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Stewart et al.

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

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

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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 'DrisStrawFifteen'. The new cultivar is primarily characterized by a flat globose plant habit, medium vigor, and medium-sized berries, is disclosed.

3 Drawing Sheets

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

BACKGROUND OF THE NEW PLANT

The present invention relates to a new and distinct strawberry cultivar designated 'DrisStrawFifteen' and botanically known as *Fragaria×ananassa*. This new strawberry cultivar was discovered in Monterey County, Calif. in June 2004 and originated from a cross between the proprietary female parent 'Driscoll Lanai' (U.S. Plant Pat. No. 15,145) and the proprietary male parent '38J181' (unpatented). The original seedling of the new cultivar was first asexually propagated at a nursery in Shasta County, Calif.

'DrisStrawFifteen' was subsequently asexually propagated at the McArthur Nursery in Shasta County, Calif. and underwent further testing in Monterey County, Calif. for six years. The present invention has been found to retain its distinctive characteristics through successive asexual propagations via stolons and tissue culture.

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 9½-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 both the upper side and underside 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 'DrisStrawFifteen' is based on observations taken in Monterey County, Calif. from 2004 to 2009. 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. 'DrisStrawFifteen' has not been observed under all possible environmental conditions. The botanical description of 'DrisStrawFifteen' was taken from 9½-month-old plants and the botanical descriptions of the comparison varieties, 'Driscoll Lanai' (U.S. Plant Pat. No. 15,145) and 'DrisStrawNine' (U.S. Plant Pat. No. 20,733), were taken from 10-month-old plants and from 9-month-old plants, respectively. Color terminology follows The Royal Horticultural Society Colour Chart, London (R.H.S.) (2001).

DETAILED BOTANICAL DESCRIPTION

Table 1 shows plant characteristics of the new variety compared with plant characteristics of the commercial varieties 'Driscoll Lanai' and 'DrisStrawNine'. Plant characteristics include plant height, diameter, number of crowns per plant, habit, the density of individual plants and the vigor.

TABLE 1

Characteristic	'DrisStrawFifteen'	'Driscoll Lanai'	'DrisStrawNine'
Plant height (cm)	20.5	21.9	20.9
Plant diameter (cm)	37.1	47.6	32.9
Number of crowns/plant	2	5.3	3
Habit	Flat globose	Flat	Upright
Density of individual plant	Open	Open	Medium
Vigor	Medium	Medium	Weak

Table 2 shows leaf characteristics of the new cultivar compared with leaf characteristics of 'Driscoll Lanai' and 'DrisStrawNine'. 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 upper side and underside of leaf, leaf shape in cross section, leaf blister-

ing, leaf glossiness, number of leaflets, terminal leaflet margin, terminal leaflet length to width ratio, overall leaf shape and shape of leaf apex and base.

TABLE 2

Leaf Characteristic	'DrisStrawFifteen'	'Driscoll Lanai'	'DrisStrawNine'
Terminal leaflet length (cm)	0.7	8.1	6.8
Terminal leaflet width (cm)	0.66	7.6	7.2
Terminal leaflet length/width ratio	1.1	1.07	1.0
No. teeth/ terminal leaflet	19	23.4	24
Shape of teeth	Rounded	Rounded	Rounded
Color of upper surface of leaf	RHS 136A (Dark green)	RHS 139A (Medium green)	RHS 147A (Dark yellow-green)
Color of lower surface of leaf	RHS 147B (Medium yellow-green)	RHS 138B (Light green)	RHS 147B (Medium yellow-green)
Leaf shape in cross section	Slightly concave	Slightly concave to flat	Concave
Leaf blistering	Medium	Medium	Medium
Leaf glossiness	Medium	Weak	Between medium and strong
No. leaflets	3 only	3 only	3 only
Terminal leaflet margin	Revolute to flat	Revolute to flat	Flat
Terminal leaflet length/width ratio	As long as broad		As long as broad
Terminal leaflet shape	Orbicular		Orbicular
Terminal leaflet base shape	Rounded	Rounded	Rounded
Terminal leaflet apex shape	Rounded		Rounded

Table 3 shows information about the petiole, the petiolule, the bract, and the stipule of the new cultivar compared to 'Driscoll Lanai' and 'DrisStrawNine'. 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, stipule pubescence and stipule anthocyanin coloration.

