

Ohio Grape-Wine Electronic Newsletter

Edited by: Dr. Maria Smith

October | 2018



In the winery, OARDC, Wooster, OH, Oct. 2018 Photo credit: Dr. Lisa Robbins

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The season ends but the work continues...

The 2018 season is quickly winding down. The wines are fermenting and the vines are beginning the transition to dormancy for the upcoming winter. This transitional phase is a great time to assess and tend to vineyard needs. Weed management, vineyard sanitation, and soil sampling for nutrient analysis are all great things to do right now to start get a head start for 2019.

In this issue, we provide some insights from the end of the season, enology progress, and guidance for making your winter preparation.

- Maria and the OSU V&E Team

Late-season berry shrivel

By: Dr. Maria Smith, HCS-OSU

In late September and early October, several cases of rapid on-set berry shrivel, and in extreme cases, complete crop loss were brought to my attention by growers across the state (Fig. 1). Berry shrivel may occur for several reasons and is not necessarily attributed to a single cause [1]. In each of the instances encountered, however, the suspected shrivel was identified as **late bunch-stem necrosis (LBSN)**.

What is LBSN?

LBSN is distinguished from other forms of berry shrivel by the presence of a necrotic (i.e., dead) rachis (Fig. 2). Below the necrotic region of the rachis, berry shrivel occurs from a lack of water and nutrient flow through plant vascular tissue. LBSN may be limited to cluster portions or, in more severe cases, afflict the entire cluster. The “late” in LBSN is defined by its timing, occurring at veraison or later during ripening.

What causes LBSN?

LBSN is a physiological disorder, and it is not pathogen related. LBSN has been reported in many cultivars across several growing regions, including *V. vinifera* Cabernet Sauvignon and Sauvignon Blanc in Europe, Australia, and the US, and most recently in *Vitis* hybrids Marquette and Frontenac in Ohio and the Midwestern US. Currently, an exact cause of LBSN has yet to be identified, but previous research suggests that LBSN is likely associated with environmental conditions and/or vine nutrient status [2, 3].

Anecdotally, the suspected cases in Ohio were associated with periods of heavy rainfall (> 0.5” per day rainfall) during the ripening period. Others have noted that site selection, cluster shading, and vine health (e.g., winter injury) may also play a role in the occurrence of LBSN.

What can you do to prevent LBSN?

Recommendations to manage and remediate LBSN are limited until a direct cause can be identified. Based on the current information, performing best viticultural practices for site selection to avoid wet areas and cold injury, canopy management to reduce cluster shading, and monitoring and maintaining optimal vine nutrient status are the best means to prevent LBSN.

For more information on LBSN, see: <http://enology.umn.edu/news/potential-bunch-stem-necrosis-minnesota-grapevines> and <http://enology.umn.edu/news/tracking-down-causes-bunch-stem-necrosis>



Figure 1. Extensive crop loss due to late bunch-stem necrosis and subsequent berry shrivel, *Vitis* hybrid Marquette, Sep. 2018

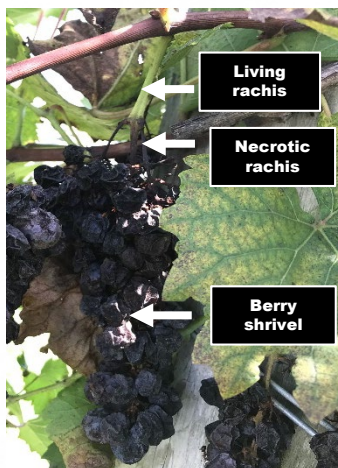


Figure 2. Late bunch-stem necrosis, *Vitis* hybrid Marquette, Sep. 2018

References:

- [1] Krasnow MN et al. 2010. Distinctive symptoms differentiate four common types of berry shrivel disorder in grape. *California Agriculture* 64:155-159.
- [2] Capps EC and Wolf. Reduction of bunch stem necrosis of Cabernet Sauvignon by increased tissue nitrogen concentration. *AJEV* 51:319-328
- [3] Holzapfel BP and Coombe. 1995. Incidence of grapevine bunchstem necrosis in South Australia: effects of region, year and pruning. *Aus J Grape Wine Res.* 4:51-54

OARDC-Wooster vineyard update

By: Diane Kinney and Imed Dami, HCS-OSU

Grape Phenology:

All varieties in the Wooster research vineyard were harvested by mid-October. As always, Chambourcin and Cabernet franc are our latest ripening varieties (Table 1). Compared to the previous two years, harvest dates are all over the place. Typically, more GDD equates early harvest; not this year. Some were picked earlier than desired due to the rapid breakdown of fruit (LaCrescent, Marquette). Others were picked earlier than previous years due to a small crop (e.g. Sauvignon blanc). This year, rain called the shots on when to pick or not to pick. It is an understatement to say the rain has interfered with harvest this year (I am sure many growers throughout the state could relate.) Unlike last year, high acid was not an issue, but low sugar was in almost all varieties (Table 2). Since flavor is not always associated with Brix, let's hope it is the case this year.

