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Stewart et al.

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(54) **STRAWBERRY PLANT NAMED 'DRISSTRAWEIGHTYSIX'**

(50) Latin Name: ***Fragaria* x *ananassa***
Varietal Denomination: **DrisStrawEightySix**

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(57) **ABSTRACT**

A new and distinct variety of strawberry plant named 'DrisStrawEightySix', particularly selected for its earliness of production, as well as the shape, appearance, flavor, and shelf life of its fruit, is disclosed.

5 Drawing Sheets

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STRAWBERRY PLANT NAMED 'DRISSTRAWEIGHTYSIX'

Latin name:

Botanical classification: *Fragaria* x *ananassa.*

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

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 'DrisStrawEightySix'.

Strawberry plant variety 'DrisStrawEightySix' originated from a cross between the female parent 'DrisStrawFiftyOne' (U.S. Plant Pat. No. 29,730) and the male parent 'DrisStrawSixtyFour' (U.S. Plant Pat. No. 30,936). Progeny plants from this cross, including 'DrisStrawEightySix', were asexually propagated via stolons in Shasta County, Calif. in May of 2015. Strawberry plant variety 'DrisStrawEightySix' was later specifically identified and selected in Hillsborough County, Fla. in January of 2016.

'DrisStrawEightySix' was subsequently asexually propagated via stolons, and has undergone testing at test plots in Hillsborough County, Fla. for six years (2015 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.

'DrisStrawEightySix' was particularly selected for its earliness of production, as well as the shape, appearance, flavor, and shelf life of its fruit.

DESCRIPTION OF THE DRAWINGS

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

FIG. **2** illustrates longitudinal sections of fruit of variety 'DrisStrawEightySix'.

FIG. **3** illustrates the upper surfaces (top row) and lower surfaces (bottom row) of flowers of variety 'DrisStrawEightySix'.

FIG. **4** illustrates the lower surface (top) and upper surface (bottom) of leaves of variety 'DrisStrawEightySix'.

FIG. **5** illustrates whole plants of variety 'DrisStrawEightySix'.

DETAILED BOTANICAL DESCRIPTION

The following detailed descriptions set forth the distinctive characteristics of 'DrisStrawEightySix'. The data which define these characteristics is based on observations taken in Hillsborough County, Fla. from 2015 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. 'DrisStrawEightySix' has not been observed under all possible environmental conditions. The botanical description of 'DrisStrawEightySix' 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.—'DrisStrawEightySix'.

Parentage:

Female parent.—'DrisStrawFiftyOne' (U.S. Plant Pat. No. 29,730).

Male parent.—'DrisStrawSixtyFour' (U.S. Plant Pat. No. 30,936).

Plant:

Height.—19.0 cm.

Diameter.—29.1 cm.

Height/width ratio.—0.65.

Number of crowns per plant.—2.1.

Growth habit.—Semi-upright.

Density of foliage.—Medium.

Vigor.—Medium.

Stolon:

Number of daughter plants per square foot.—20.

Diameter at bract.—3.0 mm.

Color.—RHS 144C (Strong yellowish green).

Anthocyanin coloration.—Medium.

Anthocyanin color.—RHS 42D (Moderate reddish orange).

Density of pubescence.—Sparse.

Fruiting truss:

Length from crown to base of terminal flower or fruit.—16.7 cm.

Diameter at base of truss.—0.40 cm.

Number of berries per fruiting truss.—1.9.

Attitude at first picking.—Semi-erect.

Color at base of truss.—RHS 144B (Strong yellowish green).

Leaf:

Number of leaflets.—Three only.

Color of upper surface.—RHS 137A (Moderate olive green).

Color of lower surface.—RHS 144D (Light yellowish green).

Blistering.—Absent or weak.

Glossiness.—Medium.

Variegation.—Absent.

Terminal leaflet.—Length: 8.4 cm. Width: 7.6 cm. Length/width ratio: 1.11. Number of teeth per terminal leaflet: 22.7. Shape: Oval. Shape of base: Obtuse. Shape of apex: Rounded. Margin: Serrate to crenate. Margin profile: Flat (level with the leaflet blade). Shape in cross section: Concave.

