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Deng et al.

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(54) **GERBERA PLANT NAMED ‘UFGE 7080’**
(50) Latin Name: ***Gerbera hybrida***
Varietal Denomination: **UFGE 7080**
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(52) **U.S. Cl.**
USPC **Plt./357**

(58) **Field of Classification Search**
USPC Plt./357
See application file for complete search history.

(56) **References Cited**

PUBLICATIONS

M.K. Hausbeck, W.R. Quackenbush, and S.D. Linderman, Michigan State University, Department of Plant Pathology, East Lansing, MI 48824, Evaluation of cultivars of African daisy for resistance to powdery mildew, 2002.

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(57) **ABSTRACT**
A new *Gerbera* plant particularly distinguished by having a novel combination of traits, including free flowering habit, medium lengths of peduncles, single inflorescence, yellow ray florets with mottling overtones of light orange, orange-red discs, an overall inflorescence diameter of approximately 11 cm, moderate levels of resistance to powdery mildew, good heat tolerance, and demonstrated potential to produce attractive plants in large (≥20-cm in diameter) containers, is disclosed.

3 Drawing Sheets

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Genus and species: *Gerbera hybrida*.
Cultivar denomination: ‘UFGE 7080’.

CROSS-REFERENCE TO RELATED APPLICATION

n/a

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n/a

BACKGROUND OF THE NEW CULTIVAR

The present invention relates to a new and distinct cultivar of *Gerbera hybrida* (“*Gerbera*”) cultivar named ‘UFGE 7080’.

Gerbera plants are ornamental plants from the family Asteraceae frequently used as a decorative garden plant or for cut flowers. The inflorescence of the *Gerbera* plant is a large capitulum with a plurality of florets, which are often brightly colored. The florets may include outer ray florets, trans florets, and central disk florets.

The new *Gerbera* cultivar ‘UFGE 7080’ is a product of a planned breeding program conducted by the Inventors in Bradenton and Wimauma, Fla. The objective of the breeding program is to develop new *Gerbera* cultivars with good plant vigor, moderate lengths of peduncles, numerous inflores-

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cences, attractive inflorescence colors, large inflorescence sizes, and moderate to high levels of powdery mildew resistance.

The new *Gerbera* cultivar ‘UFGE 7080’ originated from a cross made in Bradenton, Fla., in spring 2003 between the female or seed parent ‘UFGE 5-23’ (unpatented) and the male or pollen parent ‘UFGE 20-1’ (unpatented). ‘UFGE 5-23’ and ‘UFGE 20-1’ were *Gerbera* breeding lines selected by the inventors in Bradenton, Fla., from about 2000 progeny from the seeds donated by Sunshine State Carnations Inc. (Hobe Sound, Fla.). The new *Gerbera* cultivar ‘UFGE 7080’ was selected by the inventors from the progeny of the stated parentage in summer 2004 in Bradenton, Fla.

The first asexual reproduction of the new *Gerbera* cultivar ‘UFGE 7080’ was accomplished by crown division in late 2004 in Bradenton, Fla. Since then, the new *Gerbera* cultivar ‘UFGE 7080’ has been asexually propagated by crown division and/or tissue culture for more than five generations. Asexually propagated plants of the new *Gerbera* cultivar ‘UFGE 7080’ have remained true to the original plant, and all characteristics of the new *Gerbera* have been transmitted and retained through three successive asexual vegetative generations.

Plant Breeder’s Rights for this cultivar have not been applied for. The new *Gerbera* cultivar ‘UFGE 7080’ has not been made publicly available more than one year prior to the filing of this application.

SUMMARY OF THE INVENTION

Plants of the new *Gerbera* cultivar ‘UFGE 7080’ have not been observed under all possible environmental conditions.

Its phenotype may vary significantly with variations in environment such as light intensity, temperature, and day length, and cultural practices such as fertilization and irrigation, without any variance in genotype.

The following traits are the most outstanding and distinguishing characteristics of this new and unique *Gerbera* cultivar when grown in Wimauma, Fla., under normal horticultural practices in greenhouse conditions which closely approximate those generally used in commercial practice:

1. Freely flowering habit;
2. Medium peduncle length of approximately 43 to 52 cm;
3. Single inflorescence type;
4. Ray florets in yellow (RHS 9A) with mottling overtones close to orange (RHS 25B);
5. Greyed-purple (RHS 187A) discs before opening of disc florets;
6. Inflorescence diameter of approximately 11 cm;
7. Moderate level of resistance to powdery mildew; and
8. Good heat tolerance.

