



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

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

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

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patent is extended or adjusted under 35
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(58) **Field of Classification Search**
USPC Plt./295
See application file for complete search history.

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(57) **ABSTRACT**

A new and distinct *chrysanthemum* plant named ‘Zanmubonita Yellow’ is disclosed, it is characterized by its medium sized, double type blooms with yellow color ray florets and response time of 7 weeks. The new plant is normally used for commercial cut flower production.

3 Drawing Sheets

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Botanical designation: *Chrysanthemum* x *morifolium*
Ramat.
Cultivar denomination: ‘Zanmubonita Yellow’.

RELATED CULTIVARS

‘Zanmubonita Yellow’ is a mutant plant of ‘Zanmubonita’
(unpatented).

BACKGROUND OF THE INVENTION

The present invention comprises a new and distinct cultivar of *chrysanthemum*, botanically known as *Chrysanthemum* x *morifolium*, and referred to by the denomination ‘Zanmubonita Yellow’; the description is based on plants of about 10 weeks old.

‘Zanmubonita Yellow’ is a product of a breeding and selection program to produce new *chrysanthemum* cultivars for cut flower commercial applications. The new plant cultivar is a naturally whole plant mutant of a parent *chrysanthemum* named ‘Zanmubonita’ (unpatented).

A comparison with the parent is made in the section ‘DESCRIPTION OF THE INVENTION’ below. The new cultivar was discovered as a whole plant mutation in June 2014 by Henricus Cornelius Maria Jacobs in a controlled environment (greenhouse) in Valkenburg Z-H, The Netherlands. The first act of asexual reproduction of ‘Zanmubonita Yellow’ was accomplished when vegetative cuttings were taken from the initial selection and propagated further in Valkenburg Z-H, The Netherlands.

SUMMARY OF THE INVENTION

The present invention is a new and distinct variety of a cut type *chrysanthemum* bearing medium sized double type blooms with yellow ray-florets and a response time of seven weeks.

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BRIEF DESCRIPTION OF THE DRAWINGS

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

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

FIG. 3 shows the foliage of the new cultivar.

DESCRIPTION OF THE INVENTION

The observations and measurements were gathered from plants grown in August to September 2016 in a greenhouse in Valkenburg Z-H, the Netherlands 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. and at night 20° C. After a long day period of 14 days the photo-periodic response time in this crop was 49 days. After the long day period to flowering growth retardants (Alar) 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 resistance. 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.

From the cultivars known to inventor the most similar existing cultivar in comparison to ‘Zanmubonita Yellow’ is ‘Zanmubonita’. When ‘Zanmubonita’ and ‘Zanmubonita Yellow’ are being compared the following differences and similarities are noticed: The difference of ‘Zanmubonita’

and ‘Zanmubonita Yellow’ is ray floret color. For that characteristic ‘Zanmubonita Yellow’ has been selected out of ‘Zanmubonita’; ray florets of ‘Zanmubonita Yellow’ are yellow, while those of ‘Zanmubonita’ are white. All other characteristics of ‘Zanmubonita’ and ‘Zanmubonita Yellow’ are similar. A second similar variety is ‘Sunny Eurobelle’ (unpatented), which differs in inflorescence size with ‘Zanmubonita Yellow’. Inflorescences of ‘Sunny Eurobelle’ are smaller in size than those of ‘Zanmumbonita Yellow’.

