

The Quarterly Newsletter of the Virginia Vineyards Association

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Grapevine Viruses in Virginia

— and updates on some of the newly found grapevine viruses

Mizuho Nita, Department of Plant Pathology, Physiology, and Weed Science, Virginia Tech, Winchester, VA

Leaf roll survey 2009-2012

As many of you know, our lab has been conducting a survey of some of the important viral diseases of grapevines since 2009, with supports from the VA Wine Board and the Viticulture Consortium-East. To date, we visited 77 vineyards around the state. More than 1,300 samples from vineyards and 100 samples of wild grapes have been tested for viruses. In this study, we tested for three viruses: two types of Grapevine Leafroll-associated Viruses (GLRaV-2 and -3) and grapevine fleck virus (GFkV). GLRaV-2 and -3 are causal agents of Grapevine Leafroll Disease (GLD). The rationale behind the selection of these viruses was that GLRaV-2 and -3 are very common viruses around the world, and the presence of mealybugs (vectors of GLRaV-3) was noted in many of VA vinevards. Also, GFkV can be very problematic if both GFkV and GLRaV-3 infect a vine at the same time.

We found that 8%, 25%, and 1% of our samples contained GLRaV-2, GLRaV-3, and GFkV, respectively. Moreover, since we collected multiple samples per vineyard, we found that 64% of visited vineyards had at least one infected vine sample. Table 1 shows a summary of sampled varieties and percentage of virus-positive vines. As far as GFkV is concerned, our conclusion so far is that this virus is not a big threat in VA. By itself, it does not cause major damage on grapevines; however, when a vine is infected with GFkV and GLRaV-3, it can cause symptoms of GLRaV-3 (lack of

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VVA Board of Directors Election Results

ecember 31st ends the current Board Members tenure and new members take up their posts on January 1, 2013. The nominations for these posts have been confirmed and these are your elected officers for the next two years:

President: Thomas Kelly, Rappahannock Cellars Vice President: James Benefiel, Benevino Vineyards Secretary: Karl Hambsch, Hambsch Family Vineyards Treasurer: Kay Thompson, Rockbridge Vineyards

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President's Corner ...

By Bill Tonkins, VVA President

have just come in from Toby's field to write my last President's Corner and it brought back memories of October 2010 when Patricia and I were working on how to best lay it out for a new vineyard of Sauvignon Blanc that we planted this year. Dick Thomas called me and asked if I would not mind being put forward to serve on the Board of Directors of the VVA as President. I protested that I had only been working in the vineyard for less than a year and was not nearly qualified for the job. Experience was not a criterion it seems and that fact

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Special thanks to Mizuho Nita, Turtle Zwadlo, Pete Johns, Dean Triplett, Katie Hellebush, Christine Vrooman, Bob Garsson, Jim Benefiel, Tom Kelly



Regional Reports

Central Virginia Regional Report

Turtle Zwadlo, Pollak Vineyards

As the year winds down it is usually a time to reflect on the past season but with so much going on I find it difficult to do anything but look forward to and prepare for the next. However now that the wines are resting and our winemaker has a comfortable smile it will go down in the books as a successful year. White varieties came in very clean and ripe while the reds had good maturity and tannic structure that surpassed the expectation for the brix levels at harvest. Reds across the region plateaued starting around 20 brix and higher numbers were a long time coming with no explanation other than it was "the nature of the season." This vintage will be the opposite of 2010 that brought rapid and excessive sugars with the resultant high alcohol wines.

2012 certainly had its usual share of challenges and typical Virginia viticulture nail biters but many growers are perhaps more concerned about glimpses of potentially big problems in the future. Many of us in Central Virginia had to deal with not one but two new invasive fruit flies. The Spotted Wing Drosophila was identified in Amherst, Nelson, and Albemarle counties, ruining several crops. I did not successfully capture any here at Pollak but we and several other neighboring vineyards positively identified the Brazilian Zaprionus indianus which moved into red varieties at around 20 brix and caused early harvesting of effected fruit to avoid total crop loss.

A couple of personal observations about this pest, it seemed to show up first in fruit already

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winemakingconsultant@gmail.com Winemaking solutions focusing on: Winery and vineyard start-ups Still and sparkling wines General winery issues Food Science Degree – Virginia Tech compromised from bird damage, and a couple of cold nights in mid-September significantly reduced the population. The big concern now is how do we effectively combat either of these fruit flies both of which reproduce faster than we can spray for them, and just how devastating to the overall vineyard environment will it be to try to keep up with them?

Many feel both pests are moving into our area as a result of continuous mild winters although that is speculation, unlike the return of Pierce's Disease. Area vineyards reported observing symptoms of PD, and I had samples tested which proved positive for the disease. Dr. Mizuho Nita at Virginia Tech reported PD was found throughout the state in his sampling. Certainly what we need now is a nice cold winter to help control this additional challenge in our vineyards.

As if all of that wasn't enough to contend with another new virus, Grapevine Red Blotch associated Virus, seems to be posing a threat, although the industry is in the very early stages of detection and discovery and no one is sure what it potentially means to us here. Early concerns are that it retards maturation and sugar accumulation enough to seriously impact late season reds. We will be watching closely as this develops.

Regardless, area vineyards are responding with a positive outlook and a flurry of activity that reflects the healthy economic growth of the industry at large. Pre-plant preparations are in full swing at several sites, including King Family Vineyards who will be adding seven acres of vines in spring. Grace Estates will join the Appellation Trail when their new tasting room opens which is currently under construction, and they already have wines in the bottle ready for opening day. It seems I hear of a new vineyard operation somewhere in the region on a regular basis and we hope to see many new faces at the VVA winter technical meeting.

Here at Pollak we have started some redevelopment of existing vineyard. I pulled an acre and a half of 10 year old Merlot that has been in decline from what seems to be a combination of possible poor stock nursery material and a degenerative disease. We are taking the opportunity to remove all the existing infrastructure, work the field which will lie fallow until 2014, and try out some closer spacing when we replant. We are also converting some of our cordon trained vines to cane. As our vineyards mature it is becoming evident they have different needs and a homogenous management strategy is no longer appropriate for the longevity of some blocks. It looks like the winter season will be anything but restful.

Happy Holidays and I hope to see you at the Winter Technical Meeting.

Eastern Virginia

Pete Johns, New Kent Winery

As the colder weather converges on our region and our vines become dormant, we can catch our breath as we look back on the past growing season and reflect on our crop.

In general this region produced good quantities of grapes with better than average quality, especially with the white varieties. However the red varieties, no matter how long they hung on the vine, did not ripen properly and they did not produce the deep colors that were desired. Ironically as these grapes went into production many of us were presently surprised to see deeper colors extracted from these grapes than we expected, others have not faired as well.

Despite the fact that Hurricane Sandy made her presence felt throughout the entire Mid-Atlantic, we remain about 6 - 7 inches shy of our normal rainfall for the year. If the old timers are correct this winter will bring more snow than usual and colder temperatures. Snow is a good thing and it will certainly improve our water tables prior to spring.