TABLE 3

Characteristic	'DrisStrawFifteen'	'Driscoll Lanai'	'DrisStrawNine'
Petiole length (cm)	15.4	18.7	11.2
Petiole diameter (cm)	0.279		0.323
Petiole pubescence	Medium	Medium	Dense
Petiole pose of hairs	Outwards	Downward	Upwards
Petiole color	RHS 145A (Medium yellow-green)	RHS 145A (Yellow-green)	RHS 145A (Medium yellow-green)
Petiolule color	RHS 145A (Medium yellow-green)	RHS 145A (Yellow-green)	RHS 145B (Medium yellow-green)
Petiolule length (cm)	0.616	1.55	0.826
Petiolule diameter (cm)	0.143	0.32	0.158
Stipule length (cm)	3.1	3.7	3.4
Stipule width (cm)	0.891	1.2	0.823
Stipule pubescence	Medium	Medium to dense	Medium
Stipule anthocyanin coloration	RHS 145D (Light yellow-green)		Absent to very weak

Table 4 shows stolon characteristics of the new cultivar compared to 'Driscoll Lanai' and 'DrisStrawNine'. 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 4

Characteristic	'DrisStrawFifteen'	'Driscoll Lanai'	'DrisStrawNine'
Stolon number	Many	Many	Medium
Average number of daughter plants	40	67	35
Stolon anthocyanin	RHS 59B (Dark red-purple)	RHS 60A (Dark red-purple)	Medium
Stolon thickness	Medium	Medium to thick	Medium
Stolon pubescence	Dense	Dense	Sparse

Table 5 shows inflorescence characteristics of the new cultivar compared to 'Driscoll Lanai' and 'DrisStrawNine'. These characteristics include inflorescence position relative to foliage, time of flowering, 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 5

Characteristic	'DrisStrawFifteen'	'Driscoll Lanai'	'DrisStrawNine'
Inflorescence position relative to foliage	Beneath	Level to above	Above
Time of flowering (50% of plants at first flower)	Between early and medium		
Flower size	Medium		Medium
Flower diameter (cm)	2.399	2.58	2.920
Petal shape	Orbicular		Orbicular
Petal spacing	Overlapping	Overlapping	Overlapping
Petal apex shape	Rounded		Rounded
Petal margin	Entire		Entire
Petal base shape	Rounded		Concave-convex
Petal length (cm)	1.310	1.21	1.257
Petal width (cm)	1.269	1.29	1.332
Petal length/ width ratio	As long as broad	As long as broad	As long as broad
Petal length/ width ratio	1.0	0.94	0.9
Typical and observed petal number	6		7

TABLE 5-continued

Characteristic	'DrisStrawFifteen'	'Driscoll Lanai'	'DrisStrawNine'
Petal color (both surfaces)	RHS 155B (White)	RHS 155C (White)	RHS 155B (White)
Calyx diameter (cm)	3.036	3.25	3.573
Calyx diameter relative to corolla	Larger	Same size to larger	Larger
Inner calyx diameter relative to outer	Same size	Larger	Same size
Sepal shape	Oval		Elliptical
Sepal apex shape	Convex		Convex
Sepal margin	Entire		Entire
Sepal length (cm)	1.176	1.480	1.318
Sepal width (cm)	0.673	0.767	0.647
Typical and observed sepal number	13		14
Receptacle color	RHS 2A (Medium yellow)		RHS 2B (Medium yellow)
Anther color	RHS 174A (Dark greyed-orange)		RHS 22A (Medium yellow-orange)

Table 6 shows fruit characteristics of the new cultivar compared to 'Driscoll Lanai' and 'DrisStrawNine'. 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 hollow length to width ratio, 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) and the number of achenes per berry.

