

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

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

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

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patent is extended or adjusted under 35  
U.S.C. 154(b) by 0 days.

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**A01H 5/00** (2006.01)

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See application file for complete search history.

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(57) **ABSTRACT**

A *chrysanthemum* plant named 'Zanmulisa' characterized by  
its large sized daisy-type blooms with bright purple ray florets  
and prolific branching; and a response time of 7 weeks.

**3 Drawing Sheets**

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

Cultivar denomination: 'Zanmulisa'.

#### BACKGROUND OF THE INVENTION

The present invention relates to a new and distinct cultivar  
of *chrysanthemum* plant, botanically known as *Chrysanthemum*×*morifolium* Ramat., and hereinafter referred to by the  
cultivar denomination 'Zanmulisa'. 'Zanmulisa' is a product  
of a breeding and selection program for pot mums which had  
the objective of creating new cultivars with a daisy type  
inflorescence with medium plant height and a response week  
of 7 weeks. 'Zanmulisa' is a seedling resulting from a cross of  
the female parent id 44275 and the male parent id 20560.  
Plants of the new cultivar 'Zanmulisa' differ from plants of  
the female parent in inflorescence color; the female parents  
has red inflorescences, while the seedling has pink ones.  
Plants of the new cultivar 'Zanmulisa' differ from plants of  
the male parent in the following characteristics. (1) Inflores-  
cence size. And (2) Response time. (1) The inflorescences of  
the male parent are smaller than those of the seedling. (2) The  
response time of the male parent is higher than that of the  
seedling.

The new and distinct cultivar was discovered and selected  
as a flowering plant within the progeny of the stated cross by  
Wilhelmus Bernardus Blom in a controlled environment  
(greenhouse) in Rijsenhout, The Netherlands in May 2006.  
The first act of asexual production of 'Zanmulisa' was accom-  
plished when vegetative cuttings were taken from the initial  
selection in July 2006 and propagated further in a controlled  
environment in Rijsenhout, The Netherlands. The new culti-  
var has been found to retain its distinctive characteristics  
through successive propagations, although the phenotype  
may somewhat vary with variations in environment such as  
light intensity and temperature.

#### 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.

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

#### DESCRIPTION OF THE INVENTION

The observations and measurements were gathered in May  
2010 from plants grown in a greenhouse in Rijsenhout, The  
Netherlands, in a photo-periodic controlled crop under con-  
ditions generally used in commercial practice. Three cuttings  
were planted in a pot with a diameter of 12 cm. The green-  
house temperatures for this crop were at day-time  
18.degree.C. to 25.degree. C., and at night about 20.degree.  
C. The photo-periodic response time in this crop was 7 weeks  
after an average of eight long days. After this long day period  
growth retardants (Alar) were applied six times in an average  
dose of 1.5 gram/liter water until flowering. The plants were  
observed (directly) during the flowering of this crop. No tests  
were done on disease or insect resistance or susceptibility. No  
tests were done on cold or drought tolerance. To show the  
phenotype as described 'Zanmulisa' can be planted without  
assimilation lightning (high pressure sodium lamps) between  
week 50 and week 40 of the next year under greenhouse  
conditions in the Netherlands. With assimilation lightning  
(minimum level 2500 lux) it can be planted all year round  
under greenhouse conditions in the Netherlands.

This new variety produces large sized daisy-type blooms  
with purple ray florets and a response time of 7 weeks.

From the cultivars known to inventor the most similar  
existing cultivar in comparison to 'Zanmulisa' is 'Dark Pink  
Elgon' (U.S. Plant Pat. No. 12,492). When 'Dark Pink Elgon'  
and 'Zanmulisa' are being compared the following difference  
is noticed: The difference of 'Dark Pink Elgon' and 'Zan-  
mulisa' are (1) Inflorescence size. And (2) Color ray-florets.  
(1) The inflorescences of 'Dark Pink Elgon' are smaller than  
those of 'Zanmulisa'. (2) The ray-florets of 'Dark Pink Elgon'  
are pink, while those of 'Zanmulisa' are more purple.

