

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

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

(50) Latin Name: *Chrysanthemum morifolium*
Varietal Denomination: **Achilles**

(75) Inventor: **Mark Roland Boeder**, The Hague
(NL)

(73) Assignee: **Chrysanthemum Breeders Association**
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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 4 days.

(21) Appl. No.: **11/304,550**

(22) Filed: **Dec. 16, 2005**

(65) **Prior Publication Data**

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

(52) **U.S. Cl.** **Plt./289**

(58) **Field of Classification Search** **Plt./289**
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

2007/0143899 P1 * 6/2007 Boeder **Plt./286**

* cited by examiner

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(57) **ABSTRACT**

A *chrysanthemum* plant named 'Achilles' characterized by
its medium sized blooms with yellow-bronze ray florets and
proliferous branching; natural season flowering date August 16;
blooming for a period of 5 weeks.

3 Drawing Sheets

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BACKGROUND OF THE INVENTION

'Achilles' is a product of a breeding and selection pro-
gram for outdoor pot mums (garden mums) which had the
objective of creating new *chrysanthemum* cultivars with a
single, spoon type flower, a natural season flowering date
around August 16; blooming for a period of 5 weeks. The
new plant of the present invention comprises a new and
distinct cultivar of *chrysanthemum* plant. 'Achilles' is a
seedling resulting from a crossing program, set up by a
previous breeder, and which records are unknown to the
inventor. The new and distinct cultivar was discovered and
selected as a flowering plant by Mark Roland Boeder on a
cultivated field in Rijsenhout, The Netherlands in 2001. The
first act of asexual production of 'Achilles' was accom-
plished when vegetative cuttings were taken from the initial
selection in 2001 and propagated further in a controlled
environment in Rijsenhout, The Netherlands. The new cul-
tivar 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 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 various stages of foliage of the new
cultivar.

The plant shown in the photographic drawings was thir-
teen (13) weeks old when those photographs were taken.

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DESCRIPTION OF THE INVENTION

This new variety of *chrysanthemum* is of the botanical
classification *Chrysanthemum morifolium* L. The observa-
tions and measurements were gathered from plants grown
out door in Rijsenhout, The Netherlands under natural day
length and temperature and planted in week 24 in 2004. The
natural blooming date of this crop was August 16–21 (week
34). The average height of the plants was 27 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 yellow-bronze ray florets blooming for a period
of 5 weeks.

From the cultivars known to inventor the most similar
existing cultivar in comparison to 'Achilles' is 'Mars' (U.S.
Plant Pat. No. 14,678). When 'Mars' and 'Achilles' are
being compared the following differences are noticed: The
differences of 'Mars' and 'Achilles' are (1). Natural flow-
ering date; (2). Ray-floret type; and (3). Ray-floret color. (1)
The natural season blooming of 'Mars' occurs later than that
of 'Achilles'. (2) Both varieties have single type flowers, but
the major part of the ray-florets of 'Achilles' is fused into a
long corolla tube, leading to the appearance of spoon type
flowers. (3) The orange color of the ray-florets of 'Mars' is
more bright than that of 'Achilles'.

The following is a description of the plant and character-
istics that distinguish 'Achilles' as a new and distinct variety.

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 1995.

TABLE 1

Botanical Description of <i>chrysanthemum</i> plant ‘Achilles’	
<u>Bud</u>	
Size	Small; cross-section 0.5 cm, height 0.5 cm
Outside Color	Yellow-green 145D
Involucral bracts	2 rows, length 7 mm, width 3 mm
Involucral bracts among disc-florets	Not present
Involucral bracts color	Green 138A
<u>Bloom</u>	
Type	Single, spoon
Height	1.5 cm
Size	Medium
Fully Expanded	4.5 cm
Peduncle length	7 cm
Peduncle color	Green 138B
Number of blooms per branch	Approx. 8 blooms per branch
Performance on the plant	5 weeks
Seeds	Produced in small quantities, ovate grey-brown 199A, 1½ mm in length.
<u>Fragrance Color</u>	Typical <i>chrysanthemum</i> , slightly
Center of the flower	Immature Yellow-orange 14A Mature Yellow-orange 15A
Color of upper surface of the ray-florets	Greyed-orange 173C-175C, blending to Yellow 13C at tip
Color of the lower surface of the ray-florets	Greyed-orange 165C-167C
Tonality from Distance	A garden mum with yellow-bronze flowers
Color of the ray-florets after aging of the plant	Greyed-orange 165C to Greyed-yellow 162C
<u>Ray florets</u>	
Texture	Upper and under side smooth
Number	120-140
Cross-section	Spatulate to convex at tip
Longitudinal axis of majority	Straight
Length of corolla tube	1.5 cm
Ray-floret margin	Entire
Ray-floret length	2 cm
Ray-floret width	0.2-0.3 cm
Ratio length/width	High
Shape of tip	Rounded
<u>Disc florets</u>	
Disc diameter	0.5-0.7 cm
Distribution of disc florets	Numerous
Shape	Tubular
Color	Yellow 11D
Receptacle shape	Domed raised
<u>Reproductive Organs</u>	
Stamen	Present in disc florets only
Stamen color	Yellow-green 144A
Pollen	Present
Pollen color	Yellow 7A
Styles	Thick
Style color	Yellow 13A
Style Length	0.4 cm
Stigma color	Yellow-green 144A

