



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

(10) **Patent No.:** **US PP30,154 P2**
(45) **Date of Patent:** **Jan. 29, 2019**

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

(50) Latin Name: *Chrysanthemum* x *morifolium*
Ramat.
Varietal Denomination: **Zanmulpine**

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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.: **15/732,815**

(22) Filed: **Jan. 4, 2018**

(51) **Int. Cl.**
A01H 5/02 (2018.01)

(52) **U.S. Cl.**
USPC **Plt./294**

(58) **Field of Classification Search**
USPC Plt./294
See application file for complete search history.

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(57) **ABSTRACT**

A *chrysanthemum* plant named ‘Zanmulpine’ characterized
by its medium sized blooms with white ray florets and
prolific branching; natural season flowering date October 9;
blooming for a period of 5 weeks.

3 Drawing Sheets

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

Cultivar denomination: ‘Zanmulpine’.

RELATED CULTIVARS

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

BACKGROUND OF THE INVENTION

The present invention relates to a new and distinct cultivar
of *chrysanthemum* plant, botanically known as *Chrysanthemum*
x *morifolium* Ramat., commercially known as a garden
mum, and hereinafter referred to by the cultivar denomina-
tion ‘Zanmulpine’. ‘Zanmulpine’ 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 flowering date
around October 9, blooming for a period of 5 weeks. ‘Zanmulpine’
is a seedling resulting from a cross of the female parent 36979
(unpatented) with the male parent 37034 (unpatented). Plants
of the new cultivar ‘Zanmulpine’ differ from plants of the female
parent in the ray-floret color, ray-florets of the seedling are
white, while those of female parent show some pink coloration
due to anthocyanin formation at low temperatures. Plants of
the new cultivar ‘Zanmulpine’ differ from plants of the male
parent in the following characteristics. (1) Inflorescence color.
And (2) Inflorescence size. (1) Inflorescences of the seedling
are more white than those of the male parent. (2) Inflorescences
of the seedling are larger than those of the male parents.

The new and distinct cultivar was discovered and selected
as a flowering plant by Sjoukje Heimovaara on a cultivated
field in Rijsenhout, The Netherlands in October 2012. The
first act of asexual production of ‘Zanmulpine’ was accom-
plished when vegetative cuttings from the initial selection
were propagated further in a controlled environment in
Rijsenhout, the Netherlands, in December 2012. 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.

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The new cultivar has been found to retain its distinctive
characteristics through successive propagations.

BRIEF DESCRIPTION OF THE DRAWINGS

The present invention of a new and distinct variety of
chrysanthemum (of about 20 weeks) is shown in the accom-
panying 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 of the new
cultivar.

DESCRIPTION OF THE INVENTION

The observations and measurements were gathered from
plants in the period of 18 to 23 weeks of age grown outdoor
in Rijsenhout, the Netherlands, under natural day length and
temperature and planted in week 23 in 2017, receiving drip
irrigation. The natural blooming date of this crop was
October 9 (week 41). The average height of the plants was
40 cm. No growth retardants were used. No tests were done
on disease or insect resistance or susceptibility. No tests
were done on cold or drought tolerance. This new variety
produces medium sized blooms with white ray florets
blooming for a period of 5 weeks.

From the cultivars known to the inventor the most similar
existing cultivar in comparison to ‘Zanmulpine’ is ‘Zanmu-
dove’ (U.S. Plant Pat. No. 24,618). When ‘Zanmudove’ and
‘Zanmulpine’ are being compared the following differences
are noticed: (1). Natural season blooming date. And (2).
Plant vigor. (1). Plants of ‘Zanmulpine’ flower later in the
season than plant of ‘Zanmudove’. (2). Flowering plants of
‘Zanmulpine’ are larger than those of ‘Zanmudove’.

The following is a description of the plant and character-
istics that distinguish ‘Zanmulpine’ 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, sixth edition (2015).

