Muscadine Grapes in Georgia

By B. O. Fry and M. M. Murphy
Georgia Agricultural Experiment Station
Experiment, Georgia

The muscadine grape, **Vitis rotundifolia**, is a native of the Southern States, and is grown commercially in a few states bordering the Atlantic and Gulf coasts. A great deal of work has been devoted to the improvement of this type of grape through breeding, especially by workers at the Georgia Agricultural Experiment Station and at the North Carolina Agriculutral Experiment Station in cooperation with the United States Department of Agriculture. As a result of this effort new varieties have been introduced which ripen their fruit more evenly and produce higher yields of berries that are more desirable for fresh usage and for juices, jelly, and wine production.

Very few persons outside the South are familiar with the characteristic flavor of the fresh fruit because of its poor shipping qualities. The introduction of improved varieties and the production of high quality juices, jellies, and marmalades, should help muscadines to become an important cash crop for a larger number of growers.

Principal Varieties

During 1946 a committee was appointed within the Southern Section, American Society Horticultural Science for the purpose of evaluating the named varieties of muscadines. Subsequently this committee recommended that nurserymen discontinue the propation of a great many of the 62 named varieties. About 20 of these 62 were considered of sufficient value to keep for further usage. Of these the 11 briefly described below are considered best for planting.

The **Hunt grape** is a Georgia Experiment Station introduction resulting from a cross of a white male with the Flowers variety. Of a number of new varieties developed and tested at this Station, the Hunt has outyielded all others. The dark-colored fruit are borne on clusters of medium to large size and ripen evenly enough to require one picking. It ripens usually about Sept. 15 at Experiment, Georgia.

During the spring of 1928 one acre of land was set to this variety using the two-wire vertical system of trellising. A spacing of 14 x 21 feet was used, allowing 150 plants to the acre. The average yield per acre for the first 18 years of production (1930-48) was 3.4 tons; for the past 10 years, 4.4 tons; and for 1948, 6.6 tons per acre. This variety is outstanding in yield, type of growth, size of fruit clusters, even-ripening, and flavor. It is the only variety highly recommended in this state for commercial purposes.

Creek probably ranks second in production. The reddish-purple, medium size fruit has a very good flavor and is excellent for wine production. This variety ripens its fruit 15 to 20 days later than the Hunt. The lateness and

the lower yields would make it less desirable for commercial purposes.

Thomas, one of the older varieties, produces small, reddish-purple fruit of good quality. The plants are not as vigorous and yields are lower than with the Hunt variety.

The **Dulcet** is an excellent variety for home use. The small, reddish-purple fruit hangs on the vine well when ripe and has an excellent flavor. Difficulty in picking makes it unsuited for commercial purposes.

Scuppernong is probably the best known and the most widely grown variety for home production. The bronze-colored fruit is medium to large and of excellent flavor. Clusters are generally small and shatter freely when ripe. The plants are less vigorous than Hunt but ripen its fruit about the same time.

Yuga is well suited for home use, particularly in the Coastal Plain Area. The small, bronze-colored fruit ripens later than any of the other varieties mentioned here and hangs on the vine long after the fruit is ripe, being available over an extended period. This long picking season makes it a desirable variety for the home planting. It is not recommended for commercial purposes.

Burgaw is a self-fertile variety that produces small, dark-colored fruit of good quality. It is used as a pollinating

The abundant crop of fruit on this muscadine grape vine illustrates why these plants may produce 4 to 6 tons of berries per acre.

vine, in place of a non-producing male, when the dark fruiting varieties are preferred.

Topsail is thought to be the best of the new varieties introduced by the North Carolina Experiment Station. The vines are vigorous and foliage relatively resistant to disease. The large, bronze fruit has a medium tough skin, but soft, sweet, crisp pulp. The fruit ripens about the same time as Scuppernong, and is considered a superior table grape.

Cape Fear is productive, vigorous and relatively resistant to disease. The large, light-colored berries are borne in medium size clusters. The fruit ripens late.

Creswell produces a medium reddish-purple fruit of good quality and starts to ripen a few days later than the Hunt. It is recommended for home use.

Wallace produces a vigorous vine growth, but the foliage is somewhat susceptible to leaf diseases. The fruit, borne in large clusters, is white, smaller than Scuppernong, and is late in ripening. It is a self-fertile variety and is used as a pollinating vine when the light fruiting varieties are preferred.

The Hunt, Thomas, Creek, and Scuppernong are generally recommended for commercial purposes.

Winter Injury to Cultivated Blueberry Varities

By Stanley Johnston
Michigan Agricultural Experiment Station,
South Haven, Michigan

The 1947 growing season was a very peculiar one. The spring was cold and wet. Blueberries blossomed almost a month later than normal. July and August were dry and the latter was the hottest August on record in southwestern Michigan. Rains in early September were followed by a severe freeze on the 26th that froze many peaches on the trees. October was the warmest on record, and the weather continued mild until Thanksgiving when winter set in with a cold blizzard. The temperature reached at least −25°F. in some plantations at times during the winter.

Severe Injury Experienced

About March it was realized that blueberry plants had been injured in many plantations. The full extent of the injury was not apparent until some time later. In some plantations the injury was confined to the tips of fast