US00PP20775P2

(12) **United States Plant Patent**
Mowrey et al.

(10) **Patent No.: US PP20,775 P2**
(45) **Date of Patent: Feb. 23, 2010**

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

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

(75) Inventors: **Bruce D. Mowrey**, Watsonville, CA (US); **Philip J. Stewart**, Watsonville, CA (US); **Martin P. Madesko**, Watsonville, CA (US); **JoAnne F. Coss**, Watsonville, CA (US)

(73) Assignee: **Driscoll Strawberry Associates, Inc.**, Watsonville, CA (US)

(*) 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.: **12/291,596**

(22) Filed: **Nov. 12, 2008**

(51) **Int. Cl.**
A01H 5/00 (2006.01)

(52) **U.S. Cl.** **Plt./209**

(58) **Field of Classification Search** Plt./209
See application file for complete search history.

Primary Examiner—Annette H Para
(74) *Attorney, Agent, or Firm*—Jondle & Associates, P.C.

(57) **ABSTRACT**

This invention relates to a new and distinct cultivar of strawberry plant named 'DrisStrawTen'. A new cultivar primarily characterized by its high fruit production per plant, early to medium flowering time, everbearing fruit, low number of achenes per berry, resistance to moderate resistance to powdery mildew, and moderate resistance to Verticillium wilt and strawberry Mottle Virus is disclosed.

3 Drawing Sheets

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

BACKGROUND OF THE NEW PLANT

The present invention relates to a new and distinct strawberry cultivar designated 'DrisStrawTen' and botanically known as *Fragaria×ananassa.* This new strawberry cultivar was discovered in Summer, 2004 in Monterey, Calif. and originated from a cross between the female parent '94J283', a proprietary strawberry plant (unpatented) and the male parent '112H25', a proprietary strawberry plant (unpatented). The original seedling of the new cultivar was asexually propagated at a nursery in Shasta County, Calif. 'DrisStrawTen' was subsequently asexually propagated and underwent further testing at a nursery in Monterey, Calif. for five 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 photograph is of a plant about 7 months old.

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 upperside 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 'DrisStrawTen' is based on observations taken from the 2004 to 2008 growing seasons in Monterey, Calif. 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. 'DrisStrawTen' has not been observed under all possible environmental conditions. 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' (U.S. Plant Pat. No. 15,145) and 'San Juan' (U.S. Plant Pat. No. 12,899). Plant characteristics include plant height, diameter, number of crowns per plant, habit, density of individual plant and vigor.

TABLE 1

Characteristic	'DrisStrawTen'	'Driscoll Lanai'	'San Juan'
Plant height (cm)	21.4	25.1	24.7
Plant diameter (cm)	33.4	36.5	38.9
Number of crowns/plant	3	3	3
Habit	Globose	Flat globose	Globose
Density of individual plant	Between medium and dense	Medium	Between medium and dense
Vigor	Between weak and medium	Medium	Medium

Table 2 shows leaf characteristics of the new cultivar compared with leaf characteristics of 'Driscoll Lanai' and 'San Juan'. 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, leaflet margin, leaflet shape, shape of leaf apex and shape of leaf base.

TABLE 2

Leaf Characteristic	'DrisStrawTen'	'Driscoll Lanai'	'San Juan'
Terminal leaflet length (cm)	7.1	7.9	7.4
Terminal leaflet width (cm)	7.2	7.6	7.9
Terminal leaflet length/width ratio	1.0	1.0	0.9
Terminal leaflet: length/width ratio	As long as broad	As long as broad	As long as broad
No. teeth/terminal leaflet	21	23	25
Shape of teeth	Rounded	Rounded	Rounded
Color of upperside of leaf	RHS 147A Dark yellow-green	RHS 147A Dark yellow-green	RHS 147A Dark yellow-green
Color of underside	RHS 147C Medium yellow-green	RHS 147C Medium yellow-green	RHS 147B Medium yellow-green
Leaf shape in cross section	Slightly concave	Slightly concave	Concave
Leaf blistering	Medium	Medium	Weak
Leaf glossiness	Between medium and strong	Medium	Medium
No. leaflets	Three only	Three only	Three only
Terminal leaflet margin	Flat	Revolute	Revolute
Terminal leaflet shape	Orbicular	Orbicular	Orbicular
Terminal leaflet shape of base	Rounded	Rounded	Rounded
Terminal leaflet shape of apex	Rounded	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 'San Juan'. This includes petiole length in centimeters, petiole diameter in centimeters, petiolule length in centimeters, petiolule diameter in centimeters, bract frequency per petiole, stipule length in centimeters, stipule width in centimeters, stipule pubescence, petiole pubescence, pose of hairs on the petiole, color of the petiole, color of the petiolule and stipule anthocyanin coloration.

