US00PP32080P2

(12) United States Plant Patent

Ferguson et al.

(10) Patent No.: US PP32,080 P2
(45) Date of Patent: Aug. 18, 2020

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

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

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(*) 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.: **16/501,428**

(22) Filed: **Apr. 11, 2019**

(51) **Int. Cl.**
A01H 5/08 (2018.01)
A01H 6/74 (2018.01)

(52) **U.S. Cl.**
USPC **Plt./209**
CPC ***A01H 6/7409*** (2018.05)

(58) **Field of Classification Search**
USPC Plt./209
CPC A01H 6/7409
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 Sjulin et al.
PP8,661 P 3/1994 Bringhurst et al.
PP8,708 P 5/1994 Voth et al.
PP8,745 P 5/1994 Sjulin et al.
PP9,130 P 5/1995 Sjulin et al.
PP9,909 P 6/1997 Ackerman et al.
PP10,221 P 2/1998 Sjulin et al.
PP10,534 P 8/1998 Sjulin 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 Sjulin 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 Sjulin et al.
PP15,375 P2 11/2004 Mowrey et al.
PP15,435 P2 12/2004 Sjulin 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.
PP20,363 P2 9/2009 Chandler
PP20,701 P2 2/2010 Gilford et al.
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.
(Continued)

OTHER PUBLICATIONS

"An Early Season with Many highs", Berry Gardens, Available Online at <https://www.berrygardens.co.uk/an-early-season-with-many-highs/>, Aug. 21, 2017, pp. 1-6.
Fear et al., Unpublished U.S. Appl. No. 15/998,014, filed Jun. 11, 2018, titled "Strawberry Plant Variety Named 'DrisStrawFiftyEight'".
Ferguson et al., Unpublished U.S. Appl. No. 15/998,317, filed Aug. 3, 2018, titled "Strawberry Plant Variety Named 'DrisStrawSixty'".
Katie, "My Green Pod", Available online at <https://www.mygreenpod.com/articles/its-strawberry-time/>, May 30, 2017, pp. 1-3.
(Continued)

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(57) **ABSTRACT**

A new and distinct variety of strawberry plant named 'DrisStrawSeventyFive', selected for its large conical fruits, open canopy, and long trusses, is disclosed.

5 Drawing Sheets

(56) **References Cited**

U.S. PATENT DOCUMENTS

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.
PP29,728	P2	10/2018	Stewart et al.
PP29,729	P2	10/2018	Kibbe et al.
PP29,730	P2	10/2018	Kibbe et al.
PP29,731	P2	10/2018	Ferguson et al.
PP29,747	P2	10/2018	Vitten et al.
PP29,748	P2	10/2018	Vitten et al.
PP29,749	P2	10/2018	Stewart et al.
2003/0079263	P1	4/2003	Gilford et al.
2013/0276182	P1	10/2013	Fear et al.

OTHER PUBLICATIONS

Mendoza et al., Unpublished U.S. Appl. No. 16/350,139, filed Oct. 2, 2018, titled "Strawberry Plant Variety Named 'DrisStrawSixtySeven'".

Mendoza et al., Unpublished U.S. Appl. No. 15/998,020, filed Jun. 12, 2018, titled "Strawberry Plant Variety Named 'DrisStrawSixtyOne'".

Mendoza et al., Unpublished U.S. Appl. No. 15/998,169, filed Jul. 12, 2018, titled "Strawberry Plant Variety Named 'DrisStrawSixtyThree'".

Mendoza et al., Unpublished U.S. Appl. No. 15/998,170, filed Jul. 12, 2018, titled "Strawberry Plant Variety Named 'DrisStrawSixtyTwo'".

Pakozdi et al., Unpublished U.S. Appl. No. 16/501,198, filed Mar. 5, 2019, titled "Strawberry Plant Variety Named 'DrisStrawSeventyThree'".

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'".

Pakozdi et al., Unpublished U.S. Appl. No. 16/501,182, filed Mar. 5, 2019, titled "Strawberry Plant Variety Named 'DrisStrawSeventyFour'".

Pakozdi et al., Unpublished U.S. Appl. No. 16/501,200, filed Mar. 5, 2019, titled "Strawberry Plant Variety Named 'DrisStrawSeventyTwo'".

