

Grow Your Own Organic Muscadines

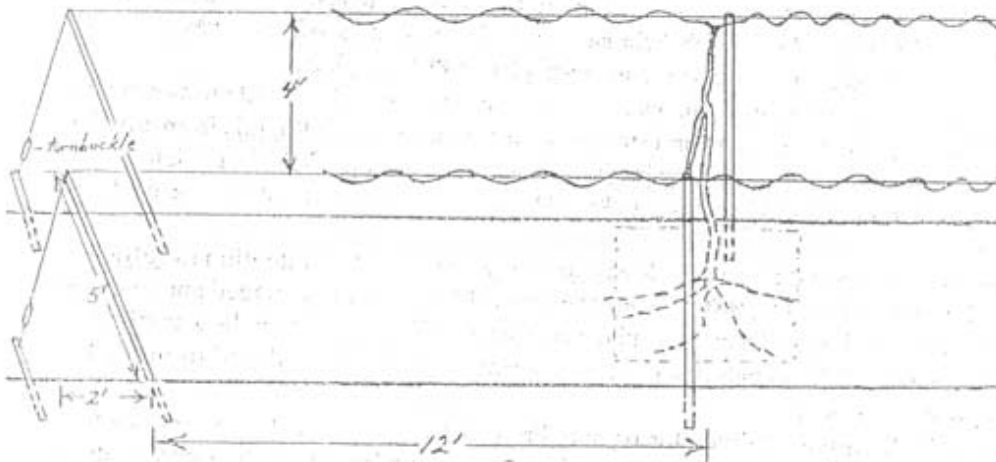
By Jerald Larson, CEA, Emanuel, Burke, and Jefferson Counties
Fort Valley State University Extension

The following is a description of two vines planted as a home scale vineyard, using practical organic methods and a low cost, easy to build trellis. This system should have good potential for small-scale commercial use as well.

A 2' x 2' area was double dug in January 2000 for each of the vines. The centers were set 24' apart to allow for longer vine extension. Each planting area received 1 pound of lime that was broadcast and stirred in with a spading fork. The varieties Fry and Nesbit were planted in mid February and the strongest single vine per plant was tied to a 5-foot stake. All other vines or laterals were pruned off. An organic fertilizer with a 6-2-1 analysis was applied at one pound per vine in an 18" diameter, circular furrow around each plant. This was covered, watered in, and 4-6" mulch was applied over the double dug area.

By mid May the vines were reaching a 5' height, and were ready for training to a trellis. During the first month of growth, as well as throughout the remainder of the first growing season, all lateral shoots were checked every two weeks and pruned back to 3 leaves. This promoted quick vine extension to the wires as well as in both directions down each wire. By late October, strong vines (arms) extended 8-10' in each direction down each wire. A light crop of fruit was achieved in the second season, as a result of this training.

The trellis was constructed of safe, low cost, easy to find, easy to install, yet strong materials. Two (2) lines of 6.5' steel posts were driven in the ground at 4' apart, with a 12' spacing between each post going down each line. The 2 end posts, at each end, were driven at the angle shown and two 3' u-posts were driven as shown to serve as anchors. One turnbuckle was placed per anchor wire, after the main wires were attached and tightened. Beginning at one end post, each main wire was passed through a drilled hole at the top of each post and secured at the other end post. A solid number 9 gauge galvanized wire was used. For trellises 50' and longer all end posts and the posts supporting the trunks should each have a second re-enforcement post driven and wired to it. For a single wire trellis, using these same materials, space the posts at 12' and the plants at 36'.



Trellis Components and Costs

10	6.5' T posts (10 x 3.87)	\$38.70
4	3' U posts (anchors) (4 x 1.68)	\$6.72
6	6.5" Turnbuckles (2 x 2.75 per pair)	\$5.50
120'	solid, #9 gauge, galvanized wire (120x0.19)	\$22.80
	Total:	\$73.72

With the trellis in place, a piece of medium gauge wire was stretched in between the posts at each vine and the single vine (trunk) tied to it with surveyors tape. Once the vine reached the wire, the tip was pinched. In a couple of weeks, the two most terminal shoots were loosely tied in opposite directions along the medium wire. When each shoot reached the long wire it was pinched again to produce the two shoots for each long wire. All new lateral shoots were tip pruned every 2 weeks and kept short at 3 leaves on the trunk and the arms for the rest of the season. A 4' wide landscape fabric may be laid between the posts, which offers excellent weed control. Adding a 4"- 6" layer of hay or straw moderates soil temperature and conserves moisture. Another excellent option is to sow Mt. Barker subterranean clover in mid-October along each side of the fabric or double curtain. This makes a strong perennial nitrogen-fixing crop.

An additional 2 pounds of organic fertilizer was applied in a 3" diameter furrow under the mulch in mid-May. Overnight drip irrigation was provided at least twice a week, April though September. A black poly pipe with 1/16" drilled holes was used. The first holes were placed 18" from each vines on both sides with additional holes spaced at 3 feet.

In early February, the second year, as well as future years, all lateral shoots were pruned back to 2 buds per shoot. Completely thin any laterals closer to 4" or 6". Winter pruning also included checking for and cutting loose any tendrils that had wrapped around the vine. In mid February, the soil was loosened with a spading fork along a 5' diameter around the trunk and 3 pounds fertilizer and 2 pounds lime were applied. The mulch was replenished to a 6" depth and extended to cover the fertilized area.

The following February as well as future years a 6' to 8' diameter circle was used and 5 pounds fertilizer and 3 pounds lime were applied. After the third February, the lime was skipped and was to be used again only at years 6, 9, 12, etc. If a soil test indicates lime is not needed for a given year, apply only the fertilizer. Also, each February when the weight is off the wires, set the turnbuckles open, hand tighten the main wires, and re-tighten the turnbuckles.

Summer pruning should promote an open space between the wires for good air movement, less disease, and provide easier access for harvesting in August. Keep vigorous laterals from crossing over each other, by pruning them back and maintaining them at 24"-30" long. Mid June- late July is generally the time to prune, using biweekly checks. Also keep low-hanging laterals pruned 24' above the ground.

Thorough harvests should be made at least once a week, paying close attention to sufficient change in fruit color and firmness to get optimum sweetness. Make sure all damaged and overripe fruit is removed at each picking to discourage build up of wasps and beetles. Using these methods at the Boggs trial garden, over 120 pounds of large, sweet organic grapes were produced from one Fry vine in the sixth growing season.

Comparing fresh eating qualities for organic Fry and Nesbit over a few years, showed considerably thinner skins and fewer seeds for Fry making it easy and pleasant to chew and swallow everything but the seeds. Remember the high nutritional value that's found in the skins of fruits. Nesbit had a very thick, non-chewable skin. These advantages make Fry a good variety to preserve for fresh eating by freezing. Use the same method as for freezing blueberries. Cowart is the preferred companion variety for Fry since it is better for fresh eating and is a better pollinator. Another good set of companion varieties is Supreme and Triumph.

Contact: Jerald Larson, larsonj@fvsu.edu