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Stewart et al.

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

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

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(58) **Field of Classification Search** Plt./208, Plt./209

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 'DrisStrawFourteen'. The new cultivar is primarily characterized by a medium density plant with medium vigor, medium-sized fruit having a large hollow center, and a partially everbearing habit, is disclosed.

3 Drawing Sheets

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

BACKGROUND OF THE NEW PLANT

The present invention relates to a new and distinct strawberry cultivar designated 'DrisStrawFourteen' and botanically known as *Fragaria×ananassa*. This new strawberry cultivar was discovered in Monterey County, Calif. in May 2005 and originated from a cross between the proprietary female parent '159K312' (unpatented) and the proprietary male parent '128K296' (unpatented). The original seedling of the new cultivar was first asexually propagated by stolons or tissue culture at a nursery in Shasta County, Calif.

'DrisStrawFourteen' was subsequently asexually propagated in Shasta County, Calif. and underwent further testing in Monterey County, Calif. for five 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 9-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 'DrisStrawFourteen' is based on observations taken in Monterey County, Calif. from 2005 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. 'DrisStrawFourteen' has not been observed under all possible environmental conditions. The botanical description of 'DrisStrawFourteen' was taken from 9-month-old plants and the botanical descriptions of the comparison varieties, 'San Juan' (U.S. Plant Pat. No. 12,899) and 'Driscoll Lanai' (U.S. Plant Pat. No. 15,145), were taken from 10-month-old plants and from 8-month-old plants, respectively. Color terminology follows The Royal Horticultural Society Colour Chart, London (RHS) (2001).

DETAILED BOTANICAL DESCRIPTION

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

TABLE 1

Characteristic	'DrisStrawFourteen'	'San Juan'	'Driscoll Lanai'
Plant height (cm)	24.9	23.6	22.8
Plant diameter (cm)	39.6	44.2	40.1
Number of crowns/ plant	3	2	2
Habit	Globose	Globose	Globose
Density of individual plant	Medium	Dense	Medium
Vigor	Medium	Strong	Medium

Table 2 shows leaf characteristics of the new cultivar compared with leaf characteristics of 'San Juan' and 'Driscoll Lanai'. 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 blistering, 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

	'DrisStrawFourteen'	'San Juan'	'Driscoll Lanai'
Leaf Characteristic			
Terminal leaflet length (cm)	7.6	7.4	7.2
Terminal leaflet width (cm)	0.84	0.74	0.69
Terminal leaflet length/width ratio	0.9	1.0	1.0
No. teeth/ terminal leaflet	28	21	20
Characteristic			
Shape of teeth	Obtuse	Rounded	Rounded
Color of upper surface of leaf	RHS 147A (Dark yellow-green)	RHS 139A (Dark green)	RHS 147A (Dark yellow-green)
Color of lower surface of leaf	RHS 148B (Medium yellow-green)	RHS 147B (Medium yellow-green)	RHS 148C (Medium yellow-green)
Leaf shape in cross section	Slightly concave	Slightly concave	Flat
Leaf blistering	Medium	Medium	Medium
Leaf glossiness	Medium	Medium	Medium
No. leaflets	3 only	3 only	3 only
Terminal leaflet margin	Flat	Revolute to flat	Revolute to flat
Terminal leaflet length/width ratio	As long as broad	As long as broad	As long as broad
Terminal leaflet shape	Orbicular	Orbicular	Orbicular
Terminal leaflet base shape	Rounded	Rounded	Rounded
Terminal leaflet apex shape	Rounded	Rounded	Rounded