Stewart et al., Unpublished U.S. Appl. No. 16/350,432, filed Nov. 14, 2018, titled "Strawberry Plant Variety Named 'DrisStrawSixtySix'".

Stewart et al., Unpublished U.S. Appl. No. 15/998,031, filed Jun. 14, 2018, titled "Strawberry Plant Variety Named 'DrisStrawSixtyFour'".

STRAWBERRY PLANT NAMED 'DRISSTRAWSEVENTYFIVE'

Latin name:

Botanical classification: *Fragaria* x *ananassa.*

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

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 'DrisStrawSeventyFive'.

Strawberry plant variety 'DrisStrawSeventyFive' originated from a cross between the proprietary female parent '54S259' (unpatented) and the male parent 'DrisStrawFiftySix' (U.S. Plant Pat. No. 29,731). Progeny plants from this cross, including 'DrisStrawSeventyFive', were asexually propagated via stolons in McArthur, Shasta County, Calif. in April of 2012. Strawberry plant variety 'DrisStrawSeventyFive' was later specifically identified and selected in Ventura County, Calif. in October of 2012.

'DrisStrawSeventyFive' was subsequently asexually propagated via stolons, and underwent further testing at a farm in Ventura County, Calif. for six years (2012 to 2018). The present variety has been found to be stable and reproduce true to type through successive asexual propagations via stolons.

'DrisStrawSeventyFive' exhibits the following distinguishing characteristics when grown under normal horticultural practices in Ventura County, Calif.:

1. Upright plant growth habit;
2. Inflorescence above foliage; and
3. Partially remontant type of bearing.

'DrisStrawSeventyFive' was selected for its large conical fruits, open canopy, and long trusses.

DESCRIPTION OF THE DRAWINGS

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

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

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

FIG. **3** shows the upper and lower surfaces of flowers of variety 'DrisStrawSeventyFive'.

FIG. **4**A shows the upper surface of a leaf of variety 'DrisStrawSeventyFive'. FIG. **4**B shows the lower surface of a leaf of variety 'DrisStrawSeventyFive'.

FIG. **5** illustrates a plant of variety 'DrisStrawSeventyFive'.

DETAILED BOTANICAL DESCRIPTION

The following detailed descriptions set forth the distinctive characteristics of 'DrisStrawSeventyFive'. The data which define these characteristics is based on observations taken in Ventura County, Calif. from 2012 to 2018. 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. 'DrisStrawSeventyFive' has not been observed under all possible environmental conditions. The botanical description of 'DrisStrawSeventyFive' was taken from plants that were three month 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.

Classification:

Species.—*Fragaria* x *ananassa.*

Common name.—Strawberry.

Denomination.—'DrisStrawSeventyFive'.

Parentage:

Female parent.—The proprietary variety '54S259' (unpatented).

Male parent.—The variety 'DrisStrawFiftySix' (U.S. Plant Pat. No. 29,731).

Plant:

Height.—19.1 cm.

Diameter.—35.3 cm.

Number of crowns per plant.—4.

Growth habit.—Upright.

Density of foliage.—Medium.

Vigor.—Medium.

Stolon:

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

Diameter at bract.—3.30 mm.

Anthocyanin coloration.—Strong.

Anthocyanin color.—RHS 58C (Strong purplish red).

Stolon color.—RHS 138B (Moderate yellow-green).
Density of pubescence on the stolon.—Medium.

Leaf:
Number of leaflets.—Three only.
Color of upper surface.—RHS NN137B (Greyish olive green).
Color of lower surface.—RHS 138B (Moderate yellow-green).
Leaf blistering.—Medium.
Leaf glossiness.—Medium.
Variegation.—Absent.
Terminal leaflets.—Length: 9.2 cm. Width: 8.1 cm. Length/width ratio: 1.1. Number of teeth/terminal leaflet: 23. Shape of base: Acute. Margin: Serrate to crenate. Shape in cross section: Concave.
Petiole.—Length: 14.7 cm. Diameter: 3.64 mm. Attitude of hairs: Slightly outwards. Bract frequency (number present on each petiole): 2. Petiole color: RHS 143B (Strong yellow-green).
Petiolule.—Length: 9.62 mm. Diameter: 2.27 mm.
Stipule.—Length: 4.2 cm. Width: 8.60 mm. Anthocyanin coloration: Weak. Anthocyanin color: RHS 54B (Deep purplish pink). Stipule color: RHS 141C (Strong yellowish green).

