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Jacobs, III et al.

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- (54) **STRAWBERRY PLANT NAMED**
‘DRISSTRAWNINETYTHREE’
- (50) Latin Name: *Fragaria x ananassa*
Varietal Denomination: **DrisStrawNinetyThree**
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- (52) **U.S. Cl.**
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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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(57) **ABSTRACT**

A new and distinct variety of strawberry plant named ‘DrisStrawNinetyThree’, particularly selected for its very early production and rain tolerance, as well as the firmness, conic shape, and flavor of the fruit, is disclosed.

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**STRAWBERRY PLANT NAMED
'DRISSTRAWNINETYTHREE'**

Latin name:

Botanical classification: *Fragaria* x *ananassa*.

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

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 'DrisStrawNinetyThree'.

Strawberry plant variety 'DrisStrawNinetyThree' originated from a controlled cross between the female parent 'DrisStrawFortyEight' (U.S. Plant Pat. No. 27,442) and the proprietary male parent '2AC123' (unpatented). Progeny plants from this cross, including 'DrisStrawNinetyThree', were asexually propagated via stolons in Shasta County, Calif. in May of 2016. Strawberry plant variety 'DrisStrawNinetyThree' was later specifically identified and selected in Hillsborough County, Fla. in December 2016.

'DrisStrawNinetyThree' was subsequently asexually propagated via stolons, and has undergone testing at test plots in Hillsborough County, Fla. for six years (2016 to 2021). The present variety has been found to be stable and reproduce true to type through successive asexual propagations via stolons and tissue culture.

'DrisStrawNinetyThree' was particularly selected for its very early production and rain tolerance, as well as the firmness, conic shape, and flavor of the fruit.

DESCRIPTION OF THE DRAWINGS

This new strawberry plant is illustrated by the accompanying photographs. The colors shown are as true as can be

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reasonably obtained by conventional photographic procedures. Unless otherwise indicated, the photographs are of plants that are four months old.

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

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

FIG. 3 illustrates another view of whole fruit of variety 'DrisStrawNinetyThree' with a more apical view of the calyx.

FIG. 4 illustrates the upper surface (top row) and lower surface (bottom row) of flowers of variety 'DrisStrawNinetyThree'.

FIG. 5 illustrates the lower surface (top) and upper surface (bottom) of leaves of variety 'DrisStrawNinetyThree'.

DETAILED BOTANICAL DESCRIPTION

The following detailed descriptions set forth the distinctive characteristics of 'DrisStrawNinetyThree'. The data which define these characteristics is based on observations taken in Hillsborough County, Fla. from 2016 to 2021. 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. 'DrisStrawNinetyThree' has not been observed under all possible environmental conditions. The botanical description of 'DrisStrawNinetyThree' was taken from plants that were four 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.) (2015 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.—'DrisStrawNinetyThree'.

Parentage:

Female parent.—'DrisStrawFortyEight' (U.S. Plant Pat. No. 27,442).

Male parent.—Proprietary strawberry plant '2AC123' (unpatented).

Plant:

Height.—12.05 cm.

Diameter.—33.4 cm.

Number of crowns per plant.—1.5.

Growth habit.—Semi-upright.

Density of foliage.—Medium.

Vigor.—Medium.

Stolon:

Number of daughter plants per square foot.—12.

Diameter at bract.—4.02 mm.

Overall color.—RHS 149C (Brilliant yellow green).

Anthocyanin coloration.—Absent or very weak.

Anthocyanin color (when present).—RHS 39D (Light pink).

Density of pubescence.—Medium.

Fruiting truss:

Attitude at first picking.—Prostrate.

Color (at base of truss).—RHS 145B (Light yellow green).

Leaf:

Number of leaflets.—Three only.
Color of leaf upper surface.—RHS 137A (Moderate olive green).
Color of leaf lower surface.—RHS 191A (Greyish yellow green). 5
Blistering.—Medium.
Glossiness.—Medium.
Variation.—Absent.
Terminal leaflet.—Length: 7.1 cm. Width: 7.3 cm. 10
 Length/width ratio: 0.973. Number of teeth per terminal leaflet: 21.9. Overall shape: Orbicular. Shape of base: Acute. Shape of apex: Rounded. Margin: Serrate to crenate. Shape in cross section: Concave.
Petiole.—Length: 106.4 mm. Diameter: 3.249 mm. 15
 Overall color: RHS 145B (Light yellow green). Pubescence: Medium. Attitude of hairs: Horizontal. Bract frequency (number present on each petiole): 0.83.
Petiolule.—Length: 9.2 mm. Diameter: 1.966 mm. 20
 Color: RHS 145C (Light yellow green).
Stipule.—Length: 30.3 mm. Width: 15.4 mm. Stipule color: RHS 145B (Light yellow green). Anthocyanin coloration: Medium. Anthocyanin color: RHS 58A (Moderate purplish red). Pubescence: Medium. 25