TABLE 3

Characteristic	'DrisStrawTen'	'Driscoll Lanai'	'San Juan'
Petiole length (cm)	12.1	13.6	11.0
Petiole diameter (cm)	0.340	0.389	0.404
Petiole pubescence	Dense	Dense	Dense
Petiole pose of hairs	Outwards	Outwards	Upwards
Petiole color	RHS 145A Medium yellow-green	RHS 144C Medium yellow-green	RHS 144C Medium yellow-green
Petiolule color	RHS 145B Medium yellow-green	RHS 144C Medium yellow-green	RHS 145B Medium yellow-green
Petiolule length (cm)	0.831	1.203	0.734
Petiolule diameter (cm)	0.164	0.151	0.177
Bract frequency	1	0	1
Stipule length (cm)	3.1	3.5	3.2
Stipule width (cm)	0.973	0.832	1.197
Stipule pubescence	Medium	Dense	Dense
Stipule anthocyanin coloration	Absent to very weak	Absent to very weak	Absent to very weak

Table 4 shows stolon characteristics of the new cultivar compared to 'Driscoll Lanai' and 'San Juan'. 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	'DrisStrawTen'	'Driscoll Lanai'	'San Juan'
Stolon number	Medium	Many	Between medium and many
Average number of daughter plants	35	17	57
Stolon anthocyanin	Medium	Strong	Strong
Stolon thickness	Medium	Between medium and thick	Medium
Stolon pubescence	Sparse	Dense	Medium

Table 5 shows inflorescence characteristics of the new cultivar compared to 'Driscoll Lanai' and 'San Juan'. These characteristics include inflorescence position relative to foliage, relative flower size, flower diameter in centimeters (measured from petal tip to petal tip), petal shape, petal apex shape, petal base shape, petal margin, relative spacing of petals, petal length in centimeters, petal width in centimeters, petal length to width ratio, typical number of petals observed, 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, sepal apex shape, sepal margin, sepal length in centimeters (measured from sepal tip to point of attachment to receptacle), sepal width in centimeters, typical number of sepals observed, receptacle color and anther color.

TABLE 5

Characteristic	'DrisStrawTen'	'Driscoll Lanai'	'San Juan'
Inflorescence position relative to foliage	Above	Above	Above
Flower size	Medium	Medium	Medium
Flower diameter (cm)	2.785	2.835	2.850
Petal shape	Orbicular	Orbicular	Orbicular
Petal apex	Rounded	Rounded	Rounded
Petal margin	Entire	Entire	Entire
Petal base shape	Concave-convex	Concave-convex	Concave-convex
Petal spacing	Overlapping	Overlapping	Overlapping
Petal length (cm)	1.254	1.133	1.227
Petal width (cm)	1.332	1.200	1.339
Petal length/width ratio	0.9	0.9	0.9
Typical and observed petal number	7	6	6
Petal length/width ratio	As long as broad	As long as broad	As long as broad
Petal color	RHS 155C White	RHS 155B White	RHS 155C White
Calyx diameter cm	3.696	3.647	3.960
Calyx diameter relative to corolla	Larger	Between larger and much larger	Larger
Inner calyx diameter relative to outer	Same size	Same size	Same size
Sepal shape	Elliptical	Elliptical	Elliptical
Sepal apex	Convex	Convex	Convex
Sepal margin	Entire	Entire	Entire
Sepal length cm	1.380	1.297	1.330
Sepal width (cm)	0.655	0.560	1.269
Typical and observed sepal number	14	13	13

TABLE 5-continued

Characteristic	'DrisStrawTen'	'Driscoll Lanai'	'San Juan'
Receptacle color	RHS 2A Medium yellow	RHS 150B Medium yellow-green	RHS 2A Medium yellow
Anther color	RHS 163B Medium greyed-orange	RHS N167C Light greyed-orange	RHS 163B Medium greyed-orange

Table 6 shows fruit characteristics of the new cultivar compared to 'Driscoll Lanai' and 'San Juan'.

