

2015 -2016 Project Summary

Monticello Winemaker's Research Exchange 2015-2016

Program Review:

The Monticello Wine Trail is a group of approximately 30 dues-paying wineries. The MWRE was able to contact the winemaker from each one of these wineries and talk with them about the program and how they could participate. Each winery was given equal opportunity and consideration in submission of experimentation to the exchange. Beyond executing a specific protocol, each winery was invited to participate in the sensory analysis of all experimentation.

The MWRE helped to develop over 60 individual experimental protocols. Each protocol was specific to the limitations and resources of the participating winery. Additionally, each protocol was reviewed by the research coordinator and the board of the MWRE to ensure proper structure, purpose, and assessment.

A number of protocols were created in conjunction with members of the enological supply industry to both provide important feedback for research and development purposes, but also to help strengthen the voice of Virginia wine makers in the design and sales of enological supplies.

Despite developing 60+ protocols the numerous weather challenges placed on Virginia wine makers during the 2016 harvest season, made it impossible for some these experiments to be carried out properly or at all. However, in the face of all of this, the number of projects carried to completion and presented at the sensory sessions (37) was increased almost 50% over 2014 (25).

The MWRE held 4 individual sensory sessions during the 2015-2016 season so that each experiment could be tasted and evaluated by local winemakers. Attendance at each session was consistently higher compared with that of 2014-2015. There was a progressive increase in participation and interest from wineries/winemakers that may not have submitted research but were invited to participate in the exchange by sharing their knowledge at these sessions. (A complete list of projects and session included in Appendix A)

Following the presentation of experiments at sensory sessions, the MWRE was able to determine statistical significance of the experimental intervention and determine if the experiment warrants longitudinal repetition and/or continued 3rd party analysis. Many of the experiments were sent to Enartis/Vinquiry for sensory analysis to be tasted and analyzed outside of the MWRE.

The results of each sensory session were made available to the public through a website created for this specific purpose. To maintain a level of scientific validity and integrity of the research carried out, it was important for the dissemination of this information to occur from a neutral source. For this reason, the MWRE created the website <http://www.winemakersresearchexchange.com> as way to deliver the results.

Summary:

The original objectives of the MWRE put forth in the grant proposal (Appendix B) were each carried with great planning and intention. For this reason I feel that the Monticello Winemaker's Research Exchange project should rightfully be considered a success.

In addition to simply meeting the objectives, the MWRE executed a project successful in bringing about discussion and action of the state of research for the entire wine industry, not just the state of Virginia. Following a presentation at the Virginia Vineyard Association (VVA) and an article in Wines & Vines magazine ([winesandvines - MWRE](#)) interest poured in from groups in other states/locals wanting to create similar projects. This project not only promoted technology and scientific discovery in the state of Virginia, but also promoted the state of Virginia in the role of enological research.

Appendix A

WINEMAKER'S RESEARCH EXCHANGE 2015 experimentation

December 8, 2015 Tasting - Early Mtn. Vineyards

Concrete vs. Stainless Steel Aging with Sauv Blanc	Triangular
Cluster Halving in Pinot Gris	Triangular
Chardonnay using Oenolees	Triangular
Chardonnay using FreshArom	Triangular
Viognier WF yeast	Triangular
Soil Conductivity Cab Franc Year 3	Triangular
Lalvin C Yeast Trial on Pinotage	Triangular
Surround on Petit Verdot	Triangular
Leaf Pulling to Reduce SWD - PV	Triangular

January 20, 2016 Tasting – King Family Vineyards

Citrus Tan on Chardonnay	Triangular
Tannin Elegance with Chardonnay	Triangular
Stylistic Goals with Chardonnay	Triangular
Harvest Methods with Viognier	Triangular
Lalvin C Yeast Trial on Chambourcin	Triangular
Co-Fermentation of Merlot and Viognier	Triangular
Merlot Clonal Comparison	Triangular
Heating Must with Cab Franc	Comparison
Harvest Methods with Cab Sauv	Triangular
WF Yeast with Petit Verdot	Comparison

March 30, 2016 – Veritas Vineyard and Winery

Press Enzymes on Sauv Blanc	Triangular
Low Sulfur Yeast Trial on Chardonnay	Triangular
Sulfur Free Protocol on Chardonnay	Triangular
Reduced Sulfur Production on Viognier	Triangular
Sulfur Free Protocol on Merlot	Triangular
Drying Tunnel for Cab Franc	Triangular
Whole Cluster Inclusion on Cab Franc	Triangular
Whole Cluster Inclusion on Cab Franc	Triangular
Whole Cluster Inclusion with Syrah	Comparison

May 5, 2016 – Horton Winery

Wild Yeast Fermentation on Chardonnay	Comparison
Organic Nutrient Trial on Chardonnay	Comparison
Bentonite with Petit Manseng	Comparison
Bentonite with Viognier	Comparison
Extended Maceration on Merlot	Triangular
Cap Management on Merlot	Comparison
Closure Comparison	Triangular
Closure Comparison	Triangular
Petit Manseng Vertical Tasting	Descriptive

Appendix B

Objectives Outlined in Grant Proposal

The objectives of the proposed research are to meet several goals:

- Facilitate collaboration amongst Monticello Wine Trail winemakers to explore winemaking techniques and enological additives to determine which are best suited to Virginia wine, and which have positive impact on wine quality.
- Develop methods and procedures to consistently carry out and assess experimental techniques.
- Monitor experimental trials and determine further/future investigations.
- Conduct tasting sessions that include statistical analysis and interpretation of results from difference and preference testing, and descriptive analysis.
- Create a digital forum for the Virginia wine industry to share development of regional winemaking techniques/protocols and discussion of projects, experimental design, and results
- Promote cooperation and consultation with various industry suppliers to develop protocols for product use specific to Virginia.