Inflorescence:

Number of flowers per plant.—13.4.
Position of inflorescence in relation to foliage.—Beneath foliage.
Pedicel.—Attitude of hairs: Slightly outwards. 30
Flower.—Flower diameter (petal tip to petal tip on non-flattened flower): 23.7 mm. Arrangement of petals: Overlapping. Size of calyx in relation to corolla: Larger. Stamen: Present. Receptacle color: RHS 6A (Brilliant greenish yellow). Anther color: 35
 RHS 13A (Vivid yellow).
Petal.—Length: 13.1 mm. Width: 13.2 mm. Length/width ratio: 0.99. Number of petals per flower: 5.3. Color of upper surface: RHS 155C (Greenish white). Color of lower surface: RHS 155C (Greenish white). 40
 Overall shape: Orbicular. Shape of apex: Rounded. Margin: Entire. Shape of base: Concavo-convex.
Calyx.—Diameter (sepal tip to sepal tip, measured on back of flower): 36.9 mm.
Sepal.—Length: 12.6 mm. Width: 6.7 mm. Number of 45
 sepals per flower: 10.6. Overall shape: Elliptical. Margin: Entire.
Flowering.—Flowering interval: Late October to March.

Fruit:

Fruit size.—Length: 49.8 mm. Width: 39.2 mm. 50
 Length/width ratio: 1.24.
Fruit hollow.—Length: 19.4 mm. Width: 5 mm. Length/width ratio: 3.88.
Shape.—Conical.
Difference in shape of terminal and other fruits.—None or very slight.
Fruit color.—RHS 45A (Vivid red).
Evenness of color.—Even or very slightly uneven.
Glossiness.—Medium.
Evenness of surface.—Even or very slightly uneven.
Width of band without achenes.—Narrow.
Position of achenes.—Level with surface.
Position of calyx attachment.—Level with fruit.
Attitude of sepals.—Upwards to outwards.
Diameter of calyx in relation to diameter of fruit.— 65
 Same size to slightly larger.

Adherence of calyx.—Weak.
Firmness.—Firm.
Color of flesh (excluding core).—RHS 45A (Vivid red).
Evenness of flesh color.—Slightly uneven.
Distribution of flesh color.—Marginal and central.
Color of core.—RHS 155C (Greenish white).
Sweetness/soluble solids (in ° Brix).—8.1.
Titrateable acidity (% as citric acid).—0.375%.
Individual fruit weight.—23.7 g/fruit.
Achenes.—Number of achenes per fruit: 422. Weight: 0.0004128 g/achene. Color of upper (sunward) side: RHS 178C (Moderate reddish orange). Color of lower (shaded) side: RHS 154B (Brilliant yellow green).
Fruiting.—Harvest interval: Mid-November to March. Type of bearing: Fully remontant. Productivity: 29,951 lbs to 31,286 lbs of fruit per acre per season from seven-month-old plants when grown in Dover, Fla.
 Resistance to abiotic stress, pests, and diseases:
Heat.—Moderately resistant.
Rain tolerance.—Moderately resistant.
Two-spotted spider mite (tetranychus urticae).—Moderately susceptible.
Botrytis fruit rot (botrytis cinerea).—Moderately susceptible.
Powdery mildew (podosphaera macularis).—Moderately resistant.
Anthracnose fruit rot (colletotrichum acutatum).—Susceptible.
Charcoal rot (macrophomina phaseolina).—Susceptible.
Neopestalotiopsis.—Susceptible.
Angular leaf spot (xanthomonas fragariae).—Susceptible.

COMPARISON WITH PARENTAL AND
REFERENCE VARIETIES

‘DrisStrawNinetyThree’ differs from the female parent ‘DrisStrawFortyEight’ (U.S. Plant Pat. No. 27,442) in that ‘DrisStrawNinetyThree’ has medium vigor, medium leaf glossiness, and a fully remontant type of bearing, whereas ‘DrisStrawFortyEight’ has weak vigor, absent or weak leaf glossiness, and a partially remontant type of bearing. In addition, ‘DrisStrawNinetyThree’ has a more compact plant habit, darker colored leaves, and is higher yielding than ‘DrisStrawFortyEight’.

