



(12) **United States Plant Patent**
Carrillo Mendoza et al.

(10) **Patent No.:** **US PP30,775 P2**
(45) **Date of Patent:** **Aug. 6, 2019**

- (54) **STRAWBERRY PLANT NAMED
‘DRISSTRAWSIXTYONE’**
- (50) Latin Name: *Fragaria x ananassa*
Varietal Denomination: **DrisStrawSixtyOne**
- (71) Applicant: **Driscoll’s, Inc.**, Watsonville, CA (US)
- (72) Inventors: **Omar Carrillo Mendoza**, La Calera (MX); **Jorge Rodriguez Alcazar**, Texcoco (MX); **Philip J. Stewart**, Watsonville, CA (US); **Maribel Martinez Negrete**, Watsonville, CA (US)
- (73) Assignee: **Driscoll’s, 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.: **15/998,020**
- (22) Filed: **Jun. 12, 2018**
- (51) **Int. Cl.**
A01H 5/08 (2018.01)
A01H 6/74 (2018.01)
- (52) **U.S. Cl.**
USPC **Plt./208**
CPC *A01H 6/7409* (2018.05)
- (58) **Field of Classification Search**
USPC Plt./208
CPC *A01H 6/7409*; *A01H 5/08*
See application file for complete search history.
- (56) **References Cited**

U.S. PATENT DOCUMENTS

PP1,745 P 8/1958 Lang
PP3,981 P 11/1976 Bringhurst et al.
PP4,487 P 11/1979 Bringhurst et al.
PP4,538 P 5/1980 Bringhurst et al.
PP5,262 P 7/1984 Voth et al.
PP5,265 P 7/1984 Voth et al.
PP5,266 P 7/1984 Bringhurst et al.
PP5,300 P 10/1984 Johnson, Jr.
PP5,480 P 5/1985 Nakagawa
PP5,840 P 12/1986 Johnson, Jr. et al.
PP6,191 P 5/1988 Johnson, Jr. et al.
PP6,231 P 7/1988 Johnson, Jr. et al.
PP6,578 P 1/1989 Voth et al.
PP6,579 P 1/1989 Bringhurst et al.
PP7,024 P 9/1989 Johnson, Jr. et al.
PP7,172 P 2/1990 Voth et al.
PP7,522 P 5/1991 Johnson, Jr. et al.
PP7,614 P 8/1991 Bringhurst et al.
PP7,615 P 8/1991 Bringhurst et al.
PP8,086 P 1/1993 Nelson et al.
PP8,205 P 4/1993 Nelson et al.
PP8,649 P 3/1994 Sjulín et al.
PP8,661 P 3/1994 Bringhurst et al.
PP8,708 P 5/1994 Voth et al.
PP8,745 P 5/1994 Sjulín et al.
PP9,130 P 5/1995 Sjulín et al.
PP9,909 P 6/1997 Ackerman et al.

PP10,221 P 2/1998 Sjulín et al.
PP10,534 P 8/1998 Sjulín et al.
PP10,642 P 10/1998 Amorao et al.
PP11,035 P 8/1999 Mowrey et al.
PP11,277 P 3/2000 Gilford et al.
PP11,279 P 3/2000 Gilford et al.
PP11,522 P 9/2000 Amorao et al.
PP11,548 P 10/2000 Amorao et al.
PP11,554 P 10/2000 Sjulín et al.
PP11,639 P 11/2000 Mowrey et al.
PP12,186 P2 11/2001 Gilford et al.
PP12,436 P2 3/2002 Amorao et al.
PP12,577 P2 4/2002 Amorao et al.
PP12,817 P2 7/2002 Gilford et al.
PP12,889 P2 8/2002 Lamb et al.
PP12,899 P2 9/2002 Mowrey et al.
PP13,386 P2 12/2002 Mowrey et al.
PP13,469 P3 1/2003 Larson et al.
PP14,005 P3 7/2003 Amorao et al.
PP14,062 P3 8/2003 Amorao et al.
PP14,109 P3 8/2003 Gilford et al.
PP14,771 P3 5/2004 Amorao et al.
PP15,145 P2 9/2004 Mowrey et al.
PP15,308 P2 11/2004 Sjulín et al.
PP15,375 P2 11/2004 Mowrey et al.
PP15,435 P2 12/2004 Sjulín et al.
PP15,596 P2 3/2005 Amorao et al.
PP15,731 P2 4/2005 Amorao et al.
PP15,752 P2 5/2005 Gilford et al.
PP16,070 P2 10/2005 Gilford et al.
PP16,238 P2 2/2006 Amorao et al.
PP16,241 P2 2/2006 Mowrey et al.
PP16,298 P2 2/2006 Gilford et al.
PP16,299 P2 2/2006 Gilford et al.
PP16,475 P2 4/2006 Gilford et al.
PP16,558 P3 5/2006 López
PP18,000 P2 9/2007 Meulenbroek
PP18,040 P3 9/2007 Mowrey et al.
PP18,041 P3 9/2007 Gilford
PP18,458 P2 1/2008 Ferguson et al.
PP18,575 P3 3/2008 Amorao et al.
PP18,878 P2 6/2008 Mowrey et al.
PP19,240 P2 9/2008 Gilford et al.
PP19,673 P3 2/2009 Ferguson et al.
PP19,767 P2 2/2009 Shaw et al.
PP20,248 P3 9/2009 Rogers et al.
PP20,701 P2 2/2010 Gilford et al.

