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‘UFBeauty’ and ‘UFBlaze’ Peaches

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‘UFBeauty’ and ‘UFBlaze’ peaches [*Prunus persica* (L.) Batsch] are released for grower trials by the Florida Agricultural Experiment Station. Trees of both cultivars produce attractive, sweet tasting, yellow and non-melting flesh (nmf) fruit intended for fresh use. As with most nmf fruit, these can be harvested “tree ripe”, with full flavor and aroma, while retaining firmness for longer shelf life than fruit from melting flesh cultivars (8). Both cultivars originated from a 1995 cross of Fla.90-50cn x ‘UFGold’ (Fig. 1). Fla.90-50cn was a nmf nectarine selection with the nmf gene originating from two sources, one from a Brazilian genotype (3,5) and the other from old US cultivars and tracing back to ‘Chinese Cling’ (1). Fla.90-50cn originated as a full sib of ‘UFGold’ (3). ‘UFBeauty’ and ‘UFBlaze’ were selected in 1997 and 1998, and tested as Fla. 97-5c and Fla. 98-1c, respectively.

Standards and methods used in this program to evaluate genotypes have been described (6). Trees of ‘UFBeauty’ and ‘UFBlaze’ are estimated to require 200 and 300 chill units (cu), respectively, based on full bloom compared to the standards of ‘Okinawa’ (150cu), ‘Sunred’ (250cu) and ‘Early Amber’ (350cu) (4). The two cultivars bloom about 4 to 5 days apart (‘UF-

Beauty’ blooms earlier) in early February at Gainesville, and both have fruited well where the coldest month averages 15° and 17°C (2), respectively, and in colder locations in the absence of spring frost. Thus, we expect ‘UFBeauty’ and ‘UFBlaze’ to be grown successfully where ‘UFGold’ (200cu) and ‘UF2000’ (300cu) peaches, respectively, have been successful. Fruit of ‘UFBeauty’ ripen 2 to 3 days after ‘UFGold’, or near May 1 at Gainesville, about 85 to 90 days from full bloom. Fruit of ‘UFBlaze’ also ripen in the first week of May, about with ‘Flordaking’, or 80 days from full bloom. Trees of both cultivars are spreading and highly vigorous, and thus require summer pruning to permit light penetration for formation of strong fruiting wood in the lower half of the tree. Trees at Gainesville set a high number of flower buds, have few blind nodes (7), and exhibit little bud drop prior to bloom (8). Trees of both cultivars have high fruit set at Gainesville, and in the absence of thinning by spring frosts require fruit thinning to achieve optimum marketable size.

‘UFBeauty’ and ‘UFBlaze’ fruit have been observed at Gainesville for 3 successive years on top worked and budded trees on ‘Flordaguard’ rootstock (Tables 1 and 2) and are compared to cultivars ripening

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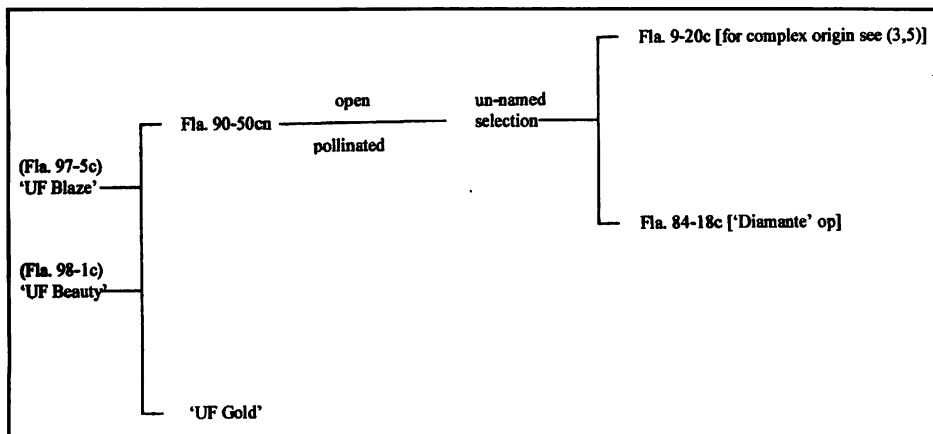


Figure 1. Lineage of 'UFBlaze' and 'UFBeauty'.