Table 1. Harvest dates and GDD of varieties grown at OARDC in Wooster in 2016, 2017, and 2018.

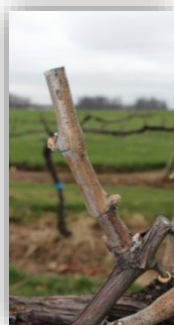
	2016		2017		2018	
Variety	Harvest Date	GDD*	Harvest Date	GDD*	Harvest Date	GDD*
Cabernet franc	5-Oct	3124	3-Oct	2831	19-Oct	3262
Chambourcin	6-Oct	3140	13-Oct	2975	19-Oct	3262
Chardonnay	29-Sep	3068	18-Sep	2660	21-Sept	2942
LaCrescent	28-Sep	3061	27-Sep	2773	20-Sep	2919
Marquette	21-Sep	2953	27-Sep	2773	18-Sep	2875
Sauvignon blanc	20-Sep	2915	25-Sep	2727	7-Sep	2678

Table 2. Fruit composition at harvest of selected varieties grown at OARDC in Wooster in 2018.

Variety	SS (%)	pH	T.A. (g/L)	FMI
Cabernet franc	20.6	3.42	6.4	32
Chambourcin	22.0	3.36	8.0	28
Chardonnay	20.9	3.33	7.0	30
La Crescent	22.3	3.27	12.6	18
Marquette	23.1	3.44	8.8	26
Sauvignon blanc	21.6	3.33	7.2	30

OARDC-Wooster (continued)

Photos: phenology progression of Cabernet franc, Photo credit: Diane Kinney



25 Apr 18



29 May 18



27 Jun 18



30 Jul 18



28 Jul 18



24 Sep 18



19 Oct 18 (H)

Weather Conditions

Rainfall has been below the 30-year average in October. However, the yearly precipitation through October 23 is nearly 10" above normal! We have seen this trend in the past few years and this may be, unfortunately, the new normal based on climate prediction for Ohio. Cumulative GDD is also above normal, which is a good thing for ripening late varieties. The combination of above normal rain and heat during ripening is not desirable though. Time will tell how the challenging 2018 vintage will turn out.

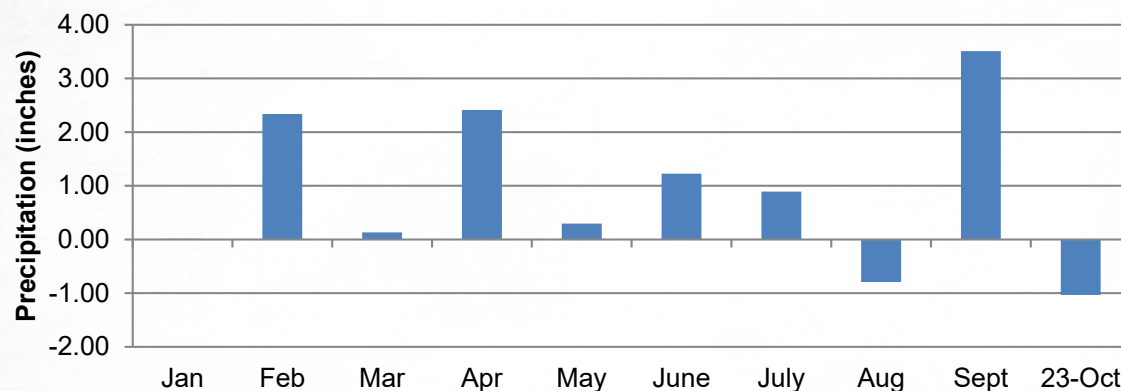


Figure 1. Deviation of monthly mean precipitation from the 30-year average 2018.

