Lake Erie Regional Grape Program

Crop Update - September 13, 2018

Photo-Kim Knappenberger
CLEREL

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IPM

Tim Weigle, NYSIPM, Cornell University, LERGP Team Leader

Spotted Lanternfly found in Yates and Albany Counties

Spotted Lanternfly (SLF), an invasive planthopper which is firmly entrenched in 13 counties in Southeastern PA, has found its way into NY. The capture of a live adult in Albany has been determined by NYSDEC to be a lone hitchhiker, inadvertently brought back to NY when it entered a vehicle during a visit to the PA quarantine zone. The Penn Yan capture is being followed up by intensive surveys of surrounding areas for SLF infestations and Tree of Heaven, a preferred host of SLF. At this time no additional SLF has been found.

Grapes is one of the preferred hosts of SLF and its feeding on grape vine trunks and cordons (it is a phloem feeder and does not feed on the grape berries) can lead to a weakening of the vine due to its swarming feeding habit. At 1" long and ½ inch wide, this is a large insect that can cause damage very quickly due to its swarming feeding habit. Reports from southeast PA vineyards indicate that up to 300 SLF adults have been found feeding on a single vine.

If you have been at Coffee Pot meetings or conferences in the past year you have heard us talk about the potential damage this pest can cause, not only for grape growers, juice processors and wineries but also apples, hops, nursery and lumber industries. The negative effect on agri -tourism in the Lake Erie region should also be taken into account. This invasive pest poses a risk to NYS agriculture, ornamental and timber industries, as well as, all NYS resident's quality of life.

It is important to realize that the Spotted Lanternfly found in Yates and Albany Counties were not part of an organized survey effort. They were identified and reported by members of the public who had seen information about the potential invasive species.

Take home message is to keep your eyes open for Spotted Lanternfly. The adult stage will be the most likely candidate for finding at this time of year. They are excellent hitchhikers so be wary of any vehicles, or deliveries, that you know are coming from the quarantine zone in Southeast PA (see fig 1). If you find Spotted Lanternfly, get a photo or capture it for positive identification. Report it using the email addresses found in the fact sheet below. I would suggest trying to get the photo first if they are at rest as they may be clumsy fliers but adults are excellent jumpers (hoppers) and can move very quickly to avoid capture.

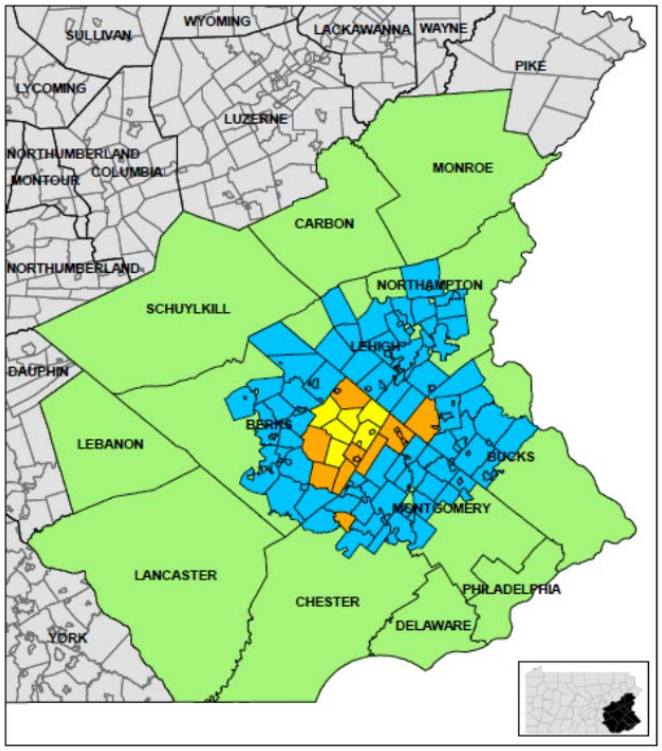
Please help spread the word about this invasive pest to aid in the early detection and response.

