

Fruit and Nut Review

Bunch Grapes

“Bunch grape” refers to grapevines having berries borne within a cluster. The entire cluster, or bunch, is harvested as a uniformly ripe, intact unit.

The South does not have the ideal climate for bunch grapes. By carefully choosing the varieties and following the procedures for producing bunch grapes in the South, you can successfully grow bunch grapes.

The worst threat to successfully growing bunch grapes in Mississippi is Pierce’s disease, which shortens the life or kills the plants. Muscadine grapes have a natural resistance to Pierce’s disease. Some bunch grape varieties have resistance to this disease.

Varieties

The choice of varieties is important and complicated. The varieties listed below are best for growing in Mississippi, and are resistant to Pierce’s disease.

North Mississippi

Fredonia - A deep-purple grape, early mid-season, vigorous, productive, with medium to small clusters of large berries. Berries ripen uniformly.

Niagara - A white grape, mid-season, vigorous, productive, medium size, with compact clusters of large berries.

South Mississippi

MidSouth - Resistant to Pierce’s disease but highly susceptible to root-knot nematodes when grown in infected soil. Dark-blue grape good for eating fresh and making jellies. Harvest dates are from late July to mid-August.

MissBlue - A dark-blue grape with open clusters. Highly susceptible to anthracnose. Harvest dates are from late July to mid-August. Recommended for juices and jellies.

Miss Blanc - White to green in color, sweet, mild, and pleasantly flavored. Fruit ripens in late July to mid-August.

Orlando Seedless - A new seedless bunch grape that has good flavor, large attractive bunches, early ripening, and vigorous vines. It is susceptible to anthracnose and root-knot nematodes.

Daytona - A pink bunch grape recommended for fresh fruit consumption. The large clusters of grapes cling to the vine clusters, allowing handling without losing berries. Susceptible to anthracnose and root-knot nematodes.

Conquistador - A multipurpose bunch grape that yields well, recommended for wine, juice, and jelly, as well as table use. Susceptible to anthracnose and root-knot nematodes.

Suwannee - A vigorous, early ripening variety with large berry size, good for wine or for fresh fruit. It blooms later, but its large berries ripen early. Susceptible to anthracnose and root-knot nematodes.

Soil and Climate

Bunch grapes grow best in deep, well-drained, sandy loam soils. Shallow, heavy clay soils will not produce the vine vigor, tonnage, or fruit quality of better drained soils. In general, bunch grapes require a long growing season, relatively high summer temperatures, low atmospheric humidity, a ripening season free from rain, and mild winter temperatures.

Planting and First Year’s Growth

Plant the vines in January or February, 8 feet apart in rows spaced 12 feet apart. Set the vines the same depth they grew in the nursery. If vines are grafted, the graft union should be 2 inches above the final soil level. Spread the roots in all directions in the planting hole.

After planting, cut back the vine to leave two or three buds. Place 2-inch by 2-inch posts at each plant to train and support the vine. When the new shoots begin to grow, select the most vigorous and tie it loosely to a stake. Remove all the other shoots.

Second-Year Training

During the second growing season, train the vines on the trellis. Use No. 10 or No. 12 smooth galvanized wire for the trellis wire. The two horizontal wires on the trellis should be 42 and 72 inches above the ground. Large support posts are needed every 12 vines down the row. The ends of the trellis must be well anchored.

If the vine (trunk) is long enough, loosely secure it to the top wire and cut it off about 2 inches above the wire. If lower canes are present, secure a cane on the lower wire on each side of the vertical main stem. Tip-cut these canes to 8 to 12 buds in length, depending on plant vigor. Allow one cluster of fruit from each bud. Remove all others in early May. Tie a cane to the upper wire on each side of the trunk.

Pruning Mature Vines

Prune according to the vigor of the vine and its production potential. You should do this in the dormant season. Remove canes that bore fruit the previous year. Select four canes that grew the previous year to train to the trellis wires—one cane on each side of the trunk on the upper and lower wires. For strong plants, count 10 to 12 buds on each cane and cut off the rest (eight buds for weak plants).

Select two additional canes close to the top wire and two additional canes close to the bottom wire. Make renewal spurs from these canes by cutting them back to two buds in length. Renewal spurs

are canes that will produce fruit the following year. Remove all other canes close to the trunk.

The properly pruned grapevine will have a trunk, four canes for fruit production (10 to 12 buds), and four renewal spurs (2 buds). Proper pruning may remove 90 percent of the wood.

Cultural Practices

Fertilizer is not a serious limiting factor in young vines. Apply five pounds of complete fertilizer (such as 13-13-13) per vine, split into two equal applications 6 weeks apart. Make the first application in February.

Drip irrigation is excellent for grape culture. Apply 1 gallon of water a day per vine per year of age until you are applying 5 gallons of water per day. Grapes are preconditioned to cold by slowing growth in August. This can be accomplished by cutting off the drip system in early August.

Harvesting

Grape harvest usually begins in mid-July and continues through September. Mature bunch grape vines can produce as much as 25 pounds per year.

Color is a poor indicator of maturity in bunch grapes. Many varieties change color long before they are fully ripe and become sweeter and less acid as they mature. Maturity is usually determined by taste or by the color of the seeds, as they change from green to brown.

If vines are allowed to overproduce, the sugar content of the fruit will be low, the color will be poor, and the maturity of both fruit and wood will be delayed. Immature wood is susceptible to freeze damage, and the next year's crop may be reduced. In the case of severe overcropping, the entire vine may be winter-killed.

By **John Braswell**, Extension Horticulture Specialist

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