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Mendoza et al.

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

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

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A01H 5/08 (2018.01)

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(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 'DrisStrawEightyTwo', particularly selected for its high early season and total yield when grown at high elevation, the size, flavor, and shelf-life of its fruit, as well as its tolerance to mites and easy-to-harvest plant architecture, is disclosed.

5 Drawing Sheets

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STRAWBERRY PLANT VARIETY NAMED 'DRISSTRAWIGHTYTWO'

Latin name:

Botanical classification: *Fragaria x ananassa*.

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

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 'DrisStrawEightyTwo'.

Strawberry plant variety 'DrisStrawEightyTwo' originated from a cross between the proprietary female parent '920AA240' (unpatented) and the proprietary male parent '914U 19' (unpatented). Progeny plants from this cross of '920AA240' x '914U 19', including 'DrisStrawEightyTwo', were asexually propagated via stolons in Zapotlan, Jalisco, Mexico in March of 2014. Strawberry plant variety 'DrisStrawEightyTwo' was later specifically identified and selected in Tangancicuaro, Michoacan, Mexico in December of 2014.

'DrisStrawEightyTwo' was subsequently asexually propagated via stolons, and underwent further testing at test plots in Tapalpa, Jalisco, Mexico and Purepero, Michoacan, Mexico for five years (2014 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.

'DrisStrawEightyTwo' exhibits the following distinguishing characteristics when grown under normal horticultural practices in Tapalpa, Jalisco, Mexico and Purepero, Michoacan, Mexico:

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1. Obtuse shape of base of terminal leaflet;
2. Medium glossiness of fruit;
3. Absent or small fruit cavity; and
4. Position of achenes level with surface on fruit.

'DrisStrawEightyTwo' was particularly selected for its high early season and total yield when grown at high elevation, the size, flavor, and shelf-life of its fruit, as well as its tolerance to mites and easy-to-harvest plant architecture.

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 'DrisStrawEightyTwo'.

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

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

FIG. 4 illustrates leaves of variety 'DrisStrawEightyTwo'.

FIG. 5 illustrates whole plants of variety 'DrisStrawEightyTwo'.

DETAILED BOTANICAL DESCRIPTION

The following detailed descriptions set forth the distinctive characteristics of 'DrisStrawEightyTwo'. The data which define these characteristics is based on observations taken in Tapalpa, Jalisco, Mexico and Purepero, Michoacan, Mexico from 2014 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. 'DrisStrawEightyTwo' has not been observed under all possible environmental conditions. The botanical description of 'DrisStrawEightyTwo' 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*, 2nd edition by James G. Harris and Melinda Woolf Harris, unless where otherwise defined.

Classification:

Species.—*Fragaria x ananassa*.

Common name.—Strawberry.

Denomination.—'DrisStrawEightyTwo'.

Parentage:

Female parent.—Proprietary strawberry plant '920AA240' (unpatented).

Male parent.—Proprietary strawberry plant '914U 19' (unpatented).

Plant:

Height.—19.8 cm.

Diameter.—35.1 cm.

Number of crowns per plant.—2.4.

Growth habit.—Semi-upright.

Stolon:

Average number of daughter plants per square foot.—

10.

