



Nebraska VineLines

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Editors: Dr. Paul Read, Professor of Horticulture & Viticulture and
Stephen J. Gamet, Department of Agronomy & Horticulture

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NEBRASKA VINELINES – HOLIDAY ISSUE

END OF YEAR CHEER

The 2017 vintage gave the Nebraska grape and wine industry lots to cheer about (and a few perplexing problems). The weather cooperated (mostly) and there were some bumper crops in many vineyards, high yields of high quality grapes that should result in some exceptional wines. (Editor's note: I can hardly wait to try some of them and to showcase Nebraska wines wherever I travel in 2018.)

What were the perplexing problems? For many vineyards there were some serious problems with herbicide drift issues. Damage varied from some typical leaf symptoms that the vines grew out of, to total crop loss. In talking to growers and Extension viticulture specialists in other states in the Midwest and even east coast states, these problems continue to emerge. Unfortunately, they will probably continue to be a problem in future growing seasons. What can be done? First, the Nebraska Winery and Grape Growers Association (NWGGA) continues to dialog with the Nebraska Legislature to try to find ways to mitigate these problems (be sure to support the NWGGA's efforts). And secondly, as a grower, you can obtain a copy of the pamphlet developed by the NWGGA Herbicide Drift Committee entitled, "Herbicide Drift and You: Steps towards mitigation, documentation and recovery". The topics covered in this excellent document include:

- 1) Contacts
- 2) About this Document
- 3) Pre-incident
- 4) Driftwatch
- 5) Sample Neighbor Letter
- 6) The Cost of Spray Drift

- 7) Identification of Damage
- 8) Identification Resources
- 9) Filing a Complaint
- 10) Post Incident
- 11) Remedial Actions, and the
- 12) NWGGA Incident Report Form

Other issues? Mother Nature continues to throw curveballs at our grape growers, but we're used to dealing with late frost, hail, diseases and insects. Obviously dealing with the latter pest problems will be part of a prudent grower's management plan, including an appropriate spray program and **keeping good records**. It isn't possible to emphasize enough the importance of record keeping, both in relation to routine management issues, but also in dealing with spray drift issues as well.

REPORT SUGGESTS HEAT CAN CONTROL POWDERY MILDEW

A recent report by the Wine Business Monthly (posted 12/12/17) provides evidence that the process of application of heat in the vineyard can help control Powdery Mildew (*Uncinula necator*). Such applications are accomplished by use of the Agrothermal Systems heat technology that has been tested in recent years and is being promoted by Marty Fischer, CEO and Founder of Agrothermal Systems (<http://agrothermalsystems.com/thermaculture>). This system has been tested in several vineyards in California, including Foley Family Vineyards, where their 2016 trial showed that the Thermaculture protocol provided the same powdery mildew control that was provided by their conventional fungicide program. Similar results were achieved in several other vineyards and also has been reported by Fruition Science in New Zealand. In a further note, research by

Dr. Doug Gubler indicated that the Agrothermal heat treatment was effective when used in 2017 replicated trials on Chardonnay, Pinot Noir and Cabernet Sauvignon, where heat alternated with fungicide gave the same clean results as a fungicide-only protocol. This represented a 50% reduction of fungicide use. Recommendations by Agrothermal Systems to growers suggest that this heat technology will reduce chemical applications. Fisher has also indicated that the agrothermal technology can increase yields, improve wine quality and provide natural pest control, but they will not rush into use of this system, but they will continue to learn and experiment. More information on impact on other disease organisms needs to be determined, but the Agrothermal Systems technology certainly appears to be promising.

[Editors's note: Marty Fischer exhibited and spoke at the 19th Annual Nebraska Winery and Grape Growers Forum and Trade Show in Omaha (March, 2016)].

WHAT'S COMING IN 2018?

- 1) Watch for a report on Ben Loseke's PhD outstanding research on Ground Covers and Cover Crops. The results of this research should provide valuable insights helpful to grape growers in Nebraska and beyond.
- 2) Regional Vineyard Tailgates – as noted earlier, a series of regional tailgate educational opportunities are being planned for 2018. Watch for dates and locations to be announced in future issues of the Nebraska VineLines and on our University of Nebraska Viticulture Program web site <http://viticulture.unl.edu>

HAPPY HOLIDAYS TO ALL AND TO ALL A GREAT GRAPE AND WINE SEASON IN 2018!

We wish you and all those near and dear to you a warm and relaxing holiday season. So take time to savor the moment with friends and family, and of course with a great Nebraska wine!

Your University of Nebraska Viticulture Program Team:
Paul, Steve, Ben, Amer, Aaron and Diane

Reminder Calendar:

January 5-6, 2018 Kansas Grape Growers & Winemakers Association Conference – Double Tree Hotel, Lawrence, KS: <http://kansasgrapesandwines.com/events/annualconference>

January 11-13, 2018 Great Plains Growers Conference – Missouri Western State University in St. Joseph, MO: <http://www.greatplainsgrowersconference.org/>

January 23-25, 2018 Unified Symposium, Sacramento Convention Center:
<https://www.unifiedsymposium.org/>

March 6-8, 2018 Eastern Winery Expo – Lancaster County Convention Center, Lancaster, PA.
<http://www.easternwineryexposition.com/>

March 15-17, 2018 Cold Climate Conference, Minneapolis/St. Paul, MN. More information soon at:
<http://mngrapegrowers.com/conference>

June 20-22, 2018 The GrapeVine Magazine Midwest Viticulture Expo 2018 – The RiverCenter, Davenport, IA. Sponsored by The GrapeVine Magazine, information at <http://thegrapevinemagazine.net/>



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