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Ferguson et al.

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(54) STRAWBERRY PLANT NAMED 'DRISSTRAWTHREE'

- (50) Latin Name: *Fragaria*×ananassa Varietal Denomination: **DrisStrawThree**
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(51) **Int. Cl.**

A01H 5/00 (2006.01)

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

(56) References Cited

U.S. PATENT DOCUMENTS

PP11,548	P	*	10/2000	Amorao et al	Plt./209
PP12,889	P2	*	8/2002	Lamb et al	Plt./364
PP14,771	P3	*	5/2004	Amorao et al	Plt./209
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OTHER PUBLICATIONS

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* cited by examiner

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(57) ABSTRACT

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

3 Drawing Sheets

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

BACKGROUND OF THE NEW PLANT

The present invention relates to a new and distinct strawberry cultivar designated 'DrisStrawThree' and botanically known as *Fragaria×ananassa*. This new strawberry cultivar was discovered in October, 2002 and originated from a cross between the female parent '5F205', a proprietary strawberry plant (unpatented) and the male parent 'San Juan' (U.S. Plant Pat. No. 12,899). The original seedling of the new cultivar was asexually propagated at a nursery in Shasta County, Calif. 'DrisStrawThree' was subsequently asexually propagated and underwent further testing at a nursery in Ventura 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 2 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 'DrisStrawThree' is based on observations taken from the 2002 to 2006 growing seasons in Ventura 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. 'DrisStrawThree' 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 parent 'San Juan'. Plant characteristics include plant height, leaf shape in cross section, fruit hollow center, fruit texture when tasted, and reaction to aphids.

TABLE 1

	Characteristic	'DrisStrawThree'	'San Juan'
25	Plant height (cm)	20.5	28.0
	Leaf shape in cross	Slightly concave	Flat to slightly convex
	Fruit hollow center	Small	Medium
	Fruit texture when tasted	Very fine	Medium
30	Aphis spp. (Aphids)	Moderately resistant	Susceptible

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Table 2 shows plant characteristics of the new variety compared with plant characteristics of the commercial varieties, 'Driscoll Camarillo' (U.S. Plant Pat. No. 14,771) and 'Baeza' (U.S. Plant Pat. No. 11,548). Plant characteristics include plant height, diameter, number of crowns per plant, habit, density of individual plant and vigor.

TABLE 2

Characteristic	'DrisStrawThree'	'Driscoll Camarillo'	'Baeza'
Plant height (cm)	20.5	23.3	22.4
Plant diameter (cm)	45.1	43.9	44.7
Number of crowns/plant	4	3	3
Habit	Flat globose	Globose	Globose
Density of individual plant	Dense	Medium to Dense	Medium to Dense
Vigor	Strong	Strong	Medium

Table 3 shows leaf characteristics of the new cultivar compared with leaf characteristics of 'Driscoll Camarillo' and 'Baeza'. 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, and shape of leaf base.

TABLE 3

Leaf Characteristic	'DrisStrawThree'	'Driscoll Camarillo'	'Baeza'
Terminal	0.82	0.90	0.83
leaflet length (cm)			
Terminal	0.80	0.97	0.91
leaflet width (cm)	1.04	0.03	0.01
Terminal leaflet length/width ratio	1.04	0.93	0.91
No. teeth/	17	27	29
terminal leaflet	17	21	27
Shape of teeth	Rounded	Rounded	Rounded
Color of	RHS 139A	RHS N189B	RHS 147A
upperside of leaf			
Color of	RHS 191B	RHS 137C	RHS 137C
underside of leaf			
Leaf shape in	Slightly concave	Slightly concave	Concave
cross section	XX7 1-	Mr. Passa	Mr. P.
Leaf blistering	Weak	Medium	Medium
Leaf glossiness	Weak	Weak	Weak
No. leaflets	Three only	Three only	Three only
Terminal	Revolute	Revolute	Revolute
leaflet margin			
Terminal	Obtuse	Rounded	Rounded
leaflet base shape			

Table 4 shows information about the petiole, the petiolule, the bract, and the stipule of the new cultivar compared to 'Driscoll Camarillo' and 'Baeza'. 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.

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TABLE 4

Characteristic	'DrisStrawThree'	'Driscoll Camarillo'	'Baeza'
Petiole length (cm)	14.1	12.7	13.4
Petiole diameter (cm)	0.412	0.408	0.420
Petiole pubescence	Dense	Sparse	Medium to dense
Petiole pose of hairs	Outward to downward	Outwards	Outwards
Petiole color	RHS 144B	RHS 144B	RHS 144B
Petiolule color	RHS 145B	RHS 145B	RHS 145B
Petiolule length (cm)	1.098	1.255	1.456
Petiolule diameter (cm)	0.236	0.254	0.232
Bract frequency	1	1	1
Stipule length	3.8	4.0	3.7
Stipule width (cm)	0.985	1.070	1.256
Stipule pubescence	Dense	Sparse	Sparse

Table 5 shows stolon characteristics of the new cultivar compared to 'Driscoll Camarillo' and 'Baeza'. These characteristics include the number of stolons, the anthocyanin coloration of the stolons, the thickness of the stolons, and the pubescence of the stolons.

