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Gilford et al.

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

(50) Latin Name: ***Fragaria×ananassa***
Varietal Denomination: **DrisStrawSeven**

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(58) **Field of Classification Search** Plt./208
See application file for complete search history.

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(57) **ABSTRACT**

This invention relates to a new and distinct cultivar of strawberry plant named 'DrisStrawSeven'. The new cultivar is primarily characterized by its large, sweet tasting fruit, early harvest maturity, and resistance to powdery mildew is disclosed.

3 Drawing Sheets

Genus and species: *Fragaria×ananassa.*
Variety denomination: 'DrisStrawSeven'.

BACKGROUND OF THE NEW PLANT

The present invention relates to a new and distinct strawberry cultivar designated 'DrisStrawSeven' and botanically known as *Fragaria×ananassa*. This new strawberry cultivar was discovered in Monterey, Calif. in June, 2003 and originated from a cross between the female proprietary parent '77G1' (unpatented) and the male parent 'Driscoll Camarillo' (U.S. Plant Pat. No. 14,771). The original seedling of the new cultivar was asexually propagated at a nursery in Shasta County, Calif. 'DrisStrawSeven' was subsequently asexually propagated and underwent further testing at a nursery in Hillsborough, Fla. for four years. The present invention has been found to retain its distinctive characteristics through successive asexual propagations.

DESCRIPTION OF THE PHOTOGRAPHS

The accompanying color photographs show typical specimens of the new cultivar at various stages of development as nearly true as it is possible to make in color reproductions. The photographs were taken from 5-month-old plants.

FIG. **1** shows overall plant habit including fruit at various stages of development.

FIG. **2** shows leaves of the plant with three leaflets.

FIG. **3** shows the upperside of several of the flowers.

FIG. **4** shows the whole fruit.

FIG. **5** shows the fruit in longitudinal cross-section.

DESCRIPTION OF THE NEW CULTIVAR

The following description of 'DrisStrawSeven' is based on observations taken from the 2003 to 2008 growing seasons in Hillsborough, Fla. 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. 'DrisStrawSeven' has not been observed under all possible environmental conditions. The botanical description of 'DrisStrawSeven' was taken from 5-month-old plants. Color terminology follows The Royal Horticultural Society Colour Chart, London (RHS) (2001).

DETAILED BOTANICAL DESCRIPTION

Table 1 shows selected plant characteristics of the new variety compared with plant characteristics of 'Driscoll Atlantis', (U.S. Plant Pat. No. 16,475) and 'Driscoll Sanibel' (U.S. Plant Pat. No. 16,298). Plant characteristics include plant height, petiolule length, stipule width, inflorescence position relative to foliage, flower size, fruit truss diameter, and fruit size.

TABLE 1

Characteristic	'DrisStrawSeven'	'Driscoll Atlantis'	'Driscoll Sanibel'
Plant height (cm)	20.9	19.8	20.2
Petiolule length (cm)	1.394	1.451	1.626
Stipule width (cm)	0.420	0.087	0.112
Inflorescence position relative to foliage	Above	Between above and level with	Between beneath and level with
Flower size	Medium	Between medium and large	Large
Fruit truss diameter (cm)	0.522	0.423	0.404
Fruit size	Large	Medium	Between large and very large

Table 2 shows plant characteristics of the new variety compared with plant characteristics of the commercial varieties 'Driscoll Atlantis' (U.S. Plant Pat. No. 16,475) and 'Driscoll Sanibel' (U.S. Plant Pat. No. 16,298). Plant characteristics

include plant height, diameter, number of crowns per plant, habit, density of individual plant and vigor.

TABLE 2

Characteristic	'DrisStrawSeven'	'Driscoll Atlantis'	'Driscoll Sanibel'
Plant height (cm)	20.9	19.8	20.2
Plant diameter (cm)	35.5	38.9	38.7
Number of crowns/plant	3	3	2
Habit	Flat globose	Flat globose	Flat
Density of individual plant	Medium	Medium to Dense	Medium
Vigor	Medium	Medium	Strong

Table 3 shows leaf characteristics of the new cultivar compared with leaf characteristics of 'Driscoll Atlantis' and 'Driscoll Sanibel'. Leaf characteristics include terminal leaflet length and width in centimeters, length to width ratio, number of teeth per terminal leaflet, shape of teeth, color of upperside and underside of leaf, leaf shape in cross section, leaf blistering, leaf glossiness, number of leaflets, terminal leaflet margin, terminal leaflet length to width ratio and shape of leaf apex and base.