Petiole.—Length: 137 mm. Diameter: 45.4 mm. Color: RHS 144C (Strong yellowish green). Pubescence: Sparse. Attitude of hairs: Upwards. Bract frequency (number present on each petiole): 0.

Petiolule.—Length: 11.9 mm. Diameter: 2.5 mm. Color: RHS 144D (Light yellowish green).

Stipule.—Length: 37.2 mm. Width: 8.9 mm. Pubescence: Sparse. Color: RHS 145D (Light yellowish green). Anthocyanin coloration: Strong. Anthocyanin color: RHS 61B (Strong purplish red).

Inflorescence:

Number of flowers per plant.—2.7.

Position of inflorescence in relation to foliage.—Same level.

Pedicel.—Attitude of hairs: Upwards.

Flower.—Flower diameter (petal tip to petal tip on non-flattened flower): 27.9 mm. Arrangement of petals: Overlapping. Size of calyx in relation to corolla: Larger. Diameter of inner calyx relative to outer (on secondary flowers): Same size. Receptacle color: RHS 144B (Strong yellowish green). Stamen: Present.

Petal.—Length: 15.5 mm. Width: 15.8 mm. Length/width ratio: 0.98. Number of petals per flower: 5.0. Color of upper side: RHS 155C (Greenish White). Color of lower side: RHS 155C (Greenish White). Shape: Obicular. Apex shape: Rounded. Base shape: Convex. Margin: Entire.

Calyx.—Diameter (sepal tip to sepal tip, measured on back of flower): 49.7 mm.

Sepal.—Length: 21.2 mm. Width: 14.3 mm. Number of sepals per flower: 10.0. Shape: Elliptical. Apex shape: Truncate. Margin: Serrate.

Anther.—Color: RHS 154A (Vivid yellowish green).

Flowering.—Flowering interval: Late October to mid-March.

Fruit:

Fruit size.—Length: 43.5 mm. Width: 44.0 mm. Length/width ratio: 0.99.

Fruit hollow.—Length: 21.7 mm. Width: 10.5 mm. Length/width ratio: 2.07.

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.—Strong.

Evenness of surface.—Even or very slightly uneven.

Width of band without achenes.—Absent or very narrow.

Position of achenes.—Level with surface.

Achenes.—Number of achenes per fruit: 377.5. Weight: 0.00073179 g/achene. Color (sunward side of berry): RHS 178B (Dark reddish orange). Color (shaded side of berry): RHS 151C (Strong greenish yellow).

Position of calyx attachment.—Level with fruit.

Attitude of sepals.—Outwards.

Diameter of calyx in relation to diameter of fruit.—Slightly larger.

Adherence of calyx.—Strong.

Firmness.—Firm.

Color of flesh (*excluding core*).—RHS 33A (Vivid reddish orange).

Evenness of color of the flesh.—Slightly uneven.

Distribution of flesh color.—Marginal and central.

Color of core.—RHS 27A (Light yellowish pink).

Texture when tasted.—Fine.

Fruit weight.—28.0 g.

Soluble solids (*in ° Brix*).—8.3.

Titratable acidity (*as % citric acid*).—1.9.

Fruiting.—Harvest interval: Late November to March. Type of bearing: Partially remontant. Productivity: 0.528 kg to 0.741 kg of fruit per plant per season from seven-month-old plants when grown in Dover, Fla.

Resistance to abiotic stress, pests, and diseases:

Heat.—Moderately resistant.

Rain damage.—Susceptible.

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

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

Powdery mildew (podosphaera macularis).—Moderately susceptible.

Anthracnose fruit rot (*colletotrichum acutatum*).—Moderately resistant.

Anthracnose crown rot (*colletotrichum gloeosporioides*).—Moderately susceptible.

Charcoal rot (*macrophomina phaseolina*).—Resistant.

Angular leaf spot (*xanthomonas fragariae*).—Resistant.

COMPARISON WITH PARENTAL AND REFERENCE VARIETIES

'DrisStrawEightySix' differs from the female parent 'DrisStrawFiftyOne' (U.S. Plant Pat. No. 29,730) in that the fruit stems of 'DrisStrawEightySix' tend to be thicker and woodier than the fruit stems of 'DrisStrawFiftyOne'.