I have asked many growers if they experienced pressure from a number of different factors. Regarding stink bugs, most growers reported little or no pressure from these most unusual insects. It seems, however, that the growers located closest to the Bay did experience light pressure. Many of these growers were properly prepared and sprayed for quick knockdown just before harvest to avoid contamination issues.

Pierce's Disease is still a constant menace for all of Virginia and also in our region, especially in the Chardonnay grapes. As in the past I strongly recommend the use of a systemic such as Admire Pro drilled into the soil and absorbed by the vines to help prevent this serious problem. The use of this product certainly has worked well in our vineyard.

Several growers did experience limited damage by the Spotted Wine Drosophila. Ironically, the breeding cycle for this new pest seemed to be disrupted following normal spraying schedules. In some vineyards a few individual grapes were affected with minimal damage. As the cluster matured, these affected grapes dried up and did not damage the remaining grapes within

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Regional Reports

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the cluster. More damage was seen on the outer rows of affected vineyards and more damage was reported in red varieties than in whites. We should all be watching closely for this insect as the next season approaches.

One or two growers in this region also reported a new problem - Red Blotch genimi virus. More details will be covered on this new crisis in another section of this newsletter.

Summary for the Region: Good quantities of fruit, with better than average quality of fruit. Luckily we experienced no serious damage from the super storm, Hurricane Sandy.

Northern Virginia

Dean Triplett, Greenstone Vineyard

As the vintage of 2012 sits in tank and barrel, it's time to look back and try to assess how the season progressed. In emails with other vineyards and wineries in our region, some common threads seem to have emerged. The two most common seem to be a smaller than anticipated crop, and high quality of fruit harvested. At Willowcroft we certainly saw both. Crop was down from projections, on average about 15 percent in nearly all varieties. Our Cab Franc seemed to be the least affected of our harvested fruit. Fruit quality in all varieties was very good. 2012 hopefully will rank with the vintages of 07 and 10 for wine guality. Some of the numbers we saw in the fruit we harvested or purchased: Chardonnay 22.4 degrees brix, 3.4 pH and .66 TA; Riesling 20.2 degrees brix (big for us), 3.3 pH and .81 TA; Albarino 23.7 degrees brix, 3.4 pH and .74 TA; Petit Manseng (which we buy) 28.2 degrees brix, 3.1 pH and .85 TA; Cabernet Sauvignon 23.4 degrees brix, 3.2 pH and .82 TA; Merlot 22.6 degrees brix, 3.4 pH and .66 TA. One of our Petit Verdot plots came in at 28.1 degrees brix, 3.2 ph and .91 TA. The other two Petit Verdot plots we grow had brix of 25 and 26 degrees. We purchased some Chardonnay from a grower near Middleburg that came in with 21.6 degrees brix, 3.7 pH and .59 TA. We had one plot of our Cabernet Franc that came in at 25 degrees, brix, 3.7 pH and .46 TA. This Cab Franc and the Chardonnay came in with highest pH's and lowest acidity of any fruit we processed.

Stephen Mackey of Notaviva Vineyards saw both low yields, due to poor fruit set, and high quality. Stephen said he saw this same situation in most of the vineyards he purchases fruit from, some as low as half of projected yields. He asks the question, was the high quality due to the lower yields or excellent weather during the season? Sort of a chicken or the egg question. I tend to fall into the weather being the driving force category. However, there was one particular vineyard in our area that I'm aware of that was significantly over cropped, and the fruit never did fully ripen. So yield at least in this case had a major affect.

While many vineyards complained of low yields, the situation was not universal. Tom Kelly of Rappahannock Cellars saw mostly a normal to slightly higher crop in many varieties as did Nate Walsh of Sunset Hills Vineyards. Both did report smaller yields in some varieties. Petit Verdot for Tom and Petit Verdot and Viognier for Nate. Both reported good to excellent quality, but Tom noticed something that we saw here at Willowcroft as well. Fruit ripening in some later season varieties seemed to hit a wall for several weeks. The fruit just hung there with no movement in sugars or acids. Then the acids would start to drop precipitously, forcing harvest. Nate noticed a difficulty in some varieties to fully ripen seeds, especially in early reds like Merlot

Beyond fruit quality and quantity, some other interesting things were noticed by these same growers. Tom saw an increase in Spotted Wing Drosophila (SWD), and increased incidence of Pierce's Disease. On the upside he saw fewer incidences of North American Grapevine Yellows (NAGY). Brian Toy of Stone Tower Vineyards saw less NAGY and no SWD in their young vines. The three year old Chardonnay and Viognier vines had seen

lose due to NAGY, but this season saw none. He did see some NAGY in some of their second leaf red varieties though. One thing that Brian tried this year was increasing the number of Blue Bird boxes and he feels this might have helped with lower NAGY in his whites. Tom thinks an increased insecticide program may have helped with his lower NAGY infected vine numbers. Nate Walsh saw uneven shoot growth and uneven bloom which he attributed to cooler, rainy weather early in the season.

The summer, while hot for everyone in July, saw moderation of temperatures in August. While hot temperatures may have been common for all of us, rainfall was not. Where we are located on the Catoctin ridge, which is pretty much in the center of Loudoun County, we got rain infrequently and only in moderate amounts. Vineyards to the west of us near Front Royal on the Blue Ridge, saw considerably more rainfall, as did vineyards to the north of us. Many times a storm would come through and dump rain north of Leesburg, while we'd get only a few sprinkles. I put down eleven sprays this year, one less than what I consider normal. A vineyard I know of slightly south east of Front Royal put on nineteen sprays. We're barely an hour apart as the crow flies but in some ways worlds apart when it comes to managing a vineyard. Next year the situations could be reversed.

George Wilson reports to me that the Winery at Bull Run has expanded its Norton vineyard by two acres. They plan more off site expansion as well. Brian Toy of Stone Tower Winery has expansion of their vineyard in mind as well. They are looking at twenty plus acres in the next year or two. Ground breaking for their winery is scheduled for this spring. Over here at Willowcroft, we're planning on ripping out some of our old virused Cabernet Franc and replanting with Merlot and Petit Verdot. We'll also be ripping out some Seyval and replacing it with Vidal.

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President's Corner

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was reinforced by Bill Reiss at our last winter's meeting. He asked me if I was going to run for the Post again this year and I said I had not planned to. He said that "I should; I should run until I get it right!"

Well I am not sure how to take that but I am extremely grateful for the opportunity to be your President. My 2 years have just flown by and it has put me in touch with so many wonderful people - knowledgeable people that I doubt that I would really have got to know so well had I not been working for the VVA. They have helped me out no end and taught me so much on what has been a steep learning curve for me.

Well my tenure and the tenure of your current Board Members are up at the end of December. The 2 years have been fun and I want to thank them for their help.

First, I am very happy that Tom Kelly will be taking over as President. He is a career grower who, besides serving as our Secretary for the last 2 years, has been active in the Sustainable Viticulture Working Group. They are now moving forward with an online workbook that will promote good science driven grape growing practices. Tom will tell us more about this at our winter meeting but suffice it to say that it is important to our industry and he is just the man to lead this effort.