The following is a description of the plant and character-  
istics that distinguish 'Zanmulisa' as a new and distinct vari-  
ety.

The color designations are taken from the plant itself.  
Accordingly, any discrepancies between the color designa-  
tions 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 xmorifolium</i> Ramat. ‘Zanmulisa’ |                                                                                        |
|------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| Bud                                                                          |                                                                                        |
| Size                                                                         | Medium; cross-section 6 mm, height 5 mm                                                |
| Shape                                                                        | Oblate                                                                                 |
| Texture                                                                      | Pubescent                                                                              |
| Outside Color                                                                | Greyed-green 191A                                                                      |
| Phyllaries                                                                   |                                                                                        |
| Number                                                                       | 22, arranged in 3 rows                                                                 |
| Shape                                                                        | Elliptic                                                                               |
| Apex                                                                         | Acute                                                                                  |
| Base                                                                         | Truncate                                                                               |
| Margin                                                                       | Entire                                                                                 |
| Color                                                                        | Upper surface: Green N138B                                                             |
| Length and width                                                             | 1.2 cm; 2 mm                                                                           |
| Texture                                                                      | Pubescent                                                                              |
| Inflorescence                                                                |                                                                                        |
| Type                                                                         | Daisy                                                                                  |
| Height                                                                       | 1.8 cm                                                                                 |
| Diameter                                                                     | 7 cm                                                                                   |
| Peduncle length                                                              | 3.5 cm                                                                                 |
| Peduncle color                                                               | Green 137D                                                                             |
| Peduncle diameter                                                            | 2 mm                                                                                   |
| Peduncle texture                                                             | Pubescent                                                                              |
| Number per branch                                                            | Approx. 5 inflorescences                                                               |
| Shelf life                                                                   | 4 weeks                                                                                |
| Seeds                                                                        | Produced in small quantities, ovate, Greyed-brown 199A, length 1.5 mm, diameter 0.6 mm |
| Fragrance                                                                    | Faint <i>chrysanthemum</i> odor                                                        |
| Color                                                                        |                                                                                        |
| Center of inflorescence (disc florets)                                       | Immature stage: Yellow Green N144B                                                     |
| Color of upper surface of the ray-florets                                    | Mature stage: Yellow 7A                                                                |
| Color of the lower surface of the ray-florets                                | Red-purple 71A                                                                         |
| Tonality from Distance                                                       | Red-purple 72C                                                                         |
| Color of the ray-florets after aging of the plant                            | A pot <i>mum</i> with bright purple flowers and a green center                         |
| Ray florets                                                                  | Red-purple 71C                                                                         |
| Texture                                                                      | Upper and lower side smooth                                                            |
| Number                                                                       | 20-22                                                                                  |
| Shape                                                                        | Elliptic                                                                               |
| Apex                                                                         | Dentate                                                                                |
| Base                                                                         | Attenuate                                                                              |
| Cross-section                                                                | Flat                                                                                   |
| Longitudinal axis of majority                                                | Straight                                                                               |
| Length of corolla tube                                                       | 0.4 cm                                                                                 |
| Ray-floret margin                                                            | Entire                                                                                 |
| Ray-floret length                                                            | 3-3.2 cm                                                                               |
| Ray-floret width                                                             | 1-1.1 cm                                                                               |
| Ratio length/width                                                           | Medium                                                                                 |
| Disc florets                                                                 |                                                                                        |
| Disc diameter                                                                | 1.4 cm                                                                                 |
| Distribution of disc florets                                                 | Abundant                                                                               |
| Shape                                                                        | Tubular                                                                                |
| Color                                                                        | Yellow 11D at apex, Yellow-green 150D at base                                          |
| Length                                                                       | 4 mm                                                                                   |
| Diameter                                                                     | 1 mm                                                                                   |
| Receptacle                                                                   |                                                                                        |
| Color                                                                        | Yellow-green 145D                                                                      |
| Shape                                                                        | Conical raised                                                                         |