'DrisStrawEightySix' differs from the male parent 'DrisStrawSixtyFour' (U.S. Plant Pat. No. 30,936) in that fruit of 'DrisStrawEightySix' is slightly larger than fruit of 'DrisStrawSixtyFour'. In addition, plants of 'DrisStrawEightySix' have higher yield and begin production earlier when compared with plants of 'DrisStrawSixtyFour'.

'DrisStrawEightySix' differs from the reference variety 'DrisStrawTwentyFour' (U.S. Plant Pat. No. 23,378) in that 'DrisStrawEightySix' has absent or weak leaf blistering, oval terminal leaflet shape, sparse stipule pubescence, and an absent or very narrow width of band without achenes on fruit, whereas 'DrisStrawTwentyFour' has medium leaf blistering, obicular terminal leaflet shape, dense stipule pubescence, and a broad width of band without achenes on fruit.

'DrisStrawEightySix' differs from the reference variety 'DrisStrawFortyNine' (U.S. Plant Pat. No. 27,682), in that 'DrisStrawEightySix' has medium leaf glossiness, oval terminal leaflet shape, strong anthocyanin coloration on stipule,

and strong fruit glossiness, whereas 'DrisStrawFortyNine' has absent or weak leaf glossiness, obicular terminal leaflet shape, absent or very weak anthocyanin coloration on stipule, and medium fruit glossiness.

We claim:

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

* * * * *

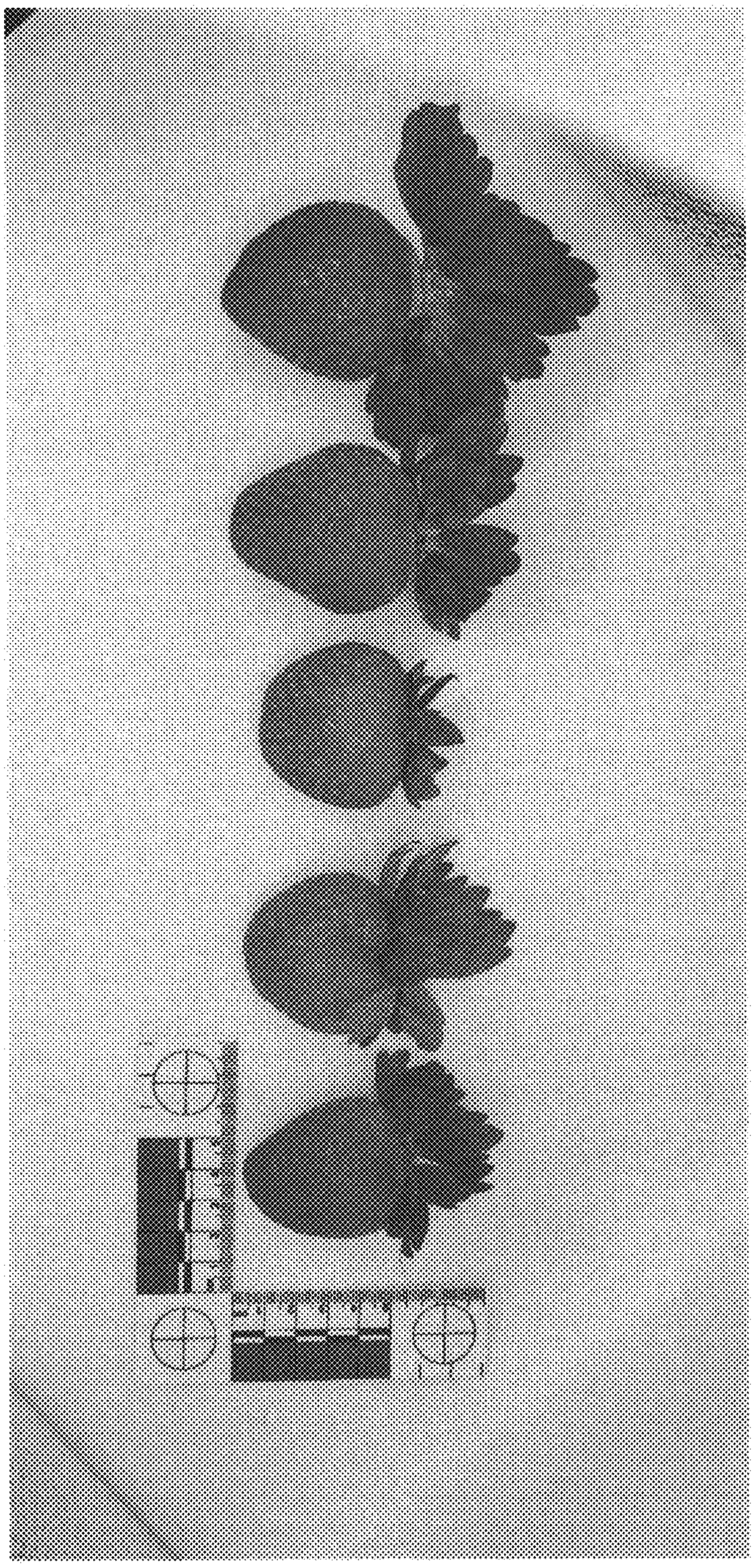