TABLE 3

Leaf Characteristic	'DrisStrawSeven'	'Driscoll Atlantis'	'Driscoll Sanibel'
Terminal leaflet length (cm)	7.97	7.89	8.56
Terminal leaflet width (cm)	7.96	8.01	8.47
Terminal leaflet length/ width ratio	1.0	1.0	1.0
No. teeth/terminal leaflet	23	23	22
Shape of teeth	Rounded	Between obtuse and rounded	Rounded
Color of upperside of leaf	RHS 147A Dark yellow-green	RHS 137A Dark green	RHS 131B Dark green
Color of underside of leaf	RHS 138B Medium green	RHS 140D Light green	RHS 142C Light green
Leaf shape in cross section	Slightly concave	Between slightly concave and flat	Slightly concave
Leaf blistering	Strong	Medium	Between medium and strong
Leaf glossiness	Medium	Weak	Medium
No. leaflets	More than three (up to 5 out of 10 leaves)	Three only	Three only
Terminal leaflet margin	Flat	Flat	Flat
Terminal leaflet: length/ width ratio	As long as broad	As long as broad	As long as broad
Terminal leaflet shape	Orbicular	Ovate	Between oval and ovate
Terminal leaflet base shape	Rounded		Obtuse
Terminal leaflet apex shape	Rounded	Rounded	Rounded

Table 4 shows information about the petiole, the petiolule, the bract, and the stipule of the new cultivar compared to 'Driscoll Atlantis' and 'Driscoll Sanibel'. This includes petiole length in centimeters, petiole diameter in centimeters, petiole pubescence, pose of hairs on the petiole, color of the petiole, color of the petiolule, petiolule length in centimeters, petiolule diameter in centimeters, bract frequency per petiole, stipule length in centimeters, stipule width in centimeters, and stipule pubescence.

TABLE 4

Characteristic	'DrisStrawSeven'	'Driscoll Atlantis'	'Driscoll Sanibel'
Petiole length (cm)	12.7	13.7	15.3
Petiole diameter (cm)	0.456	0.430	0.455
Petiole pubescence	Between medium and dense	Dense	Medium
Petiole pose of hairs	Between upwards and outwards	Outwards	Between outwards and downwards
Petiole color	RHS 144D Light yellow-green	RHS 145C Light yellow-green	RHS 145D Light yellow-green
Petiolule color	RHS 144D Light yellow-green	RHS 145C Light yellow-green	RHS 145D Light yellow-green
Petiolule length (cm)	1.394	1.451	1.626
Petiolule diameter (cm)	0.237	0.213	0.233
Bract frequency	2	2	2
Stipule length (cm)	3.8	3.7	3.9
Stipule width (cm)	0.420	0.087	0.112
Stipule pubescence	Medium	Dense	Medium
Stipule anthocyanin coloration	Medium		

Table 5 shows stolon characteristics of the new cultivar compared to 'Driscoll Atlantis' and 'Driscoll Sanibel'. These characteristics include the number of stolons, average number of daughter plants, the anthocyanin coloration of the stolons, the thickness of the stolons, and the pubescence of the stolons.

TABLE 5

Characteristic	'DrisStrawSeven'	'Driscoll Atlantis'	'Driscoll Sanibel'
Stolon Number	Many		
Average number of daughter plants	55	53	52
Stolon Anthocyanin	Medium	Between weak and medium	Strong
Stolon Thickness	Medium	Medium	Medium
Stolon Pubescence	Sparse	Medium	Medium

Table 6 shows inflorescence characteristics of the new cultivar compared to 'Driscoll Atlantis' and 'Driscoll Sanibel'. These characteristics include inflorescence position relative to foliage, relative flower size, flower diameter in centimeters (measured from petal tip to petal tip), petal shape, relative spacing of petals, petal apex, base and margin, petal length in centimeters, petal width in centimeters, petal length to width ratio, number of petals, petal color, calyx diameter in centimeters (measured on back of flower from sepal tip to sepal tip), diameter of calyx relative to corolla, diameter of inner calyx relative to outer, sepal shape, apex and margin, sepal length in centimeters (measured from sepal tip to point of attachment to receptacle), sepal width in centimeters, number of sepals, receptacle color and anther color.

