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Carrillo Mendoza et al.

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- (54) **STRAWBERRY PLANT NAMED
‘DRISSTRAWSIXTYEIGHT’**
- (50) Latin Name: *Fragaria x ananassa*
Varietal Denomination: **DrisStrawSixtyEight**
- (71) Applicant: **Driscoll’s, Inc.**, Watsonville, CA (US)
- (72) Inventors: **Omar Carrillo Mendoza**, La Calera (MX); **Maribel Martinez Negrete**, Watsonville, CA (US); **Manuel Lopez**, Watsonville, CA (US); **Renae R. Robertson**, Santa Maria, CA (US)
- (73) Assignee: **Driscoll’s Inc.**, Watsonville, CA (US)
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CPC **A01H 6/7409** (2018.05)
- (58) **Field of Classification Search**
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See application file for complete search history.

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Primary Examiner — Anne Marie Grunberg
(74) Attorney, Agent, or Firm — Morrison & Foerster LLP

(57) **ABSTRACT**

A new and distinct variety of strawberry plant named ‘DrisStrawSixtyEight’, selected for its high relatively early and late yield, shipping capacity, fruit size, juicy, sweet, aromatic fruit, as well as mite and botrytis field tolerance, is disclosed.

5 Drawing Sheets

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STRAWBERRY PLANT NAMED 'DRISSTRAWSEXTYEIGHT'

Latin name:

Botanical classification: *Fragaria* x *ananassa*.

Varietal denomination: The varietal denomination of the claimed variety of strawberry plant is 'DrisStrawSixtyEight'.

BACKGROUND OF THE INVENTION

Cultivated strawberry is a hybrid species of the genus *Fragaria* that is grown worldwide for its fruit. Modern strawberry was first bred in Brittany, France, in the 18th century by crossing *Fragaria virginiana* with *Fragaria chiloensis*. Strawberry fruit is an aggregate accessory fruit, with the fleshy part of the fruit being derived from the receptacle that holds the ovaries.

Strawberry varieties vary widely in color, size, shape, flavor, season of ripening, degree of fertility, and susceptibility to disease. Certain varieties vary in foliage, and some vary in the relative development of their reproductive organs. Typically, strawberry flowers appear hermaphroditic in structure, but function as either male or female. Generally, commercial production of strawberry plants involves propagation from runners and distribution as either plugs or bare root plants. Cultivation is either perennial or annual plasticulture. During the off season, strawberries can also be produced in greenhouses.

Strawberry fruit is widely appreciated for its characteristic bright red color, aroma, juicy texture, and sweetness. Strawberry fruit is a popular fruit that is generally consumed either fresh or in prepared foods, such as preserves and baked goods.

Strawberry is an important and valuable fruit crop. Accordingly, there is a need for new varieties of strawberry plants. In particular, there is a need for improved varieties of strawberry plant that are stable, high yielding, and agronomically sound.

SUMMARY OF THE INVENTION

In order to meet these needs, the present invention is directed to an improved variety of strawberry plant. In particular, the invention relates to a new and distinct variety of strawberry plant (*Fragaria* x *ananassa*), which has been denominated as 'DrisStrawSixtyEight'.

Strawberry plant variety 'DrisStrawSixtyEight' originated from a cross between the female parent 'DrisStrawTwentySeven' (U.S. Plant Pat. No. 23,400) and the male parent 'DrisStrawThirtyThree' (U.S. Plant Pat. No. 24,533). Progeny plants from this cross, including 'DrisStrawSixtyEight', were asexually propagated via stolons in McArthur, Shasta County, Calif. in April of 2010. Strawberry plant variety 'DrisStrawSixtyEight' was later specifically identified and selected in Santa Maria, Calif. in November of 2010.

'DrisStrawSixtyEight' was subsequently asexually propagated via stolons, and underwent further testing at a farm in Tapalpa, Mexico for four years (2013 to 2017). The present variety has been found to be stable and reproduce true to type through successive asexual propagations via stolons.

'DrisStrawSixtyEight' exhibits the following distinguishing characteristics when grown under normal horticultural practices in Tapalpa, Mexico:

1. Inflorescence at the same level as foliage
2. Cordate fruit shape; and
3. Partially remontant type of bearing.

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'DrisStrawSixtyEight' was selected for its high relatively early and late yield, shipping capacity, fruit size, juicy, sweet, aromatic fruit, as well as mite and botrytis field tolerance.