‘DrisStrawNinetyThree’ differs from the male parent proprietary strawberry plant ‘2AC123’ (unpatented) in that ‘DrisStrawNinetyThree’ begins fruit production much earlier than ‘2AC123’ and is less susceptible to blotchy fruit ripening and rain damage compared to ‘2AC123’.

‘DrisStrawNinetyThree’ differs from the reference variety ‘DrisStrawTwentyFour’ (U.S. Plant Pat. No. 23,378) in that ‘DrisStrawNinetyThree’ has a semi-upright growth habit, medium anthocyanin coloration on stipules, medium fruit glossiness, and a fully remontant type of bearing, whereas ‘DrisStrawTwentyFour’ has a spreading growth habit, absent or very weak anthocyanin coloration on stipules, strong fruit glossiness, and a partially remontant type of bearing.

‘DrisStrawNinetyThree’ differs from the reference variety ‘DrisStrawFortyNine’ (U.S. Plant Pat. No. 27,682) in that ‘DrisStrawNinetyThree’ has a medium density of foliage, medium leaf glossiness, medium anthocyanin coloration on stipules, and a fully remontant type of bearing, whereas

‘DrisStrawFortyNine’ has a sparse density of foliage, absent or weak leaf glossiness, absent or very weak anthocyanin coloration on stipules, and a partially remontant type of bearing.

We claim:

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

* * * * *

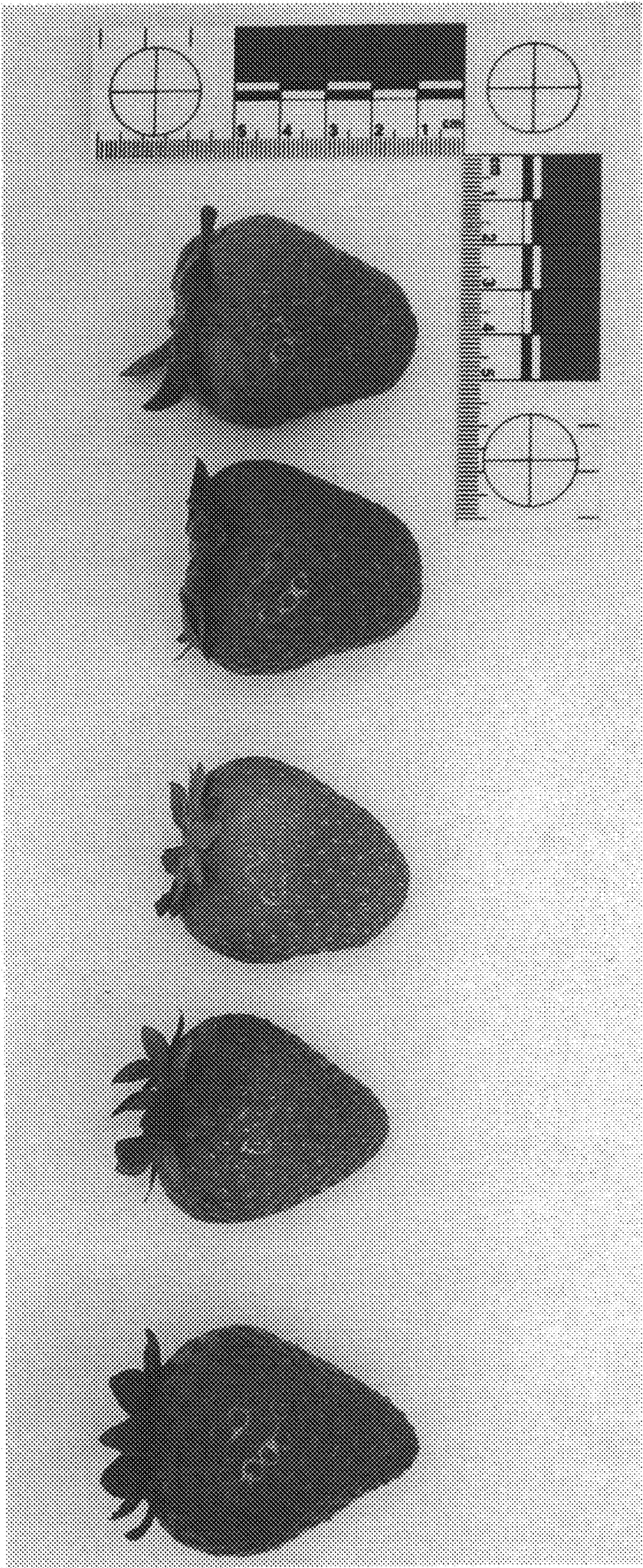


