Fruit Varieties Journal 52(1):19-19 1998

'Gulfbeauty' and 'Gulfblaze' Japanese-Type Plums[1]

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'Gulfbeauty' and 'Gulfblaze' are low-chill requirement Japanese-type plums *(Prunus salicina)* released by the Florida Agricultural Experiment Station. They are adapted to central and north Florida where 'Gulfbeauty' ripens in early May, one week before 'Gulfruby'; 'Gulfblaze' ripens in late May, one week after 'Gulfruby.' They are recommended for trial planting where 'Gulfruby' is grown successfully (2).

'Gulfbeauty' and 'Gulfblaze' originated from 4th generation poly-crosses of Florida selections (3). The original crosses, made in 1967, were high chill plum cultivars 'Ozark Premier,' 'Burbank,' 'Beauty,' and 'Bruce' hybridized with pollen of 'Taiwan.' 'Taiwan' was selected from a 1959 seed importation of 'Huang-ju' open-pollination, in Taiwan. Polycrosses were made by open-pollination of selected seedlings in each generation. Outcrossing was the rule as most selections were not self fruitful. 'Gulfbeauty' was the first plum selection in 1985 and has been tested as Fla. 85-1. 'Gulfblaze' was the 7th plum selection in 1987 and has been tested as Fla. 87-7.

Trees of 'Gulfbeauty' and 'Gulfblaze' are vigorous, semi-spreading in growth, and readily spread in response to early crop load and pruning. Trees in central and north Florida flower with 'Gulfruby' with which they are cross fruitful as well as each other; neither are self fruitful (1). 'Gulfbeauty' and 'Gulfblaze' have a low chilling requirement as they fruit well in central Florida, but appear to also have a high heat requirement for breaking dormancy. They bloom before standard Japanese-type cultivars in low-chill areas, but in high chill areas they bloom late, with or after many of the early blooming, high chill Japanese-type cultivars. Thus, 'Gulfbeauty' and 'Gulfblaze' are adapted over a greater range in Florida than peach cultivars with a similar chill requirement. Their chilling requirement is estimated at 250 chill units. Bloom occurs in early to mid-February at Gainesville, usually extending over a 10 day period. Fruit set occurs on spurs and on one year whips like in peach. Trees are precocious, bearing the second leaf in the field.

Fruit of 'Gulfbeauty' and 'Gulfblaze' are nearly round, and possess dark red skin over firm flesh which is clingstone. Eating quality of flesh is rated excellent, but the skin taste sour on both cultivars. Fruit are further characterized by 'Gulfbeauty' having a pale yellow and 'Gulfblaze' a deep orange flesh and fruit of both cultivars hang on the tree for 7 to 10 days after shipping ripe. Fruit set on both cultivars is high and much thinning is required to prevent limb breakage and to size the fruit properly. Fruit size of 'Gulfbeauty' is slightly smaller and 'Gulfblaze' slightly larger than 'Gulfruby.' Resistance to bacterial spot *(Xanthomanas campestris)* and sunscald of fruit are higher than for 'Gulfruby.' Resistance to leaf scald *(Xylella fastidiosa)* is high and equal to 'Gulfruby.' Concentric skin cracks and splitstone of fruit have not been evident on either cultivar.

A plant patent has been filed for 'Gulfbeauty' and 'Gulfblaze' and a propagation agreement is available through Florida Foundation Seed Producers, Inc., P.O. Box 309, Greenwood, FL 32443. Budwood is not indexed, but no known virus symptoms have been observed.

Literature Cited

1. Richards, G. D., G. W. Porter, J. Rodriquez-A., and W. B. Sherman. 1992. Pollen production and cross compatibility in low-chill Japanese-type plum. Proc. Fla. State Hort. Soc. 105:302-304.
2. Sherman, W. B. and P. M. Lyrene. 1985. Progress of low-chill plum breeding. Proc. Fla. State Hort. Soc. 98:164-165.
3. Sherman, W. B., B. Topp, and P. M. Lyrene. 1992. Breeding low-chill Japanese-type plums for subtropical climates. Acta Horticulturae 317: 149-153.

[1]Florida Agricultural Experiment Station Journal Series No. R-05849.