TABLE 1

Botanical Description of Chrysanthemum × morifolium Ramat. ‘Zanmulpine’	
Bud	
Size:	Small; cross-section 6 mm, height 5 mm
Shape:	Round
Texture:	Pubescent
Outside color:	Greyed-green 191B
Phyllaries	
Number:	21-22, arranged in 3 rows
Shape:	Elliptic
Apex:	Acute
Base:	Truncate
Margin:	Entire
Color:	Upper side: Green 143c
Lower side:	Greyed-green 191C
Length and width:	3 mm; 1.5 mm
Texture:	Pubescent
Inflorescences	
Type:	Double
Height:	1-3 cm
Diameter:	4 cm
Peduncle length:	7.5 cm
Peduncle color:	Greyed-green 190A
Peduncle diameter:	1.5 mm
Peduncle texture:	Pubescent
Number per branch:	About 5-6 inflorescences
Duration of flowering:	5 weeks
Seeds:	Produced in small quantities, ovate, Greyed-browns 199A, length 1.5 mm, diameter 0.5 mm; texture: rough with ribs
Fragrance:	Faint chrysanthemum odor
Color inflorescences	
Center of inflorescence:	Immature stage: White 155A; Mature stage: White 155A
Color of upper side of ray florets:	White NN155D
Color of lower side of ray florets:	White NN155D
Tonality from distance:	A garden mum with white blooms and a cream center
Color of ray florets after : aging of the plant	White NN155D
Ray florets	
Number of types:	One
Type:	Ligulate
Rows:	About 15
Texture:	Upper and lower side smooth
Number:	180-200
Shape:	Elliptic
Apex:	Pointed
Base:	Acute
Cross-section:	Flat
Longitudinal axis:	Straight
Length of corolla tube:	1-3 mm
Diameter corolla tube:	1 mm
Ray floret margin:	Entire
Ray floret length:	1-2.3 cm
Ray-floret width:	2-5 mm
Ratio length/width:	Medium
Disc florets	Absent
Receptacle	
Color:	Yellow-green 145D
Shape:	Domed raised
Height:	4 mm
Diameter:	3 mm

TABLE 1-continued

Botanical Description of Chrysanthemum × morifolium Ramat. ‘Zanmulpine’	
5	Reproductive Organs
	Androecium: Absent
	Pollen: Lacking
	Gynoecium: Present in ray florets
	Style color: Yellow-green 154C
10	Style length: 4 mm
	Stigma color: Yellow 7A
	Stigma width: 1 mm
	Ovary: Enclosed in calyx
	Ovary color: Yellow-green 149D
	Plant
15	Type: Bushy
	Growth habit: Spherical shape
	Growth rate: Vigorous
	Height: 35-45 cm
	Width: 60-70 cm
	Stem color: Greyed-brown 199A
20	Stem strength: Not strong
	Stem brittleness: Brittle
	Stem anthocyanin coloration: Absent
	Internode length: 1-1.5 cm
	Length of lateral branch: From top to bottom 23 cm
	Lateral branch color: Yellow-Green 147 C
25	Lateral branch, attachment: Weak
	Lateral branch diameter: 2.5 mm
	Lateral branch, texture: Pubescent with ribs
	Branching (average number of lateral branches): Medium with 8-9 breaks after pinching
	Natural season blooming date: October 9 (week 41) in Rijsenhout, the Netherlands
30	Roots - habits: Fine, freely branching
	Roots - color: White 155A
	Foliage
	Glossiness: Leaf upper side: very weak
	Leaf lower side: absent
35	Leaf color: Upper side: Green NN137A
	Lower side: Green 138A
	Color midvein: Upper side: Yellow-green 147D
	Lower side: Yellow-green 148D
	Size: Small; length 3-4.5 cm, width 2.3-2.6 cm
40	Quantity (number per lateral branches): 23-25
	Shape: Elliptic
	Texture upper side: Sparsely pubescent
	Texture under side: Pubescent
	Venation arrangement: Pinnate
45	Shape of margin: Serrated
	Shape of base of sinus between lateral lobes: Rounded
	Margin of sinus between lateral lobes: Diverging
	Shape of base: Attenuate to truncate
50	Apex: Mucronulate
	Petiole strength: Weak
	Petiole attitude: Moderately upwards
	Petiole length: 0.8 cm
	Petiole diameter: 1-2 mm
	Petiole color: Yellow-green 147D
55	Stipules: Very small