FIG. 1

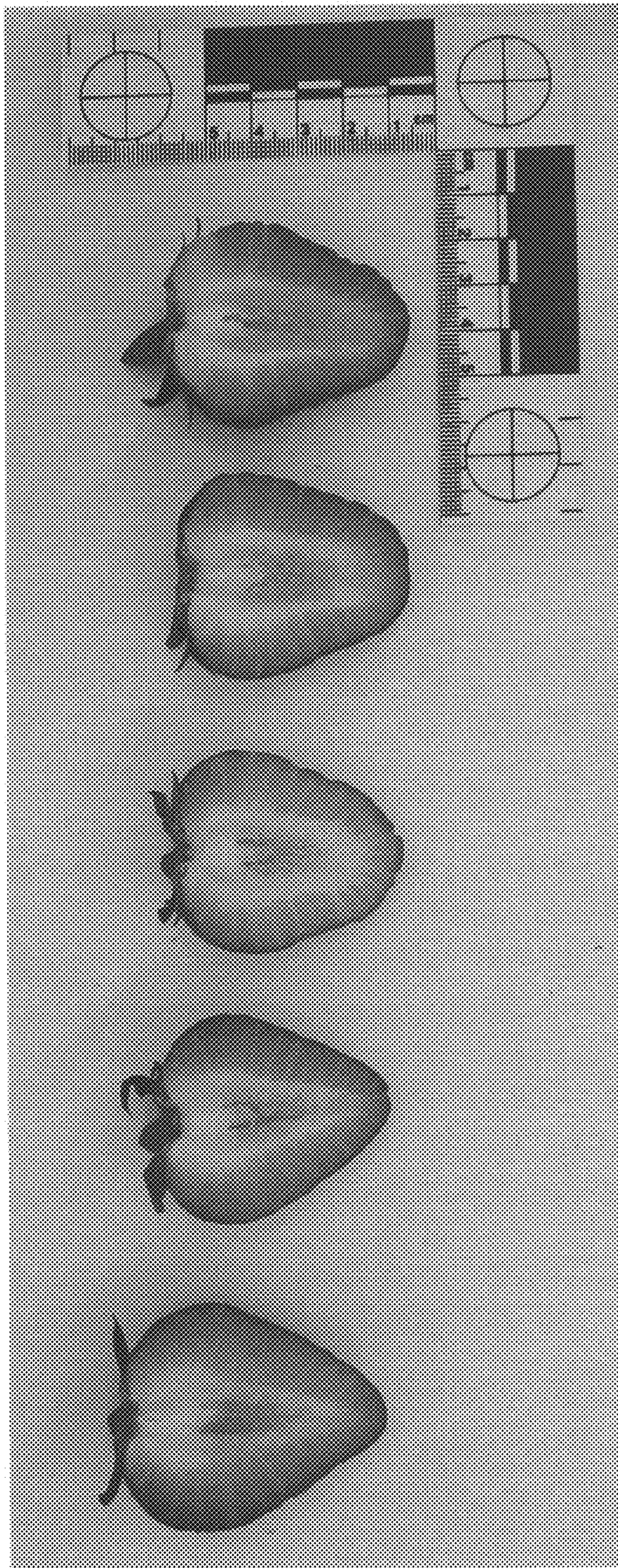


FIG. 2

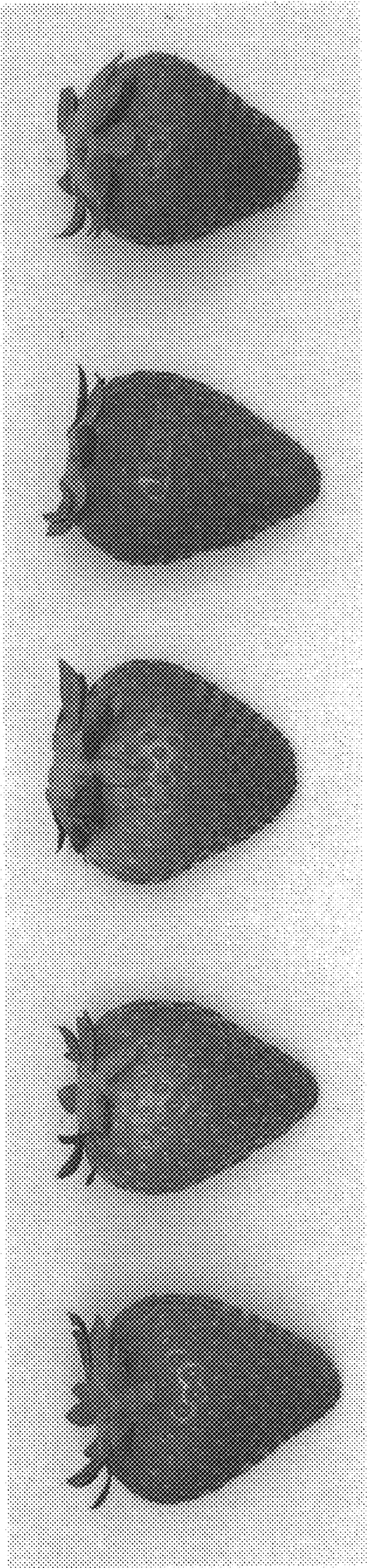


