TEXAS A&M AGRILIFE EXTENSION

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Texas Winegrower

A Quarterly Publication of the Texas AgriLife Extension Viticulture and Enology Program

Inside this issue:

Upcoming Events:

- Oct 18- 9-11 a.m. Tailgate Meeting Young Family Vineyards
- Nov 6, 7– TWGGA Grape Camp (Fredericksburg)
- Nov 18– Andy Walker and the return of Pierce's disease. (Salt Lick BBQ, Dripping Springs)
- Dec 2– 9 a.m. to 3 p.m. Prospective Grower Workshop. Lost Oak Winery RSVP to agriliferegister.tamu.edu/wine
- January pruning workshops are planned for Hidalgo and Lavaca counties. Please inquire for details on times and dates to Fran Pontash
- Gulf Coast Field Day Feb 3- Cat Spring

Welcome

From the editor

Welcome to the first issue of Texas Winegrower. A statewide quarterly publication of the Texas AgriLife Extension Viticulture and Enology Program.

Our Viticulture and Enology program is growing along with the winegrape industry here in Texas. In 2015 Justin Scheiner joined the horticulture department at Texas A&M as an Assistant Professor and an Extension Specialist-Viticulture. In 2016 we are happy to have the opportunity to add four new Viticulture Extension Program Specialists to our team. Fran Pontash representing the Gulf Coast and South Texas; Andrew Labay representing the Hill Country , Pierre Helwi in the High Plains and West Texas and Michael Cook in North Texas. These talented individuals join Ed Hellman, Jim Kamas and Larry Stein to make up the Viticulture and Enology Program for Texas A&M AgriLife Extension.

We are also proud to have the opportunity through support of the growing community to continue and expand our work at the new Texas AgriLife Extension Viticulture and Fruit Lab, where this newsletter is produced. We are working hard to put this facility and its staff to work to address winegrower needs and serve as a resource to fruit growers.

Texas Winegrower is a quarterly publication intended to update the wine growing community on regional and statewide news and events, as well as relevant research going on in the state. Additionally, this quarterly newsletter will serve as a resource for seasonally relevant topics as well as information of general interest to the win growing community.

Andy Walker 94% vinifera Selection # 07713-51

Dr. Andy Walker to showcase PD tolerant

Mark your calendars for Nov. 18th, for an event including wine tastings with Dr. Andy Walker at The Pecan Grove at Salt Lick BBQ. Seating is limited.

Details and registration can be found at agriliferegister.tamu.edu/Horticulture .

In addition to an opportunity to taste some of Andy Walker's PD tolerant selections, wines made from PD tolerant varieties and selections by Andrew Labay and Justin Sheiner will be poured as well. This is a great opportunity to taste the potential that some of these tolerant varieties have for wine making in Texas. **As of the publication date of this newsletter, this event has sold out. Please contact Laura Nelson to be put on our waitlist.**

Regional Updates

Michael Cook

North Texas

Growers in the North Texas region experienced a challenging start to the season with isolated spring frost and hail events into April along with heavy spring rains. A high incidence of disease last season combined with a mild winter led to increased disease pressure early-on. Failing to keep on top of recommended spray programs led to diseased foliage, followed by infected fruit. Some growers lost their entire crop to downy mildew or black rot. Vineyards with an effective spray regimen fared much better. After the excessive rainfall, vineyards entered into a drought period that caught some growers off guard. In general, most growers have been able to hold onto a healthy crop. A series of extremely early northern fronts, bringing copious amounts of rain came at an inopportune time for some growers presenting the dilemma of whether to harvest early or wait out the storm. Growers who did not harvest before the rainfall events noted a dilution of total soluble solids and had to wait for fruit to rise to acceptable soluble solid concentration to harvest. One of the challenges of hanging fruit was that in some vineyards berries had begun to split, inviting bunch rot and other pathogens into the clusters. Harvest of white wine grape varieties such as 'Blanc du Bois', 'Viognier', 'Sauvignon blanc', 'Orange muscat', and 'Malvasia Bianca were complete by late Sept. with harvest of red varieties such as 'Syrah' and 'Tempranillo' completing in early Oct. Overall, even with these obstacles, the majority of North Texas growers have produced a good crop of quality fruit. With harvest over growers are focusing their attention on maintaining a full canopy for as long as possible while simultaneously preparing for next season.

Andrew Labay

Hill Country

In the Texas Hill Country harvest began in late-June for early-ripening varieties, and for those wineries who picked early for rosé winemaking. By mid-August many sites and varieties had been harvested before the shift to unseasonably humid, rainy weather. Harvest continued through the beginning of September for much of the region, and overall we have seen average to above average yields with good fruit quality. There were some reports of lower sugar levels with certain varieties and at certain sites. The mid-August rains certainly could have been a factor. At our research plots in Fredericksburg and Hye we harvested ahead of the rains, and sugar levels were lower this year when harvested at similar pH levels compared to 2014 and 2015. High crop load could have been a factor for these sites.