DESCRIPTION OF THE DRAWINGS

This new strawberry plant is illustrated by the accompanying photographs which show fruit of the plant, flowers, leaves, and plants. The colors shown are as true as can be reasonably obtained by conventional photographic procedures. The photographs are of plants that are one year old.

FIG. 1 illustrates whole fruit of variety 'DrisStrawSixtyEight'.

FIG. 2 illustrates longitudinal sections of fruit of variety 'DrisStrawSixtyEight'.

FIG. 3 shows the upper and lower surfaces of flowers of variety 'DrisStrawSixtyEight'.

FIG. 4A shows the lower surface of a leaf of variety 'DrisStrawSixtyEight'. FIG. 4B shows the upper surface of a leaf of variety 'DrisStrawSixtyEight'.

FIG. 5 illustrates plants of variety 'DrisStrawSixtyEight'.

DETAILED BOTANICAL DESCRIPTION OF THE PLANT

The following detailed descriptions set forth the distinctive characteristics of 'DrisStrawSixtyEight'. The data which define these characteristics is based on observations taken in Tapalpa, Mexico from 2013 to 2017. This description is in accordance with UPOV terminology. Color designations, color descriptions, and other phenotypical descriptions may deviate from the stated values and descriptions depending upon variation in environmental, seasonal, climatic, and cultural conditions. 'DrisStrawSixtyEight' has not been observed under all possible environmental conditions. The botanical description of 'DrisStrawSixtyEight' was taken from plants that were one year old. The indicated values represent averages calculated from measurements of several plants. Color references are primarily to The R.H.S. Colour Chart of The Royal Horticultural Society of London (R.H.S.) (2007 edition). Descriptive terminology follows the *Plant Identification Terminology, An Illustrated Glossary*, 2nd edition by James G. Harris and Melinda Woolf Harris, unless where otherwise defined.

Classification:

Species.—*Fragaria* x *ananassa*.

Common name.—Strawberry.

Denomination.—'DrisStrawSixtyEight'.

Parentage:

Female parent.—The variety 'DrisStrawTwentySeven' (U.S. Plant Pat. No. 23,400).

Male parent.—The variety 'DrisStrawThirtyThree' (U.S. Plant Pat. No. 24,533).

Plant:

Height.—27.6 cm.

Diameter.—32.6 cm.

Number of crowns per plant.—5.2.

Growth habit.—Semi-upright.

Density of foliage.—Medium.

Vigor.—Medium.

Stolon:

Average number of daughter plants per square foot.—5.

Diameter at bract.—3.93 mm.

Anthocyanin coloration.—Weak.

Anthocyanin color.—RHS 42A (Vivid reddish orange).

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Stolon color.—RHS 138B (Moderate yellow-green).

Density of pubescence on the stolon.—Medium.

Leaf:

Number of leaflets.—Three only.

Color of upper surface.—RHS 139A (Dark yellowish green). 5

Color of lower surface.—RHS 147B (Moderate yellow-green).

Leaf blistering.—Strong.

Leaf glossiness.—Medium. 10

Variation.—Absent.

Terminal leaflets.—Length: 6.4 cm. Width: 5.1 cm. Length/width ratio: 1.2. Number of teeth/terminal leaflet: 19. Shape of base: Obtuse. Margin: Serrate to crenate. Shape in cross section: Concave. 15

Petiole.—Length: 11.7 cm. Diameter: 3.8 mm. Attitude of hairs: Slightly outwards. Bract frequency (number present on each petiole): 2. Petiole color: RHS 144C (Strong yellow-green).

Petiolule.—Length: 9.5 mm. Diameter: 3 mm. 20

Stipule.—Length: 1.61 cm. Width: 8.4 mm. Anthocyanin coloration: Absent or very weak. Anthocyanin color: RHS 144A (Strong yellow-green). Stipule color: RHS 155A (Pale yellow-green).

Inflorescence:

Position in relation to foliage.—Same level. 25

Pedicel.—Attitude of hairs: Slightly outwards. Pedicel color: RHS 144C (Strong yellow-green).

