



Virginia Cooperative Extension

Virginia Tech • Virginia State University

VITICULTURE NOTES Vol. 29, December 2014

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<http://www.arec.vaes.vt.edu/alson-h-smith/grapes/viticulture/index.html>

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I. Current situation:

This year-end Viticulture Notes is a compilation of a number of news bits and pieces as well as some items to look forward to in the coming year, including meetings and vineyard workshops. We will be resuming more in-depth vineyard management discussions in the new year. In the meantime, the viticulture team at the AHS Jr. AREC sends you our best wishes for a safe and festive holiday season!

II. Nutrient Management Plans and Virginia Vineyards

Greg Klingler, Research Specialist, AHS Jr. Agricultural Research and Extension Center

Nutrient management is a discipline whose aim is to maintain maximal crop yields while protecting water quality, and a common subject of discussion for policymakers and agricultural producers. A nutrient management plan is a collection of information used to assess fertilizer needs for a specific site, such as a vineyard block. In Virginia, these plans are written by private consultants certified by the Virginia Department of Conservation & Recreation (DCR), and by DCR nutrient management specialists.

A list of these planners can be found at the DCR website:

www.dcr.virginia.gov/soil_and_water/nutmgt.shtml.

The information contained in a nutrient management plan includes soils data, expected crop yields, evaluations of soil and geological factors that can increase the likelihood of water pollution arising from the site, soil test results, and expected nutrient removal by the crop. For vineyards, it is also important to have information on petiole nutrient analysis and crop levels. This information is compiled in order to determine the correct rate, timing, and placement of fertilizers to deliver nutrients to the vines without negatively impacting water quality.

The nutrient management planning process was initially conceived for row crops, small grains, or pasture that received animal manures as fertilizer, and was primarily focused on nitrogen, phosphorus,

and potassium fertilizers, all of which are used at relatively high rates with these agronomic crops. Any nutrient management plan for wine grapes, a perennial crop with low nutrient demands, should have a different emphasis than that used with row crops or small grains. For high-yielding annual crops, nitrogen applications are based on nitrogen expected to be removed with the crop; for phosphorus and potassium, applications are based on soil test phosphorus and potassium levels. For grapevines, leaf petiole analysis and tracking nutrients other than just N, P, and K is important to maintaining grape quality. Nutrient management is an important component of an overall strategy to produce good yields of high-quality grapes, and a nutrient management plan is a great opportunity to take the data and ask the questions that can help you assess how effectively your vineyard management strategy is working.

Who needs a nutrient management plan?

Virginia's nutrient management planning program, administered by the DCR, is largely a voluntary program. However, in some situations, vineyard owners may find that a nutrient management plan is required under state law. Nutrient management plans are required as part of a number of agricultural cost-share or income tax credit programs, such as the building of agricultural chemical handling facilities or purchase of pesticide application equipment. For specific questions regarding nutrient management plans and agricultural cost-share or tax credit programs, contact your local soil and water conservation district office of the USDA's Natural Resource Conservation Service (NRCS) ([for Virginia, click here](#)). Nutrient management plans are also required by the Virginia Department of Environmental Quality for agricultural fields where biosolids are applied. Nutrient management plans are generally required for growers whose vineyards are within the counties of the Tidewater region of Virginia on land that falls within Resource Protection Areas. Again, contact your local NRCS office to determine whether you fall under this jurisdiction.

