

'Sundollar' Nectarine

P.C. Andersen, W.B. Sherman, and R.H. Sharpe

Agricultural Research and Education Center, IFAS, University of Florida, Monticello, FL 32344

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'Sundollar' nectarine [*Prunus persica* (L.) Batsch] has been released for grower trial by the Florida Experiment Station. 'Sundollar' bears an attractive red fruit with yellow flesh. It ripens before 'Sungem' (Sherman et al., 1987) and all other commercially recommended nectarine cultivars evaluated at AREC-Monticello.

Origin

'Sundollar' was the result of a 1978 cross of 'Sunlite' × 'Armqueen'. The seedling was selected in 1982 and designated as 2-4N. Budded trees have been tested at the AREC-Monticello and at Gainesville, Fla.

Description

Major advantages of 'Sundollar' are a moderately low chilling requirement, early ripening, attractiveness, desirable firmness, and resistance to bacterial spot [*Xanthomonas campestris* pv. *pruni* (Smith) Dye]. 'Sundollar' trees have an estimated winter chilling requirement of ≈400 chilling units (cu), ≈50 and 150 cu less than 'Sungem' and 'Armking', respectively. Chill units were determined in relation to designated chill units of known cultivars, based on the Weinberger model (Weinberger, 1956). Full bloom in Monticello, Fla., usually coincides with 'Flordaking' and occurs ≈6 days before 'Sungem'. 'Sundollar' trees have fruited well where the coldest month averages 13 to 16C, and in colder locations in the absence of spring frosts. It is best adapted in regions where the production of 'Flordaking' and 'Sungem' have

proven reliable. 'Sundollar' trees are semi-upright, but respond well to pruning, with the formation of an open center. Trees set a moderate to high number of flower buds, and moderately heavy thinning is required in the absence of frost thinning.

Fruit harvest of 'Sundollar' is typically during the first 2 weeks in May in northern Florida, ≈5 to 7 days before 'Sungem' (Table 1). The fruit development period from bloom to harvest is ≈70 days. Fruit size is ≈80g (5.1 cm in diameter) when thinned to one fruit per 10-cm shoot length, or 90 g (5.2 cm in diameter) when thinned to one per 20-cm shoot length. Fruit of 'Sundollar' are larger than 'Sungem' when thinned equally. Fruit is round with essentially no tip. Fruit suture is smooth. External fruit appearance is attractive, with an 80% red blush over a yellow ground color. Fruit have yellow, melting flesh, and are classified as semicling with little separation of the flesh from the pit at soft ripe. We consider flesh firmness and quality to be good and equal to that

of 'Sungem'. Fruit flesh is relatively non-browning. Trees must be irrigated regularly during rapid periods of fruit growth to minimize longitudinal fruit cracking in years of intermittent drought. Fruit cracking in irrigated trees was reduced to <5%. 'Sundollar' fruit has shown little tendency to incur split pits (<5%), as compared to 'Sungem' (30% to 50%). 'Sundollar' leaves and fruit are as resistant to bacterial spot as 'Sungem'. Trees are moderate in vigor and productive. Leaves are moderate in size with reniform petiolar glands. Flowers are showy and medium pink. Trees are self-fertile, and pollen is bright yellow.

Availability

Budwood has been released to commercial nurseries. Inquiries concerning the availability of budwood can be directed to Florida Foundation Seed Producers, Inc., P.O. Box 309, Greenwood, FL 32443. Limited quantities of nonindexed budwood may be obtained from the Univ. of Florida, AREC-Monticello, Rte. 4, Box 4092, Monticello, FL 32344.

Literature Cited

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Weinberger, J.H. 1956. Prolonged dormancy trouble in peaches in relation to winter temperatures. Proc. Amer. Soc. Hort. Sci. 67: 107-112.

Table 1. Characteristics of 'Sundollar' in 1982-89 at the AREC-Monticello, Fla.

Year	Full bloom		First harvest		Crop load ²	Red overcolor (%)	Fruit size		
	Date	Days before 'Sungem'	Date (all May)	Days before 'Sungem'			Wt (g)	Diam (cm)	Fruit shape ³
1982	NA*	NA	3	NA	NA	70	81	5.1	9
1983	25 Feb.	9	15	5	6	70	81	5.0	9
1984	NA	NA	1	NA	NA	NA	NA	NA	NA
1985	2 Mar.	4	2	5	10+	90	88	5.0	9
1986	15 Feb.	11	2	8	10+	80	73	5.0	9
1987	2 Mar.	3	13	5	10+	90	71	5.0	8+
1988	29 Feb.	7	7	8	10	75	98	5.2	9
1989 ^w	10 Feb.	4	1	NA	10+	90	70	5.0	8

²Crop load rating: 0 = no crop to 10 = full crop; optimum crop load for 'Sundollar' = 9. Crop load 10+ = crop that was not sufficiently thinned.

³Shape rating: 1 = poorest or least desirable to 10 = most desirable.

*NA = Information is not available.

^w1989 data from tree receiving frost protection on 25 and 26 Feb.

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