Flower.—Flower diameter (petal tip to petal tip on non-flattened flower): 37.9 mm. Arrangement of petals: Overlapping. Stamen: Present. Stamen length: 5 mm. Stamen width: 0.2 mm. Stamen shape: Elongated conic. Stamen color: RHS 145C (Light yellow-green). Number of stamens per flower: 22. Anther color: RHS 13B (Brilliant yellow). Typical and observed number of flowers per plant: 7.8. 30

Petal.—Length: 18.8 mm. Width: 17.6 mm. Length/width ratio: 1.1. Typical and observed petal number: 7.4. Color of upper side: RHS 155C (Greenish white). Color of lower side: RHS 155C (Greenish white). 40

Calyx.—Diameter (sepal tip to sepal tip, measured on back of flower): 44.4 mm. Calyx color: RHS 141B (Deep yellowish green).

Sepal.—Length (sepal tip to point of attachment to receptacle): 19.8 mm. Width: 8.8 mm. Typical and observed sepal number: 13. 45

Fruit:

Length.—50.4 mm.

Width.—42.4 mm. 50

Length/width ratio.—1.2.

Fruit hollow length.—22.9 mm.

Fruit hollow width.—11 mm.

Fruit hollow length/width ratio.—2.1.

Shape.—Cordate.

Differences in shape between primary and secondary fruit.—Slight. 55

Color.—RHS 45A (Vivid red).

Evenness of fruit color.—Slightly uneven.

Fruit glossiness.—Medium.

Width of band without achenes.—Medium. 60

Fruit firmness.—Firm.

Position of achenes.—Level with surface.

Achene color.—RHS 143C (Strong yellow-green).

Number of achenes per fruit.—368. 65

Achene weight.—80 mg.

Peduncle length.—22 cm.

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Peduncle diameter.—2.1 mm.

Number of fruit per truss.—10.

Position of calyx attachment.—Level with fruit.

Attitude of sepals.—Outwards.

Color of flesh (excluding core).—RHS 36A (Light yellowish pink).

Color of core.—RHS 34A (Vivid reddish orange).

Titrate acidity (as citric acid in percentage).—0.3%.

Sugar content (as soluble solids in degrees brix).—7.8°.

Production:

Flowering interval.—Late September to late April.

Harvest interval.—Mid-October.

Type of bearing.—Partially remontant.

Productivity.—41,278 kg to 36,916 kg of fruit per hectare per season from ten-month-old plants when grown in Tapalpa, Mexico.

Resistance to diseases, pests, and abiotic stress:

Two-spotted spider mite (tetranychus urticae).—Moderately susceptible.

Botrytis fruit rot (botrytis cinerea).—Moderately susceptible.

Powdery mildew (podosphaera macularis).—Moderately resistant. 25

COMPARISON WITH PARENTAL AND COMMERCIAL VARIETIES

‘DrisStrawSixtyEight’ differs from the female parent ‘DrisStrawTwentySeven’ (U.S. Plant Pat. No. 23,400) in that ‘DrisStrawSixtyEight’ has sweeter and juicier fruit and higher yield compared to ‘DrisStrawTwentySeven’. Additionally, ‘DrisStrawSixtyEight’ differs from ‘DrisStrawTwentySeven’ in that ‘DrisStrawSixtyEight’ has inflorescence at the same level as foliage, a weak anthocyanin coloration on stolons, a cordate fruit shape, and a partially remontant type of bearing, while ‘DrisStrawTwentySeven’ has inflorescence above foliage, a strong anthocyanin coloration on stolons, a conical fruit shape, and a not remontant type of bearing.

