

Figures Intended to Scare You: the approximate cost to plant one acre of *vinifera* grapevine vineyard in Southeast Pennsylvania in 2011

Assumptions: Start with a square one-acre, cleared field. Spacing is 8' x 4' (1361 plants per acre), vertical shoot position (VSP) trellis. Dimensions of field are 210 ft x 210 ft (27 rows).

1.	54 x 10' Rib-Bak End Post	1575
2.	297 x 8' - 10g notched galvanized steel line stakes	2896
3.	5,700' 12 gauge hi-tensile trellis wire (\$ 0.024/foot)	137
4.	54 - 36 inch earth anchors	402
5.	29,000' 14 gauge H/T 4-life wire (2-pair catch + 1 irrigation)	464
6.	500' braided end assembly wires	468
7.	110 wire vise	176
8.	54 wire strainers plus handle	143
9.	Nicopress tool and sleeves	100
10.	1100 pencil training stakes	660
11.	Gripple wire fasteners	220
12.	Vine ties	200
13.	1100 x grow tubes (or milk cartons)	803
14.	1361 x grafted <i>vinifera</i> grapevines (prep and shipping)	5444
15.	Labor at \$15.00 per hour x 120 hours (planting, trellis, training, etc)	1800
16.	Laser planting (\$45/row + \$.60/vine + \$1800 truck fee)	3800
17.	Irrigation (not including well or pond)	7000*
18.	Site preparation (soil preparation, soil amendments, weed control, etc.)	1000
19.	Deer fence (8' high tensile exclusion, 1 gate, 4 corners)	2500*
20.	Drain tile (soil assessment will determine if it is needed)	2500
21.	Beer	100

TOTAL DEVELOPMENT INVESTMENT: \$ 32,388

Items 15 and 16 will vary depending on labor for planting or a laser planter. The truck fee may be shared with other vineyards in the area using the laser planting service. This is a rough approximation of costs. It will vary greatly based on current prices, vineyard design, options and many other unpredictable variables. For example, wider vine spacing will reduce vine numbers and a divided canopy may or may not reduce trellis costs. However, in this scenario, it would not be unwise to add 25% to this cost for inflation, incidental and the unexpected. In general, the more demanding the site, the higher the development costs will be. Flat square fields are the easiest/cheapest. Steep, rocky, fields with uneven blocks are the most expensive. French hybrid vineyards are generally less expensive to develop than *vinifera*. A deer fence is no longer considered optional for a high quality vineyard. Drain tile will depend on soil evaluation. Drip irrigation is highly recommended. Developing a water source can be very costly, as can utility development costs.

Necessary equipment and tools for new vineyards:

1. Tractor
2. Cultivator
3. Fungicide sprayer
4. Herbicide sprayer
5. Vine hedger
6. Flail mower
7. Pickup truck
8. Post pounder and/or auger
9. Hand tools
10. Supplies
11. Storage shed

Prices provided by Michael Schmidt of Spec Trellising, Ivyland, PA. <http://www.spectrellising.com/>

\* estimate provide by Nelson Stewart at Karamoor Farm Vineyard