(Continued)

OTHER PUBLICATIONS

Fear et al., Unpublished U.S. Appl. No. 15/998,014, filed Jun. 11, 2018, titled “Strawberry Plant Variety Named ‘DrisStrawFiftyEight’”.

(Continued)

Primary Examiner — Keith O. Robinson

(74) Attorney, Agent, or Firm — Morrison & Foerster LLP

(57) **ABSTRACT**

A new and distinct variety of strawberry plant named ‘DrisStrawSixtyOne’ particularly characterized by its firm fruit, large fruit size, medium vivid red fruit color, sweet fruit flavor, upright growth habit, and medium vigor, is disclosed.

5 Drawing Sheets

(56)

References Cited

U.S. PATENT DOCUMENTS

PP20,731 P2 2/2010 Mowrey et al.
PP20,733 P2 2/2010 Mowrey et al.
PP20,735 P2 2/2010 Ferguson
PP20,775 P2 2/2010 Mowrey et al.
PP20,922 P2 4/2010 Gilford et al.
PP21,538 P2 11/2010 Gilford et al.
PP21,559 P2 12/2010 Ferguson et al.
PP21,762 P2 3/2011 Stewart et al.
PP22,040 P3 7/2011 Stewart et al.
PP22,218 P2 11/2011 Ferguson
PP22,247 P2 11/2011 Ferguson
PP23,107 P2 10/2012 Ferguson et al.
PP23,148 P2 10/2012 Gilford et al.
PP23,377 P2 2/2013 Ferguson et al.
PP23,378 P2 2/2013 Pullen et al.
PP23,382 P2 2/2013 Ferguson et al.
PP23,383 P2 2/2013 Ferguson et al.
PP23,400 P2 2/2013 Ferguson et al.
PP23,401 P2 2/2013 Pullen et al.
PP23,459 P2 3/2013 Stewart et al.
PP23,506 P3 4/2013 Ferguson et al.
PP23,517 P3 4/2013 Ferguson et al.
PP24,096 P3 12/2013 Fear et al.
PP24,317 P3 3/2014 Ferguson et al.
PP24,333 P3 3/2014 Vitten et al.
PP24,395 P3 4/2014 Vitten et al.
PP24,533 P3 6/2014 Ferguson et al.
PP24,745 P2 8/2014 Vitten et al.
PP25,408 P3 4/2015 Vitten et al.
PP25,437 P3 4/2015 Vitten et al.
PP25,698 P3 7/2015 Ferguson et al.
PP25,699 P3 7/2015 Stewart et al.
PP25,747 P3 7/2015 Kibbe et al.
PP25,866 P3 9/2015 Ferguson et al.
PP26,800 P3 6/2016 Stewart et al.

PP26,801 P3 6/2016 Stewart et al.
PP26,802 P3 6/2016 Rodriguez Alcazar et al.
PP27,442 P2 12/2016 Kibbe et al.
PP27,645 P3 2/2017 Vitten et al.
PP27,682 P3 2/2017 Kibbe et al.
PP27,711 P3 2/2017 Vitten et al.
PP27,813 P3 3/2017 Ferguson et al.
PP29,289 P3 5/2018 Vitten et al.
2003/0079263 P1 4/2003 Gilford et al.
2013/0276182 P1 10/2013 Fear et al.

