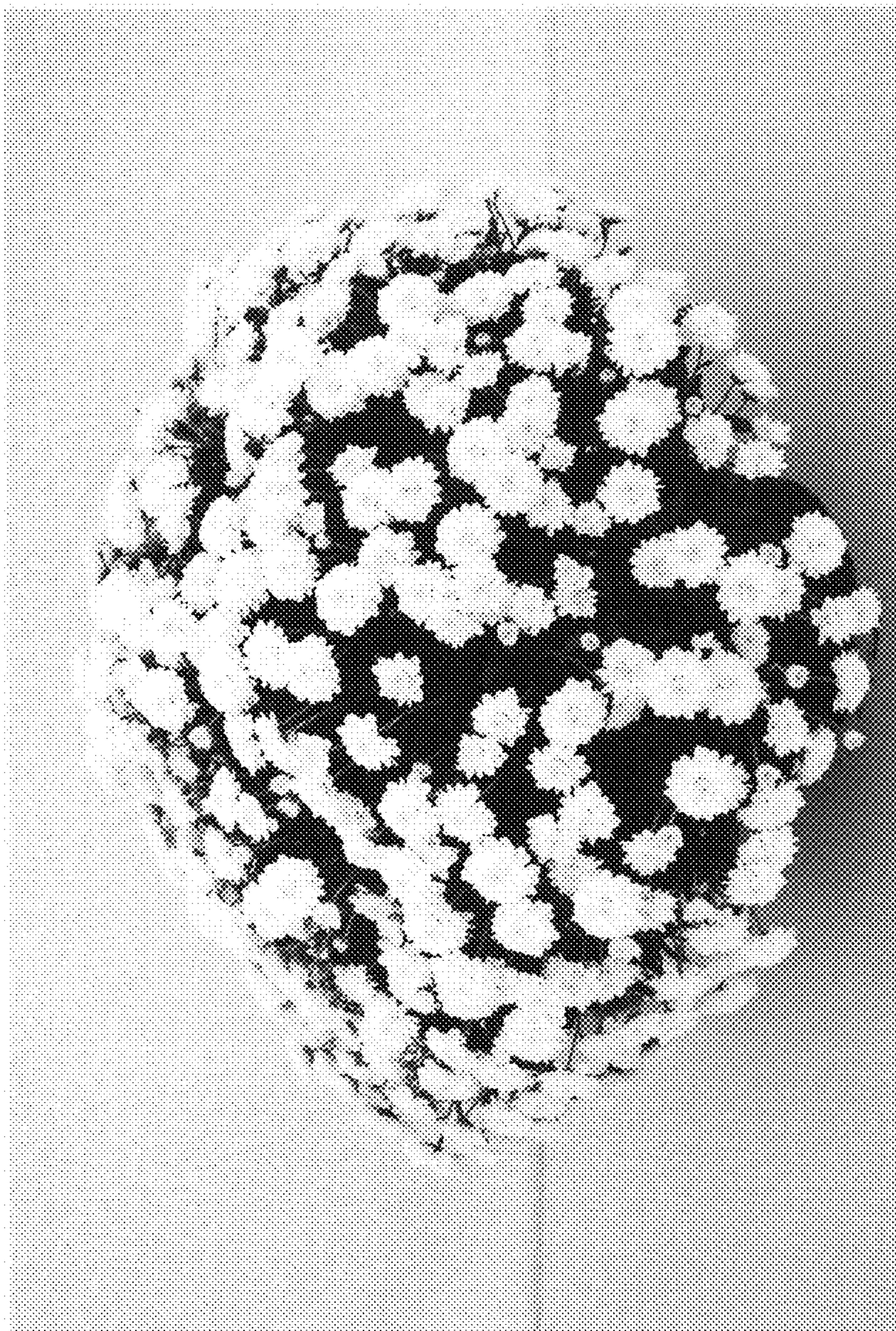


FIG. 1

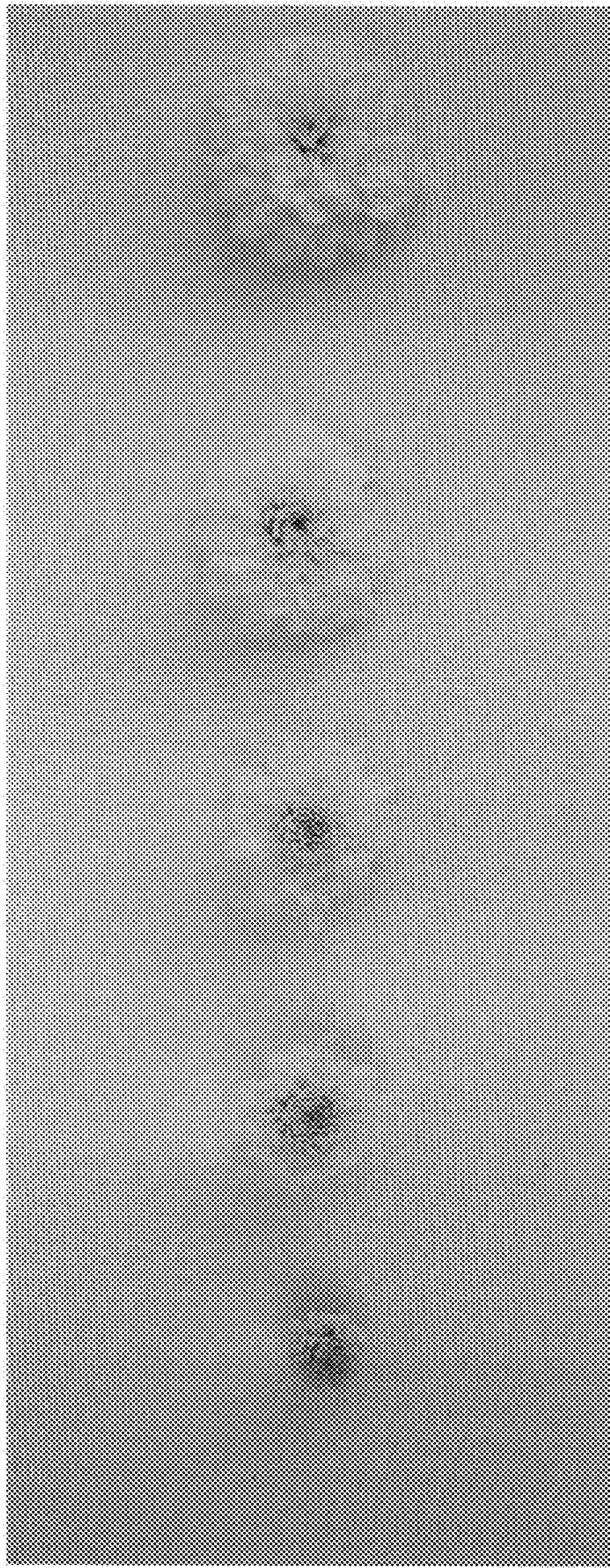