Photo: Greg Hoover Penn State University

Spotted Lanternfly in Pennsylvania

pennsylvania
DEPARTMENT OF AGRICULTURE

Pennsylvania Spotted Lanternfly Quarantine Map by Year 2014-2017



Legend

- Quarantine2014
- Quarantine2015
- Quarantine2016
- Quarantine2017

pennsylvania
DEPARTMENT OF AGRICULTURE

For Immediate Release: 09/11/2018

DEC Contact: Lori Severino (518) 402-8000
Press Office | PressOffice@dec.ny.gov

DEC AND DAM ANNOUNCE CONFIRMED FINDING OF SPOTTED LANTERNFLY IN ALBANY AND YATES COUNTIES

State Agencies Encourage Public to Report Findings of Invasive Pest

The New York State Departments of Environmental Conservation (DEC) and Agriculture and Markets (DAM) today confirmed that spotted lanternfly (SLF), an invasive pest from Asia, has been found in Albany and Yates counties. A single adult insect was discovered in a vehicle in the Capital District. In addition, a single adult insect was reported on a private Keuka Lake property in Penn Yan, Yates County.

"DEC and our partners at the Department of Agriculture and Markets are closely tracking the spotted lanternfly, a destructive invasive pest, as part of our ongoing efforts to prevent its establishment and spread in New York. This pest has the potential to severely impact our state's agricultural and tourism industries," **DEC Commissioner Basil Seggos said.** "We are encouraging the public to send us information to bolster our efforts—they are our eyes on the ground."

Following both reported cases, DEC and DAM immediately began extensive surveys throughout the area. At this time, no additional insects have been found. DEC and DAM urge New Yorkers to report potential sightings to spottedlanternfly@dec.ny.gov.

State Agriculture Commissioner Richard A. Ball said, "It's critical that we monitor for and control this invasive species, which can weaken plants and have a devastating impact on our farm crops and agricultural production, especially apples, grapes and hops. Since our farmers are among those facing the greatest potential impact, we ask them to join us in helping to watch for the spotted lanternfly, and signs of infestation, and report any sightings immediately."

SLF (*photo attached*) is a destructive pest that feeds on more than 70 plant species including tree-of-heaven (*Ailanthus altissima*), maples, apple trees, grapevine, and hops. SLF feedings can stress plants, making them vulnerable to disease and attacks from other insects. SLF also excretes large amounts of sticky "honeydew," which attracts sooty molds that interfere with plant photosynthesis, negatively affecting the growth and fruit yield of plants. SLF also has the potential to significantly hinder quality of life due to the honeydew and the swarms of insects it attracts.

SLF was first discovered in Pennsylvania in 2014 and have since been found in New Jersey, Delaware and Virginia. Given the proximity to the Pennsylvania and New Jersey infestations, New York State is at high risk for infestation. While these insects can jump and fly short distances, they spread primarily through human activity. SLF lay their eggs on any number of surfaces such as vehicles, stone, rusty metal, outdoor furniture and firewood. Therefore, the insects can hitch rides on any outdoor item and be easily transported into and throughout New York.

Jennifer Grant, Ph.D., Cornell University Director New York State IPM Program said, "Knowing that this pest was likely to arrive, we have been working with our State partner agencies to develop integrated strategies to get the word out and manage SLF in grapes, hops, apples and other susceptible crops. It's imperative that the public help slow the invasion and spread by reporting possible sightings and acting responsibly when traveling in quarantine areas."

Adult SLF are active from July to December. They are approximately one-inch long and half an inch wide at rest, with eye-catching wings. Adults begin laying eggs in October. Signs of an SLF infestation may include:

- Sap oozing or weeping from open wounds on tree trunks, which appear wet and give off fermented odors.
- One-inch-long egg masses that are brownish-gray, waxy and mud-like when new. Old egg masses are brown and scaly.
- Massive honeydew build-up under plants, sometimes with black sooty mold developing.