The late-season rain and humidity led, in some cases, to downy mildew infections of highly susceptible varieties or where post-harvest sprays were not applied. It is for this reason that we are reminded to remain attentive to the vineyard post-harvest, even when our focus may shift heavily to the winery. This last week of September has seen another wave of rain in our region with totals from 1 – 5 inches and a drop in temperature. Fall is certainly in the air as we enter the October festival season.

High Plains

Pierre Helwi

Despite the hard end to the 2016 season, the High Plains is promising high quality grapes and wines. The hot and dry early summer allowed ideal ripening of berries with low disease pressure. July was characterized by warm temperatures during the day, up to 95°F and cool nights promoting an optimal accumulation of quality compounds in the berry. By mid-August, harvest of white varieties and some of the early ripening reds had started and 75% of these cultivars were in the wineries by late September. Late August saw heavy rainfalls of more than 4.5 inches with temperatures ranging between 89°F and 65°F. This rainy weather continued during September and sugar accumulation slowed down and ripeness was delayed for the unharvested varieties. With the humidity and the warm temperatures, bunch rots started to appear mainly in plots where appropriate fungicides were not applied for protection. Even with these unfavorable conditions, harvest continued when the climate allowed. Early and some mid-season varieties were picked with correct sugar levels while the remaining mid-season varieties and the majority of late ripening reds were harvested with lower sugar content. By the end of September, ripeness was achieved for the majority of cultivars with harvest near complete. The end of season conditions increased fungal disease pressure so growers should remain on top of their spray applications to prevent any infection. Looking at the big picture, even with the difficult conditions, grapes of quality were picked where sugar, acidity, phenols and aromas attained their optimal levels. 2016 will be remembered as a quality vintage from High Plains fruit.

Gulf Coast

Fran Pontash

Heavy rains drenched the Texas Gulf Coast early on, then abruptly halted during the ripening period. The hot dry spell, allowed for quality as the grapes were able to fully develop without losing acidity before the rains returned. The early season floods left a combination of factors that influenced harvest including, abundant early season vegetative growth, cloud covered skies during bloom, and an inability to get into the vineyard to spray fungicides due to flooding.

The hot, dry period during ripening allowed for a respite from disease pressure, so that by harvest, bunch rots were marginal. Blanc Du Bois and Lenoir dominate commercial production of the Gulf Coast region. Blanc Du Bois made up over 55% and Lenoir about 38% of harvested grapes for commercial use. Overall, their cluster weights were lower than average, and the quality of harvested berries was dictated by the success of managing the early season disease pressure and rapid shoot growth. The vast majority of Blanc Du Bois was harvested by July 30. Reported Brix levels for Blanc Du Bois grapes ranged from 19-24^0 Brix, with pH below 3.5.

The maturity of Lenoir was reached for harvest before the rains, while some ripening in the northern vineyards was cut short by a return of heavy rainfall. Lenoir ranged from 23-25^0 Brix with pH hovering around 3.7. Flavor profiles and conditions of grapes were pleasing. This year harvest logistics remain a challenge for small acreage growers.

Heavy rainfalls returned just in time to provide timely hydration to vineyards post-harvest, however the rains also created prime conditions for the return of fungal disease including downy mildew. Leaves need to stay on the vine for as long as possible in order to gather sunshine and replenish carbohydrate reserves for winter. Successful post-harvest management during a humid, rainy late summer must include preventive sprays against downy mildew of either mancozeb or captan with attention to mowing and weed control.

The Continuing Threat of Pierce's Disease

Jacy L. Lewis and Jim Kamas

After several years of drought, we have experienced a series of milder winters and dramatically wetter conditions in many parts of the state. The combination of plentiful water and mild winter temperatures appear to have resulted in an exponential rise in the number of insect pests in vineyards many of which have been shown to be competent vectors of Pierce's disease. As many of you know, funding for tracking of PD vectors including the Glassy Winged sharpshooter ended several years ago. This means that scientific data regarding vector numbers in vineyards is not available and the information we do have is anecdotal. That said, reports from a number of growers as well as trap data in our own vineyards at the Viticulture and Fruit Lab in Fredericksburg have suggested a large increase in the numbers of GWSS and other vector populations this year.

In addition to an apparent increase in the number of vectors, the Texas Plant Disease Diagnostic Lab has reported a sharp increase in the number of submitted samples testing positive for the pathogen that causes Pierce's disease. The combination of an increase in vectors along with an increase in pathogen reservoirs that may be indicated by the increase in positive tests in the diagnostic lab could lead to a new epidemic of vines and vineyards lost to Piece's disease. We are urging growers in all areas of the state to be vigilant in protecting their vines against this disease.