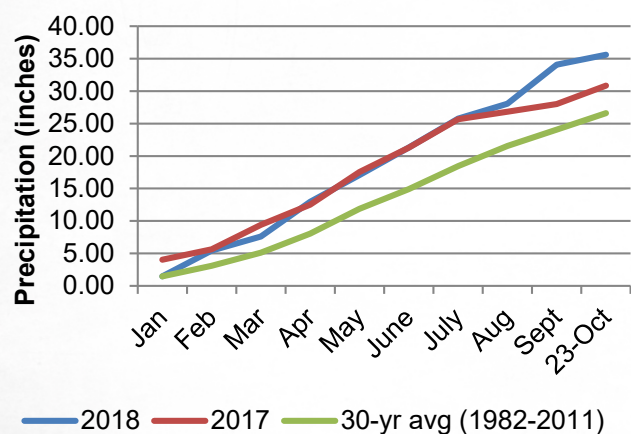


Figure 2. Cumulative precipitation - Wooster

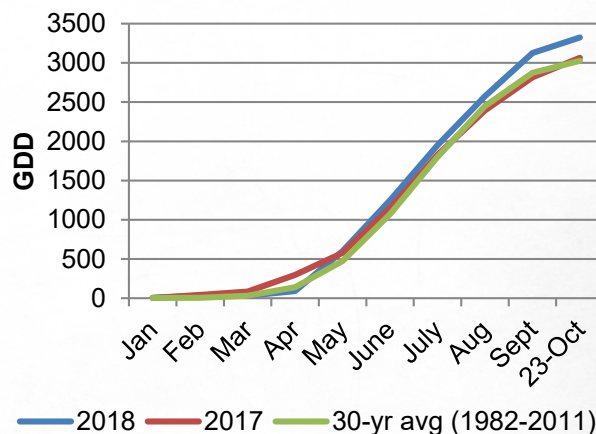


Figure 3. Cumulative GDD - Wooster

OARDC-Wooster (continued)

Cultural Practices

As soon as harvest is completed, we have recorded the first temperature below freezing on October 25th. Despite placing electric wire to deter racoons, damage to the fruit was significant in all late varieties. Yellow jackets were also abundant this year and made picking challenging. We began hilling-up grafted vines and will conduct a second pass in November. We have finally made it to the end of the season, but this has been a tough year from start to finish.



Photo: Hilling up of Cabernet franc vines, Photo credit: Diane Kinney

2018 AARS harvest report

By: Andy Kirk, AARS-OSU

November is here, and grape growers throughout Ohio are ready to say goodbye to the difficult 2018 harvest. In the Grand River Valley and Lake Erie regions, there is a prevailing notion that things could have been much worse, despite the challenges faced. Several heavy storms in September stayed south of our area, sparing us the deluge of rain that was received elsewhere in the state. Without question, there will be quality wines that emerge from this vintage. However, more than one winemaker has joked with me that 2018 will be a test of skill in the cellar. Here are a few notable trends that surfaced locally over the past few months.

- Disease management of sour rot complex and *Botrytis* in early season varieties
- Stalled ripening in late season varieties

Sour rot and Botrytis (bunch rot) in early-ripening varieties

Late-season rots (e.g., *Botrytis* and sour rot) were major challenges for early-ripening varieties. This year, some local vineyards lost as much as half of their Pinot Noir to rot. Finding preventative solutions to sour rot and bunch rot will be critical to achieving the growth in grape production that many seek. For more information on the development of the sour rot complex, see the [Sep 2018 OGEN](#).

Despite our best practices, late-season disease may still be a persistent issue. The question now becomes what to do about the recurring rot issues. In the forthcoming issues of OGEN, we will begin a series of articles detailing a newer canopy management strategy, early leaf removal (ELR), that shows promise for reducing incidence and severity of late-season rots in many tight-clustered varieties such as Pinot Noir and Pinot Gris.

Tips for managing late-season diseases

Disease management should be a multi-faceted approach, encompassing both chemical and cultural control practices. Knowing what we do about *Botrytis* and sour rot, control practices incorporate:

- Bird control to limit berry puncture wounds, which serve as entry points for disease
- Maintain an open canopy around the fruit-zone through performing viticultural best practices (e.g., shoot thinning, shoot positioning, leaf removal, etc.) to improve air flow, sunlight exposure, and fungicide penetration
- Utilizing best practices for disease management ([2018 Midwest Fruit Pest Management Guide](#))

AARS (continued)

Stalled ripening in late-ripening varieties

After a warm September, temperatures completely stalled after the first week of October, bringing brix accumulation to a halt as well (Fig. 1). Degradation of malic acid is closely linked to ambient temperature [1], so it was not a surprise to see that titratable acidity levels decreased only moderately throughout the last three weeks of October (Table 1). As often seems to be the case at AARS, this was a fine year for mid-season varieties such as Sauvignon Blanc, Regent, and Gruner Veltliner. These varieties reached peak maturity after the period of extreme heat in late September, but before temperatures fell off dramatically in mid-October. Of all the varieties in Northeast OH, I have been hearing that it was an especially tough year for Riesling. Riesling has two characteristics one would have wanted to avoid during the 2018 growing season: it is (1) late ripening and (2) highly susceptible to *Botrytis*.

