



US00PP20735P2

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

(10) **Patent No.:** **US PP20,735 P2**
(45) **Date of Patent:** **Feb. 9, 2010**

(54) **STRAWBERRY PLANT NAMED**
'DRISSTRAWEIGHT'
(50) Latin Name: *Fragaria×ananassa*
Varietal Denomination: **DrisStrawEight**

(75) Inventor: **Michael D. Ferguson**, Moorpark, CA
(US)

(73) Assignee: **Driscoll Strawberry Associates, Inc.**,
Watsonville, CA (US)

(*) 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.: **12/287,322**

(22) Filed: **Oct. 8, 2008**

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

(52) **U.S. Cl.** **Plt./209**

(58) **Field of Classification Search** **Plt./208,**
Plt./209

See application file for complete search history.

Primary Examiner—Susan B McCormick Ewoldt

(74) *Attorney, Agent, or Firm*—Jondle & Associates, P.C.

(57) **ABSTRACT**

This invention relates to a new and distinct cultivar of straw-
berry plant named 'DrisStrawEight'. The new cultivar is pri-
marily characterized by its large, firm and medium to strong
sweet tasting fruit, medium-vigor and moderate resistance to
Powdery mildew, is disclosed.

2 Drawing Sheets

1

Genus and species: *Fragaria×ananassa*.
Variety denomination: 'DrisStrawEight'.

BACKGROUND OF THE NEW PLANT

The present invention relates to a new and distinct straw-
berry cultivar designated 'DrisStrawEight' and botanically
known as *Fragaria×ananassa*. This new strawberry cultivar
was discovered in Camarillo, Calif. in January 2005 and
originated from a cross between the female parent 'Driscoll
Ojai' (U.S. Plant Pat. No. 18,575) and the male parent
'Driscoll Agoura' (U.S. Plant Pat. No. 15,731). The original
seedling of the new cultivar was asexually propagated at a
nursery in Shasta County, Calif.

'DrisStrawEight' was subsequently asexually propagated
in Shasta County, Calif. and underwent further testing at a
nursery in Ventura County, Calif. for three years. The present
invention has been found to retain its distinctive characteris-
tics through successive asexual propagations via stolons and
tissue culture.

DESCRIPTION OF THE PHOTOGRAPHS

The accompanying color photographs show typical speci-
mens of the new cultivar at various stages of development as
nearly true as it is possible to make in color reproductions.

FIG. 1 shows overall plant habit including fruit at various
stages of development.

FIG. 2 shows the upper and lower surfaces of several of the
flowers.

FIG. 3 shows the fruit in longitudinal cross-section.

FIG. 4 shows the upper and lower surfaces of the leaves at
the three leaf stage.

DESCRIPTION OF THE NEW CULTIVAR

The following description of 'DrisStrawEight' is based on
observations taken in Ventura County, Calif. from
2006–2008. This description is in accordance with UPOV
terminology. Color designations, color descriptions, and
other phenotypical descriptions may deviate from the stated

2

values and descriptions depending upon variation in environ-
mental, seasonal, climatic and cultural conditions. 'DrisStra-
wEight' has not been observed under all possible environ-
mental conditions. The botanical description of
'DrisStrawEight' was taken from 6 month-old plants and the
botanical descriptions of 'Driscoll Agoura' and 'Driscoll
Ojai' were taken from 5 month-old plants. Color terminology
follows The Royal Horticultural Society Colour Chart, Lon-
don (R.H.S.) (2001).

DETAILED BOTANICAL DESCRIPTION

Table 1 shows selected plant characteristics of the new
variety compared with plant characteristics of 'Driscoll Ago-
ura' (U.S. Plant Pat. No. 15,731) and 'Driscoll Ojai' (U.S.
Plant Pat. No. 18,575). Plant characteristics include stolon
number, fruit shape, insertion of achenes and fruit production.

TABLE 1

Characteristic	'DrisStrawEight'	'Driscoll	
		Agoura'	'Driscoll Ojai'
Stolon number	Medium	Few	Many
Fruit shape	Conical and almost cylindrical	Almost cylindrical	Almost cylindrical
Insertion of achenes	Below surface	Level with surface	Above surface
Fruit production (g/plant)	529	617	504

Table 2 shows plant characteristics of the new variety com-
pared with plant characteristics of the commercial varieties
'Driscoll Agoura' (U.S. Plant Pat. No. 15,731) and 'Driscoll
Ojai' (U.S. Plant Pat. No. 18,575). Plant characteristics
include plant height, diameter, the number of crowns per
plant, habit, the density of individual plants and the vigor.