The following is a description of the plant and characteristics that distinguish ‘Zanmubonita 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 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> × <i>morifolium</i> Ramat. ‘Zanmubonita Yellow’	
Bud	
Size:	Medium; cross-section 8 mm, height 7 mm
Shape:	Round
Texture:	Pubescent
Outside color:	Greyed-green 191A
Phyllaries	
Number:	24, arranged in 3 rows
Shape:	Elliptic
Apex:	Acute
Base:	Truncate
Margin:	Entire
Color:	Upper side: Green 136A
Under side:	Green 137A
Length and width:	10 mm; 3.5 mm
Texture:	Pubescent (upper side)
Inflorescences	
Spray Form:	Cylindrical
Inflorescence Type:	Double
Inflorescence Height:	2 cm
Inflorescence Diameter:	7-8 cm
Peduncle length:	10-17 cm
Peduncle color:	Green 138A
Peduncle diameter:	2 mm
Peduncle texture:	Pubescent
Number per branch:	Approx. 16-17 inflorescences
Seeds:	Not observed.
Fragrance:	Faint chrysanthemum odor
Color inflorescences	
Center of inflorescence:	Immature stage: Yellow-green 143C; Mature stage: Yellow-green 144C
Color of upper side of ray florets:	Yellow 5C
Color of lower side of ray florets:	Yellow 5C
Tonality from distance:	A cut mum with yellow blooms and a green center
Color of ray florets after aging of the plant:	Yellow 5C
Ray florets	
Number of types:	One
Type:	Ligulate
Texture:	Upper and under side smooth
Number:	100-110
Shape:	Elliptic
Apex:	Rounded
Base:	Acute

TABLE 1-continued

Botanical Description of <i>Chrysanthemum</i> × <i>morifolium</i> Ramat. ‘Zanmubonita Yellow’		
5	Cross-section:	Weakly concave
	Longitudinal axis:	Straight
	Diameter of corolla tube:	1 mm
	Length of corolla tube:	2 mm
	Ray floret margin:	Entire
	Ray floret length:	1.8-4 cm
10	Ray floret width (outer row):	4-12 mm
	Ratio length/width:	Medium
	Disc diameter:	1 mm
15	Distribution of disc florets:	Very few, only visible in mature stage of inflorescence
	Shape:	Tubular
	Color:	Yellow-green 145C at base to Green Yellow 143C at apex
	Length:	4 mm
20	Diameter:	0.5 mm
	Color:	Yellow-green 145D
	Shape:	Domed raised
	Height:	5 mm
	Diameter:	6 mm
25	Reproductive Organs	
	Androecium:	Present on only disc florets
	Stamen length:	3 mm
	Stamen color:	Yellow-green 144A
	Anther color:	Yellow 2A
30	Pollen:	Not observed
	Gynoecium:	Present on both ray and disc florets
	Style color:	Yellow-green 154C
	Style length:	4 mm
	Stigma color:	Yellow 7A
	Stigma width:	1 mm
35	Ovary:	Enclosed in calyx
	Ovary color:	Yellow-green 149D
	Plant type:	Non-bushy
	Growth habit:	Upright
40	Growth rate:	Medium
	Height:	105-115 cm
	Width:	25 cm
	Stem strength:	Strong
	Stem color:	Green 138B
	Stem texture:	Smooth, slightly pubescent
	Stem diameter:	6-7 mm
45	Stem anthocyanin coloration:	absent
	Internode length:	1.8-2 cm
	Response time:	49 days
	Roots:	Short, fibrous
	Root color:	White 155A
50	Foliage	
	Glossiness:	Weakly (upper side)
	Leaf color:	Upper side: Green 136A; Under side: Green 137C
	Color midvein:	Upper side: Yellow-green 147D; Under side: Yellow-green 148D
55	Size:	Medium; length 10-12 cm, width 4.5-6.5 cm
	Quantity per stem:	26-30
	Shape:	Elliptic
	Texture upper side:	Sparsely pubescent
60	Texture under side:	Pubescent
	Venation arrangement:	Pinnate
	Shape of margin:	Serrated
	Shape of base of sinus between lateral lobes:	Rounded
65	Margin of sinus between lateral lobes:	Diverging

TABLE 1-continued

Botanical Description of <i>Chrysanthemum</i> × <i>morifolium</i> Ramat. ‘Zanmubonita Yellow’	
Shape of base:	Attenuate to Truncate
Apex:	Pointed
Petiole length:	2 cm
Petiole diameter:	2.5-3 mm
Petiole attitude:	Moderately upwards
Petiole color:	Yellow-green 147D
Petiole strength:	Medium
Stipules:	1 to 1.5 cm

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TABLE 2

Differences of the new plant with the comparison varieties.			
	‘Zanmubonita Yellow’	‘Zanmubonita’	‘Sunny Eurobelle’
Color ray florets	Yellow 5C	White 155D	Yellow 5B
Inflorescence size	7-8 cm	7 cm	6-6.5 cm

I claim:
1. A new and distinct *chrysanthemum* plant named ‘Zan-
mubonita Yellow’ as described and illustrated.