FIG. 1

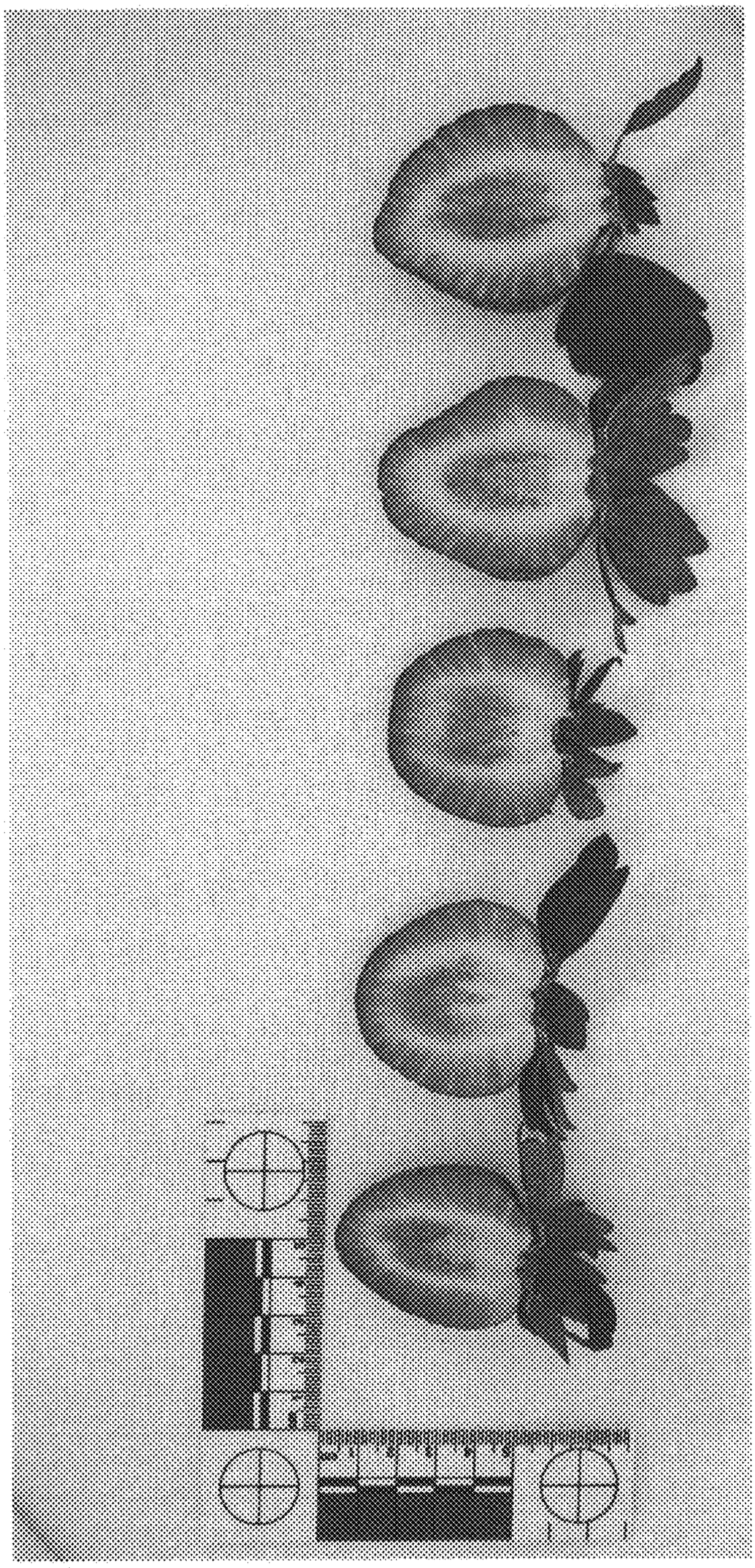

FIG. 2