TABLE 2

Characteristic	'DrisStrawEight'	'Driscoll Agoura'	'Driscoll Ojai'
Plant height (cm)	16.1	13.2	14.0
Plant diameter (cm)	28.3	30.3	32.0
Number of crowns/plant	2	3	2
Habit	Globose	Flat	Flat-globose
Density of individual plant	Medium	Medium	Medium
Vigor	Medium	Weak	Strong

Table 3 shows leaf characteristics of the new cultivar compared with leaf characteristics of 'Driscoll Agoura' and 'Driscoll Ojai'. Leaf characteristics include terminal leaflet length and width in centimeters, length to width ratio, number of teeth per terminal leaflet, shape of teeth, color of upper side and underside of leaf, leaf shape in cross section, leaf blistering, leaf glossiness, number of leaflets, terminal leaflet margin, terminal leaflet length to width ratio, overall leaf shape and shape of leaf apex and base.

TABLE 3

Leaf Characteristic	'DrisStrawEight'	'Driscoll Agoura'	'Driscoll Ojai'
Terminal leaflet length (cm)	0.64	0.58	0.60
Terminal leaflet width (cm)	0.61	0.56	0.63
Terminal leaflet length/width ratio	1.0	1.0	1.0
No. teeth/terminal leaflet	21	23	20
Shape of teeth	Rounded	Rounded	Rounded
Color of upper surface of leaf	RHS 139A (Dark-green)	RHS 139A (Dark-green)	RHS 147A (Medium yellow-green)
Color of lower surface of leaf	RHS 148B (Medium yellow-green)	RHS 147B (Medium yellow-green)	RHS 147C (Medium yellow-green)
Leaf shape in cross section	Concave	Concave	Concave
Leaf blistering	Weak	Medium	Medium
Leaf glossiness	Weak	Medium	Medium
No. leaflets	Three only	Three only	Three only
Terminal leaflet margin	Revolute	Revolute	Revolute to flat
Terminal leaflet: length/width ratio	As long as broad	As long as broad	As long as broad
Terminal leaflet shape	Orbicular	Orbicular	Orbicular
Terminal leaflet base shape	Obtuse	Obtuse	Obtuse
Terminal leaflet apex shape	Rounded	Rounded	Rounded

Table 4 shows information about the petiole, the petiolule, the bract, and the stipule of the new cultivar compared to 'Driscoll Agoura' and 'Driscoll Ojai'. This includes petiole length in centimeters, petiole diameter in centimeters, petiole pubescence, pose of hairs on the petiole, color of the petiole, color of the petiolule, petiolule length in centimeters, petiolule diameter in centimeters, bract frequency per petiole, stipule length in centimeters, stipule width in centimeters, stipule pubescence and stipule anthocyanin coloration.

TABLE 4

Characteristic	'DrisStrawEight'	'Driscoll Agoura'	'Driscoll Ojai'
Petiole length (cm)	8.5	6.4	6.5
Petiole diameter (cm)	0.281	0.274	0.323
Petiole pubescence	Very dense	Dense	Dense
Petiole pose of hairs	Outwards	Outwards	Between outwards to downwards
Petiole color	RHS 146C (Medium yellow-green)	RHS 146D (Medium yellow-green)	RHS 145A (Light yellow-green)
Petiolule color	RHS 146C (Medium yellow-green)	RHS 145A (Light yellow-green)	RHS 145A (Light yellow-green)
Petiolule length (cm)	0.40	0.366	0.434
Petiolule diameter (cm)	0.145	0.131	0.194
Bract frequency	1	0	1
Stipule length (cm)	0.37	0.35	0.36
Stipule width (cm)	1.119	1.128	1.256
Stipule pubescence	Absent/very sparse	Absent/very sparse	Medium
Stipule anthocyanin coloration	Weak	Weak	Weak

Table 5 shows stolon characteristics of the new cultivar compared to 'Driscoll Agoura' and 'Driscoll Ojai'. These characteristics include the number of stolons, average number of daughter plants, the anthocyanin coloration of the stolons, the thickness of the stolons, and the pubescence of the stolons.