just before and after (Table 3). Tree-ripe fruit are 70 to 90% red over a yellow ground color. 'UFBeauty' and 'UFBlaze' have dark red stripes longitudinally on the fruit. Fruit shape on both cultivars is near round with no bulge at the suture. The flesh of both cultivars contains some red pigment, especially on the sunny side of the fruit and in trees under stress, but neither have red at the pit. Flesh is clingy to the pit when fully ripe. Both have non-melting flesh with good sweetness and low acidity (not the honey gene). Flesh has little tendency to brown on bruised or cut surfaces. 'UFBeauty' and 'UFBlaze' average 5.7cm in diameter and average 110 g in weight. Fruit of both cultivars range from 11 to 13 brix with a titratable acidity of about 0.8% (malic acid equivalent) at tree ripe when firmness is about 1.3 to 1.5

kg as measured with an 8mm tip penetrometer. Pits are medium small, and have little tendency to split even when crop loads are low.

Leaves of 'UFBeauty' and 'UFBlaze' have 2 to 4 globose glands. Flowers are showy and pink. Anthers are yellow with little 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 at Gainesville where known susceptible genotypes show typical symptoms.

'UFBeauty' and 'UFBlaze' have potential for cold hardiness as they had full and moderate crops, respectively, following -4.4°C on the night of 28 February, 2002 when only 4 of 189 genotypes that were past bloom had more than 1 to 10 fruit per tree. Fruiting on

Table 1. Tree performance and fruit characteristics of 'UFBeauty' at Gainesville, FL (2000-2002).

Year	Tree			Fruit					
	Bloom	Chill	First	Wt.	Red skin	Shape	Attr.	Qual.	Pube-
	(50%)	(est.)	harvest	(g)	(%)	1 = least to 10 = most desirable			
2000	2/10	200	4/26	101	100	9	9	8	8
2001	2/6	200	5/1	100	90	10	10	8	8
2002	2/3	200	4/28	120	90	10	10	8	8

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

Table 2. Tree performance and fruit characteristics of ‘UFBlaze’ at Gainesville, FL (2000-2002).

Year	Tree			Fruit					
	Bloom	Chill	First	Wt.	Red skin	Shape	Attr.	Qual.	Pube- scence
	(50%)	(est.)	harvest	(g)	(%)	1 = least to 10 = most desirable			
2000	2/14	300	5/3	106	100	9	10	9	10
2001	2/8	325	5/7	121	90	9	9	9	9
2002	2/8	300	5/3	115	90	9	9	10	—

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

Table 3. Tree performance and fruit characteristics of ‘UFBeauty’ compared to ‘UFGold’ and ‘Tropic Beauty’, and ‘UFBlaze’ compared to ‘Flordaking’ and ‘UF2000’ at Gainesville, FL (2000-2002). Tree data are averages of 3 years; fruit data are rounded to whole numbers for the cultivar based on 3 years’ data.

Cultivar	Tree			Fruit					
	Bloom	Chill	First	Wt.	Red skin	Shape	Attr.	Qual.	Pube- scence
	(50%)	(est.)	harvest	(g)	(%)	1 - least to 10 = most desirable			
UFGold	2/6	200	4/26	90	40	9	10	9	10
UFBeauty	2/6	200	4/28	107	90	10	10	8	8
Tropic Beauty	2/3	150	5/11	120	70	9	8	8	7
Flordaking	2/13	325	5/3	125	40	5	5	4	7
UFBlaze	2/10	300	5/4	116	90	9	9	9	9
UF2000	2/10	300	5/19	120	60	8	8	8	8

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

both cultivars was consistent in 2 locations within the orchard. The orchard was irrigated by overhead sprinklers throughout the night at 5mm per hour, but a gusty wind about 10 to 12 mph occurred after 3AM and continued until the irrigation was terminated at 9AM with the temperature of 3° C. Dew point was between -10° and -12° C throughout the irrigation, probably resulting in evaporative cooling of young fruit, especially with the late night wind.

Plant patents have been filed for ‘UF-Beauty’ and ‘UFBlaze’ and propagation agreements are available through Florida Foundation Seed Producers, Inc., P.O. Box 309, Greenwood, FL 32443. Budwood was virus indexed in May 2001 and tested negative for PNRSV and PVD.

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