Dick Thomas, who has served for 4 years as Vice President, is handing over to Jim Benefiel. Thank you for your support Dick and for agreeing to continue to represent us on the Department of Game and Inland Fisheries Wild Turkey Stakeholder Committee. And Jim, thank you for stepping up for another term on the Board. Jim is a dedicated grower who is very active in the Association, whether it is helping to run a new grower workshop or lead us on a trip to Bordeaux. He has also been instrumental in pulling together our grant proposals for the Sustainable Viticulture Workbook and drawing up requests for proposals from contractors. Thank you Jim!

Karl Hambsch volunteered to chair our Education Committee earlier this year and is now taking up the reigns of Secretary. He too is very active on the Sustainable Viticulture Working Group and is now fully engaged in his family vineyards. Thank you for stepping up and volunteering to keep the association moving forward Karl.

We welcome Kay Thompson back to the fold as Treasurer and I cannot think of anyone who would be better for the Job. She, as our former office manager, knows our Association business inside and out and must have got really tired of me calling her with questions during my first 6 months or more in the post. Welcome back Kay.

Finally I would like to mention Randy Phillips. He has served for many years now as our Member-at-Large and is currently our Legislative Chair. He is also very active with the Wineries Association and the Virginia Wineries Distribution Company and would like to hand over the Legislative responsibilities, which are growing to include a directorship on the Board of the Virginia Wine Council. If you are interested in representing us in this area then please let me know and thank you Randy.

I look forward to seeing you all at the end of January and wish you a safe and happy holiday and wonderful growing season and harvest in the New Year.



Regional Reports

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Most of the vineyards in our area have had a nice mild fall that let leaves hang on the vine. Some had late season Downey Mildew problems that in some cases caused early leaf drop. While the temperatures this fall have been below average, along with rainfall, we haven't seen anything below the upper twenty's. Hopefully this coming winter will be mild and with some real luck maybe we'll have a "normal" budbreak next year.

2013 Grower of the Year Award

Last February at our annual meeting, the Virginia Vineyard Association's Grower of the Year Award was presented to Jeanette Smith of VineSmith. Nominations will be accepted from members for this prestigious award through January 6, 2013.

The candidate should meet the following qualifications:

- Nominated by an active member of the VVA.
- Managed or operated a vineyard in Virginia for at least seven years.
- Contributed to the Virginia Viticulture Industry.
- Have a minimum of five acres of vineyard.
- Be an active member of the VVA.

A list of our current members can be found on our website.

Nominations should be sent to vavineyardsassoc@gmail. com or mailed to the VVA at Post Office Box 91, Dugspur VA, 24325 by January 6, 2013. All nominations should be in letter form, signed, and should demonstrate how the nominee meets all requirements for the award.

VWA Annual Meeting Summary

The VWA Annual Meeting was held on Tuesday, November 13th at Veritas Vineyards and Winery in Afton, VA. The meeting was a great success with nearly 150 people registered. Amy Ciarametaro of the Virginia Wine Marketing Office reviewed some of the projects the Wine Marketing Office has been working on, including the Wine Summit, strategic planning, the Virginia Winery Guides, promoting the Governor's Cup ® competition, handling media requests, FLITE tours, Wineries Unlimited, and the Commercial Grape Report. Amy also gave an overview of ongoing projects, including the Virginia Winery Guide for 2013, redesigning the Civil War label program, a new phase of the VirginiaWine.org website, promoting March Wine & Dine month and October by the Glass Month, building interest with wineries and trade in surrounding states, and sending surveys.

Following Amy was Dave Saunders of the marketing company Madison and Main. Dave conducted a lively marketing workshop on best practices for social media. Dave fielded many questions about social media sites and blog-ging. He also provided 5 strategies for social media marketing.

During the working lunch, the Annual Meeting was held. President Mitzi Batterson gave her President's Report detailing projects VWA has worked on this year and that are in the pipeline for the upcoming year. Mitzi gave background information on the Cooperative and encouraged everyone to complete the Cooperative Survey. Mitzi also announced the date for the rescheduled Regulation & Rules Round Up – Tuesday, December 18, 2012. Also announced was the 6th Governor's Cup Case Seminar which will be held during the VVA Winter Technical Meeting. Wineries Unlimited is returning to Richmond and will be March 12-14th; the organizers are offering a discount to VWA members.

The Committee Chairs also provided reports for each of their committees. Jeff Cooper of Cooper Vineyards gave an update of the financials for 2012 and 2013. Justin Rose of Rosemont of Virginia gave an update on the Commonwealth Quality Assurance program and reminded everyone that the membership fees for CQA will be waived until December 31, 2012 and any COA-approved wine can enter the Governor's Cup® at no charge. Jim Turpin of Democracy Vineyards gave a report on the Membership Committee including initiatives to expand VWA membership to include cideries, wine stores and VVA members. Jeff Cooper and Dean Gruenburg of Prince Michel Vineyards gave updates on the Governor's Cup® Competition, the Wine Expo, and Vintage Virginia. Dean explained that despite the fact that VWA is no longer the beneficiary of the Wine Expo, VWA will support the event this year and the promoters will be offering a discount on booth fees to VWA

members who pay their dues by January 15, 2013. Ann Heidig of Lake Anna Winery gave an update on the Legislative Committee. The VWA Legislative Policy was reviewed and approved. Ann also detailed the Legislative Priorities for the upcoming General Assembly session. Katie Hellebush of the Virginia Wine Council gave an overview of issues of concern for the upcoming year. Finally, Randy Phillips of the VWDC gave an update on their recent hire of an Executive Director.

After the Annual Meeting, Mary Beth Williams of Williams Compliance & Consulting Group gave an update on regulation and reporting issues. Mitzi discussed the issues wineries are having with several counties. She also gave an update on PO's in reporting, COLAs and product registration, food service at wineries, barrel tastings, FDA registrations and land lease issues.

Finally, Ann Heidig, Jim Turpin and Delegate Bobby Orrock hosted a panel on Vine & Wine Day which will be held on January 17, 2013. Ann, Jim and Delegate Orrock described to the attendants what to expect at the General Assembly and during Vine and Wine Day.

It was an informative event. The next planned event is the Regulation And Rules Round Up on December 18th and the membership meeting on February 22nd after the big Governor's Cup Gala the evening before!

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Virginia Wine Council Update

Katie Hellebush, Director, Virginia Wine Council

When the 2013 General Assembly Session rapidly approaching, farm wineries and vineyards have much at stake this legislative session. The Virginia Wine Council is fully engaged as the wine industry's legislative advocate, working on a wide variety of issues, from expanded funding for the Virginia Wine Board, alcoholic beverage control regulations as well as sustainable agriculture, transportation and workforce policies.

VWC is also examining the impact of federal budget negotiations on the many programs, conservation and market access funds associated with the farm bill and any resulting impact to state and local funds and programs.