- Diameter at bract.*—3.5 mm.
Anthocyanin coloration.—Medium.
Stolon color with anthocyanin coloration.—RHS 44C (Vivid reddish-orange).
- Leaf:
- Number of leaflets.*—Three only.
Color of upper surface.—RHS NN137A (Greyish olive green).
Variation.—Absent.
Terminal leaflet.—Length: 11 cm. Width: 15.2 cm. Length/width ratio: 0.7. Number of teeth/terminal leaflet: 21. Shape of base: Obtuse. Margin: Serrate to crenate. Shape in cross section: Straight.
Petiole.—Length: 12.8 cm. Diameter: 3.3 mm. Attitude of hairs: Slightly outwards. Bract frequency (number present on each petiole): 2.
Petiolule.—Length: 12 mm. Diameter: 1.6 mm.
Stipule.—Length: 3.0 cm. Width: 10.8 mm. Anthocyanin coloration: Medium. Anthocyanin color: RHS 42C (Strong reddish orange).
- Inflorescence:
- Position in relation to foliage.*—Above.
Pediceal.—Attitude of hairs: Slightly outwards.
Flower.—Flower diameter (petal tip to petal tip on non-flattened flower): 27.9 mm. Arrangement of petals: Touching. Stamen: Present. Typical and observed number of flowers per plant: 12.3.
Petal.—Length: 13.6 mm. Width: 13.6 mm. Length/width ratio: 1.0. Typical and observed petal number: 5.8. Color of upper side: RHS NN155C (White).
Calyx.—Diameter (sepal tip to sepal tip, measured on back of flower): 47.6 mm.
Sepal.—Length (sepal tip to point of attachment to receptacle): 22.1 mm. Width: 10.5 mm. Typical and observed sepal number: 13.
- Fruit:
- Length.*—47 mm.
Width.—41 mm.
Length/width ratio.—1.1.
Fruit hollow length.—2.6 mm.
Fruit hollow width.—1.0 mm.
Fruit hollow length/width ratio.—2.6.
Shape.—Conical.
Glossiness.—Medium.
Firmness.—Medium.
Color.—RHS 45A (Vivid red).
Position of achenes.—Level with surface.
Position of calyx attachment.—Level with fruit.
Attitude of sepals.—Outwards.
Color of flesh (excluding core).—RHS 34C (Strong reddish orange).
Color of core.—RHS 31A (Strong reddish orange).

- Production:
- Flowering interval.*—September to May.
Harvest interval.—October to May.
Type of bearing.—Fully remontant.
Productivity.—39,911 kg to 52,552 kg of fruit per hectare per season from six-month-old plants when grown in Tapalpa, Jalisco, Mexico.
Resistance to abiotic stress, pests, and diseases:
Heat.—Moderately resistant.
Two-spotted spider mite (tetranychus urticae).—Moderately resistant.
Botrytis fruit rot (botrytis cinerea).—Moderately resistant.
Powdery mildew (podosphaera macularis).—Moderately resistant.
Xanthomonas (xanthomonas fragariae).—Moderately susceptible.

COMPARISON WITH PARENTAL AND COMMERCIAL VARIETIES

‘DrisStrawEightyTwo’ differs from the proprietary female parent ‘920AA240’ (unpatented) in that ‘DrisStrawEightyTwo’ has earlier fruit production and a more compact plant than ‘920AA240’.

‘DrisStrawEightyTwo’ differs from the proprietary male parent ‘914U 19’ (unpatented) in that fruit of ‘DrisStrawEightyTwo’ are softer, more conic in shape, and larger in size than fruit of ‘914U 19’.

‘DrisStrawEightyTwo’ differs from the commercial variety ‘Driscoll El Dorado’ (U.S. Plant Pat. No. 16,238) in that ‘DrisStrawEightyTwo’ has an obtuse shape of base of terminal leaflet, a medium glossiness of fruit, an absent or small fruit cavity, and a level with surface position of achenes on fruit, whereas ‘Driscoll El Dorado’ has a rounded shape of base of terminal leaflet, a strong glossiness of fruit, a medium fruit cavity, and a below surface position of achenes on fruit. Further, ‘DrisStrawEightyTwo’ is fully remontant, while ‘Driscoll El Dorado’ is partially remontant.

‘DrisStrawEightyTwo’ differs from the commercial variety ‘DrisStrawThirtySix’ (U.S. Plant Pat. No. 25,698) in that ‘DrisStrawEightyTwo’ has an obtuse shape of base of terminal leaflet, a medium glossiness of fruit, an absent or small fruit cavity, and a level with surface position of achenes on fruit, whereas ‘DrisStrawThirtySix’ has an acute shape of base of terminal leaflet, a strong glossiness of fruit, a medium fruit cavity, and a below surface position of achenes on fruit. Further, ‘DrisStrawEightyTwo’ is fully remontant, while ‘DrisStrawThirtySix’ is not remontant.