Plants of the new *Gerbera* cultivar 'UFGE 7080' differ from the female parent 'UFGE 5-23' (unpatented) in the following characteristics:

1. Plants of the new *Gerbera* cultivar 'UFGE 7080' and the female parent 'UFGE 5-23' differ in ray floret color as plants of the female parent have orange ray florets;
2. Plants of the new *Gerbera* cultivar 'UFGE 7080' and the female parent 'UFGE 5-23' differ in disc floret color as plants of the female parent have yellow-green disc florets;
3. Plants of the new *Gerbera* cultivar 'UFGE 7080' have more ray florets than plants of the female parent 'UFGE 5-23'; and
4. Plants of the new *Gerbera* cultivar 'UFGE 7080' have shorter and sturdier peduncles than plants of the female parent 'UFGE 5-23', which makes plants of the new *Gerbera* suitable for growing in large containers or landscapes while plants of the female parents tend to lodge in large containers or landscapes.

Plants of the new *Gerbera* cultivar 'UFGE 7080' differ from the male parent 'UFGE 20-1' (unpatented) in the following characteristics:

1. Plants of the new *Gerbera* cultivar 'UFGE 7080' and the male parent 'UFGE 20-1' differ in inflorescence form as plants of the male parent have double inflorescences;
2. Plants of the new *Gerbera* cultivar 'UFGE 7080' and the male parent 'UFGE 20-1' differ in ray floret color as the plants of the male parent have orange ray florets; and
3. Plants of the new *Gerbera* cultivar 'UFGE 7080' and the male parent 'UFGE 20-1' differ in powdery mildew resistance as the plants of the male parent are highly susceptible to powdery mildew

The new *Gerbera* cultivar 'UFGE 7080' can be compared to *Gerbera hybrida* 'UFGE 4141', disclosed in U.S. Plant Pat. No. 23,346. Plants of the new *Gerbera* cultivar 'UFGE 7080' differ from plants of 'UFGE 4141' in the following characteristics:

1. Plants of the new *Gerbera* cultivar 'UFGE 7080' and 'UFGE 4141' differ in inflorescence form as plants of 'UFGE 4141' have semi-double inflorescences;
2. Plants of the new *Gerbera* cultivar 'UFGE 7080' and 'UFGE 4141' differ in ray floret color as the plants of 'UFGE 4141' have orange ray florets (RHS 33B);

3. Plants of the new *Gerbera* cultivar 'UFGE 7080' and 'UFGE 4141' differ in disc floret color as plants of 'UFGE 4141' have a yellow-green disc before opening of disc florets; and

4. Plants of the new *Gerbera* cultivar 'UFGE 7080' have shorter peduncles as the peduncles of 'UFGE 4141' are approximately 52 cm.

The new *Gerbera* cultivar 'UFGE 7080' can be compared to *Gerbera hybrida* 'UFGE 7032', disclosed in the pending U.S. Plant Pat. No. 23,448. Plants of the new *Gerbera* differ from plants of 'UFGE 7032' in the following characteristics:

1. Plants of the new *Gerbera* and 'UFGE 7032' differ in inflorescence form as plants of 'UFGE 7032' have semi-double inflorescences;
2. Plants of the new *Gerbera* and 'UFGE 7032' differ in disc floret color as plants of 'UFGE 7032' have a yellow-green (RHS 151D) disc before opening of the disc florets;
3. Plants of the new *Gerbera* and 'UFGE 7032' differ in ray floret color as plants of 'UFGE 7032' have yellow ray florets without any overtones in other colors; and
4. Plants of the new *Gerbera* have higher levels of powdery mildew resistance than plants of 'UFGE 7032'.