TABLE 5

Characteristic	'DrisStrawEight'	'Driscoll Agoura'	'Driscoll Ojai'
Stolon Number	Medium	Few	Many
Average number of daughter plants	44	11	72
Stolon Anthocyanin	Weak	Between weak and medium	Weak
Stolon Thickness	Thin	Between medium and thick	Medium
Stolon Pubescence	Absent or very sparse	Dense	Absent or very sparse

Table 6 shows inflorescence characteristics of the new cultivar compared to 'Driscoll Agoura' and 'Driscoll Ojai'. These characteristics include inflorescence position relative to foliage, time of flowering, relative flower size, flower diameter in centimeters (measured from petal tip to petal tip), petal shape, relative spacing of petals, petal apex, base and margin, petal length in centimeters, petal width in centimeters, petal length to width ratio, number of petals, petal color, calyx diameter in centimeters (measured on back of flower from sepal tip to sepal tip), diameter of calyx relative to corolla, diameter of inner calyx relative to outer, sepal shape, apex and margin, sepal length in centimeters (measured from sepal tip to point of attachment to receptacle), sepal width in centimeters, number of sepals, receptacle color and anther color.

TABLE 6

Characteristic	'DrisStrawEight'	'Driscoll Agoura'	'Driscoll Ojai'
Inflorescence position relative to foliage	Above	Level with	Above
Time of flowering (50% of plants at first flower)	Early	Early	Early
Flower size	Medium	Medium	Medium
Flower diameter (cm)	3.247	2.859	3.531
Petal shape	Orbicular	Orbicular	Orbicular
Petal spacing	Overlapping	Overlapping	Overlapping
Petal apex shape	Rounded	Rounded	Rounded
Petal margin	Entire	Entire	Entire
Petal base shape	Concave-convex	Concave-convex	Concave-convex
Petal length (cm)	1.741	1.577	1.818
Petal width (cm)	1.719	1.537	1.873
Petal length/width ratio	1.0-As long as broad	1.0-As long as broad	1.0-As long as broad
Typical and observed petal number	6	7	6
Petal color	RHS 155D (White)	RHS 155D (White)	RHS 155B (White)
Calyx diameter (cm)	5.210	4.603	5.466
Calyx diameter relative to corolla	Larger	Larger	Larger
Inner calyx diameter relative to outer	Same size	Larger	Same size
Sepal shape	Elliptical	Elliptical	Elliptical
Sepal apex shape	Convex	Convex	Retuse
Sepal margin	Entire	Entire	Entire
Sepal length (cm)	2.174	1.814	2.103
Sepal width (cm)	0.897	0.766	1.031
Typical and observed sepal number	13	14	13
Receptacle color	RHS 151B (Medium yellow-green)	RHS 151D (Medium yellow-green)	RHS 151B (Medium yellow-green)
Anther color	RHS 16B (Light yellow-orange)	RHS 14C (Light yellow-orange)	RHS 17A (Medium yellow-orange)

Table 7 shows fruit characteristics of the new cultivar compared to 'Driscoll Agoura' and 'Driscoll Ojai'. These characteristics include fruiting truss length in centimeters, fruiting truss diameter, number of berries per truss, fruiting truss attitude, fruiting truss color, fruit length in centimeters, fruit truss width in centimeters, fruit length to width ratio, fruit hollow length and width in centimeters, fruit hollow length to width ratio, fruit weight in grams, relative fruit size, predominant fruit shape, difference in shape between primary and secondary fruits, band without achenes, unevenness of fruit surface, fruit skin color, evenness of fruit color, fruit glossiness, insertion of achenes, achene coloration (sunward and shaded sides of berry) and the number of achenes per berry.

TABLE 7

Characteristic	'DrisStrawEight'	'Driscoll Agoura'	'Driscoll Ojai'
Fruiting truss length (cm)	17.4	14.4	16.7
Fruiting truss length-general	Medium	Medium	Medium

