



# Nebraska VineLines

UNIVERSITY OF  
**Nebraska**  
Lincoln | EXTENSION

**University of Nebraska Viticulture Program**

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April 2014  
Issue XVII-2

## SPRING EDITION

### 17<sup>th</sup> ANNUAL FORUM EXCITING, EDUCATIONAL

The 17<sup>th</sup> Annual Nebraska Winery and Grape Growers Forum and Trade Show was held February 27- March 1, 2014 at the Kearney Holiday Inn and was hailed by attendees as “inspiring, educational and overall extremely worthwhile”. Katie Cook, Enology Specialist from the University of Minnesota grape and wine program provided insights into the U of M grape breeding program with her Keynote address “What’s New and Exciting in the University of Minnesota Grape and Wine Program” and presented a workshop for winemakers on “Working with Minnesota Grape Cultivars in the Winery”, a timely topic as Nebraska and Midwest winemakers work to perfect their wines from ever-increasing acreages of ‘Marquette’, ‘Frontenac’, ‘Frontenac Gris’ and ‘La Crescent’. Katie also addressed “Wine Microbial Stability” with helpful tips on preventing spoilages and for harnessing the “good” microbes, especially the yeasts.

Danene Beedle, Marketing Director for the Missouri Wine and Grape Board explained how the Missouri grape and wine industry has grown so successfully, with a workshop entitled “Missouri Wine’s Marketing Expedition – the Unfolding of Our Story” and presenting the third Keynote address, “Branding – Your Stamp of Approval”. Attendees were duly impressed as Danene explained and encouraged an understanding of the many aspects of marketing and promotion of a quality product, such as Nebraska wines.

Dr. R. Keith Striegler, proprietor of Flint Ridge Winegrowing Services and no stranger to the Nebraska industry, discussed the problems of labor costs and availability by his Keynote presentation “Mechanization in the Vineyard”. Keith also headlined our Advanced Viticulture track on Saturday by explaining the national “Clean Plant Network”. As more and more hidden virus problems emerge in vineyards, Keith explained the valuable contribution that can be made by providing planting stock that has been tested for specific disease problems, in other words, enabling new vineyards to be planted with clean planting stock, which will get new plantings off to a healthy start.

Other topics that caught the interest of attendees included “How Frost Develops: Use of the Cold Air Drain for Frost Protection (Steve Hammersmith, Shur Farms Frost Protection), Robert Byrnes from Nebraska Renewable Energy who presented “Leading the Way – An Update on Sustainable Viticulture in Nebraska” and John Laffey, Enlist Field Specialist, Dow AgroSciences who discussed Dow’s new “Enlist” program of GMO crops and the Dow chemicals that accompany them. The “Off Target Management Panel” provided further discussion regarding the relative safety of new formulations of 2,4-D and related requirements for individuals who use these combinations. The Trade Show attracted visitors and attendees, providing information and demonstrations that enlightened participants on what’s new and what’s available to enhance their grape growing and winemaking enterprises.

The conference concluded with the Annual Grand Awards Banquet, featuring an elegant meal that included outstanding Nebraska wines to match each course of the meal. Each winemaker whose wine was selected explained the background of the viticulture and winemaking that went into producing these exceptional wines that were selected from a competition that involved over 60 excellent wines. The judges noted that the Nebraska wines are continuing to improve, noting that "they're getting better every year!" Wayne Peterson of Midwest Growers Supply was presented with the C. J. Schweitzer Award for his outstanding and continuing support of the Nebraska Grape and Wine Industry.

### **WINTER OF 2013-2014 IMPACTS VINEYARDS IN DIFFERENT WAYS**

Based upon observations in eastern Nebraska vineyards, it is apparent that Mother Nature didn't treat all vineyards equally. The University of Nebraska Viticulture Program's research vineyards near Nemaha, Peru and Nebraska City have exhibited minimal damage to primary buds, trunks and cordons. Vineyards in and near Lincoln also experienced only a small amount of damage. Damage estimates vary with cultivar, with the most sensitive (e.g., vinifera, Chardonnay, Traminette, Chambourcin, Lemberger, Vignoles) often showing slight to moderate injury, while more hardy cultivars (Frontenac, Marquette, Saint Croix) showed no damage whatsoever.