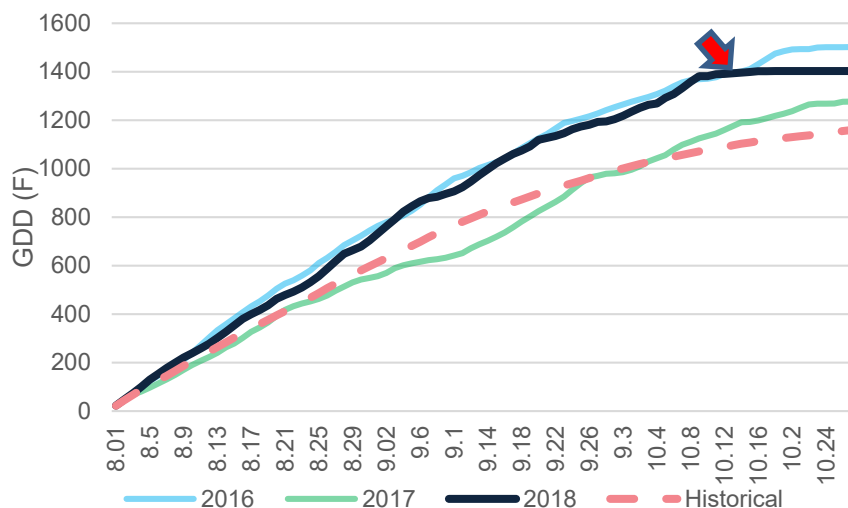


Figure 1. GDD stalls Mid-October

Table 1. Cabernet Franc maturity progression

Sampling Date	Brix	Titratable Acidity	pH
10/3/2018	19.0	8.00	3.50
10/11/2018	20.2	7.23	3.47
10/17/2018	20.2	6.87	3.46
10/26/2018	21.0	6.77	3.67

Loose Ends

At the research station, we have begun bringing nets in and revisiting our hilling up protocol in preparation for winter. With regards to our spray program, this has been one of our lighter post-harvest periods for spray applications. I have relied on scouting to decide when and whether to apply a post-harvest spray application for downy and powdery mildew. At AARS, I have seen little pressure for either in the post-harvest period. Driving through the local vineyards, it does appear, however, that mildew got the best of some vines in the post-harvest period. As of October 29th, most of our vineyards locally have been frost free and have a full canopy. An extended post-harvest canopy has been linked to positive benefits such as improved bud initiation and general vine productivity [2].

There are only so many ways to say that it was a difficult year. Well done to our growers this year for the dedication and skill they displayed battling the tough conditions. Seeing as there are many skilled winemakers in the state, it will be exciting to see what they can do with the 2018 vintage. May our path to success be a little easier in 2019!

References

- [1] Kliewer, W. M. (1973). Berry composition of *Vitis vinifera* cultivars as influenced by photo-and nycto-temperatures during maturation. *Amer Soc Hort Sci J.* 98. 153-159.
- [2] Howell, G. S. (2001). Sustainable grape productivity and the growth-yield relationship: A review. *American Journal of Enology and Viticulture*, 52, 165-174.

Sprayer winterizing and storage: mitigating costly spring problems

By: Dr. Erdal Ozkan, Ag. Engineering-OSU



It is likely your sprayer use is now complete until next spring. To avoid potential problems and save yourself from frustration and major headaches next spring, provide your sprayer now with some TLC (Tender Loving Care). Yes, you may have some fruit still remaining to be harvested, and it may still be a busy time for the year, however, do not ignore the importance of sprayer winterization . If you have not done so yet, do not delay winterization too long! You don't want a pump that is cracked and/or not working at its full capacity because the sprayer was not properly winterized before the temperature falls below freezing. Here are some important tasks to perform for your sprayer this time of the year.

Photo credit: Erdal Ozkan

Rinsing

You likely did the right thing when you used the sprayer the last time: *you rinsed the whole system (tank, hoses, filters, nozzles) thoroughly*. If you did not, make sure this is done *before* storing the sprayer. A sprayer that is not rinsed thoroughly after each use, and especially after the spraying season is over, may lead to cross-contamination of products applied next spring. Another problem that may result from lack of, or insufficient rinsing of the complete sprayer parts is clogged nozzles. Once the nozzles are clogged, and they remain in that condition a long time, it is extremely difficult to bring them back to their normal operating conditions you expect from a comparable clean nozzle. Leaving chemical residues in nozzles will usually lead to changes in their flow rates, as well as in their spray patterns resulting in uneven distribution of chemicals on the target.

Depending on the tank, proper rinsing of the interior of the tank could be easy or challenging. It will be very easy if the tank is relatively new and is equipped with special rinsing nozzles and mechanism inside the tank. If this is not the case, manual rinsing of the tank interior is more difficult, and poses some safety problems such as inhaling fumes of leftover chemicals during the rinsing process. To avoid these problems, either replace the tank with one that has the interior rinse nozzles, or install an interior tank rinse system in your existing tank.

For effective rinsing of all the sprayer components, circulate clean water through the whole sprayer parts several minutes first with the nozzles off, then flush out the rinsate through the nozzles. Rinsing should be done preferably in the field, or on a concrete chemical mixing/loading pad with a sump to recover rinse water. Regardless, dispose of the rinsate according to what is recommended on the labels of the pesticides you have used. Always check the label for specific instructions. However, most labels recommend following procedure: If rinsing is done on a concrete rinse pad with a sump, put the rinsate collected in the sump back in the tank, dilute it with water and spray it in the field where there is no potential for the rinsate to reach ditches and other water bodies nearby. If the rinsing is done in the field, make sure you are not flushing out the rinsate in the system in one area. It is best to further dilute the rinse water in the tank and, spray it on the field on areas where there is no potential for the rinsate to reach ditches and other water bodies nearby.