TABLE 7-continued

Characteristic	'DrisStrawEight'	'Driscoll Agoura'	'Driscoll Ojai'
Fruiting truss diameter (cm)	0.295	0.297	0.348
Number of berries per fruiting truss	1	3	1
Fruiting truss attitude	Prostrate	Prostrate	Prostrate
Fruiting truss color at base of truss	RHS 146C (Medium yellow-green)	RHS 145A (Light yellow-green)	RHS 145A (Light yellow-green)
Fruit length (cm)	4.496	4.916	4.712
Fruit width (cm)	4.029	4.331	4.700
Fruit length/width ratio	1.1-As long as broad	1.1-As long as broad	1.0-As long as broad
Fruit hollow length (cm)	2.216	2.532	3.032
Fruit hollow width (cm)	1.043	1.542	1.082
Fruit hollow length/width ratio	2.1	1.6	2.8
Fruit weight (g)	26.5	27.5	28.8
Relative fruit size	Large	Large	Large
Predominant fruit shape	Conical and almost cylindrical	Almost cylindrical	Almost cylindrical
Difference in shape between primary & secondary fruits	None or very slight	None or very slight	None or very slight
Band without achenes	Broad	Medium	Medium
Unevenness of fruit surface	Weak	Weak	Medium
Fruit skin color	RHS 45B (Medium-red)	RHS 46A (Dark-red)	RHS 46A (Dark-red)
Evenness of fruit color	Even	Even	Even
Fruit glossiness	Medium	Medium	Weak
Insertion of achenes	Below surface	Level with surface	Above surface
Achene coloration-sunward side of berry	RHS 53B (Dark-red)	RHS 181A (Dark greyed-red)	RHS 182A (Dark greyed-red)
Achene coloration-shaded side of berry	RHS 146D (Medium yellow-green)	RHS 153A (Medium yellow-green)	RHS 152D (Medium yellow-green)
Achenes per berry	200.8	331.4	174.5

Table 8 shows fruit characteristics of the new cultivar compared to 'Driscoll Agoura' and 'Driscoll Ojai'. These characteristics include the harvest maturity, insertion of calyx, pose of calyx segments, size of calyx in relation to fruit, adherence of calyx, firmness of flesh, color of the fruit flesh, evenness of the flesh color, distribution of flesh color, hollow center, sweetness of fruit, acidity of fruit, texture of fruit when tasted, type of bearing, grams of fruit per plant.

TABLE 8

Characteristic	'DrisStrawEight'	'Driscoll Agoura'	'Driscoll Ojai'
Harvest maturity	Early January to mid-June	Late January to mid-June	Late January to late May
Insertion of calyx	Set above fruit	Set above fruit	Level
Pose of calyx segments	Reflexed	Reflexed	Between spreading and reflexed
Size of calyx in relation to fruit	Larger	Between same size and larger	Larger

TABLE 8-continued

Characteristic	'DrisStrawEight'	'Driscoll Agoura'	'Driscoll Ojai'
Adherence of calyx	Between medium and strong	Strong	Between medium and strong
Firmness of flesh	Firm	Firm	Extremely firm
Color of the flesh	RHS 155A (White) and RHS 41B (Medium-red)	RHS 155C (White) and RHS 41A (Medium-red)	RHS N155D (White) and RHS 45C (Medium-red)
Evenness of flesh color	Slightly uneven	Slightly uneven	Slightly uneven
Distribution of flesh color	Marginal and central	Marginal and central	Marginal and central
Hollow center	Large	Large	Large
Sweetness	Between medium and strong	Medium	Medium
Acidity	Medium	Medium	Medium
Texture when tasted	Medium	Medium	Medium
Type of bearing	Partially everbearing	Partially everbearing	Partially everbearing
Grams of fruit/plant	529	617	504

Table 9 shows stress, pest and disease characteristics of the new cultivar compared to 'Driscoll Agoura' and 'Driscoll Ojai'.

TABLE 9

Pest, Stress or Disease	'DrisStrawEight'	'Driscoll Agoura'	'Driscoll Ojai'
High temperatures	Moderately resistant		Moderately resistant
High pH	Moderately resistant	Moderately resistant	Moderately resistant
High soil salt levels	Moderately resistant	Moderately resistant	Moderately resistant
Water logging	Moderately resistant		Moderately resistant

TABLE 9-continued

Pest, Stress or Disease	'DrisStrawEight'	'Driscoll Agoura'	'Driscoll Ojai'
<i>Tetranychus urticae</i>	Moderately resistant	Moderately resistant	Moderately resistant
<i>Lygus hesperus</i>	Susceptible	Susceptible	Susceptible
<i>Botrytis</i> fruit rot	Moderately susceptible	Moderately susceptible	Moderately susceptible
Powdery mildew	Moderately resistant	Moderately resistant	Moderately susceptible
<i>Verticillium</i> wilt	Susceptible	Susceptible	Susceptible
Strawberry mottle virus	Moderately resistant	Moderately resistant	Moderately resistant
<i>Xanthomonas fragariae</i>	Moderately susceptible	Moderately susceptible	Susceptible

COMPARISON WITH PARENTAL AND COMMERCIAL CULTIVARS

When 'DrisStrawEight' is compared to the male parent 'Driscoll Agoura' (U.S. Plant Pat. No. 15,731), 'DrisStrawEight' begins fruiting a week to two weeks earlier than 'Driscoll Agoura'. Additionally, 'DrisStrawEight' is less rain tolerant and has smaller fruit size than 'Driscoll Agoura'.

