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Mowrey et al.

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

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

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(57) **ABSTRACT**

This invention relates to a new and distinct cultivar of strawberry plant named 'DrisStrawTwo'. The new cultivar is primarily characterized by its large fruit size, heavy fruit production, and resistance to powdery mildew.

3 Drawing Sheets

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

BACKGROUND OF THE NEW PLANT

The present invention relates to a new and distinct strawberry cultivar designated 'DrisStrawTwo' and botanically known as *Fragaria×ananassa*. This new strawberry cultivar originated from a controlled cross between 'Driscoll Camarillo' (U.S. Plant Pat. No. 14,771) and 'Driscoll Marin' (U.S. Plant Pat. No. 15,375). The original seedling of the new cultivar was asexually propagated by stolons at a nursery in Shasta County, Calif. Propagules were transplanted to a controlled breeding plot in Ventura County, Calif. where it was identified and selected for further evaluation in October, 2002. 'DrisStrawTwo' was subsequently asexually propagated and underwent further testing at various locations in Monterey County, Calif. 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.

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 a 10 month old plant 'DrisStrawTwo' is based on observations taken during the 2006 growing season in Monterey County, 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. 'DrisStrawTwo' 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 parents, 'Driscoll Camarillo' and 'Driscoll Marin'. Plant characteristics include plant habit, vigor, leaf shape in cross section, fruit length in centimeters, yield in grams per plant and reaction to powdery mildew.

TABLE 1

Characteristic	'DrisStrawTwo'	'Driscoll Camarillo'	'Driscoll Marin'
Habit	Flat globose	Globose	Flat
Vigor	Medium	Medium	Weak
Leaf shape in cross section	Flat	Concave	Slightly concave
Powdery mildew	Resistant	Between susceptible & highly susceptible	Moderately susceptible

Table 2 shows leaf characteristics of the new cultivar compared with leaf characteristics of 'Driscoll Camarillo' and 'Driscoll Lanai' (U.S. Plant Pat. No. 15,145). 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, shape of leaf margin and shape of leaf base.

TABLE 2

Leaf Characteristic	'DrisStrawTwo'	'Driscoll Camarillo'	'Driscoll Lanai'
Terminal leaflet length (cm)	0.76	0.71	0.76
Terminal leaflet width (cm)	0.71	0.75	0.74
Terminal leaflet length/width ratio	1.06	0.95	1.02
No. teeth/terminal leaflet	20	23	21
Shape of teeth	Obtuse	Rounded	Rounded
Color of upperside of leaf	RHS 147A Dark yellow green	RHS 147A Dark yellow green	RHS 139A Dark green
Color of underside of leaf	RHS 147B Dark yellow green	RHS 138B Dark green	RHS 138B Dark green
Leaf shape in cross section	Flat	Concave	Between slightly concave & flat
Leaf blistering	Strong	Very strong	Medium
Leaf glossiness	Medium	Between medium & strong	Weak
No. leaflets	Three only	Three only	Three only
Terminal leaflet margin	Between revolute & flat	Between revolute & flat	Between revolute & flat
Terminal leaflet base shape	Rounded	Rounded	Rounded

Table 3 shows information about the petiole, the petiolule, the bract, and the stipule of the new cultivar compared to 'Driscoll Camarillo' and 'Driscoll Lanai'. 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 and color of the petiolule.

TABLE 3

Characteristic	'DrisStrawTwo'	'Driscoll Camarillo'	'Driscoll Lanai'
Petiole length (cm)	18.8	16.8	18.3
Petiole diameter (cm)	0.286	0.331	0.260
Petiole pubescence	Dense	Sparse	Medium
Petiole pose of hairs	Outwards	Outwards	Downwards
Petiole color	RHS 145A Medium yellow green	RHS 149A Light yellow green	RHS 145A Medium yellow green
Petiolule color	RHS 145B Medium yellow green	RHS 144B Medium yellow green	RHS 145A Medium yellow green
Petiolule length (cm)	1.590	1.376	1.308
Petiolule diameter (cm)	0.185	0.194	0.148
Bract frequency	0	0	0
Stipule length (cm)	3.8	4.0	3.3
Stipule width (cm)	0.794	0.866	0.550
Stipule pubescence	Sparse	Sparse	Between medium & dense

Table 4 shows stolon characteristics of the new cultivar compared to 'Driscoll Camarillo' and 'Driscoll Lanai'. These characteristics include the number of stolons, the anthocyanin coloration of the stolons, the thickness of the stolons, the pubescence of the stolons, and the average number of daughter plants.