In addition – VWC successfully worked with VDACS and the Virginia Department of Health (VDH) to formalize a policy regarding the inspection of tasting rooms. The inspection of farm winery tasting rooms will continue under the governance of VDACS, leaving VDH to inspect restaurants. You may find a copy of the full policy here: http://virginiawinecouncil. org/_pub/TastingRoomPolicy.pdf

To receive critical information about items such as the inspection of tasting rooms and the progress of wine related legislation, signup for our newsletter by visiting http://www. VirigniaWineCouncil.org. VWC will be publishing weekly reports during the General Assembly Session.

I also encourage you to join us for our annual Wine & Vine Legislative Day, which is set for January 17, 2013 at the General Assembly Building in Richmond. The annual event gives you an opportunity to visit with your legislators during session and speak with them about the issues that are important to your business. Please call 804-726-6021 to let us know you would like to participate!

With your support, the VWC is here to

provide the industry with strong and active legislative representation, to reflect the strength of Virginia's wine industry. With the beginning of a new legislative season, your input, actions and financial support are critical to the development of another successful session for the wine industry. Whether large or small, I encourage you to provide what you are able, to ensure that our expenses, much like our benefits, are shared fairly across the industry. It's our job to be the voice and face for the wine industry in Richmond - but VWC must have partners like you to help us be successful.

As always thank you for your support. Please call with any legislative or regulatory questions as they arise or for assistance in local planning and economic development initiatives specific to your region.

I look forward to our continued work and wish you the best for the New Year!

Grapevine Viruses in Virginia

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sugar and color) to be severe. We only found two cases of mixed infection of GFkV and GLRaV-3.

The other good news is that we did not find any of the three surveyed viruses in our wild grape samples. Therefore, it seems that these viruses were brought to vineyards via planting materials, and they did not come from native grape population. However, I should note that there was a case of GLRaV-2 infection in wild grape in California, and many of the American grape varieties (Concord, Niagara, etc.) were found to be positive with GLRaV-2 and -3 in several surveys, including ours. Therefore, a risk of these wild grapevines to become an alternative host of GLD cannot be dismissed.

So far, we did not find any obvious correlations between the virus incidence and region or variety. We tested 39 varieties that included French, Hybrid, and American varieties, and we found at least one infected vine in most of the varieties we tested (Table 1). We also examined to see if we could find a good correlation between symptomatic vines and the presence of GLRaV-3, and we found that visual symptoms could not really tell which vines were infected because there were many virus positive vines that did not show symptoms at the time of sampling and there were many other vines with symptoms without positive detection (Table 2). Since we only tested for three viruses, it is possible that the symptomatic vines are infected with another leafroll-associated virus. Also, many other biotic and abiotic factors such as fungal and bacterial infection of the vascular tissues can cause reddening of leaves.

When we examined our data for the effect of the age of vines and the presence of an insect vector (mealybug), we found that the vines planted prior to the 1990's had a significantly higher chance of containing GLRaV-2 and -3 (Table 2). Also, when a panel of vine was found with mealybugs, it had a significantly higher chance of containing GLRaV-3. Thus, older vines with mealybugs infestation are highly likely to contain GLRaV-3. These findings make sense because prior to the 1990's we simply did not have the sensitive techniques to examine viruses as we do now, and also mealybugs cannot transmit GLRaV-2.

Mealybugs in VA and management strategies

We conducted a small survey of mealybug populations. What we found so far were three species of mealybugs: grape mealybug; Gill's mealybug; and striped mealybug. We had a confirmation based on morphology, but we are still in the process of confirming our results with DNA sequencing to make our finding more concrete. Other than grape mealybugs, we do not have any scientific evidence of GLRaV-3 transmission with the other two species, but we will investigate this more in the future.

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Table 2.

Results from chi-square test are showing the relationship (or a lack of) between virus-positive vines and visual symptoms, a presence of mealybugs, and age of plantings. The number with "**" denotes that there is a statistically higher chance of finding a virus-positive vine under the specified condition.

Virus Type	Visual Symptoms	Presence of Mealybugs	Pre-1990's planting
GLRaV-2	0.79	0.71	0.007**
GLRaV-3	0.50	<0.001**	<0.001**

Table 1

A list of sampled varieties from the VA virus survey and the percentage of virus positive samples.

Variety	Total	Positive sampl
	number	in percentage
Cabernet Sauvignon	81	31%
Cabernet franc	54	15%
Chardonnay	36	47%
Petit Verdot	36	19%
Merlot	33	21%
Viognier	27	30%
Traminette	15	7%
Petit Manseng	14	7%
Chambourcin	12	17%
Malbec	12	17%
Norton	11	55%
Vidal blanc	11	82%
Syrah	8	50%
Riesling	6	50%
Chardonel	5	0%
Pinot gris	5	40%
Seyval blanc	5	60%
Gewurztraminer	4	50%
Rkatsiteli	3	100%
Roussanne	3	0%
Sangiovese	3	33%
Tannat	3	33%
Albarino	2	50%
Chancellor	2	100%
Concord	2	50%
Muscat	2	0%
Nebbiolo	2	0%
New York 95	2	0%
Sauvignon blanc	2	50%
Tempranillo	2	0%
Touriga Nacional	2	50%
American Table		
Grape (unknown)	1	0%
Barbera	1	0%
Catawba	1	100%
Cayuga White	1	0%
Fer Servadou	1	0%
Mourvedre	1	100%
Muscadine	1	0%
Niagara	1	100%
Orange Muscat	1	0%
Pinot noir	1	100%

Leaning Green

Sustainability and Communication

Christine Vrooman, Ankida Ridge Vineyards

f all the reasons for implementing the upcoming Sustainable Viticulture Program, the most rewarding to me is that in implementing this program the grower gets up close and personal with his/her vinevard site. And in so doing, the result is a greater awareness of its needs which should result in improved fruit quality and healthier vines. By taking the time to go through each question of each section of the upcoming online workbook, the grower becomes more aware of the soil, the vine itself, the fruit, the pests, the land and waters downstream, their workers, their neighbors, the entirety of the result of all the maneuverings and actions that occur in their vineyard space. In answering the questions in all sections of the workbook I found myself much more aware of issues that I had not deemed to be that important. I feel even more intellectually invested in my vineyard.

Sustainability is much more than concern for the environment. That is only one leg of the concept. Actually, reducing the environmental impact is merely a result of actions taken for a more essential aspect, that of vineyard health and economic sustainability. If the actions taken when adopting a sustainability program are not in the end creating economic viability, then it is all for naught, isn't it? The economic returns of improved fruit quality, vine health and vineyard longevity, with the added benefit of reduced environmental impact should be incentive enough for growers to participate. The program might be more effectively implemented if growers could see it as a "Best Practices" program. This is of value to both new and established growers. The greater the number of involved growers, the better for all of us, for we can then glean a measurement of our practices as a community of growers and use that as we move ahead. The aggregate of scores will be published (all anonymous) as growers over time re-take the questions of the workbook. Continued participation is of value, as it will help us evaluate our progress in our best practices as we move forward and continue to assess the health of our vineyards and the quality of our wines. If after implementing this program we notice over time an increase in fruit quality and a decrease in negative environmental impact, while improving our economic returns, then we all stand to gain.