DESCRIPTION OF THE FIGURES

This new *Gerbera* cultivar 'UFGE 7080' is illustrated by the accompanying photographs (FIGS. 1-3) which show the plant's form, inflorescences, and foliage. The colors shown are as true as can be reasonably obtained by conventional photographic procedures. The photographs are of a plant approximately five months old which was produced from one tissue culture liner and was potted in a 2.7-L container. Colors in the photograph may differ slightly from the color values cited in the detailed botanical description, which accurately describe the colors of the new *Gerbera* cultivar 'UFGE 7080'.

FIG. 1 shows a photograph of the overall plant habit including inflorescences and foliage of a typical plant of the new *Gerbera* cultivar 'UFGE 7080'. The photograph is taken from a side perspective view;

FIG. 2 shows a photograph illustrating a close-up view of the inflorescence of a typical plant of the new *Gerbera* cultivar 'UFGE 7080'; and

FIG. 3 shows a photograph illustrating a close-up of a leaf of a typical plant of the new *Gerbera* cultivar 'UFGE 7080'.

DETAILED BOTANICAL DESCRIPTION

The following detailed description sets forth the distinctive characteristics of the new *Gerbera* cultivar 'UFGE 7080'. The present botanical description is based on plants of the new *Gerbera* cultivar 'UFGE 7080', and the plants were approximately seven months old when the data was taken. The colors (except those in common terms) are described from R.H.S. Colour Chart published by The Royal Horticultural Society in London (1986 ed.), in association with the Flower Council of Holland.

Botanical Description

Botanical classification:

Family.—Asteraceae.

Botanical.—*Gerbera hybrida* 'UFGE 7080'.

Common name.—*Gerbera* (*Gerbera*).

Parentage:

Female, or seed, parent.—‘UFGE 5-23’ (unpatented).

Male, or pollen, parent.—‘UFGE 20-1’ (unpatented).

Plant description:

General appearance.—Herbaceous perennial, typically 5
grown as container or garden plants; upright and
mounding growth habit, roughly globular in shape;
leaves arranged in basal rosettes and outwardly arch-
ing; dense and bushy habit; inflorescences held above 10
the foliar plane on erect and moderately strong basal
peduncles (or scapes); moderately vigorous.

Plant height, soil level to top of foliar plane.—Approx.
27 cm.

Plant height, soil level to top of inflorescence.—47 to 56 15
cm.

Plant width.—Approx. 58 cm.

Foliage description:

Leaf arrangement.—Basal rosette, alternate, simple.

Leaf blade.—Length: 21 to 26 cm. Width: 12 to 17 cm. 20
Shape: Oblong. Apex: Moderately acute to obtuse.
Base: Truncate. Margin: Irregular crenate, sinuses
divergent, slightly undulate. Texture, upper surface:
Sparsely pubescent. Texture, lower surface: Moder- 25
ately pubescent. Venation pattern: Pinnate. Depth of
incisions in leaf: Basal part: Deep. Central part:
Medium. Distal part: Shallow. Color, Upper side: Yel-
low-green (RHS 147A). Color, Bottom side: Yellow-
green (RHS 147B). Glossiness on upper side: 30
Medium.

Petiole.—Petiole length: Approx. 8.5 cm. Diameter:
About 3.5 mm. Texture, upper and lower surfaces:
Moderately pubescent. Color Upper surfaces: Close
to yellow-green (RHS 144A) Lower surfaces: Close 35
to yellow-green (RHS 144B). Color, proximal end:
Close to greyed-purple (RHS 183B). Petiole antho-
cyanin coloration: Close to red-purple (RHS 59A and
59B).

Inflorescence: 40

Appearance.—Single type inflorescence form; solitary 40
inflorescences borne on upright and moderately
strong scapes above the foliar plane; ray and disc
florets arranged acropetally on a capitulum.

Color (general tonality from a distance of 3 meters).— 45
Golden yellow with a touch of light orange.

Shape.—Moderately incurving funnel-shaped.

Fragrance.—None detected.

Flowering season.—Plants begin flowering about six
weeks after planting and flower year-round in outdoor 50
gardens in Wimauma, Fla., until plants are killed by
frosts or freezes; plants flower year-round under
greenhouse conditions in Wimauma, Fla.

Inflorescence longevity.—Inflorescences last about two
weeks on the plant in Wimauma, Fla.; inflorescences 55
not persistent.

Quantity of inflorescences.—Free flowering habit, with
up to 15 open and developing inflorescences per plant.