Please keep in mind that while there may be some difference in the progression of the disease in various geographic areas, the vectors, the pathogen and the disease have been found in ALL growing regions of the state. We believe that many vineyard and vine losses that have been considered "unexplained" or generally referred to as "winter kill" have been the direct result of infection by *Xylella fastidiosa,* the pathogen that causes Pierce's disease.

One option to consider when installing new plantings is the use of PD resistant varieties, many of which have been undergoing testing by staff at the Viticulture and Fruit Lab. Wines made from promising varieties by Andrew Labay, Justin Scheiner and Andy Walker will be showcased at November's event featuring Andy Walker. Additionally there will be informative talks by Jim Kamas, David Appel, and Andrew Labay. All of these speakers have been instrumental in research and development of management strategies for PD in Texas vineyards.

For more information on how to protect your vineyard against this lethal disease contact your regional Extension Program Specialist, or consult the **Texas Grape Growers' PD Management Guide** which can be found at aggie-horticulture.tamu.edu/fruit-nut/files/2010/10/Texas-Grape-Growers-PD-Management-Guide.pdf

The use of systemically applied imidacloprid is still the primary recommended strategy for preventing the spread of Pierces Disease in Texas

Post-Harvest Wind Down

Jacy L. Lewis

For many of us the post-harvest fall season is a time to stop and take a breath after a busy growing season, followed by a frantic harvest and crush. That said, there are still some important vineyard tasks to address before putting the vines to sleep for the winter to help ensure a good start to the following growing season.

We recommend the use of a cover crop in the overwhelming majority of vineyards in Texas. If a perennial cover crop is not in place, or maintaining a green cover through the winter dormancy of the perennial cover crop is desired, early fall is the time to seed. Getting in a crop of annual rye or oats before the fall rains is ideal. In addition to helping maintain a drivable/walkable surface in the vineyard while wet, a cover crop helps reduce soil compaction from heavy vehicle traffic, maintain soil structure and add important organic matter to the soil when it dies.

This is also a good time to address trellis and irrigation maintenance and repairs. Consider your canopy management strategy for the following year and make any needed adjustments to your trellis.

Once temperatures cool and vines have entered dormancy a small late fall application of nitrogen may be in order. As long as dormancy has initiated, this will not cause vines to break dormancy.

Don't forget, dormancy does not mean your vines cease to grow. In our Texas climate, while above ground growth stops, roots continue to grow and take up water and nutrients. In a dry fall or winter, your vines may need water. Water uptake continues during winter and an absence of adequate hydration leaves vines susceptible to freeze injury or even death.

If you are just realizing that you need replacement vines, it may be too late to get the rootstock you prefer. It is advisable to refuse to accept a less than desirable rootstock and rather use the opportunity to reassess any severe winter injury or kill in the spring and make a timely order next year for all replacement vines of the scion and rootstock variety you prefer.

This is also a good time to plan for and assess your chemical needs for next year and get bids. This can help prevent the need to make emergency purchases during the growing season, and allow you to get the best possible value for the chemicals you need. This will also ensure the ability to make a timely application of the desired chemical, even if it is for something your local supplier does not keep in stock.

Using this time to catch up on needed repairs, perform annual maintenance and plan for next growing season can save time, money and aggravation in the year to come. That said, don't forget to relax and recover during this "slow" season.

It is extension's recommendation that planting be postponed when desired scion / rootstock combinations cannot be sourced.

A well supplied chemical shed is a grower's best friend when conditions call for an immediate application of a desired chemical. Planning for these events in advance reduces stress and allows for timely crop saving applications while saving time and money.

Photos courtesy of Andrew Labay

Texas Winegrower is a production of the Texas A&M AgriLife Extension Viticulture Program.

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We welcome your questions or comments! Please address all comments or inquiries to:
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https://www.facebook.com/TXViticulture/

We hope you have enjoyed the first issue of our new statewide newsletter. Our goal is to provide timely information on topics of relevance to winegrape growers in Texas. In future issues we hope to include updates on scientific research, expert information on pest and disease management, vineyard best practices, and information on opportunities to attend Extension program events.

First and foremost, we want to produce a newsletter that is relevant and provides information that you as part of the winegrowing community are interested in. We welcome your comments and suggestions particularly with regard to your impressions of this first issue as well as topics you would like to see covered in future issues.

Thank you for your support of our program, and allowing us to help you to address your growing needs.

Cheers,
Jacy L. Lewis
Editor

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Photos courtesy of Texas A&M Agrilife Extension