To enjoy the greatest benefit from all of this, improved communication amongst growers would be extremely valuable. To communicate with one another our experiences, both good and bad, can help save fruit, enhance fruit quality and in the end create wines of integrity and greater value.

Personally, one of the aspects of this wine industry that has impressed me most since becoming a part of it back in 2008 is the sense of camaraderie amongst so many of the growers. We are a community and that spirit of community adds an invaluable component to the experience of growing grapes and making wine here in the commonwealth of Virginia. Recently a sommelier and wine writer from Atlanta visited a few wineries and, in addition to the great wines he tasted, he was extremely impressed by the sense of community he observed amongst industry members. This community has value not only in the intrinsic "feel" it adds to our lives as we work in this industry together, but also in the benefit of sharing observations, experiences, what has worked and not worked in the vineyard. After I posted in the last Grape Press our experiences with the SWD (Spotted Winged Drosophila) I had several growers contact me, wanting to talk about it and share experiences, for they too had experienced the dreaded SWD. A message board/forum that is used regularly by growers would be extremely valuable for everyone in the industry. To check it once daily, in the evening during the growing season, to see if anyone is discovering something new in their vineyard, or to post what you have noticed that day, would be very helpful for everyone. If someone had posted a week before we discovered the SWD in our vineyard

that they had spotted them in theirs, that earlier intervention might have improved our situation. To share what is working, what is not working (anonymous or not) would in the end serve all of us in the grape growing community. So let's have further discussion on how best to share information on a regular basis during the growing season. It is well worth the effort in my opinion.

There will be a panel discussion at



Birth of a Cluster

the VVA Winter Technical Meeting Friday afternoon. Spend some time thinking about your enthusiasm for such a program, as well as your reservations. At this time, we are not looking at certification, but that is not discounting the possibility in the future if the industry feels it would be of benefit and of more value. Consider these first couple years as more of a "pilot" program that will need your input on ways to improve it. If you are one feeling opposed to the Sustainability Program, I would ask that you first take the time to study the questions before fully discounting the program. Each question is provided with a reason to the importance of that particular practice. There is usually a gap when someone hears of something new, to learning about it, to implementing it. Don't get lost in that gap and lose an opportunity to enhance your grape quality and vineyard health. Perhaps that is one of the greatest aspects of this industry; there is always room for learning more. And isn't that one of life's greatest pleasures?



Grapevine Viruses

continued from page 6

Mealybugs can disseminate GLRaV-3 very rapidly over time and space. In one of our field trials, a newly inter-planted vine was infected with GLRaV-3 within a few months after planting. Moreover, in another field trial, we found that a field could experience more than a 300% increase of diseased vines in one season.

Thus, a series of studies was conducted to examine choices of insecticides for mealybug management. So far, both Movento and Scorpion applied on foliage seemed to provide an excellent control (Figure 1). On the same note, if you apply a contact insecticide during the season (we tested Baythroid XL at bloom), it may flare up mealybug populations by reducing the populations of beneficial insects.

Summary of our findings

For existing vineyards, the first take-home message is the importance of identification of virus disease complex. Although visual symptoms are not the best way to diagnose GLD, red cupping leaves in mid- to late-season should alarm you for GLD. Another piece of the complex is mealybugs. Please take a look at Figure 2 for their general appearance, and make yourself familiar with this insect. It is very difficult to find, but in many of the vineyards we visited, we were able to find them. You may find them under bark during the spring, at the base of new shoots or on the underside of leaves soon after bloom, and within a cluster near harvest.

The second take-home message is the importance of obtaining certified grapevines that are tested for multiple viruses. Since we did not find any positive vines among wild grapevines, these viruses had to come with wine grape vines. Although the "virus-tested" vines are not equal to "virus-free", we found that the odds of infection by the GLRaV-2, -3, and GFkV in newer vineyards were low.

The third message is the importance of

mealybug management. This insect is very efficient at moving viruses around. Thus, if you have GLRaV-3 and mealybugs in your vineyard(s), and are thinking about planting a new vineyard nearby, mealybug management needs to be considered. However, please note that these insecticides are expensive materials, and if you do not have GLD or mealybugs, there is no need for the use.

What is next?

With our overwhelming results, it was natural for us to continue our project on grapevine viruses. We initiated the expansion of the investigation of grapevine viruses with support from the VA Wine Board in 2012. So far, we have increased our testing for viruses to other GLD viruses (GLRaV-1, -4, -5, and -9), and viruses belonging to the rugose wood diseases (grapevine virus A, grapevine virus B, and Ruspestris stem pitting-associated virus-1).

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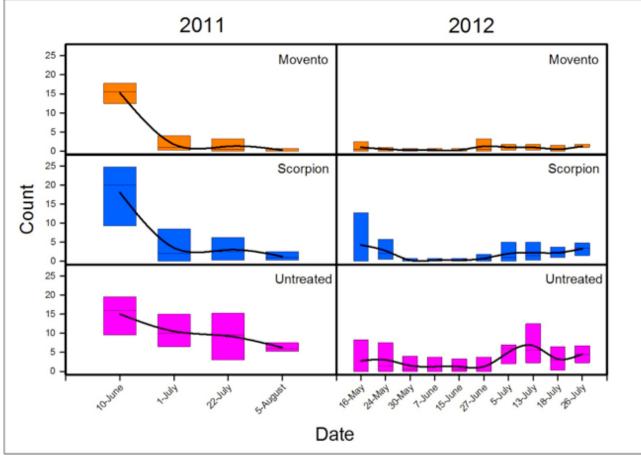


Figure 1.

Seasonal changes of mealybug counts on the vines treated with Movento, Scorpion, and an untreated check in 2011 and 2012. The middle line of the box is the mean number, and bottom and top are 25% and 75% data range, respectively. Both Movento and Scorpion were applied using a backpack sprayer onto foliage twice in mid-June in both years.

Reminiscing on My First Year in the Vineyard

Bob Garsson

o you remember your first year in the vineyard? Can you still recall the first vine you planted, the first time you experienced bud break, and the agony you felt the first time you dropped fruit to the ground? Do you remember the things you got right that first year, and can you still recall the mistakes that you made?

Now that I've been through most of a full season, from preparing the ground and putting in the trellis, to planting and nurturing the vines all the way through the "harvest" (three clusters that grew despite our efforts to keep the vines free of fruit), I think it's time to enjoy a glass of someone else's wine, reminisce happily about how well everything turned out, and then get down to the serious business of evaluating what we did right and what we did wrong.

On the plus side, I think we got a lot of things right. We spent more time than I care to remember researching and thinking through what varietals we would plant and more specifically, what clones would do best on our property – a 740-foot elevated vineyard on a steep, westward facing slop in Afton. We settled on four grapes – Cab Franc, Petit Verdot, Viognier and Petit Manseng – and I'm very happy with the choices we made. We're thinking of putting in some Merlot next spring, but I think the four we started with are great grapes for Virginia.