TABLE 1-continued

| Botanical Description of <i>Chrysanthemum xmorifolium</i> Ramat. ‘Zanmulisa’ |                                         |
|------------------------------------------------------------------------------|-----------------------------------------|
| Height                                                                       | 5 mm                                    |
| Diameter                                                                     | 6 mm                                    |
| Reproductive Organs                                                          |                                         |
| Androecium                                                                   | Present on disc florets only            |
| Stamen length                                                                | 3 mm                                    |
| Stamen color                                                                 | Yellow-green 144A                       |
| Anther color                                                                 | Yellow 3A                               |
| Pollen                                                                       | Present                                 |
| Pollen                                                                       | Yellow 12A                              |
| Gynoecium                                                                    | Present on both ray and disc florets    |
| Style color                                                                  | Yellow-green 154C                       |
| Style Length                                                                 | 3 mm                                    |
| Stigma color                                                                 | Yellow 7A                               |
| Stigma Width                                                                 | 1 mm                                    |
| Ovary                                                                        | Enclosed in calyx                       |
| Plant                                                                        |                                         |
| Form                                                                         | Upright and branching                   |
| Growth habit                                                                 | Spherical shape                         |
| Growth rate                                                                  | Medium                                  |
| Height                                                                       | 24 cm                                   |
| Width                                                                        | 30 cm                                   |
| Stem Color                                                                   | Green 137C                              |
| Stem Strength                                                                | Strong                                  |
| Stem Brittleness                                                             | Not brittle                             |
| Stem Anthocyanin Coloration                                                  | Not observed                            |
| Internode length                                                             | 1-1.5 cm                                |
| Length of lateral branch                                                     | From top to bottom 20 cm                |
| Lateral branch color                                                         | Green 137D                              |
| Lateral branch diameter                                                      | 3 mm                                    |
| Lateral branch, attachment                                                   | Medium strength                         |
| Branching (average number of lateral branches)                               | Prolific with 3 breaks after pinching   |
| Response time                                                                | 7 weeks                                 |
| Foliage                                                                      |                                         |
| Leaf color                                                                   | Upper surface: Green 137A               |
| Color midvein                                                                | Lower surface: Green 138A               |
| Size                                                                         | Upper surface: Yellow-green 147D        |
| Quantity (number per lateral branch)                                         | Lower surface: Yellow-green 148D        |
| Shape                                                                        | Medium; length 7-9.5 cm, width 3-4.5 cm |
| Texture upper side                                                           | 12                                      |
| Texture under side                                                           | Elliptic                                |
| Venation arrangement                                                         | Sparsely pubescent                      |
| Shape of the margin                                                          | Pubescent                               |
| Shape of Base of Sinus                                                       | Palmate                                 |
| Between Lateral Lobes                                                        | Serrated                                |
| Margin of Sinus Between                                                      | Rounded                                 |
| Lateral Lobes                                                                |                                         |
| Shape of Base                                                                | Diverging                               |
| Apex                                                                         | Acute                                   |
| Petiole length                                                               | Mucronulate                             |
| Petiole diameter                                                             | 1 cm                                    |
| Petiole color                                                                | 3 mm                                    |
|                                                                              | Yellow-green 147D                       |

TABLE 2

| Differences with the comparison variety |                |                   |
|-----------------------------------------|----------------|-------------------|
|                                         | ‘Zanmulisa’    | ‘Dark Pink Elgon’ |
| Inflorescence size                      | 7 cm           | 6 cm              |
| Color ray-florets                       | Red-purple 71A | Red-purple 67B    |

I claim:  
1. A new and distinct *chrysanthemum* plant named ‘Zanmulisa’ as described and illustrated.

