

July 25, 2024

Finger Lakes Vineyard Update

SLF is in the Finger Lakes. What Should We Do?

Recapping our Tailgate Meeting on July 23

I will be on vacation from Monday, July 29 – Friday, August 9, so there will be no Vineyard Update newsletters during that time. Hard to believe that when I get back we'll be gearing up for harvest. - Hans

Our Tailgate Meeting this week was all about Spotted Lanternfly (SLF) and the recent discovery of a small population in Romulus. For this week's Update, I wanted to recap (to the best extent I can) what was discussed so that growers who weren't able to attend yesterday's meeting can have much of the information that was shared yesterday.

What's been happening since the SLF nymphs were discovered?

Over the past week, staff from the NYS IPM program and the Department of Ag & Markets have visited the original site and a few neighboring vineyards to do some additional scouting and set up a few traps. There will be some more discussions over the next few weeks about subsequent steps after that, but for now, multiple sets of eyeballs will continue to be focused on the vicinity where the nymphs were found to see if more are discovered.

What should we expect this year and coming years?

We obviously can't predict exactly how this finding will develop, or how many more we will find in the coming weeks. The experience in other areas where SLF has established is that it takes 1-2 years for the populations to build to the point where they start to become a concern for the health and viability of the vineyard. However, that doesn't mean that they won't be a nuisance before then. I suspect that we will start to get a better idea of the size of the population in Romulus once they become adults and are more mobile and easier to identify.

What should growers be looking for right now?

At Tuesday's meeting, we distributed a few different resources describing the life cycle of SLF. One of the important things to keep in mind when looking for SLF is what stage of development they should be in at



a given time of year. For example, if somebody says they saw a bunch of adult SLF near their house this spring, we would know that it actually couldn't be SLF because the adult stage of their lifecycle doesn't start in the area until August. The nymphs that were found in Romulus were still black, meaning they were most likely in their third instar phase. By this time, they are likely starting to develop into 4th instar nymphs, which are the ones with the red coloring on their backs in addition to the black and white coloring. Adults will likely begin to emerge sometime in early to mid-August. September and October seem to be the most likely timeframe for adults to start congregating in and around vineyards.

While these nymphs still have several weeks to go until they become adults, the populations in places like Pennsylvania and New York City are developing into adults now. This means that growers should be

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July 24 Tailgate Meeting at Knapp Winery. **Photo: Carrie Carmenatty NYS IPM Program**



SLF is in the Finger Lakes. What Should We Do? (continued from pg. 1)

looking for both nymphs and adults at this point.

We have included in this week's newsletter a one-page flyer from the IPM program that has photos of each life stage with instructions on what to do if SLF is found anywhere in the Finger Lakes, which are printed in both English and Spanish and can be posted where vineyard workers can see it.

The <u>Lake Erie Regional Grape Program</u> has also created a very good Pocket Guide for SLF. You can see and download a copy of it from their website <u>by clicking here</u>, or we have a few spiral-bound hard copies at our office in Penn Yan, which you can request from Brittany Griffin (<u>bg393@cornell.edu</u> or 315-536-5134). The guide is also <u>available in Spanish</u>.

What are management options for growers?

Because this is an invasive species, a system of predators and other natural controls doesn't exist for SLF in our area. Therefore, growers are going to have to be proactive in implementing different practices to keep populations to a manageable level.

Perhaps the easiest and most obvious one, although not necessarily preferred, is the use of insecticides. There are a number of insecticides that are either labeled for use against planthoppers or have 2(ee) exemptions for SLF, several of which growers may already be using for other pests like grape berry moth. Last month, we released an updated list of spray materials that are currently legal to use for SLF in New York (included in this week's Update, and also <u>available on the FLGP website</u>). In addition to synthetic insecticides, there are also several biologically based materials that should have good efficacy against both nymphs and adults, including a few different products that contain *Beauveria bassiana*, a fungus that has been found to infect and kill SLF in the wild.



Female Tree of Heaven on eastern shore of Seneca Lake.

What about Tree of Heaven?

We spent a fair amount of time at this week's meeting talking about the elimination of Tree of Heaven (TOH) as a management strategy for SLF. While TOH is the most preferred host of SLF, it is only one of about 100 different types of plants that it can feed on. So why go through the effort of removing TOH from a property if SLF can feed on so many other plants as well?

Research has found that SLF have a higher survival rate, and females produce more eggs and egg masses, if they are able to feed on TOH during their lifecycle. So while removing TOH from a property won't prevent SLF from arriving at a site, it can help to keep the population from growing as large and quickly as it might otherwise.