FIG. 2

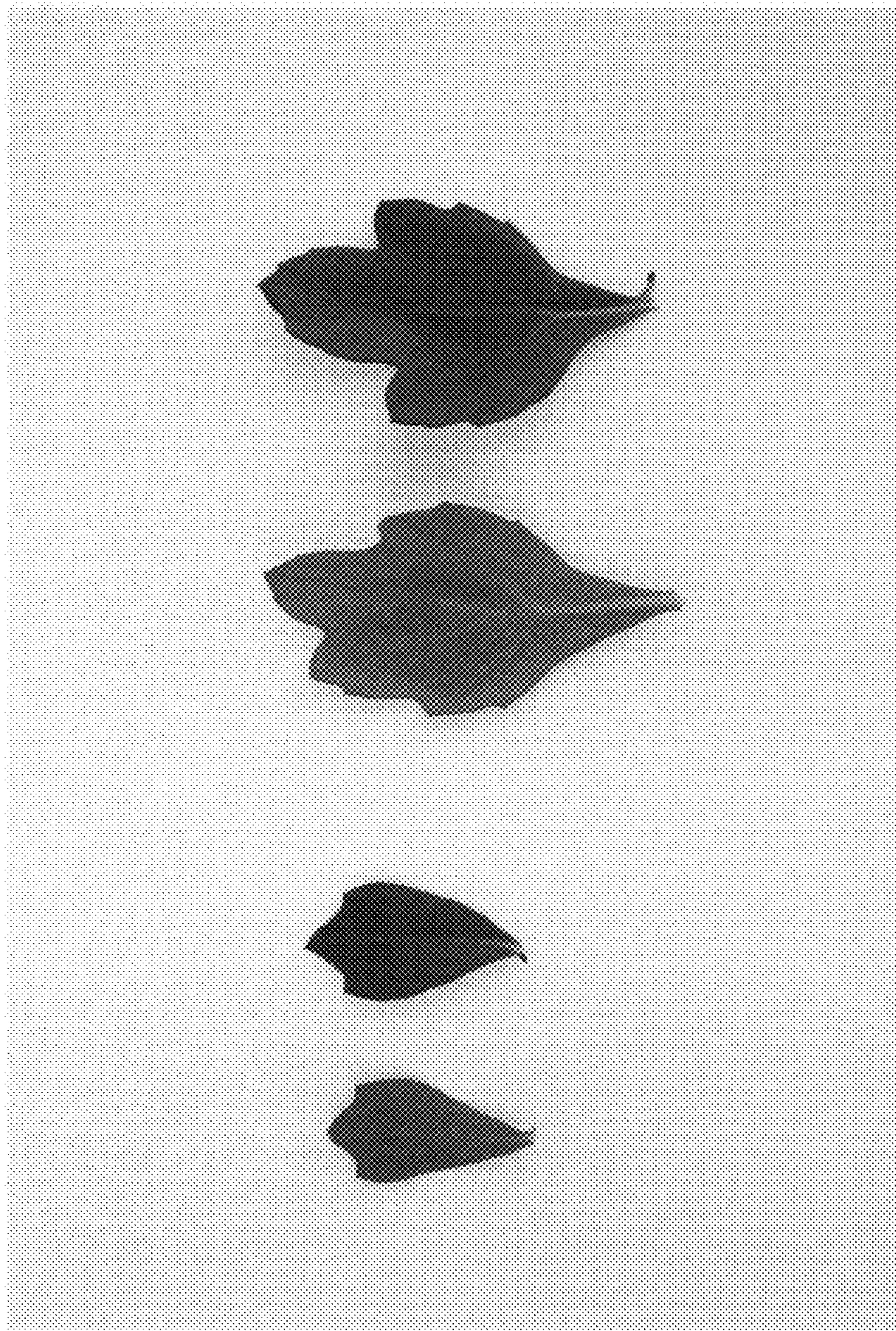


FIG. 3