We decided to go with ENTAV clones, and worked through three different nurseries to get the vines we wanted. For the record, we ended up getting ENTAV 214 Cab Franc; ENTAV 573 Petit Manseng; ENTAV 400 Petit Verdot; and ENAV 642Viognier. We put all of them on 101-14 rootstock.

Some nurseries were better than others for a small vineyard like ours. We spent more money on 25 Viognier vines from one of the nurseries than we did for 50 Cab Francs from another. We justified the purchase by telling ourselves that it would be helpful to develop a relationship with multiple nurseries. Good theory. But we got a note a few months ago from the expensive nursery that loan sharked us those Viognier vines announcing that they were no longer taking orders for next year. I guess our 25-vine order didn't make much of an impression. Well, so much for theories.

Continuing on the plus side, we hired a contractor to get posts in the ground for the trellises and the H-brace end-post system. I had wanted to do that work myself (which is to say, I wanted so badly to buy the auger and bits for my tractor), but with spinal surgery

pending in May, I had to contract the work out. Later in the spring, I was at least able to run the bottom wire myself, and that was both fun and satisfying.

We also managed to get a deer fence up. Again, with my surgery falling between the start and the finish of that work, my primary contribution was to watch very hard (honestly, really, really hard) and to offer some advice. The real work was done by my wife and daughter, Chris and Kate, and they did a magnificent job. I will never forget the sight of Chris and Kate wielding sledge hammers to drive three-foot post holders into the ground.

And finally, in April, we planted the vines, a whopping 150 of them. We hilled the vines over until warmer weather arrived, and maintained the vineyard the best we could. It was a true joy to watch them grow, from dormant sticks to honest-to-God, bona-fide grape vines. We were pretty disciplined about sticking to a spraying schedule (and by "we," I mean Chris), and I think our vines made it through the first year pretty much disease free. One of my favorite memories of the summer was the evenings I spent walking through the vineyard, astonished that I had something large enough to accommodate an actual walk.

But we did make some mistakes along the way. And I'm doing my best to catalog them all so that we can do a little better next year, when we plant more vines.

First, we decided to dispense with grow tubes for reasons that I still think made good sense. After sampling the research, we concluded that vines grown without tubes would do at least as well during the first season as those grown with tubes, and maybe better in subsequent years. Honestly, it somehow just felt right to let the vines toughen and grow at a natural pace. We also recognized that the main reason for using grow tubes was to facilitate the use of Roundup, and with only 150 vines we thought we could cultivate the rows by hand.

Okay, it was a great theory, and quite pos-

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Viruses in Virginia

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Preliminary results showed that we found at least one positive sample for all of the tested viruses, and there were many vines with Ruspestris stem pitting-associated virus. These rugose wood disease viruses cause slow decline of vines over years, and are often associated with pitting and grooving in woody cylinder. We will expand our search in the near future to include a few more viruses such as tomato ring spot virus that is vectored by a species of nematode.

What is new in grape viruses?

Unfortunately, grapevines are known for their virus infections. There are over 60 viruses associated with grapevines. In addition, with recent advances in technologies (especially a next generation deep sequencing), we are adding more viruses to the list. Some newly found viruses are: Grapevine red blotch-associated virus (aka, Grapevine cabernet franc-associated virus); Grapevine pinot gris virus; Grapevine virus F; and Grapevine vein-clearing virus.

Please note that these are so new even for researchers that we do not have a complete picture of the disease. For example, in most of these new viruses, even symptoms are not well described. Also, although particles (RNA or DNA) were found in symptomatic grapevines, many of these newly found particles have not been experimentally proven to cause the disease. Moreover, these viruses (and many other viruses found in grapevines) are often relatively minor in terms of both prevalence and economic importance. They may only cause minor symptoms, and/or they may not have a known vector. Even if they do, the vector may not be as efficient as mealybugs or may not be present in wide geographic areas. (Note: that is why GLD, which can cause severe symptoms and has widely available vectors, is very important for us and many other wine growing regions.)

Grapevine red blotch-associated virus is associated with foliar symp-



Figure 2.

Pictures of mealybugs found in VA vineyards. Panels A and B show the Gill's mealybugs on the trunk and at the base of a shoot, panels C and D show grape mealybugs on a fruit and on a shoot, respectively. (Note: identifications of species are still under investigation.)

toms similar to GLD and, in some cases, reduction of Brix is also reported. A DNA virus has been suggested; however, the correlation between the virus and observed symptoms has not been clearly defined yet, since there are many factors (both biotic and abiotic) that can cause blotching of grape leaves. Grapevine pinot gris virus seems to be associated with chlorotic mottling and leaf deformation, especially on the cultivar 'Traminer.' A recent study showed the correlation between symptoms and detection of this new virus "species-to-be;" however, there are still discussions about how this virus interacts with grapevines and how it is disseminated. Since this virus is similar to Grapevine berry inner necrosis virus, researchers are suspecting that it may be transmitted by a species of mites. Grapevine virus F is a new member to the rugose wood disease complex, and the infection can lead to a rapid death of young vines. Grapevine vein clearing virus is the first reported case of a DNA virus associated with grapes (others are all RNA viruses with an exception of the blotch-associated virus described earlier), and a recent study found infected vines from a wide area of the Midwest (MO, IL, and IN). Symptoms of this virus are a clearing of the veins that eventually become necrotic. Since this particular virus has been found in a wide geographic region, it will be very important to find out about its vector. You will probably hear from us about some of these new viruses as we make progress on our grapevine virus project.

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Reminiscing

continued from page 9

sibly it would have worked if I had not been out of commission for part of the season. But in practice, it was very hard to keep the rows clean and free of competing weeds.

We used Roundup before planting, and throughout the growing season we cultivated the best we could. But keeping up with the grass and weeds in the row, even for a vineyard as small as ours, was a challenge, and we now know there was less clean space under the vines than there should have been. A simple experiment proved that.

For comparison's sake, we sheltered a dozen of the Viognier vines so that we could use Roundup in the row just once midway through the growing season. The vineyard floor around those vines was beautifully clean, and they grew so much larger than the vines right next to them that didn't have the benefit of Roundup. While that sample wasn't large enough or random enough to allow us to draw an empirically sound conclusion, the evidence did seem pretty conclusive. Now we're working on how best to tackle the cultivating next year so that we give the vines more room to grow.

Another lesson came late in the season, when Hurricane Sandy visited our vineyard and exposed another small mistake. We had used bamboo poles as support stakes, and they seemed sturdy enough when we put them into the ground. What we didn't think of was to clip the poles to the trellis wire. In any event, when we surveyed the vineyard after Sandy had passed through, we found a number of vines that had literally been blown over, along with their support stakes. In every case, these were vines that had not reached the cordon wire, and were therefore being held in place only by the stake. Vines that had reached the wire and been tied off seemed to do okay.