Inflorescence bud.—Height: About 1.2 cm. Diameter:
About 1.8 cm. Shape: Oblate. Color (opening buds): 60
Close to greyed-purple (RHS 187A).

Inflorescence size.—Diameter: About 11 cm. Depth
(height): About 2 cm. Diameter of disc: About 3.3 cm.
Receptacle height: About 4 mm. Receptacle diameter:
About 1.8 cm. Receptacle color: Close to green-white 65
(RHS 157A).

Phyllaries.—Number of phyllaries per inflorescence:

About 76 arranged in about three whorls. Length:
About 1.5 cm. Width: About 3 mm. Shape: Subulate.
Apex: Narrowly acute. Base: Truncate. Margin:
Entire. Texture, upper surface: Smooth, glabrous.
Texture, lower surface: Densely tomentose. Color,
inner surface: Close to green (RHS 146A). Color,
outer surface: Close to green (RHS 137A).

Inner ray florets (trans florets).—Number per inflores-
cence: About 160 arranged in about four whorls.
Length: About 1.2 cm. Width: About 2 mm. Shape:
Tubular, fused. Apex: Emarginate. Base: Truncate.
Margin: Entire. Texture, upper surface: Smooth, gla-
brous, slightly velvety, longitudinally ridged. Texture,
lower surface: Smooth, glabrous, slightly velvety,
longitudinally ridged. Color: Upper surface: Close to
yellow (RHS 9A) with some florets having tinges of
light orange (RHS 24A). Lower surface: Close to
yellow (RHS 9C) and with some florets having tinges
of light orange (RHS 24B).

Outer ray floret.—Number: About 58 arranged in three
whorls. Cross section: Straight to slightly convex.
Length: Medium, approx. 5.0 cm. Width: Medium,
approx. 10 mm. Shape: Narrow elliptic. Apex: Emar-
ginate. Base: Truncate. Margin: Entire. Depth of inci-
sion: Very shallow. Texture, upper surface: Smooth,
glabrous, slightly velvety, longitudinally ridged. Tex-
ture, lower surface: Smooth, glabrous, slightly vel-
vety, longitudinally ridged. Color (topside): Close to
yellow (RHS 9A), with mottling overtones close to
orange (RHS 25B) on the two thirds surface begin-
ning at apex and toward the middle. Color (bottom
side): Close to yellow (RHS 9C).

Disc florets.—Number: About 287. Length: About 1.5
cm. Width: About 3.5 mm. Shape: Tubular, fused.
Apex: Narrowly obtuse. Base: Fused. Margin: Entire.
Texture, upper and lower surfaces: Smooth, glabrous.
Color, fully opened upper surface: Close to orange-
red (RHS 33B) alternating with stripes close to yellow
(RHS 10B). Color, fully opened lower surface: Close
to orange-red (RHS 32B) alternating with stripes
close to yellow (RHS 10C).

Reproductive organs.—Androecium: On most disc flo-
rets; quantity: one. Gynoecium: On ray and disc flo-
rets; quantity per floret: one. Filament length: About 8
mm. Filament color: Close to yellow (11B). Anther
shape: Linear. Anther length: About 1 mm. Anther
width: About less than 1 mm. Anther color: Close to
yellow (RHS 13B). Pollen, amount: Good. Pollen
color: Close to yellow (RHS 13A). Pistil per floret:
One. Pistil length: About 1.8 cm. Stigma shape: Cleft.
Stigma color: Close to yellow (RHS 12D). Style
length: About 1.4 cm. Style color: Close to yellow
(RHS 13A). Ovary color: Close to white (RHS 145B).

Pappus.—Quantity of hairs per floret: About 96. Length:
About 6 mm. Diameter: Less than 1 mm. Texture:
Soft. Main color: Close to white (RHS 155B).

Peduncle.—Length: Medium, 43 to 52 cm. Tendency to
fasciation: Absent. Thickness: Medium, approx. 5.5
mm. Strength: Moderately strong. Texture: Moder-

ately tomentose. Color: Close to yellow-green (RHS 144A). Anthocyanin coloration, at base and top: Absent.