Anyone that suspects they have found SLF is encouraged to send a photo to spottedlanternfly@dec.ny.gov. Please note the location of where the insect was found, egg masses, and/or infestation signs. DEC and DAM also encourage the public to inspect outdoor items such as vehicles, furniture, and firewood for egg masses. Anyone that visits the Pennsylvania or New Jersey Quarantine Areas should thoroughly inspect their vehicle, luggage and gear for SLF and egg masses before leaving and scrape off all egg masses.

A Smartphone application is also available to help citizens and conservation professionals quickly and easily report new invasive species sightings directly to New York's invasive species database from their phones. For more information, visit http://www.nyimapinvasives.org/ (leaves DEC website).

DEC, DAM, New York State Office of Parks, Recreation and Historic Preservation and the US Department of Agriculture will continue to survey throughout the Capital District and the Finger Lakes focusing on travel corridors and high-risk areas. Extensive surveys will continue to be conducted in high-risk areas throughout the state as well as inspections of nursery stock, stone shipments, commercial transports, etc., from Pennsylvania. DEC and DAM will also continue its efforts to educate the public as well as industry personnel.

For more information on SLF, visit www.dec.ny.gov/animals/113303.html.

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Connect with DEC on: Facebook, Twitter, Flickr, and Instagram

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STOP THE INVASION
PROTECT NEW YORK FROM INVASIVE SPECIES

NEW YORK STATE OF OPPORTUNITY. Department of Environmental Conservation | Agriculture and Markets | Parks, Recreation and Historic Preservation

SPOTTED LANTERNFLY

Lycorma delicatula

What is the spotted lanternfly?

The spotted lanternfly (SLF) is an invasive pest from Asia that primarily feeds on tree of heaven (*Ailanthus altissima*) but can also feed on a wide variety of plants such as grapevine, hops, maple, walnut, fruit trees and others. This insect could impact New York's forests as well as the agricultural and tourism industries.

Identification

Nymphs are black with white spots and turn red before transitioning into adults. They can be seen as early as April. Adults begin to appear in July and are approximately 1 inch long and ½ inch wide at rest, with eye-catching wings. Their forewings are grayish with black spots. The lower portions of their hindwings are red with black spots, and the upper portions are dark with a white stripe. In the fall, adults lay 1-inch-long egg masses on nearly anything from tree trunks and rocks to vehicles and firewood. They are smooth and brownish-gray with a shiny, waxy coating when first laid.

Adult spotted lanternfly
Lawrence Barringer, Pennsylvania Department of Agriculture, Bugwood.org

Where are they located?

SLF were first discovered in Pennsylvania in 2014 and have since been found in New Jersey, Delaware and Virginia. As of spring 2018, New York has no infestations, though it's possible they are present in low numbers and have not been detected yet. Given the proximity of the Pennsylvania infestation, it is expected to be found in New York eventually.

What is the risk to NYS?

SLF pose a significant threat to New York's agricultural and forest health. Adults and nymphs use their sucking mouthparts to feed on the sap of more than 70 plant species. Feeding by sometimes-thousands of SLF stresses plants, making them vulnerable to disease and attacks from other insects. SLF also excrete large amounts of sticky "honeydew," which attracts sooty molds that interfere with plant photosynthesis, negatively affecting the growth and fruit yield of plants. New York's annual yield of apples and grapes, with a combined value of $358.4 million, could be impacted if SLF enters New York. The full extent of economic damage this insect could cause is unknown at this time.

Spotted lanternfly nymph
Lawrence Barringer, Pennsylvania Department of Agriculture, Bugwood.org

Although native insects also secrete honeydew, the size of SLF and the large populations that congregate in an area result in large accumulations of it. The sticky mess and the swarms of insects it attracts can significantly hinder outdoor activities. In Pennsylvania, where SLF populations are the densest, people can't be outside without getting honeydew on their hair, clothes, and other belongings.

How do they spread to new areas?

While SLF can jump and fly short distances, they spread primarily through human activity. They often hitch rides to new areas when they lay their eggs on vehicles, firewood, outdoor furniture, stone, etc. and are inadvertently transported long distances.