OTHER PUBLICATIONS

Ferguson et al., Unpublished U.S. Appl. No. 15/731,546, filed Jun. 26, 2017, titled "Strawberry Plant Variety Named 'DrisStrawFiftySix'".
Kibbe et al., Unpublished U.S. Appl. No. 15/731,542, filed Jun. 26, 2017, titled "Strawberry Plant Variety Named 'DrisStrawFiftyTwo'".
Kibbe et al., Unpublished U.S. Appl. No. 15/731,545, filed Jun. 26, 2017, titled "Strawberry Plant Variety Named 'DrisStrawFiftyOne'".
Pakozdi et al., Unpublished U.S. Appl. No. 15/998,015, filed Jun. 11, 2018, titled "Strawberry Plant Variety Named 'DrisStrawFiftyNine'".
Pakozdi et al., Unpublished U.S. Appl. No. 15/998,028, filed Jun. 14, 2018, titled "Strawberry Plant Variety Named 'DrisStrawsixtyFive'".
Stewart et al., Unpublished U.S. Appl. No. 15/731,415, filed Jun. 6, 2017, titled "Strawberry Plant Variety Named 'DrisStrawFiftyThree'".
Stewart et al., Unpublished U.S. Appl. No. 15/731,421, filed Jun. 6, 2017, titled "Strawberry Plant Variety Named 'DrisStrawFiftySeven'".
Stewart et al., Unpublished U.S. Appl. No. 15/998,031, filed Jun. 14, 2018, titled "Strawberry Plant Variety Named 'DrisStrawSixtyfour'".
Vitten et al., Unpublished U.S. Appl. No. 15/731,559, filed Jun. 27, 2017, titled "Strawberry Plant Variety Named 'DrisStrawFiftyFour'".
Vitten et al., Unpublished U.S. Appl. No. 15/731,560, filed Jun. 27, 2017, titled "Strawberry Plant Variety Named 'DrisStrawfiftyFive'".

STRAWBERRY PLANT NAMED 'DRISSTRAWSIXTYONE'

Latin name:

Botanical classification: *Fragaria* x *ananassa*.

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

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 economically 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 'DrisStrawSixtyOne'.

Strawberry plant variety 'DrisStrawSixtyOne' was discovered in Tangancicuaro, Mexico in October of 2012, and originated from a cross between the proprietary female parent '107P238' (unpatented) and the proprietary male parent 'DrisStrawSeventeen' (U.S. Plant Pat. No. 22,218). A single plant was selected and asexually propagated via stolons in Zapotlan, Mexico.

'DrisStrawSixtyOne' was subsequently asexually propagated via stolons, and underwent further testing at a farm in Tangancicuaro, Mexico for six years (2012 to 2017). The present variety has been found to be stable and reproduce true to type through successive asexual propagations via stolons.

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

1. Large plant size;
2. Large fruit with sweet flavor; and
3. Earlier production.

'DrisStrawSixtyOne' was selected for its flavor, fruit size, and shelf-life.

DESCRIPTION OF THE DRAWINGS

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

FIG. 1A illustrates whole fruit of variety 'DrisStrawSixtyOne'.

FIG. 1B illustrates longitudinal cross-sections of fruit of variety 'DrisStrawSixtyOne'.

FIG. 2 illustrates the upper and lower surfaces of flowers of variety 'DrisStrawSixtyOne'.

FIG. 3A shows the upper surface of a leaf of variety 'DrisStrawSixtyOne'.

FIG. 3B shows the lower surface of a leaf of variety 'DrisStrawSixtyOne'.

FIG. 4 illustrates the overall plant habit including fruit at various stages of development of variety 'DrisStrawSixtyOne'.

DESCRIPTION OF THE NEW VARIETY

The following detailed descriptions set forth the distinctive characteristics of 'DrisStrawSixtyOne'. The data which define these characteristics is based on observations taken in Tangancicuaro, Mexico from 2012 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. 'DrisStrawSixtyOne' has not been observed under all possible environmental conditions. The botanical description of 'DrisStrawSixtyOne' was taken from plants that were five months 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.

DETAILED BOTANICAL DESCRIPTION OF THE PLANT

Classification:

Species.—*Fragaria* x *ananassa*.

Common name.—Strawberry.

Denomination.—'DrisStrawSixtyOne'.

Parentage:

Female parent.—The proprietary variety '107P238' (unpatented).

Male parent.—The proprietary variety 'DrisStrawSeventeen' (U.S. Plant Pat. No. 22,218).

Plant:

Height.—20.7 cm.

Diameter.—33.7 cm.

Number of crowns per plant.—6.

Growth habit.—Upright.

Stolon:

Average number of daughter plants per square foot.—12.

3

Diameter at bract.—3.47 mm.

Anthocyanin coloration.—Present.

Anthocyanin color.—RHS 180B (Moderate red).

Leaf:

Number of leaflets.—Three only.

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

Variation.—Absent.

Terminal leaflets.—Length: 8.8 cm. Width: 7.8 cm. Length/width ratio: 1.1. Number of teeth/terminal leaflet: 22. Shape of base: Rounded. Margin: Serrate to crenate. Shape in cross section: Concave.

Petiole.—Length: 15.7 cm. Diameter: 4.38 mm. Attitude of hairs: Upwards. Bract frequency (number present on each petiole): 1.

Petiolule.—Length: 9.80 mm. Diameter: 2.31 mm.