‘DrisStrawSixtyEight’ differs from the male parent ‘DrisStrawThirtyThree’ (U.S. Plant Pat. No. 24,533) in that ‘DrisStrawSixtyEight’ has inflorescence at the same level as foliage, an obtuse shape of base of terminal leaflet, a cordate fruit shape, and a partially remontant type of bearing, while ‘DrisStrawThirtyThree’ has inflorescence above foliage, an acute shape of base of terminal leaflet, a conical fruit shape, and a not remontant type of bearing. 50

‘DrisStrawSixtyEight’ differs from the commercial variety ‘Driscoll El Dorado’ (U.S. Plant Pat. No. 16,238) in that ‘DrisStrawSixtyEight’ has inflorescence at the same level as foliage, an obtuse shape of base of terminal leaflet, a weak anthocyanin coloration on stolons, and a level with the surface insertion of achenes on fruit, while ‘Driscoll El Dorado’ has inflorescence above foliage, a rounded shape of base of terminal leaflet, a medium anthocyanin coloration on stolons, and a below the surface insertion of achenes on fruit. 55

‘DrisStrawSixtyEight’ differs from the commercial variety ‘DrisStrawSixtyTwo’ (U.S. Plant Pat. No. 31,527) in that ‘DrisStrawSixtyEight’ has a semi-upright plant growth habit, a serrate to crenate terminal leaflet margin, a cordate fruit shape, and an outwards attitude of sepals on fruit, whereas ‘DrisStrawSixtyTwo’ has a spreading plant growth habit, a crenate terminal leaflet margin, a cylindrical fruit shape, and an upwards attitude of sepals on fruit. 60 65

We claim:

1. A new and distinct variety of strawberry plant named
'DrisStrawSixtyEight' as shown and described herein.

* * * * *

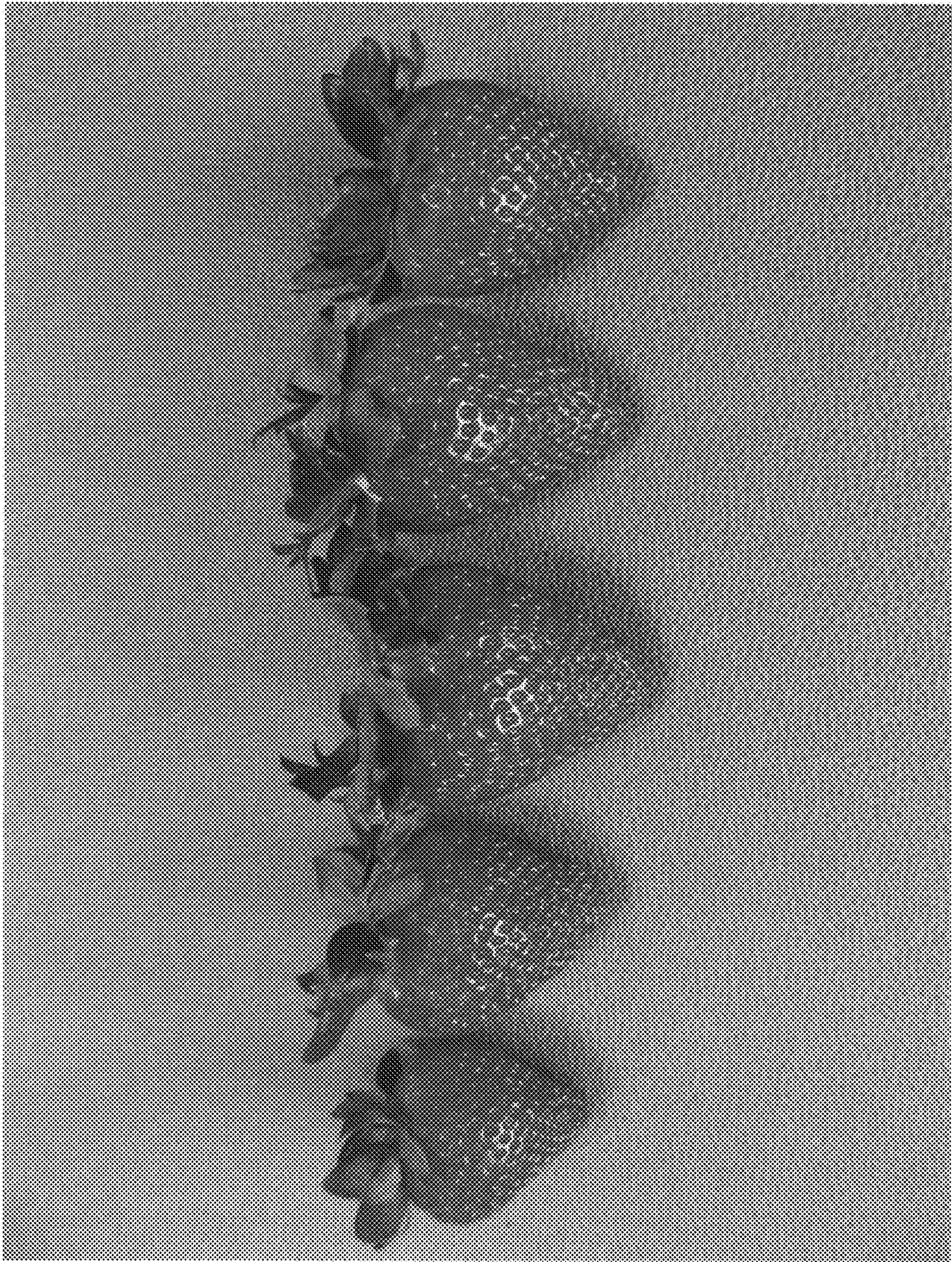


FIG. 1

