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**Mendoza et al.**

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(54) **STRAWBERRY PLANT VARIETY NAMED 'DRISSTRAWEIGHTYTHREE'**

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

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***A01H 5/08*** (2018.01)
***A01H 6/74*** (2018.01)

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

(58) **Field of Classification Search**
USPC ..... Plt./209
See application file for complete search history.

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(57) **ABSTRACT**

A new and distinct variety of strawberry plant named 'DrisStrawEightyThree', particularly selected for the shelf-life and flavor of its fruit, high mid- to late season yield when grown in low elevation in Central Mexico, and tolerance to *Xanthomonas*, is disclosed.

**6 Drawing Sheets**

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# STRAWBERRY PLANT VARIETY NAMED 'DRISSTRAWEIGHTYTHREE'

Latin name:

Botanical classification: *Fragaria* x *ananassa.*

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

## 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 18$^{th}$ 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 'DrisStrawEightyThree'.

Strawberry plant variety 'DrisStrawEightyThree' originated from a cross between the proprietary female parent '50T403' (unpatented) and the male parent 'DrisStrawEight' (U.S. Plant Pat. No. 20,735). Progeny plants from this cross, including 'DrisStrawEightyThree', were asexually propagated via stolons in Zapotlan, Jalisco, Mexico in March of 2014. Strawberry plant variety 'DrisStrawEightyThree' was later specifically identified and selected in Tangancicuaro, Michoacan, Mexico in December of 2014.

'DrisStrawEightyThree' was subsequently asexually propagated via stolons, and underwent further testing at test plots in Tangancicuaro, Michoacan, Mexico for four years (2015 to 2019). The present variety has been found to be stable and reproduce true to type through successive asexual propagations via stolons and tissue culture.

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

1. Absent or very weak anthocyanin coloration of stolon;
2. Touching arrangement of petals;



3. Narrow width of band without achenes on fruit; and
4. Very firm fruit firmness.

'DrisStrawEightyThree' was particularly selected for the shelf-life and flavor of its fruit, high mid- to late season yield when grown in low elevation in Central Mexico, and tolerance to *Xanthomonas.*

## DESCRIPTION OF THE DRAWINGS

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

FIG. **1** illustrates whole fruit of variety 'DrisStrawEightyThree'.

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

FIG. **3** illustrates the upper surfaces and lower surfaces of flowers of variety 'DrisStrawEightyThree'.

FIG. **4** illustrates leaves of variety 'DrisStrawEightyThree'.

FIG. **5** illustrates a view of whole plants of variety 'DrisStrawEightyThree'.

FIG. **6** illustrates an additional view of whole plants of variety 'DrisStrawEightyThree'.

## DETAILED BOTANICAL DESCRIPTION

The following detailed descriptions set forth the distinctive characteristics of 'DrisStrawEightyThree'. The data which define these characteristics is based on observations taken in Tangancicuaro, Michoacan, Mexico from 2015 to 2019. 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. 'DrisStrawEightyThree' has not been observed under all possible environmental conditions. The botanical description of 'DrisStrawEightyThree' was taken from plants that were six 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,* 2$^{nd}$ edition by James G. Harris and Melinda Woolf Harris, unless where otherwise defined.

Classification:

*Species.*—*Fragaria* x *ananassa.*

*Common name.*—Strawberry.

*Denomination.*—'DrisStrawEightyThree'.

Parentage:

*Female parent.*—Proprietary strawberry plant '50T403' (unpatented).

*Male parent.*—The variety 'DrisStrawEight' (U.S. Plant Pat. No. 20,735).

Plant:

*Height.*—25.0 cm.

*Diameter.*—34.4 cm.

*Number of crowns per plant.*—3.3.

*Growth habit.*—Semi-upright.

Stolon:

*Average number of daughter plants per square foot.*—6.

*Diameter at bract.*—4.02 mm.

*Anthocyanin coloration.*—Absent or very weak.

*Stolon color with anthocyanin coloration (when present).*—RHS 144C (Strong yellow green).

Leaf:

*Number of leaflets.*—Three only.

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

*Variegation.*—Absent.