Stipule.—Length: 4.5 cm. Width: 18.80 mm. Anthocyanin coloration: Present. Anthocyanin color: RHS 58C (Strong purplish red).

Inflorescence:

Position in relation to foliage.—Beneath.

Pedicel.—Attitude of hairs: Upwards.

Flower.—Flower diameter (petal tip to petal tip on non-flattened flower): 26.30 mm. Arrangement of petals: Overlapping. Stamen: Present. Typical and observed number of flowers per plant: 18.90.

Petal.—Length: 15.60 mm. Width: 15.30 mm. Length/width ratio: 1.0. Typical and observed petal number: 6. Color of upper side: RHS 155A (Pale yellow-green).

Calyx.—Diameter (sepal tip to sepal tip, measured on back of flower): 56.20 mm.

Sepal.—Length (sepal tip to point of attachment to receptacle): 26.50 mm. Width: 16.60 mm. Typical and observed sepal number: 12.

Fruit:

Length.—49.70 mm.

Width.—33.36 mm.

Length/width ratio.—1.5.

Fruit hollow length.—16.00 mm.

Fruit hollow width.—3.60 mm.

Fruit hollow length/width ratio.—4.4.

Shape.—Conical.

Color.—RHS 45A (Vivid red).

Position of achenes.—Above surface.

Position of calyx attachment.—Level with fruit.

Attitude of sepals.—Outwards.

Color of flesh (excluding core).—RHS 42A (Vivid reddish orange).

Color of core.—RHS 37A (Strong yellowish pink).

Production:

Flowering interval.—October to March.

Harvest interval.—October to March.

Type of bearing.—Partially everbearing to partially remontant.

4

Productivity.—30997 kg to 40893 kg of fruit per hectare per season from ten-month-old plants when grown in Tangancicuaro, Mexico.

Resistance to abiotic stress, pests and diseases:

Heat.—Moderately resistant.

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

Lygus bug (lygus hesperus).—Susceptible.

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

Powdery mildew (podosphaera macularis).—Moderately resistant.

Xanthomonas fragariae.—Moderately susceptible.

Black root rot.—Moderately susceptible.

COMPARISON WITH PARENTAL AND
COMMERCIAL VARIETIES

‘DrisStrawSixtyOne’ differs from the proprietary female parent ‘107P238’ (unpatented) in that ‘107P238’ is a short-day variety, whereas ‘DrisStrawSixtyOne’ is not a short-day variety. Moreover, fruit ‘107P238’ is sweeter than fruit of ‘DrisStrawSixtyOne’.

‘DrisStrawSixtyOne’ differs from the proprietary male parent ‘DrisStrawSeventeen’ (U.S. Plant Pat. No. 22,218) in that plants of ‘DrisStrawSixtyOne’ are larger in size compared to plants of ‘DrisStrawSeventeen’. Additionally, fruit of ‘DrisStrawSixtyOne’ are larger and have a sweeter flavor compared to fruit of ‘DrisStrawSeventeen’. Moreover, fruit production of ‘DrisStrawSixtyOne’ is earlier than that of ‘DrisStrawSeventeen’.

‘DrisStrawSixtyOne’ differs from the commercial variety ‘Driscoll Osceola’ (U.S. Plant Pat. No. 15,752) in that leaves of ‘DrisStrawSixtyOne’ are blue-green on the upper side, while leaves of ‘Driscoll Osceola’ are medium green on the upper side. Additionally, plants of ‘DrisStrawSixtyOne’ have inflorescence beneath foliage, while plants of ‘Driscoll Osceola’ have inflorescence on the same level with foliage. Moreover, fruit of ‘DrisStrawSixtyOne’ are medium red, while fruit of ‘Driscoll Osceola’ are dark red.

‘DrisStrawSixtyOne’ differs from the commercial variety ‘DrisStrawThirtySeven’ (U.S. Plant Pat. No. 25,866) in that plants of ‘DrisStrawSixtyOne’ have an upright growth habit, while plants of ‘DrisStrawThirtySeven’ have a semi-upright growth habit. Additionally, terminal leaflets of ‘DrisStrawSixtyOne’ have a concave shape in cross section, while terminal leaflets of ‘DrisStrawThirtySeven’ have a convex shape in cross section. Moreover, fruit of ‘DrisStrawSixtyOne’ are larger in size than fruit of ‘DrisStrawThirtySeven’.