When 'DrisStrawEight' is compared to the female parent 'Driscoll Ojai' (U.S. Plant Pat. No. 18,575), 'DrisStrawEight' begins fruiting two to four weeks earlier than 'Driscoll Ojai'. Additionally, the fruit of 'DrisStrawEight' is a lighter red and more conically shaped than the fruit of 'Driscoll Ojai'.

When compared to the commercial variety 'DrisStrawFour' (U.S. Plant Pat. No. 19,240), 'DrisStrawEight' has a shorter petiole (8.5 cm) and higher fruit production (529 grams per plant), while 'DrisStrawFour' has a longer petiole (11.2 cm) and lower fruit production (443 grams per plant).

I claim:

1. A new and distinct cultivar of strawberry plant, as described and shown herein.

* * * * *



FIG. 1

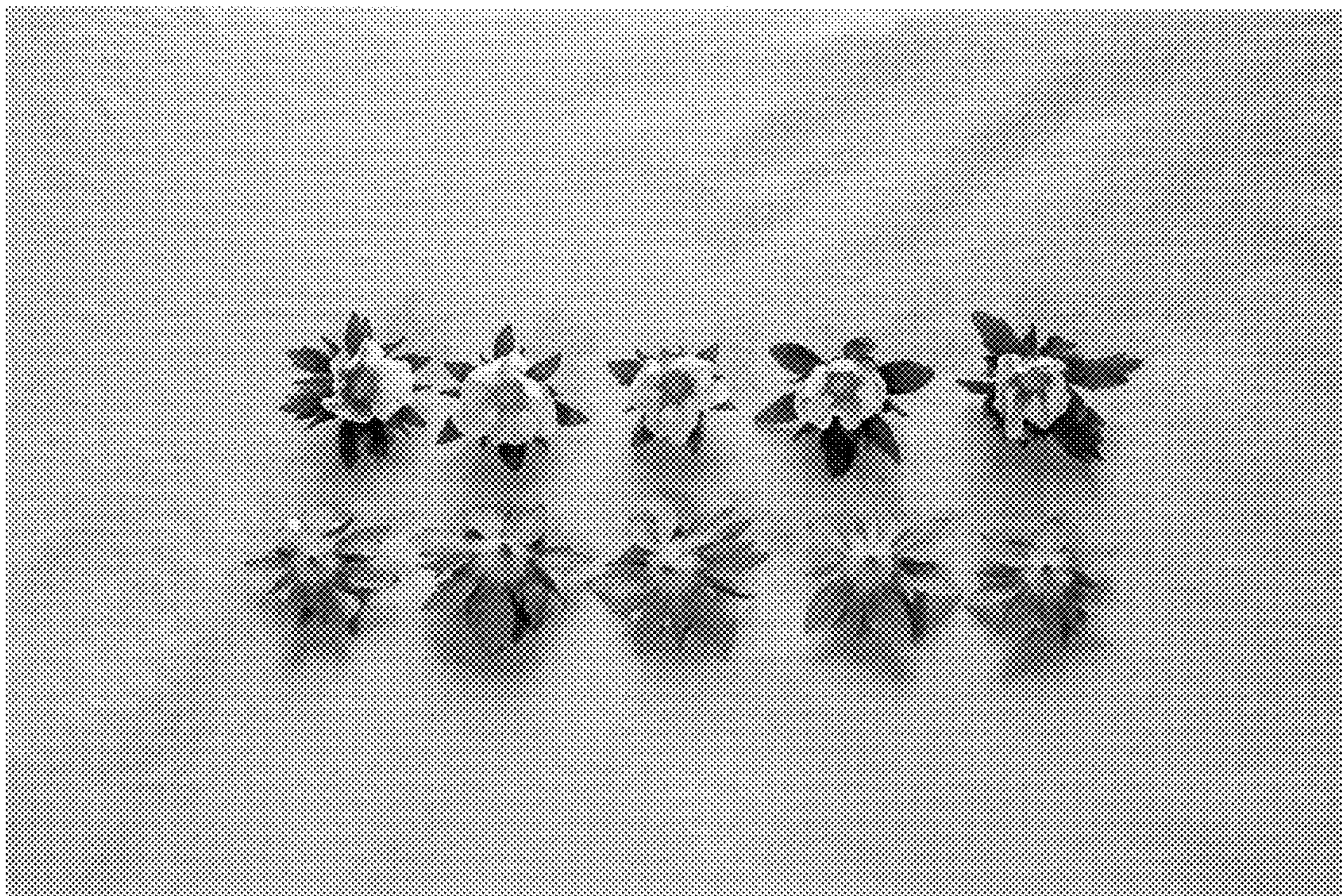


FIG. 2

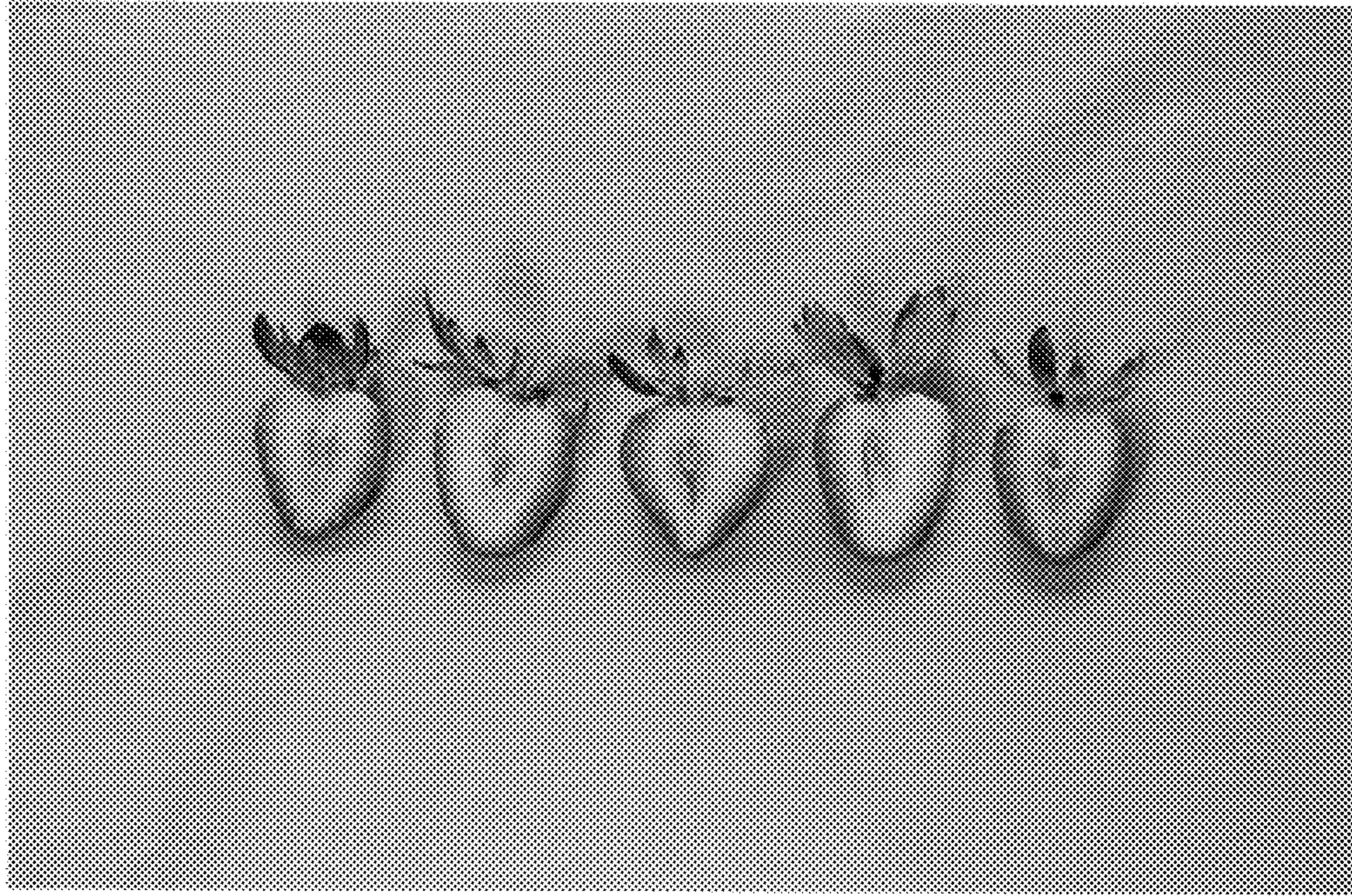


FIG. 3

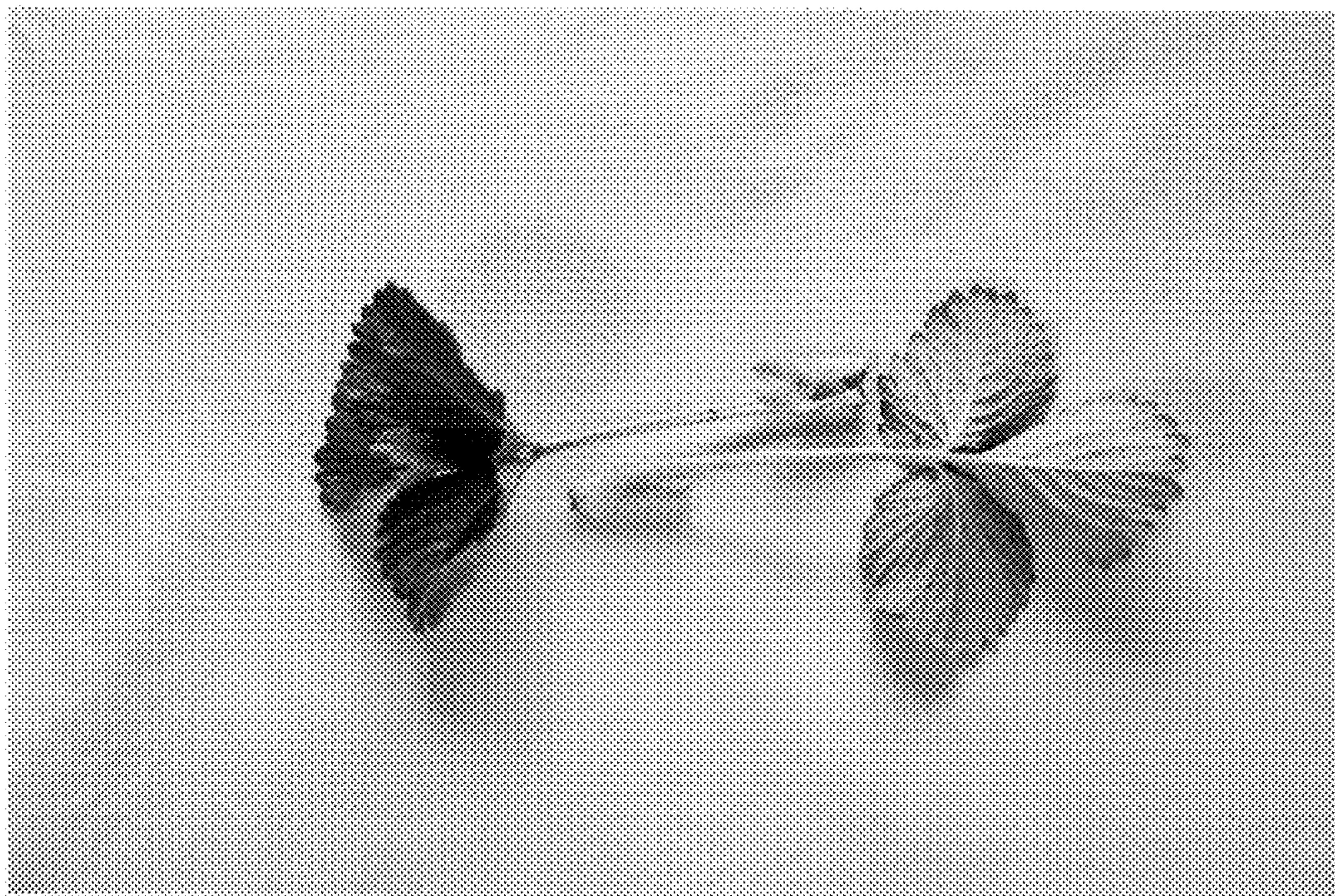


FIG. 4