Identifying TOH can be a little tricky because it looks similar to a few other trees that are commonly found in the Finger Lakes, like black walnut and sumac. Female trees are much easier to identify at this time of year because of their large and colorful bunches of seed-containing samaras. Penn State has an excellent bulletin that describes how to identify TOH, along with a few options on how to control it. You can download the bulletin by <u>clicking here</u>, and a copy of it is also included in this week' newsletter.

Controlling TOH can be challenging because it can have an extensive root system that will push up multiple new plants if the main tree is just cut down, making the problem worse. Systemic herbicides like glyphosate and triclopyr are most often used to control TOH because they are able to move through the vascular system into the roots. It should be noted that triclopyr, while systemic, does not move as readily through the tree as glyphosate does.

We discussed a few different control methods for TOH at the meeting, which I will briefly summarize.

<u>Cut Stump</u> – Simply cutting a TOH stem will only encourage more regrowth, so it is necessary to immediately treat every stem that is cut with application of concentrated (>25% a.i.) glyphosate. This treatment is generally less effective because the complete removal of the tree essentially inactivates the downward movement of the vascular system, and limits the effectiveness of the

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Spotted Lanternfly in the FLX (continued from pg. 2)

herbicide on the roots. Generally not recommended by the folks I've spoken with.

<u>Basal bark treatment</u> – The bottom 12-18" of the tree stem is coated with a mix of triclopyr ester (Garlon 4 Ultra is one product) and a horticultural oil or, and it says this on the label, diesel fuel. This treatment is recommended for trees less than 6" in diameter. There is a good video from Virginia Tech demonstrating this technique (<u>click here for video</u>). Because triclopyr is less mobile than glyphosate, it may be less effective in a well-established stand with an extensive root system.



<u>Drill and fill</u> – This is the generally recommended technique for TOH control for any stem greater than 1" in diameter. Drill 1" deep holes into each TOH stem using a 3/8" bit, and then fill each hole with a concentrated solution of glyphosate (\geq 25% a.i.) using a small squeeze bottle (most glyphosate products for ag use are likely over this concentration. For example, Makaze from Loveland is 41% glyphosate). This will deposit about 1 ml of solution in each hole. Drill 1 hole for every 2" in diameter of the tree. To calculate the diameter, measure the circumference of the tree at chest height, and divide that by 3.14. If you come up with an odd number diameter (e.g., 5" which would mean drilling 2.5 holes), round the number of holes up – in this case, 3 holes. You

can see a demonstration of this technique at <u>https://youtu.be/vSxr-9n0-vo?si=Ou3mO-AMxbHvYzAf</u>. The video focuses on beech trees, but the technique would be the same for TOH.

It's important to give the herbicide time to work before removing any treated trees – the general recommendation is about 30 days – to prevent significant resprouting when they are cut down. In well-established stands, it may take several years of effort to fully eradicate them from the site. I would recommend prioritizing the removal of female trees to stop them from spreading by seed (a mature tree can produce 350,000 seeds per year).

We are in the very early stages of the arrival of this new pest, and most growers won't need to take any kind of action to manage SLF this year. The most important things growers can do right now is to scout their vineyards and tree lines for both SLF and TOH, and if time permits, start removing TOH from your property.

Please send me any questions or concerns you might have about SLF or TOH. Also, if there are resources that you would like to have about SLF that you would like to see developed (we mentioned talkers for winery visitors in tasting rooms, for example), let us know and we will work with the IPM program, Ag & Markets, and others to try and develop them.

Resources:

NYS IPM Spotted Lanternfly website

StopSLF.org

Spotted Lanternfly Management in Vineyards (Penn State)

PEST NOTICE: SPOTTED LANTERNFLY ¡Atención! Nueva Plaga Invasora: La Mosca Linterna con Manchas



Spot it!—When working in the vineyard or walking the perimeter. **¡Detéctela!**—Al trabajar en el viñedo o caminar por el perímetro.



Adult Lanternfly. // La Mosca Linterna con Manchas Adulta. Lawrence Barringer, Pennsylvania Department of Agriculture, Bugwood.org.



Dead Adult Lanternfly. // Muestra de un Adulto Muerto. Lawrence Barringer, Pennsylvania Department of Agriculture, Bugwood.org.

Report it!—Notify vineyard managment immediately. Early detection is important. **¡Repórtela!—**Notifique a la gerencia del viñedo. La detección temprana es importante.