Sprayer storage (continued)

Cleaning

Rinsing the system with water as previously explained may be insufficient to remove chemicals from the sprayer. This may lead to cross-contamination problems. Some pesticide residues left in the sprayer may cause serious problems when a spray mixture containing these residual materials is applied on a grape variety highly sensitive to that pesticide. To avoid such problems, it is best to *clean* and *rinse* the entire spraying system with some sort of a cleaning solution. *Usually a mixture of 1 to 100 of household ammonia to water should be adequate for cleaning the tank, but you may first need to clean the tank with a mixture containing detergent if tank was not cleaned weeks ago, right after the last spray application.* Some chemicals require specific rinsing solution. See the online University of Missouri Extension Publication listing many commonly used pesticides and the specific rinsing solutions required for them at <http://extension.missouri.edu/p/G4852>. However, you should always check the product label to find out the most recent recommendations on cleaning agents.

Cleaning the outside of the sprayer components deserves equal attention. Remove compacted deposits with a bristle brush. Then flush the exterior parts of the equipment with water. A high pressure washer can be used, if available. Wash the exterior of the equipment either in the field away from ditches and water sources nearby, or a specially constructed concrete rinse pad with a sump. Again, the rinsate should be disposed of according to the label recommendations. As previously mentioned, most labels recommends the same practice: put the rinsate collected in the sump back in the tank, dilute it with water and spray it in the field where there is no potential for the rinsate to reach ditches and other water bodies nearby.



Photos: Nozzle and filter cleaning prior to sprayer storage. Photo credit: (Left) E. Ozkan, (Below) K. Horniblow



Sprayer winterization for fall 2019

- **Rinse** residues from tanks, hoses, filters, and nozzles
- **Clean** the tank and sprayer components inside and outside with recommended detergents according to pesticide product labels
- **Winterize** the sprayer, especially the pump, drying completely and adding recommended oils/lubricants. Be aware of potential damaging oils to rubber pump parts.
- **Check** all parts for cracking and other signs of wear and damage. Identify parts needed for repair and replacement for the following season.
- **Store** your sprayer and parts away from damaging weather conditions in a dry building away from sunlight, moisture, and extreme temperature exposure.

Sprayer storage (continued)

Winterizing

Check one more time to make sure there is no liquid left inside any of the sprayer parts to prevent freezing – especially the pump, the heart of a sprayer, which requires special care. You don't want a cracked and/or below full capacity working pump because of improper maintenance before winter freezing temperatures. After draining the water, add a small amount of oil, and rotate the pump four or five revolutions by hand to completely coat interior surfaces. Make sure that this oil is not going to damage rubber rollers in a roller pump or rubber parts in a diaphragm pump. If oil is not recommended, pouring one tablespoon of radiator rust inhibitor in the inlet and outlet part of the pump also keeps the pump from corroding. Another alternative is to put automotive antifreeze with rust inhibitor in the pump and other sprayer parts. This also protects against corrosion and prevents freezing in case all the water is not drained. To prevent corrosion, remove nozzle tips and strainers, dry them, and store them in a dry place. Putting them in a can of light oil such as diesel fuel or kerosene is another option. Check the operator's manual prior to winterization.

Storage

Find ways to protect your sprayer against the harmful effects of snow, rain, sun, and strong winds. Moisture in the air, whether from snow, rain, or soil, rusts metal parts of unprotected equipment of any kind. This is especially true for a sprayer, because there are all kinds of hoses, rubber gaskets and plastic pieces all around a sprayer. Yes, the sun may help reduce air moisture, but it also causes damage. Ultraviolet light softens and weakens rubber materials (e.g., hoses and tires) and degrades some tank materials. The best protection from damaging environmental conditions is to store sprayers in a dry building. Storing sprayers in a building also gives you a chance to work on them any time during the off-season regardless of weather. If storing in a building is not possible, try covering the sprayer with some material that will protect it from sun, rain and snow. When storing trailer-type sprayers, put blocks under the frame or axle to reduce tire pressure during storage.

Finally, check the condition of all sprayer parts one more time before leaving the sprayer behind. Identify the parts that may need to be worked on, or replaced. Check the tank, and hoses to make sure there are no signs of cracks starting to take place. Check the painted parts of the sprayer for scratched spots. Touch up these areas with paint to eliminate corrosion. Finally, don't forget to cover openings to prevent bird nesting, insects, dirt, and other foreign material from getting into the sprayer system.



Photo: Vineyard sprayer, Photo credit: Erdal Ozkan

A good 2018 harvest in the OARDC enology lab

By: Patrick Pierquet and Todd Steiner, HCS-OSU

Today (10/24), we crushed the last of our red and white wine grapes for the season in the OARDC enology lab. There's a lot of work ahead, of course, with ongoing red and white wine fermentations, pressing reds, racking, filtering, etc., but it's always very satisfying to crush that last lot of grapes for the season. In general, the quality of the fruit has been very good, particularly considering the warm and wet challenging growing conditions this year. Thanks to our vineyard managers Andy Kirk (Ashtabula station), Dr. Imed Dami and Diane Kinney (Wooster). As you may be aware, September and early October were warmer than normal, which resulted in lower acids in the grape must. With some varieties, Sauvignon blanc from Wooster and Cabernet Franc from Kingsville, the acid was so low that we had to add tartaric acid, which is nice to observe in cool climate wine regions like Ohio.

