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'Flordaglobe' Peach

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'Flordaglobe' peach [*Prunus persica* (L.) Batsch] has been released for grower trial by the Florida Agricultural Experiment Station (Fig. 1). We have rated 'Flordaglobe' as having a higher percentage red overcolor, a rounder shape, and a lower incidence of split pit than 'Flordaking' (Andrews et al., 1979). Most important, 'Flordaglobe' typically ripens several days before 'Flordaking' in northern Florida.

Origin

'Flordaglobe' originated from a 1978 cross of 'Redglobe' × 'EarliGrande'. It was selected and propagated in 1982 as Fla. M2-2. Budded trees have been tested at the Agricultural Research and Education Center-Monticello, in Gainesville, Fla., and at grower locations in northern Florida and southern Georgia.

Description

Major advantages of 'Flordaglobe' are a moderate chilling requirement, early ripening, excellent color and shape, desirable firmness, and resistance to bacterial spot [*Xanthomonas capestris* pv. *pruni* (Smith) Dye]. 'Flordaglobe' has an estimated chilling requirement of 475 chill units (cu), ≈125

cu higher than 'Flordaking' (350 cu). Chill units were determined in relation to established chill units of known cultivars, based on the model of Weinberger (1956). The cu requirement of vegetative buds of 'Flordaglobe' is 50 to 100 cu greater than reproductive buds. Full bloom occurs during late February or early March in northern Florida. 'Flordaglobe' has fruited well where the coldest month averages 12 to 15C and in colder locations in the absence of spring frosts. 'Flordaglobe' typically blooms several days after 'Flordaking' in northern Florida (Table 1); hence, it is less likely to incur frost damage. During the abnormally mild winter of 1988-89, bloom of 'Flordaglobe' occurred 43 days after 'Flordaking', thus avoiding late-

winter freezes and frosts. Blossom hardiness in the presence of spring frosts appears to be similar to 'Flordaking'. 'Flordaglobe' is best adapted where 'Flordaking' has been grown and in areas slightly farther north in the Northern Hemisphere.

Trees are semi-upright and are easily adapted to an open-center training system. Early fruit thinning is required to achieve best fruit size in this early ripening cultivar. First commercial harvest has ranged from 3 to 6 days before 'Flordaking', usually during the last week in April or first week in May. 'Flordaglobe' ripens 60 to 65 days after full bloom. Fruit size is ≈5.2 cm in diameter (90 g), but, with heavy thinning (one fruit per 15 to 20 cm of shoot length), fruit size will attain 5.3 cm (95-100 g). Fruit size is smaller than that of 'Flordaking' (Andrews et al., 1979). Fruit shape is round, with virtually no tip when cropped in Monticello or farther north. Fruit suture is smooth and pubescence is medium-short. Color is excellent, with an 80% red blush over a yellow ground color when ready to harvest. Flesh is firm, melting in character, yellow, and relatively non-browning. Flesh is semicling, as it clings

Fig. 1. 'Flordaglobe', an early ripening, moderate-chill peach.

Table 1. Fruit characteristics of 'Flordaglobe' at commercial picking stage in 1982-90 at the AREC-Monticello.*

Year	Full bloom		Fruit harvest			Red overcolor (%)	Fruit size		
	Date	Days after Flordaking	Date	Days before Flordaking	Crop load†		Wt (g)	Diam (cm)	Fruit shape‡
1982	23 Feb.	2	29 Apr.	6	NA	60	83	5.1	9
1983	3 Mar.	3	14 May	4	6	60	90	5.1	9
1984	NA	NA	1 May	NA	NA	NA	NA	NA	NA
1985	10 Mar.	9	30 Apr.	3	10+	80	113	5.3	9
1986	28 Feb.	9	26 Apr.	6	10	90	97	5.2	9
1987	10 Mar.	8	8 May	5	10+	90	90	5.1	9
1988	6 Mar.	4	6 May	4	10	80	99	5.2	9
1989	13 Mar.	43	1 May	NA	10	90	96	5.2	9
1990	10 Feb.	11	13 Apr.	5	10	80	89	5.1	9

*NA = information is not available.

†Crop loading rating: 0 = no crop to 10 = full crop; 9 = optimum crop load for 'Flordaglobe'. Crop load 10+ = crop that was not sufficiently thinned.

‡Shape rating: 1 = least desirable; 10 = most desirable.

§In 1989, 'Flordaking' bloomed unusually early due to a prolonged warm period in January and February.

slightly to the pit at soft ripe. We have judged 'Flordaglobe' as more attractive and superior in flavor to 'Flordaking'. Pits are medium-small and have a low (less than 'Flordaking') tendency to split.

Trees of 'Flordaglobe' are self-fertile, moderately vigorous, and productive. Leaves are medium in size, with reniform petiolar glands. Resistance of leaves and fruit to bacterial spot is high and about equal to 'Flor-

daking'. Flowers are light pink and showy. Pollen is abundant and bright yellow.