We claim:

1. A new and distinct variety of strawberry plant named ‘DrisStrawSixtyOne’ as shown and described herein.

* * * * *

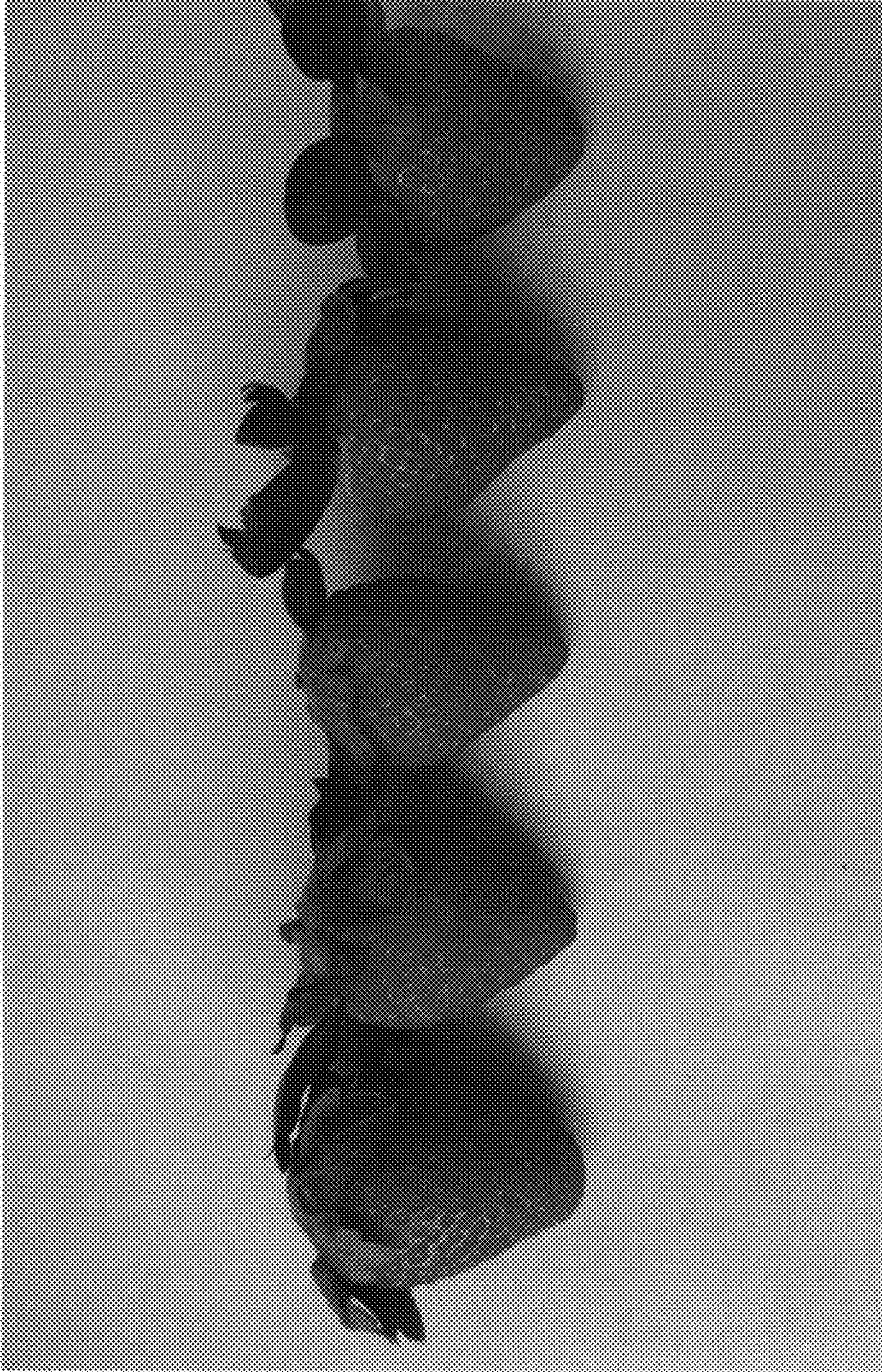


FIG. 1A