TABLE 6

Characteristic	'DrisStrawFifteen'	'Driscoll Lanai'	'DrisStrawNine'
Fruiting truss length (cm)	19.4	30.0	16.9
Fruiting truss length (general)	Between medium and long		
Fruiting truss diameter (cm) at base of truss	0.361		0.512
Number of berries per fruiting truss	5		4
Fruiting truss attitude	Prostrate	Prostrate	Semi-erect
Fruiting truss color at base of truss	RHS N144C (Medium yellow-green)		RHS 144A (Medium yellow-green)
Fruit length (cm)	3.666	4.5	4.274
Fruit width (cm)	3.492	3.8	4.222
Fruit length/width ratio	1.0	1.19	1.0
Fruit hollow length (cm)	1.017		1.341
Fruit hollow width (cm)	0.442		1.023
Fruit hollow length/width ratio	2.3		1.3

TABLE 6-continued

Characteristic	'DrisStrawFifteen'	'Driscoll Lanai'	'DrisStrawNine'
Fruit weight (g)	21.6	23.3	23.1
Fruit ratio of length/maximum width	As long as broad		As long as broad
Relative fruit size	Medium		Medium
Predominant fruit shape	Conical	Conical to ovoid	Conical
Difference in shape between primary and secondary fruits	Between slight and moderate	Slight	Slight
Band without achenes	Narrow	Narrow to medium	Narrow
Unevenness of fruit surface	Weak	Weak	Weak
Fruit skin color	RHS 46A (Dark red)	RHS 45B (Orange red)	RHS 46A (Dark red)
Evenness of fruit color	Even	Even	Even
Fruit glossiness	Medium	Strong	Medium
Insertion of achenes	Below surface	Level with surface	Level with surface
Achene coloration (sunward side of berry)	RHS 175A (Dark greyed-orange)	RHS 185B to RHS 154B (Gray purple to yellow-green)	RHS 184A (Dark greyed-purple)
Achene coloration (shaded side of berry)	RHS N144A (Medium yellow-green)	RHS 185B to RHS 154B (Gray purple to yellow-green)	RHS 153B (Medium yellow-green)
Achenes per berry	324.0	300	320

Table 7 shows fruit characteristics of the new cultivar compared to 'Driscoll Lanai' and 'DrisStrawNine'. These characteristics include the harvest maturity, 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, type of bearing, grams of fruit per plant.

TABLE 7

Characteristic	'DrisStrawFifteen'	'Driscoll Lanai'	'DrisStrawNine'
Harvest interval	Late March to early November	Late March to early November	Late March to early November
Harvest maturity	Between early and mid-season		
Insertion of calyx	Set above fruit	Level	Level
Pose of calyx segments	Spreading	Spreading to reflexed	Spreading
Size of calyx in relation to fruit	Smaller and larger	Smaller	Larger
Adherence of calyx	Strong	Strong	Strong
Firmness of flesh	Firm	Medium	Medium
Color of the flesh	RHS N155B (White) and RHS 46B (Dark red)	RHS 47C (Orange-red)	RHS 155C (White) and RHS 41A (Medium red)
Evenness of flesh color	Slightly uneven	Uneven	Uneven
Distribution of flesh color	Marginal and central	Marginal and central	Marginal and central
Hollow center	Small	Medium	Small
Sweetness	Strong	Medium	Medium
Acidity	Medium	Medium	Medium
Texture when tasted	Medium	Fine	Medium
Type of bearing	Fully everbearing	Partially everbearing	Fully everbearing

TABLE 7-continued

Characteristic	'DrisStrawFifteen'	'Driscoll Lanai'	'DrisStrawNine'
Grams of fruit/plant	1,513	1,679	1,505

Table 8 shows pest, stress and disease characteristics of the new cultivar compared to 'Driscoll Lanai' and 'DrisStrawNine'.

TABLE 8

Pest, Stress, or Disease	'DrisStrawFifteen'	'Driscoll Lanai'	'DrisStrawNine'
Tetranychus urticae	Moderately susceptible	Susceptible	Moderately susceptible
Botrytis fruit rot	Moderately susceptible	Susceptible	Susceptible
Powdery mildew	Moderately susceptible	Susceptible	Between moderately susceptible and susceptible
Verticillium wilt	Moderately resistant	Moderately resistant	Susceptible
Rain	Between moderately resistant and moderately susceptible		

COMPARISON WITH PARENTAL AND COMMERCIAL CULTIVARS

When 'DrisStrawFifteen' is compared to the proprietary female parent 'Driscoll Lanai' (U.S. Plant Pat. No. 15,145), 'DrisStrawFifteen' is fully everbearing while 'Driscoll Lanai' is partially everbearing. In addition, 'DrisStrawFifteen' has a strong sweetness of fruit while 'Driscoll Lanai' has a medium sweetness of fruit. Finally, 'DrisStrawFifteen' has smaller fruit size (length: 3.666 cm; width: 3.492 cm) than 'Driscoll Lanai' (length: 4.5 cm; width: 3.8 cm).