Ed Swanson (Cuthills Vineyards) reported that his vineyards were damaged significantly by the cold temperature events that were observed in his plantings near Pierce, with many of his new seedlings hurt first by the cold and then "pruned" by rabbits all the way to the ground. In addition his mainstay plantings of Lacrosse and Petite Amie suffered serious injury as well. He did indicate that some of his more advanced selections came through quite well, which is reason for optimism. Ed further noted that his Temparia which was growing near Frontenac Gris and La Crescent - both of which were noticeably damaged - but the Temparia escaped unscathed.

As you can see from the notes that follow from Max Hoffman (Schillingbridge Winery and Microbrewery) and Jim Shaw (Soaring Wings Vineyard), in addition to Ed Swanson's comments and our UNL observations, it was a truly variable fall and winter season. As plants resume growth following bud

break, an initial assessment can be made. When flowering occurs (capfall), vine survival can be further evaluated, but if serious trunk or cordon damage occurred there will be vascular injury that will evidence itself when the vines are growing vigorously. In the summer the result will be collapse of shoots when the weather gets hot and stressful, so the full extent of the past seasons' damage will only be seen as the growing season progresses. Let's hope for good recovery for those vineyards that experienced damage and be cautiously optimistic for a good crop for the 2014 vintage for all Nebraska vineyards.

### **Schilling Bridge Vineyard News, Max Hoffman**

At the Schilling Bridge vineyard we had low temps of -6 in early December, -12 in both January and February, and -8 in early March. Bud damage is insignificant on Lacrosse, DeChaunac, Traminette, Edelweiss, Aurore, and Baco Noir. Twenty to thirty percent primary damage on Seyval and about fifty percent primary damage on Chambourcin. Most secondary buds are alive on the Chambourcin. Most buds on the few Vinifera vines we have are dead with the exception of some live secondary buds on Riesling. I will have a better handle on these at budbreak.

### **Soaring Wings Vineyard News, Jim Shaw**

#### **Bud and Vine Losses 2013-14 Winter**

Temperatures in our vineyard fell in the fall of 2013 from highs in the 60s F to lows of -2 F in 6 days. Surprisingly this caused not only extensive bud damage, but also significant trunk and cordon damage.

Initial field tests taking random samples of buds show the following results:

Syrah: (Was protected by dual insulation blankets) Bud survival less than 5%. Extensive cordon loss (>60%). No crop expected.

Chambourcin: Primary bud losses about 90%. Trunk and cordon losses unknown. Little to no crop expected.

Traminette: Primary bud losses 40%. No noticed trunk or cordon losses. Expect a 50% crop.

Brianna: Primary bud losses about 25%. No noticed trunk or cordon losses. Expect a 75% crop.

Edelweiss: Only larger buds survived. Those on smaller spurs suffered nearly 100% losses. Significant smaller diameter cordon damage. Expect 40% crop.

DeChaunac: There was about a 75% loss of primaries, but it still produces a crop on secondaries. Significant trunk and cordon damage. Expect a 40% crop and less production for next two years.

LaCrosse: There was a 50% loss of primaries, but like the DeChaunac significant trunk and cordon losses. Many were split. Expect a 35% crop and less production for next two years.

Vignoles: Almost every plant suffered from the loss of a cordon, trunk, or both. Bud survival was around 50%, but with the damages to the trunks and cordons production is questionable. Expect a 25% crop.

Frontenac. The only bright spot. 95% primary bud survival with no significant trunk or cordon damage noted. Expect a normal crop.

Last year's harvest was a bumper crop. This year's looks to be our worst since starting wine making operations 11 years ago. Suspect the extensive trunk and cordon damage was due to sap freezing in them with the extreme initial drop in temperatures. Have only seen this type of damage from late spring freezes, so this one is unusual.

### **From the Iowa Wine Grower News, Two useful lists:**

#### **25 Handy Online Pesticide Management Guides**

Setting up a vineyard pest management program takes some time and study. It takes several years of experience to become proficient in this art. Pest identification, sprayer calibration, Worker Protection Standard (WPS) requirements, pre-harvest intervals (PHI), re-entry intervals (REI), mode of action rotation, spray intervals, adjuvant use, mixing order, timing and cost all need to be considered for a good pest management spray program.