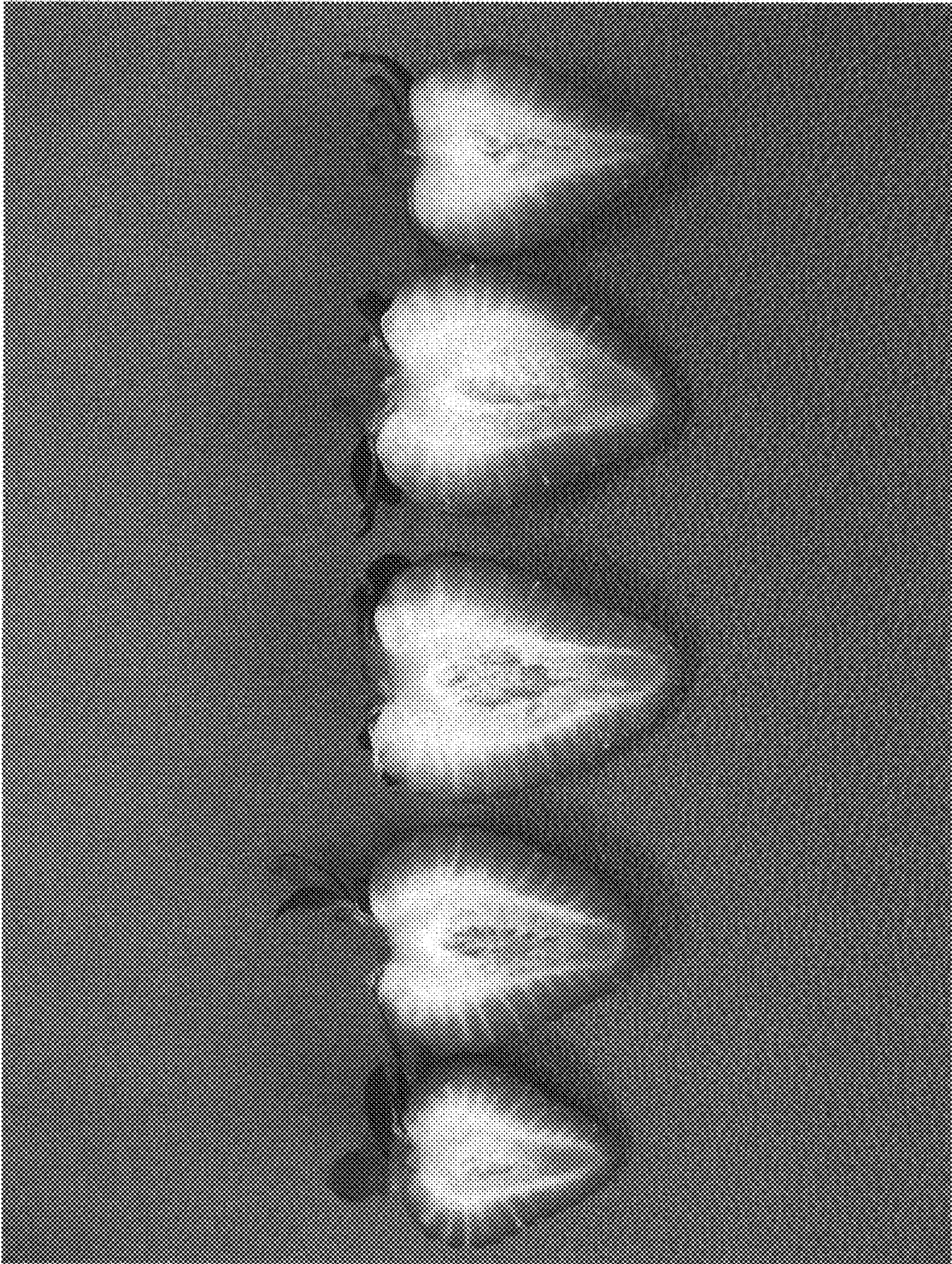


FIG. 2

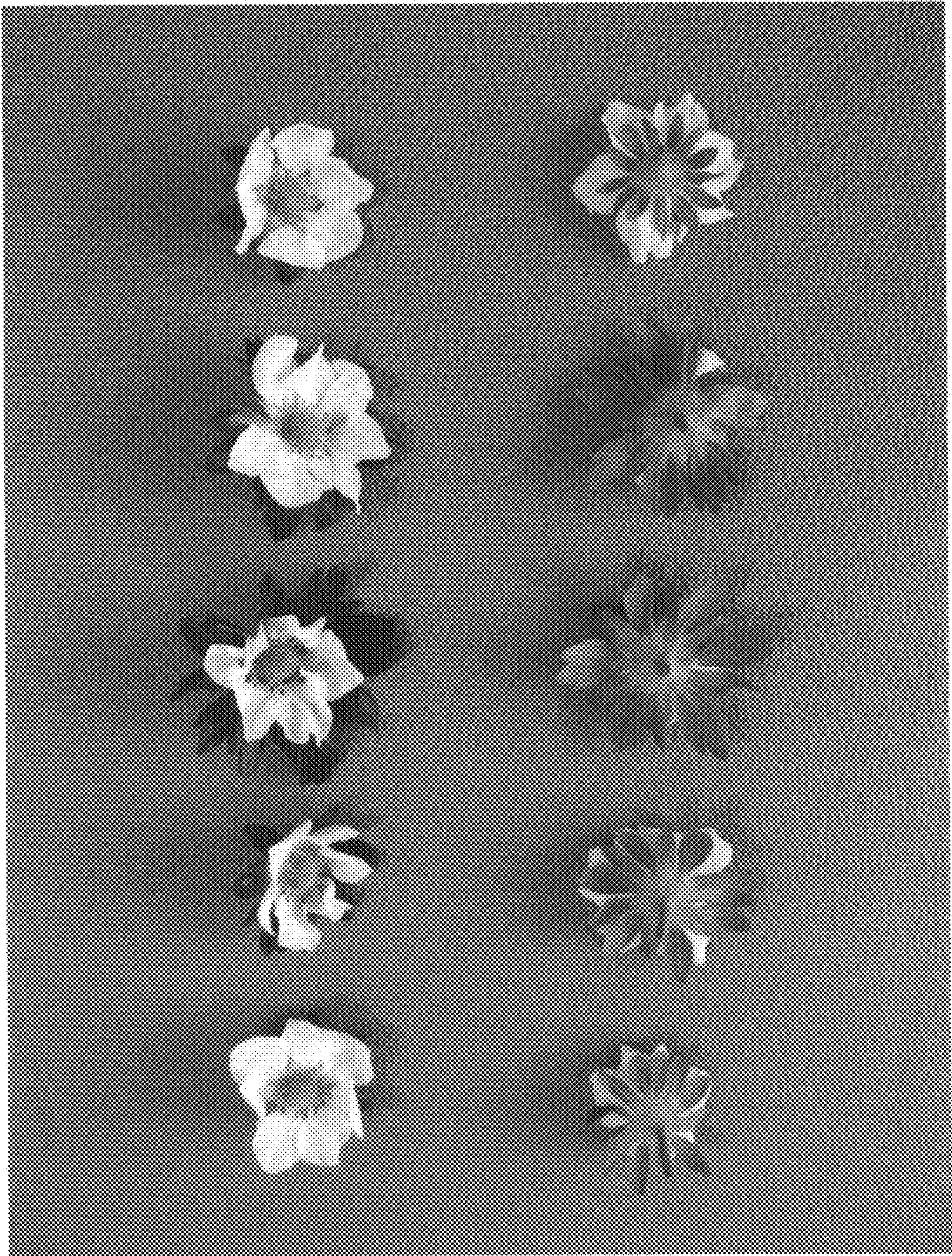


FIG. 3