FIG. 3

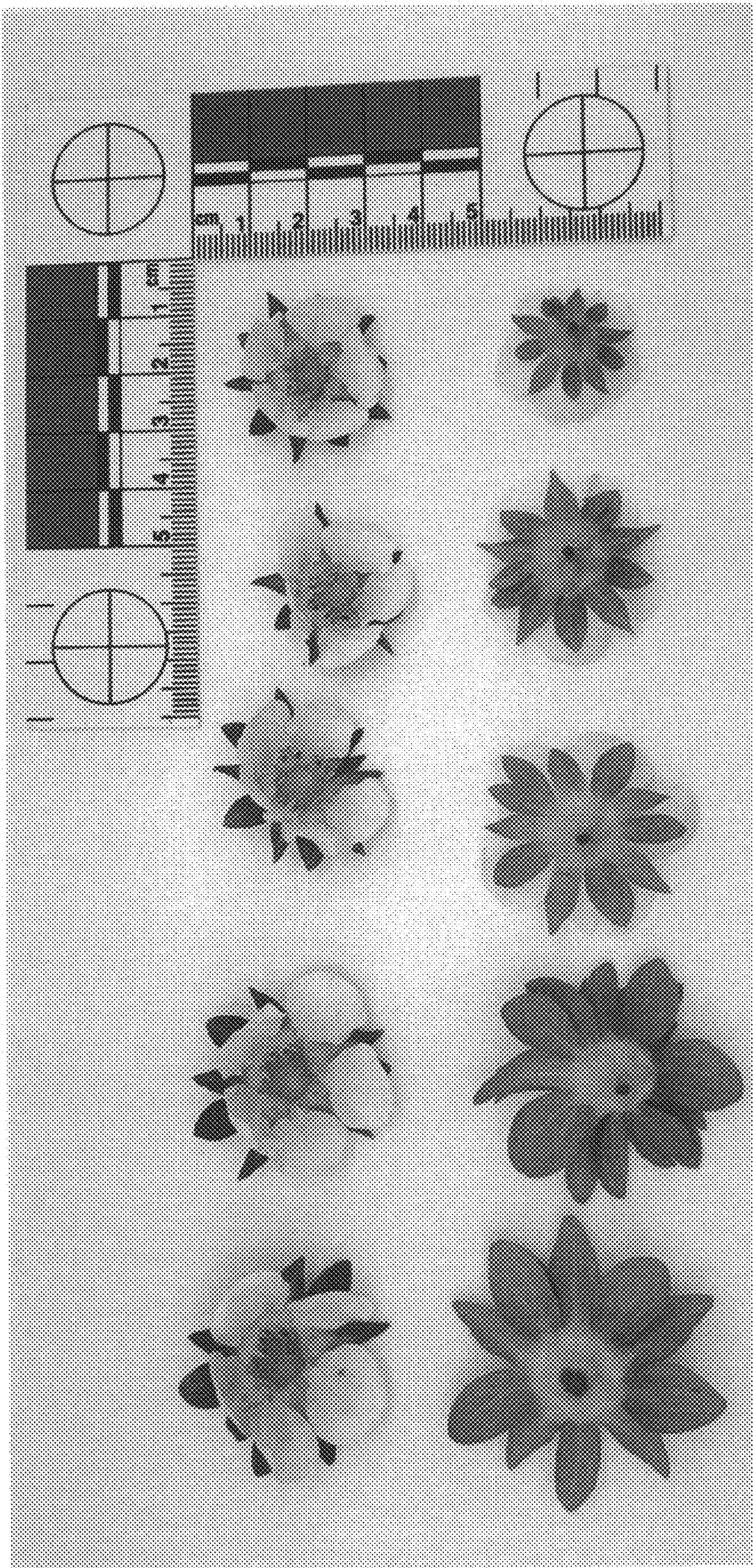


FIG. 4

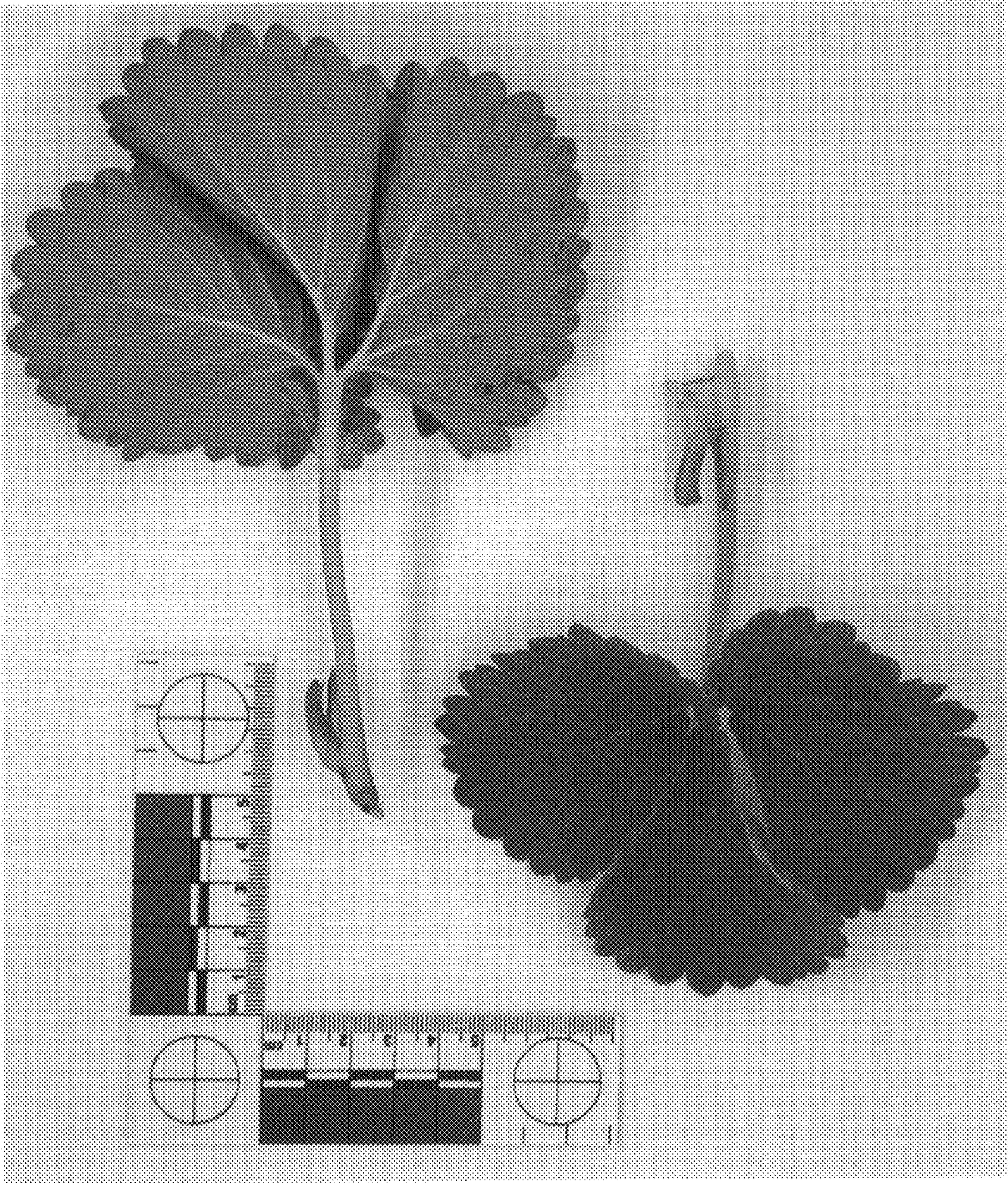


FIG. 5