TABLE 6

Characteristic	'DrisStrawSeven'	'Driscoll Atlantis'	'Driscoll Sanibel'
Inflorescence position relative to foliage	Above	Between level with and above	Between beneath and level with
Flower size	Medium	Between medium and large	Large
Flower diameter (cm)	2.238	2.369	2.070
Petal shape	Orbicular	Orbicular	Orbicular
Petal spacing	Overlapping	Overlapping	Between touching and overlapping
Petal apex shape	Rounded	Rounded	Rounded
Petal margin	Entire	Entire	Entire
Petal base shape	Rounded	Rounded	Rounded
Petal length (cm)	1.043	1.248	1.166
Petal width (cm)	1.081	1.302	1.188
Petal length/ width ratio	As long as broad	As long as broad	As long as broad
Typical and observed petal number	6	5	6
Petal color	RHS 155D White	RHS 155C White	RHS 155C White
Calyx diameter (cm)	2.789	2.871	2.997
Calyx diameter relative to corolla	Between smaller and same size	Between same size and larger	Between same size and larger
Inner calyx diameter relative to outer	Same size	Same size	Larger
Sepal shape	Elliptical	Elliptical	Elliptical
Sepal apex shape	Convex	Convex	Convex
Sepal margin	Entire	Entire	Entire
Sepal length (cm)	0.989	1.040	1.172
Sepal width (cm)	0.508	0.713	0.637
Typical and observed sepal number	12	11	11
Receptacle color	RHS 3A Medium yellow	RHS 149A Medium yellow green	RHS 149B Medium yellow green
Anther color	RHS 7A Dark yellow	RHS 9A Dark yellow	RHS 9A Dark yellow

Table 7 shows fruit characteristics of the new cultivar compared to 'Driscoll Atlantis' and 'Driscoll Sanibel'. These characteristics include fruiting truss length in centimeters, fruiting truss diameter, number of berries per truss, fruiting truss attitude, fruiting truss color, fruit length in centimeters, fruit truss width in centimeters, fruit length to width ratio, fruit hollow length and width in centimeters, fruit weight in grams, relative fruit size, predominant fruit shape, difference in shape between primary and secondary fruits, band without achenes, unevenness of fruit surface, fruit skin color, evenness of fruit color, fruit glossiness, insertion of achenes, achene coloration (sunward and shaded sides of berry), insertion of calyx, pose of calyx segments, size of calyx in relation to fruit, adherence of calyx, firmness of flesh, color of the fruit flesh, evenness of the flesh color, distribution of flesh color, hollow center, sweetness of fruit, acidity of fruit, texture of fruit when tasted, time of flowering, harvest maturity, type of bearing, grams of fruit per plant.

TABLE 7

Characteristic	'DrisStrawSeven'	'Driscoll Atlantis'	'Driscoll Sanibel'
Fruiting truss length (cm)	22.2	22.7	19.7
Fruiting truss diameter (cm)	0.522	0.423	0.404
Number of berries per fruiting truss	3	3	1
Fruiting truss attitude	Between erect and semi-erect	Prostrate	Prostrate
Fruiting truss color	RHS 144D Light yellow green	RHS 145B Light yellow green	RHS 144B Light yellow green
Fruit length (cm)	4.890	4.200	5.180
Fruit width (cm)	3.720	3.640	4.610
Fruit length/ width ratio	1.3	1.2	1.1
Fruit length/ width ratio	Longer than broad	Longer than broad	Longer than broad
Fruit hollow length (cm)	2.130	1.880	2.310
Fruit hollow width (cm)	0.420	0.850	0.790
Fruit hollow length/width ratio	5.1	2.2	2.9
Fruit weight (g)	26.7	23.8	31.8
Relative fruit size	Large	Medium	Between large and very large
Predominant fruit shape	Conical	Conical	Conical
Difference in shape between primary & secondary fruits	Slight	Slight	Slight
Band without achenes	Narrow	Absent or very narrow	Narrow
Unevenness of fruit surface	Medium	Between weak and medium	Medium
Fruit skin color	RHS 46A Dark red	RHS 45B Medium red	RHS 43A Medium red
Evenness of fruit color	Even	Even	Even
Fruit glossiness	Between medium and strong	Strong	Strong
Insertion of achenes	Level with surface	Level with surface	Level with surface
Achene coloration - shaded side of berry	RHS 145A Light yellow-green	RHS 151D Light yellow-green	RHS 150C Light yellow-green
Insertion of calyx	Level	Level	Level
Pose of calyx segments	Spreading	Between spreading and reflexed	Between spreading and reflexed
Size of calyx in relation to fruit	Between same size and larger	Between same size and larger	Larger
Adherence of calyx	Strong	Strong	Strong
Firmness of flesh	Between medium and firm	Firm	Medium
Color of the flesh	RHS 40B Medium red	RHS 42B Medium red	RHS 40C Medium red
Evenness of flesh color	Between uneven and slightly uneven	Slightly uneven	Slightly uneven
Distribution of flesh color	Marginal and central	Marginal and central	Marginal and central
Hollow center	Small	Medium	Medium
Sweetness	Strong	Strong	Strong
Acidity	Between weak and medium	Medium	Medium

