'Sunraycer' Nectarine

W.B. Sherman, P.C. Andersen, and P.M. Lyrene

Horticultural Sciences Department, University of Florida, Gainesville, FL 32611

Additional index words. fruit breeding, low chilling

'Sunraycer' nectarine [*Prunus persica* (L.) Batsch] produces a large, attractive, yellow-fleshed fruit. It is recommended for commercial trial and by homeowners in areas where 'Sunblaze' nectarine has been successfully grown.

Origin

'Sunraycer' originated from a 1982 cross of two advanced Florida breeding selections, Fla. 7-11 x Fla. 7-3N (Fig. 1). Cultivars in its heritage can be traced to germplasm from California ('Sunnyside' and 'ArmKing'), New Jersey ('Sungold'), and Florida ('Flordawon') breeding programs. 'Sunraycer' was selected in 1984 and tested as Fla. 84-16N.

Description

'Sunraycer' trees flower and leaf with 'Sunred' [250 chill units (cu)] and 'Sunblaze' (250 cu); thus, the chilling requirement is rated similarly, at ≈ 275 cu. Full bloom occurs most years in early to mid-February in Gainesville, Fla. Trees have fruited well in areas where the coldest month averages 15 to 17C and in colder locations in the absence of fruit loss by spring frosts. Leaves are similar in size to 'Sunblaze' and have reniform petiolar glands.

Flowers are nonshowy and deep pink. Pollen is bright yellow and abundant. Trees are self-fertile and precocious, fruiting when 2 years old (third leaf in the field).

The following description of fruit and tree characteristics summarizes observations made at Gainesville. In general, these characteristics apply to locations in Australia, the Mediterranean area of Europe, California, and South America. Trees are vigorous but semispreading, and respond favorably to pruning, which permits the formation of an open center. Flower bud set is high with few blind nodes, and trees will require much fruit thinning in the absence of thinning by spring frosts.

Fruit of 'Sunraycer' have been evaluated on budded trees since 1987. Major advantages of 'Sunraycer' are its relatively large fruit, their desirable degree of firmness, and resistance to bacterial spot [*Xanthomonas campestris* pv. *pruni* (Smith) Dye], similar to 'Sunblaze'. Fruit are moderately large for the

maturity season, averaging ≈ 6 cm in diameter and 115 g when firm-ripe for commercial harvest. Thinning to space fruit 15 to 20 cm apart is required for proper sizing. Fruit ripen ≈ 85 days after bloom and ≈ 5 days before 'Sunblaze' nectarine. Fruit firmness and size were rated higher than for 'Sunblaze'. Fruit shape is long oval with no sharp tip or suture bulge. Fruit flesh ripens evenly from outside to the pit. 'Sunraycer' fruit are semi-cling, with little separation of the pit and flesh when soft tree-ripe. Flesh is yellow and melting, with good dessert-type quality and flavor. The fruit skin is relatively free of speckles and is 80% to 100% brilliant red over a bright yellow ground color, making the fruit highly attractive. Flesh browning does not occur readily on cut or bruised surfaces in tree-ripe fruit. Pits are medium small and have a low tendency to split during the final fruit size increase. The harvest period, lasting 5 to 7 days, begins in early to mid-May at Gainesville.

Availability

'Sunraycer' budwood has been released to commercial nurseries, and limited quantities of budwood may be obtained from the Horticultural Sciences Dept., 1143 Fifield Hall, Univ. of Florida, Gainesville, FL 32611. Inquiry regarding the availability of budwood may be directed to Florida Seed Foundation, P.O. Box 309, Greenwood, FL 32433.

Fig. 1. Pedigree of 'Sunraycer' nectarine.

Received for publication 11 Aug. 1994. Accepted for publication 11 Oct. 1994. Florida Agricultural Experiment Station Journal series no. R03977. The cost of publishing this paper was defrayed in part by the payment of page charges. Under postal regulations, this paper therefore must be hereby marked advertisement solely to indicate this fact.