\* \* \* \* \*

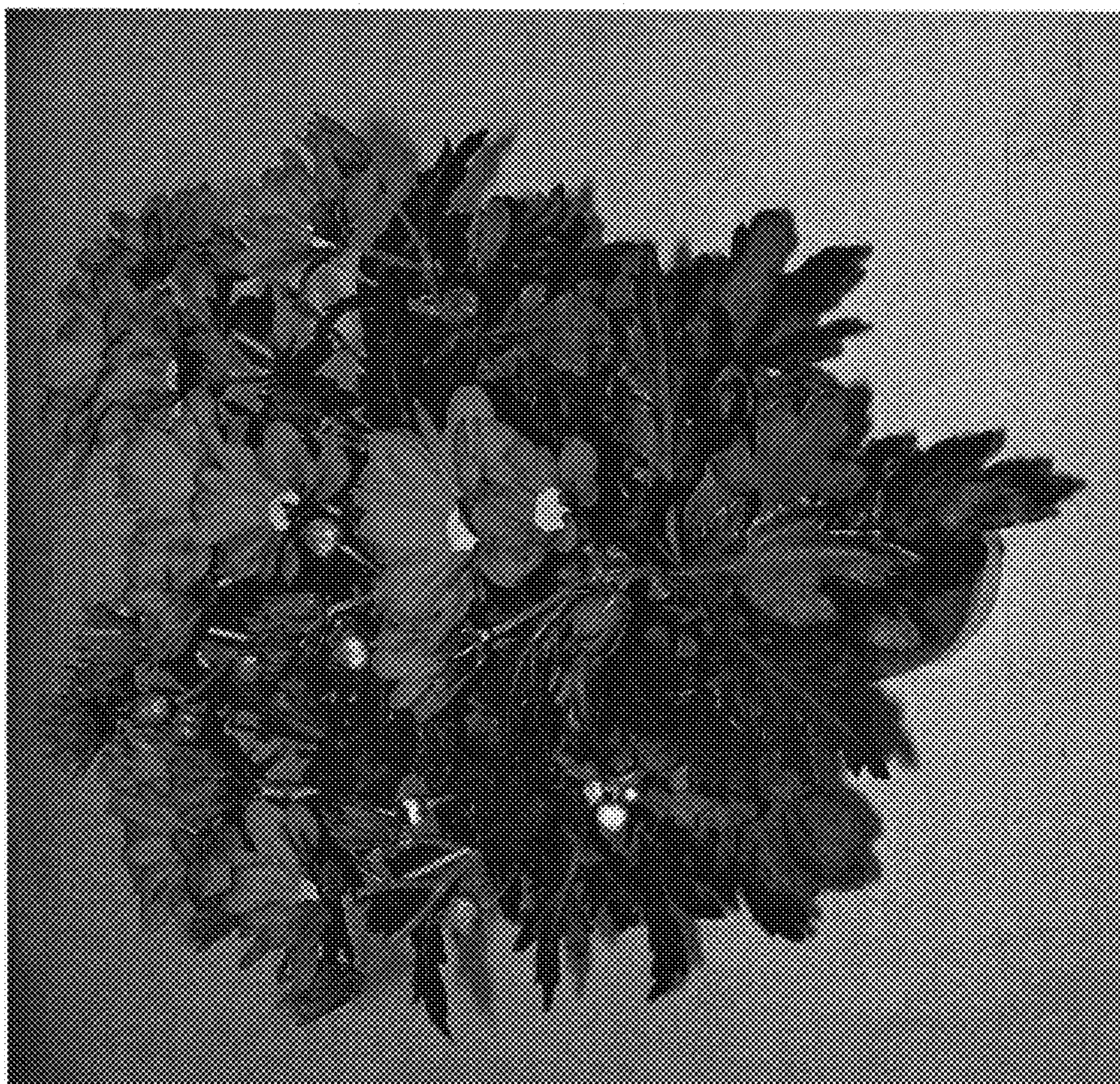