* * * * *



FIG. 1

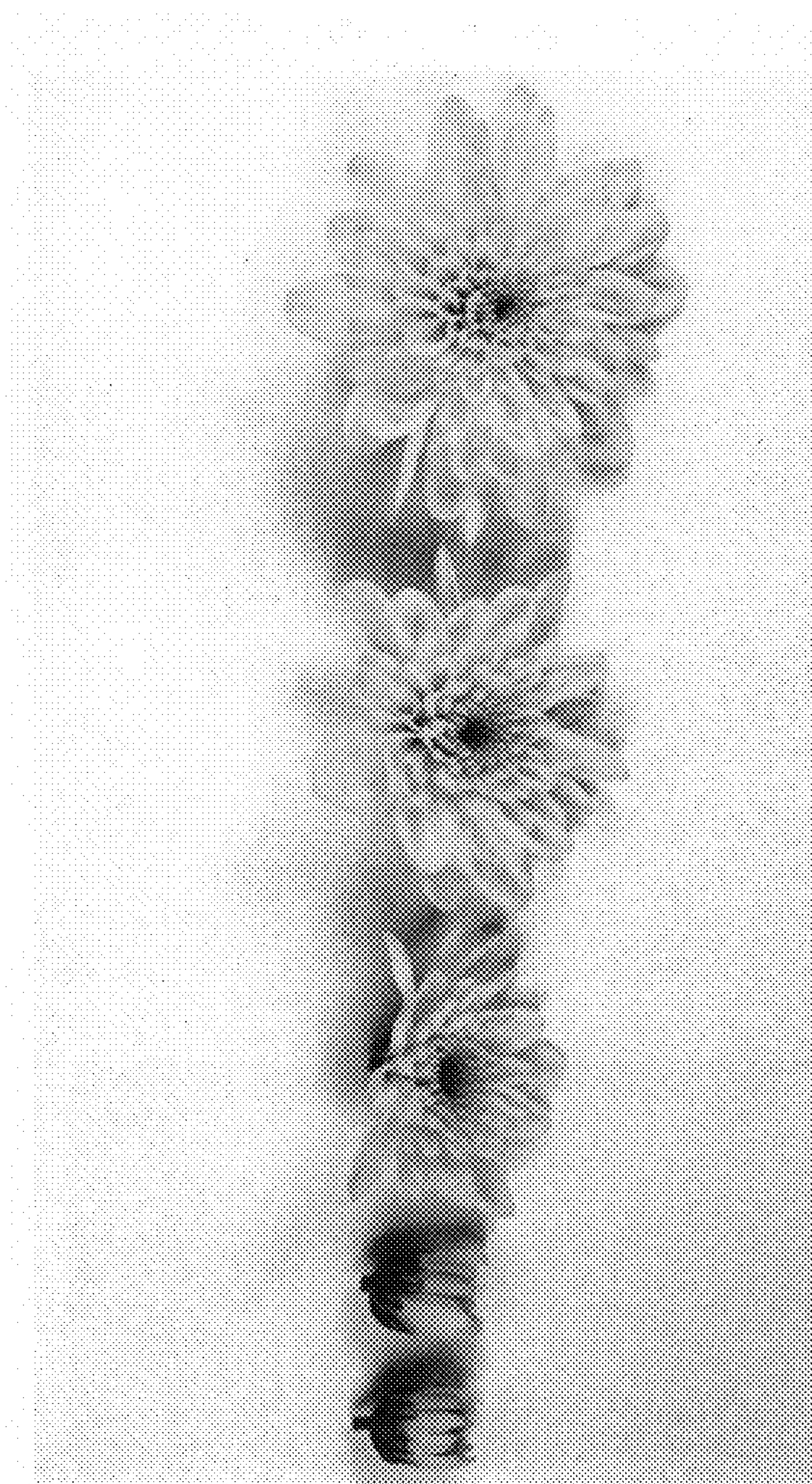