TABLE 4

Characteristic	'DrisStrawTwo'	'Driscoll Camarillo'	'Driscoll Lanai'
Stolon Number	Medium	Medium	Many
Stolon Anthocyanin	Strong	Medium	Strong
Stolon Thickness	Thin	Between Medium & Thick	Between Medium & Thick
Stolon Pubescence	Sparse	Medium	Dense
Average Number of Daughter Plants (Nursery Average)	17	N/A	67

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

TABLE 5

Characteristic	'DrisStrawTwo'	'Driscoll Camarillo'	'Driscoll Lanai'
Inflorescence position relative to foliage	Above	Above	Between level with & above
Flower size	Medium	Medium	Medium
Flower diameter (cm)	2.549	2.698	2.518
Petal spacing	Overlapping	Overlapping	Overlapping
Petal length (cm)	1.156	1.275	1.103
Petal width (cm)	1.197	1.367	1.146
Petal length/width ratio	0.97	0.93	0.96
Petal color	RHS 155D White	RHS 155B White	RHS 155C White
Calyx diameter (cm)	3.260	3.236	3.469
Calyx diameter relative to corolla	Larger	Between smaller & same size	Between same size & larger
Inner calyx diameter relative to outer	Between same size & larger	Same size	Larger
Sepal length (cm)	1.108	1.118	1.187
Sepal width (cm)	0.608	0.709	0.630
Receptacle color	RHS 2A Yellow	RHS 1A Green yellow	RHS 1B Green yellow
Anther color	RHS 15B Yellow orange	RHS 17A Yellow orange	RHS 9A Yellow orange

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

TABLE 6

Characteristic	'DrisStrawTwo'	'Driscoll Camarillo'	'Driscoll Lanai'
Fruiting truss length (cm)	31.6	27.6	24.0
Fruiting truss attitude	Prostrate	Prostrate	Prostrate
Fruit length (cm)	4.51	3.59	3.63
Fruit width (cm)	3.59	3.29	3.48

TABLE 6-continued

Characteristic	'DrisStrawTwo'	'Driscoll Camarillo'	'Driscoll Lanai'
Fruit length/width ratio	1.26	1.09	1.04
Fruit weight (g)	24.7	20.6	24.2
Relative fruit size	Large	Between medium & large	Medium
Predominant fruit shape	Conical	Cordate	Between conical & ovoid
Difference in shape between primary & secondary fruits	Moderate	Slight	Slight
Band without achenes	Medium	Absent or very narrow	Between narrow & medium
Unevenness of fruit surface	Absent or very weak	Weak	Weak
Fruit skin color	RHS 45A Red	RHS 46A Red	RHS 45B Orange red
Evenness of fruit color	Even	Even	Even
Fruit glossiness	Strong	Strong	Strong
Insertion of achenes	Between level with surface & above surface	Below surface	Level with surface
Achene coloration - sunward side of berry	RHS 179A Greyed red	RHS 184B Greyed purple	RHS 185B Greyed purple
Achene coloration - shaded side of berry	RHS 3A Yellow	RHS 13B Yellow	RHS 154B Yellow green
Achenes per berry	233.7	224	226.8
Insertion of calyx	Set above fruit	In a basin	Level
Pose of calyx segments	Between spreading & reflexed	Reflexed	Between spreading & reflexed
Size of calyx in relation to fruit	Smaller	Smaller	Smaller
Adherence of calyx	Medium	Strong	Strong
Firmness of flesh	Firm	Firm	Medium
Evenness of flesh color	Even	Slightly uneven	Uneven
Color of flesh	RHS 44C & RHS 155B Orange red & white	RHS 34B & RHS 155A Orange red & white	RHS 47C Orange red

