

training systems in the Okanagan Valley of British Columbia. *Acta Hort.* 451:495-504.

6. Robinson, T. L., A. N. Lakso, and S. G. Carpenter. 1991. Canopy development, yield, and

fruit quality of 'Empire' and 'Delicious' apple trees grown in four orchard production systems for ten years. *J. Amer. Soc. Hort. Sci.* 116:179-187.

Journal American Pomological Society 56(4):206-207 2002

'Sunbest' Nectarine

W. B. Sherman and P. M. Lyrene

'Sunbest' nectarine, [*Prunus persica* (L.) Batsch], is released for grower trial by the Florida Agricultural Experiment Station. Trees of 'Sunbest' produce an attractive, sweet tasting, yellow and melting flesh, semi-freestone fruit intended for fresh use. It is expected to replace 'Sunraycer' nectarine because it is similar in bloom and ripening time and has larger and more attractive fruit. 'Sunbest' originated from a 1992 cross of 'Sunraycer' nectarine x 'Suncoast' nectarine, was selected and propagated in 1994, and tested as Fla. 94-15n.

Standards and methods used in this program to evaluate genotypes have been described (3). 'Sunbest' fruit have been observed at Gainesville on trees budded onto 'Flordaguard' seedlings and the following description of fruit summarizes 5 years of observation on trees 3 to 7 years old. Trees of 'Sunbest' are estimated to require 225 chill units based on full bloom occurring 2 days before the standard (2) of 'Sunred' nectarine, that blooms in early February at Gainesville. 'Sunbest' has fruited well where the coldest month averages 16 to 17C (1) and in colder locations in the absence of spring frost. Thus, we expect 'Sunbest' to be grown successfully where 'Sunraycer' nectarine and 'Flordaglo' peach have been successful. Fruit ripen in early May at Gainesville, about 85 to 90 days from full bloom and about 3 days before 'Sunraycer' nectarine and 'Flordaglo' peach.

Trees are semi-upright, vigorous, and require summer pruning when grown in a

vase training system 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 (5), and exhibit little bud failure prior to bloom (6). Flower bud density is higher than for most standard varieties because internode length is shorter. Fruit set is high and thinning will be required in the absence of spring frost at Gainesville to attain an average of 2 1/2 inch diameter fruit weighing 120 to 140 grams. Fruit picked at the commercial harvest stage of maturity are 90 to 100 percent bright red over a yellow ground color. The skin is relatively free of sugar speckles, compared to 'Sunblaze' nectarine. Fruit shape is long-oval with no suture bulge and rounded at the tip. The flesh may contain small red flecks, but has no red at the pit. Flesh is firm, with good sweetness, and does not brown readily on bruised or cut surfaces. Pits are medium small and have little tendency to split.

Leaves have 4 to 6 large reniform glands. Flowers are non-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 where known susceptible genotypes show typical symptoms.

A plant patent has been filed for 'Sunbest' and a propagation agreement is available through Florida Foundation Seed Producers, Inc., P.O. Box 309, Greenwood, FL 32443. Bud wood is non-in-

dexed, but peach genotypes originating at the University of Florida breeding program (4) has been found virus free in countries that routinely quarantine and index.

Literature Cited

1. Sharpe, R. H., W. B. Sherman, and J. D. Mart-solf. 1990. Peach cultivars in Florida and their chilling requirements. *Acta Hort.* 279:191-197.
2. Sherman, W. B. and P. M. Lyrene. 1998. Bloom time in low-chill peaches. *Fruit Var. J.* 52:226-228.
3. Sherman, W. B., P. M. Lyrene, N. F. Childers, F. G. Gmitter, and P. C. Andersen. 1998. Low-chill peach and nectarine cultivars for trial in Florida. *Proc. Fla. State Hort. Soc.* 101: 241-244.
4. Sherman, W. B., P. M. Lyrene, and R. H. Sharpe. 1996. Low-chill peach and nectarine breeding at the University of Florida. *Proc. Fla. State Hort. Soc.* 109:222-223.
5. Richards, G. D., G. W. Porter, J. Rodriguez, and W. B. Sherman. 1994. Incidence of blind nodes in low-chill peach and nectarine germplasm. *Fruit Var. J.* 48:199-202.
6. Weinberger, J. H. 1967. Studies on flower bud drop in peaches. *Proc. Amer. Soc. Hort. Sci.* 91:78-83.



Muscadine Grapes

EDITED BY: DAVID G. HIMELRICK AND FOUAD M. BASIOUNY

Muscadine Grapes is part of the Horticultural Crop Production Series initiated this year by ASHS Press. The series is intended to provide sourcebooks of information on individual horticultural crops for growers as well as professional horticulturists.

Muscadine Grapes is a combined monograph and production manual on the muscadines, one of the few truly American fruits. For growers, horticulturists, educators, and researchers, this book fills a void in the scientific literature for a comprehensive source of information on all aspects of muscadine grapes.

The common muscadine, *Vitis rotundifolia* (synonym *Muscadinia rotundifolia*), is native to the southeastern United States and has been cultivated for over 400 years. Muscadines, indigenous to the southeastern United States, have a long and colorful history and have been used for fresh fruit, preserves, and wine. Despite its regional popularity, the muscadine grape has been slighted in the scientific literature. Although, information on muscadines can be found in scattered bulletins and pamphlets there is no current authoritative treatise devoted to this delectable fruit. *Muscadine Grapes* will hopefully fulfill a need that has long been overdue.

The contents of this 378 page book include the following chapters and sections: *Introduction to the Muscadines • Anatomy and Morphology • Genetics and Breeding • Cultivars • Clonal Propagation • Growth and Development • Vineyard Site Selection, Establishment, and Floor Management • Trellising, Training, and Pruning • Irrigation and Mineral Nutrition • Diseases • Insect Pests • Harvest and Handling • Physiology and Postharvest Technology • Marketing • Processing • Compositional and Nutritional Characteristics • General Muscadine References • Subject Index • Cultivar Index*

The 16 chapters involved a total of 23 authors and provide much new technical information that has never been published before. This reference book will be useful to the practitioner and be authoritative for the teacher, scholar, and researcher.

This publication by the American Society for Horticultural Science should have a place on the bookshelf of every serious grape grower and winemaker. Books may be purchased from: ASHS Press, 113 S. West Street, Suite 200, Alexandria, VA 22314-2851, (703)-836-4606, Fax (703)-836-2024. The cost of the book is \$54.95 (ASHS members), \$59.95 (nonmembers) + shipping charges. ISBN: 0-9797546-0-4, Softcover. Shipping: US \$4, Canada/Mexico: Surface \$6. International: Surface \$6; Air \$14. Books can be ordered online at the ASHS website: www.ashs.org.