TABLE 6

Characteristic	'DrisStrawTen'	'Driscoll Lanai'	'San Juan'
Fruiting truss length (cm)	20.2	22.2	25.1
Fruiting truss diameter (cm)	0.442	0.360	0.481
Number of berries per fruiting truss	4	4	4
Fruiting truss attitude	Erect	Semi-erect	Semi-erect
Fruiting truss length	Medium	Long	Long
Truss color	RHS 144A Medium yellow-green	RHS 144A Medium yellow-green	RHS 144A Medium yellow-green
Fruit length (cm)	4.207	4.327	4.857
Fruit width (cm)	4.289	4.431	4.603
Fruit length/ width ratio	1.0	1.0	1.1
Fruit length/ width ratio	As long as broad	As long as broad	As long as broad
Fruit weight (g)	23.1	25.6	28.0
Relative fruit size	Medium	Medium	Large
Predominant fruit shape	Conical	Conical	Conical
Difference in shape between primary & secondary fruits	Slight	Slight	Slight
Band without achenes	Narrow	Narrow	Narrow
Unevenness of fruit surface	Weak	Between medium and strong	Medium
Fruit skin color	RHS 45A Dark red	RHS 46A Dark red	RHS 53A Dark red
Evenness of fruit color	Even	Even	Even
Fruit glossiness	Medium	Medium	Between medium and strong
Insertion of achenes	Level with surface	Above surface	Below surface
Achene coloration-sunward side of berry	RHS 185A Dark greyed-purple	RHS 183C Dark greyed-purple	RHS 180B Medium greyed-red
Achene coloration-shaded side of berry	RHS 151B Medium yellow-green	RHS 152B medium yellow-green	RHS 150B light yellow-green
Achenes per berry	324	345	397

TABLE 6-continued

Characteristic	'DrisStrawTen'	'Driscoll Lanai'	'San Juan'
Achene weight (g)	0.00057453	0.000497336	0.000558419
Insertion of calyx	Level	Level	Level
Pose of calyx segments	Spreading	Reflexed	Reflexed
Size of calyx in relation to fruit	Same size	Larger	Between smaller and same size
Adherence of calyx	Medium	Medium	Strong
Firmness of flesh	Medium	Medium	Firm
Color of the flesh	RHS 43B Medium red and RHS 49D light red	RHS 155A White and RHS 41B medium red	RHS 155B White and RHS 41A medium red
Evenness of flesh color	Uneven	Slightly uneven	Slightly uneven
Distribution of flesh color	Marginal and central	Marginal and central	Marginal and central
Fruit hollow length (cm)	2.047	2.055	2.169
Fruit hollow width (cm)	1.610	0.774	0.738
Fruit hollow length/width ratio	1.3	2.7	2.9
Hollow center	Medium	Medium	Small
Sweetness	Medium	Medium	Strong
Acidity	Medium	Medium	Weak
Texture when tasted	Medium	Medium	Fine
Time of flowering	Between early and medium	Between early and medium	Between early and medium
Harvest maturity (50% of plants with ripe fruit)	Late March to early November	Late March to early November	Late March to early November
Type of bearing	Fully everbearing	Partially everbearing	Partially everbearing
Grams of fruit/plant	1,769	1,609	1,412

Table 7 shows pest and disease characteristics of the new cultivar compared to 'Driscoll Lanai' and 'San Juan'.