TABLE 1-continued

Botanical Description of <i>chrysanthemum</i> plant ‘Achilles’	
Stigma Width	1 mm
Ovaries	Enclosed in calyx
<u>Plant</u>	
Form	Grown as a spray type potmum, outdoor mounded and round
Growth habit	Spherical shape
Growth rate	Moderate
Height	27 cm
Width	25 cm
Stem Color	Yellow-green 147B with streaks of Greyed-red 182B
Stem Strength	Weak
Stem Brittleness	Brittle
Stem Anthocyanin Coloration	Present
Internode length	2.5 cm
Length of lateral branch	From top to bottom 15-16 cm
Lateral branch color	Yellow-green 147B-C
Lateral branch, attachment	Medium strength
Branching (average number of lateral branches)	Good with 5-6 breaks after pinching
Natural season blooming date	August 16-September 20
<u>Foliage</u>	
Leaf color	Upper side Green 139 A-B Lower side Green 139C
Color midvein	Upper side Yellow-green 147D Lower side Yellow-green 148C
Size	Small.; length 3-5 cm, width 2-3 cm
Quantity (number per lateral branch)	25-30
Shape	Elliptic
Texture upper side	Glabrous
Texture under side	Pubescent
Venation arrangement	Palmate
Shape of the margin	Serrated
Shape of Base of Sinus	Rounded
Between Lateral Lobes	
Margin of Sinus Between	Diverging
Lateral Lobes	
Shape of Base	Obtuse
Apex	Mucronulate
Petiole length	0.5-1 cm
Petiole color	Yellow-green 147D

TABLE 2

<u>Differences with the comparison variety</u>		
	‘Achilles’	‘Mars’
Natural season blooming date	August 16-21	September 6-11
Length corolla tube of ray-florets	1.5 cm	0.3 cm
Color upper surface ray-florets	Greyed-orange 173C to 175C	Yellow-orange 22B

I claim:

1. A new and distinct variety of *chrysanthemum* plant as described and illustrated.

* * * * *

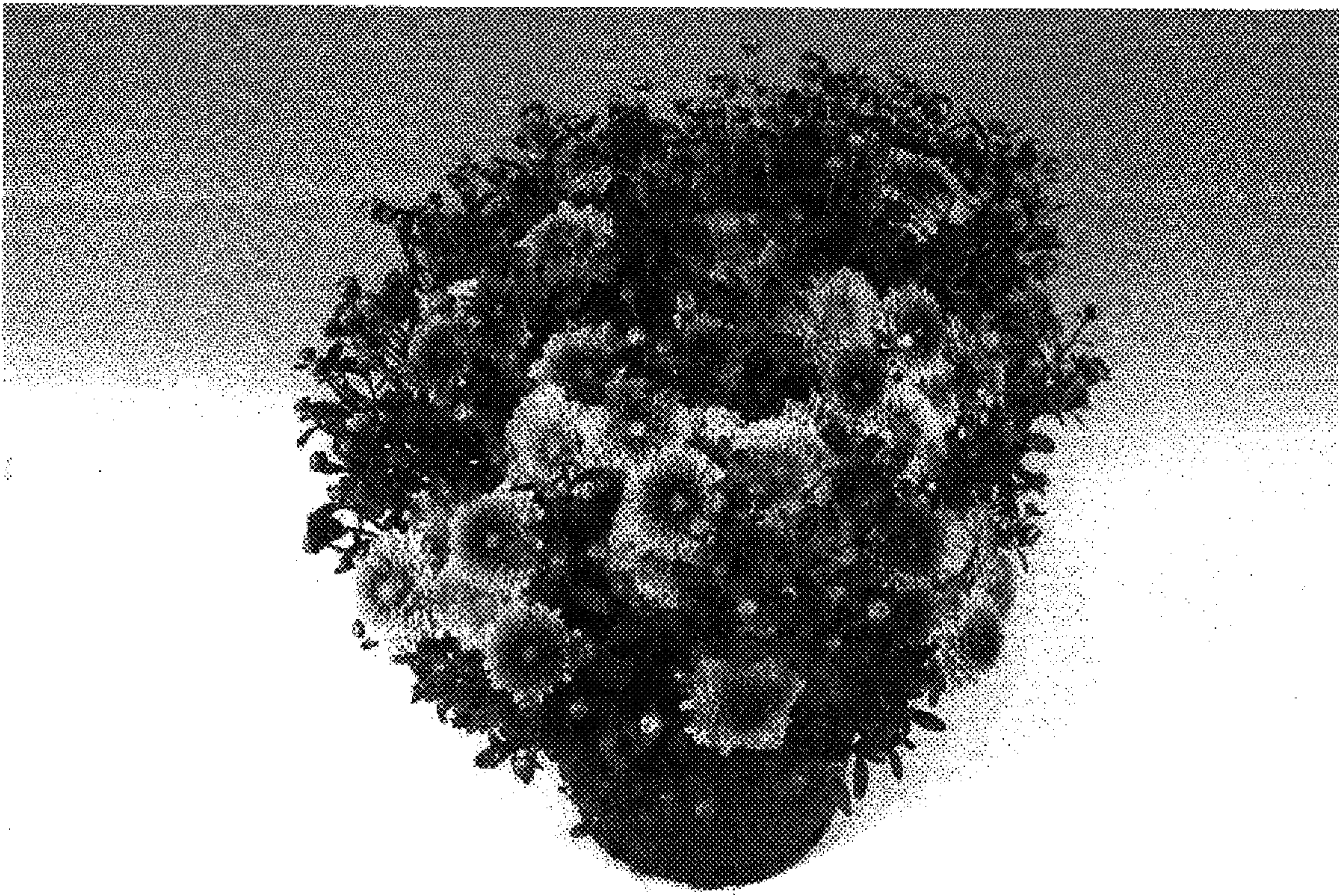


Figure 1

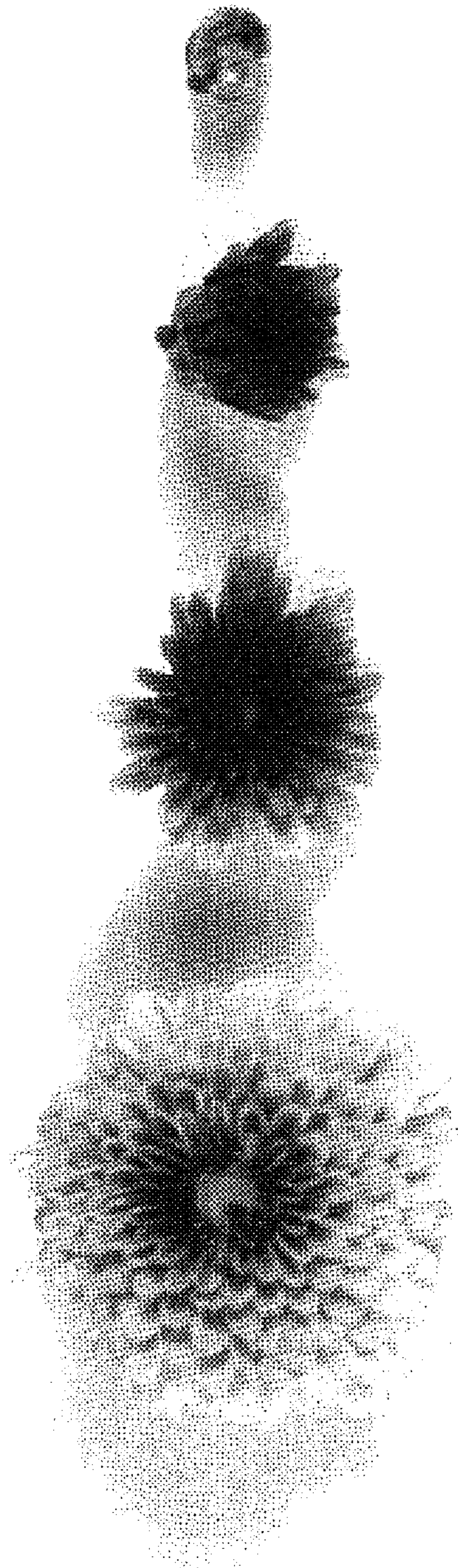


Figure 2



Figure 3