FIG. 1

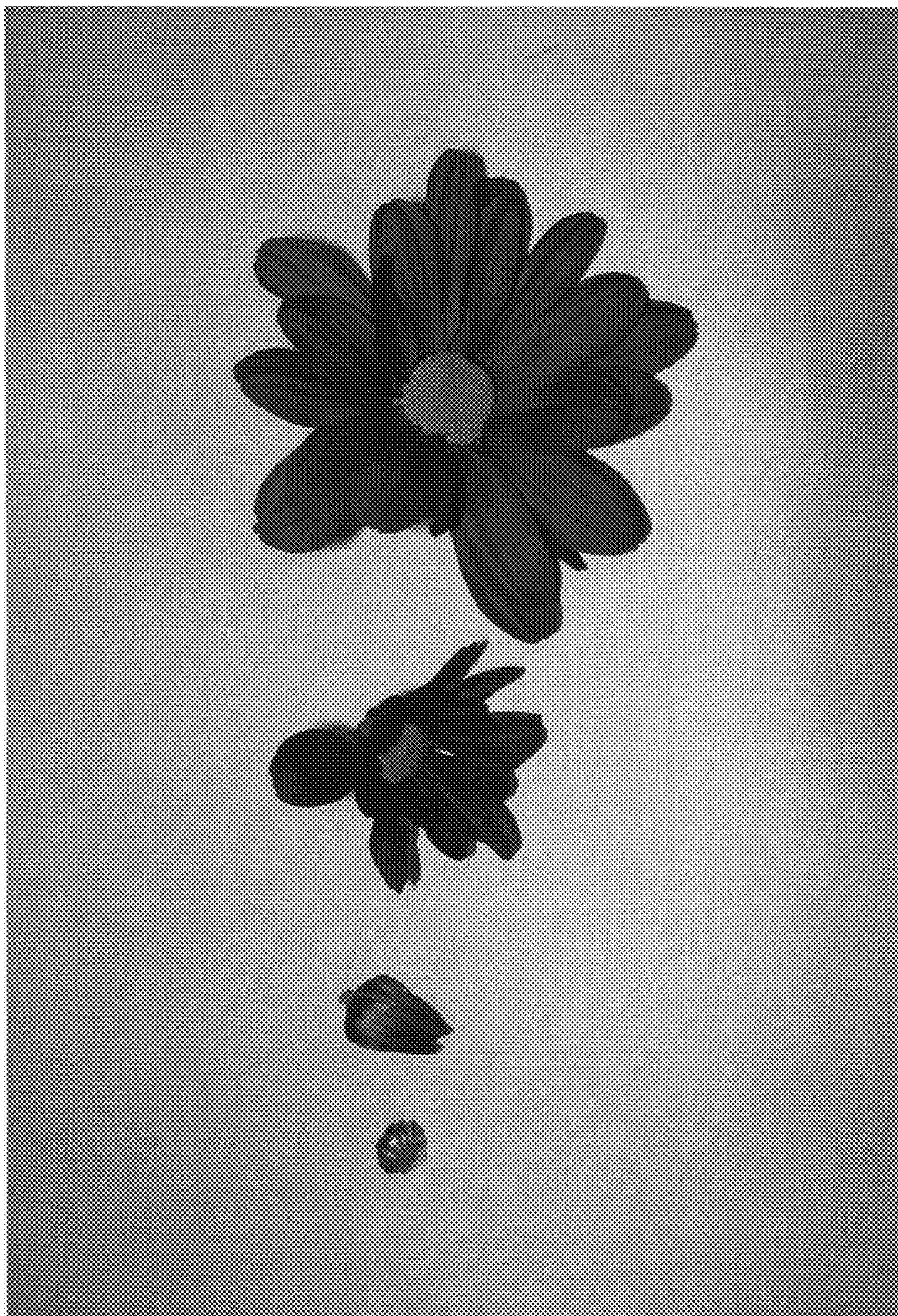