New (left) and old (right) egg masses
Kenneth R. Law, USDA APHIS PPQ, Bugwood.org

What are the signs of an infestation?

- Sap oozing or weeping from tiny open wounds on tree trunks, which appears wet and may give off fermented odors.
- One-inch-long egg masses that are brownish-gray, waxy and mud-like when new. Old egg masses are brown and scaly.
- Massive honeydew build-up under plants, sometimes with black sooty mold.

What is being done?

DEC is working with the NYS Department of Agriculture and Markets and the US Department of Agriculture to address SLF. Since it is less expensive and easier to deal with a pest before it becomes widespread, the goal is to find SLF early or prevent it from entering NY altogether.

A plan has been developed that describes how the agencies will prevent and detect SLF in New York. Extensive trapping surveys will be conducted in high-risk areas throughout the state as well as inspections of nursery stock, stone shipments, commercial transports, etc. from Pennsylvania. DEC and partner organizations encourage everyone to be on the lookout for this pest.

Wounds from SLF feeding are too small to spot without sap oozing out of them.
Pennsylvania Department of Agriculture, Bugwood.org

What can I do?

- Learn how to identify SLF.
- Inspect outdoor items such as firewood, vehicles, and furniture for egg masses.
- If you visit states with SLF, be sure to check all equipment and gear before leaving. Scrape off any egg masses. Visit www.agriculture.pa.gov for more information on SLF in PA.

If you believe you have found SLF in New York…

- Take pictures of the insect, egg masses and/or infestation signs as described above (include something for scale such as a coin or ruler).
- Note the location (address, intersecting roads, landmarks or GPS coordinates).
- Email the information to DEC (see below).
- Report the infestation to iMapInvasives at www.NYiMapInvasives.org.

Swarm of lanternflies on a tree
Lawrence Barringer, Pennsylvania Department of Agriculture, Bugwood.org

CONTACT INFORMATION

Bureau of Invasive Species and Ecosystem Health
Division of Lands and Forests

New York State Department of Environmental Conservation
625 Broadway, Albany NY 12233
spottedlanternfly@dec.ny.gov
www.dec.ny.gov

Updated May 1, 2018

PA Update

Andy Muza, Extension Educator, Penn State

In the Vineyard (9-12-18) –

<u>Honeyvine Milkweed (HvM)</u> - Final Reminder before Harvest

Honeyvine milkweed (HvM) , also known as climbing milkweed, is a twining, perennial vine which grows rapidly and reproduces both vegetatively (by sprouting shoots from buds on lateral roots) and by wind disseminated seed dispersal.

For those growers that have had problems with HvM in the past, this is a final reminder before harvest to scout blocks for the presence of this weed. If you have not been spot spraying for this weed throughout the season then HvM will now be in the trellis with large pods which contain numerous seeds (Figure 1). Seed pods can contaminate grape loads and should be removed from the vineyard before harvest begins. HvM should be pulled out of the trellis, laid on the ground, and seed pods should be collected in a plastic garbage bag and disposed of. After pod collection, HvM vines that were placed on the ground should be thoroughly sprayed with a high concentration of an herbicide containing the active ingredient glyphosate (Figure 2). (Management of perennial weeds is most effective when glyphosate is applied to mature leaves capable of translocating the herbicide throughout the plant.)