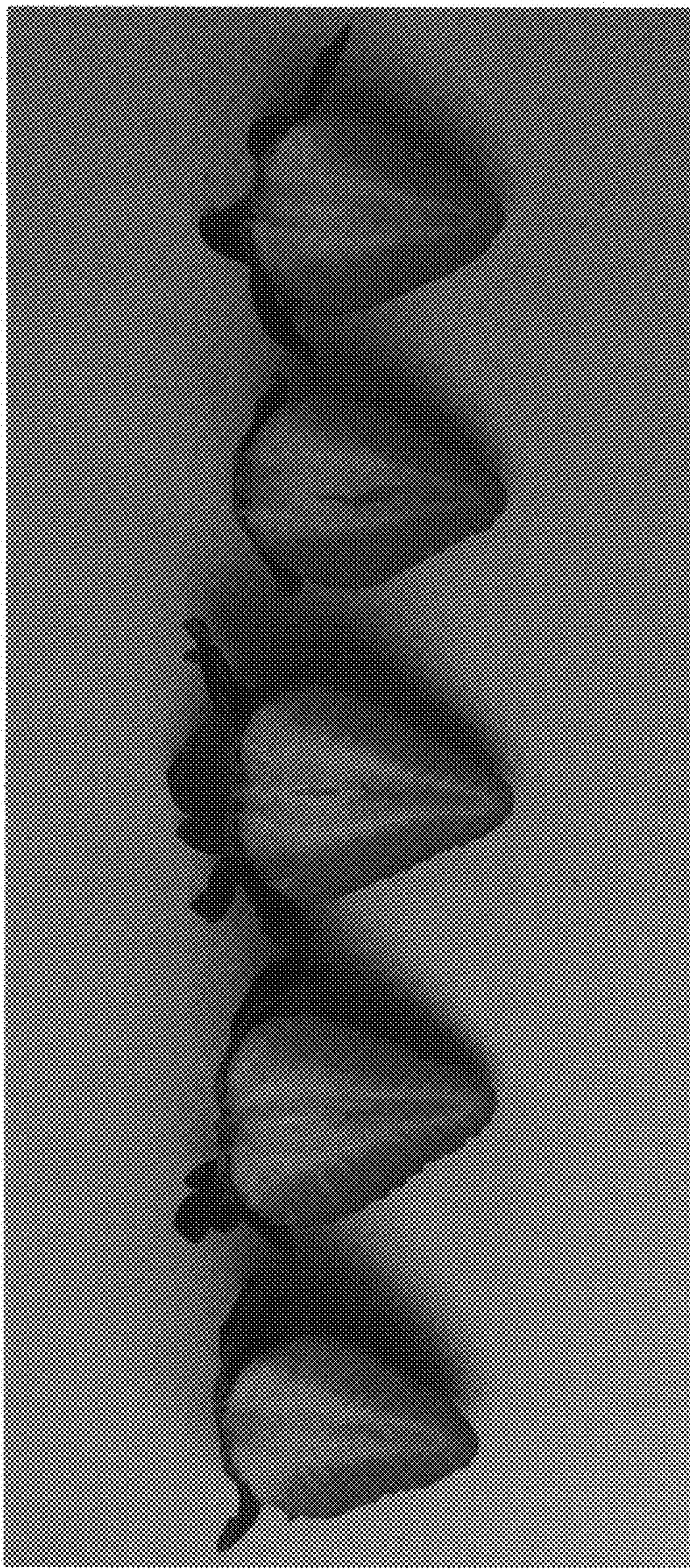


FIG. 1B

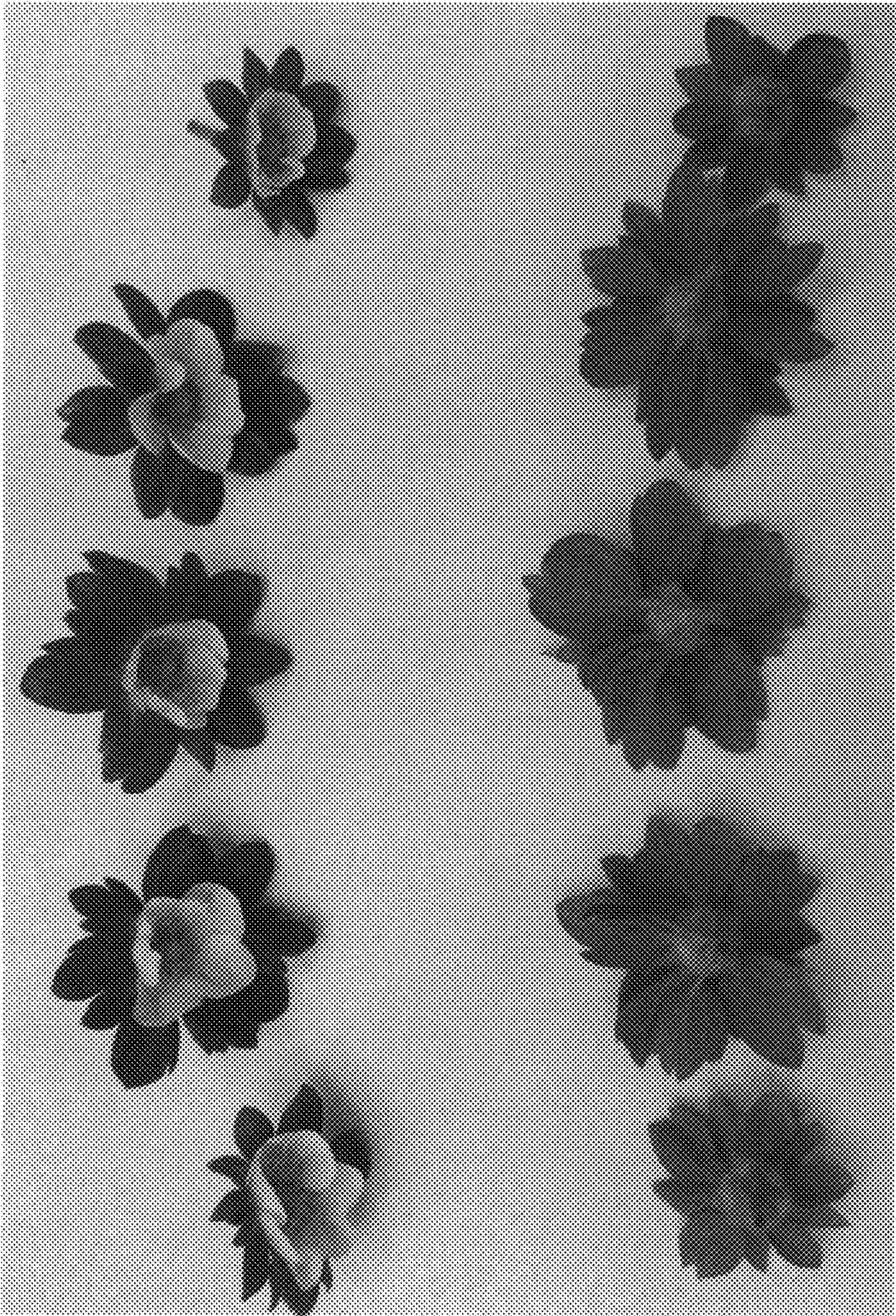


FIG. 2