Resistance to Diseases

Plants of the new *Gerbera* cultivar ‘UFGE 7080’ were observed in five experiments in which they were compared with plants of commercial *Gerbera* cultivars, ‘Bimini’ (unpatented), ‘Pensacola’ (unpatented), ‘FUNTASTIC™ Canary’ (‘UFGE 7032’), and/or ‘FUNTASTIC™ Fire Orange’ (‘UFGE 4141’), for the severity of powdery mildew, *Podosphaera* (syn. *Sphaerotheca*) *fusca* (Fr.) S. Blumer. Plants of the new *Gerbera* consistently showed moderate levels of resistance to powdery mildew.

The five experiments were conducted in Wimauma, Fla.: Experiment 1 was conducted from winter 2008 to spring 2009, Experiments 2 and 3 were conducted from summer to fall 2009, and Experiments 4 and 5 were conducted from spring to summer 2012. In all experiments, tissue culture liners of the new *Gerbera*, ‘Bimini’, ‘Pensacola’, ‘FUNTASTIC™ Canary’, and/or ‘FUNTASTIC™ Fire Orange’ were transplanted into 2.7-L containers filled with commercial potting mix amended with controlled release fertilizer at the rate of 5.28 kg·m⁻³ and trace element fertilizer at the rate of 1.05 kg·m⁻³. In Experiments 1, 3 and 4, all plants were grown in a screen house in Wimauma, Fla., without temperature or photoperiod control but with approximately 45% light exclusion. In Experiments 2 and 5, plants were grown in a greenhouse in Wimauma, Fla. The greenhouse had approximately 30% light exclusion and temperature inside the greenhouse was between 21° C. (night) to 35° C. (day). Fungicides were not applied throughout the experiments to subject the plants to natural powdery mildew disease pressures. A randomized complete block design was used in these experiments, with five (Experiment 1), five (Experiment 2), six (Experiment 3), four (Experiment 4), or six (Experiment 5) replications. The experimental unit was a single containerized plant. Severity of powdery mildew on plants was assessed using a scale of 1 to 10 as described by Hausbeck et al. (2002) in March 2009 (Experiment 1), June 2009 (Experiment 2), October 2009 (Experiment 3), and August 2012 (Experiments 4 and 5). The powdery mildew severity ratings in these experiments ranged from 1.7 to 4.8, which are significantly lower compared to the powdery mildew severity ratings of ‘Bimini’ or ‘Pensacola’. These data indicate moderate levels of powdery mildew resistance in the new *Gerbera*. No other disease resistance characterizations have been made.

TABLE 1

Powdery mildew severity ratings of the new <i>Gerbera</i> cultivar ‘UFGE 7080’ and commercial <i>Gerbera</i> cultivars, ‘Bimini’, ‘Pensacola’, ‘FUNTASTIC™ Canary’, and/or ‘FUNTASTIC™ Fire Orange’, grown under natural powdery mildew pressure in five experiments in Wimauma, Florida: Experiment 1 (winter 2008 through spring 2009), Experiments 2 and 3 (summer 2009 through fall 2009), and Experiments 4 and 5 (spring 2012 through summer 2012).					
Varieties	Experiments				
	1	2	3	4	5
Powdery mildew severity ratings ^Z					
New <i>Gerbera</i>	4.8	4.0	3.7	3.0	1.7
‘Bimini’	7.5	6.7			
‘Pensacola’	8.6	8.7			
‘FUNTASTIC™ Canary’	7.4	5.7	4.2	3.3	2.8
‘FUNTASTIC™ Fire Orange’	6.8	4.0	3.7		

^ZPowdery mildew severity was rated on a scale of 1 to 10 as described by Hausbeck et al. (2002): 1 = no disease, 2 = trace to 10%, 3 = 10% to 20%, 4 = 20 to 30%, 5 = 30% to 40%, 6 = 40% to 50%, 7 = 50% to 60%, 8 = 60% to 70%, 9 = 70% to 80%, and 10 = 80% to 100% of leaf surface covered with powdery mildew.

Heat Tolerance

Plants of the new *Gerbera* cultivar ‘UFGE 7080’ grow well and produce inflorescences freely in summer in Florida when ambient temperatures are 35° C. or higher.

Literature Cited

Hausbeck, M. K., W. R. Quackenbush, and S. D. Linderman. 2002. Evaluation of cultivars of African daisy for resistance to powdery mildew, 2002. B&C Tests 18:O0004.