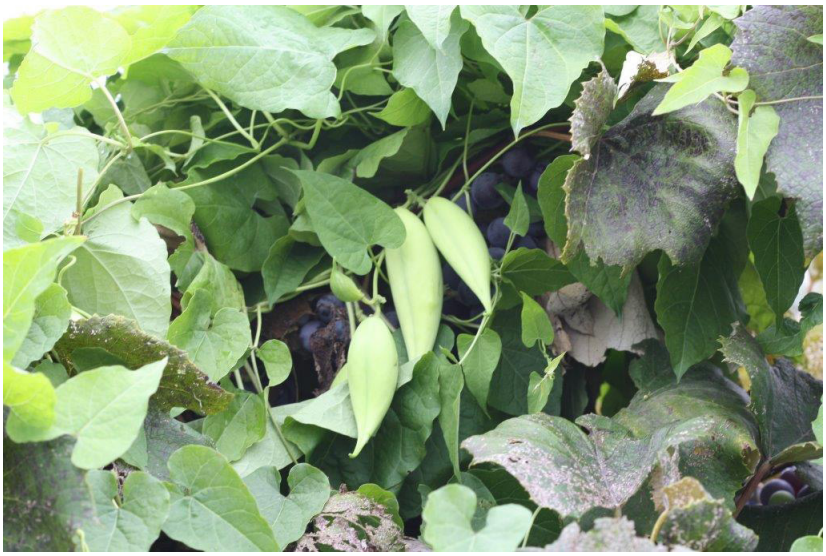

Figure 1. Honeyvine milkweed in the canopy in a Concord vineyard. Photo - Andy Muza, Penn State

Figure 2. Honeyvine milkweed, awaiting a glyphosate application, after removal from the trellis. Photo - Andy Muza, Penn State

To avoid injury to grapevines **DO NOT** allow spray to contact green tissue. Applications should be made with shielded sprayers or wiper equipment, but not within 14 days of harvest. **Read the Label** for specific use and restrictions concerning application of glyphosate in vineyards.

North East PA Update

Bryan Hed, Research Technologist, Lake Erie Grape Research and Extension Center

Weather: At our location by the lake, we recorded 4.02 inches of precipitation in August (above average) and we now have 3.23 inches of precipitation so far in September. We recorded a whopping 730 growing degree days in August (the second hottest August in at least the last 20 years (August 2016 was hotter). We have now accumulated 239 growing degree days in September and about 2700 gdds since April 1.

Diseases: Six inches of rain in the past 4 weeks has generated plenty of downy mildew infection periods and kept the threat of the disease very much alive. Take the time to scout blocks of susceptible wine varieties; this disease can do a tremendous amount of damage just when you need your leaves the most. Most of the downy mildew lesions I've seen were on new shoot growth and not on older/mature leaves. New leaves are more susceptible and are more likely to be unprotected by prior fungicide sprays than older, exporting leaves that may still be coated with at least some fungicide residue despite the rain. The good news is that if you're only seeing it on new growth of 'still growing' shoots, it is of less consequence to ripening than lesions on mature, exporting leaves that are working hard to ripen your crop.

Also be cautious about using materials like captan or copper at this point for wine grape protection against downy mildew. Those materials can cause problems with fermentation later if fungicide residues are high enough at harvest (which may depend to some extent on how much rain we receive between now and harvest) even though you're observing proper pre-harvest intervals. Phosphorous acids may be among your best 'go to' materials on wine grapes that will be harvested within the next few weeks. Just make sure to keep applications of phosphorous acid materials to 3 or fewer per season.

With all this rain now, bunch rot is being observed developing in wine varieties with compact bunches and unfortunately, in some cases it's in the form of sour rot. Botrytis specific fungicides can help manage bunch rots that are caused by Botrytis, but in warmer and wetter ripening years (like this year), we see a fair amount of sour rot (caused by other, non-Botrytis fungi and bacteria) that cannot be controlled by fungicides. As I mentioned a couple of week ago, Wayne Wilcox graduate student, Dr. Megan Hall, has developed some valuable information to show that controlling fruit flies (with insecticides) and applying a sterilant (like oxidate) during this latter part of the ripening period can help reduce the progression of sour rot, particularly in those rot prone varieties with compact bunches.

2018 eNEWA Grape Subscription Sign-Up

Subscriber information

Name_____

Email address _____

City_____

Select Location(s) (circle as many as you like, or write in below)

_____

Lake Erie	**Lake Erie**
Appleton, North	**Ransomville**
Burt	**Ripley**
Corwin	**Sheridan**
Dunkirk	**Silver Creek**
East Fredonia	**Somerset**
East Westfield	**Versailles**
Erie	**Westfield**
Fredonia	
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Lake City	
North East Escarpment	
North East Lab	
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Select eNEWA Delivery Times (write in times below) Delivery requests should be on the hour.