TABLE 5

Characteristic	'DrisStrawThree'	'Driscoll Camarillo'	'Baeza'
Stolon Number	Few to medium	Few to medium	Few to medium
Stolon Anthocyanin	Strong	Weak to medium	Weak to medium
Stolon Thickness	Medium	Thick	Thick to very thick
Stolon Pubescence	Sparse	Sparse	Medium to dense

Table 6 shows inflorescence characteristics of the new cultivar compared to 'Driscoll Camarillo' and 'Baeza'. 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 6

Characteristic	'DrisStrawThree'	'Driscoll Camarillo'	'Baeza'	
Inflorescence position relative to foliage	Beneath	Above	Above	
Flower size	Medium	Medium	Medium	
Flower diameter (cm)	3.001	2.263	2.490	
Petal spacing	Overlapping	Overlapping	Overlapping	
Petal length (cm)	1.502	1.262	1.496	

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TABLE 6-continued

Characteristic	'DrisStrawThree'	'Driscoll Camarillo'	'Baeza'
Petal width (cm)	1.531	1.263	1.511
Petal length/width ratio	0.98	1.00	0.99
Petal color	RHS 155B	RHS 155C	RHS 155B
Calyx diameter (cm)	4.088	2.550	2.925
Calyx diameter relative to corolla	Larger	Smaller	Same size
Inner calyx diameter relative to outer	Same size	Same size	Same size
Sepal length (cm)	1.582	0.964	1.087
Sepal width (cm)	0.817	0.544	0.505
Receptacle color	RHS N144A	RHS 2B	RHS 1A
Anther color	RHS 17A	RHS 15B	RHS 17B

Table 7 shows fruit characteristics of the new cultivar compared to 'Driscoll Camarillo' and 'Baeza'.

TABLE 7

Characteristic	'DrisStrawThree'	'Driscoll Camarillo'	'Baeza'
Fruiting truss length (cm)	13.4	26.5	21.7
Fruiting truss	Prostrate	Erect	Erect
Fruiting truss length	Medium	Long	Long
Fruit length (cm)	4.93	3.76	4.35
Fruit width (cm)	4.36	3.73	3.92
Fruit length/ width ratio	1.13	1.01	1.11
Fruit weight (g)	27.5	21.0	22.3
Relative fruit size	Very large	Medium	Medium
Predominant fruit shape	Almost cylindrical	Conical	Conical
Difference in shape between primary & secondary fruits	Slight	None or very slight	None or very slight
Band without achenes	Narrow	Absent or very narrow	Absent or very narrow
Unevenness of fruit surface	Medium	Medium	Medium
Fruit skin color	RHS 45B	RHS 46A	RHS 46B
	Red	Red	Red
Evenness of fruit color	Uneven	Even	Even
Fruit glossiness	Medium	Medium	Medium
Insertion of	Level with	Level with	Level with
achenes	surface	surface	surface
Achene	RHS 165A	RHS 166B	RHS 163B
coloration-	Red to purple,	Red to purple,	Red to purple,
berry	possibly greyed	possibly greyed	possibly greyed
Achene	RHS 151C yellow	RHS 151C	RHS 151A
coloration- shaded side of berry	to green	yellow to green	Yellow to green
Achenes per berry	243.6	316.2	361.3
Achene weight	0.000664409	0.000570367	0.000466731
Insertion of calyx	Set above the fruit	Level	Level
Pose of calyx segments	Reflexed	Reflexed	Reflexed

TABLE 7-continued

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Characteristic	'DrisStrawThree'	'Driscoll Camarillo'	'Baeza'
Size of calyx in relation to fruit	Smaller to larger	Same size	Same size
Adherence of calyx	Strong	Strong	Strong
Firmness of flesh	Firm	Firm	Firm
Color of the	RHS 155A	RHS 155A	RHS 155A
flesh	(White) to RHS	(White) to RHS	(White) to RHS
	44D (light red)	44D (light red)	38B (pale rose)
Evenness of flesh color	Slightly uneven	Even	Even
Distribution of	Marginal and	Only marginal	Only marginal
flesh color	central		
Hollow center	Small	Absent	Medium
Sweetness	Strong	Medium	Medium
Acidity	Weak	Medium	Medium
Texture when tasted	Very fine	Medium	Medium
Time of flowering	Early	Early	Late
Harvest	Mid-season, early	Mid-season,	Late
maturity	June to late December	early June to late December	early July to late December
Type of bearing	Fully everbearing	Fully everbearing	Fully everbearing
Grams of fruit/plant	500	286	289

Table 8 shows the resistance to different forms of stress of the new cultivar compared to 'Driscoll Camarillo' and 'Baeza'. These forms of stress include drought, high temperatures, wind, high pH, and high soil salt level.