Spotted Lanternfly Eggs on Grapevines. Egg masses have the appearance of a waxy patch and can be found on many surfaces. // Los huevos de la Mosca Linterna con Manchas en las viñas de uvas. Las masas de huevos parecen como parches cerosos y se encuentran en muchas superficies. Eric Clifton, BioWorks Inc.

Older Nymph Stage. // Estadio de Ninfa Avanzada. Lawrence Barringer, Pennsylvania Department of Agriculture, Bugwood.org.



Young Nymphs. // Estadio de Ninfa Temprana. Richard Gardner, Bugwood.org.

Destroy it!—All life stages that you find. Approved pesticides can be found online.

¡Elimínela!—En toda etapa de la vida en que se encuentre. Los pesticidas aprobados se pueden encontrar en línea. **Don't Move it!**—Check your car and equipment before traveling.

¡No la disperse!—Revise su carro y equipo antes de viajar.



New York State Integrated Pest Management



Agriculture and Markets June 2024 – Insecticides for Control of Spotted Lanternfly (a fulgorid invasive insect) in New York Grapes – Quick Guide Compiled by Greg Loeb, Juliet Carroll, Hans Walter-Peterson, and Dan Gilrein, Cornell University.

Read the pesticide label and 2(ee) recommendation or 24(c) special local need label for directions, details, and additional restrictions. Visit NYSPAD <u>www.dec.ny.gov/nyspad/products</u> to search for primary label and 2(ee) or 24(c) information. Must have 2(ee) or 24(c) in possession when applying the material.

				GRAPES	PES				
Product (registration type)	۹۱ ¹	Use Restrictions	EPA Reg No.	IRAC Group ²	Rate/A	REI ³	PHI ⁴	Probable efficacy on nymphs	Probable efficacy on adults
Actara (2(ee))	thiamethoxam	NYS, LI	100-938	4 A	3.5 oz	12 hr	5 d	Excellent	Excellent
[@] Drexel Carbaryl 4L (2(ee))	carbaryl	NR	19713-49	1A	2 qts	2 days; 6 days if girdling or cane turning	7 d	Excellent	Good
# Imidan 70WP (2(ee))	phosmet	SAN	10163-169	1B	1.333 lb to 2.125 lb	14 days, see label. No U-pick allowed	≤ 1.333 lb/A = 7 d > 1.333 lb/A = 14 d	Excellent	Poor
[@] Brigade WSB (2(ee))	bifenthrin	£	279-3108	3A	8 - 16 oz	12 hr	30 d	Excellent	Excellent
[@] Brigade WSB (researcher 2(ee))	bifenthrin	£	279-3108	3A	10 oz	12 hr	30 d	Excellent	Excellent
* Brigade 2EC (2(ee))	bifenthrin	£	279-3313	3A	6.4 fl oz	12 hr	30 d	Excellent	Excellent
Brigade 2EC (24(c))	bifenthrin	ц	279-3313	3A	6.4 fl oz	12 hr	postharvest	Not relevant	Excellent
* Hero (2(ee))	zeta-cypermethrin & bifenthrin	ш	279-3315	3A	5 - 10.3 fl oz	12 hr	30 d	Excellent	Excellent
^{#@} Mustang MAXX (2(ee))	zeta-cypermethrin	Ŧ	279-3426	3A	4 fl oz	12 hr	1 d	Excellent	Good
* Sniper Helios (2(ee))	bifenthrin	Ŧ	34704-858	3A	3.2 - 6.4 fl oz	12 hr	30 d	Excellent	Excellent
[@] Danitol 2.4 EC (2(ee))	fenpropathrin	ц	59639-35	3A	16 - 21.33 fl oz	24 hr	21 d	Excellent	Excellent
° Pyronyl Crop Spray	Pyrethrin+PPO	SAN	89459-26	ЗA	12 fl oz	12 hr	O	Good	Good

Use Restrictions: NR = None; NYS = Restricted-use by the DEC, requires applicator certification; F = Federal restricted-use, requires applicator, certification; LI = no use on Long Island.

*Rating based on different product with same AI. @Tested on peach only. #Assumed excellent at high rate per acre. Rotate between IRAC groups to prevent resistance.

^e Contact only, thorough coverage. No residual efficacy.
^Approved for organic use in NY.
^p May be phytotoxic, follow label restrictions.

¹Active Ingredient. ² Mode of Action, IRAC group code. (UN = undesignated) ³ Restricted Entry Interval (hr = hours). ⁴ Pre-Harvest Interval (d = days).

