

**Year-end Report  
Virginia Wine Board, September 2014**

**Title:** Enology Extension Specialist

**Principal Investigator:**

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**Type of Project:** Extension

**Amount funded:** \$72,191

**1. Objectives For 2014**

1. Support the growth and development of Virginia's wine industry through the expansion of educational extension programs and applied enological research.

- Provide additional workshops across VA including wine filtration workshop, wine faults detection and home winemaking workshops.
- Work with Enology services lab to offer advanced testing such as RT PCR for wine spoilage organisms.
- Collaborate with Greg Peck and Amanda Stewart to offer Cider Production workshop.

2. Provide written and oral educational resources to existing and potential wine industry practitioners

- Continue work with CMS Ensemble to get website live.
- Work with Amanda Stewart, Ken Hurley and Ann Sandbrook on new enology question/answer option for website.

3. Provide an educational bridge between vineyard practices and the wine production practices that directly impact wine quality.

- Work with local extension offices to provide educational resources to growers and winemakers in collaboration with Tony Wolf and Tremain Hatch.
- Assist students of Tony Wolf with applied research projects involving winemaking.

## **Achievements**

- Presented VT Wine School July 21-25. Workshops included presentations on harvest preparation, faults detection and juice analysis.
- Received grant funding from VA Wine Board for studying enhanced grape dehydration techniques.
- Worked with CMS to develop question and answer forum on new enology website.
- Travelled to Eastern shore to visit wineries and distribute workshop information.
- Collaborated with Tremain Hatch at IPM vineyard meetings and VT Wine School to introduce impact of vineyard practices on wine quality issues.

## **Results**

- The technical growth and development of Virginia's wine industry was enhanced through the expansion of educational extension programs.
  - Multistate Extension Collaborators:  
  
Denise Gardner, Penn State University  
Michael Leonardelli, University of Missouri
  - Multistate Extension Involvement:  
  
Presentation at Penn State Wine Conference (Bottling Line Sanitation) and PA Enology and Viticulture research conference (Aromatic Profiling of Petit Manseng). Allowed winemakers in the north east to be exposed to optimum bottling line sanitation issues and current research in vineyard nitrogen applications and its impact on volatiles.  
  
Collaborated with Univ. of MO presenting MO Wine School and VT Wine School. Winemakers in MO and VA benefited from regional expertise of extension specialists working with unique grape varieties that may show promise for their region. These programs addressed the needs of winemakers that would otherwise not have the opportunity to attend.

## **Submitted and funded**

Kelly M., B. Zoecklein. July 2014 - June 2015. Creating Amarone-Style Wines using an Enhanced Dehydration Technique. Virginia Wine Board. Total Amount: \$28,231. 80% Participation.

## **Course and Curriculum Development**

- Food Science and Technology: Fermentation Option. Instructional Development Type: Curriculum. Served on committee to develop Fermentation option for FST.
- February 25-27. Attended VCE Professional Development Winter conference presentations including Innovative Techniques in Extension Outreach. Presented VA Cider Styles at Commercial Hard Cider Production session.

## Meetings Led/Organized

- June 2014. Wine Filtration Workshops. Mt. Jackson and Meadows of Dan. Organized and presented. Arranged for presentation by industry filtration representative. Scope: In-state. Attendees: 38.
- July 2014. VT Wine School. Blacksburg. Organized and presented. Arranged for invited speakers from Scott Labs, Missouri Extension, VT Food Science and VT viticulture extension. Scope: Regional. Attendees: 30.
- July 2014. Basic Juice Analysis Workshop. Blacksburg. Organized and presented. Arranged for Missouri extension specialist as guest speaker. Scope: Regional. Attendees: 26.

## Boards, Commissions, and Advisory Committees

Loudon Co. Viticulture and Enology Center Working Group. My Role: Serve as a member of the working group to provide input to research group examining feasibility of a viticulture and enology program in Loudon County.

## Additional

Molly Kelly conducted the following activities over the 2014 fiscal year as part of her 100% time commitment to enology extension activities:

- Conducted 37 on-site-winery visits for introduction, tour facility, advise clients on variety selection, evaluate processing difficulties and technical assistance concerning wine quality, etc.
- Approximately 72 telephone conversations/emails with winemakers concerning winemaking questions/issues, establishing new wineries.
- Consults with Enology Services Lab: 35
- Participated in winemaker's roundtable with Bruce Zoecklein May 14 in Linden. Approximately 15 attendees.

Travel expenses totaled \$7,852.15

Supplies and materials (\$3,334.82)/Miscellaneous Contractual Services (\$1,023.00) purchased with project funds included workshop supplies, copy services, catering, miscellaneous lab supplies.

## Plans

Cider Production Short course: November 6-7, 2014

Pre-harvest visits: Eastern Shore

Post-harvest workshops: Advanced Laboratory Analysis, Fault detection

**Summary:** Objectives listed above were achieved as proposed. The Virginia Wine Board has enabled Virginia Tech to provide greater educational resources and support to Virginia wineries by hiring an Enology Extension specialist and funding travel and material costs. The enhanced technical support of wine producers funded by this grant will assist Virginia winemakers in making the most appropriate winery decisions affecting wine production and wine quality.