TABLE 8

Reaction to Stress	'DrisStrawThree'	'Driscoll Camarillo'	'Baeza'
Drought	Moderately resistant	Moderately resistant	Moderately resistant
High temperatures	Moderately resistant	Moderately resistant	Moderately resistant
Wind	Moderately resistant	Moderately resistant	Moderately resistant
High pH	Moderately resistant	Moderately resistant	Moderately resistant
High soil salt level	Moderately resistant	Moderately resistant	Susceptible

Table 9 shows pest and disease characteristics of the new cultivar compared to 'Driscoll Camarillo' and 'Baeza'.

TABLE 9

TABLE 9				
Pest or Disease	'DrisStrawThree'	'Driscoll Camarillo'	'Baeza'	
Tetranychus urticae (2-spotted spider mite)	Moderately resistant	Moderately resistant	Moderately resistant	
Tarsonemus pallidus Aphelencoides	Moderately resistant Moderately	Moderately resistant Moderately	Moderately resistant Moderately	
fragariae	resistant	resistant	resistant	
Pratylenchus penetrans	Moderately resistant	Moderately resistant	Moderately resistant	
Ditylenchus dipsac	Moderately resistant	Moderately resistant	Moderately resistant	

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TABLE 9-continued

Pest or Disease	'DrisStrawThree'	'Driscoll Camarillo'	'Baeza'
Anthonomus rubi	Moderately resistant	Moderately resistant	Moderately resistant
Aphis spp. (Aphids)	Moderately resistant	Moderately resistant	Moderately resistant
Lygus hesperus (Lygus bug) Botrytis fruit rot	Moderately resistant Moderately Susceptible	Moderately resistant Moderately Susceptible	Moderately resistant Moderately Susceptible

TABLE 9-continued

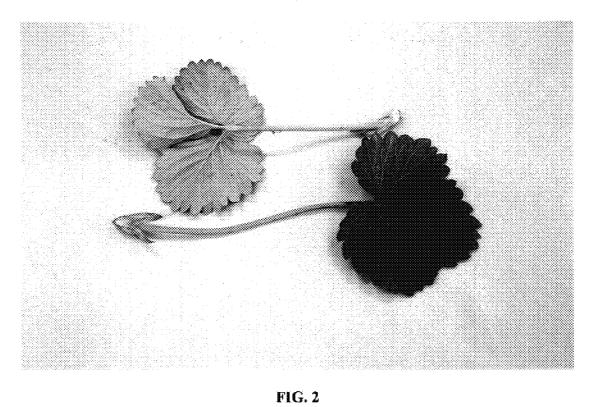
Pest or Disease	'DrisStrawThree'	'Driscoll Camarillo'	'Baeza'
Powdery mildew	Resistant	Highly susceptible	Susceptible

We claim:

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



FIG. 1



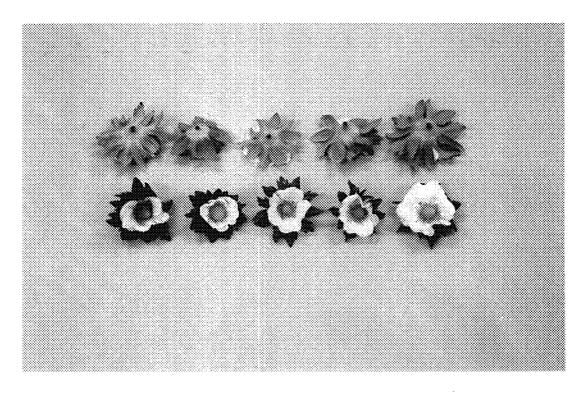


FIG. 3

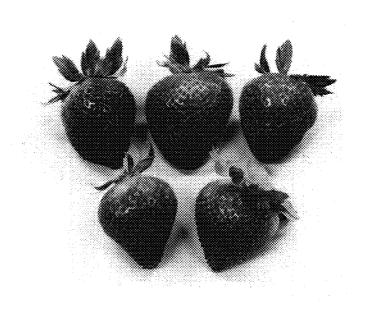


FIG. 4

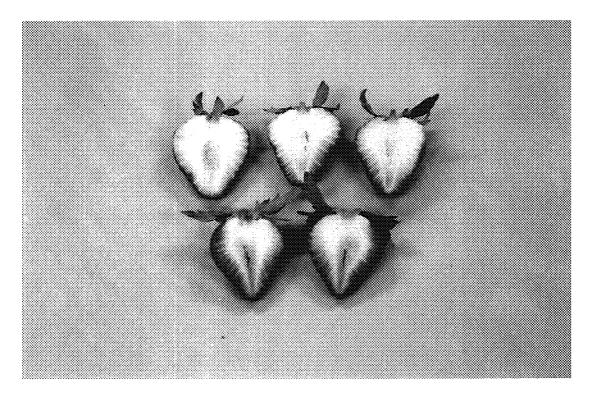


FIG. 5