We claim:

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

* * * * *

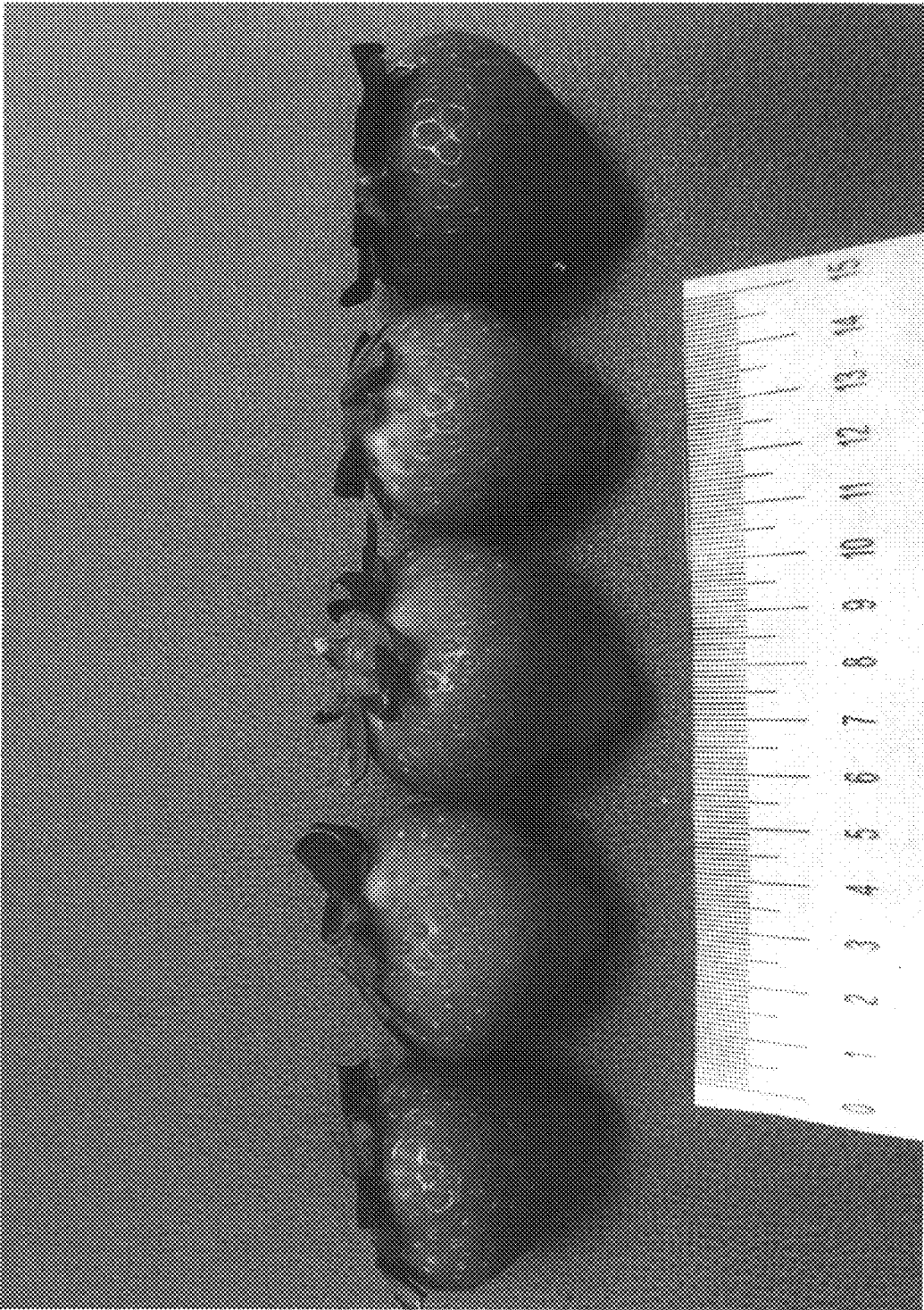


FIG. 1



FIG. 2