I think it's pretty obvious that a clip at the top of the stake would have provided a lot more support. I had actually talked to a vineyard manager a month before Sandy about the clips. We didn't really get into the reasons for using them, but when I said I hadn't, he asked, "why not?" All I could say was that I hadn't known to do it. I made a mental note to buy the clips and secure all the poles, but with everything looking so good, it didn't seem urgent. Well, now I know.

We did get it right when it came to the pests, though. Our rescued puppy, not yet a year old, loved to wander down to the vineyard with us and proved to be a champ at keeping birds and rabbits out of the vineyard. And beetles. We aggressively met our one Japanese beetle infestation with a spray application and a lot of handpicking, and it turned out the puppy also likes to help pick off the beetles, and she does so without harming the leaves.

Other mistakes? I'm sure there are dozens that I don't know about, in addition to a few more that I do. We went for close spacing (3 feet), but in retrospect, I wish we had gone for an extra four to six inches. We'll see how it works out, but every time I look at the vines, I wonder if their vigor can be contained in that tight space. We were good about spraying, but since we don't live on the property full-time, we weren't perfect. And I think we need a refresher course on dormant winter pruning sometime in the next few months.

But the vines are still there, they look wonderful (at least they did through those last days of autumn when the leaves were still green), and I'm still confident that someday, not too many years from now, when I reflect back upon the summer, I'll be drinking a glass of wine from those grapes and maybe laughing over some of the rookie mistakes I made.

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Sustainable Viticulture Workbook update

Jim Benefiel

The Sustainable Practices workgroup met in Winchester in November and introduced the contractor selected to develop the workbook into an on-line database. Preliminary issues were discussed, as the contract itself and a memorandum of understanding with VDACS are still being negotiated. The contractor plans to have a prototype available for presentation at the VVA winter meeting, with product launch set for before the start of the growing season. VVA has committed to funding the project for the first two years at no cost to users. The database aspect of the project will allow growers to compare their practices against their peers (in blind) and will present each user with a list of high-impact practices based on the user's self-recorded inputs. It will also allow educators to develop program materials on areas needing improvement across the state or within regions, and will enable VVA to bring documented evidence to legislators and regulators to influence policy and rulemaking discussions where appropriate. The on-line aspect will allow direct links to the references currently in the paper version of the workbook. All user inputs will remain confidential.

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2013 Winter Technical

January 31st-February 2nd OMNI | Charlottesville, Va. Online Registration

http://www.virginiavineyardsassociation. com/2013-annual-technical-meeting/

In Memory of Jim MacKenzie

Tom Kelly

y now, many of you may have heard of the passing of our good friend and mentor Jim MacKenzie. Jim's absence leaves a large hole in our industry and a great sadness in the hearts of those who knew him. For those of you who didn't know Jim, I thought I'd share some of my memories of him.

When I met Jim in 2004 he was introduced to me as the sales rep for Helena Chemical but I quickly came to know him as much more. Jim was a farmer, through and through. When he would stop by the vineyard as part of his route, he would spend a good long time just chatting. He always had a story or two to tell from his long history in agriculture and it didn't take long to discover that each story had a lesson hidden within. He had an easy way of teaching without ever letting you know you were being taught. I will always remember him for his easy manner, good nature and that funny little chuckle of his.

Jim spent many hours in the vineyards he serviced and his enthusiasm for his work and for the grape industry was contagious. Every spring he would hold a growers meeting that not only informed the attending growers of new products and label changes but provided honest and practical insight into how best to use the products he promoted. Jim further serviced the industry through his membership in the VVA, his consulting business - Mackenzie Ag Consulting - and by designing and building several specialized machines to improve farming practices for his growers. He was equally engaged with his clients in the tree fruit, field and row crop industries.

At home Jim was a family man who enjoyed hunting, growing pumpkins and working in his shop. Our hearts and thoughts are with his family. Follow this link to his obituary: http://www. ompsfuneralhome.com/obituaries/James-Mackenzie/.

Jim will be deeply missed by those whose lives he touched. The world will seem a little emptier without him. Rest well my friend.



Governor's Cup Seminar

s part of the newly revamped Governor's Cup competition, sup-**L**ported by the Virginia Wine Board and the Virginia Vineyards Association, educational forums that highlight the viticulture and winemaking practices of the top 12 scoring wines from the 2012 Governor's Cup competition are being presented. During this 2.5 hour forum, there will be a tasting and discussion of the Governor's Cup Case wines. The presentations will be made by Jay Youmans, Master of Wine, with the support of some of the winemakers and vinevard managers of the award winning wines. Please join us for this last opportunity to taste these special wines.

The wines that will be discussed are:

- Bluestone Vineyard 2010 Cabernet Sauvignon
- Delfosse Vineyards & Winery 2007 Blend
- Glen Manor Vineyards 2009 Hodder Hill
- Jefferson Vineyards 2010 Cabernet Franc
- Keswick Vineyards 2009 Reserve Cabernet Sauvignon
- · Keswick Vineyards 2010 Merlot
- King Family Vineyards 2008 Meritage Blend
- Potomac Point Winery 2009 Heritage Reserve Meritage Blend
- Tarara Winery 2010 Honah Lee White Vinifera Blend
- Trump Winery 2008 Kluge SP Blanc de Blanc Sparkling
- Veritas 2010 Vintner's Reserve Meritage Blend
- White Hall Vineyards 2010 Gewurztraminer



2013 Annual Technical Meeting | Agenda Omni Hotel, Charlottesville | January 31-February 2, 2013

<u>Thursday January 31, 2013</u> Separate \$20.00 registration fee required for Thursday track

12:00 PM Registration Opens

1:00 PM 2012 Governor's Cup Winners: Tastings and Discussions

Sponsored by the Virginia Wine Council, this educational forum highlights the viticulture and wine making practices of the top 12 scoring wines from the 2012 Governor's Cup competition, and will be presented by Jay Youmans a Master of Wine, with detail on the winemaking and vineyards from where the grapes were harvested. This is an excellent opportunity for members to attend who missed the very popular Regional Seminars that were carried out throughout the State during last year. Q & A will follow each tasting.

4:30 PM Adjourn

	2013 Vendors
Augusta Coop	Vineyard consulting, crop protectants, nutrients, custom application services.
Arton Products	Custom decorated stemware, glassware, and ceramics.
Bayer Crop Science	Fungicides, insecticides, herbicides.
BDI Machinery Sales, Inc.	Sprayer, hedger, hoeing machine.
Carolina Wine Shop	Winery equipment and supplies.
Double A Vineyards	One-year field grown grapevines.
Gowan Company	Pest Control Products
Helena Chemical Company	Vineyard pesticides, fertilizers, etc.
Hermann J. Wiemer Vineyard	Grafted grapevines.
M.G. Newell Corporation	Pumps, tanks, valves, hoses, etc.
Spec Trellising	Trellis materials, netting, steam generators, s/s tanks.
VineSmith/Crop Production	Pesticides, crop consulting.
VDACS	Agriculture and Forestry Development Services
VDACS-Office of Pesticide Services	Compliance materials and resources, pesticide safety
	literature, recordkeeping books.
Virginia Wine Bottling Company	Mobile Wine Bottling Services
Watermark Design	Logo and label design, websites, and winery branding.
Winchester Equipment Company	Tractors & sprayers.
Wine & Vine Care	Winery and vineyard consulting management.
Wright Global Graphic Solutions	Wine labels and design, point of purchase.