TABLE 7-continued

Characteristic	'DrisStrawSeven'	'Driscoll Atlantis'	'Driscoll Sanibel'
Texture when tasted	Fine	Medium	Fine
Time of flowering	Medium	Very early	Early
Harvest maturity (50% of plants with ripe fruit)	Early December to late April	Late November to mid-March	Late November to mid-March
Type of bearing	Not everbearing	Partially everbearing	Partially everbearing
Grams of fruit/plant	402	360	448

Table 8 shows pest and disease characteristics of the new cultivar compared to 'Driscoll Atlantis' and 'Driscoll Sanibel'.

TABLE 8

Pest or Disease	'DrisStrawSeven'	'Driscoll Atlantis'	'Driscoll Sanibel'
Xanthomonas fragariae	Susceptible	Moderately susceptible	Moderately susceptible
Powdery mildew	Resistant	Susceptible	Susceptible

COMPARISON WITH PARENTAL CULTIVARS

When 'DrisStrawSeven' is compared to the proprietary female parent '77G1' (unpatented), 'DrisStrawSeven' is a short-day plant, whereas '77G1' is a day-neutral plant.

When 'DrisStrawSeven' is compared to the male parent 'Driscoll Camarillo' (U.S. Plant Pat. No. 14,771), 'DrisStrawSeven' is a globose plant that is not everbearing, whereas 'Driscoll Camarillo' is a flat globose plant that is fully everbearing. In addition, the leaf shape in cross section of 'DrisStrawSeven' is slightly concave and 'DrisStrawSeven' has more than three leaflets. The leaf shape in cross section of 'Driscoll Camarillo' is concave and 'Driscoll Camarillo' has only three leaflets. Further, the fruiting truss attitude in 'DrisStrawSeven' is between erect and semi-erect, whereas it is prostrate in 'Driscoll Camarillo'.

We claim:

1. A new and distinct cultivar of strawberry plant as described and shown herein.

* * * * *

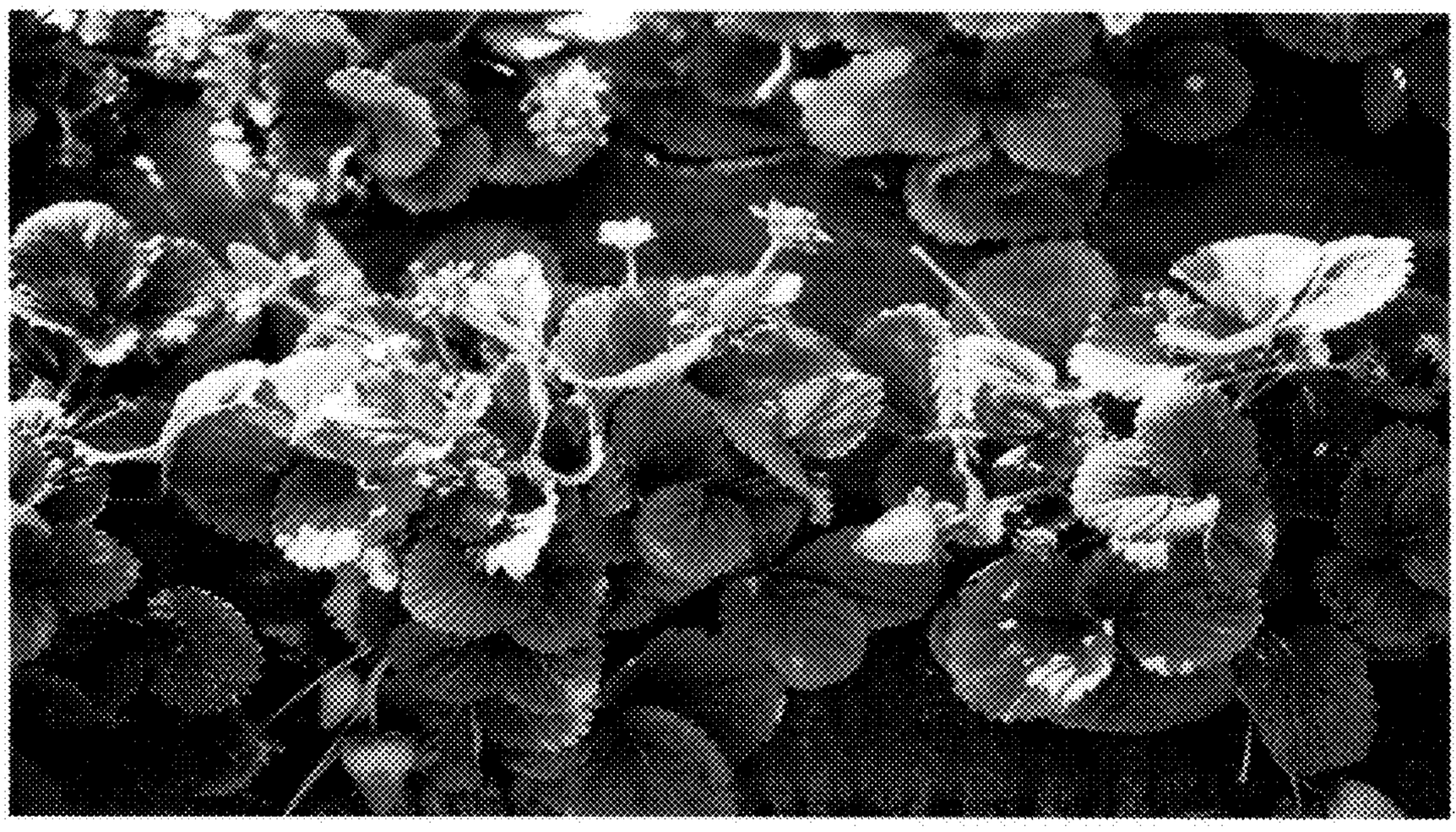

FIG. 1

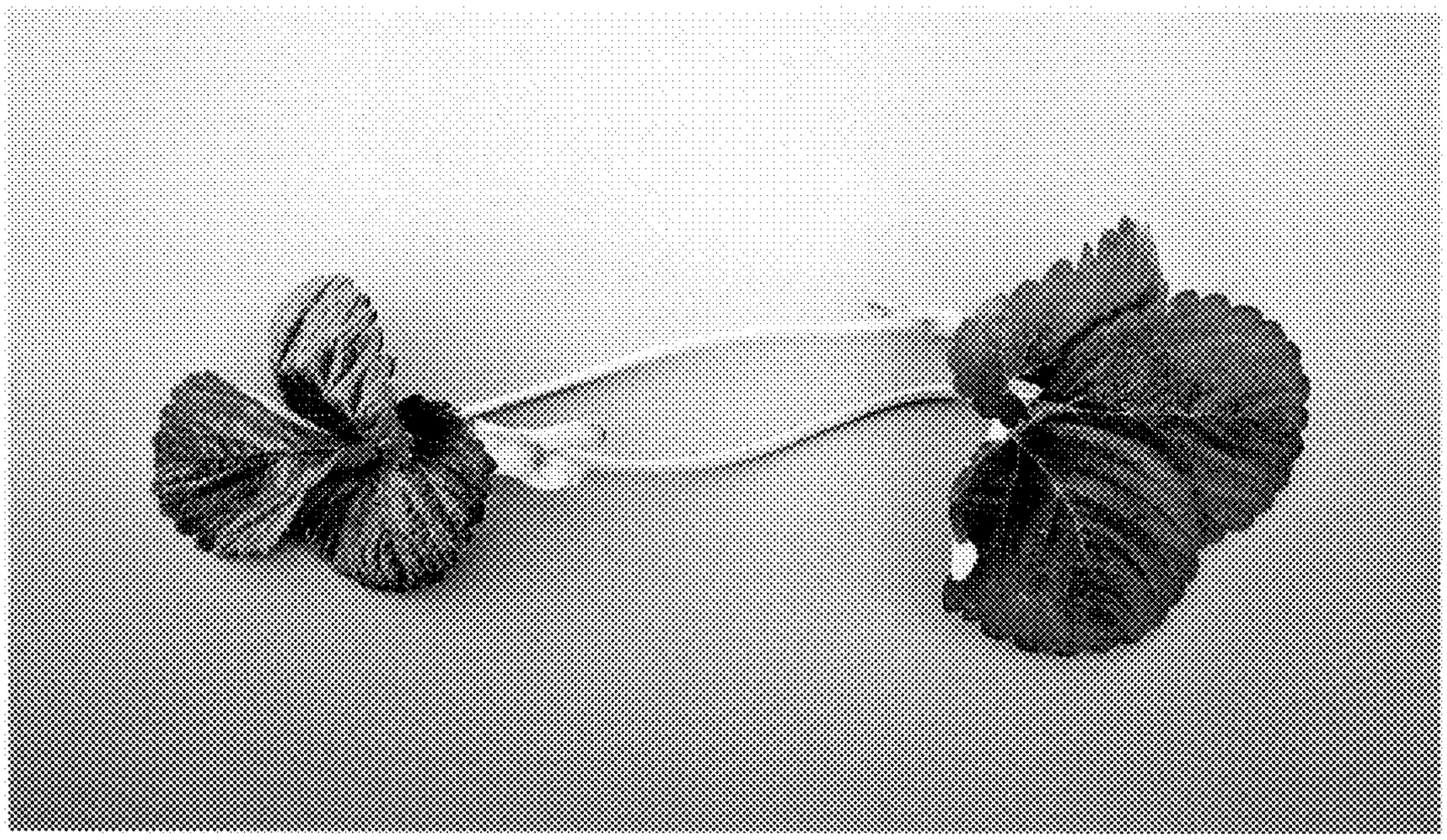