Table 3 shows information about the petiole, the petiolule, the bract, and the stipule of the new cultivar compared to 'San Juan' and 'Driscoll Lanai'. 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	'DrisStrawFourteen'	'San Juan'	'Driscoll Lanai'
Petiole length (cm)	13.8	16.3	14.4
Petiole diameter (cm)	0.333	0.314	0.280
Petiole pubescence	Sparse	Medium	Medium
Petiole pose of hairs	Upwards to downwards	Outwards	Between upwards and outwards
Petiole color	RHS 144B (Medium yellow-green)	RHS 146B (Medium yellow-green)	RHS 144C (Medium yellow-green)
Petiolule color	RHS 144B (Medium yellow-green)	RHS 146C (Medium yellow-green)	RHS 144C (Medium yellow-green)
Petiolule length (mm)	7.21	8.63	12.26
Petiolule diameter (cm)	0.165	0.170	0.145
Bract frequency	1	1	0
Stipule length (cm)	3.8	3.3	3.3
Stipule width (cm)	0.694	0.929	0.897
Stipule pubescence	Dense	Medium	Dense
Stipule anthocyanin coloration	RHS 145D (Light yellow-green)	RHS 149D (Light yellow-green)	RHS 149D (Light yellow-green)

Table 4 shows stolon characteristics of the new cultivar compared to 'San Juan' and 'Driscoll Lanai'. 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	'DrisStrawFourteen'	'San Juan'	'Driscoll Lanai'
Stolon number	Medium	Between medium and many	Many
Average number of daughter plants	30+	57	67
Stolon anthocyanin	RHS 60C (Dark red-purple)	RHS 59A (Dark red-purple)	RHS 60A (Dark red-purple)
Stolon thickness	Medium	Medium	Between medium and thick
Stolon pubescence	Medium	Medium	Dense

Table 5 shows inflorescence characteristics of the new cultivar compared to 'San Juan' and 'Driscoll Lanai'. 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	'DrisStrawFourteen'	'San Juan'	'Driscoll Lanai'
Inflorescence position relative to foliage	Level with	Beneath	Level with
Time of flowering (50% of plants at first flower)	Between early and medium	Between early and medium	Between early and medium
Flower size	Medium	Medium	Medium
Flower diameter (cm)	2.430	2.792	2.540
Petal shape	Orbicular	Orbicular	Orbicular
Petal spacing	Overlapping	Overlapping	Overlapping
Petal apex shape	Rounded	Rounded	Rounded

TABLE 5-continued

Characteristic	'DrisStrawFourteen'	'San Juan'	'Driscoll Lanai'
Petal margin	Entire	Entire	Entire
Petal base shape	Concave-convex	Concave-convex	Rounded
Petal length (cm)	1.216	1.347	1.221
Petal width (cm)	1.149	1.469	1.285
Petal length/width ratio	As long as broad	As long as broad	As long as broad
Petal length/width ratio	1.1	0.9	1.0
Typical and observed petal number	6	6	7
Petal color	RHS 155C (White)	RHS 155D (White)	RHS 155B (White)
Calyx diameter (cm)	3.444	3.631	3.228
Calyx diameter relative to corolla	Larger	Larger	Larger
Inner calyx diameter relative to outer	Same size	Same size	Same size
Sepal shape	Oval	Oval	Oval
Sepal apex shape	Convex	Convex	Convex
Sepal margin	Entire	Entire	Entire
Sepal length (cm)	1.369	1.461	1.150
Sepal width (cm)	0.681	0.767	0.461
Typical and observed sepal number	13	13	13
Receptacle color	RHS 2A (Medium yellow)	RHS 151A (Medium yellow-green)	RHS N144B (Medium yellow-green)
Anther color	RHS 152B (Medium yellow-green)	RHS 178A (Dark greyed-red)	RHS 163A (Medium greyed-orange)

Table 6 shows fruit characteristics of the new cultivar compared to 'San Juan' and 'Driscoll Lanai'. 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	'DrisStrawFourteen'	'San Juan'	'Driscoll Lanai'
Fruiting truss length (cm)	18.8	22.8	17.2
Fruiting truss length (general)	Medium	Between medium and long	Medium
Fruiting truss diameter (cm) at base of truss	0.429	0.391	0.327
Number of berries per fruiting truss	4	4	4
Fruiting truss attitude	Prostrate	Prostrate	Prostrate
Fruiting truss color at base of truss	RHS 144A (Medium yellow-green)	RHS 144A (Medium yellow-green)	RHS 144A (Medium yellow-green)
Fruit length (cm)	4.149	4.349	3.752
Fruit width (cm)	3.840	3.784	3.683

