Growing Muscadine Grapes

In Florida

Taken from the brochure "Growing Muscadine Grapes in Florida" By: Jiang Lu, Cynthia Connolly & Joe Spinelli

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The Early settlers attempted to grow European grapes in Florida over 300 years ago. Through centuries of experimentation, however, grape growers found that non-native grapevines could not endure the state's climate. In the 1930's grape research and breeding programs were initiated at Florida's universities.

Two distinct types of grapes thrive in the state today. They are Florida hybrid bunch grapes which grow in the typical grape bunch formation and Muscadine grapes which grow in small clusters. Both are used for fresh fruit, wine, jelly, and juice.

Muscadine grapes (Vitis rotundifolia) are native to Florida and southeastern United States. They are enjoyable and easy to grow.

The first step in growing Muscadines is to obtain plants. Rooted cuttings are used for planting grapevines. You can use either bare root vines or potted plants and you can either purchase them from a nursery or propagate them yourself.

Planting

Early spring is the best time for planting. Holes 8" in depth and 6" to 8" in diameter should be dug with either a shovel or a tractor driven auger. Under dry conditions, a gallon of water should be poured into the hole before planting. One year old potted plants should be placed directly in the hole without disturbing the root ball. Plants which have been in pots for more than a year may be root bound, however, and the roots should be separated at planting. After placing the plant into the hole, firm the soil around it and water it immediately. Continue watering the newly transplanted vines at least once a week to ensure their survival. Provide a straight support (twine, bamboo, wood or plastic sticks, etc.) to help the plant climb to the trellis. New shoots should start to grow within a couple of weeks after planting.

Training

It is important to train the young plants by tying one strong shoot to a straight support and pruning off all the other shoots. This strong shoot will be the main stem or trunk of the vine and should grow straight up to the trellis wire. When the main stem is about six inches above the trellis or fruiting wire, select two lateral shoots growing in opposite directions from below the trellis wire to form the cordons and cut off the main stem above these shoots to force them to

grow. These shoots should be tied to the wire, leading their growing tips in desired directions forming the bilateral cordons.

Fertilizer

Any material that supplies nutrients to growing plants is a fertilizer. Fertilizer should be applied to plants about two weeks after the vines start to grow. Approximately 1/4 pound of 10-10-10 should be placed in a circle 6" from the new plants. One half and 3/4 of a pound are recommended for two and three year old plants, respectively. A second and third application may be made at the same rate after six and twelve weeks of growth. Organic fertilizers such as fish emulsion, compost, crabmeal, or cottonseed meal may be used as an alternative.

Irrigation and Weed Control

Water the vines about once a week to saturate the roots if there is no rain. Prevent weeds from competing with the vines by shallow hoeing (so as not to damage the grape plant's roots), mowing, or applying herbicide whenever necessary.

First Pruning and Second Season Growth

To ensure good fruit production, pruning of the past season's growth should be done each winter when the leaves have dried and fallen off the vines and the plants are dormant between January and February. After the lateral shoots have been established as cordons, canes extending from them should be pruned back to spurs. These spurs should have 3-4 buds on them. In the spring of the second growing season, as these buds break and produce new shoots, all flower clusters should be removed to concentrate growth in the vine. Vines which do not reach to the trellis wire should be retained to grow to the wire in the second year. At bud break of the second year, plants should be fertilizer with 1/2 pound of 10-10-10 per plant. This should be repeated after six and twelve weeks.

Second Pruning and Third Season Growth

In the winter after the second growing season, canes grown from the previous year's buds should be pruned back to three buds per spur. When buds begin to grow in early spring, apply fertilizer (3/4 pound of 10-10-10 per plant) and repeat application six weeks and the twelve weeks later. Weeds should be controlled to avoid competition with the grapevines for nutrients and water. By the third season of growth the bilateral cordon should be well established and fruit may be harvested.

Forth Season Onward

Prune the vines after the third season of growth while the plants are dormant as before. Fertilize at bud break and again at six weeks and twelve weeks. Water weekly in the absence of rain and control weeds. Sufficient water and nutrients at bud break are very important to ensure a vigorously growing vine and good fruit set. Remove suckers from the trunk below the trellis.

Harvesting

Harvesting of fruit should begin in the third season. Muscadine grapes may be picked individually or shaken off the vine into a net suspended from a catch frame.

Disease Control

Fungal diseases such as anthracanose, black rot, and downy mildew are common in Florida grapes. Muscadines have fewer disease problems than bunch grapes. Disease susceptibility, however, varies with different cultivars. Sanitary and healthy soil and growing conditions are the best means to prevent disease. Fungicides may be used to control diseases. Check with your county extension agent to determine approved products.

<u>Top</u>

Back to Resources