ENTERPRISE TOOL FOR EASTERN UNITED STATES SMALL VINEYARD MANAGEMENT

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Introduction

A team of researchers at Cornell University lead by Dr. Miguel Gómez, as well as researchers Dr. Tony Wolf and Tremain Hatch at Virginia Tech University have created a detailed tool for vineyard managers located in the Eastern half of the United States (US).

The enterprise tool is designed to model potential costs and receipts of establishing and developing a V. Vinifera vineyard. Users are able to change all input costs to better reflect their individual situations.

The base numbers are based off of the V. Vinifera cost and establishment study for the Finger Lakes (FLX) region of New York State (NYS) published in 2020, and then updated to better mirror a general vineyard located somewhere in Eastern half of the US.

This document details the general assumptions of the enterprise tool and includes links to the mentioned documents.
Since 1997, Cornell University has published seven reports analyzing the overall cost, and potential returns, of establishment and development of V. Vinifera vineyard in the FLX region of NYS, with the most recent being published in January 2020.

Click here to access the FLX 2020 report.

While discussing the results of these studies with vineyard managers and owners two things became apparent:

1. The models used in the reports created good baseline numbers for growers to compare their vineyards to, but producers wanted to be able to model their individual costs as well.
2. Given the extreme variability of vineyard management practices across the Eastern United States the FLX studies may not be appropriate for others to compare their vineyards to in different regions or states.

To address these two main concerns, our research group developed the tool discussed in this report.

Using the base model vineyard utilized for the 2020 FLX report, research teams from both Cornell University and Virginia Tech University collaborated to create an easy to use Excel® spreadsheet for vineyard managers across the Eastern United States.

The base assumptions in the Excel tool are meant to represent a general V. Vinifera vineyard and can be changed to better match the production and management practices of almost any vineyard.

The tool can be found on Cornell Viticulture website at the link below:

Click here to access the tool

An instructional video demonstrating the tool can be found at the link below:

Click here to access the instructional video
How to use the tool

First, make sure to save a new copy of the tool to your computer. If for any reason something goes wrong with your copy once you have started making changes you can quickly open the saved copy and start again.

The first sheet is titled "Introduction." This sheet will have general instructions and give the main assumptions used for the underlying numbers used in spreadsheet. The second sheet is titled "Individual Sheet Explanations." This will have a detailed outline of each subsequent sheet in the tool and if they can be edited or not. You will notice, these two tabs are colored blue, this indicates they are explanation tabs and should be referred to if you have any issues when using the tool.

To use the production cost analysis tool please follow the three simple steps below:

1. Click on the Orange tab titled "General Assumptions." Read over the page. Under the column "Base Model Values" are tool's original assumptions. If any of these do not match you individual vineyard please enter the correct number in the BLUE colored cell under the column titled "Your Numbers."

2. On the same tab, look under the two tables titled "Yield & Sales Assumption" and "Insecticide, Fungicide, Herbicide & Fertilizer Material Cost Assumptions." If any of the assumptions do not match your vineyard, please insert the correct numbers in the BLUE colored cells.

3. Click through the GREEN colored tabs to see your individual vineyard results. "Quick Key Findings" is a tab summarizing quick questions you may have, such as "is my vineyard economically profitable?" or "what is the economic profit per acre of my vineyard?" "Establishment and Dev Results" shows the general cost breakdown of years one through three, or the development and establishment years of the vineyard. "Mature Vineyard Results" shows the cost and revenue breakdowns of the vineyard once it is mature (year four on). This will also show 25-year projections as well as allow you to model potential crop losses among other options.

IMPORTANT NOTE - You can also click on the two ORANGE tabs titled "Machinery & Equipment" and "Trellis & Drainage" to edit the costs associated with each. Again, if you feel the associated costs are not in-line with your vineyard please put the correct values in the BLUE highlighted cells.
Limitations

It is important to note that vineyard management practices will vary significantly from vineyard to vineyard, let alone from state to state. What one vineyard manager does in New York may not look anything similar to what a vineyard manager in Virginia does. This variability limits general efforts like this tool as we cannot account for every difference, or every cost, of every vineyard.

It is important to note the assumed management practices should not be considered agronomic advice, nor are they endorsed by either Cornell University or Virginia Tech University. Contacting either Cornell Cooperative Extension or Virginia Cooperative Extension directly is advised for any agronomic consulting you wish to obtain.

This tool is developed to allow vineyard managers to think more critically about their own practices. There may be areas where individuals can save money or take advantage of economies-of-scale to lower overall costs. The results of this tool are meant to help identify these opportunities on an individual basis.

We hope you find this tool useful. If you are interested in creating your own vineyard budgets from scratch please click here to view a three part series created by Cornell Lecturer Russell Moss detailing ways on developing your own budgets.

If you have any questions please reach out to Dr. Miguel I. Gómez’s research group by sending an email to mig7@cornell.edu. You may also contact the primary author, Trent Davis MSc, at tjd233@cornell.edu.
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