

Subject: RE: Nebraska VineLines January 2013

From: Kathryn Schindler
Sent: Thursday, January 31, 2013 4:49 PM
To: viticulture@unl.edu
Subject: Nebraska VineLines January 2013

Nebraska VineLines from Dr. Paul Read

“Growing an Industry” is Theme for Forum and Trade Show

Join us for the 16th Annual Nebraska Winery and Grape Growers Forum and Trade Show at the Kearney Holiday Inn from Feb. 28-March 2, 2013. A great lineup of speakers is being assembled to help us focus on improving our already outstanding grape and wine industry. The theme of the 16th conference is “Growing an Industry.”

When looking over evaluations of previous presentations of the Nebraska Winery and Grape Growers Forum and Trade Show, a common thread has been “let’s hear more from local growers, experts, winemakers”, so we have listened and that’s why the 16th Forum’s theme is “Growing an Industry.” The lineup of the speakers for the overall program will include successful Nebraska grape growers, winemakers, grape enthusiasts and experts from Nebraska and neighboring states.

Register for the forum and trade show at <http://events.r20.constantcontact.com/register/event?oeidk=a07e6y671j7fc91b3d9&llr=mnvcekkab>. A draft agenda is attached to this email.

We are also calling for submissions of wines for the competition featuring Nebraska's best wines to match each course of the banquet. It's going to be an exciting program filled with great information and the NWGGA's new Executive Director will provide insights on the state of the industry, as well as coordinating what promises to be a great Trade Show.

Survey Seeks Input on Cold Hardiness

Faculty at Michigan State University are asking for input on the hardiness of tree fruit and grapes at: <https://www.surveymonkey.com/s/ColdDamageTreeFruitGrapes>. For more information, contact Paolo Sabbatini at sabbatin@msu.edu.

“Recipe to Reality” Seminar is March 16

The UNL Food Processing Center is offering a one-day seminar for all individuals interested in starting a food manufacturing business. The “Recipe to Reality” seminar will be offered on March 16, 2013. Pre-registration is required and space is limited. Registration deadline is March 1, 2013. Contact Jill Gifford at 402-472-2819 or jgifford1@unl.edu for an information packet.



Harlene Hatterman-Valenti

Northern Grapes Project Continues Webinar Series

The Northern Grapes Project Webinar Series will hold webinars on Tuesday, Feb. 12, 2013 at both 11 a.m. Central/Noon Eastern and at 6 p.m. Central/7 p.m. Eastern. The topic will be “Vineyard Floor Management” with Harlene Hatterman-Valenti from North Dakota State University and Justine Vanden Heuvel from Cornell University. They will discuss the basics of vineyard floor management, weed control during vineyard establishment, and the use of under-vine cover crops. Harlene will also have photographs of herbicide damage on grape vines.

The Northern Grapes Project has switched to a different platform so there are no longer space restrictions during the webinars. Registration is free at the online

form: https://cornell.qualtrics.com/SE/?SID=SV_bEiXladi6CQLBsx. Once registered, participants will receive an email with the web address (URL) as well as connection instructions. Registration opens on Friday, Feb. 8, 2013, at 8 a.m. Eastern. For more information, see the Northern Grapes Project at <http://northerngrapesproject.org/>.



Justine Vanden Heuvel

Use of Grow Tubes in Vineyard Establishment

By Rick Dunst, Viticulturist, Double A Vineyards

The use of grow tubes in vineyard establishment has become popular in the past decade or two. Obviously, vineyards have been planted for thousands of years without the use of plant shelters, but the tubes do provide positive benefits. This article will summarize some research on grow tubes as well as our experience in western New York.

Grow tubes vary in shape, size, and color, and are placed around newly planted grapevines. Support is usually provided with a stake such as a bamboo pole. Manufacturers make various claims, including an increase in first year vine growth and the potential for earlier cropping or increased crop size in the first few years after planting. The positive growth response is attributed to the greenhouse-like environment inside the tube that promotes rapid shoot elongation, especially early in the season when all the vine growth is inside the shelter. Some manufacturers claim positive growth attributes due to the color of the tube and the positive effects of transmitted color on plant growth.

Many university studies have been conducted on grow tube use. Most research does agree with claims of an increase in early-season shoot growth attributed to the use of grow tubes, but support for some of the other manufacturer claims is lacking. For example, research in the Midwest has not shown an overall increase in vine growth from using grow tubes [1]. Rather, early-season vine growth usually results in a single dominant shoot that is straight with long internodes. In one study, newly-planted vines that were not pruned at planting and that were not grown in grow tubes had significantly more leaf area and end-of-season root mass than those trained to a single shoot, regardless of whether or not the vines were trained to a single shoot and established with or without grow tubes. Leaf area and root growth are cited as being most important in vineyard establishment. Additional research in Michigan and other states indicates an increase in shoot extension with the use of grow tubes, but not an overall increase in above- or below- ground vine growth, or an increase in long-term vine productivity [2]. Premature defoliation of vine parts inside the grow tubes was associated with reduced hardiness of vine tissue.

In 2012, the staff at Double A Vineyards conducted a simple experiment that compared the use of Blue-X grow tubes, Plantra grow tubes, and an untubed control for 'Concord' establishment. We measured end-of-season vine growth by counting the number of ripe nodes with developed periderm, and saw no difference. Periderm on untubed vines had typical "mahogany" color associated with ripened wood, while periderm on vines grown with grow tubes of either type had a more bleached appearance. While we will follow vine development this coming growing season, our previous experience with several varieties including natives, hybrids, and vinifera suggests there will be no detrimental effects associated with vines established with a grow tube as compared with those grown without one.