While nutrient management plans are currently voluntary for most Virginia vineyards, it is questionable whether this will continue to be the case indefinitely. Due to continued concerns over the health of the Chesapeake Bay, virtually all farmers in the state of Maryland have been required to have nutrient management plans since 1998. Between the Chesapeake Bay, Mississippi River, and Albemarle and Pamlico Sounds, almost the entire state of Virginia is contained within watersheds impaired by nitrogen and phosphorus pollution, so it is not unrealistic to expect more oversight for Virginia farmers in the future. Luckily, nutrient management plans are fairly easy to develop and implement. As with so many aspects of operating a business, good recordkeeping is worth its weight in gold- if you have good records now, it will be a much smoother transition if and when the regulatory landscape changes. As nutrient management regulations evolve, it is also important to remember that this is an opportunity to improve vineyard management and to address the general public's concerns over agriculture's impact on the environment that ultimately drives regulations. To that end, development of a vineyard nutrient management plan is one of the queries (#17 of the pre-plant phase of vineyard establishment) in the Virginia Vineyards Association's "Sustainable Winegrowers Self-Assessment Guide"

- *Greg Klinger is a research specialist at Virginia Tech's AHS, Jr. AREC. Greg holds an MSc degree in agronomy and has continued to take plant nutrition coursework and attend DCR-sponsored workshops on nutrient management since his hire by Virginia Tech in 2013.*

III. Survey of USDA/NIFA research project's impact

Tony Wolf, Viticulturist, Virginia Tech

I wish to call your attention to an industry survey that you *might* have recently received from Virginia Tech's Center for Survey Research (I say "might", because the survey was sent to about 1200 producers

throughout the eastern US). The survey was initiated by myself and Dr. “Jay” Jayaratne (Evaluation Specialist, North Carolina State University), and by our colleagues on a USDA/NIFA project that we have been engaged with over the last four years. The purpose of the survey is to gauge what you have learned or applied in your operation during the last 3 years with respect to some of our communications about the project, entitled “*Improved grape and wine quality in a challenging environment: An eastern US model for sustainability and economic vitality*” funded by the USDA’s National Institute of Food and Agriculture’s Specialty Crops Research Initiative program. If you attended the VA Vineyards Association’s annual winter technical meeting in February 2014, for example, you were exposed to a full-day research summit highlighting some of the research results from the project. You can find much more detail about the project through a web search including the terms SCRI, Virginia Tech, Wolf, and USDA/NIFA in your search query (I’m purposefully not including a direct hyperlink to the site).

Your responses and opinions will be extremely valuable for us to determine the outcomes of this project and plan future research and Extension work to effectively serve industry needs.

I would greatly appreciate it if you respond to this survey if the Center for Survey Research has sent you the link to the survey instrument. You can ignore this if you have NOT received the survey invitation. The survey will take about 10-15 minutes to complete.

Thank You.



IV. USDA Provides Greater Protection for Fruit, Vegetable and Other Specialty Crop Growers

Allison Wash, USDA Farm Service Agency

For several years Farm Service Agency (FSA) has offered a program called the Noninsured Crop Disaster Assistance Program (NAP). This program has provided a low level of coverage for agricultural commodities when Federal Crop Insurance (FCIC) did not provide coverage at the catastrophic level. On December 12th 2014, the US Secretary of Agriculture announced new provisions for the NAP program, which was allowed under the 2014 Farm Bill. Producers will now have the option to purchase coverage at a higher level; this new coverage is being referred to as “buy-up”. NAP will have loss thresholds as low as 35%, with a 100% price option. This is a major change to the program and one that can now provide reliable and respectable risk management coverage to crops that FCIC does not offer.

In uncertain economic times, the importance of risk management on America’s farms is at an all-time high. With the cost of seed/stock, fertilizer and harvesting inputs on the rise, American producers cannot afford to go unprotected. Risk management is a vital tool to protect a producer’s investment in a crop.

This coverage is being offered beginning with the 2015 crop year. However, we have several crops whose application for coverage closing date has already passed. Those include (but are not limited to): aquaculture, Christmas trees, turf sod, orchards, vineyards, fruit-bearing bushes, strawberries, honey

and maple sap. FSA is offering a retroactive application for coverage to producers of these crops for the buy-up option only. **The application for closing date for these crops is Wednesday, January 14, 2015.**

Attached is an electronic version of a postcard that was sent to producers who had reported acreage for any of the affected crops. However, in Virginia, there may be several producers who are not current FSA customers, and therefore, will not receive the postcard. A Web Tool that offers assistance in determining the level of coverage needed can be found here: <http://fsa.usapas.com/NAP.aspx>. Producers need to contact their local FSA Office with questions and to file an application for coverage. A County Office Directory can be found here: <http://offices.sc.egov.usda.gov/locator/app?state=us&agency=fsa>.