Inflorescence:
Position in relation to foliage.—Above.
Pedicel.—Attitude of hairs: Slightly outwards. Pedicel color: RHS 144B (Strong yellow-green).
Flower.—Flower diameter (petal tip to petal tip on non-flattened flower): 23.89 mm. Arrangement of petals: Overlapping. Stamen: Present. Stamen length: 5.1 mm. Stamen width: 0.4 mm. Number of stamens per flower: 30. Anther color: RHS 14A (Vivid yellow). Typical and observed number of flowers per plant: 33.30.
Petal.—Length: 9.61 mm. Width: 10.50 mm. Length/width ratio: 0.9. Typical and observed petal number: 6. Color of upper side: RHS NN155B (White). Color of lower side: RHS 155B (Yellowish white).
Calyx.—Diameter (sepal tip to sepal tip, measured on back of flower): 27.53 mm. Calyx color: RHS 139A (Dark yellowish green).
Sepal.—Length (sepal tip to point of attachment to receptacle): 9.17 mm. Width: 5.30 mm. Typical and observed sepal number: 11.

Fruit:
Length.—43.31 mm.
Width.—39.30 mm.
Length/width ratio.—1.1.
Fruit hollow length.—14.13 mm.
Fruit hollow width.—9.96 mm.
Fruit hollow length/width ratio.—1.4.
Shape.—Conical.
Differences in shape between primary and secondary fruit.—Slight.
Color.—RHS N45A (Moderate red).
Evenness of fruit color.—Even or very slightly uneven.
Fruit glossiness.—Medium.
Width of band without achenes.—Absent or very narrow.
Fruit firmness.—Medium.
Position of achenes.—Below surface.
Achene color.—RHS 151B (Strong yellowish green).
Number of achenes per fruit.—370.
Achene weight.—477 mg.
Peduncle length.—8.95 cm.
Peduncle diameter.—2.2 mm.
Number of fruit per truss.—5.
Position of calyx attachment.—Inserted.
Attitude of sepals.—Upwards.
Color of flesh (excluding core).—RHS N155C (Pinkish white).
Color of core.—RHS 38C (Light yellowish pink).
Titratable acidity (as citric acid in percentage).—0.8025%.
Sugar content (as soluble solids in degrees brix).—8.225°.

Production:
Flowering interval.—July to November.
Harvest interval.—September to December.
Type of bearing.—Partially remontant.
Productivity.—10,864 kg to 16,119 kg of fruit per acre per season from five-month-old plants when grown in Ventura County, Calif.

Resistance to diseases, pests, and abiotic stress:
Strawberry aphid (chaetosiphon fragaefolii).—Moderately resistant.
Two-spotted spider mite (tetranychus urticae).—Moderately resistant.
Botrytis fruit rot (botrytis cinerea).—Moderately resistant.
Powdery mildew (podosphaera macularis).—Moderately resistant.

COMPARISON WITH PARENTAL AND COMMERCIAL VARIETIES

'DrisStrawSeventyFive' differs from the proprietary female parent '54S259' (unpatented) in that 'DrisStrawSeventyFive' has a less dense canopy, larger fruit size, and longer trusses compared to '54S259'.

'DrisStrawSeventyFive' differs from the male parent 'DrisStrawFiftySix' (U.S. Plant Pat. No. 29,731) in that 'DrisStrawSeventyFive' has an upright plant growth habit, inflorescence above foliage, an overlapping arrangement of petals, and a partially remontant type of bearing, whereas 'DrisStrawFiftySix' has a semi-upright to spreading plant growth habit, inflorescence on the same level as foliage, a touching arrangement of petals, and a fully remontant type of bearing.

