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'UFSun' Peach

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'UFSun' peach, [*Prunus persica* (L.) Batsch], is released for grower trial by the Florida Agricultural Experiment Station. Trees produce attractive, sweet tasting, yellow and non-melting flesh, semi-clingstone fruit intended for fresh use. 'UFSun' is suggested for central and south Florida from Tampa to Orlando and south of Interstate 4. It may be used to replace 'UFGold' (5) peach in south Florida because it sets fruit more reliably at Immokalee, especially under night temperatures near and above 14 °C during bloom to shuck split (3). 'UFSun' originated from a 1995 cross of Fla. 90-50cn nectarine x 'UFGold' peach, was selected and propagated in 1997, and tested as Fla. 97-20c. Fla. 90-50cn originated as an F2 of Fla. 84-18c (Diamante op) x Fla. 9-20c [complex parentage in (5)].

Standards and methods used in this program to evaluate genotypes have been described (7). 'UFSun' fruit have been observed at Immokalee (Table 1 & 2) and Gainesville (Table 3 & 4) on trees budded onto 'Flordaguard' seedlings and the following description of fruit summarizes 2 and 4 years of observation on trees 4 and 6 years old, respectively at Immokalee and Gainesville. Trees of 'UFSun' are estimated to require about 100 chill units (cu) based on full bloom occurring 3 days before the standard (6) of 'Okinawa' (150cu), that blooms in latter half of January at Immokalee and late January at Gainesville. 'UFSun' has fruited well where the coldest month averages 17 to 18°C (4) and in colder locations in the absence of spring frost. Thus, we expect 'UFSun' to be grown successfully where 'Flordaprince'(8) and 'TropicBeauty'(2) peaches have been grown. Fruit ripen in late April in Immokalee and in very early May at Gainesville, about 80 days from full bloom and about 5 to 7 days after 'Flordaprince' peach at Immokalee and 3 days before 'Flordaprince' at Gainesville.

Trees are spreading, vigorous, and require summer pruning when grown in a vase training system to permit light penetration for formation of strong fruiting wood in the lower half of the tree. Trees at Immokalee and Gainesville set a high number of flower buds, have few blind nodes (1), and exhibit little bud failure prior to bloom (10). Flower bud density is slightly less than for 'Flordaprince'. Fruit set is good and thinning at 15-20 cm (six to eight inches) between fruit will be required in the absence of spring frost to attain an average of 5.7 cm (2 1/4 inch) diameter fruit weighing 100 to 110 grams. Fruit picked at the commercial harvest stage of maturity are 30 to 50 % red at Gainesville and 70 % red at Immokalee over a bright yellow ground color. Fruit shape is nearly round and slightly squat with no suture bulge and with a slight tip at the bottom of the suture in Immokalee and inverted tip at Gainesville. The yellow flesh may contain small red flecks, but has no red at the pit. Flesh is firm, with good sweetness, and does not brown readily on bruised or cut surfaces. Eating quality is good, sweet and slightly acid with a pleasing aftertaste with no bitterness. Fruit averaged 11 °Brix based on an average from 10 representative fruit at first harvest, when taken on the fruit equator perpendicular to the suture. Titratable acidity was 0.60 as % malic acid and penetrometer firmness was 1.4 kg as

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Table 1. Tree performance and fruit characteristics of 'UFSun' at Immokalee, FL (2002-2003).

	Tree			Fruit					
	Bloom	Chill	First	Wt.	Red skin	Shape	Attr.	Qual.	Pubescence
Year	(50%)	(est.)	harvest	(g)	(%)	1 = least to 10 = most desirable			
2002	4 Feb	125	28 Apr	105	70	8	9	8	9
2003	14 Feb	100	25 Apr	92	80	9	9	9	9

Wt. = Weight; Attr. = Attractiveness; Qual. = Quality

Table 2. Tree performance and fruit characteristics of 'UFSun' compared to 'Flordaprince' and 'TropicBeauty' at Immokalee, FL (2002-2003). Tree data are averages of 2 years; whereas, fruit data are rounded to whole numbers for the cultivars based on 2 year's data.

	Tree			Fruit					
	Bloom	Chill	First	Wt.	Red skin	Shape	Attr.	Qual.	Pubescence
Cultivar	(50%)	(est.)	harvest	(g)	(%)	1 = least to 10 = most desirable			
UFSun	7 Feb	100	28 Apr	100	70	9	9	9	9
TropicBeauty	9 Feb	150	30 Apr	110	80	10	8	8	9
Flordaprince	7 Feb	150	18 Apr	85	80	9	9	8	8

Wt. = Weight; Attr. = Attractiveness; Qual. = Quality

Table 3. Tree performance and fruit characteristics of 'UFSun' at Gainesville, FL (2001-2003).

	Tree			Fruit					
	Bloom	Chill	First	Wt.	Red skin	Shape	Attr.	Qual	Pubescence
Year	(50%)	(est.)	harvest	(g)	(%)	1 = least to 10 = most desirable			
2001	4 Feb	100	23 Apr	118	40	9	7	8	8
2002	1 Feb	150	23 Apr	115	50	10	8	8	8
2003	7 Feb	100	28 Apr	120	50	9	8	9	8

Wt. = Weight; Attr. = Attractiveness; Qual. = Quality

Table 4. Tree performance and fruit characteristics of 'UFSun' compared to 'Flordaprince' and 'TropicBeauty' at Gainesville, FL (2001-2003). Tree data are averages of 2 years; whereas, fruit data are rounded to whole numbers for the cultivars based on 2 year's data.

	Tree			Fruit					
	Bloom	Chill	First	Wt.	Red skin	Shape	Attr.	Qual.	Pubescence
Cultivar	(50%)	(est.)	harvest	(g)	(%)	1 = least to 10 = most desirable			
UFSun	4 Feb	100	28 Apr	118	70	9	8	9	8
TropicBeauty	10 Feb	150	10 May	110	80	9	8	8	9
Flordaprince	7 Feb	150	25 Apr	85	80	9	9	8	8

Wt. = Weight; Attr. = Attractiveness; Qual. = Quality

measured with a standard 8 mm tip at harvest. No over-ripe off-flavors were noted. Pits are small, similar to 'UFGold' and have little tendency to split.

Leaves have 2 to 4 reniform glands. Flowers are showy and pink. Anthers are orange to red with anthocyanin and pollen is bright yellow and abundant. Leaves and fruit have shown no bacterial spot [*Xanthomonas campestris* pv. *pruni* (Sm.) Dye] in test plantings where known susceptible genotypes show typical symptoms.

A plant patent has been filed for 'UFSun' and a propagation agreement is available through Florida Foundation Seed Producers, Inc., P.O. Box 309, Greenwood, FL 32443. Bud wood is non-indexed, but peach genotypes originating at the University of Florida breeding program (9) have been found virus free in countries that routinely quarantine and index.

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