TABLE 7

Pest or Disease	'DrisStrawTen'	'Driscoll Lanai'	'San Juan'
Tetranychus urticae (2-spotted spider mite)	Moderately susceptible	Susceptible	Moderately susceptible
Botrytis fruit rot	Susceptible	Susceptible	Susceptible
Powdery mildew	Between resistant and moderately resistant	Susceptible	Susceptible
Verticillium wilt	Moderately resistant	Moderately susceptible	Susceptible
Viral diseases - Strawberry Mottle Virus	Moderately resistant	Moderately resistant	Moderately resistant
Xanthomonas fragariae	Moderately susceptible	Moderately susceptible	Moderately susceptible

We claim:

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

* * * * *

FIG. 1

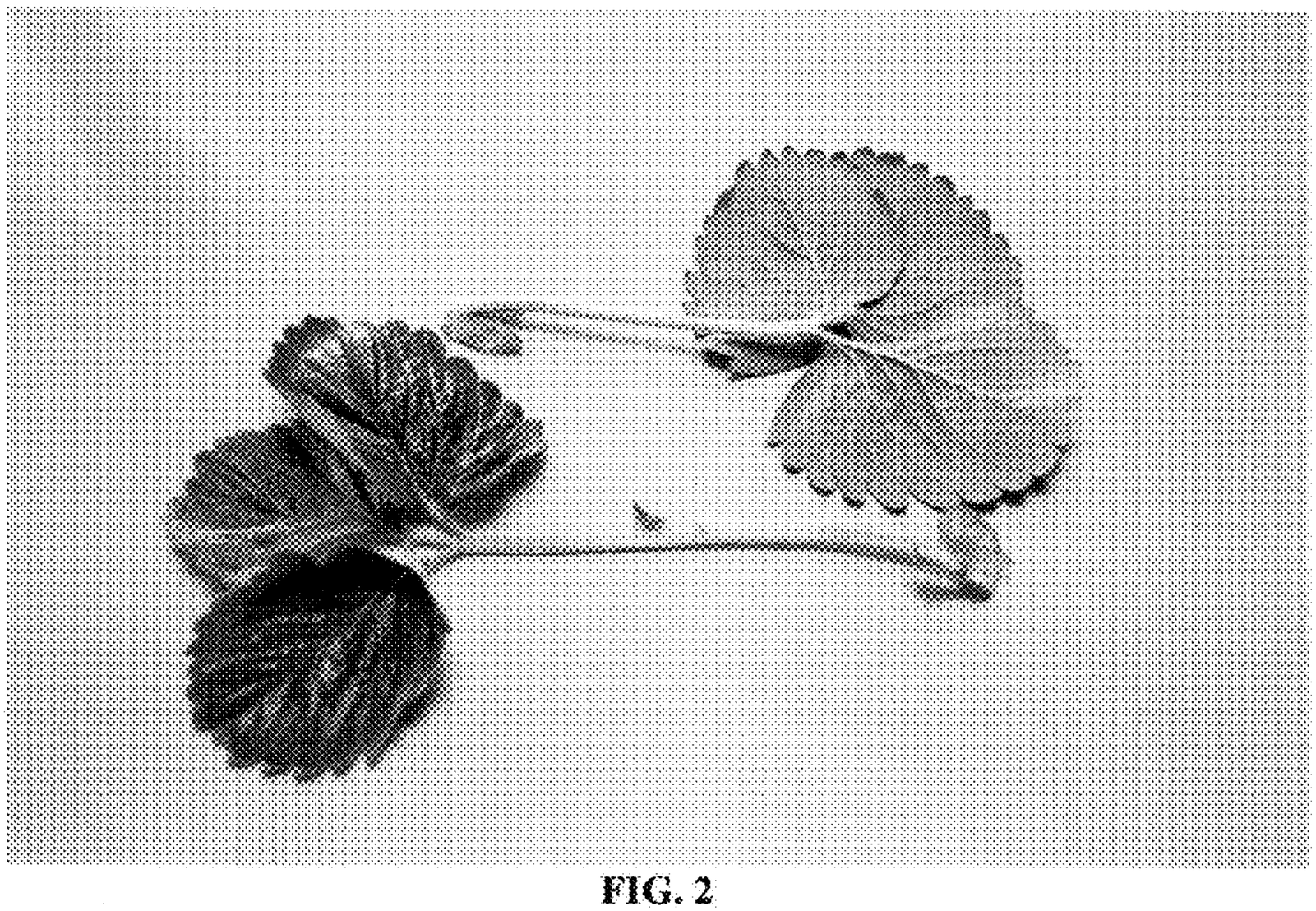

FIG. 2

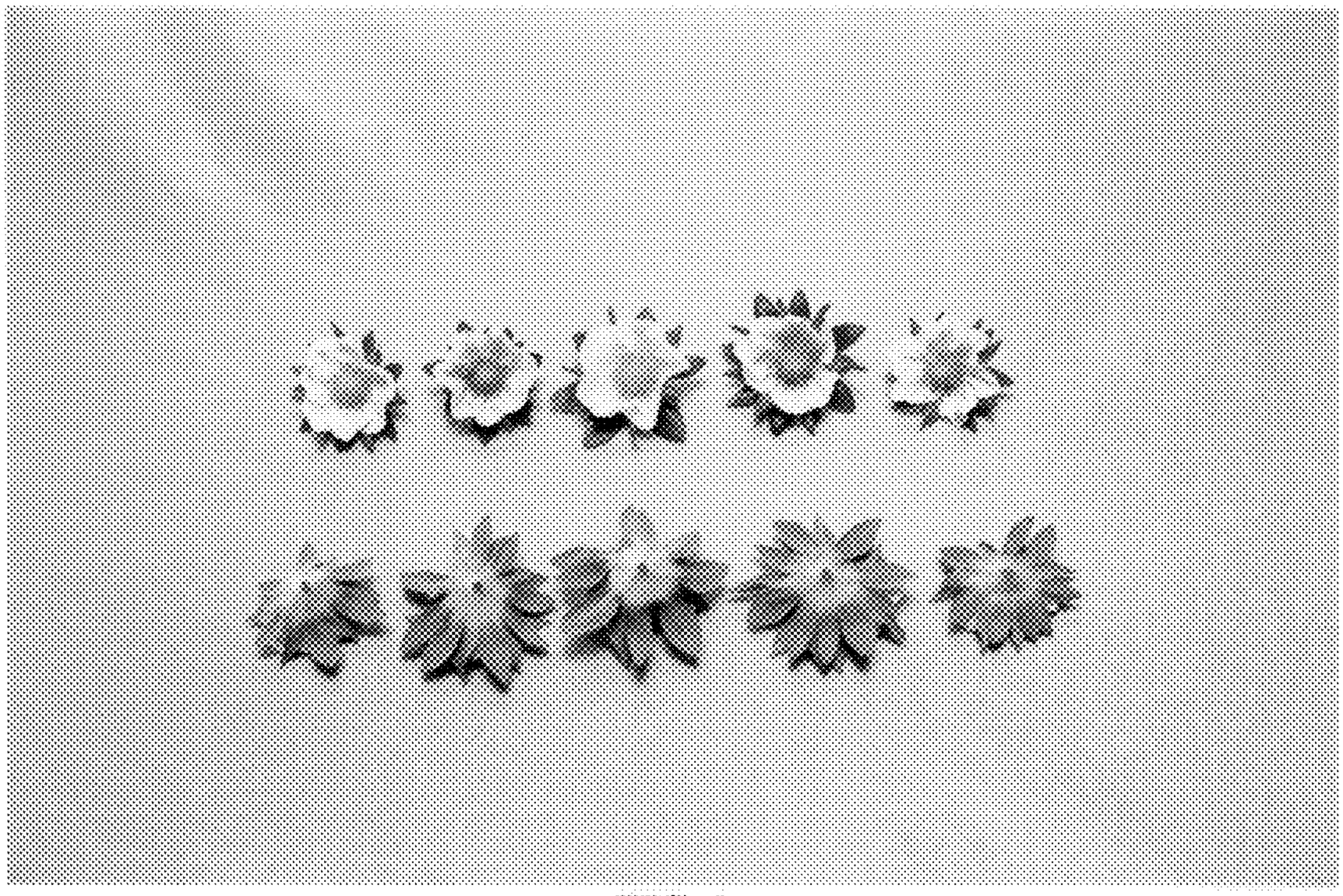

FIG. 3

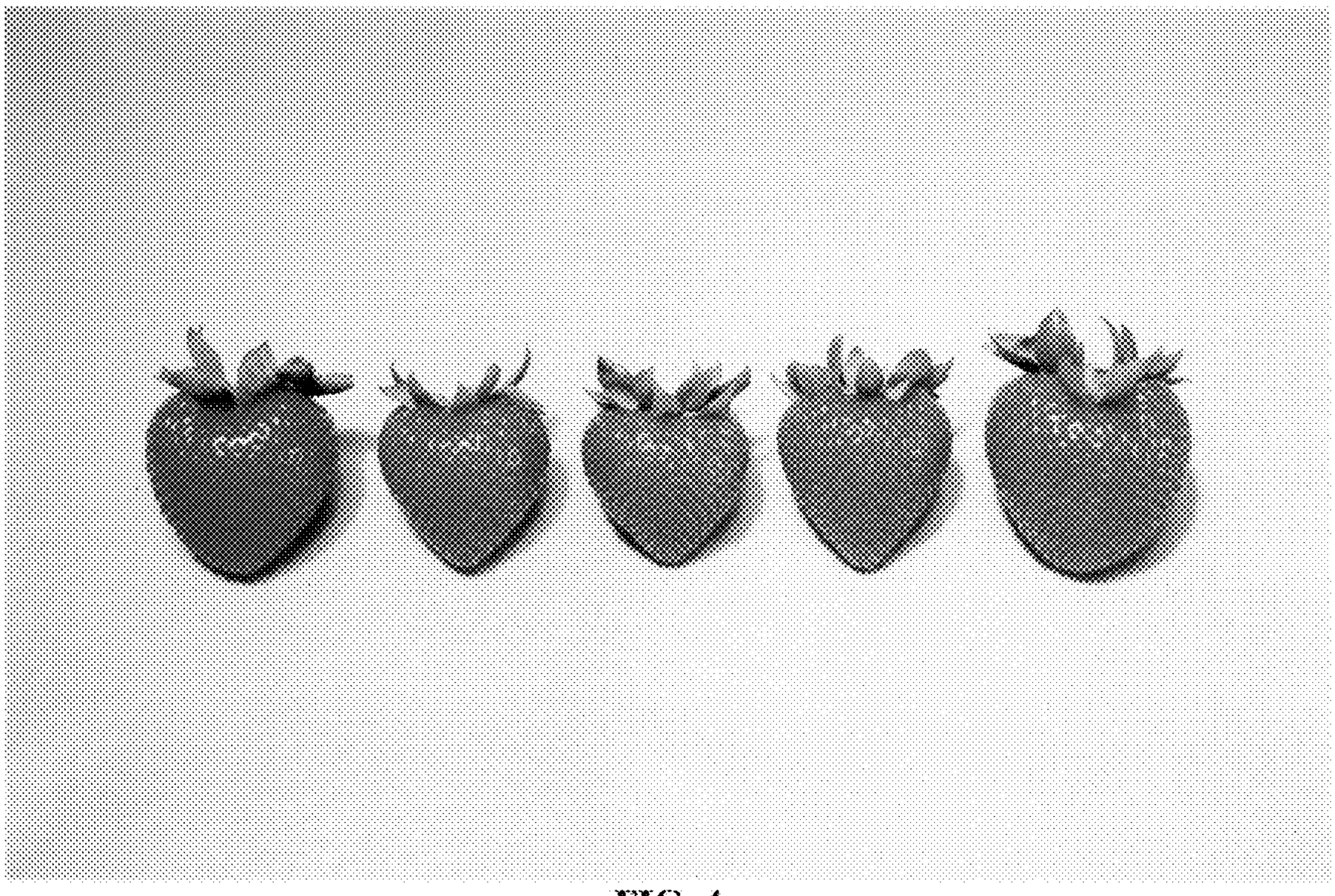

FIG. 4

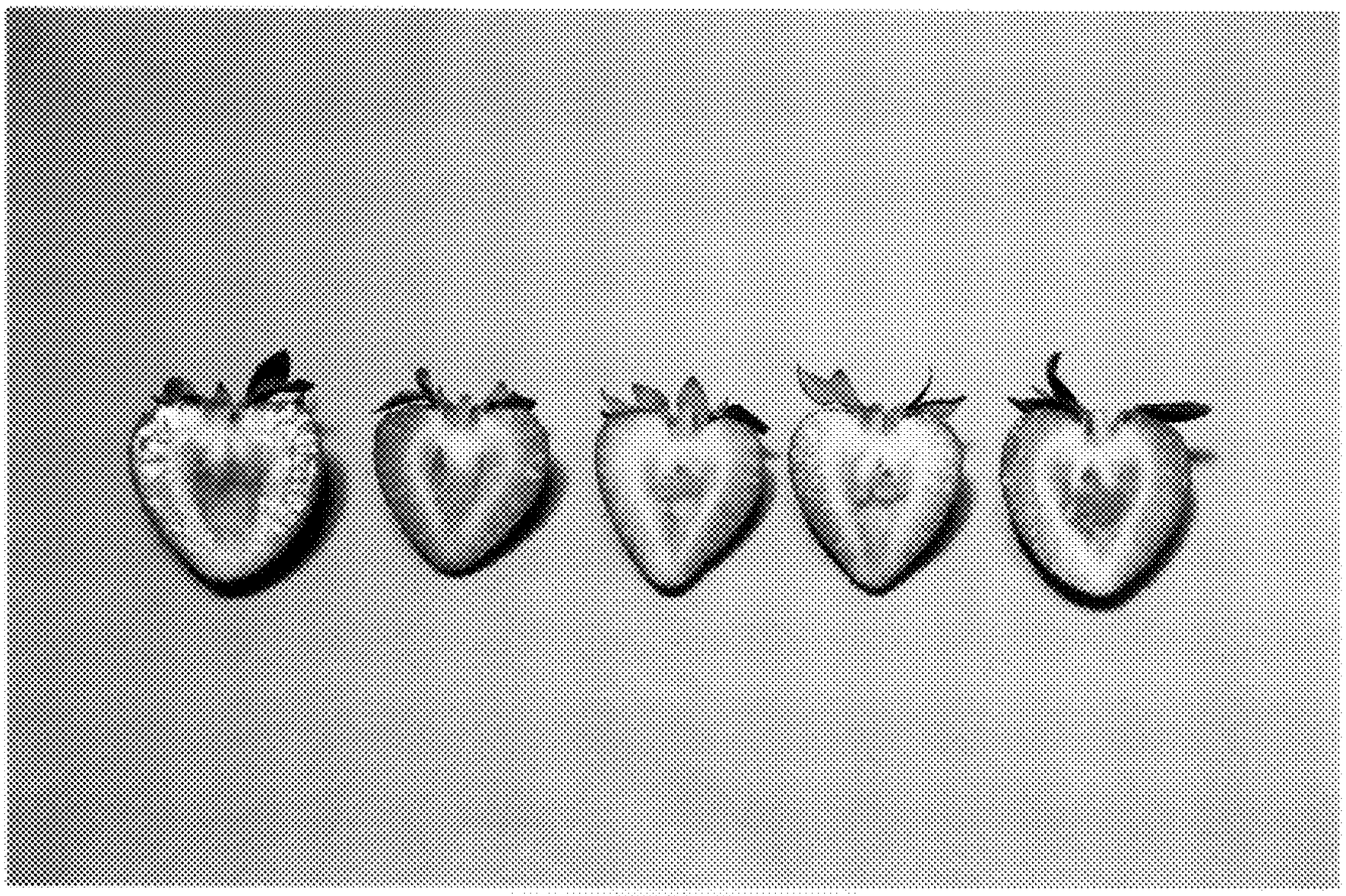

FIG. 5