*Terminal leaflet.*—Length: 8.8 cm. Width: 7.7 cm. Length/width ratio: 1.1. Number of teeth/terminal leaflet: 17. Shape of base: Obtuse. Margin: Serrate to crenate. Shape in cross section: Convex.

*Petiole.*—Length: 12.3 cm. Diameter: 3.09 mm. Attitude of hairs: Slightly outwards. Bract frequency (number present on each petiole): 2.

*Petiolule.*—Length: 7.0 mm. Diameter: 1.86 mm.

*Stipule.*—Length: 3.30 cm. Width: 8.30 mm. Anthocyanin coloration: Absent or very weak. Anthocyanin color (when present): RHS 37A (Strong yellowish pink).

Inflorescence:

*Position in relation to foliage.*—Same level.

*Pedicel.*—Attitude of hairs: Slightly outwards.

*Flower.*—Flower diameter (petal tip to petal tip on non-flattened flower): 25.7 mm. Arrangement of petals: Touching. Stamen: Present. Typical and observed number of flowers per plant: 12.40.

*Petal.*—Length: 12.60 mm. Width: 12.00 mm. Length/width ratio: 1.1. Typical and observed petal number: 5.3. Color of upper side: RHS 155C (Greenish white).

*Calyx.*—Diameter (sepal tip to sepal tip, measured on back of flower): 47.40 mm.

*Sepal.*—Length (sepal tip to point of attachment to receptacle): 19.20 mm. Width: 10.10 mm. Typical and observed sepal number: 11.

Fruit:

*Length.*—44.7 mm.

*Width.*—39.30 mm.

*Length/width ratio.*—1.1.

*Fruit hollow length.*—13.40 mm.

*Fruit hollow width.*—5.9 mm.

*Fruit hollow length/width ratio.*—2.3.

*Shape.*—Cordate.

*Glossiness.*—Medium.

*Firmness.*—Very firm.

*Color.*—RHS 34A (Vivid reddish orange).

*Position of achenes.*—Level with surface.

*Position of calyx attachment.*—Level with fruit.

*Attitude of sepals.*—Outwards.

*Color of flesh (excluding core).*—RHS 32B (Strong reddish orange).

*Color of core.*—RHS 33C (Strong yellowish pink).



Production:

*Flowering interval.*—September to April.

*Harvest interval.*—October to April.

*Type of bearing.*—Fully remontant.

*Productivity.*—30,773 kg to 54,786 kg of fruit per hectare per season from six-month-old plants when grown in Tangancicuaro, Michoacan, Mexico.

Resistance to abiotic stress, pests, and diseases:

*Heat.*—Moderately resistant.

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

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

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

*Xanthomonas (xanthomonas fragariae).*—Moderately resistant.

## COMPARISON WITH PARENTAL AND COMMERCIAL VARIETIES

'DrisStrawEightyThree' differs from the proprietary female parent '50T403' (unpatented) in that fruit of 'DrisStrawEightyThree' have better flavor than fruit of '50T403'. In addition, plants of 'DrisStrawEightyThree' have lower yield than plants of '50T403'.

'DrisStrawEightyThree' differs from the male parent 'DrisStrawEight' (U.S. Plant Pat. No. 20,735) in that fruit of 'DrisStrawEightyThree' are firmer and bigger than fruit of 'DrisStrawEight'. In addition, plants of 'DrisStrawEightyThree' have higher early season and total yield when compared with plants of 'DrisStrawEight'.

'DrisStrawEightyThree' differs from the commercial variety 'Driscoll Osceola' (U.S. Plant Pat. No. 15,752) in that 'DrisStrawEightyThree' has an absent or very weak anthocyanin coloration of stolon, a touching arrangement of petals, a narrow width of band without achenes on fruit, and a very firm fruit firmness, whereas 'Driscoll Osceola' has a medium to strong anthocyanin coloration of stolon, an overlapping arrangement of petals, a very narrow width of band without achenes on fruit, and a soft to medium fruit firmness. Further, 'DrisStrawEightyThree' is fully remontant, while 'Driscoll Osceola' is partially remontant.