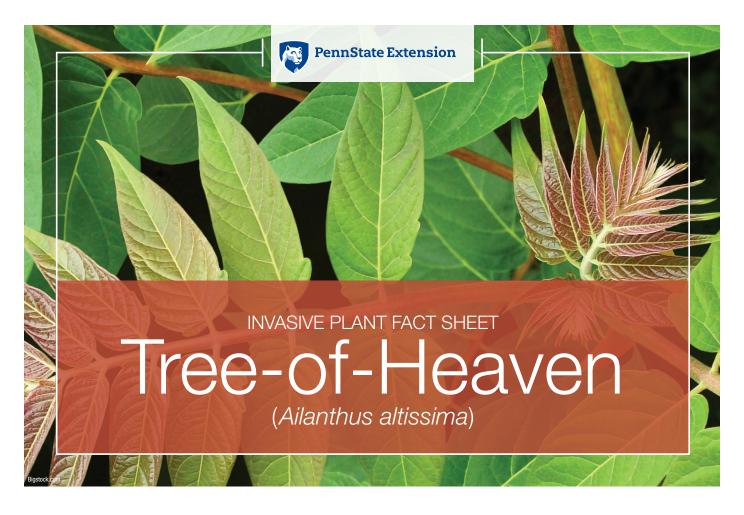
				GRAPES	PES				
Product (registration type)	Al ¹	Use Restrictions	EPA Reg No.	IRAC Group ²	Rate/A	REI ³	PHI ⁴	Probable efficacy on nymphs	Probable efficacy on adults
^{op} Pest-Kote	Pyrethrin	NR	92035-1- 97839	3A	12 fl oz	12 hr	Until spray has dried	Good	Good
* Swagger (2(ee))	bifenthrin & imidacloprid	£	34704-1045	<mark>3A</mark> , <mark>4A</mark>	7.6 - 12.8 fl oz	12 hr	30 d	Good to Excellent	Good to Excellent
دم Botanigard Maxx	<i>Beauveria bassiana</i> (strain GHA) + pyrethrins	NR	82074-5	UN, <mark>3A</mark>	8 - 32 fl oz	12 hr	Until spray has dried	Good	Good
^c A Aza-Direct (2(ee))	azadirachtin	NR	71908-1- 10163	NN	1.0 – 3.5 pints	4 hr	0 d	Good	Good
^{cAP} M-Pede (2(ee))	potassium salts of fatty acids (insecticidal soap)	NR	10163-324	NN	1-2 gals (1-2% v/v solution)	12 hr	0 d	Good	Good
^c ^ BoteGHA ES	<i>Beauveria bassiana</i> (strain GHA)	NR	82074-1	NN	0.25-1 qt	4 hr	Up to day of harvest	Good	Good
^{cA} Botanigard ES	<i>Beauveria bassiana</i> (strain GHA)	NR	82074-1	NN	0.25-2 qt	4 hr	Up to day of harvest	Good	Good
^c ^A Bioceres WP	Beauveria bassiana (strain ANT-03)	NR	89600-2	N	1-2 lb	4 hr	Up to day of harvest	Good	Good

Use Restrictions: NR = None; NYS = Restricted-use by the DEC, requires applicator certification; F = Federal restricted-use, requires applicator certification; LI = no use on Long Island.

*Rating based on different product with same AI.	ñ
$^{@}$ Tested on peach only.	$^{\vee}A_{1}$
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Background

Tree-of-heaven (*Ailanthus altissima*), commonly referred to as ailanthus, is a rapidly growing deciduous tree native to both northeast and central China, as well as Taiwan. It was first introduced into the United States in the Philadelphia area in the late 1700s. Immigrants later introduced tree-of-heaven to the West Coast in the 1850s.

The tree was initially valued as a unique, fast-growing ornamental shade tree with the ability to grow on a wide range of site conditions, tolerating poor soils and air quality. It was widely planted from New York City to Washington, D.C. By the early 1900s the tree began losing popularity due to its "weedy" nature, prolific root sprouting, and foul odor. Tree-of-heaven has spread and become a common invasive plant in urban, agricultural, and forested areas.

Description

Size: Tree-of-heaven has rapid growth and can grow into a large tree, reaching heights of 80 feet and up to 6 feet in diameter.