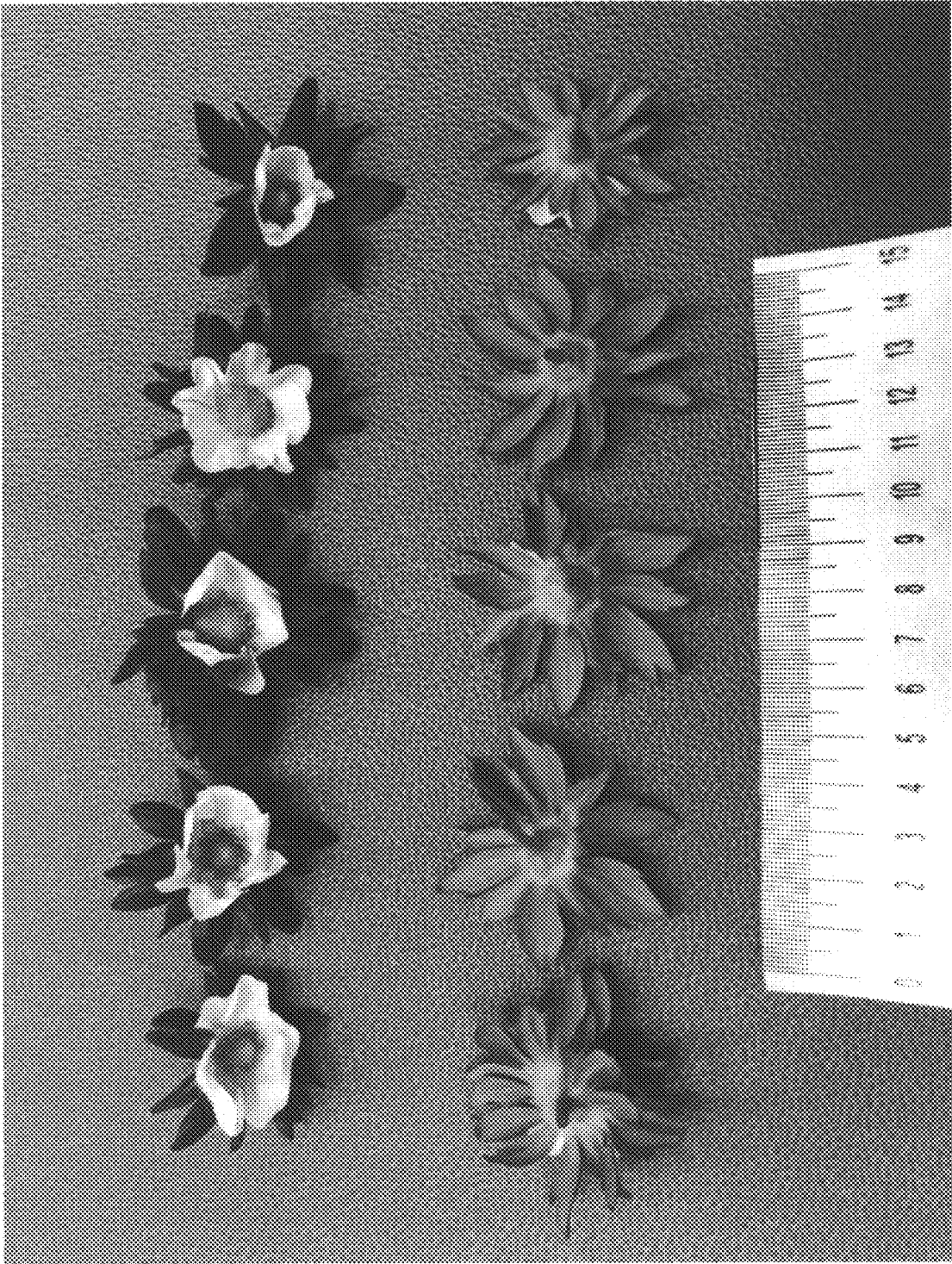


FIG. 3

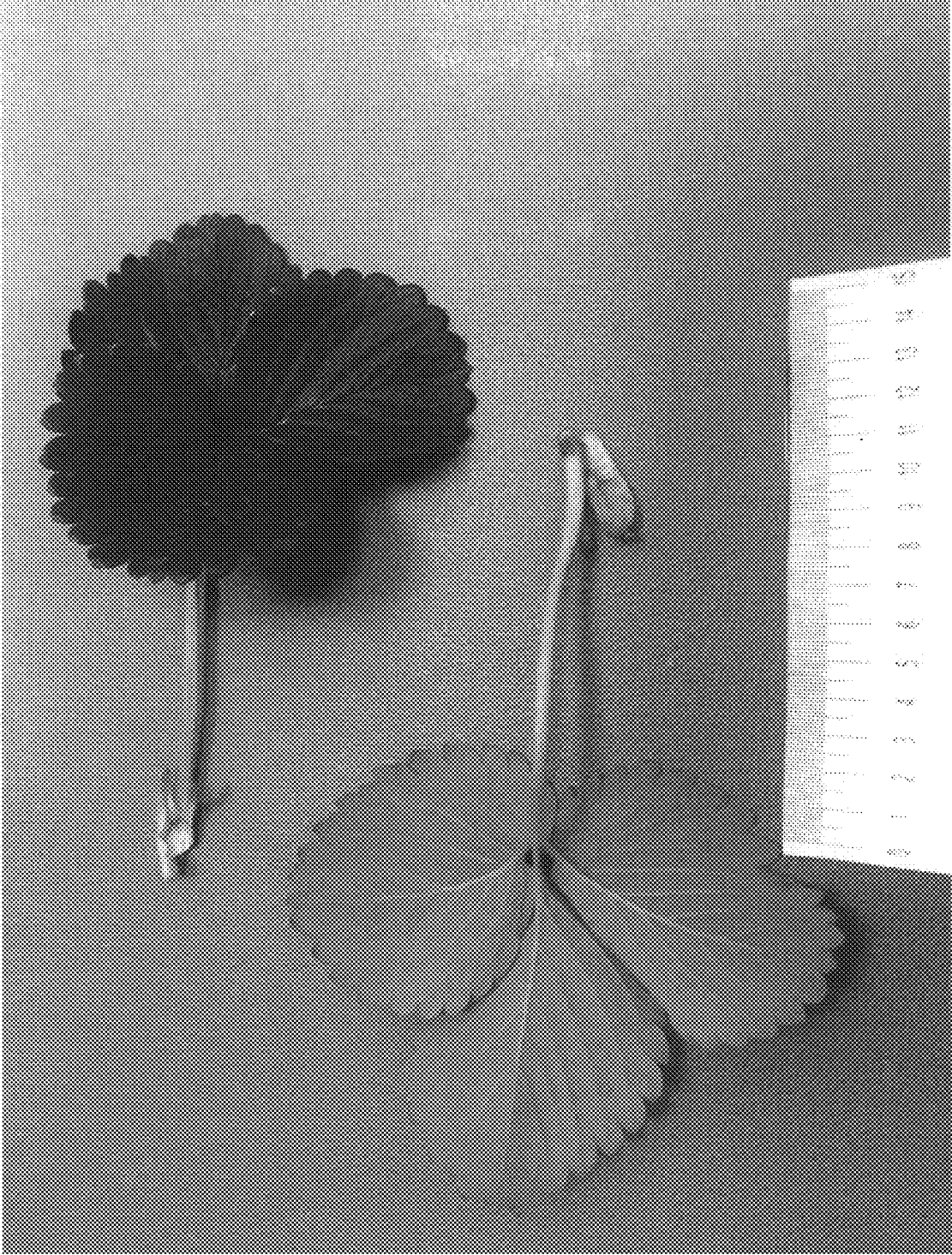


