

SCHEDULE FOR GRAPE PRODUCTION PRACTICES IN FLORIDA

J. A. Mortensen and J. W. Harris

January - February - March - April - May - June - July - August - September - October - November - December

Florida is unique among the 50 states in being located on a peninsula jutting southward between large bodies of salt water. Stresses on grapevines are affected by this. For example, Pierce's disease (PD) and anthracnose are greater problems here than in other states, necessitating the use of PD-resistant varieties and regular preventive sprays of fungicide for successful viticulture. The importance of proper timing for fertilizing, liming, spraying, irrigating, pruning, training, and controlling weeds cannot be overemphasized if Florida viticulture is to be successful.

This research report is designed to inform Florida growers about what needs to be done on grapes and the proper time of year to do it. Growers should keep the schedule handy as a reminder of the needs for a particular month. While the list is shorter between September and December, there is nevertheless something to be done every month of the year.

January

- Construct trellis over rows before planting the vines, and install irrigation system.
- Transplant bare-rooted vines from nursery in January or February. Potted vines may be planted any month of the year in vineyard. Hold back a few plants in pots for replanting skips as they occur during the summer months.
- Prune dormant vines. If some green leaves are still on vines, wait until early February to prune. 'Stover' and 'Suwannee' should be pruned later to avoid damage from March freeze.
- Replace posts, staples, and trellis anchors as needed; tighten wires with fence stretcher as needed, and the vines to wire with baling twine. The time of wire tightening should always precede the time of tying canes with twine, but should be after pruning. Use previously cut binder twine in tying.
- Cuttings: make cuttings of bunch grapes if needed (8" long for potting and 12" long for nursery); bury in builder's sand for callusing, covering with 5" or more of sand. Water well but protect from excessive rainfall. Muscadines do not root well from dormant cuttings (see June).

February

- Complete planting and grafting operations during February. Early to mid-February is the best time for grafting in central Florida. Use waxed milk cartons or tar paper rings to keep mounds of builder's sand in place around grafts. Bench grafts should be stored in damp sand for several weeks after grafting until callused.
- Continue pruning and tying grapevines, completing bunch grapes in February. Remove prunings to a burn area for vineyard sanitation.
- Begin clean cultivation and mulching around plants. Mowing of row middles may be necessary.
- Install a stake (1/2" PVC pipe or treated wood stake) by each vine, fastening to the trellis wire with fine galvanized wire to prevent blowing over in the wind.
- Irrigate the buried cuttings and the grafts enclosed in cartons as needed.
- Broadcast first application of fertilizer on bearing bunch grape vines (600 lbs. 12-4-8 per acre). For non-bearing vines, fertilize in circular pattern around vine from trunk out about one foot, using ¼ lb. per vine every month. Do not fertilize newly set plants until March, after growth begins.
- Apply fungicide as dormant spray to bunch grapes at time of buds well for earliest variety. Read and observe label.

March

- Complete pruning and tying of muscadine grapes by March 20. Apply fungicide as dormant spray to muscadines at time of budswell (usually Mar. 25-31).
- Check callus development on bench grafts, planting bench grafts in one-gallon pots. Use half-gallon milk cartons to protect graft unions, filling with sand to top bud.
- When bunch grape buds are 2 inches long, begin spraying fungicide on bearing vines every 2 weeks. Include insecticide only if vine inspection reveals a need for it.
- Apply Roundup herbicide to a 3 ft wide strip under the vine trellis after installing $\frac{1}{2}$ gallon milk cartons around young plants to prevent damage. Be sure each plant is staked to prevent carton from blowing away in wind.
- Irrigate buried bunch grape cuttings, nursery, vineyard, and grafts enclosed in cartons as needed. Fertilize non-bearing and newly set plants. (See item 6 in February)
- Broadcast first application of fertilizer on bearing muscadine grape vines (600 bld. 12-4-8 per acre).
- Cuttings: dig up buried bunch grape cuttings when callus and roots form and before buds swell more than 1 inch; plant in nursery rows (12" ones), or pots (8" ones).

April

- Spray bunch grapes with fungicide. At least one fungicidal spray during full bloom is important. Apply insecticide if needed but do not use Sevin during bloom (kills bees). Don't spray muscadines in April. Irrigate nursery, vineyard, and graft cartons as needed.
- Remove unwanted shoots and suckers, tying wanted growth to stake with tapener; train young vines and grafts up the stake (twice over vineyard in April).
- Mow all row middles as needed.
- Fertilize non-bearing vines (See item 6 in February) and cutting nursery.
- Remove graft mounds and cartons when scions are about 15 inches long. Cut off any scion roots and tapen to stake.
- Spray gibberellin on seedless grapes about one week after bloom and a week later to increase berry size and eliminate gritty seed remnants.