FIG. 2

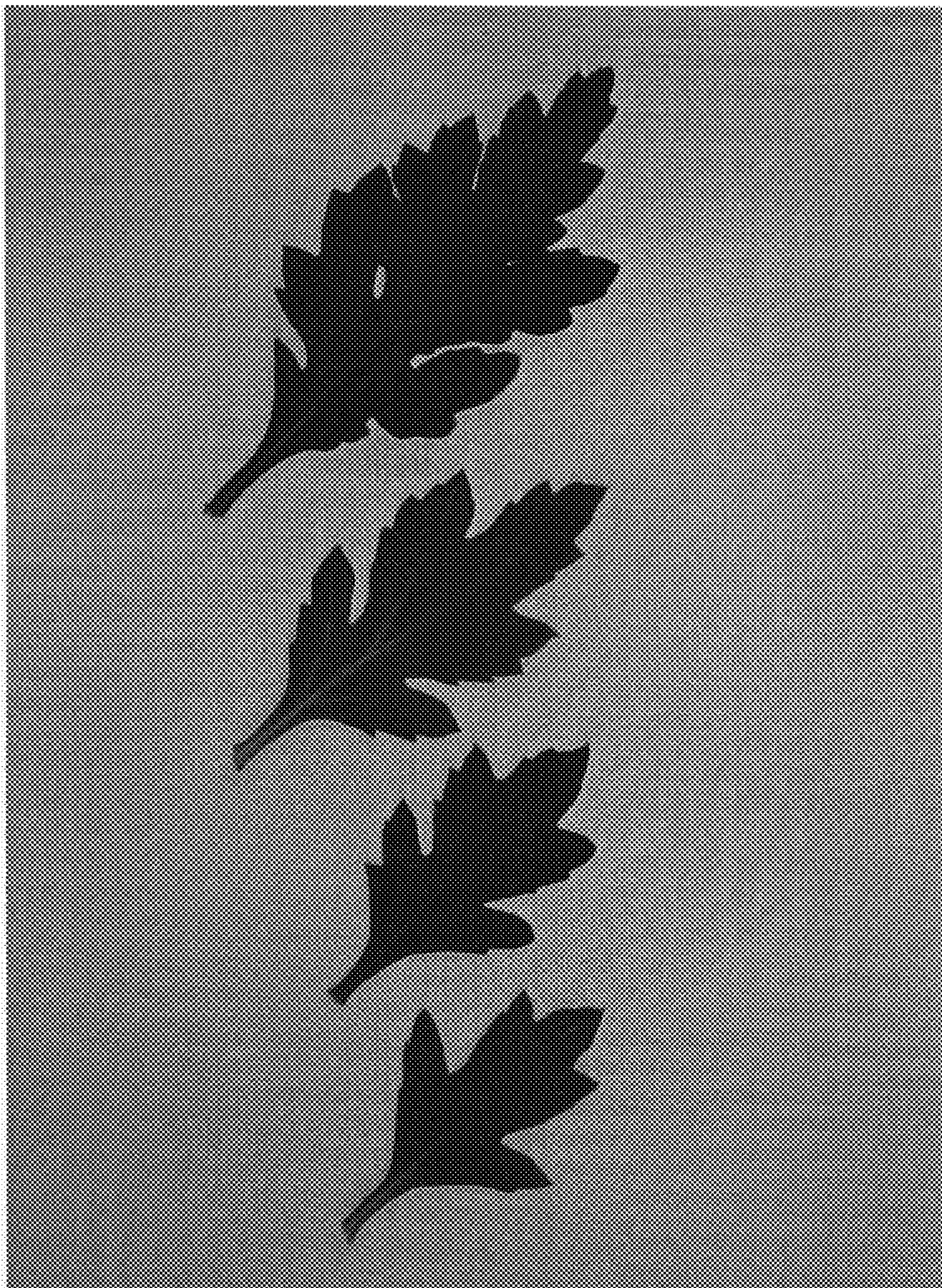


FIG. 3