2013 Vendors

Agenda - Page 1 of 3

2013 Annual Technical Meeting | Agenda Omni Hotel, Charlottesville | January 31-February 2, 2013

Friday, February 1, 2013

7:30 AM 8:30 AM	Registration and Continental Breakfast. Welcome, VVA President
8:40 AM	Introducing Molly Kelly, Virginia Tech's Enology Extension Specialist
	Molly Kelly, Virginia Tech
9:10 AM	Leafroll Virus Research & Overview of Other Viruses
	Impacting Virginia Vineyards
	Taylor Jones, Virginia Tech
10:00 AM	Break. *Trade Show opens*
10:20 AM	Integrated Pest Management of Pierce's Disease
	Jim Kamas, Texas A&M
11:15 AM	Industry Updates
	Rock Stephens, Virginia Wine Board , Annette Boyd, Virginia Wine Marketing,
	Katie Hellebush, Virginia Wine Council, Mitzi Batterson, Virginia Wineries
	Association
11:45 AM	VVA Business Meeting and Presentation of Grower of the Year Award
	VVA President
	Committee Reports
12:30 pm	Break for lunch (on your own).
1:45 pm	Sustainability Workbook in Practice
	Moderator: Tom Kelly
	Tremain Hatch
	Christine Vrooman
3:00 pm ±	Break
3:30 pm	Updates on Grape Insect Pests: Grape Berry Moth, Grape Root Borer and Fruit Flies
	Tim Jordan and Doug Pfeiffer
4:40 pm	Updates and 2013 Plans for Grapevine Yellows Management Studies
	Teresa Stoepler and Tony Wolf
5:00 pm	Adjourn
7:00 pm	30 th Anniversary Celebratory Dinner &
	Presentation of Lifetime Achievement Award to Bruce Zoecklein

Agenda - Page 2 of 3

2013 Annual Technical Meeting | Agenda Omni Hotel, Charlottesville | January 31-February 2, 2013

Saturday, February 2, 2013

7:30 AM	Continental Breakfast and registration
8:00 AM	Grape Disease Management: Back-to-Basics I
	Powdery Mildew and Botrytis: Biology, management and research updates
	Anton Baudoin, Virginia Tech
8:45am	Grape Disease Management: Back-to-Basics II
	Downy Mildew and non-specific fruit rots
	Noemi Halbrendt, Penn State
9:30 am	Grape Disease Management: Back-to-Basics III
	Phomopsis, ripe rot and bitter rot
	Mizuho Nita, Virginia Tech
10:15 am	Break
10:45 am	Grape Disease Management: Considering options for an effective,
	season-long disease management program.
	Tony Wolf, Virginia Tech
11:30 am	Effects of Post-veraison Grape Fungicides on Alcoholic and Malolactic
	Fermentation
	Hans Walter-Peterson, Cornell University
12:00 pm	Buffet Lunch in the Atrium (provided)
1:30 pm	Blanc du Bois Wine Presentation
	Jim Kamas, Texas A&M
2:00 pm	Tasting and Panel Discussion: Viognier
	Bruce Zoecklein
	Martha Wicks Muller, Winemaker, Barren Ridge Vineyards (sensory attributes of
	Viognier wines)
	4 industry panelist (to be announced)
4:00 pm	Closing remarks and adjourn
	VVA President

Special Thanks to the Friends of the VVA! Information will be available for each of these businesses at the Winter Technical.

- Allen E. Neyman Associates Architecture, LLC
- Virginia Farm Bureau Federation
- <u>Williams Compliance and Consulting Group, LLC</u>

Agenda - Page 3 of 3

My First Year in the Vineyard

continued from page 11

And yes, I think I'll always remember that first year in the vineyard – the first vine I planted, the first bud break I experienced, and the taste of those first errant grapes that weren't supposed to be there. And I'll remember the mistakes too. But I know for sure that they'll pale in comparison to the triumphs of that first glorious season.

(Editor's note: If you have memories of both successes and rookie mistakes, and you don't mind sharing them, please drop us a note at the Grape Press or leave a comment on Bob's blog at http://projectsunlight. net, where a slightly different version of this article appeared.)



Winter Technical Meeting

January 31 - February 2, 2013 Omni Charlottesville Celebrate the 30th Anniversary of the Virginia Vineyards Association!

2013 Winter Technical Meeting Online Registration http://www.virginiavineyardsassociation.com/2013-annual-technicalmeeting/

Wine & Vine Legislative Day

January 17, 2013 General Assembly Building in Richmond.

The annual event gives you an opportunity to visit with your legislators during session and speak with them about the issues that are important to our business. Please call Katie Hellebush on 804-726-6021 to let her know if you would like to participate!

Governor's Cup Gala

February 21, 2013

John Marshall Ballroom, Richmond, VA

We are pleased to invite you to the Virginia Wineries Association Governor's Cup®Gala supported by the Virginia Wine Board and the Virginia Vineyards Association. The Gala is the premier gathering of the Virginia wine industry. The highlight of the evening will be the announcement of the winner of the Governor's Cup® competition. Those invited and expected to attend this fully catered event include the Governor, First Lady, the Secretary of Agriculture, members of the Virginia Wineries Association and the Virginia Vineyards Association, highly-qualified members of the trade – restaurateurs and retailers, members of the Virginia General Assembly and the press.

In addition to delicious food, attendees will enjoy tasting award-winning Virginia wines, many of which won medals in the Governor's Cup[®] competition.

Dress for this event is business attire. Space is limited, so register now!

Parking is available for \$5 for this event. The lot is on 5th Street, one block south of the John Marshall. The Downtown Richmond Marriott and Hilton Garden Inn are both within walking distance of the John Marshall.

The Vines and Wines of Bordeaux

The VVA has finalized an 8-day, 7-night trip to Bordeaux, France, this winter to meet with vinegrowers, winemakers, researchers, and brokers to discuss production techniques, current research, winemaking, marketing, and promotion. There will be tastings, of course, and some sightseeing, but the focus will be on making contacts and learning practical techniques and management initiatives. 15,000 independent growers and 4,000 producers have had centuries to identify what works and what doesn't.

Members must enroll and pay a deposit by October 10th to ensure their place on the tour. Seating is limited, so reserve your place. Save \$100 by paying in full by October 15th, the early bird price will be \$2700 plus trans-Atlantic air fare.

Wineries Unlimited Conference and Trade Show

March 12-14, 2013 Greater Richmond Convention Center http://www.wineriesunlimited.com/attendees/schedule-and-topics/

EXCHANGE

Due to the large number of items for sale, I would direct our members to the following web site: Virginiavineyards association.com

Editors note: Please take note of the change of email address for our office manager Katie Meeks vavineyardsassoc@gmail.com