#### **Here is a list of some good resources that should come in handy:**

1. 2014 Midwest Small Fruit & Grape Spray Guide PM 1375, 92 pp.:  
<https://store.extension.iastate.edu/ItemDetail.aspx?ProductID=4796>
2. Midwest Small Fruit Pest Mgt. Handbook, 210 pp.:  
<http://pested.osu.edu/documents/CommStudy/2b%20Midwest%20Small%20Fruit%20Pest%20Mgmt.pdf>

3. North Central IPM Guide, 107 pp.:  
<http://www.ipmcenters.org/pmsp/pdf/NorthCentralGrapePMSP.pdf>
4. Pocket Guide for Grape IPM Scouting in North Central & Eastern U.S. MI State Univ. \$20
5. Grape IPM Guide for Minnesota Producers, UMN, 67 pp.:  
[http://pdc.umn.edu/prod/groups/cfans/@pub/@cfans/@pdc/documents/asset/cfans\\_asset\\_175589.pdf](http://pdc.umn.edu/prod/groups/cfans/@pub/@cfans/@pdc/documents/asset/cfans_asset_175589.pdf)
6. Pesticide Mgt. Chapter in the Vine Balance Sustainable Viticulture Guide, Cornell Univ, 28 pp.:  
<http://www.vinebalance.com/pdf/chapter6.pdf>
7. eXtension Grape Pest Management portal:  
<http://www.extension.org/pages/54498/growing-grapes-vineyard-ipm>
8. Fungicide Resistance Action Committee:  
<http://www.frac.info/>
9. Pesticide Labels and MSDS sheets:  
<http://www.cdms.net/LabelsMsds/LMDefault.aspx>
10. Compendium of Herbicide Adjuvants, Southern IL Univ.:  
<http://www.herbicide-adjuvants.com/>
11. Airblast Sprayer Calibration, Univ. of Kentucky, 3 pp.:  
<http://www.uky.edu/Ag/CCD/calibration.pdf>
12. Small Hand Sprayer Calibration, ISU, 4 pp.:  
<http://www.extension.iastate.edu/Publications/PM1271.pdf>
13. NY Extension Pesticide Application Technology portal, Excellent! :  
<http://web.entomology.cornell.edu/landers/pestapp/index.htm>
14. Effective Vineyard Spraying by Dr. Andrew Landers, 2010- 262 pp. approx.
15. EPA - Worker Protection Standard (WPS):  
<http://www.epa.gov/pesticides/health/worker.htm>
16. ISU Worker Protection Standard training resources:  
<http://www.extension.iastate.edu/pme/WorkerProtect.html>
17. EPA WPS Vineyard Worker Compliance Self Study Training document that can be used to comply with the EPA WPS training requirements, 37 pp.:  
[http://www.epa.gov/region07/pesticides/pdf/wps\\_vineyard\\_training.pdf](http://www.epa.gov/region07/pesticides/pdf/wps_vineyard_training.pdf)
18. TracGrape Pesticide Records & Excel Software from Cornell Univ. \$60 license fee.  
[http://www.nysipm.cornell.edu/trac/about/about\\_grape.asp](http://www.nysipm.cornell.edu/trac/about/about_grape.asp)
19. VineSmith's Pest Management Toolkit (one-of-a-kind pesticide guide – EXCELLENT), \$39:  
<http://www.vinesmith.com/spray-guides/>

20. 2014 New York and Pennsylvania Pest Management Guidelines for Grapes, \$27:  
<http://ipmguidelines.org/Grapes/Default.aspx>
21. Sprayer Nozzles, Selection & Calibration, UKY Extension, 6 pp.:  
<http://pest.ca.uky.edu/PSEP/Manuals/Nozzles.pdf>
22. TeeJet Nozzle Selection Guide:  
<http://www.teejet.com/english/home.aspx>
23. John Deere Nozzle Selection Tool:  
<http://nozzleselector.deere.com/>
24. Delavan Ag Spray Products Technical Information:  
<http://www.delavanagspray.com/TechInfo.htm>
25. EPA Pesticide Product Label Finder:  
<http://iaspub.epa.gov/apex/pesticides/f?p=PPLS:1>

