

**PENNSYLVANIA WINE MARKETING AND RESEARCH PROGRAM –
GRANT FINAL REPORT**

PROJECT TITLE: PENNSYLVANIA WINE INDUSTRY SPONSORSHIP FOR THE 2018
AMERICAN SOCIETY OF ENOLOGY AND VITICULTURE – EASTERN
SECTION CONFERENCE

PERSONNEL:

Denise M. Gardner
Wine Consultant
1103 Armstrong Lane
Phoenixville, PA 19460
denise@dgwinemaking.com
484-318-8370

Michela Centinari
Assistant Professor
218 Tyson Building
University Park, PA 16802
mcz22@psu.edu
814-867-0514

GRANT RECEIVED: \$20,000.00

GRANT FUNDS INVOICED: \$16,633.99

INTRODUCTION

The American Society of Enology and Viticulture – Eastern Section (ASEV-ES) is a professional organization. Their mission is *“to provide [educational] forums for the presentation, discussion and publication (through the official journal of the ASEV) of such research and technology developments for the advancement of wines, and the solution of problems of specific interest to the enology and viticulture of grapes grown in the Eastern United States and Canada”* (asev-es.org). Geographically, ASEV-ES membership ranges across all U.S. states east of the Rocky Mountains and Canada.

The July 2018 ASEV-ES Conference was hosted in King of Prussia, Pennsylvania and was attended by wine industry and academic members from across the United States. With the financial support from the Pennsylvania Wine Marketing and Research Board (PA WMRB), the ASEV-ES organization was able to invite national and international wine experts to educate attendees on how to manage high potassium retention in the vineyard and mitigate high potassium issues in wine during production. These speakers were featured in a half-day industry-focused workshop titled, “Taming High pH in the East.” Furthermore, these funds contributed to wine purchases of Pennsylvania produced wines that were highlighted during the duration of the conference.

BENEFITS TO THE COMMONWEALTH AND PENNSYLVANIA WINE INDUSTRY

As the conference was hosted in Pennsylvania, one natural benefit that occurred was the contribution to both local businesses and agribusinesses, including several Pennsylvania wineries.

Attendees were provided with opportunity to participate in a day-long Pennsylvania wine industry tour held on the first day of the conference. This tour traveled to three regional wineries with vineyards:

- Galen Glen Winery (Andreas, PA)
- Setter Ridge Winery (Kutztown, PA)
- Pinnacle Ridge Winery (Kutztown, PA)

These educational tours included tours of the vineyard and cellar, as well as detailed tastings to showcase premier Pennsylvania wines. Some examples of vineyard and winery tour discussions included, among others:

- Vineyard management challenges with natural weather incidents. Many attendees empathized with these challenges in their own grape growing regions.
- The emergence of the invasive spotted lanternfly, and how it is affecting Pennsylvania vineyards. Research on spotted lanternfly control was a pertinent topic of discussion.
- Wine production best practices to emphasize *terroir* while maintaining wine quality.
- Sparkling wine production techniques used to create local sparkling wines of distinction.
- Pairing local cuisine with local wines.
- The integration of gravity flow wine production operations and how it affects general winemaking practices.

From these tours, attendees and hosting wineries were able to learn from each other, and brainstorm unique lessons that could be applied both in the hosting winery as well as for those attending the conference.

Furthermore, several Pennsylvania grown and produced wines were purchased and showcased at the conference. These unique sensory experiences showcased variability in the Commonwealth's *terroir*, as well as featured the quality wine production that takes place in the state. It is through these exercises that visiting attendees can grow to appreciate the agricultural product, wine, produced in Pennsylvania.

Finally, funds granted from the PA WMRB were primarily used to sponsor an industry-focused half-day workshop on a growing viticulture (the science of grape growing) and enology (the science of winemaking) challenge for many Pennsylvania wine producers: potassium retention. The workshop titled "*Taming High pH in the East*" featured four key speakers, Dr. Tony Wolf (Virginia Tech University, VA), Fritz Westover (Westover Viticulture Advising, TX), Dr. James Kennedy (California), and Geoff Cowey (Australian Wine Research Institute, Australia). The discussion surrounding potassium retention and high pH is pertinent to Pennsylvania grape growers and winemakers, especially those in the southeastern and south central parts of the state. The clay-based soils in many of these regions are prime contributors to high potassium retention in grapes. Pennsylvania's general climate also contributes to some of these issues. Winemakers that purchase grapes from growers in these regions or grow estate grapes in these regions annually deal with winemaking challenges affiliated with high pH.

Dr. Wolf and Mr. Westover discussed viticulture challenges associated with high potassium retention in the grapevine: how potassium travels to the vine, soil and climate conditions that make potassium retention possible, and what vineyard management techniques may influence vine and grape potassium retention. These lessons were intended to provide grape growers with an understanding how potassium could affect their wine grapes. Furthermore, growers were left with management strategies to apply to their own vineyards.

Wine grapes high in potassium are problematic for wine production as it buffers the pH of the wine, leading to higher pH values in the wine. Higher wine pH's influence color stability, phenolic strength, sulfur dioxide activity, and microbial stability. As mitigating potassium retention in the vineyard can take years to remediate in the vineyard, Dr. Kennedy and Mr. Cowey discussed winemaking strategies to address both high potassium in wine and the side effects of having higher pH's in wines. While both topics are quite specific, they provided examples to winemakers on how and when to alter wine production techniques that would most benefit the wine quality and longevity when dealing with potassium retention in the wine.

Without the grant received from the PA WMRB, this detailed educational workshop would not have been possible. The workshop was timely and could address a complex issue that many Pennsylvania grape growers and winemakers deal with annually.

FUNDS EXPENDED

ME #44186821	DATE INVOICED	LINE ITEM 1: PENNSYLVANIA WINE PURCHASES	LINE ITEM 2: TRAVEL/SPEAKER EXPENSES/ HONORARIUMS, & WORKSHOP SUPPORT
Amendment Allocation		\$5,000.00	\$15,000.00
<i>Invoice 1</i>	<i>08/20/2018</i>	-\$2,005.88	\$0.00
<i>Invoice 2</i>	<i>08/21/2018</i>	\$0.00	-\$11,991.59
<i>Invoice 3</i>	<i>08/21/2018</i>	\$0.00	-\$2,636.52
Total Remaining		\$2,994.12	\$371.89

A total of \$3,366.01 was not used for this grant due to a delay in the release of funds by the State, which was out of the control of grantees. Unfortunately, the full release of funds did not occur until after the close of the conference, causing the leftover funds stated above.