FIG. 2

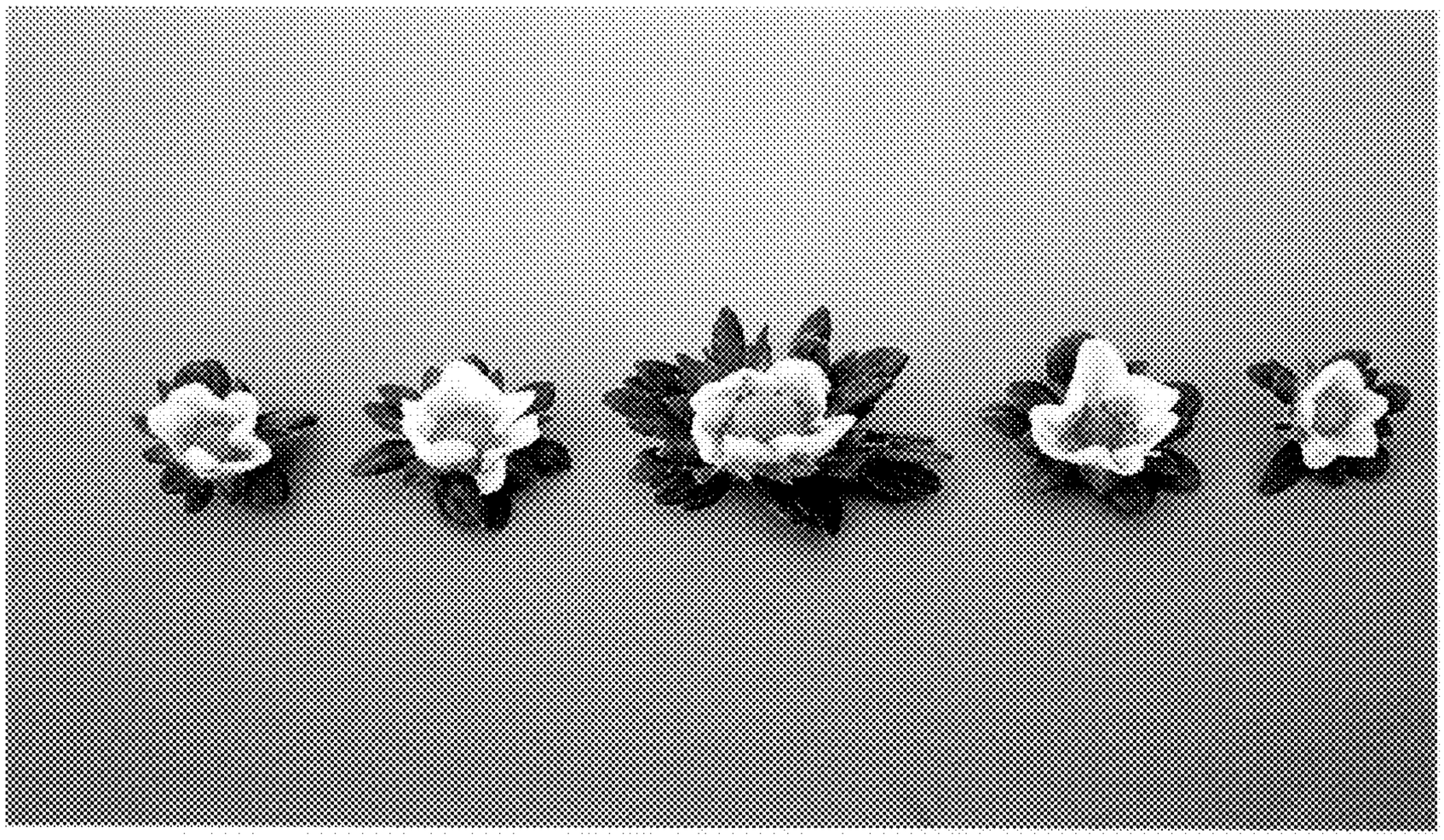

FIG. 3