TABLE 6-continued

Characteristic	'DrisStrawTwo'	'Driscoll Camarillo'	'Driscoll Lanai'
Hollow center	Absent	Between absent & small	Medium
Sweetness	Medium	Medium	Medium
Texture when tasted	Medium	Medium	Fine
Harvest maturity	Mid-season	Between early & mid-season	Late
Type of bearing	Fully everbearing	Fully everbearing	Partially everbearing
Grams of fruit/plant	1,654.7	1,485.1	1,420.4

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

TABLE 7

Pest or Disease	'DrisStrawTwo'	'Driscoll Camarillo'	'Driscoll Lanai'
Tetranychus urticae (2-spotted spider mite)	Susceptible	Moderately Susceptible	Susceptible
Lygus hesperus (Lygus bug)	Susceptible	Susceptible	Susceptible
Botrytis fruit rot	Moderately Susceptible	Between moderately resistant & moderately susceptible	Susceptible
Powdery mildew	Resistant	Between susceptible & highly susceptible	Susceptible
Verticillium wilt	Susceptible	Moderately Susceptible	Moderately resistant
Strawberry mottle virus	Moderately resistant	Moderately resistant	Moderately resistant
Xanthomonas fragariae	Moderately Susceptible	Moderately resistant	Moderately Susceptible

We claim:

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

* * * * *

FIG. 1

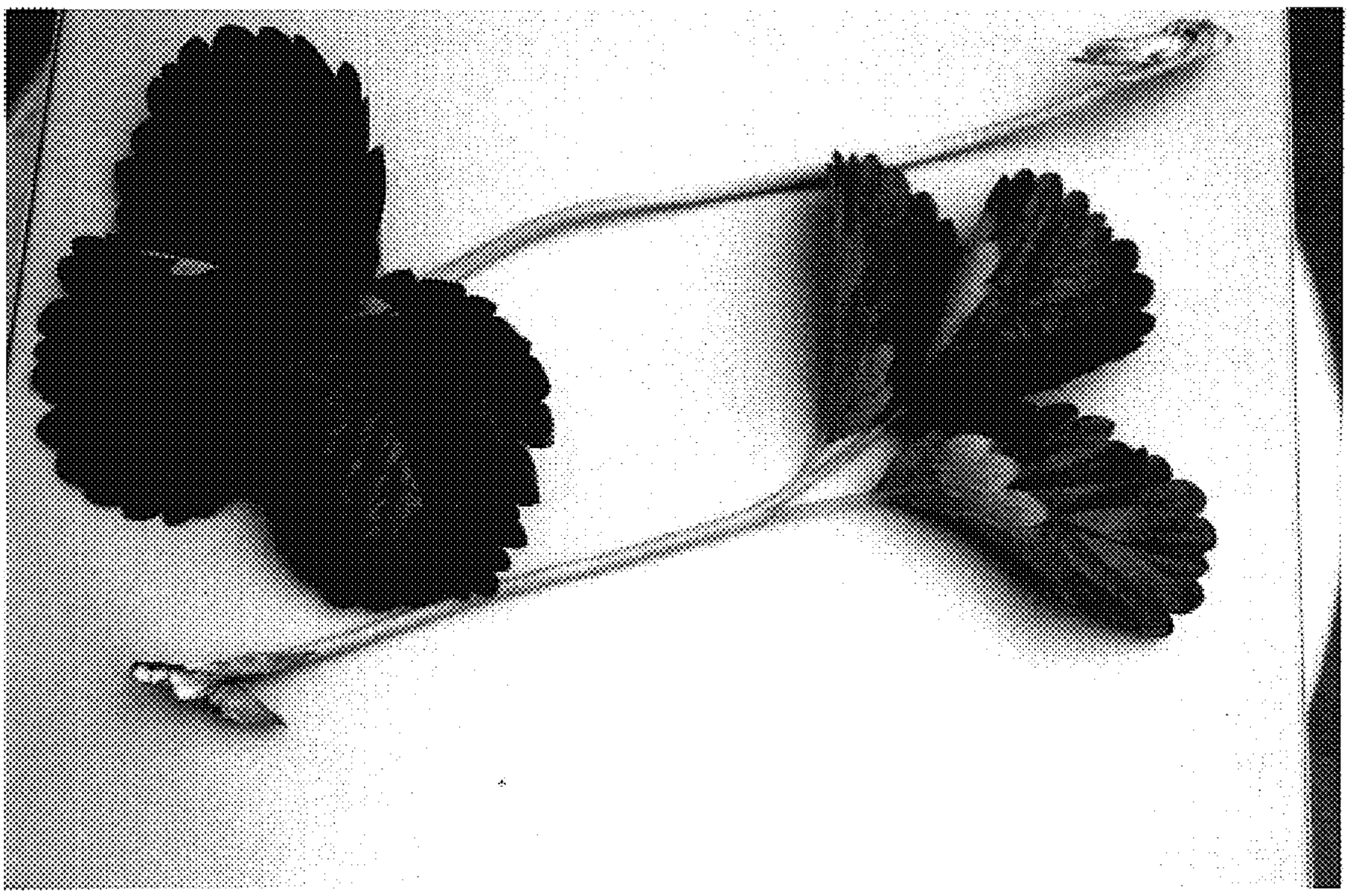

FIG. 2

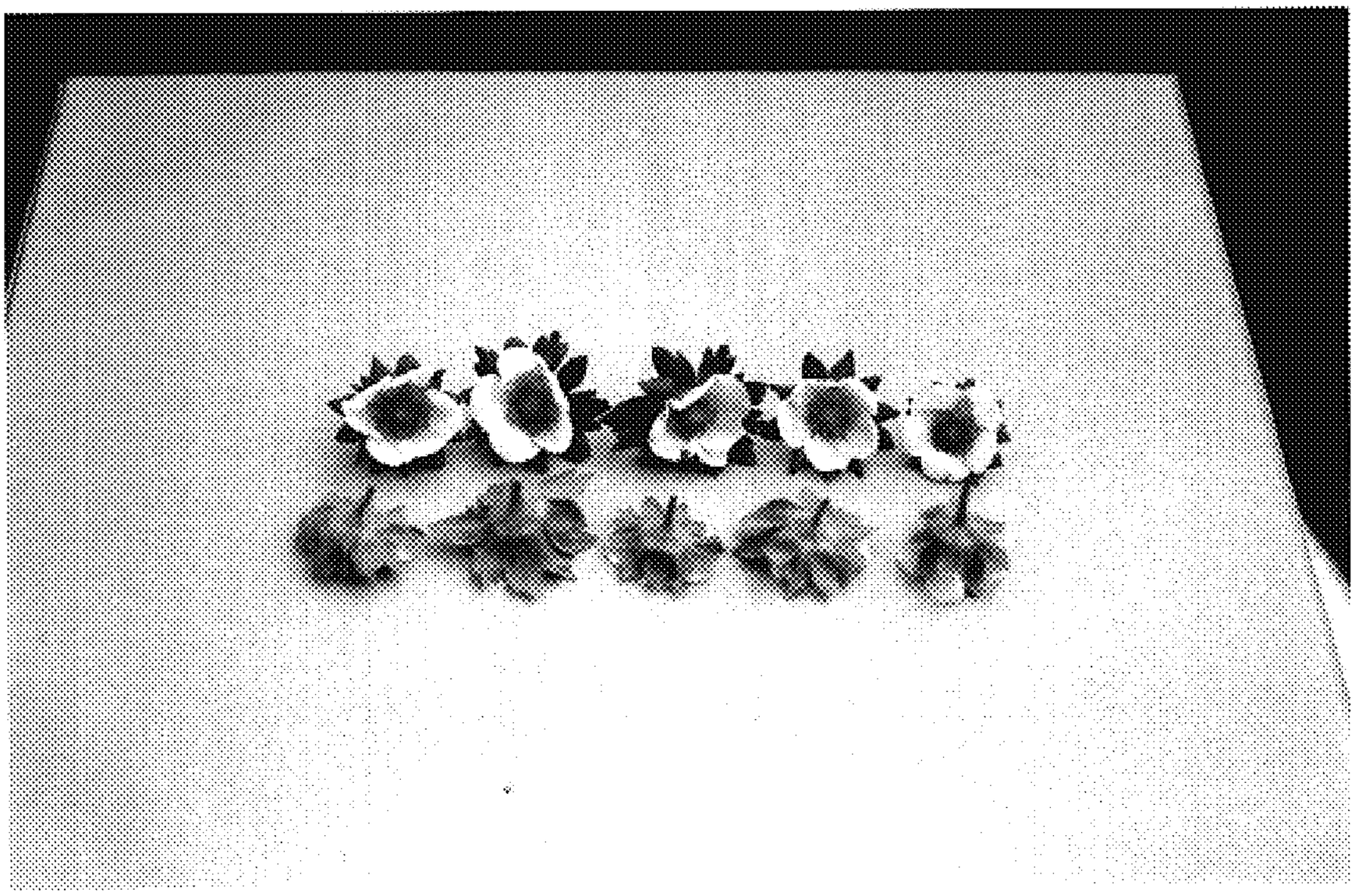

FIG. 3