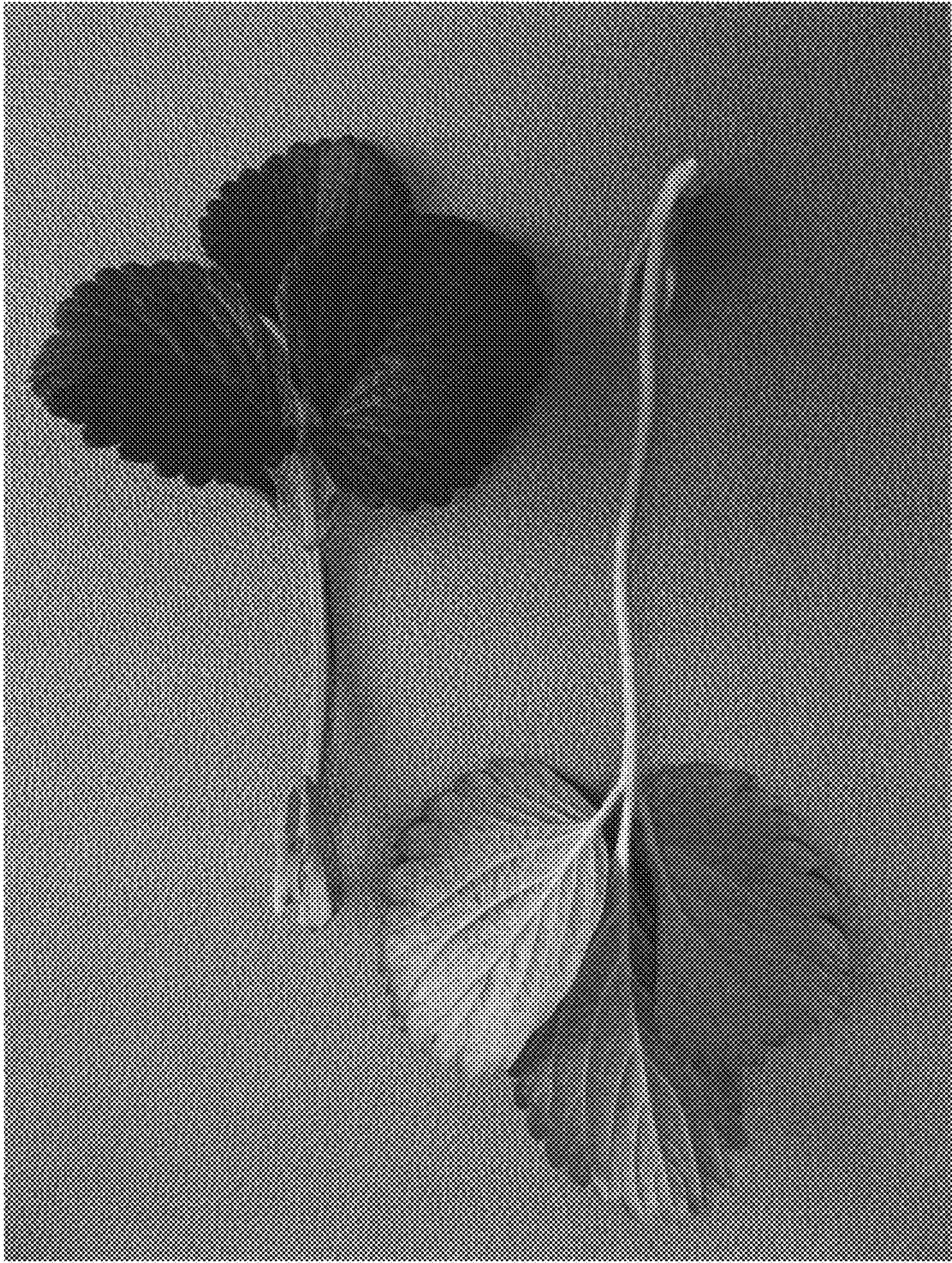


FIG. 4A

FIG. 4B

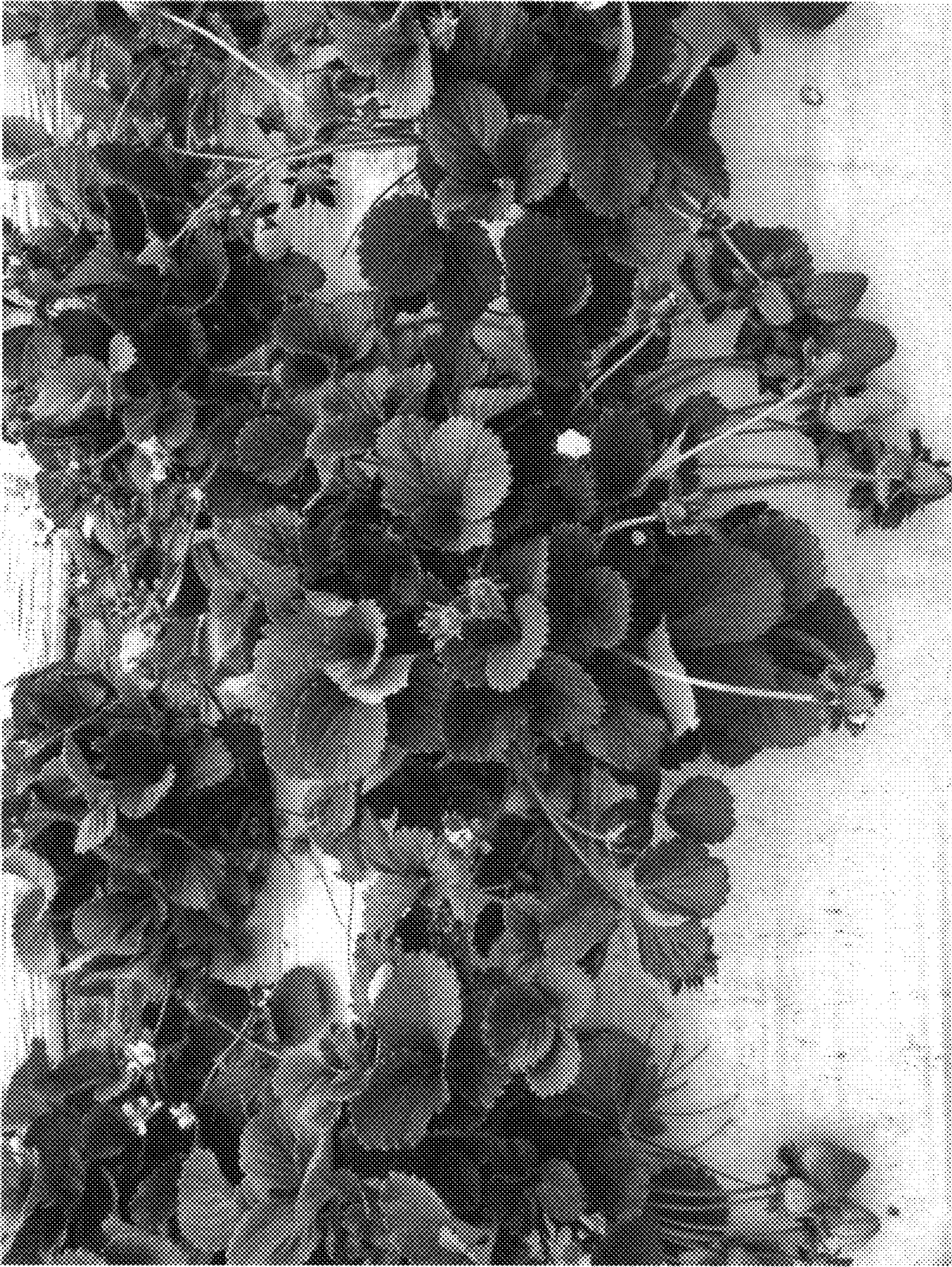


FIG. 5