'Sunmist' 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, white flesh

'Sunmist' nectarine [*Prunus persica* (L.) Batsch] produces an attractive, high-quality, white-fleshed fruit recommended for trial where 'Sunblaze' nectarine has been grown successfully.

Origin

'Sunmist' nectarine originated from a 1986 cross of 'Flordaglo' peach x 'Mayfire' nectarine. 'Flordaglo' carries a recessive nectarine gene (Sherman and Lyrene, 1989). 'Sunmist' was selected at Gainesville, Fla., in 1988 and tested in Gainesville and Monticello, Fla., as Fla. 88-11NW.

Description

'Sunmist' trees flower and leaf between 'Sunred' [250 chill units (cu)] and 'Early Amber' (350 cu); thus, the chilling requirement is $\approx$ 300 cu, which means that full bloom

occurs most years in mid-February at Gainesville. Trees have fruited well where the coldest month averages 15 to 17C and in colder locations in the absence of fruit loss by spring frosts. Trees are vigorous and productive. Leaves are light green, characteristic of white-fleshed peach or nectarines. Leaves are medium in size with globose petiolar glands. Flowers are showy and light pink. Pollen is creamy yellow and abundant, coming from dark-red anthers. Trees are self-fertile and precocious, fruiting with commercial crops when 2 years old (third leaf in the field).

'Sunmist' fruit have been evaluated on budded trees at Gainesville and Monticello. The following description of fruit and tree characteristics summarizes observations made at both locations. Trees are spreading and respond favorably to pruning for the vase shape with an open center. Flower bud set is moderately heavy, and trees require moderate thinning in the absence of adequate crop load reduction by spring frosts.

'Sunmist' is the first low-chill, white-flesh nectarine introduced by the Univ. of Florida breeding program. Major advantages of 'Sunmist' are outstanding flavor and aroma, good postharvest firmness retention, and high resistance to bacterial spot [*Xanthomonas campestris* pv. *pruni* (Smith) Dye], similar to

'Flordaglo'. Fruit are moderate in size for the maturity season, averaging $\approx$ 5.5 cm in diameter and 90 to 100 g when firm-ripe for commercial harvest and 120 to 140 g at soft-ripe for picking by the homeowner. Thinning to space fruit 15 to 20 cm apart is required for proper sizing. Fruit ripen in early May at Gainesville, $\approx$ 80 days after bloom or $\approx$ 7 days before 'Sunblaze', and about the same time as 'Flordaglo'. The fruit is covered $\approx$ 80% to 90% by red blush over a creamy white ground color. Fruit 1) are slightly oval to nearly round with no sharp tip or bulge; 2) are firm, and the flesh ripens evenly from the skin to the pit; 3) are semi-cling, with little separation of the pit and flesh when soft-ripe; and 4) do not have a tendency to bruise and brown excessively. Flesh is white and melting, with high dessert-type quality and flavor. The flavor is typical of the aromas of white-flesh peaches. Speckles on the skin are not normally abundant. When fruit are matured on trees without irrigation in hot, dry climates, a moderate amount of speckling will appear on the distal end and some red pigment will develop in the flesh. Flesh browning is moderate in tree-ripened fruit that have cut or bruised surfaces. Pits are medium small and have exhibited little tendency to split.

Availability

'Sunmist' is being patented by the Univ. of Florida, and budwood will be released to nursery operators under a propagation agreement through the Florida Seed Foundation, P.O. Box 309, Greenwood, FL 32443.

Literature Cited

Sherman, W.B. and P.M. Lyrene. 1989. 'Flordaglo' peach. HortScience 24:396.

Received for publication 11 Aug. 1994. Accepted for publication 11 Oct. 1994. Florida Agricultural Experiment Station Journal series no. R-03976. 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.