

Vinews
Viticulture Information News, Week of 16 July 2018
Columbia, MO



Spotted Lanternfly

First a look back. On Friday, May 8, 2015 the Grape and Wine Institute held a grape and wine research symposium. At that time, I had only been on the Missouri scene about 3 months. The title of my symposium presentation was “An outsider’s perspective of the Missouri Grape and Wine Industries: Extension and Research Needs”. The fourth slide of my presentation focused on emerging insect pests and included photographs of the Brown marmorated stink bug (*Halyomorpha halys*), spotted wing drosophila (*Drosophila suzukii*) and the spotted lanternfly (*Lycorma delicatula*). Currently we have the Brown marmorated stink bug and spotted wing drosophila in Missouri. The spotted lanternfly has not been reported in Missouri.



Spotted Lanternfly adult with wings spread showing the bright red coloration of the hind-wings. Photo credit: Holly Ragusa, Pennsylvania Department of Agriculture

The spotted lanternfly was first reported in Berks County, Pennsylvania in 2014. The spotted lanternfly has also been reported in New York and Delaware (fall 2017) and Virginia (1/2018). Although the preferred host is the Tree of Heaven (*Ailanthus altissima*) more than 70 plant species are at risk including tree fruit crops and grapes. The spotted lanternfly feeds like an aphid, sucking in plant sap and excreting honeydew. The honeydew can be prolific and results in the growth of sooty mold.

Last week I had the opportunity to visit a few vineyards and wineries in Pennsylvania during the American Society of Enology and Viticulture-Eastern section conference. Near one of the vineyard locations visited, spotted lanternfly caused the demise of a 6-acre Pinot Noir vineyard. We did not view the vineyard because the vineyard had been removed. Colleagues at Pennsylvania State University speculate that direct feeding of the spotted lanternfly weakens the vines and coupled with a cold winter temperatures results in grapevine death.

Unlike other insect pests, female spotted lanternfly adults do not deposit eggs on preferred host plants. Instead, egg masses are deposited on just about any surface. Think, cars, shipping containers, lumber and concrete blocks.

Although, this may not provide what one considers a great nurturing environment for immature spotted lanternfly nymphs, the behavior provides great potential for spread across large geographical areas.

The name lanternfly is not a good description for the invasive pest and more or less should be considered a misnomer. The spotted lanternfly is not a fly nor a moth but belongs to the order Hemiptera which have sucking mouthparts. Similar to aphids the spotted lanternfly with their piercing sucking mouthparts feed on plant sap. Although the adults have wings, most of the adults movement is confined to walking or hopping and therefore the spotted lanternfly is a planthopper.

At this time, please become familiar with identifying spotted lanternfly. The nymphs have four-instars and the first three instars are black with white spots. The last instar, the nymphs develop red patches in addition to the black and white spots. The adults have colorful hind-wings with bright red coloration but the hind wings are seldom visible unless the spotted lanternflies are disturbed. Freshly deposited egg masses appear gray and over time the egg masses fracture appearing dry and cracked. As the egg masses age, rows of eggs appear visible in rows. [Please see the USDA APHIS website](#) to familiarize yourself with pictures to what I have described above.

Currently there are no pheromone monitoring traps for spotted lanternfly. Monitoring in Pennsylvania is performed by banding sticky material such as bird tanglefoot around the base of trunks of preferred host plants.

Please report sightings and either capturing specimens or take pictures and contact your [local Extension office](#) or [Plants and Pests at the Missouri Department of Agriculture](#)

Disease Outlook

The extended forecast has the high daily temperatures dipping into the mid-80s and some areas will receive rainfall over the next couple of days. The environment will then be conducive for powdery mildew development. Also depending on the wetting period, downy mildew will also be a threat. At this point in the season, berries have developed resistance to downy mildew, powdery mildew and black rot. However, other green tissues remain susceptible.

Temperature is the primary driving force controlling the spread of powdery mildew. When temperatures are between 60 to 80 °F that is when powdery is the most active. When temperatures are above 90 °F powdery mildew is not active. Pay close attention to the weather patterns over the next 10-days as we experience these minor cool-downs as disease can once again ramp-up. For those of you who have been extending or s-t-r-e-t-c-h-i-n-g your cover sprays be sure to have adequate protection during these cooler, wetter periods.

Introduction to Winemaking Workshop

The Grape and Wine Institute at the University of Missouri will be putting on a one-day Introduction to Winemaking for winemakers looking to cover some essential skills for making quality wine. If you're feeling a little rusty in the lab or winery, this is a great refresher course as well. Topics during the day will include:

- Understanding and determining fruit ripeness for specific wine styles
- Designing a vinification plan with a focus on sparkling wine
- Overview of winery equipment and proper sanitation
- Fundamentals of in-house lab analysis, with hands-on practice
- Interpreting lab results

When: The class will be on August 8th, 2018 and will start at 10am with registration at 9:30am.

Where: Room 245 Eckles Hall, University of Missouri, Columbia, MO

Cost: \$80 which includes lunch, please send check to Kwasniewski lab at Eckles room 135, payable to University of Missouri



Introduction to Winemaking

LIMITED SPACE AVAILABLE
 CONTACT:
MISSOURIGWI@GMAIL.COM
 TO REGISTER

[FOR MORE INFO CLICK HERE](#)


Grape and Wine Institute
 University of Missouri

A one day class with focus on:

- EQUIPMENT OVERVIEW/SANITATION
- LAB ANALYSIS FUNDAMENTALS
- DESIGNING VINIFICATION PLAN

8/8/2018

10AM

\$80

LUNCH INCLUDED

Limited space is available, so reserve now to ensure you can take advantage of this opportunity. Email missourigwi@gmail.com to register or for more information.

Cumulative Growing Degree Days for the Seven Grape Growing Regions of Missouri from April 1 to 16 July, 2018.

Region	Location by County	Growing Degree Days ¹		
		2018	2017	30 Year Average
Augusta	St. Charles	2045	1878	1803
Hermann	Gasconade	1952	1784	1728
Ozark Highland	Phelps	2128	1956	1852
Ozark Mountain	Lawrence	2121	1887	1829
Southeast	Ste. Genevieve	2019	1867	1826
Central	Boone	2063	1832	1766
Western	Ray	1978	1742	1705

¹Growing degree days at base 50 from April 1 to July 16, 2018. Data compiled from Useful and Useable at <https://mygeohub.org/groups/u2u/tools>. Click on link below to determine growing degree days in your area.

To determine the number of growing degree days accumulated in your area since April 1. [Use this tool.](#)

Please scout your vineyards on a regularly scheduled basis in an effort to manage problem pests. This report contains information on scouting reports from specific locations and may not reflect pest problems in your vineyard. If you would like more information on IPM in grapes, please contact Dean Volenberg at 573-882-0476 or volenbergd@missouri.edu