When 'DrisStrawFifteen' is compared to the proprietary male parent '38J181' (unpatented), 'DrisStrawFifteen' has larger fruit and is more prone to bruising during handling than '38J181'.

When 'DrisStrawFifteen' is compared to the commercial variety 'DrisStrawNine', the petiole pose of hairs for 'DrisStrawFifteen' is outwards while the petiole pose of hairs for 'DrisStrawNine' is downward. In addition, 'DrisStrawFifteen' is moderately resistant to *Verticillium* wilt while 'DrisStrawNine' is susceptible to *Verticillium* wilt.

We claim:

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

* * * * *

FIG. 1

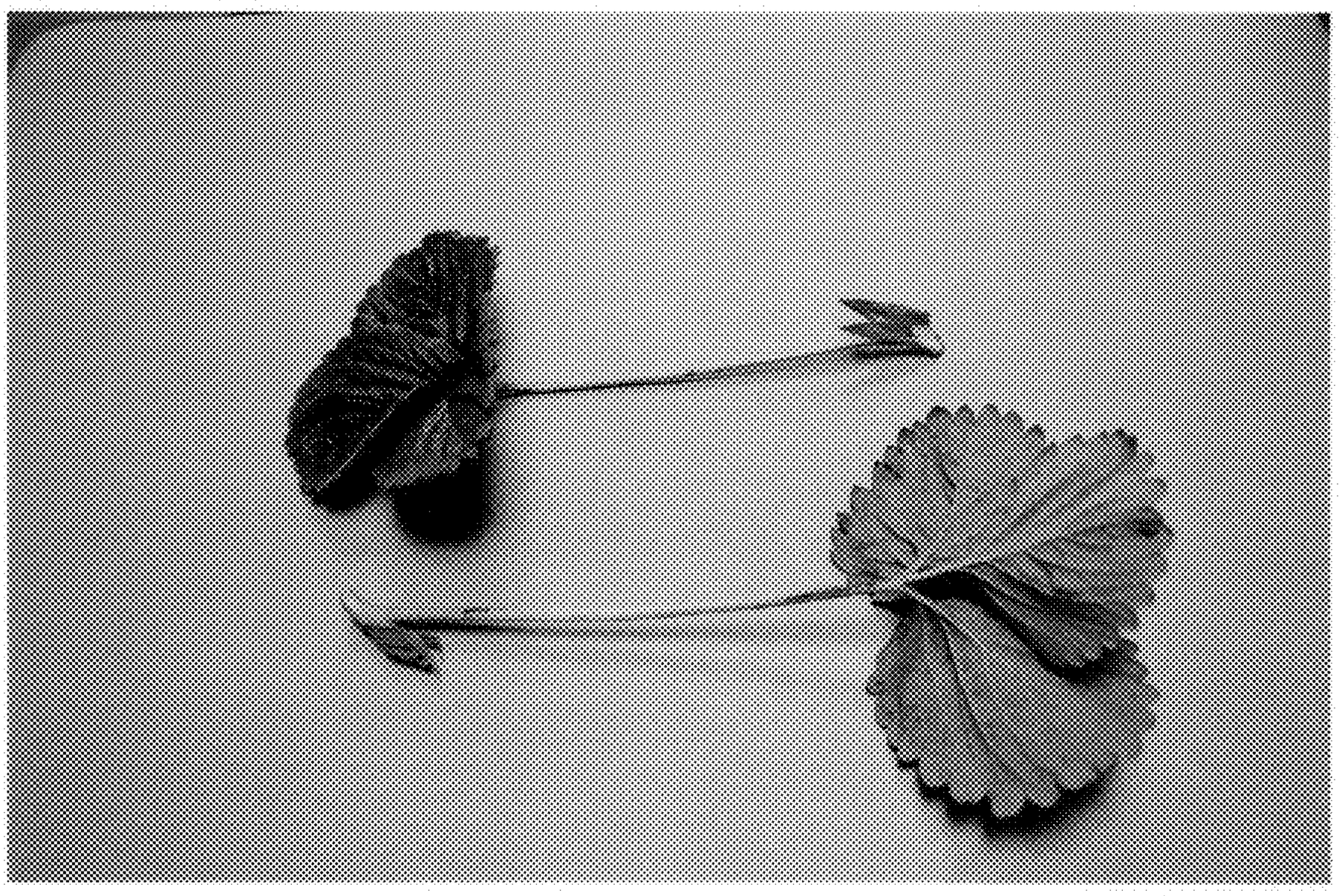

FIG. 2

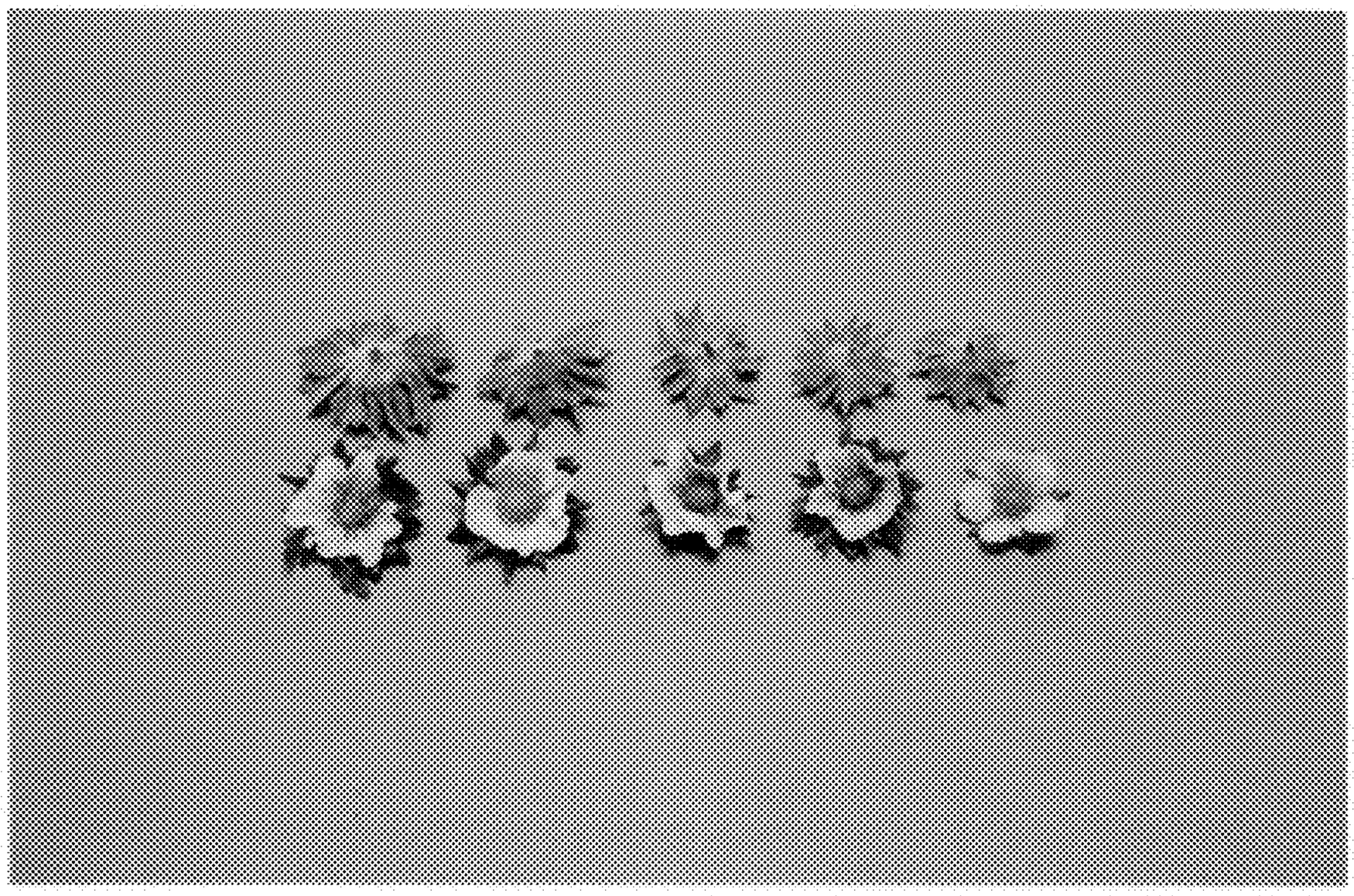

FIG. 3

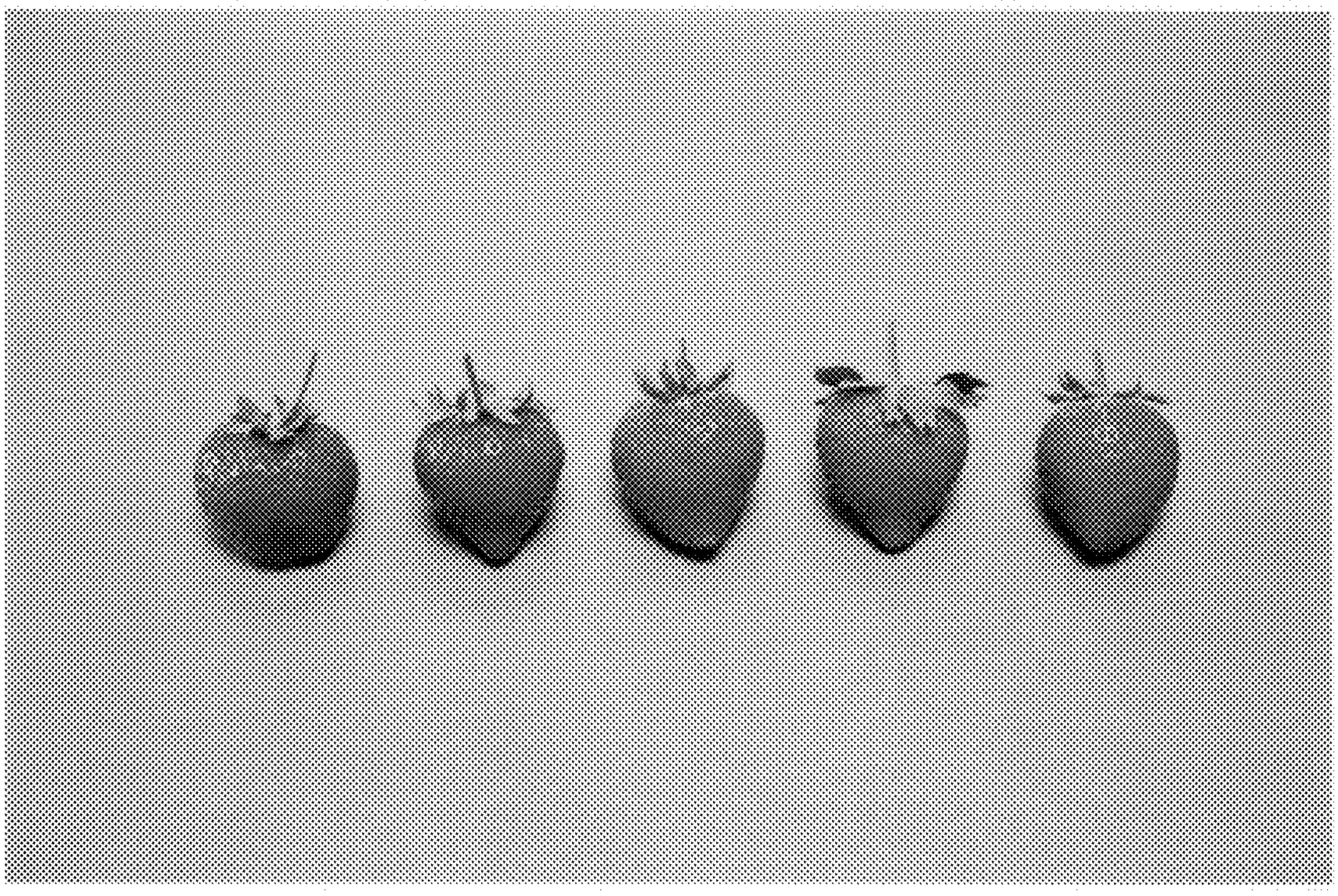

FIG. 4

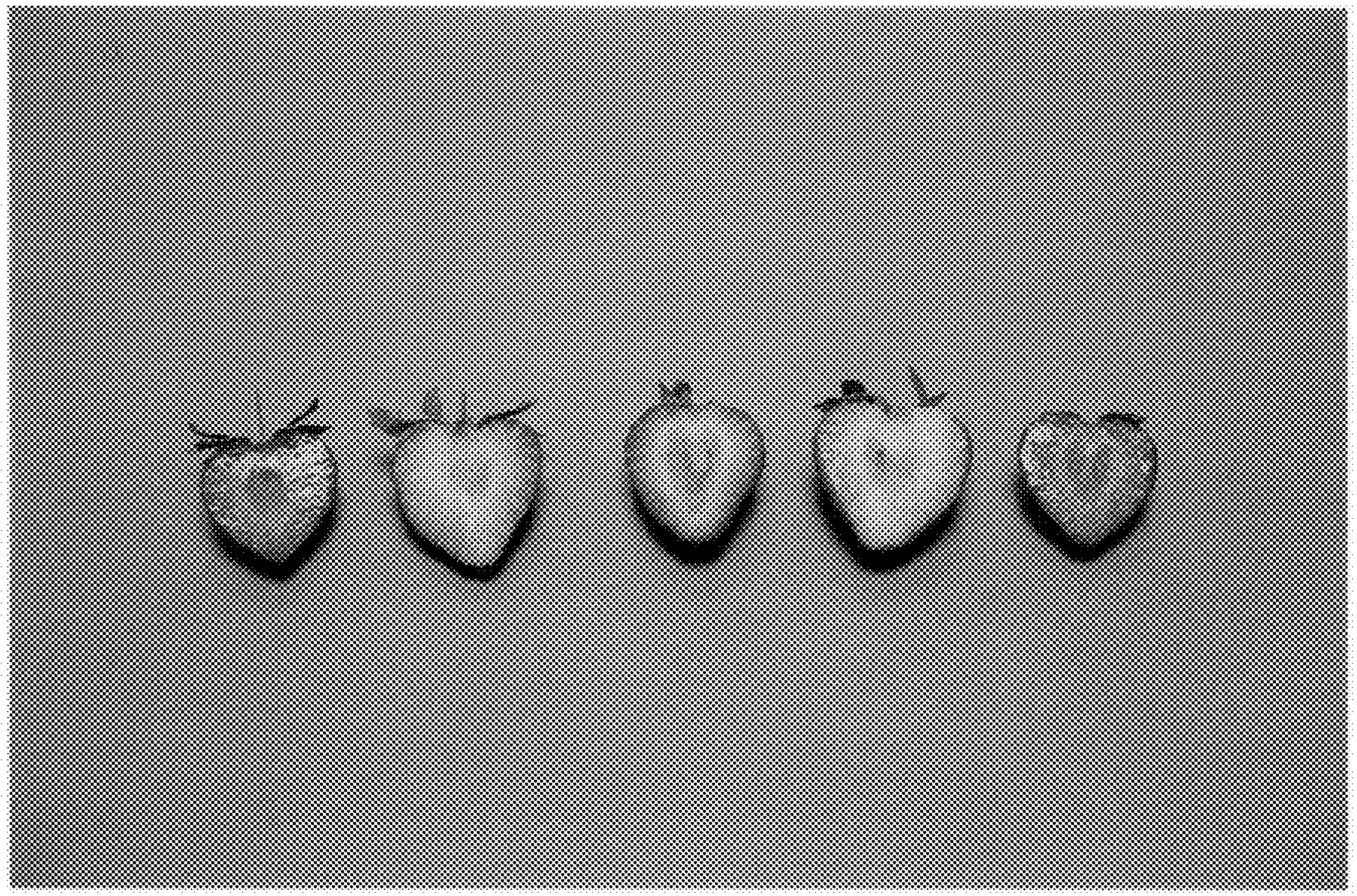

FIG. 5