TABLE 6-continued

Characteristic	'DrisStrawFourteen'	'San Juan'	'Driscoll Lanai'
Fruit length/width ratio	1.1	1.1	1.0
Fruit hollow length (cm)	2.139	1.837	1.222
Fruit hollow width (cm)	0.716	0.538	0.424
Fruit hollow length/width ratio	3.0	3.4	2.9
Fruit weight (g)	29.1	25.4	24.9
Fruit ratio of length/maximum width	As long as broad	As long as broad	As long as broad
Relative fruit size	Medium	Medium	Medium
Predominant fruit shape	Conical	Conical	Conical and almost cylindrical
Difference in shape between primary and secondary fruits	Slight	Slight	Slight
Band without achenes	Absent or very narrow	Broad	Narrow
Unevenness of fruit surface	Weak	Medium	Weak
Fruit skin color	RHS 46B (Dark red)	RHS 46A (Dark red)	RHS 46A (Dark red)
Evenness of fruit color	Even	Slightly uneven	Even
Fruit glossiness	Medium	Medium	Medium
Insertion of achenes	Below surface to above surface	Level with surface	Above surface
Achene coloration (sunward side of berry)	RHS 185A (Dark greyed-purple)	RHS 183C (Dark greyed-purple)	RHS 176A (Dark greyed-orange)
Achene coloration (shaded side of berry)	RHS N144B (Medium yellow-green)	RHS 152C (Medium yellow-green)	RHS 152C (Medium yellow-green)
Achenes per berry	340.6	273.4	294.5

Table 7 shows fruit characteristics of the new cultivar compared to 'San Juan' and 'Driscoll Lanai'. 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	'DrisStrawFourteen'	'San Juan'	'Driscoll Lanai'
Harvest interval	Late March to early November	Late March to early November	Late March to early November
Harvest maturity	Late	Between early and mid-season	Between early and mid-season
Insertion of calyx	Level	Set above fruit	Level
Pose of calyx segments	Reflexed	Reflexed	Reflexed
Size of calyx in relation to fruit	From same size to larger	Same size	From same size to larger
Adherence of calyx	Strong	Strong	Medium
Firmness of flesh	Firm	Medium	Medium
Color of the flesh	RHS 155D (White) and RHS 43B (Medium red)	RHS 155B (White) and RHS 43A (Medium red)	RHS 155C (White) and RHS 46A (Dark red)

TABLE 7-continued

Characteristic	'DrisStrawFourteen'	'San Juan'	'Driscoll Lanai'
Evenness of flesh color	Slightly uneven	Slightly uneven	Slightly uneven
Distribution of flesh color	Marginal and central	Marginal and central	Marginal and central
Hollow center	Large	Small	Small
Sweetness	Medium	Medium	Medium
Acidity	Medium	Medium	Medium
Texture when tasted	Medium	Medium	Medium
Type of bearing	Partially everbearing	Partially everbearing	Partially everbearing
Grams of fruit/ plant	1,463	1,303	1,699

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

TABLE 8

Pest, Stress, or Disease	'DrisStrawFourteen'	'San Juan'	'Driscoll Lanai'
Botrytis fruit rot	Moderately resistant	Susceptible	Susceptible
Powdery mildew	Between resistant and moderately resistant	Susceptible	Susceptible
Verticillium wilt	Moderately resistant	Susceptible	Moderately susceptible
Rain	Between resistant and moderately resistant	Between resistant and moderately resistant	Moderately resistant

COMPARISON WITH PARENTAL AND COMMERCIAL CULTIVARS

When 'DrisStrawFourteen' is compared to the proprietary female parent '159K312' (unpatented), 'DrisStrawFourteen' has larger fruit and better organic performance than does '159K312 ' .

When 'DrisStrawFourteen' is compared to the proprietary male parent '128K296' (unpatented), 'DrisStrawFourteen' has larger fruit and better organic performance than does '128K296'.

When 'DrisStrawFourteen' is compared to the commercial variety 'San Juan', 'DrisStrawFourteen' has softer but more fruit in the second half of the season than does 'San Juan'.