What is claimed is:

1. A new and distinct cultivar of *Gerbera* plant named ‘UFGE 7080’, as illustrated and described herein.

* * * * *



FIG. 1



FIG. 2

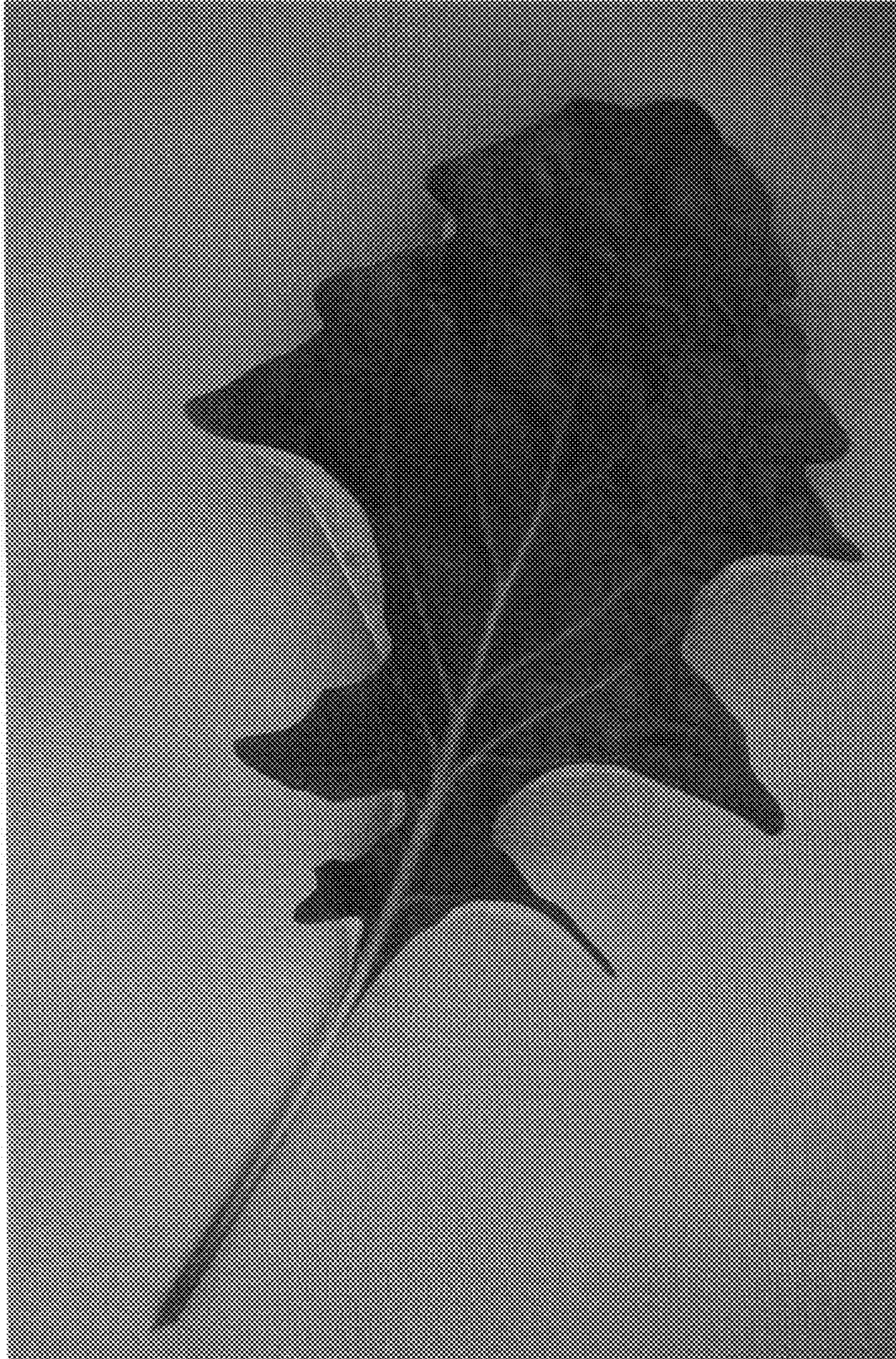


FIG. 3