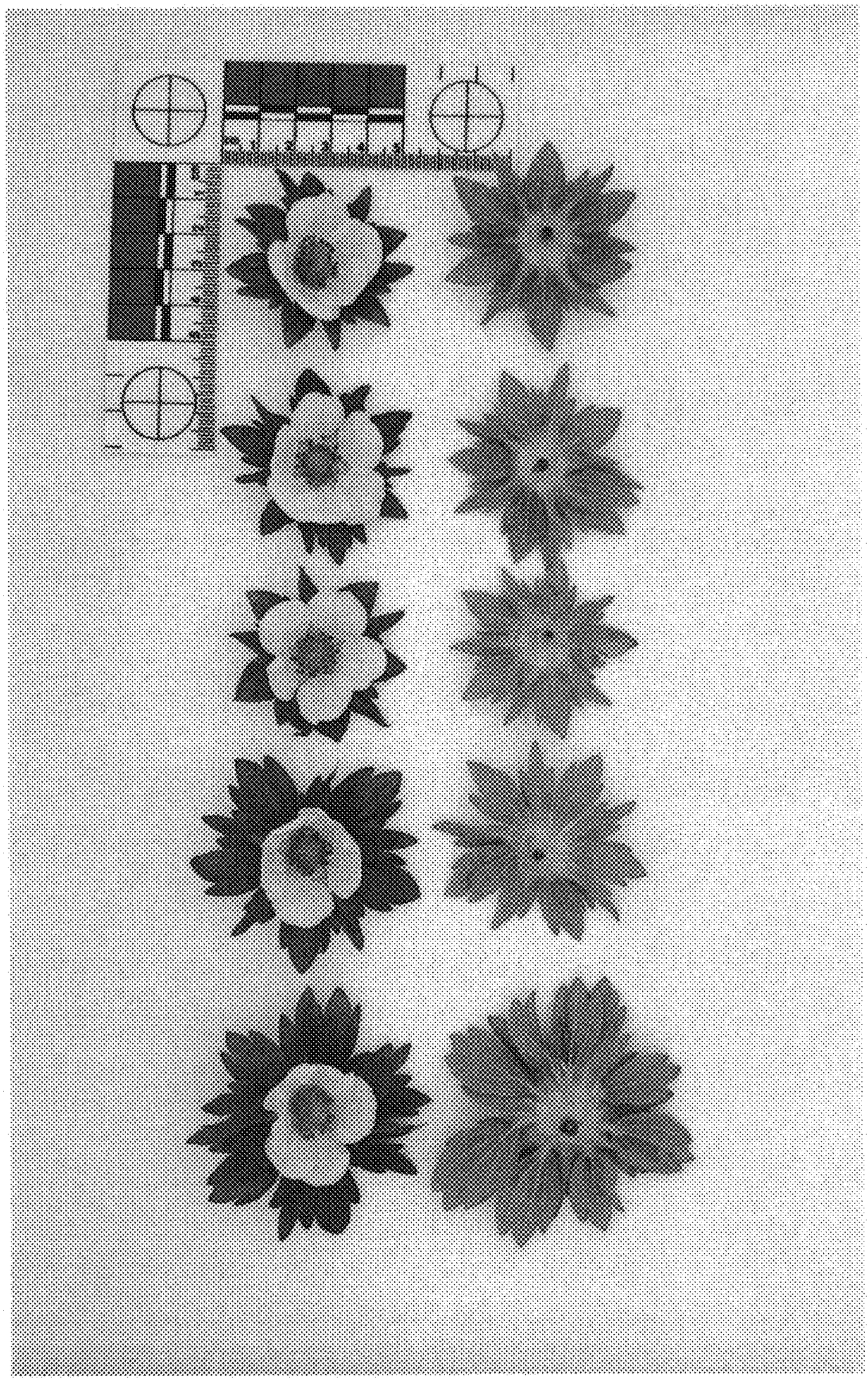

FIG. 3

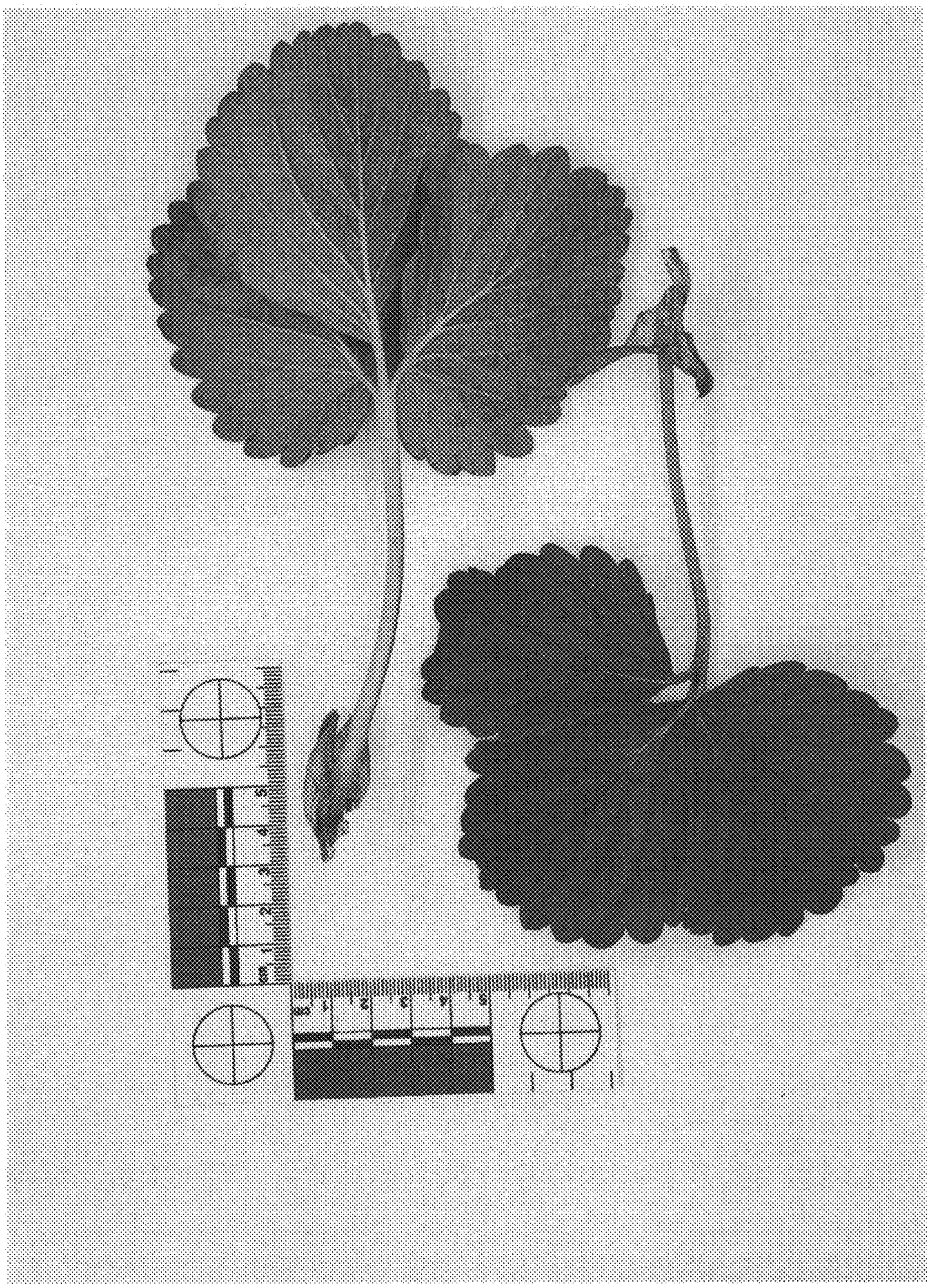

FIG. 4

FIG. 5