Table 9 shows selected plant characteristics of the new variety compared with plant characteristics of 'San Juan' (U.S. Plant Pat. No. 12,899) and 'Driscoll Lanai' (U.S. Plant Pat. No. 15,145). Plant characteristics include terminal leaflet margin profile, insertion of achenes, and fruit production.

TABLE 9

Characteristic	'DrisStrawFourteen'	'San Juan'	'Driscoll Lanai'
Terminal leaflet margin profile	Flat	Revolute to flat	Revolute to flat
Insertion of achenes	Below surface to above surface	Level with surface	Above surface
Fruit production, grams/plant	1,463	1,303	1,699

We claim:

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

* * * * *

FIG. 1

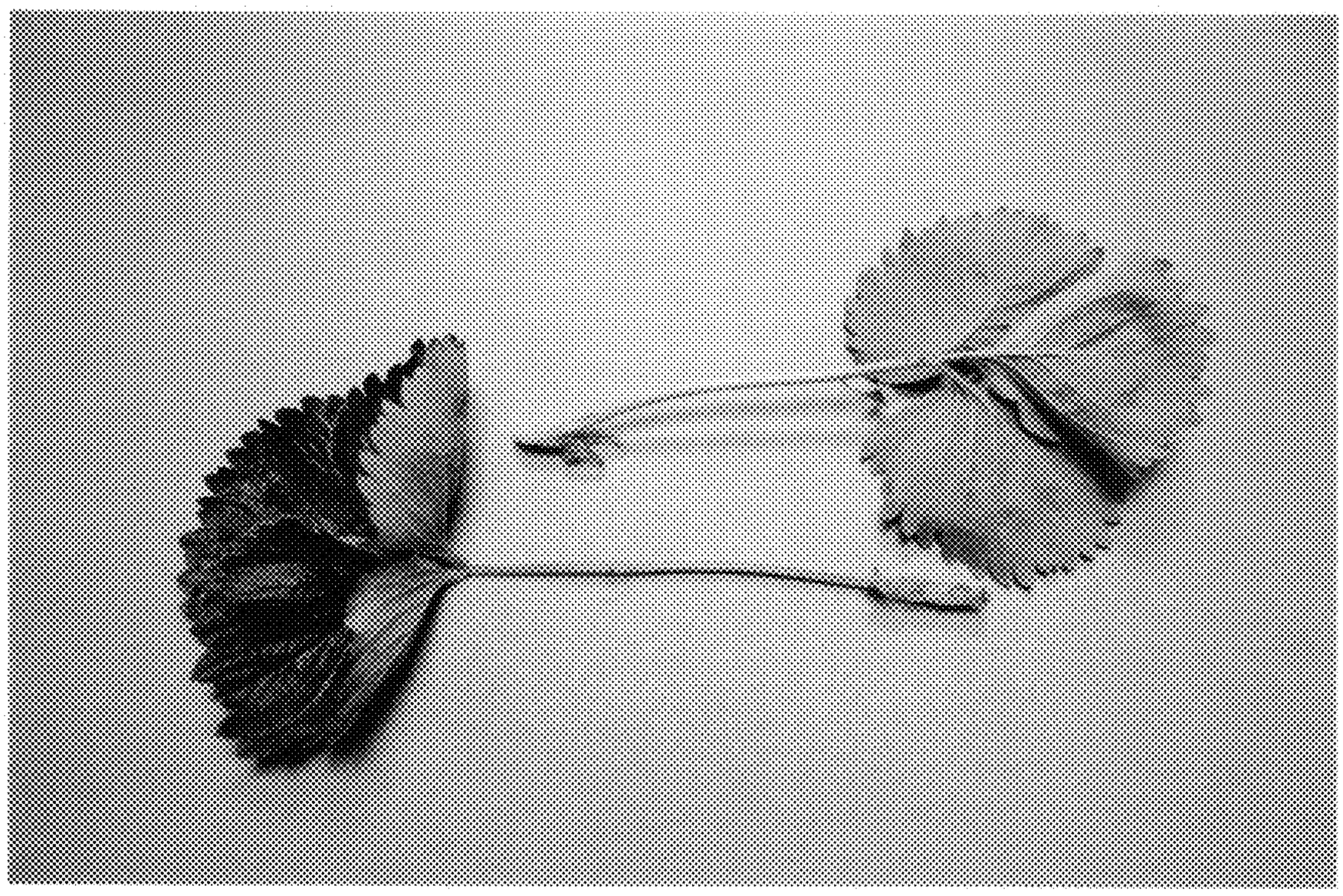

FIG. 2

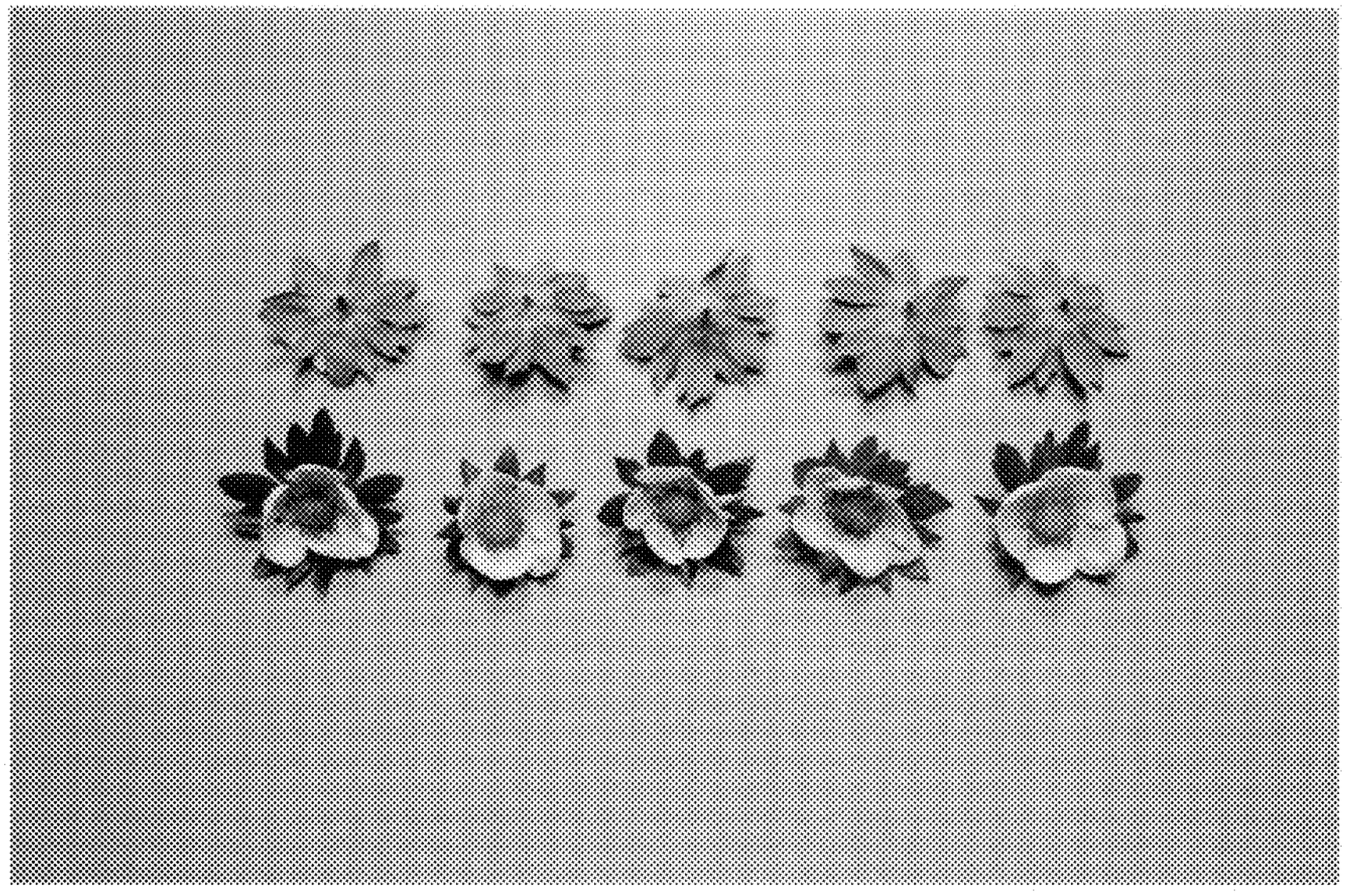

FIG. 3

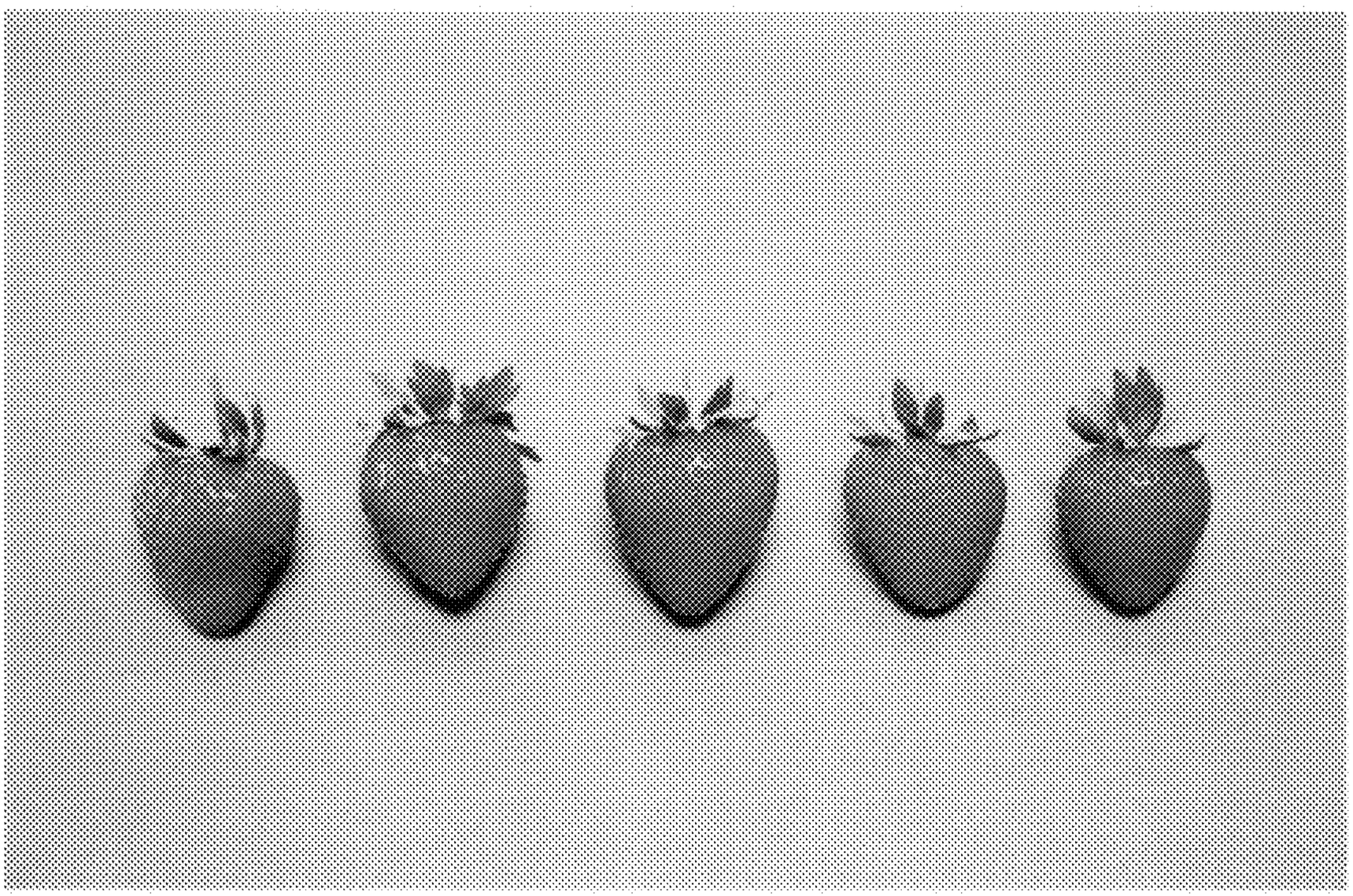

FIG. 4

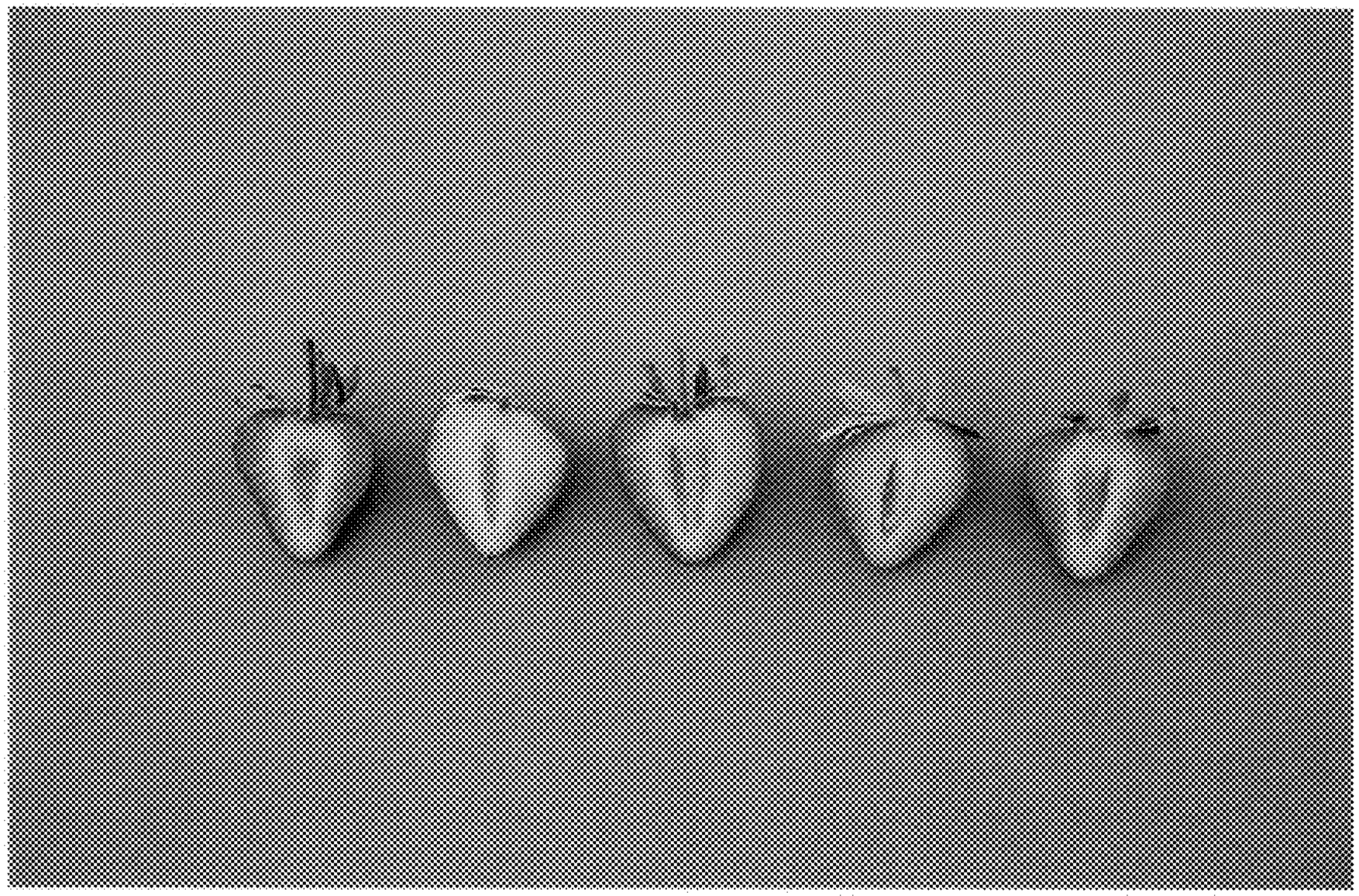

FIG. 5