### 15 Handy Organic Viticulture Resources

1. Ohio State University has a 46 page organic grape spray guide here:  
<http://www.oardc.ohio-state.edu/fruitpathology/organic/PDF/OSU-Organic-Grape-Diseases.pdf>
2. Microbial Biopesticides for the Control of Plant Diseases in Organic Farming, Ohio State Univ. 5 pp.: [http://ohioline.osu.edu/hyg-fact/3000/pdf/HYG\\_3310\\_08.pdf](http://ohioline.osu.edu/hyg-fact/3000/pdf/HYG_3310_08.pdf)
3. Washington State University Organic Viticulture Resources:  
<http://wine.wsu.edu/research-extension/grape-growing/organic/>
4. ATTRA has an excellent organic grape production guide here, \$3.95 digital, \$6.95 print copy., 44 pp.: <https://attra.ncat.org/attra-pub/summaries/summary.php?pub=5>
5. Organic Risk Mgt. Crops Manual, Univ. of MN:  
<http://www.organicriskmanagement.umn.edu/>
6. Cornell Univ. Organic Grape Production Guide, 44 pp.:  
[http://nysipm.cornell.edu/organic\\_guide/grapes.pdf](http://nysipm.cornell.edu/organic_guide/grapes.pdf)
7. National Organic Materials Review Institute:  
<http://www.omri.org/>
8. National Organic Program USDA homepage:  
<http://www.ams.usda.gov/nop/>
9. Iowa Department of Ag Organic Certification Program:  
<http://www.iowaagriculture.gov/AgDiversification/organicCertification.asp>

10. ISU Organic Agriculture Extension Program:  
<http://extension.agron.iastate.edu/organicag/>
11. Commercial Book: The Grape Grower – A Guide to Organic Viticulture by Lon Rombough”, 290 pp.: <http://www.bunchgrapes.com>
12. Learning Material on Organic Farming in Europe (put “Viticulture” in search box):  
<http://www.organic-edunet.eu/>
13. Organic ePrints – International Organic Farming Search Portal. (put “Viticulture I search box) : <http://orgprints.org/>
14. Organic Winegrowing Manual, 2011 McGourty, Ohmart & Chaney – UC Davis, \$35, 192 pp.: <http://anrcatalog.ucdavis.edu/items/3511.aspx>
15. Northeast Organic Network Cornell Univ.:  
<http://www.neon.cornell.edu/training/resources.html>

### 18<sup>TH</sup> FORUM TO BE HELD IN OMAHA – SAVE THE DATE!

The 18<sup>th</sup> Annual Nebraska Winery and Grape Growers Forum and Trade Show will be held March 5-7, 2015 at the newly renovated Omaha Marriott, 10220 Regency Circle, Omaha, NE 68114. The University of Nebraska Viticulture Program in collaboration with the Nebraska Winery and Grape Growers Association is excited to bring the 18<sup>th</sup> Forum to the Omaha Marriott, where new features will be available for attendees, along with the tried and true aspects of the previous conferences. People considering attending what promises to be an outstanding conference will find the amenities of the Omaha Marriott most attractive, including shuttle service to/from the Omaha airport, Eppley Field. The Omaha Marriott is also easily accessible by car and has excellent proximity to shopping and outstanding restaurants. Details of program content and speakers will be available later at the University of Nebraska Viticulture web site <http://agronomy.unl.edu/viticulture> For questions about the 18<sup>th</sup> Forum, contact Paul Read ([pread@unl.edu](mailto:pread@unl.edu) tel: 402-472-5136) or Stephen Gamet ([sgamet@unl.edu](mailto:sgamet@unl.edu))

**Save the date – March 5-7, 2015** for the 18<sup>th</sup> Annual Nebraska Winery and Grape Growers Forum and Trade Show.

## Reminder Calendar

May 3 & 4, 2014 Toast Nebraska Wine Fest, at Mahoney State Park

March 5 – 7, 2015, 18<sup>th</sup> Annual Forum.

May 4, 2014 Wine Barrel Profiles and Barrel Toasting Demonstration, Minnesota Grape Growers Association (MFFA), noon to 4:00 p.m., Chankaska Creek Ranch and Winery, Kasota, MN (507) 931-0089

June 23 – 27 Austin to Host 65th ASEV National Conference & 39th ASEV Eastern Section Annual Meeting

July 28 to August 2 11<sup>th</sup> International Conference on Grapevine Breeding and Genetics, Beijing, China,

<http://www.grapebreeding2014.com/Default.aspx?alias=www.grapebreeding2014.com/eng>

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