As in previous years, we are making experimental wines from several grape varieties that are not grown widely here but seem to have potential. These varieties include Sauvignon Blanc, Petit Manseng, Ortega, Arneis, Teroldego and Regent, among others. You'll have the opportunity to sample some of these experimental wines at our post-harvest workshops in December and January (dates and locations will be announced soon).

As we normally do, we are making wines from "standard" Ohio varieties such as Chambourcin, Cabernet Franc, Chardonnay and Pinot Gris. We have trials evaluating enzyme comparison for red wine primary fermentation, a comparison of primary fermentation temperatures on red wine quality, evaluating yeast mannoproteins and carobmethylcellulose (CMC) for efficient cold stabilization practices, and juice reduction to improve Pinot Noir color and flavor. These experiments will provide guidance to the Ohio wine industry for improving our wine quality.

Good luck to all Ohio wineries for a successful 2018 vintage, and we'll see you at our workshops and the Ohio Grape and Wine conference February 18-19, 2019 at the Embassy Suites in Columbus/Dublin, Ohio!



Photos: (left) Diane Kinney and Dr. Lisa Robbins Dunlap at harvest, (center and right) grape crush, Photo credit: Dr. Lisa Robbins Dunlap

Vines & Wines News @ Buckeye Appellation | 2018

By: Diane Kinney, HCS-OSU

Vine & Wine News continues to provide updates on grape growing and wine making in Ohio and elsewhere. These updates will be posted on the program website, *Buckeye Appellation* (BA) at:
<http://ohiograpeweb.cfaes.ohio-state.edu/>.

We would like to invite you to visit the website on a regular basis to help inform you of what our OSU Team has available to you through OGEN, TGE, research updates, events and news. Our hope is that it becomes a resource you look up periodically. ***So why not bookmark this site today?***

In the month of September, we have posted the following updates. Simply click on the blue link and the desired document will automatically open.

Educational Materials:

- ❖ Ohio Grape-Wine Electronic Newsletter ([OGEN](#)) on homepage and tab (current issue).
- ❖ The Grape Exchange ([TGE](#)) on the homepage and tab (latest posting on September 24).

News:

- ❖ [Fruit Maturity](#) at the OSU-Wooster and AARS-Kingsville

Wines and Vines News @ Buckeye Appellation | 2018

Submit your wines for the 2018 Ohio Wine Quality Assurance program! See pp. 14-18 for submission guidelines.

Save the Date!



2019 Ohio Grape & Wine Conference
February 18-19, 2019
Embassy Suites Columbus/Dublin
5100 Upper Metro Place
Dublin, OH 43017



NOVEMBER 2018 OHIO QUALITY WINE SENSORY EVALUATION (OOW)

1. OQW Date: November 29, 2018
2. Location: OSU/OARDC - Fisher Auditorium
3. Coordinator: Todd Steiner - OARDC
4. Stewards: OSU/OARDC and ODA Staff
5. Entry Fee: \$50.00

The OQW Program: \$50.00 per entry plus the retail price for 3 bottles of each entry. * **Special Note: Since we have tax exempt status, we do not need to pay tax on the wines entered into the OQW sensory evaluation. This is a change we adopted at OSU/OARDC for all OQW sensory evaluations.**

Wines submitted for the quality seal designation must be made of 90% Ohio grown grapes consisting of *Vitis vinifera*, French/American hybrid's or American/*Labrusca* varieties. *It is also important to note that any fruit source other than grapes including essence (formula) wines are not currently allowed into the OQW program.

In addition to other parameters set forth, wines submitted into the OQW program must receive 15 points or higher on a 20 point scale to be eligible for the OQW seal and pass chemical evaluation based on Federal (TTB) standards. Participating wineries will be contacted by the Ohio Grape Industries Committee with results of the sensory and chemical evaluation for OQW status.

6. Number of bottles required: 3 per entry **(Please include invoice for wines submitted)**
7. Wines must be of commercial quantities: A minimum of 50 cases of Still, Sparkling and Dessert wine and 20 cases of Ice wine should be available for sale at the time of entry.
8. Shipping address: OARDC
C/o Todd Steiner
2018 November OQW Sensory Evaluation
Dept. of Horticulture & Crop Science
1680 Madison Avenue
Wooster, OH 44691



THE OHIO STATE UNIVERSITY

COLLEGE OF FOOD, AGRICULTURAL,
AND ENVIRONMENTAL SCIENCES

9. Entry Deadline: **November 19, 2018**

10. A panel of 5 experienced judges will use a variation of the standard 20 - point U.C. Davis scoring system sheet as used in most wine competitions. High and low scores will be thrown out. The remaining 3 scores will be added together, averaged and rounded to the next full number.