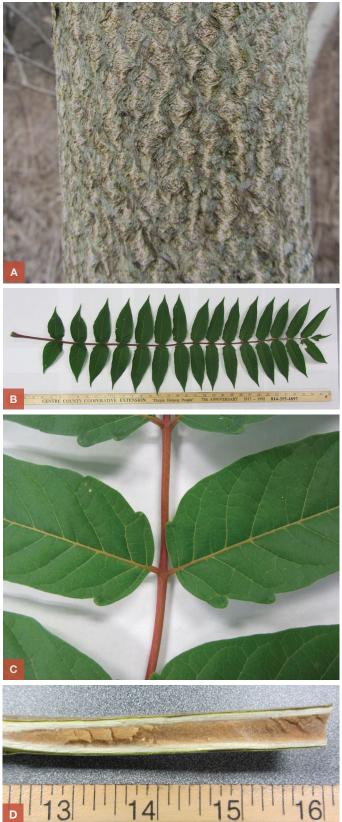
Bark: The bark of tree-of-heaven is smooth and brownishgreen when young, eventually turning light brown to gray, resembling the skin of a cantaloupe. **Leaves:** Tree-of-heaven leaves are pinnately compound, meaning they have a central stem in which leaflets are attached on each side. One leaf can range in length from 1 to 4 feet with anywhere from 10 to 40 leaflets. The leaflets are lance-shaped with smooth or "entire" margins. At the base of each leaflet are one to two protruding bumps called glandular teeth. When crushed, the leaves and all plant parts give off a strong, offensive odor.

Twigs: The twigs of tree-of-heaven are alternate on the tree, stout, greenish to brown in color, and lack a terminal bud. They have large V- or heart-shaped leaf scars. The twigs easily break to expose the large, spongy, brown center, or pith.

Seeds: Seeds on female trees are a 1-to-2-inch-long twisted samara, or wing. There is one seed per samara. The samaras are found in clusters, which often hang on the tree through winter.

Look-Alikes

This species is easily confused with some of our native trees that have compound leaves and numerous leaflets, such as staghorn sumac, black walnut, and hickory. The leaflet edges



of these native trees all have teeth, called serrations, while those of tree-of-heaven are smooth. The foul odor produced by the crushed foliage and broken twigs is also unique to tree-of-heaven.



A. Bark

- B. Compound leaf
- C. Smooth leaf margin showing glandular teeth
- **D.** Brown spongy pith
- E. Leaf scar on twig
- **F.** Winged seeds called samaras
- **G.** Clonal patches growing along highway
- Photos by Dave Jackso

Dispersal

Tree-of-heaven is dioecious, meaning a tree is either male or female, and typically grows in dense colonies, or "clones." All trees in a single clone are the same sex. Female trees are prolific seeders with the potential to produce more than 300,000 seeds annually. The single-seeded samaras are wind dispersed.

Management Calendar

The management calendar for tree-of-heaven emphasizes late season treatment to maximize control of the roots.

	Jan.	Feb.	March	April	Мау	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Bud Break												
Flowering and Seed Ripening												
Foliar or Stem Treatment												
Cutting after Treatment												

Treatment and Timing

Prescriptions for controlling tree-of-heaven stress proper timing of operations to maximize injury to roots. Improper timing will result in treatments that provide "top kill" (shoot injury) but little control of the roots. Product names reflect the current Pennsylvania state herbicide contract; additional brands with the same active ingredients are available.

Treatment	Timing	Herbicide	Product Rate	Comments
Foliar Application	July 1 to onset of fall color	Rodeo (glyphosate) plus Garlon 3A (triclopyr 3 lb/gal) or Vastlan (triclopyr 4 lb/gal)	3 quarts/acre plus 2 quarts/acre or 1.5 quarts/acre	The combination of glyphosate and triclopyr provides a broad- spectrum treatment that is effective against tree-of-heaven and other woody species that should also be targeted during the operation. This is a nonselective mixture, but it has little soil activity and poses little risk to nontarget organisms through root uptake. Garlon 3A and Vast- lan are both triclopyr formulations but have different active ingredient concentrations. A surfactant (e.g., Alligare 90) needs to be added. If using a different glyphosate product, be sure to check the product label to see if a surfactant is needed (some come premixed).
Basal Bark	July 1 to onset of fall color	Pathfinder II or Garlon 4 Ultra (triclopyr ester)	Ready-to-use or 20% by volume, 1:4 in basal oil	Pathfinder II is a ready-to-use oil-based formulation of triclopyr used for basal bark applications. Treat stems up to 6 inches in basal diam- eter by wetting the entire circumference of the lower 12 to 18 inches, without runoff; apply a shorter band to small-diameter stems. This technique is best suited for treating small infestations or as a follow-up to treat surviving stems after a foliar application. If stems are larger than 6 inches in basal diameter use hack-and-squirt.
Hack and Squirt	July 1 to onset of fall color	Rodeo (glyphosate) or Garlon 3A (triclopyr 3 lb/gal) or Vastlan (triclopyr 4 lb/gal)	Use either product undiluted or 1:1 with water	Glyphosate or triclopyr in water are effective for hack-and-squirt treatments. It is essential to space the cuts, leaving intact bark between them. If the stem is completely girdled, the herbicide cannot translocate to roots. A simple guideline for the number of hacks is one per inch of diameter, with a minimum of two. Spray herbicide solution into hacks immediately using a squirt bottle, filling the cuts. This treatment is best suited for low stem numbers and stems at least 1 inch in diameter.
Cut Stump	N/A			If cutting tree-of-heaven for immediate safety reasons, do so and treat the stump. However, cut stump herbicide applications are not recommended because they do not provide effective control of roots. Stump treatments will keep the stump free of sprouts, but they will not prevent root suckering. When tree removal is necessary, it is best to treat with one of the above-mentioned herbicide applications first, wait for symptoms to develop (generally 30 days), and then cut.