V. USDA's Tree Assistance Program (TAP) : Financial support for replacing vines lost due to cold injury
Tremain Hatch, Viticulture Research/Extension Associate

We discussed the TAP program earlier this year, but call your attention to it again here at the end of 2014 due to some impending deadlines. For damage or vine loss that occurred between Oct. 1, 2011 and Dec. 31, 2014, the application and supporting documents must be submitted by Jan. 30, 2015. For injury/loss that occurs in 2015, the application deadline will be the later of: within 90 days of the disaster event, or the date when the loss is apparent.

TAP was authorized in the 2014 Farm Bill to provide financial assistance to qualifying growers to replant trees and vines killed by natural disasters. Vine *mortality* in excess of 16% (15% mortality to meet disaster threshold and adjusted 1% for normal mortality) within a block is a requirement for this program; however, there is also a "rehabilitative" provision in the program which can provide financial assistance (up to 50% of actual costs in excess of 15% base level of damage) for the cost of retraining injured grapevines.

Please read the fact sheet for more information:

http://www.fsa.usda.gov/Internet/FSA_File/tap_2014.pdf

This is a two-page fact sheet that is well worth your time reading if you have sustained appreciable vine damage due to the recent winter. It is also important to note that a FSA representative may need to visit your site to observe and document the nature of damage. Therefore, if you wish to take advantage of this program, don't remove killed vines until the FSA representative has visited your site.

To proceed, contact your local Farm Service Agency Office. Go to the following site

<http://offices.sc.egov.usda.gov/locator/app?state=va&agency=fsa>

and follow the directions for finding your representative FSA office. Please have on hand a starting inventory of your damaged vineyard block(s) (number of vines) and an estimate of vine mortality.

VI. Upcoming meetings

There are a number of meetings on the horizon here in Virginia and in surrounding states. We'll provide reminders about these meetings as their occurrence nears, but get them on your calendars now if you're interested in attending. In addition to the meetings listed here, Tremain Hatch, Mizuho Nita and VCE extension agents in some of the principal grape growing counties are putting together a series of IPM and indepth vineyard meetings for the 2015 spring and summer. We'll pass along that information as the details are pinned down.

A. 2014 Virginia Cooperative Extension pruning workshops

Specialists with Virginia Tech's AHS Jr. AREC and local Virginia Cooperative Extension agents will conduct two commercial viticulture pruning workshops in January. These workshops will involve classroom style presentations followed by guided practice in the vineyard. Both programs will provide a review of the fundamentals of dormant pruning. Moving to the vineyard we will then focus on pruning strategies for vines with winter injury and crown gall where trunk-renewal and retraining are necessary to compensate for injury sustained in the 2013/2014 winter.

When: January 19th 2015 (Central Virginia) @11:30am

Where: Democracy Vineyards <http://democracyvineyards.com/>
585 Mountain Cove Rd.,
Lovingson VA 22949

When: January 23rd 2015 (Northern Virginia) @ 11:30 am

Where: Desert Rose Ranch and Winery <http://desertrosewinery.com/>
13726 Hume Road
Hume VA 22639

Details for both pruning workshops:

- Meet at 11:30 am at the winery
- Bag lunch indoors at the winery (*bring your own lunch*)
- Session ends by 16:00
- No registration or cost; open to all
- *Bring pruning shears and prepare to be outside rain or shine*

If you are a person with a disability and desire any assistive devices, services or other accommodations to participate in this activity, please contact Tremain Hatch, AHS Jr. AREC at (540) 869-2560 ext. 11 during business hours of 8 a.m. and 4 p.m. to discuss accommodations 5 days prior to the event.