11. Chemical analysis will also be performed on all submitted wines representing a second component of the quality assurance program based on the Federal (TTB) regulations for volatile acidity, total sulfur dioxide and alcohol concentrations.

12. Varietal Wines:

If the wine is varietal, please indicate as such on the entry form. (Varietal wines will be separated within each category.) **If the wine is generic, please indicate from which varieties the blend is made.** It does justice to the wine since it enables us to judge it in the right context (flight)!

Designation of Sweetness:

Dry:	under 0.7% RS
Medium Dry:	0.8-2.0% RS
Medium Sweet:	2.1-4.0% RS
Sweet:	more than 4.0% RS

***The exact designation of sweetness helps us in establishing the correct tasting order within a flight!**

13. Vintage of Wines:

The vintage on the entry form has to be **consistent with the label!** If there is no vintage designation on the label (which, for instance, are all wines with an American appellation), the space on the entry form should either be left empty or red “NV” (Non-Vintage)!

***Note: Wine labels**

Since proof of 90 percent Ohio grown fruit is required on the entry form for wines achieving OQW status, wines labeled with an “American” appellation will be accepted into the OQW program.

ENTRY DEADLINE: NOVEMBER 19, 2018

Please UPS or deliver to: OARDC, 2018 November OQW sensory evaluation, c/o Todd Steiner, Dept. of Horticulture & Crop Science, 1680 Madison Ave., Wooster, OH 44691, ph: 330-263-3881. Please include check made payable to: OARDC - OQW Sensory Evaluation.

NOVEMBER 2018 OOW ENTRY FORM

Please fill out the attached forms and send them with the entry fee and wine invoice to:

OARDC

C/o Todd Steiner

November 2018 OQW Sensory Evaluation

Dept. of Horticulture & Crop Science

1680 Madison Ave

Wooster, OH 44691

Choose one of the following categories for the OQW Program:

- | | |
|--------------------------------------|--------------------------------------|
| 1. American Dry Red | 33. Hybrid Sweet Blush/Rosé |
| 2. American Medium Dry Red | 34. Pinot Noir |
| 3. American Medium Sweet Red | 35. Cabernet Sauvignon & blends |
| 4. American Sweet Red | 36. Cabernet Franc |
| 5. White Catawba | 37. Merlot |
| 6. Niagara | 38. Shiraz/Syrah |
| 7. American Medium Dry White | 39. Vinifera Dry Red |
| 8. American Medium Sweet White | 40. Vinifera Medium Dry Red |
| 9. American Sweet White | 41. Vinifera Medium Sweet Red |
| 10. Pink Catawba | 42. Vinifera Sweet Red |
| 11. American Dry Blush/Rosé | 43. Pinot Gris/Grigio |
| 12. American Medium Dry Blush/Rosé | 44. Chardonnay |
| 13. American Medium Sweet Blush/Rosé | 45. Gewurztraminer |
| 14. American Sweet Blush/Rosé | 46. Riesling |
| 15. Chambourcin | 47. Vinifera Dry White |
| 16. Chancellor | 48. Vinifera Medium Dry White |
| 17. Foch | 49. Vinifera Medium Sweet White |
| 18. Hybrid Dry Red | 50. Vinifera Sweet White |
| 19. Hybrid Medium Dry Red | 51. Vinifera Dry Blush/Rosé |
| 20. Hybrid Medium Sweet Red | 52. Vinifera Medium Dry Blush/Rosé |
| 21. Hybrid Sweet Red | 53. Vinifera Medium Sweet Blush/Rosé |
| 22. Seyval | 54. Vinifera Sweet Blush/Rosé |
| 23. Traminette | 55. American Sparkling |
| 24. Vidal | 56. Hybrid Sparkling |
| 25. Vignoles | 57. Vinifera Sparkling |
| 26. Hybrid Dry White | 58. Dessert: Fortified, dry or sweet |
| 27. Hybrid Medium Dry White | 59. Slightly Carbonated |
| 28. Hybrid Medium Sweet White | 60. Ice Wine |
| 29. Hybrid Sweet White | |
| 30. Hybrid Dry Blush/Rosé | |
| 31. Hybrid Medium Dry Blush/Rosé | |
| 32. Hybrid Medium Sweet Blush/Rosé | |

NOVEMBER 2018
OHIO QUALITY WINE PROGRAM
ENTRY/APPLICATION FORM

Winery Information:

Winery Name:	
Contact:	
Address	
City, State, ZIP	
Phone	
Fax:	
E-mail	
Ohio A- 2 Permit #	
Signature (required):	
Date:	

Category	
Wine Name	
Brand (If other than Winery Name)	
Vintage	
Varietal / generic name	
Appellation (As stated on label)	
If generic, note blend components	
Percent Residual Sugar	
Fruit Source:	
Appellation	
Town	
County	
Percentages of fruit used in varietal or blend	
Total gallons of wine produced	
Number of Cases for seal designation	
Number of cases produced for sale	
If submitting a bottle ready tank sample, please list expected bottle/case release date	