FIG. 2

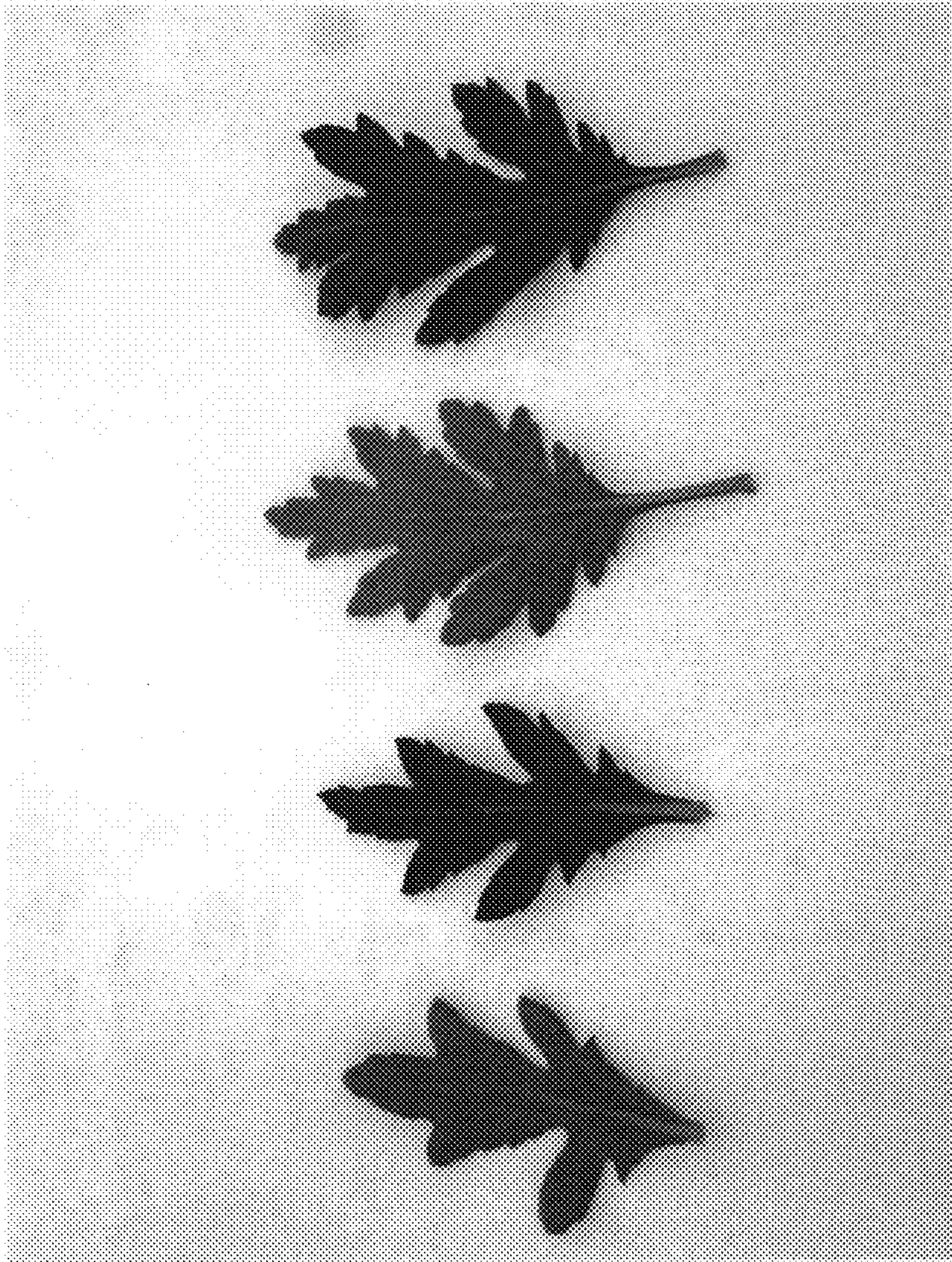


FIG. 3