*TDD number is [\(800\) 828-1120](tel:8008281120).

B. Introduction to mid-Atlantic wine grape production

When: 5 February 2015

Where: Omni Hotel, Charlottesville VA (part of the VVA's winter technical meeting)

Registration: At VVA website (<http://www.virginiavineyardsassociation.com/>)

Details: This will be a team-taught program designed for those either exploring grape production or recently engaged in wine grape growing. Program will be followed by a reception with experienced grape growers and winery representatives.

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|---------|--|
| 1:00 pm | Introduction and market opportunities
<i>Tony Wolf, Virginia Tech</i> |
| 1:30 pm | Vineyard business planning considerations &
Vineyard Calculator – predicted cash flows
<i>Tremain Hatch, Virginia Tech</i> |
| 2:00 pm | Variety/clone/rootstock considerations for the mid-Atlantic
<i>Tony Wolf</i> |

- 2:30 pm Winery perspective on grape varieties that wineries are seeking to purchase
Skip Causey, Potomac Point Vineyard and Winery
- 2:40 pm Vineyard site evaluation and environmental challenges
Tremain Hatch
- 3:20 pm Fundamentals of vine management
Cain Hickey, Virginia Tech
- 4:00 pm Fundamentals of grape integrated disease management
Mizuho Nita, Virginia Tech
- 4:40 pm New Growers Perspective on Successes and Failures
Karl Hamsch, Loving Cup Vineyard and Winery
- 4:55 pm Overview of PVCC wine industry training opportunities
Greg Rosko, Piedmont Virginia Community College

C: Virginia Vineyards Association's winter technical meeting

When: 6 -7 February 2015

Where: Omni Hotel, Charlottesville VA

Registration: At VVA website (<http://www.virginiavineyardsassociation.com/>). The meeting is open to all, not just VVA members. The program timing details are provided at the VVA website. The following provides a bit more explanation as to what each topic will cover, day by day.

Thursday, 2/5/2015 (Three options)

1:00-5:00 pm: Track A: Commercial winegrape production primer (Hatch, Wolf and others)

1:00-4:00 pm: Track B: Governor's Case Presentations (Jay Youmans)

1:00-4:00 pm: Track C: Basic fruit analysis (Molly Kelly)

Friday 2/6/2015

8:30 am: Virus disease panel discussion

Panel discussion will review important viruses of grapevine in the mid-Atlantic with special attention on latest developments of leafroll and red blotch viruses and vectors. Panelists include Marc Fuchs (Cornell University), Taylor Jones (Virginia Tech), Lucie Morton (consultant) and Mizuho Nita (moderating).

10:10am: Matching varieties to climate and potential impacts of climate change

Dr. Greg Jones, Southern Oregon University is a leading world authority on the predicted impacts of global warming patterns on winegrowing, particularly as related to matching varieties with suitable thermal environments. Greg last spoke to the Virginia winegrape industry at the "Wine, Grapes and Environment" symposium held in Roanoke in 2004.

11:00 am: Industry Updates

1:15 pm: Current and future volatile herbicide drift issues panel discussion

Topic will address current issues related to 2,4-D and dicamba herbicide drift issues in Virginia and the potential of additional threats posed by growers of 2,4-D and dicamba-tolerant cropping systems that will likely be hitting the markets in 2015 and beyond. Panelists will include Tony Wolf, Doug Doohan (The Ohio State University), and Tom Burke (VA Department of Agriculture and Consumer Services)

2:15 pm: Research update: The role of soil mineralogy in potassium uptake by wine grapes (E. Beasley and Lucie Morton). Presentation on VA Wine Board-funded research project.