Established trees continually spread by sending up root suckers that may emerge as far as 50 feet from the parent tree. A cut or injured tree-of-heaven may send up dozens of stump and root sprouts. Sprouts as young as two years are capable of producing seed. Tree-of-heaven produces allelopathic chemicals in its leaves, roots, and bark that can limit or prevent the establishment of other plants.

Site

Tree-of-heaven grows almost anywhere, from mine spoil in full sun to fertile, partly shaded, alluvial soils along rivers and streams. Besides urban areas, tree-of-heaven is now found growing along woodland edges, roadsides, railways, fencerows, and in forest openings. Tree-of-heaven is intolerant of shade and cannot compete under a closed forest canopy but will quickly colonize disturbed areas, taking advantage of forests defoliated by insects or impacted by wind and other disturbances.

Control

Due to its extensive root system and resprouting ability, tree-of-heaven is difficult to control. Treatment timing and following up the second year are critical to success. Mechanical methods, such as cutting or mowing, are ineffective, as the tree responds by producing large numbers of stump sprouts and root suckers. When cutting tree-of-heaven is necessary to remove potentially hazardous trees, it is best to treat with an herbicide first, wait for symptoms to develop (approximately 30 days), and then cut.

Hand pulling young seedlings is effective when the soil is moist and the entire root system is removed. Small root fragments are capable of generating new shoots. Seedlings can be easily confused with root suckers, which are nearly impossible to pull by hand.

To control tree-of-heaven, target the roots with systemic herbicides applied in mid- to late summer (July to onset of fall color) when the tree is moving carbohydrates to the roots. Herbicide applications made outside this late growing season window will only injure aboveground growth. Following treatment, repeated site monitoring for signs of regrowth is critical to prevent reinfestation.

Herbicides applied to foliage, bark, or cuts on the stem are effective at controlling tree-of-heaven. Cut stump herbicide applications do not prevent root suckering and should not be utilized. There are many effective herbicides available for use on tree-ofheaven, including dicamba, glyphosate, imazapyr, metsulfuron methyl, and triclopyr. For most treatments we recommend using herbicides containing the active ingredients glyphosate or triclopyr because they have practically no soil activity and pose little risk to nontarget plants through root uptake.

Foliar herbicide sprays are used where tree height and distribution allow effective coverage without unacceptable contact with nearby desirable plants. Treatments are applied in mid- to late growing season with equipment ranging from high-volume truck-mounted sprayers to low-volume backpack sprayers.

For dense or extensive infestations, treat initially with a foliar application to eliminate the small, low growth. Then follow up with a bark or hack-and-squirt application on the remaining larger stems. The initial foliar application will control most of the stems, while the follow-up stem treatment controls missed stems or those too tall for adequate coverage.

Basal bark applications provide a target-specific method for treating tree-of-heaven that are generally less than 6 inches in basal diameter. Using a low-volume backpack sprayer, a concentrated mixture of herbicide containing the ester formulation of triclopyr in oil is applied from the ground line to a height of 12 to 18 inches, completely around the stem. To maximize translocation to the roots, apply herbicides from mid- to late summer.

Hack-and-squirt herbicide applications are highly selective with a concentrated herbicide solution applied to downward-angled cuts in the stem. For effective hack-and-squirt applications, apply the herbicide solution to cuts spaced evenly around the stem. Leaving uncut living tissue between the hacks allows the herbicide to move to the roots. Again, make applications in mid- to late summer.

Well-established tree-of-heaven stands are only eliminated through repeated efforts and monitoring. Initial treatments often only reduce the root systems, making follow-up measures necessary. Persistence is the key to success.