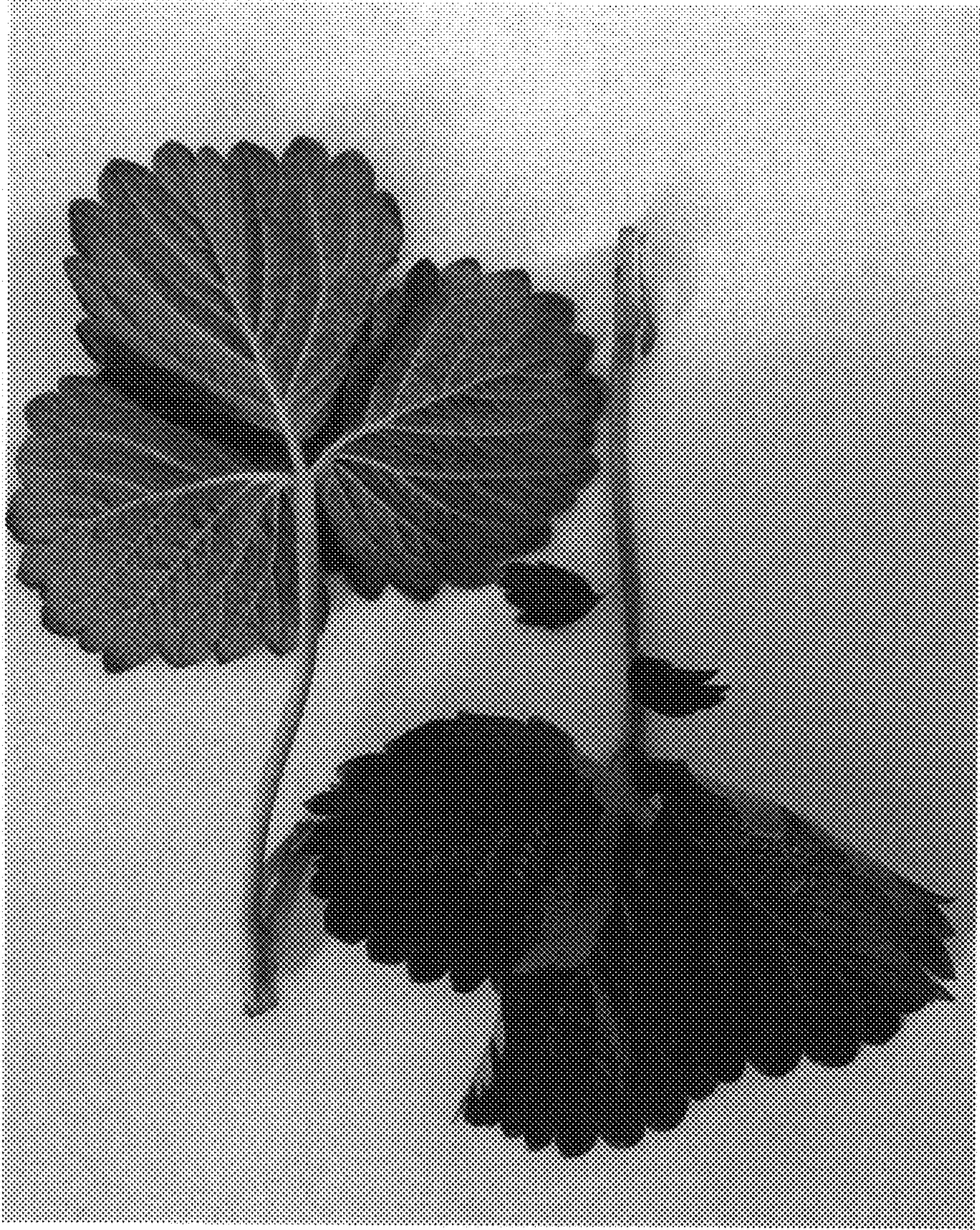


FIG. 3B

FIG. 3A

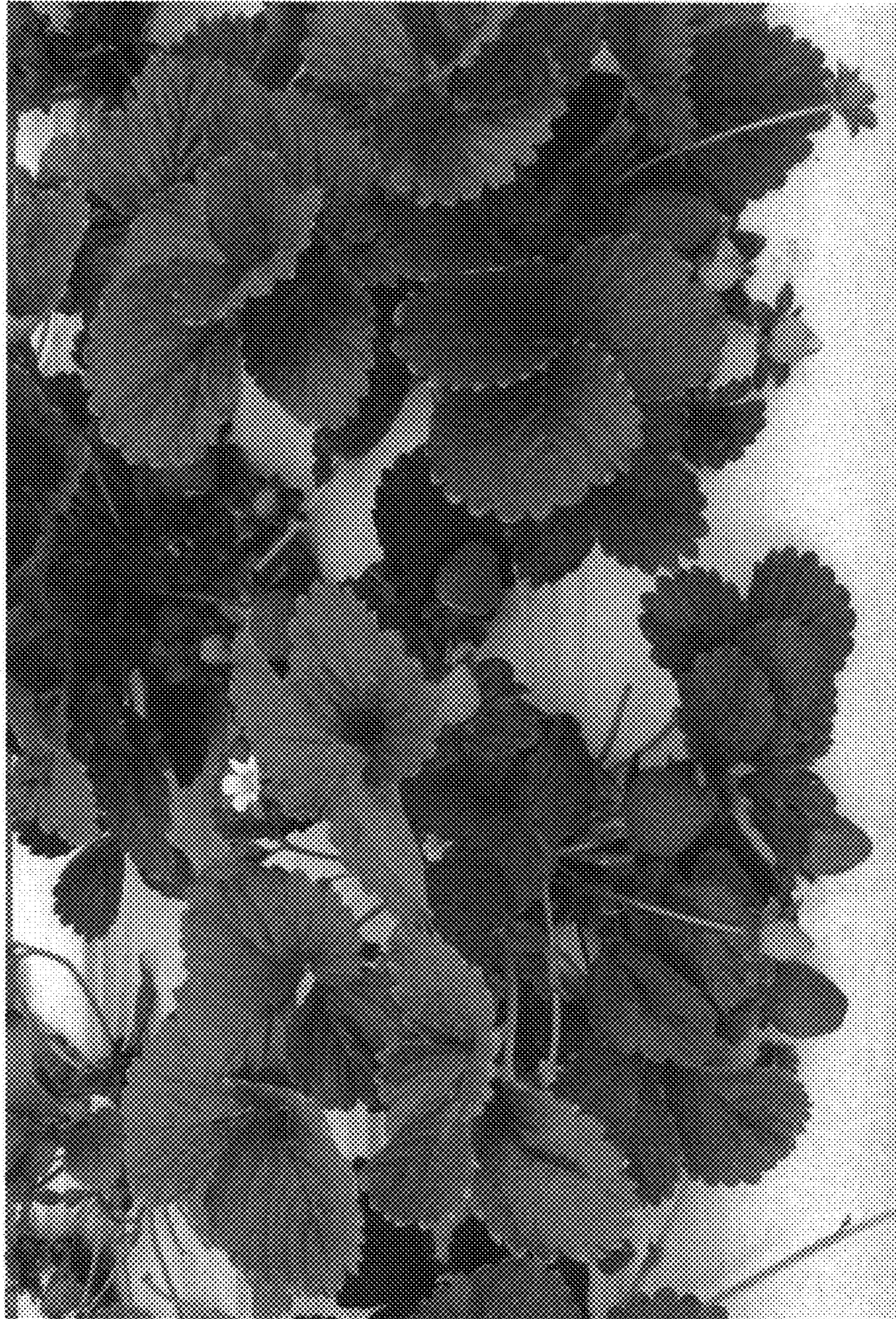


FIG. 4