TABLE 2

Differences with the comparison variety, when grown under identical conditions		
60	‘Zanmulpine’	‘Zanmudove’
	Natural season blooming date	Week 41
	Plant size	40 cm
		Week 39
		30 cm

I claim:

1. A new and distinct *chrysanthemum* plant named 'Zan-mulpine' as described and illustrated.

* * * * *

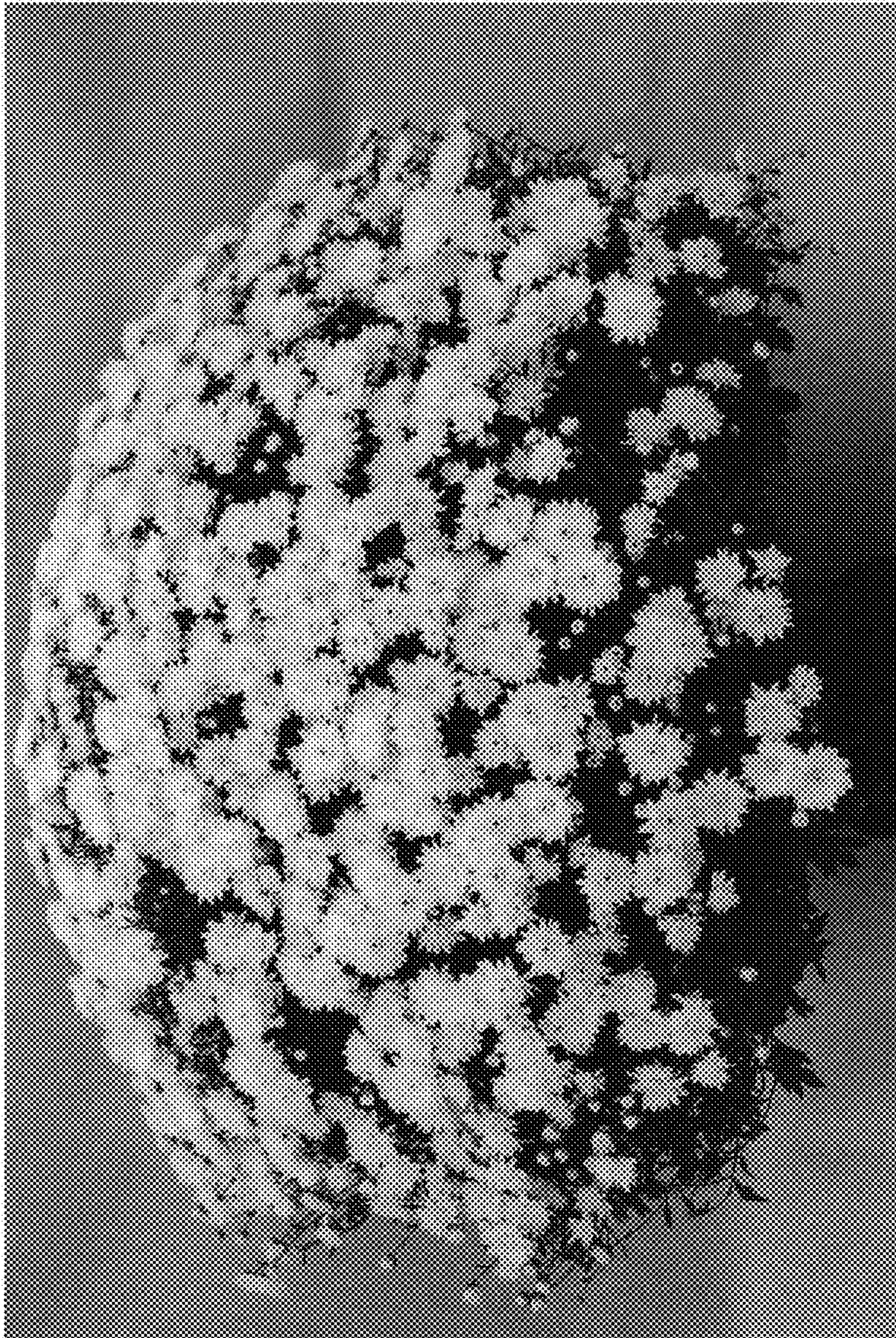


FIG. 1

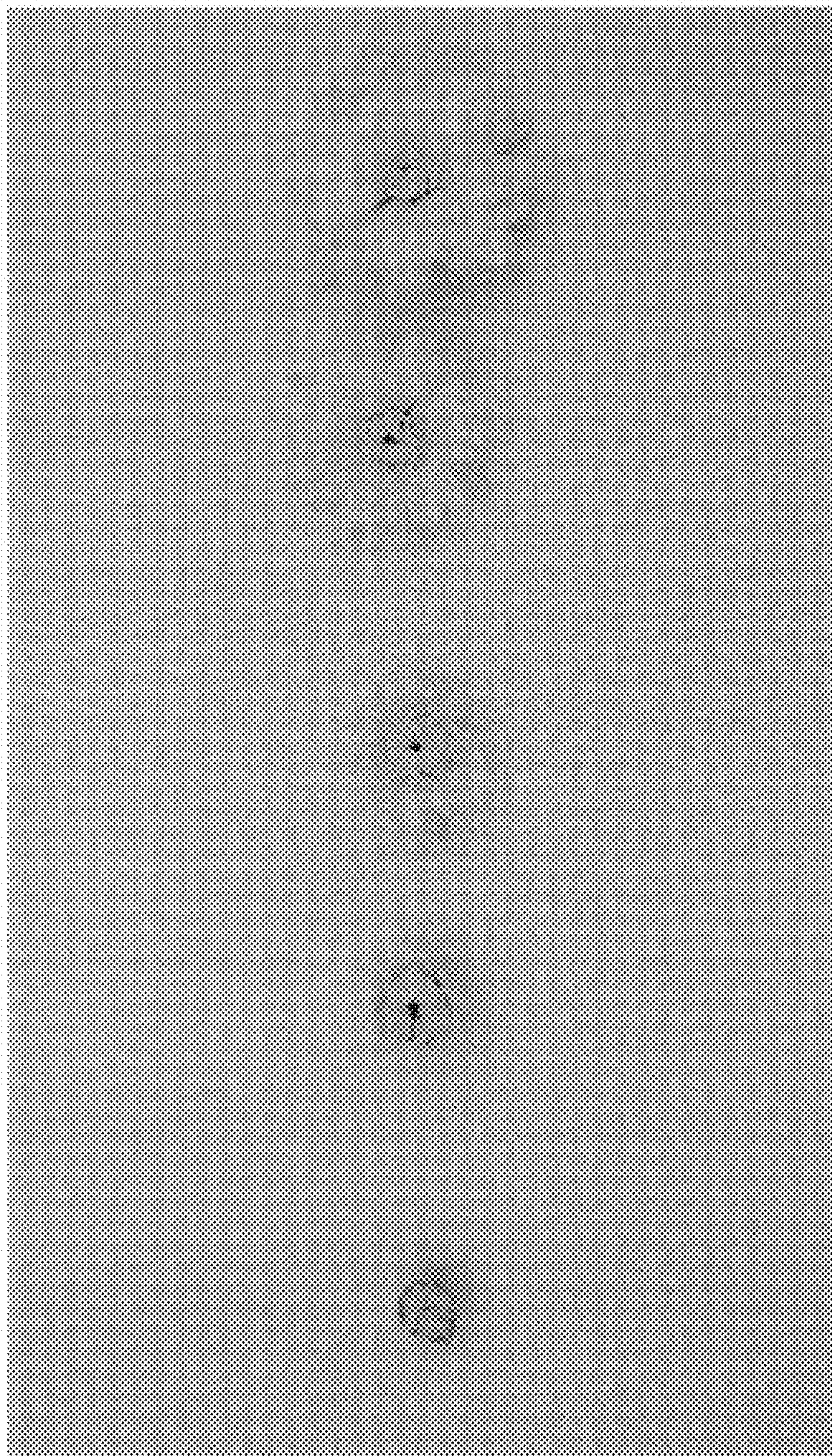


FIG. 2

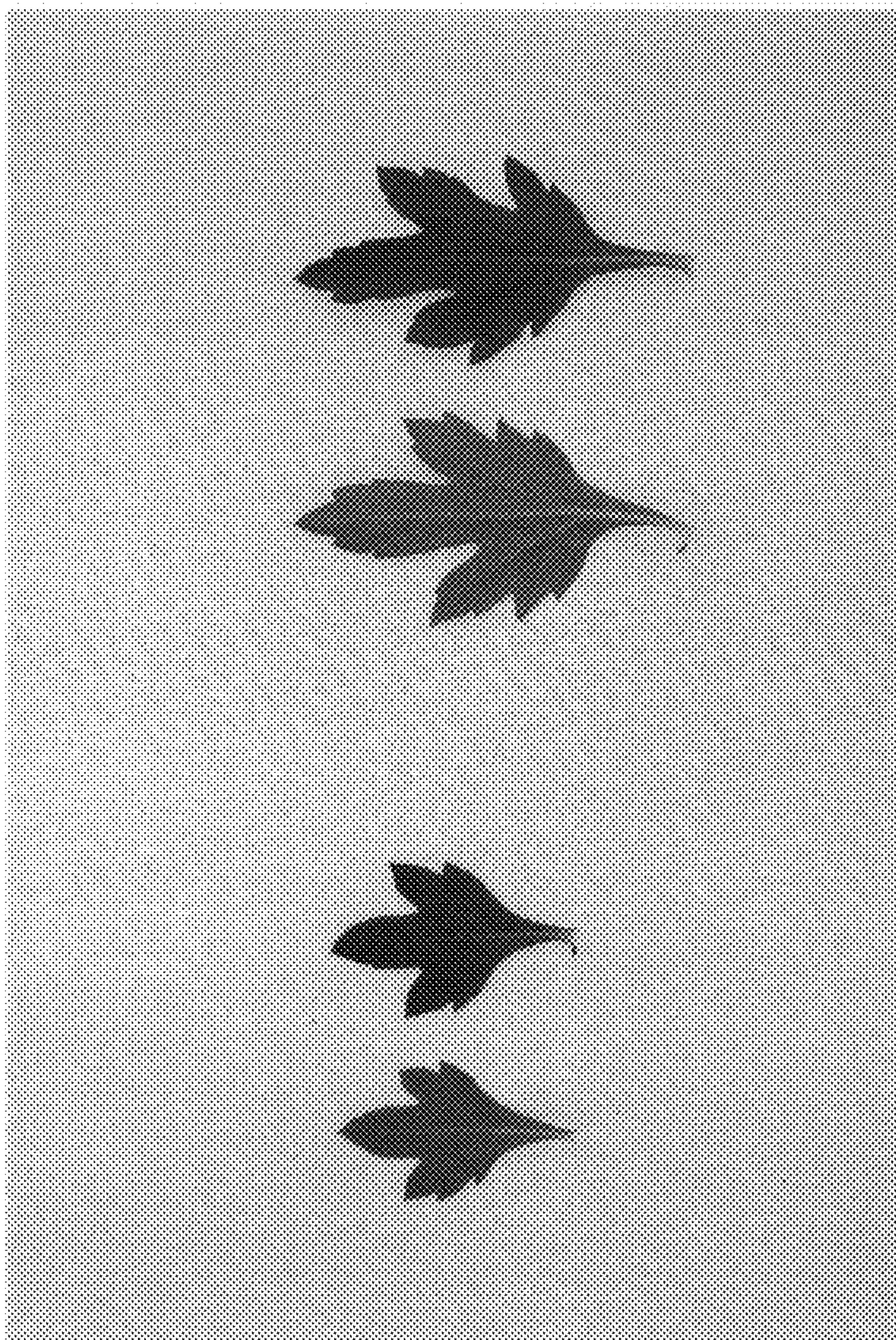


FIG. 3