Human Health Concerns

Tree-of-heaven can affect human health. The tree is a very high pollen producer and a moderate source of allergy in some people. In addition, a few cases of skin irritation or dermatitis have been reported from contact with plant parts (leaves, branches, seeds, and bark) and products. Symptoms often vary and depend on several factors, including the sensitivity of the individual, the extent of contact, and the condition of the plant or plant product. There are rare reports of myocarditis (inflammation of the heart muscle) from exposure to sap through broken skin, blisters, or cuts. People who have extensive contact with the tree should wear protective clothing and gloves and be careful to avoid contact with the sap.

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Finger Lakes Vineyard Update

Finger Lakes Grape Program

In the Vineyard



While a lot of attention is getting focused on the recent Spotted Lanternfly discovery in Romulus, the growing season continues on for everyone. And what we're seeing now is the onset of veraison starting in early varieties like Marquette and Jupiter, one of our seedless table grapes. While I haven't seen them lately, I suspect other early varieties like Baco noir and Geneva Red are doing the same.

Because of our early bloom this year, we predicted that we would arrive at veraison early as well, and that is turning out to be the case. Our average veraison date for Marquette over the past 10 years is July 28, and as you can see by the upper photo, we're well past 50% color change in berries. The average veraison date for Jupiter is August 2 and I think we are at or very close to 50% color in those as well, so we are still about 7-10 days ahead of average in terms of phenology, and I suspect we will see similar patterns in the other varieties as we move through the next couple of weeks. The forecast for the next couple of months is that temperatures are likely to stay warmer than normal, so at this point I see no reason to think that harvest won't be early this year.

Marquette (top) and Jupiter (bottom) turning color, July 24. Photos: Donald Caldwell

URGENT – Grape Growers Asked to Respond to 2024 Grape Forecast Survey

This announcement surprised all of us in NY grape extension, so we apologize that this is getting to you with such short notice. We know that many of you have responded to the grape acreage survey that is being led by the NY Wine & Grape Foundation, which we greatly appreciate. While this appears to be trying to do something similar, we still recommend that growers participate in this quick survey from NASS. The full press release from USDA follows this summary written by Andrew Holden with the LERGP. - Hans

Earlier this month, The U.S. Department of Agriculture's National Agricultural Statistics Service (NASS) announced that they will conduct a forecast survey for 2024 grape season in the Northeast States. The survey comes after the 2021 USDA decision to drop the yearly grape survey in all states except for California and Washinton. The data collected and reported is extremely useful and important for growers making business decisions, research and Extension projects, and FSA disaster programs. We encourage anyone growing grapes to respond so that the size and strength of our industry can be heard and accurately represented.

Growers should expect a call this week or early next week (July 22nd – August 1st) to be surveyed with a short list of questions. These questions will pertain to 2024 acreage and projected production from growers in the northeastern region. The USDA shared that they will try and contact producers twice if they do not answer the first call.

Per the news release, "The survey participant sample will be phoned by the New York NASDA staff. As with all NASS surveys, information provided by respondents is confidential by law." They also state there will be a quick turnaround with the data to be published in the August 12th, 2024, *Crop Production* report.

For more information on NASS surveys and reports, call the NASS Northeastern Regional Field Office at 1-800-498-1518.

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Upcoming Events

Don't forget to check out the calendar on our website (<u>https://blogs.cornell.edu/flxgrapes/events/</u>) for more information about these and other events relevant to the Finger Lakes grape industry.

Tailgate Meeting

Tuesday, August 13 4:30 – 6:00 PM Randall Standish Vineyards, 5506 NY-21, Naples, NY

Our next Tailgate Meeting will be on Tuesday, August 13 at Randall Standish Vineyards located in Naples, NY. These meetings are a time for growers and the FLGP staff to discuss what's going on in the vineyards, ask questions, and learn from each other. There is no set agenda for the most part, so bring questions, observations, thoughts, etc. and let's talk about them. Like our other Tailgates, this meeting has been approved for 1.5 pesticide recertification credits by DEC.

Here is the remaining schedule for Tailgate Meetings this year:

August 20, 2024 Miles Wine Cellars, 168 Randall Crossing Rd, Himrod, NY

Equipment Rodeo 2024

Wednesday, August 14 11:00 – 4:00 PM Wagner Vineyards 9322 State Route 414, Lodi NY

The NY State Wine Grape Growers are organizing and sponsoring the 2024 Equipment Rodeo this summer, where growers will get to see a wide range of vineyard equipment including sprayers, tractors, implements, and many others. Admission is free, and a food truck will be onsite. More details are on the event flyer included in this week's Vineyard Update.