'DrisStrawSeventyFive' differs from the commercial variety 'DrisStrawTwentyOne' (U.S. Plant Pat. No. 23,506) in that 'DrisStrawSeventyFive' has inflorescence above foliage, an acute shape of base of terminal leaflet, a serrate to crenate margin of terminal leaflet, and a partially remontant type of bearing, whereas 'DrisStrawTwentyOne' has inflorescence beneath foliage, a rounded shape of base of terminal leaflet, a crenate margin of terminal leaflet, and a fully remontant type of bearing.

'DrisStrawSeventyFive' differs from the commercial variety 'DrisStrawSixty' (U.S. Plant Pat. No. 30,789) in that 'DrisStrawSeventyFive' has an upright plant growth habit, inflorescence above foliage, an acute shape of base of terminal leaflet, and a partially remontant type of bearing, whereas 'DrisStrawSixty' has a semi-upright plant growth habit, inflorescence on the same level as foliage, a rounded shape of base of terminal leaflet, and a fully remontant type of bearing.

We claim:

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

* * * * *

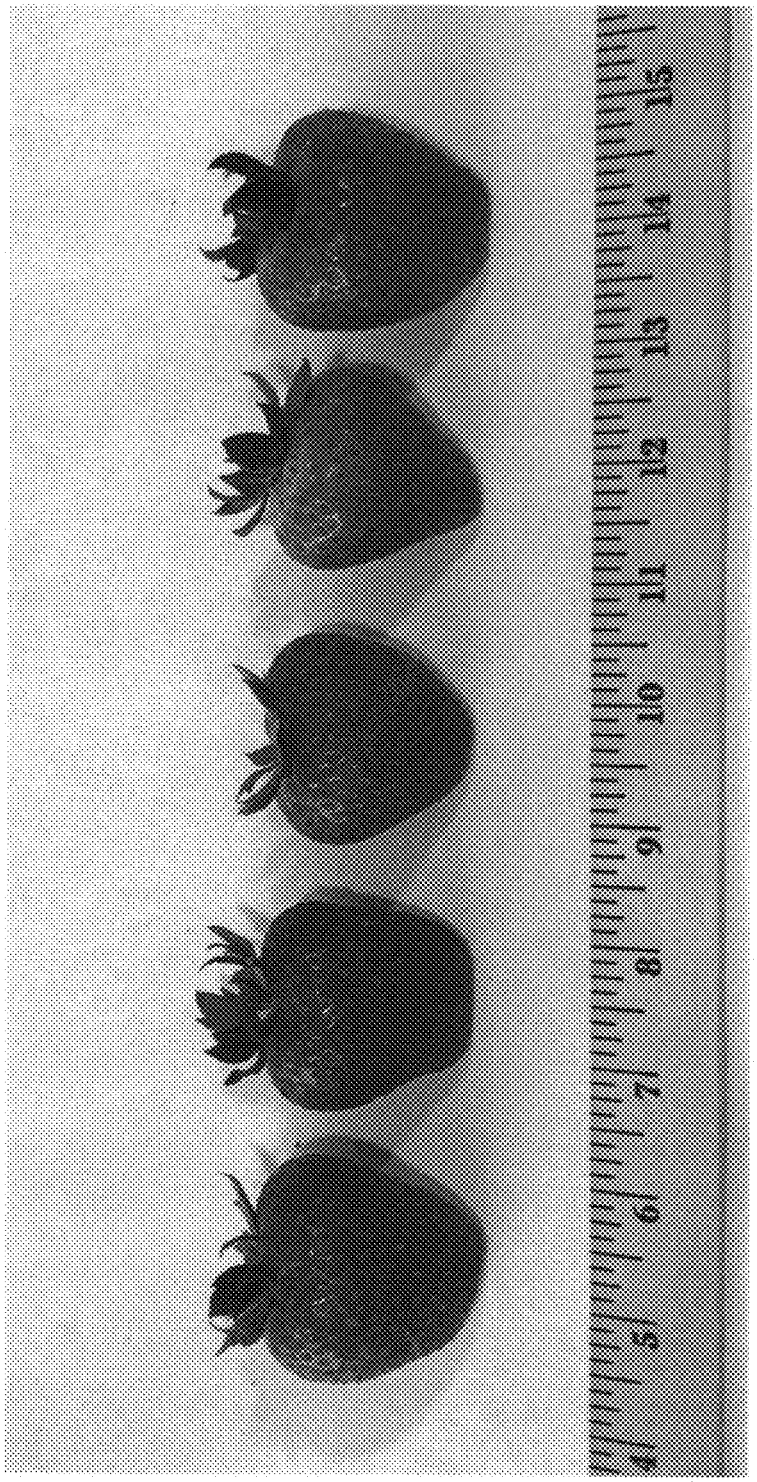

FIG. 1

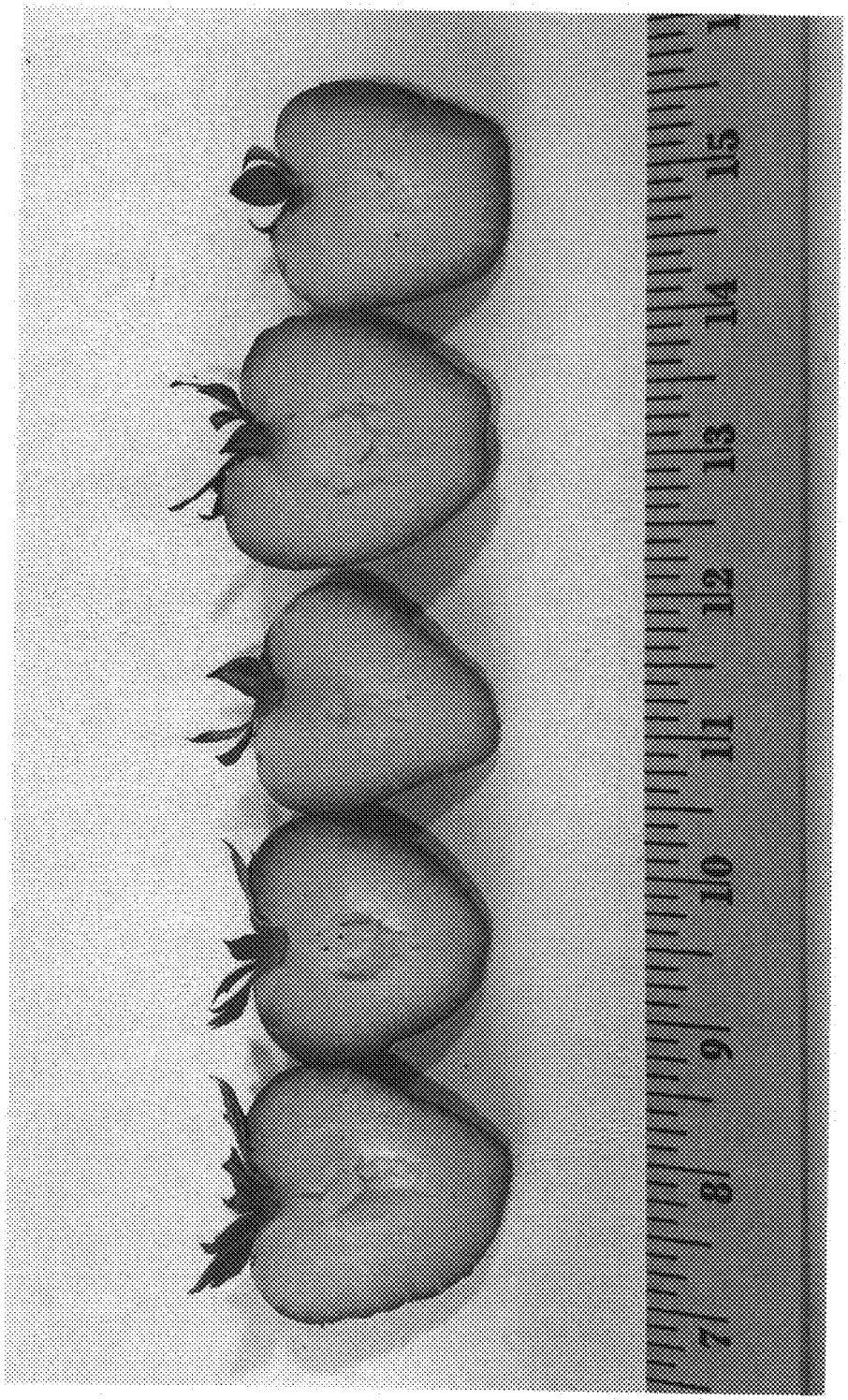

FIG. 2

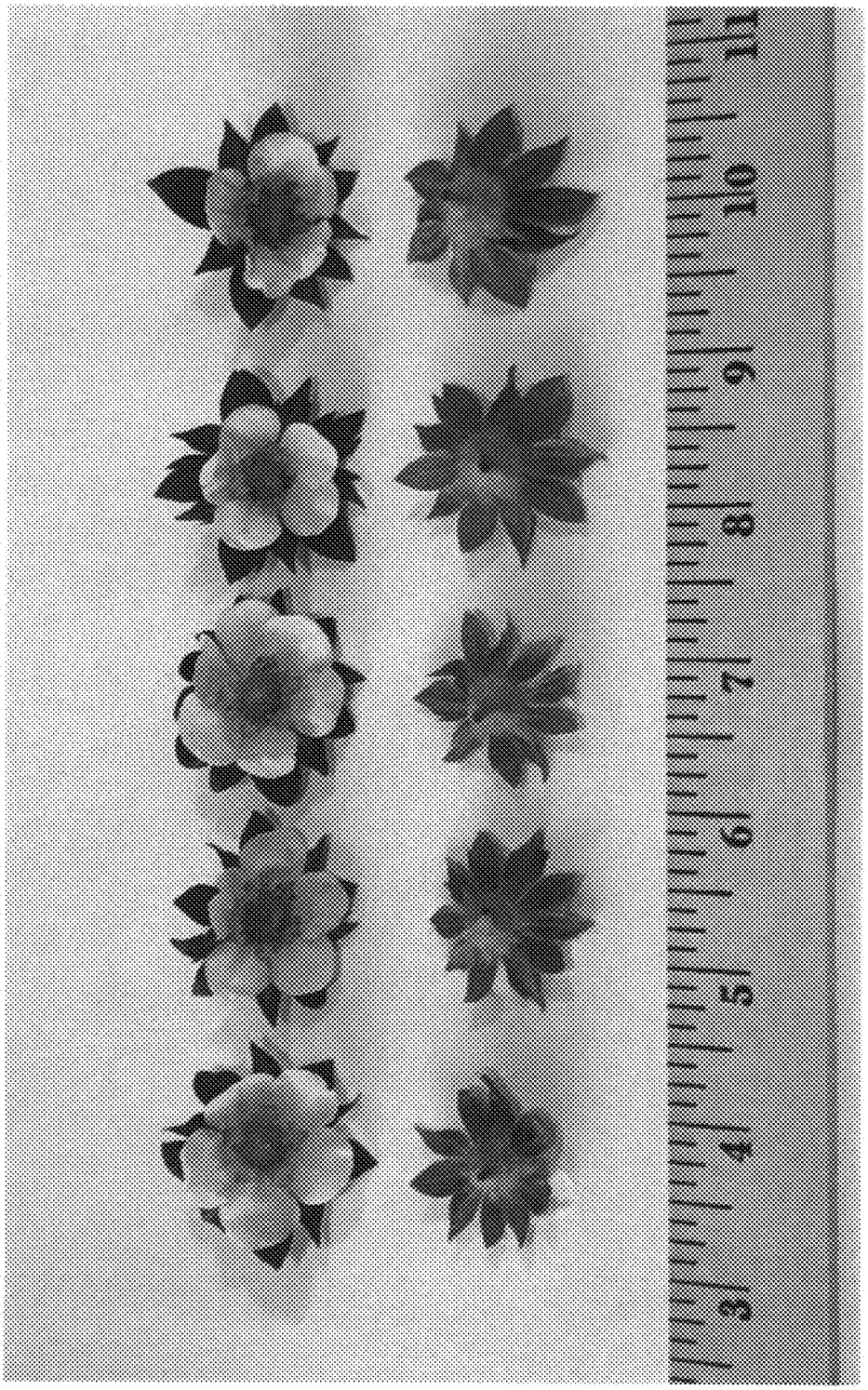

FIG. 3

FIG. 4A

FIG. 4B

FIG. 5