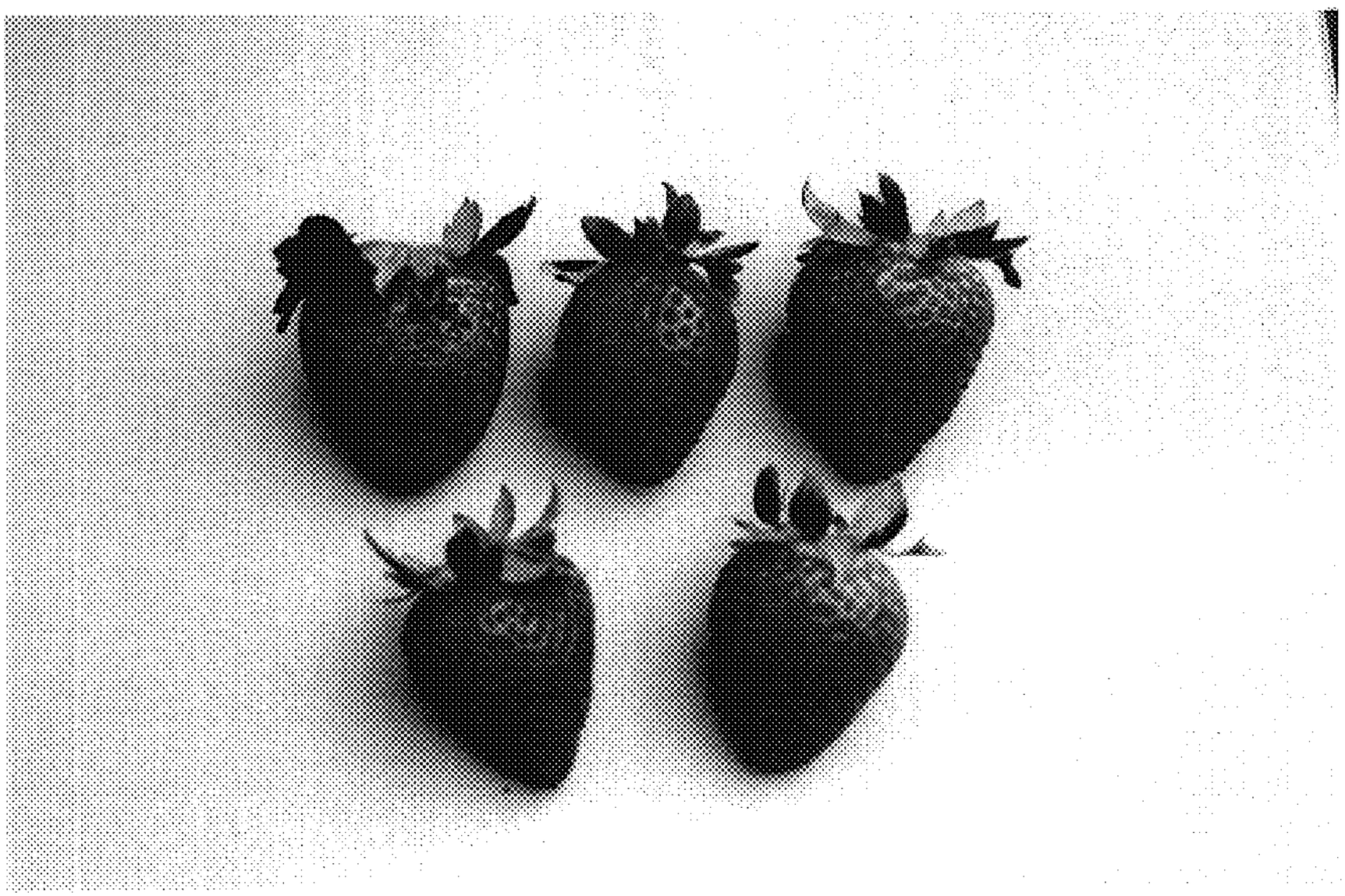

FIG. 4

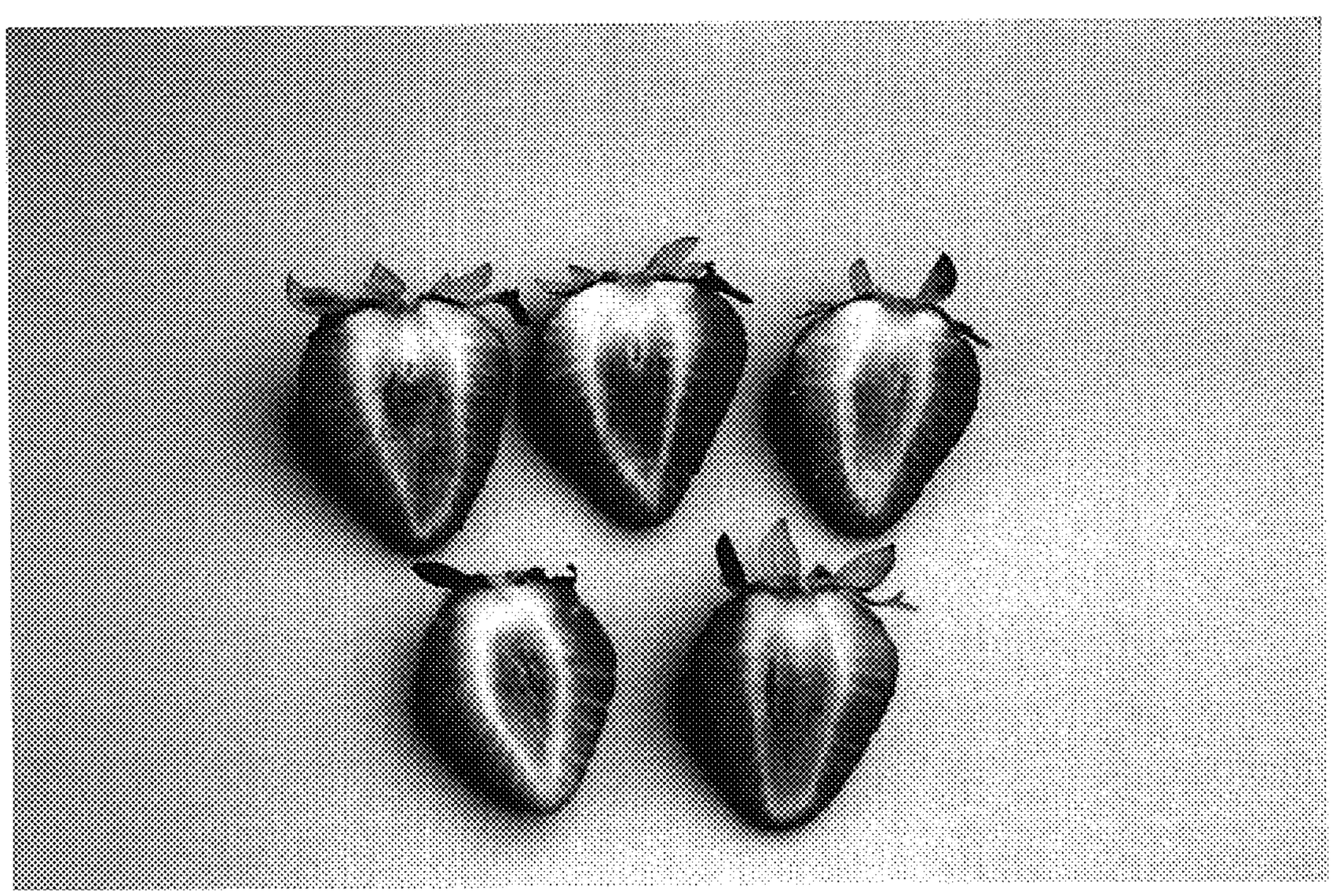

FIG. 5