FIG. 4

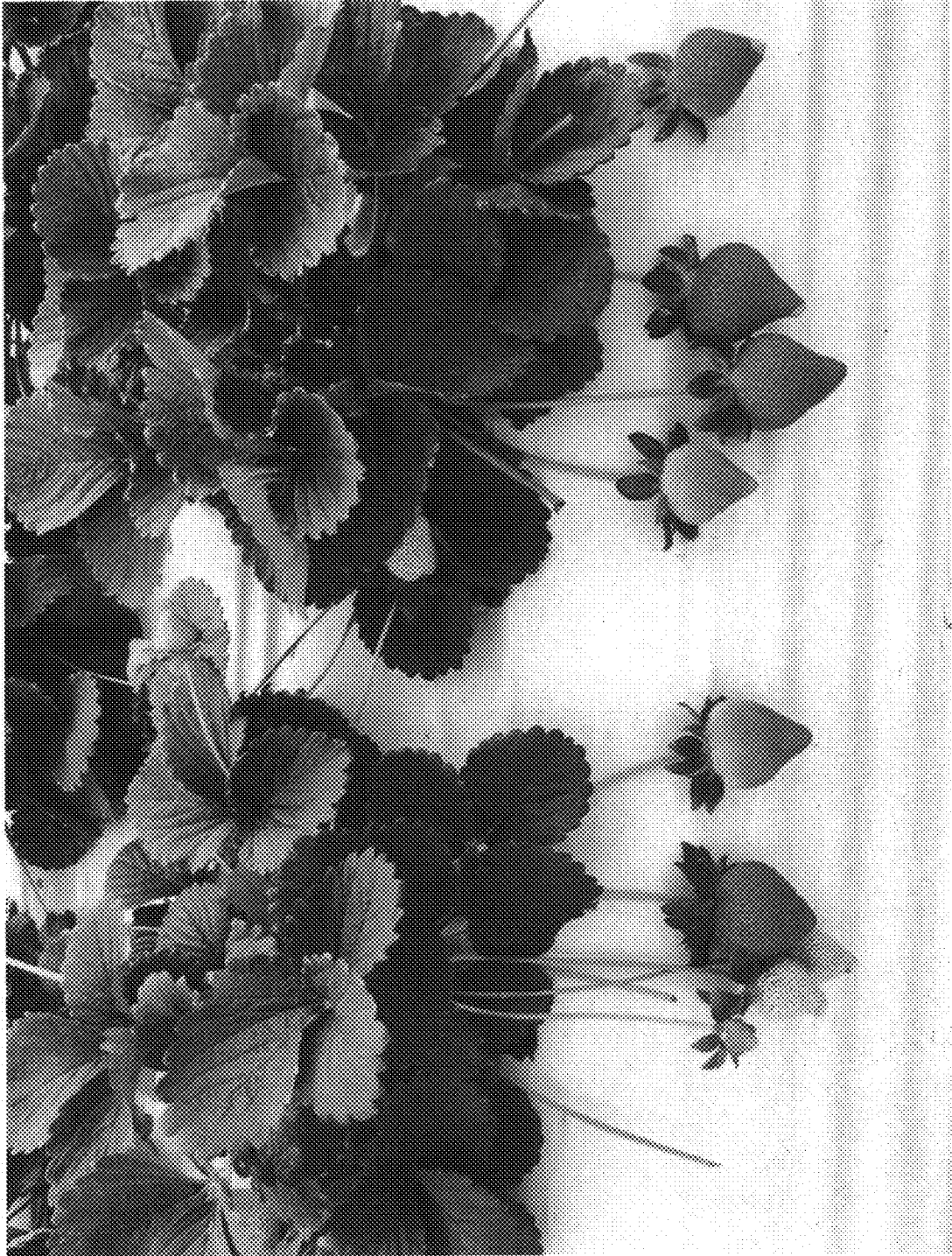


FIG. 5