3:00 pm: Vineyard Renovation/ replanting panel

Panel will explore the factors considered when deciding whether to replant or redesign and reinstall a vineyard. If given the option, does one reconfigure the row width and direction, inrow spacing, use newer varieties and clones, and how do the economics play out? Panelists will include Jim Law, Tremain Hatch, Jeanette Smith, Hunter McCulloch and Scott Elliff.

5:00 pm: "James MacKenzie Student Scholarships" and VVA's "Grower of the year" presentations

6:00 pm: Wine Reception, 6:00 to 8:30 pm

Saturday, 2/7/2014

8:30 am: Research Updates: Grape ripe rot (Charlotte Oliver) and North American Grapevine Yellows (Paolo Lenzi and Tony Wolf). Presentation on VA Wine Board-funded research projects.

8:30 am: [Breakout session] Interactive design of disease management program.

Dr. Mizuho Nita provides an in-depth discussion of what to consider in designing a disease management program for the coming year: factors affecting disease, chemical and cultural control measures, and fungicide resistance management are discussed.

9:30 am: Retraining and recovery of cold-injured grapevines

Tony Wolf and Mizuho Nita illustrate practical measures for dealing with vines injured by cold during the 2013/2014 winter. Special attention is given to removal of crown gall affected trunks and cordons, and wound protection measures when large cuts are necessitated.

9:30 am: [Breakout session]: Vineyard leasing options panel.

Jim Benefiel leads a discussion of vineyard leasing options, including short-term and long-term options

10:45 Spotted wing drosophila management (D. Pfeiffer)

Dr. Doug Pfeiffer reviews the status of SWD, including prevalence in Virginia and cultural and chemical management options.

11:30 am: Virginia Vineyards Association's Business Meeting

1:30 pm: Viognier-viticulture panel. Panelists Tony Wolf, Chris Hill and Mark Fedor will review the viticultural strengths and weaknesses of Viognier under Virginia conditions. This Rhone variety was declared Virginia's "signature" grape variety in 2011, mainly on the basis of its quality, rather than its quantity...

3:00 pm: Viognier – wine tasting. Tastings of Virginia (and other) Viogniers and discussion led by Marti Mueller, formerly with Barren Ridge Winery.

VII. Positions sought or wanted:

Seeking Experienced Vineyard Manager:

Stone Tower Winery in Leesburg, Virginia is seeking a Vineyard Manager with super premium wine grape production experience to manage an existing 30 acre estate vineyard and oversee the development of an additional ten to twenty acres of vineyards per year for the next several years. This is a salaried position with a compensation package based on experience. The successful candidate will report directly to the Director of Winemaking and Viticulture. This position will be a dedicated, full-time job for the successful candidate who should consider themselves qualified due to their education, experience, strong sense of urgency, and the desire to lead by example. All interested parties should forward resume and salary history to lacey@stonetowerwinery.com

Seeking Vineyard Management Position:

Candidate seeking full time employment as vineyard manager in northern Virginia. Served as daily manager of 10+acre wine grape vineyard (*Vitis vinifera* varieties) for 2014 vintage. Experienced in all aspects of vineyard management including equipment operation and maintenance; prioritization of daily work schedules; supervision of labor crew; new planting installation; vine/crop management; pesticide handling and application; dormant pruning; and harvest. Familiarity and some experience with cellar practices. Possesses abundant energy, strong problem solving, budgeting, and computer skills; a Private Applicator license with VDACS; and some Spanish fluency. Seeking communicative team atmosphere in which to grow high quality wine grapes, continue evolving as a viticulturist, and contribute to the Virginia wine industry. Available immediately. Resume and references upon request. Thank you.
simbelmyne6@hotmail.com
703-795-0344

Seeking Experienced Winemaker and Vineyard Manager:

Chateau O'Brien in Fauquier County is seeking a winemaker and vineyard manager. 2500-case winery; 5 acre vineyard but growing to 25 acres. Send CV and references to Howard O'Brien (howard@chateauobrien.com), or call 571-238-0033.