'DrisStrawEightyThree' differs from the commercial variety 'DrisStrawSeventyEight' (U.S. Plant Pat. No. 31,655) in that 'DrisStrawEightyThree' has an absent or very weak anthocyanin coloration of stolon, a touching arrangement of petals, a narrow width of band without achenes on fruit, and a very firm fruit firmness, whereas 'DrisStrawSeventyEight' has weak anthocyanin coloration of stolon, an overlapping arrangement of petals, an absent or very narrow width of band without achenes on fruit, and a medium fruit firmness. Further, 'DrisStrawEightyThree' is fully remontant, while 'DrisStrawSeventyEight' is partially remontant.

We claim:

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

* * * * *

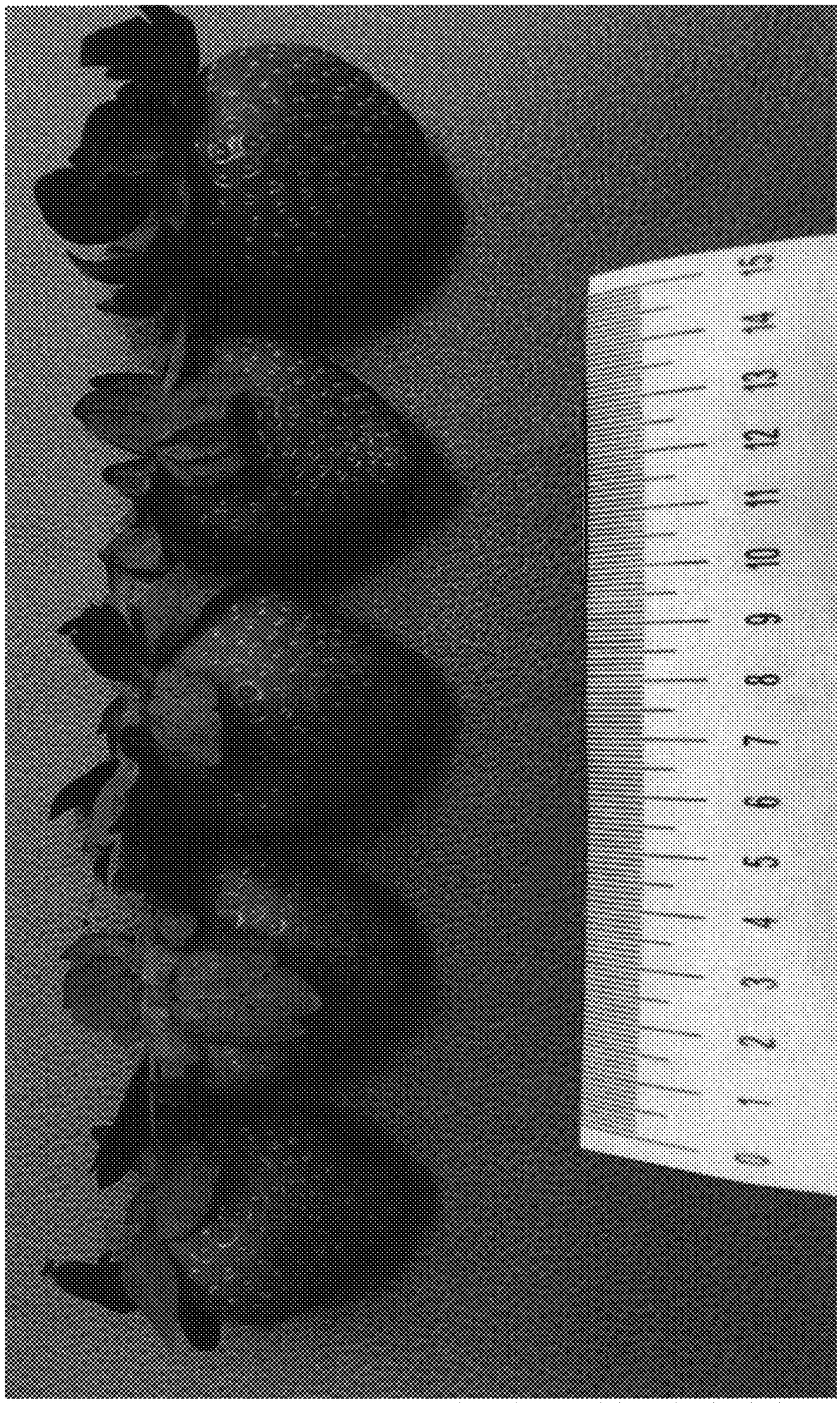

FIG. 1

FIG. 2

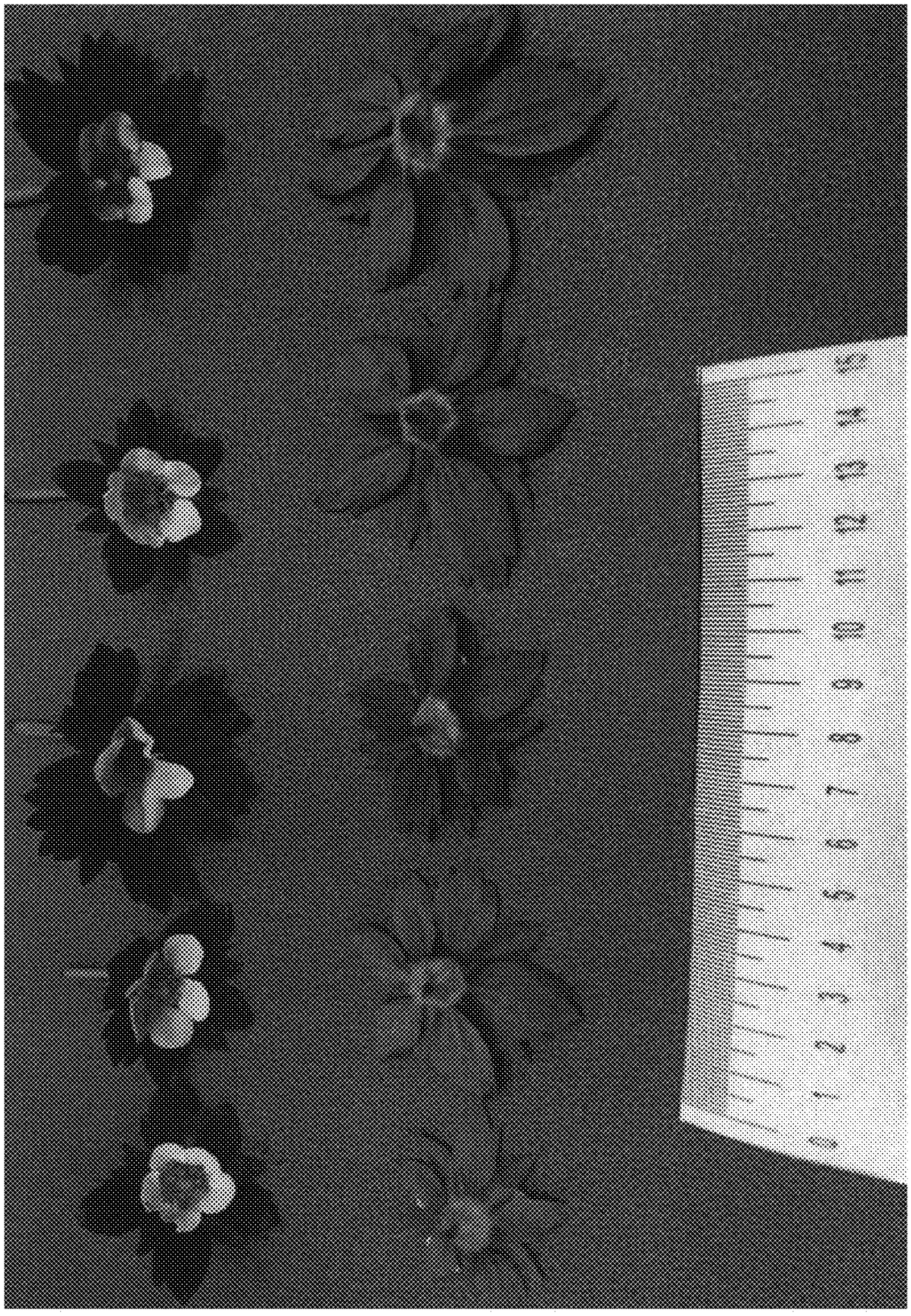

FIG. 3

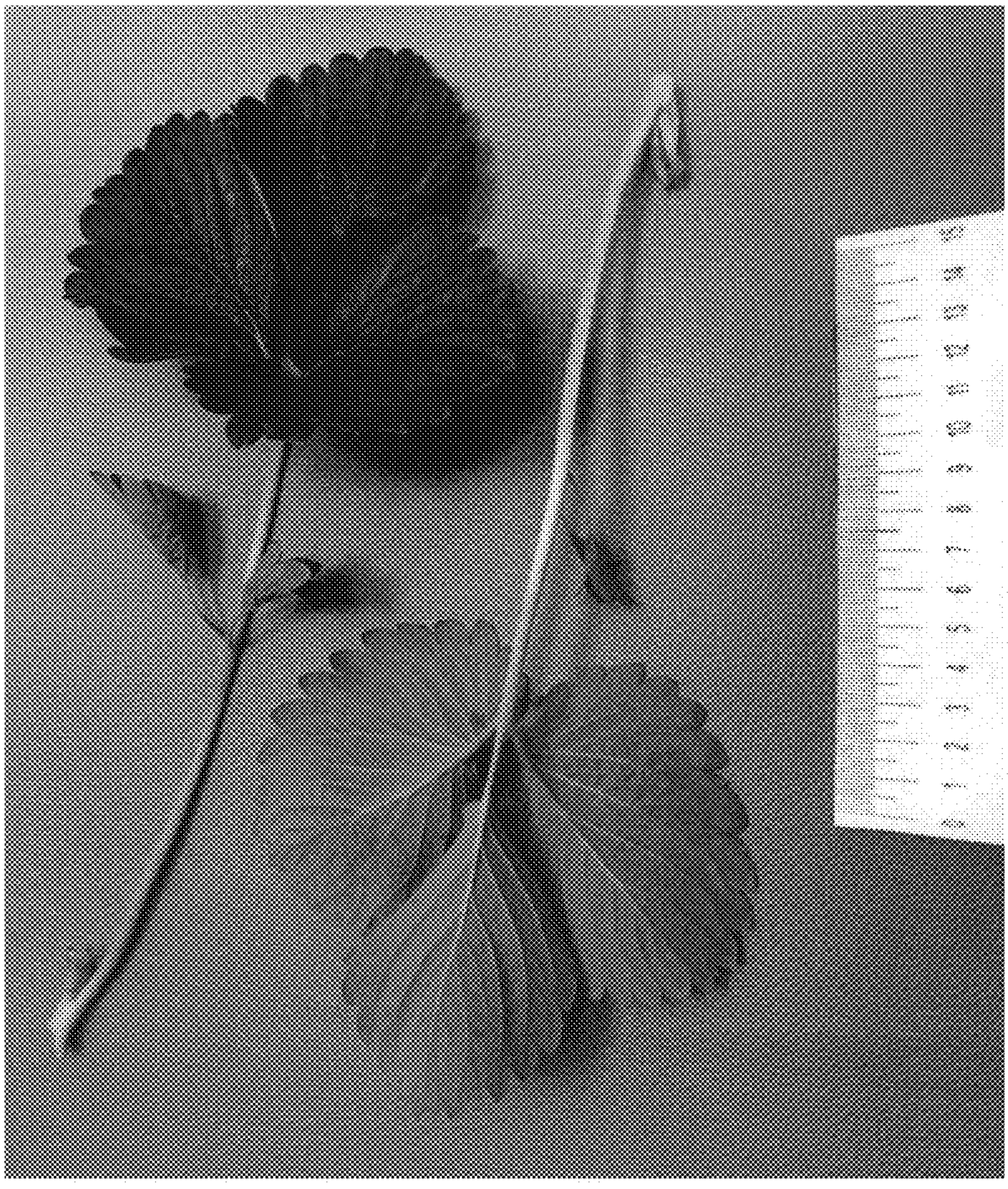

FIG. 4

FIG. 5

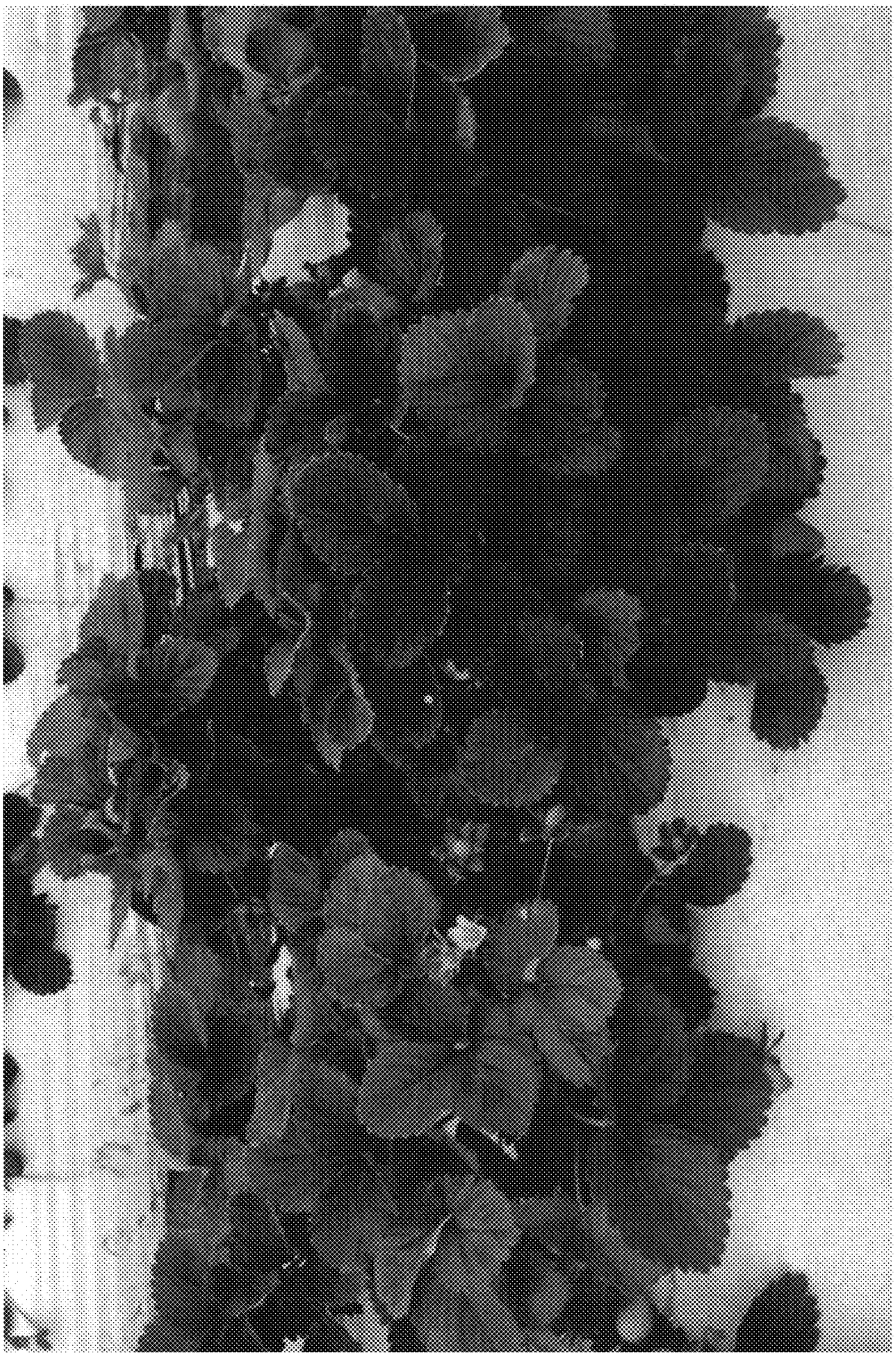

FIG. 6