Availability

Budwood has been released to commercial nurseries. Inquiries regarding availability of budwood can be directed to Florida Foundation Seed Producers, Inc., P.O. Box 309, Greenwood, FL 32443. Limited quantities of nonindexed budwood maybe obtained from

the AREC-Monticello, Rt. 4, Box 4092, Monticello, FL 32344-9302.

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'Charlee' Watermelon

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The three major watermelon cultivars in Florida are 'Charleston Gray', 'Crimson Sweet', and 'Jubilee'. 'Charleston Gray' was introduced in 1954 and quickly was established as the leading cultivar for commercial production in Florida. 'Jubilee' and 'Crimson Sweet', both introduced in 1963, also became important commercial cultivars in Florida and other states.

In more recent years, 'Crimson Sweet' has become increasingly popular with growers because of its high yield and high level of resistance to fusarium wilt. Conversely, commercial plantings of 'Jubilee' and 'Charleston Gray' have decreased, principally -because of their lower level of resistance to wilt compared with 'Crimson Sweet'.

In 1971, a backcrossing program was begun to incorporate the high-level wilt resistance of 'Smoky lee', 'Texas W5', and 'Calhoun Gray' into 'Jubilee' and 'Charleston Gray'. Tests of backcross lines, conducted since 1978, showed that they were superior to the recurrent parent lines not only in resistance to fusarium wilt, but in many other characteristics. Selfing, with concomitant selection for both wilt resistance and desirable plant and fruit characters, was initiated in these backcross progenies in 1979. In subsequent years, both replicated and grower trials were conducted. 'Charlee', which was tested as SCWT 257 and Florida F83CE in 1984, 1985, and 1986 trials, is the first cultivar to be released from the backcrossing program.

Origin

'Charlee' originated from a cross made in 1962 between 'Texas W5', which is highly resistant to fusarium wilt, and 'Charleston Gray' (Fig. 1). After several years of selfing, a *cross was made in 1971 with 'Calhoun Gray', which is also highly resistant to wilt. Following that cross, there were four crosses with USDA 51-27 ('Charleston Gray') and 11 selfings, the last four of which followed the final cross with USDA 51-27 in 1978. A seed increase in isolation (F83CE) of the final self-pollination (82M21-5), was made in Fall 1983. Seed from this planting was fur-

nished to the Florida Foundation Seed Producers, Inc., for increase and release as the new cultivar Charlee.

Description

Plants of 'Charlee' are vigorous and prolific, comparing favorably with 'Charleston Gray'. Fruits of both cultivars ripen in early midseason.

Fruits of 'Charlee' are similar to those of 'Charleston Gray' and 'Charleston Gray #5' in size, shape, and weight (Table 1). They are remarkably uniform in both exterior and interior appearance (Fig. 2). Flesh is an attractive red, but not as intense as that of 'Dixielee'. Sugar content, expressed as percent soluble solids concentration of the juice, is not significantly different from 'Charleston Gray' or 'Charleston Gray #5'. In organoleptic samplings, conducted as part of four replicated tests in 1983 and 1984, in which three or four experienced evaluators participated, flesh texture and flavor of 'Charlee' rated higher than those of 'Charleston Gray', 'Jubilee', 'Crimson Sweet'

Table 1. Characteristics of ripe fruits of 'Charlee', 'Charleston Gray', and 'Charleston Gray #5' at Leesburg, Fla., in 1984.

Characteristic	Charlee	Charleston Gray	Charleston Gray #5
Range of weights (kg)			
Maximum	13.6	16.3	13.6
Minimum	8.6	7.7	9.1
Mean wt (kg)	10.4	11.8	10.9
Length (cm)	44.7	42.7	46.0
Diameter (cm)	20.8	21.4	21.1
Shape ratio (L/D)	2.15	2.00	2.18
Rind thickness (mm)	19.0	15.2	15.8
Soluble solids concn (%)	10.8	10.0	10.5
Flesh color	Red	Red	Red

Table 2. Flesh texture and flavor of ripe fruits of 'Charlee' and several other cultivars at Leesburg, Fla., in 1983 and 1984.

Cultivar	Trial ^{a,v}							
	Spring 1983		Fall 1983		Spring 1984		Fall 1984	
	Texture	Flavor	Texture	Flavor	Texture	Flavor	Texture	Flavor
Charlee	4.7 a	4.2 a	5.3 a	5.0 a	4.6 a	4.3 a	4.4 a	3.5 a
Jubilee	3.8 a	3.3 a	3.3 b	3.8 b	4.5 a	3.7 ab	3.4 ab	3.3 a
Charleston Gray	3.5 a	3.5 a	3.5 b	4.3 b	---	---	2.3 b	2.8 a
Charleston Gray #5	---	---	---	---	3.3 b	2.7 c	3.0 ab	2.8 a
Crimson Sweet	---	---	---	---	3.8 ab	3.3 bc	---	---

^aScale for grading flesh texture and flavor: 0 = poor, 6 = excellent.

^vMean separation in columns by Duncan's multiple range test^P = 0.05.

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