Winter Muscadine Chores

Establishment of muscadine vines is quite labor intensive, with each vine requiring attention every week of the growing season. Winter chores are just as important, with the main concern being dormant pruning needs. Do you know how to prune your muscadine vine or when dormant pruning should occur?

Preparing for Winter
To prepare for winter, grow tubes should be removed in September and irrigation lines should be drained. No fertilizer should be applied after early July so the vines can properly harden off for the winter.

Winter Pruning
Prune later to delay budbreak. Based on observations from 2007, growers should wait until February/March if possible, to prune their vines. Pruning later may cause the vines to “bleed” more, but studies have shown that the “bleeding” is just a sugar water solution and does not harm the vine.

When pruning, choose the best wood to leave for fruiting. Growers should prune out bull canes and 1-year-old wood less than pencil width in diameter. The best fruiting wood is about a pencil width in diameter and has good color (see photo). Growers should aim to leave 3-4 count buds per shoot, with spurs spaced every 4-6 inches. If a cordon has not yet reached desired length, the spurs can be cut more severely (leaving 1-2 count buds) to direct vine resources into extending the cordon. Shoots around the head of the vine are often more vigorous and can be pruned harder, in attempt to force more even vigor and productivity down the cordon. This is an area of current research and observation, so growers interested in trying this should do so on a limited scale and in consultation with their local Extension Agent.

Mechanical pruning is an efficient method of pruning for wine production. Most growers prefer mechanical pruning due to cost savings in time and labor. Recent studies have shown that mechanical pruning is acceptable for fruit yield and quality, but growers should devote time every other year or so to perform some additional hand pruning to remove dead wood and shoots with poor orientation, and select or encourage new fruiting "bearers." Fresh muscadine growers need to perform this additional hand pruning yearly to maintain an open canopy and optimize fruit quality. Studies are ongoing at NCSU to determine the key number of buds per vine to leave for maximum yield and fruit quality for both the fresh and processed markets - stay tuned for updates!
Be sure to remove tendrils that may be girdling the trunk or cordon. These tendrils become very hard and eventually act as a tourniquet, preventing the flow of water and nutrients from the roots to the fruit-producing shoots of the vine, and preventing the flow of carbohydrates from the photosynthetic regions of the vine (leaves) back to the roots. Remember, the more stress a vine is under, the more prone it will be to disease and cold injury.

Still have questions about pruning? Contact the North Carolina Cooperative Extension Service in your county to inquire about pruning workshops in your area. Demos in 2009 are tentatively scheduled for Jones County on January 21, Hoke County on January 31, and Johnston County for February 21, with more dates to come.

Weed Management

For further information on muscadine grapes in North Carolina visit http://www.ces.ncsu.edu/muscadines or contact Connie Fisk, NCSU Extension Associate for muscadine grapes by phone (910-296-2143) or email (connie_fisk@ncsu.edu).

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