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Percentages of fruit used in varietal or blend	
Total gallons of wine produced	
Number of Cases for seal designation	
Number of cases produced for sale	
If submitting a bottle ready tank sample, please list expected bottle/case release date	

*For further additional entries, please make photocopies and fill out for each additional entry submitted or copy from the following website: <http://ohiograpeweb.cfaes.ohio-state.edu/>



THE OHIO STATE UNIVERSITY

COLLEGE OF FOOD, AGRICULTURAL,
AND ENVIRONMENTAL SCIENCES

Name & Address	Phone	Email & Website	Area of Expertise & Assistance Provided
Dr. Imed Dami, Professor & Viticulture State Specialist Dept. Of Horticulture & Crop Science 216 Gourley Hall – OARDC 1680 Madison Avenue Wooster, OH 44691	330-263-3882	e-mail: dami.1@osu.edu Website: Buckeye Appellation	Viticulture research and statewide extension & outreach programs.
Dr. Doug Doohan, Professor Dept. Of Horticulture & Crop Science 116 Gourley Hall – OARDC 1680 Madison Avenue Wooster, OH 44691	330-202-3593	Email: Doohan.1@osu.edu Website: OARDC Weed Lab	Vineyard weeds and control. Recommendation on herbicides.
Dr. Gary Gao, Small Fruit Specialist and Associate Professor , OSU South Centers 1864 Shyville Rd, Piketon, OH 45661 OSU main campus, Rm 256B, Howlett Hall, 2001 Fyffe Ct Columbus, OH	740-289-2071 Ext. 123 Fax: 740-289-4591	Email: gao.2@osu.edu Website: OSU South Centers	Viticulture Research and Outreach in southern Ohio
Dr. Melanie Lewis Ivey, Assist. Professor Dept. of Plant Pathology 224 Selby Hall – OARDC 1680 Madison Avenue Wooster, OH 44691	330-263-3849 330-465-0309	Email: ivey.14@osu.edu Website: OSU Fruit Pathology	Grape Diseases Diagnostics and Management. Recommendation on grape fungicides and biocontrols. Good Agricultural Practices and Food Safety Recommendations.
Diane Kinney, Research Assistant Dept. Of Horticulture & Crop Science 218 Gourley Hall – OARDC 1680 Madison Avenue Wooster, OH 44691	330-263-3814	Email: kinney.63@osu.edu Website: Buckeye Appellation	Vineyard and Lab Manager – Viticulture Program. Website manager for Buckeye Appellation website.
Andrew Kirk, AARS Station Manager Ashtabula Agricultural Research Station 2625 South Ridge Road Kingsville, OH 44048	440-224-0273	Email: Kirk.197@osu.edu	Viticulture Research and Outreach in northeastern Ohio.
Dr. Elizabeth Long, Assist. Professor OSU/OARDC Entomologist 105 Thorne Hall 1680 Madison Avenue Wooster, OH 44691	330-263-3725	Email: long.1541@osu.edu	Fruit and vegetable insects.
Dr. Erdal Ozkan, Professor & Extension State Specialist Food, Agriculture & Biological Engineering Dept, OSU 590 Woody Hayes Drive Columbus, OH 43210	614-292-3006	Email: ozkan.2@osu.edu	Pesticide application technology, Sprayer calibration
Patrick Pierquet, Research Associate Dept. Of Horticulture & Crop Science 220 Gourley Hall – OARDC 1680 Madison Avenue Wooster, OH 44691	330-263-3879	Email: Pierquet.1@osu.edu	Wine Cellar Master Enology research, micro-vinification, sensory evaluation, and laboratory analysis
Dr. Lisa Robbins Dunlap, Research Associate Dept. of Horticulture & Crop Science 218 Gourley Hall – OARDC 1680 Madison Avenue Wooster, OH 44691	330- 202-3543	Email: Dunlap.352@osu.edu	Cellar assistant Enology research, sensory evaluation, and laboratory analysis
Dr. Maria Smith, Viticulture Outreach Specialist Dept. of Horticulture & Crop Science 205 Gourley Hall – OARDC 1680 Madison Avenue Wooster, OH 44691	330-263-3825	Email: Smith.12720@osu.edu Website: Buckeye Appellation	Maria is the primary contact for viticulture extension and outreach. Evaluation of site suitability for vineyard establishment and all aspects of commercial grape production.
Todd Steiner, Enology Program Manager & Outreach Specialist Dept. Of Horticulture & Crop Science 118 Gourley Hall – OARDC 1680 Madison Avenue Wooster, OH 44691	330-263-3881	Email: Steiner.4@osu.edu Website: Buckeye Appellation	Todd is the primary research and extension contact of the enology program. Commercial wine production, sensory evaluation, laboratory analysis/setup and winery establishment.

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