'Rosa Linda' Strawberry

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'Rosa Linda' strawberry (*Fragaria xananassa* Duch.) has produced high early season (December through February) yields of attractive, flavorful fruit in trials at the Univ. of Florida's Gulf Coast Research and Education Center in Dover. It is recommended for commercial trial in west central Florida and other areas with relatively mild winter climates. The clone was named 'Rosa Linda' (pretty rose in Spanish) because of the pleasant rose aroma that is sometimes detected when the fruit is eaten.

Origin

'Rosa Linda' (tested as FL 90-15) originated from a 1990 cross of two Florida Agricultural Experiment Station breeding selections, FL 87-418 × FL 87-200. There are only a few named cultivars in its long pedigree; 'Toro' and 'Parker' (Univ. of California cultivars) were two of its great-grandparents, and 'Aiko' (Univ. of California) and 'Dover' (Univ. of Florida) are four and five generations back in the pedigree, respectively (Fig. 1). An additional observation that can be made from the pedigree of 'Rosa Linda' is the obvious use of recurrent selection in this new cultivar's development. Five or six cycles of recurrent selection have been completed since the current Univ. of Florida strawberry breeding program began in the late 1960s.

Description

'Rosa Linda' has a more erect plant habit than 'Sweet Charlie' (U.S. Plant Patent No. 8729) or 'Oso Grande' (Bringhurst and Voth, 1989), a characteristic that tends to make its fruit more visible. Its petioles are similar in length to those of 'Sweet Charlie', but are stiffer. 'Rosa Linda' has had greater early season (December through February) yield than 'Oso Grande', but not greater than 'Sweet

Charlies. Internal fruit color is mostly bright red, which make fresh slices of 'Rosa Linda' fruit very attractive. The fruit has a firmness and flavor intensity that is similar to the fruit of 'Sweet Charlie' (Table 2). While 'Sweet Charlie' fruit could be described as sweet and juicy, 'Rosa Linda' fruit flavor could be described as full-bodied and aromatic. The calyx lobes on 'Rosa Linda' fruit are mostly entire and recurved.

In commercial fruiting field trials conducted over four seasons, from 1993 to 1997, 'Rosa Linda' was not unduly affected by any of the major strawberry diseases or by two-spotted spider mites (*Tetranychus urticae* Koch). Plants have been observed with green petal disease (caused by a phytoplasma), but currently this is not a widespread problem (Harrison et al., 1997).

The most distinctive features of 'Rosa Linda' are the consistency of shape and color of its secondary and later fruit, its erect plant habit, and the unique aromatic quality of its fruit.

Fig. 1. Pedigree of 'Rosa Linda' strawberry.

Table 1. Yield and mean fruit mass of 'Rosa Linda' strawberry compared with those of two standard cultivars grown at Dover, Fla.²

Cultivar	Yield ^y (g/plant)					Mass/fruit ^z (g)
	December	January	February	March	Season	
1993–94						
Rosa Linda	0	118 (9)	240 (19)	112 (25)	470 (41)	17.2 (0.6)
Oso Grande	31 (10)	79 (15)	100 (9)	314 (19)	524 (21)	17.7 (0.3)
Sweet Charlie	51 (5)	71 (8)	252 (30)	148 (20)	521 (20)	17.3 (0.2)
1994–95						
Rosa Linda	6 (3)	8 (2)	88 (13)	501 (41)	602 (37)	16.3 (0.2)
Sweet Charlie	30 (10)	24 (2)	210 (13)	280 (28)	540 (28)	17.1 (0.5)
1995–96						
Rosa Linda	1 (0.6)	83 (5)	198 (34)	221 (19)	503 (49)	18.3 (0.3)
Oso Grande	0	84 (27)	87 (15)	174 (33)	344 (28)	23.1 (0.7)
Sweet Charlie	18 (3)	84 (9)	174 (61)	178 (5)	454 (74)	17.1 (0.5)

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⁴Plants were obtained from commercial Canadian nurseries in 1993 and 1995, and from the field nursery at GCREC-Dover, Dover, Fla., in 1994. Planting dates were 12 Oct. 1993, 13 Oct. 1994, and 9 Nov. 1995.

⁵Values represent mean per plant for three 10-plant plots, with SEs in parentheses.

⁶Seasonal fruit mass was determined by dividing total marketable fruit yield per plot by total marketable fruit number per plot. SEs reported in parentheses.

Fig. 2. Fruit of 'Rosa Linda' strawberry.

Table 2. Fruit characteristics of 'Rosa Linda' strawberry compared with those of two standard cultivars grown at Dover, Fla.^z

Cultivar	Color uniformity ^y	Flavor intensity ^y	Sweetness ^y	Firmness ^y
Rosa Linda	10.7	8.4	7.7	8.8
Oso Grande	7.3	6.7	7.0	9.0
Sweet Charlie	9.6	8.5	8.7	8.4

^zMeans based on the ratings of 12 trained panelists, who rated samples of fruit from each cultivar two or four times each season for three seasons (1993–95). A few of the 12 panelists were not able to participate in the study for all 3 years, so they were replaced with new panelists.

^yRating scale 1 to 15, with a higher score indicating more uniform color, more strawberry flavor intensity, more sweetness, and more firmness.

Availability

The Univ. of Florida's Institute of Food and Agricultural Sciences obtained a U.S. plant patent (no. 9866) on 'Rosa Linda' in 1997. A list of nurseries licensed to propagate this cultivar can be obtained from the Florida Strawberry Growers Association, P.O. Drawer 2550, Plant City, FL 33564.

Literature Cited

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