2024 Cornell AgriTech Vineyard Pathology Field Day

September 4, 2024 9:00 AM – 12:30 PM Barton Lab, Cornell AgriTech 15 Castle Creek Drive, Geneva NY

The 2024 Cornell Vineyard Pathology Field Day will be held on September 4 from 9 am to approximately 12:30 pm. This is open to all industry representatives, as well as anyone involved in the grape industry in the northeast.

We will meet in the lobby of Barton lab (15 Castle Creek Dr), starting at 8:30 am with a departure to the field about 9 am. You will be getting an overview of all the field trials we have conducted this season against all the major diseases, as well as a new biological/conventional pesticide testing arena in our Traminette block. We will also visit the VitisGen III vineyards, where some exciting research will be taking place next season. Students will also be on hand to talk about some of the tech that is being used and how it could impact the industry going forward.

There is no cost to attend, but registration is requested for everyone who attends. To register, please visit <u>https://bit.ly/3Y7Fxhw</u>.

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July 25, 2024

2024 GDD & Precipitation

FLX	FLX Teaching & Demonstration Vineyard – Dresden, NY							
Date	Hi Temp (F)	Lo Temp (F)	Rain (inches)	Daily GDDs	Total GDDs			
7/17/24	79.9	67.6	0.00	23.8	1526.3			
7/18/24	75.0	62.1	0.00	18.6	1544.9			
7/19/24	77.4	60.4	0.00	18.9	1563.8			
7/20/24	82.8	59.4	0.00	21.1	1584.9			
7/21/24	81.1	59.5	0.00	20.3	1605.2			
7/22/24	87.1	64.8	0.12	26.0	1631.1			
7/23/24	83.5	66.7	0.22	25.1	1656.2			
Weekly Total			0.34"	153.7				
Season Total			13.62"	1656.2				

GDDs as of July 23, 2023: 1433.3

Rainfall as of July 23, 2023: 14.36"



<u>Seasonal Comparisons (at Geneva)</u>

Growing Degree Days

	2024 GDD	Long-term Avg GDD ²	Cumulative days
	I	Avg GDD ²	ahead (+)/behind (-) ³
April	69.9	64.2	+1
May	393.5	255.5	+11
June	589.0	484.3	+13
July	534.6	647.2	+15
August		596.8	
September		361.1	
October		113.9	
TOTAL	1587.0	2522.9	

¹ Accumulated GDDs for each month.

² The long-term average (1973-2023) GDD accumulation for that month.

³ Numbers at the end of each month represent where this year's GDD accumulation stands relative to the long-term average. The most recent number represents the current status.

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Finger Lakes Vineyard Update

Finger Lakes Grape Program

Precipitation

	2024 Rain ⁴	Long-term Avg Rain ⁵	Monthly deviation from avg ⁶
April	4.73"	2.86"	+1.87"
Мау	2.75"	3.04"	-0.29"
June	3.75"	3.58"	+0.17"
July	2.44"	3.48"	
August		3.19"	
September		3.43"	
October		3.39"	
TOTAL	13.67"	22.97"	

⁴ Monthly rainfall totals up to current date

⁵ Long-term average rainfall for the month (total)

⁶ Monthly deviation from average (calculated at the end of the month)

July 25, 2024

Additional Information

Become a fan of the Finger Lakes Grape Program on Facebook, or follow us on Twitter (@cceflgp) as well as YouTube. Also check out our website at <u>http://flgp.cce.cornell.edu</u>.

Got some grapes to sell? Looking to buy some equipment or bulk wine? List your ad on the <u>NY Grape & Wine</u> <u>Classifieds website today!</u>

Finger Lakes Grape Program Advisory Committee

Eric Amberg- Grafted Grapevine Nursery Dave Orzel– Nutrien Ag Matt Doyle- Doyle Vineyard Management Tara Farnan- Barrington Cellars Chris Gerling- Cornell University Extension Mike Colizzi- E & J Gallo Tina Hazlitt- Sawmill Creek Vineyards Cameron Hosmer- Hosmer Winery

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Cornell Cooperative Extension Finger Lakes Grape Program

Hans Walter-Peterson—Team Leader Donald Caldwell—Viticulture Technician Ellen Coyne—Project Field Technician The Finger Lakes Grape Program is a partnership between Cornell University and the Cornell Cooperative Extension Associations in Ontario, Seneca, Schuyler, Steuben, Wayne and Yates Counties.



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