

Hands Off the Pruners: The Grapevine is Resting!

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Muscadines are a type of grape native to the southeastern United States, known for their unique flavor, sweet berries, and strong adaptation to the region's hot, humid climate. They are widely enjoyed fresh and are also used for juice, jelly, and wine which make them excellent crops for commercial or hobbyist growers.

As temperatures drop and daylight fades, muscadine vines across North Florida enter their winter rest period called dormancy. Dormancy is essential for protecting next year's crop and understanding what this process does for the vine can make all the difference when spring arrives. The process is same as what happens to deciduous trees which drop their leaves over winter time.

Why This Matters in North Florida.

Dormancy allows grapevines to harden off, conserve energy, and protect sensitive tissues from cold injury. Even though the vines appear quiet, they are preparing for next season's growth. Seeing this phenomenon may raise concern for the growers but rest assured this is a natural process this time of the year.

What growers do during this period, especially in terms of pruning timing, directly affects bud survival and next year's fruitfulness. Figure 1 shows a muscadine vineyard entering early winter dormancy as yellowing leaves drop and canes harden.

North Florida consistently receives more frequent and significant freezing temperatures than Central or South Florida, which means early-pruned vines are at a higher risk of cold damage during unpredictable winter warm-ups and frost events.

How Grapevines Grow

Muscadine vines carry next year's shoots and fruit clusters inside tiny compound buds located on one-year-old wood, which is last season's growth. These buds formed during the previous growing season, and winter dormancy helps safeguard them until spring. Figure 2B shows a one-year-old cane with dormant buds that already contain next year's growth.

When vines experience cooler temperatures, the buds enter a deeper state of rest and remain protected until conditions warm. Pruning too early removes productive one-year-old wood, reduces the number of healthy buds, and can cause buds to swell earlier than they should. This makes them much more vulnerable to a late frost. Understanding where next year's fruit is formed makes choosing the correct pruning window even more important.

Pruning Now – Yes or No?

No. In North Florida, do not prune muscadine vines in early winter. It can be tempting to start pruning early when the vine has begun to go dormant, but this is a common mistake. Wait until mid-February or after the last significant frost. Holding off keeps buds safely dormant during the most unpredictable part of the winter.

If you are ever unsure, remember that it is always better to prune late than early. Vines that are pruned later sometimes show more sap bleeding, but this does not harm the plant. Early pruning, however, can make the tender, young buds more susceptible to frost damage which will impact the quantity and quality of next year's harvest.

What to Do in November–December?

Early winter is the time to prepare the vineyard without cutting back canes. After harvest, gradually ease off irrigation to help vines harden. Only water enough to prevent severe drought in very sandy soils. Hold all nitrogen fertilizers until spring. This is also the ideal time for sanitation. Remove any mummified berries and obviously diseased canes still hanging on the trellis. These dried, shriveled fruit can carry disease into the next season, as shown in Figure 2C. Cleaning up now helps reduce fungal problems when vines wake up in spring.

Trellis repairs also fit well into this season. Tighten wires, replace damaged staples or anchors, and straighten leaning posts while the canopy is thin.

Some older muscadine vines may also show aerial roots along the trunk or cordons, especially in low spots or wetter areas of the vineyard (Figure 2A). These roots often form when the soil stays very moist and low in oxygen. They help the vine absorb oxygen from the air and should be left alone rather than pruned off. If aerial roots are common in a block, it is a sign to pay attention to drainage and soil moisture over time.

Tool care is another important winter task. Sharpen pruners and loppers so they make clean, healthy cuts later. Just as important, sanitize your tools to help prevent spreading diseases from vine to vine. Wipe or dip blades regularly in a 70 percent ethanol solution or a dilute bleach solution up to 50 percent, refreshing the solution as it becomes dirty.

Finally, walk through the vineyard and take note of where pruning will be needed once winter ends. Photograph crowded areas or problem spots now so you can plan for healthier spur positioning in spring.

Dormant Sprays

Where product labels allow, a dormant copper or lime-sulfur spray can help reduce fungi that overwinter on the vines. Always follow the label for safety gear, re-entry intervals, and crop instructions, and avoid spraying ahead of a freeze or rainfall.



Figure 1. Muscadine vineyard entering early winter dormancy at the FAMU Center for Viticulture and Small Fruit Research. Leaves are shedding, canes are hardening off, and the vines are settling into their natural rest period—an ideal time for cleanup and preparation, but not for pruning.

Spring Readiness Checklist

When the danger of frost has passed, usually by mid-February or later, it is time to prune. At that point, prune one-year-old canes back to short spurs with 3 to 4 buds each, spacing these spurs a few inches apart to keep the canopy open and healthy. Remove any dead, weak, or diseased wood, and clear away tendrils that may be girdling the cordons. Make sure cordons are supported and secure before spring growth begins.

Key Takeaways

Dormancy is the vine's natural protection system. The buds on one-year-old wood already hold next year's shoots and fruit clusters, so avoiding early pruning helps ensure a productive harvest. Always wait until after the last frost, or mid-February at the earliest, to prune. Early winter is better used for cleanup, trellis adjustments, weed control, tool care, and general vineyard preparation. By giving the vines time to rest undisturbed, you set them up for strong growth and a successful season ahead.



Figure 2. **A.** Aerial roots on this mature muscadine signal wet, low-oxygen soil. They help the vine absorb oxygen from the air and should be left alone, do not prune them; **B.** One-year-old muscadine cane showing dormant compound buds. These buds already contain next season's shoots and fruit clusters. Wait until after the last frost before pruning; **C.** Mummified muscadine berries left over from harvest. Early winter is the ideal time to remove this dried fruit and other debris from the trellis to reduce overwintering fungal inoculum before spring growth begins.