Despite the lack of research that supports the claims of an increase in the productivity of young vines, there are some generally recognized benefits of using grow tubes in vineyard establishment, including early development of a single, upright-growing trunk without labor inputs once the grow tubes are installed; protection from animal depredation; and, perhaps most important, protection from chemical herbicides that are often used during vineyard establishment. As noted, vines grown with the use of grow tubes generally produce one dominant, upright-growing cane that can be used to develop the first "semi-permanent" trunk. Protection from feeding by animals such as deer and rabbits can be critical in establishing first-year leaf area in situations where such protection is needed. Minimizing weed growth around young vines is critical during their establishment, as weeds can compete with vines for water, nutrients, and sunlight, with the potential to reduce growth and productivity of young vines.

Interestingly, in our experience, fungal disease pressure is usually not a problem when using grow tubes despite the greenhouse-like conditions inside them. Apparently, temperature fluctuations inside the tubes is not conducive to disease development. One problem that does occur on occasion is foliar feeding by insects such as Japanese Beetles. As the goal of vineyard establishment is to maximize leaf area development of young vines, leaf feeding by insects should be monitored regularly, and control measures should be applied as soon as feeding is observed. In any case, grow tubes should be removed towards the end of the first growing season to promote hardening off (we usually remove them in early September in western New York), and tubes can be stored and re-used for future establishment of new vines.

Rely Herbicide in Short Supply

Fruit and nut growers, especially in the West, are facing shortages of the popular herbicide Rely (glufosinate, Bayer CropScience). According to Bayer, demand for the active ingredient in Rely 280 (glufosinate) increased significantly in 2012 and is expected to increase again in 2013. This increase is due to the rapid spread of herbicide-resistant weeds across crops and geographies.

In a written statement, Bayer says it is investing to increase the global production of the active ingredient in Rely to help ensure an adequate supply in coming years. "In the short term, demand for the active ingredient in Rely 280 will continue to increase more rapidly than manufacturing capabilities can be expanded, and we anticipate a shortage of the active ingredient in 2013. Bayer CropScience remains committed to providing producers in the horticulture market with viable pest control solutions and will continue to keep the market informed of updates."

Glufosinate is classified as a "Group 10, or Group B" herbicide and inhibits an enzyme important in the production of the amino acid glutamine in plants. Although it sounds similar to another amino acid inhibitor, glyphosate (the active ingredient in Roundup and others), glufosinate works quite differently than the Group 9 herbicide glyphosate. Because it has a different mode of action than glyphosate, glufosinate has become very important in orchards and vineyards — especially those struggling with glyphosate-resistant weeds like horseweed (e.g. mare's tail). The scarcity of glufosinate seems to be driven by glyphosate-resistant weeds in other cropping systems. The active ingredient glufosinate in Rely 280 is the same one used in Ignite, Liberty, Basta, and Finale herbicides, and several of these are used in LibertyLink crops such as cotton, corn, canola, and soybeans, as well as a few other crops.

In its statement, Bayer notes Alion herbicide offers outstanding pre-emergence weed control in many of the same fruit, nut, and vine crops that are managed by Rely 280. "Bayer CropScience remains committed to providing producers in the horticulture market with viable pest control solutions and will resume production of Rely 280 when supplies reach a sufficient level."

Calendar of Events

Viticulture 2013, Feb. 6-8, 2013, Rochester Riverside Convention Center in Rochester, NY. This is sponsored by the New York Wine & Grape Foundation: http://vit2013.com/Home_Page.php.

2013 Midwest Grape and Wine Conference, Feb. 7-9, 2013, St. Charles, MO. See the website at: <http://www.midwestgrape.com/>.

North Dakota Grape and Wine Association Annual Conference, Feb. 8-9, 2013, Radisson Hotel, Bismarck, ND. Full Details may be found at <http://www.ndgga.org>.

Michigan Grape & Wine Conference, Feb. 13-15, 2013, Kellogg Hotel & Conference Center – East Lansing, MI. Details: http://www.michiganwines.com/page.php?menu_id=77.

2013 Cold Climate Conference, Feb. 21-24, 2013, St. Paul, MN. This event is sponsored by the Minnesota Grape Growers Association. See: <http://mngrapegrowers.com/conference>.

Nebraska 16th Nebraska Winery & Grape Growers Conference, Feb. 28-March 2, 2013, Holiday Inn, Kearney, NE. <http://agronomy.unl.edu/viticulture>.

Eastern Winery Exposition, March 5-8, 2013, at Lancaster County Convention Center & Lancaster Marriott at Penn Square, PA. See the website at <http://www.easternwineryexposition.com/conference/>.

2013 Wineries Unlimited Trade Show and Conference, March 12-14, 2013, Richmond, Va. For more information, see: <http://www.wineriesunlimited.com/>.

2013 Iowa Wine Growers Association annual conference, March 15-16, 2013, West Des Moines, IA. Visit <http://iowawinegrowers.org/> for conference details.

Midwest Aronia Berry Annual Conference, April 4-6, 2013, Des Moines IA. Details soon: <http://midwestaronia.org/>.

First International Elderberry Symposium, June 9-14, 2013, Columbia, MO. Details here: <http://muconf.missouri.edu/elderberrysymposium/>

64th American Society of Enology & Viticulture (ASEV) National Conference, June 24-28, 2013, Portola Hotel & Monterey Conference Center – Monterey, CA: <http://asev.org/national-conference-2013/>

38th Annual ASEV-Eastern Section Conference and Symposium, July 15-18, 2013, Winston-Salem Marriott and Embassy Suites, Winston-Salem, North Carolina U.S.A. See the website at: <http://www.asev-es.org/>.

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