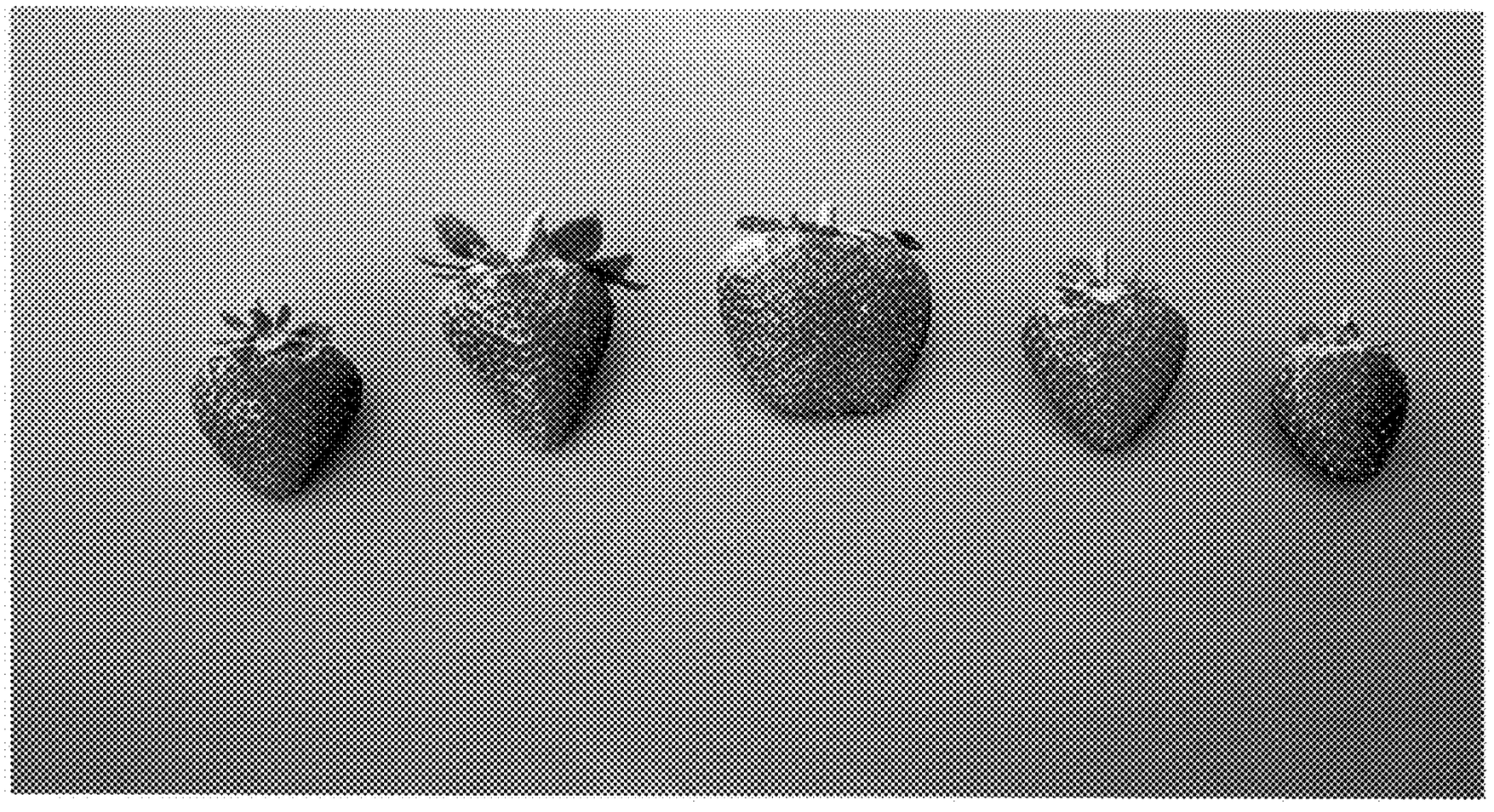

FIG. 4

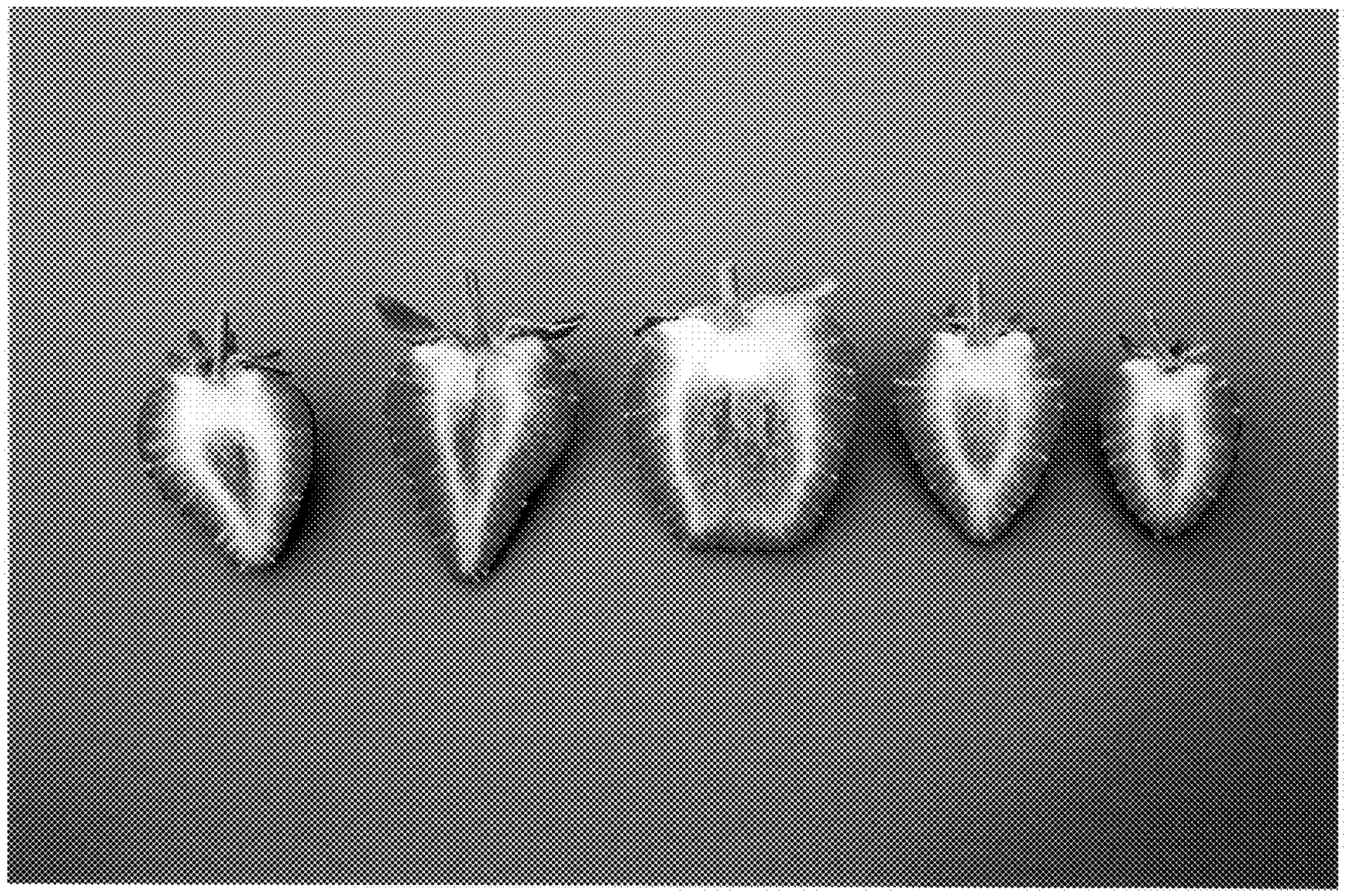

FIG. 5