May

- Continue spraying bunch grapes every two weeks with fungicide. Begin regular spraying of muscadines with fungicide when blooms open, applying every 2 weeks thereafter until near harvest. Include insecticide when insects are causing damage. Read and observe labels, and be sure to observe "days before harvest" regulations on label.
- Apply Roundup in trellis rows as needed for weed control (usually 6 weeks between Roundup applications).
- Irrigate as needed.
- Continue sprouting, tapening each vine to stakes and trellis as it grows (twice over vineyard in May).
- Broadcast second application of 12-4-8 to bearing bunch grape vines (600 lb. per acre).
- Fertilize non-bearing plants. (See item 6 in February)
- Mow as needed in row middles.
- Rototill, hoe, or cultivate cutting nursery as needed.

June

- Spray with fungicide both bunch grapes and muscadines, adding insecticide if insect buildup warrants it. Read and observe labels, observing "days before harvest" for the chemical used.
- Irrigate as needed.
- Broadcast second fertilizer application to bearing grapevines (600 lbs. of 12-4-8 per acre). Fertilize non-bearing plants. (See item 6 in February)
- As needed, continue staking, tying, training and sprouting young vines (2-3 times over vineyard in June).

- Replant all skips with potted vines as needed with the same variety.
- Apply Karmex to the soil in mature vineyard as a pre-emergence herbicide (only once a year, and only with 3-yr old vines or older).
- Mow row middles as needed.
- Cuttings: begin in early June making softwood cuttings of muscadines for propagation under intermittent mist. Apply liquid fertilizer to cuttings after 4 weeks in mist bed.

July

- Spray fungicides, observing days before harvest regulations of different fungicides. Read and observe label.
- Harvest bunch grape when ripe, transporting rapidly to refrigeration.
- Apply Roundup or Gramoxone herbicide as needed for weed control. Rototill nursery and hoe weeds in nursery rows as needed.
- Fertilize non-bearing plants (See item 6 in February) and cutting nursery.
- Transplant rooted cuttings of muscadines in mist bed to pots when roots long enough (tug test).
- Continue making softwood cuttings of muscadines if needed, completing at end of July.
- Continue training vines up stakes and onto trellis wire, removing unwanted zgrowth (twice over vineyard in July).
- Irrigate when needed.
- Mow row middles when needed.

August

- Harvest muscadine fruit as needed and transport rapidly to refrigeration.
- Spray after harvest once a month only, using both fungicide and insecticide in tank.
- Fertilize non-bearing vines. (See item 6 in February)
- Spray Roundup or Gramoxone for weed control if needed.
- Mow row middles as needed.
- Transplant rooted cuttings in mist bed to pots when adequately rooted as determined by tug test.
- Irrigate when needed.
- Rototill nursery as needed.
- Train vines up stakes and onto trellis wire, removing unwanted growth (once over vineyard in August).

September

- Complete harvest of muscadine grapes.
- Spray once a month with fungicide and insecticide thereafter.
- Fertilize non-bearing vines. (See item 6 in February)
- Apply Lorsban insecticide over ground surface to kill grape root borers. Since only one application a year is approved, apply at optimum date for your area (late September).
- Use Roundup or Gramoxone only as needed in rows for weed control. Rototill and hoe in cutting nursery.
- Mow row middles as needed.
- Take soil samples for pH and soil fertility determination (alternate years).

October

- Prepare for new plantings by applying dolomite (if needed), plowing, and disking. Plowing is important to loosen deeper layers of soil even if sod is not growing on the surface. Disking alone is too shallow to accomplish this.

- Apply final fungicide and insecticide spray to help hold leaves from premature defoliation, which weakens vines for next year.
- Irrigate as needed in vineyard and nursery.
- Mow row middles as needed.
- Repair and clean equipment for future use, such as picking boxes, pruning shears, and harvest shears. Cut binder twine into 8" lengths in bundles for use in winter tying of vines.

November

- Repair trellises as needed. Construct trellises in plowed areas to be planted in January and February.
- Install a lightning ground wire (galvanized 9 gauge) on a post every 90 ft along each trellis row and at each end of the trellis. Be sure wire extends 15" or more into ground.
- Remove unwanted vines and cultivate the vacated area for replanting during January or February.
- Irrigate or mow as needed.
- Continue cutting balls of binder twine into 8" lengths (especially if rainy weather).

December

- Broadcast dolomitic limestone to establish vineyard in order to bring low pH up to pH 6.2, if needed. Do not lime if pH is 6.0 or higher. Use sulfur dust instead of lime if pH is 7.3 or higher.
- In late December, begin early dormant pruning of vines whose leaves have fallen or turned yellow. Prune late-ripening bunch grapes and muscadine grapes ahead of early ripening grapes.
- Begin bare-root planting of young vines, where planned.
- Note: The use of trade names in this publication is not a guarantee or warranty of the products named nor does it signify that they are approved to the exclusion of others of similar composition. Read all labels of any pesticide before application. THE LABEL IS THE LAW.