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INSURING GRAPES

NY, 2018

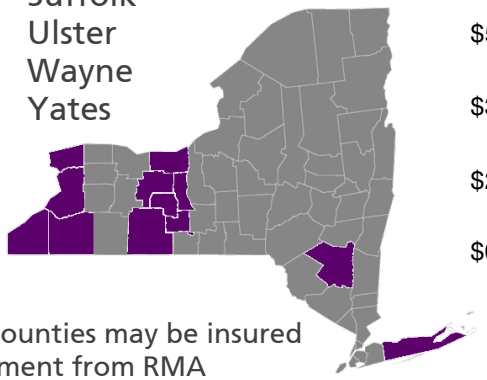
Crop insurance is a safety net for farmers that helps you **manage risk**. If you have a crop failure, crop insurance can help you farm again next year.

Important Insurance Deadlines

- **Nov. 20, 2017:** Sales Closing, Policy Change, Cancellation, Termination Date
- **Jan. 15, 2018:** Acreage / Production Report Date
- **Aug. 15, 2018:** Premium Billing Date
- **Nov. 20, 2018:** End of Insurance Period

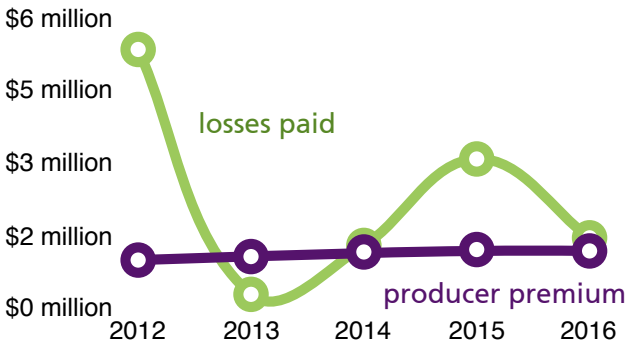
Over 40 grape varieties are insurable in these counties:

Cattaraugus
Chautauqua
Erie
Niagara
Ontario
Schuyler
Seneca
Steuben
Suffolk
Ulster
Wayne
Yates



Grapes in other counties may be insured by written agreement from RMA

NYS Grape Crop Insurance Performance



Learn more & sign up:

To sign up, contact a crop insurance agent. Find an agent using the Agent Locator tool at rma.usda.gov/tools/agent.html

Find crop insurance information at ag-analytics.org/cropinsurance/

Cornell University delivers crop insurance education in New York State in partnership with the USDA Risk Management Agency.

Diversity and Inclusion are a part of Cornell University's heritage. We are an employer and educator recognized for valuing AA/EEO, Protected Veterans, and Individuals with Disabilities.

Ag-Analytics

USDA

LERGP Links of Interest:

Go to http://lergp.cce.cornell.edu/ for a detailed calendar of events, registration, membership, and to view past and current Crop Updates and Newsletters.

LERGP Web-site:
http://lergp.com/

Cornell Lake Erie Research & Extension Laboratory Facebook page
https://www.facebook.com/Cornell-Lake-Erie-Research-and-Extension-Laboratory-678754995584587/?fref=ts

Efficient Vineyard Web-site:
https://www.efficientvineyard.com/

Table for: Insecticides for use in NY and PA:
http://lergp.cce.cornell.edu/submission.php?id=69&crumb=ipm|ipm

Crop Estimation and Thinning Table:
http://nygpadmin.cce.cornell.edu/pdf/submission/pdf65_pdf.pdf

Appellation Cornell Newsletter Index:
http://grapesandwine.cals.cornell.edu/cals/grapesandwine/appellation-cornell/

Veraison to Harvest newsletters:
http://grapesandwine.cals.cornell.edu/cals/grapesandwine/veraison-to-harvest/index.cfm

NEWA:
http://newa.cornell.edu/

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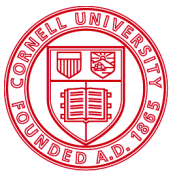
716-792-2800



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