







SPOTTED LANTERNFLY













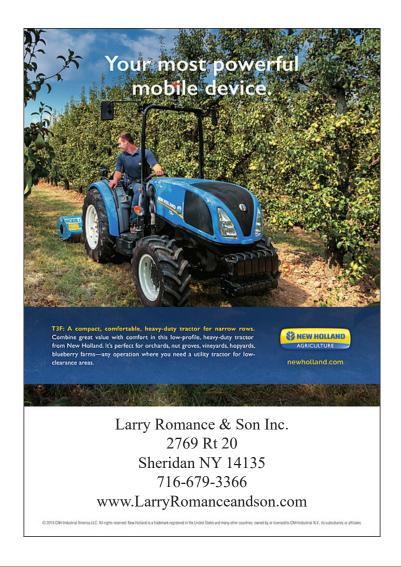
Spotted Lantern fly is still an issue. Do you know what to look for?

CROP UPDATE AUGUST 8, 2019

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

In this Crop Update:

- · Cover Crop Season Kevin Martin
- Grape Berry Moth/NEWA Update- Tim Weigle



The Lake Erie Regional Grape Program is a Cornell Cooperative Extension partnership between Cornell University and the Cornell Cooperative Extensions in Chautauqua, Erie and Niagara county NY and in Erie County PA.

Business Management

Kevin Martin, Penn State University, LERGP, Business Management Educator

Cover Crop Season

It is cover crop season. We've seen a number of trends this year in seed buying that I'd like to touch on. Growers are simplifying their seed blends and narrowing their goals for cover crops. When seed mixes get too complex, I think the natural reaction is to assume that species are in competition. While that can happen, most mixes have the potential to work better. This can work particularly well for increasing biomass production. There has been some research showing, in the right conditions, rye grass as a monoculture does outperform mixes for weed suppression. Growers switching to monocultures as a cost savings technique might be disappointed. Base monoculture grasses require high seed rates that can cost nearly as much as blends.

Nitrogen fixation

When organic matter is above 3%, nitrogen fixation can be helpful but should not be a primary goal. Nitrogen fixation only occurs when legumes cannot find adequate N in soil. Advertised recommendations for medium red clover indicate that an early August planting may fix 65 lbs. of nitrogen per grape acre. For grapes, this may be too much and its release may not be well timed. Medium red clover seeded at rates of 5 – 7 lbs per acre will provide supplemental nitrogen at more appropriate rates when terminated. By cutting the cost of legume seed by 65%, growers can continue to use urea, which will ensure ideal timing for 20 -25 lbs of actual N around bloom. Well managed legume cover crops can fix 1lb. of nitrogen for \$.75. While that is nearly double the price of urea, it is more available and stable. Given the differences in cost, until we know more about the efficiency of uptake and bloom availability, it makes sense to supplement urea not replace it altogether.

Weed Control

While it's hard to beat annual rye grass for weed control, other options do exist. Companion crops, such as oats or grain rye often provide moderate to excellent levels of weed control. At low rates these companion crops provide weed control in row middles at least as good, if not better than two applications of round-up. Due to timing issues, typically, only one application of round-up is saved. While trips through the vineyard are not saved, the quality of the weed control is superior.

Annual ryegrass outperformed grain rye and oats in trials so far. A rate of 4-9 pounds per grape acre would be appropriate depending on other seeds in the mix. Seed cost would range from \$8-\$16 per grape acre. In addition to weed control, a companion crop would enhance the performance of other seeds and prevent erosion (particularly during harvest).

We haven't had much experience yet, but the growth pattern of berseem clover is supposed to aid in weed suppression. Like crimson clover, over wintering is questionable. This does limit the value of the clover, but aids in ease of termination.

Erosion Control

Erosion control is often the primary concern of conservation programs. The environmental costs of erosion are high. Costs of erosion shouldered by growers are specific to sites, practices and weather. On most sites, in most years, erosion and field disturbance is not severe enough to justify a cover crop. Flooding or wet soil can require significant rehabilitation efforts in wet years. These costs can easily result in 3-5 days of labor and tractor work for a small 10-acre block. Erosion control, for most growers, is just an added bonus.

Barley, Cereal Rye, Sorghum and Cowpea are the highest rated choices for control. Cereal Rye is one of a number of companion crops often used in vineyards. If erosion is a severe problem, one might start to favor cereal rye for that block. Annual Ryegrass, oats, wheat and radish are all very

good at erosion control. Since most growers are not necessarily focused on erosion, a very good rating opens up the possibilities of nearly all companion crops commonly used in vineyards.

If wet weather resulted in medium to heavy tillage in the last 6-12 months erosion control going into a potentially wet fall and late harvest might make a lot of sense.

Managing Water Status

For growers that get the basics right, vine size is still driven by water status. In the east, this is typically outside of the control of the growers. Where drainage can be installed it usually is. Well drained soils are generally more productive and often profitable. Cover crops offer another tool, one that is badly needed as rainfall can manipulate production and vine size dramatically.

Theoretically, higher quality soils will be more resilient to excess and deficient rainfall, increasing productivity in unusually dry and wet years. We have already started to see cover crops influence vine size prior to quantifiable changes in soil health. Benefits of enhancing vine size significantly outweigh the costs of cover crop. With one notable exception, vine size improved significantly across all treatments, with all seed mixes. Improvements in smaller vines were most notable, thus variability within a block was somewhat reduced.

There are lots of reasons to use cover crops beyond these goals. For most grape acres I'd like to continue to see 3-4 species. A grass or grain blended with a legume and radish is a pretty standard mix that allows species to work together to ensure a good establishment and inexpensive seed rates. Buckwheat can be added optionally but should probably be seeded at very low rates. If seeding at low to medium rates, legume cost should be decreased, as the risk of lower performance may become an issue. In well drained soils, cover crops provided significant and unwanted competition in a dry year. I like to think of this as a starting point for a diverse mix. As goals, needs and soil conditions change there are plenty of ways to modify this mix. With an overwhelming number of options, vineyard managers just need a place to start.





Tim Weigle, NYSIPM, Cornell University, LERGP Team Leader

Grape Berry Moth

If you have visited the NEWA website http://newa.cornell.edu today you may have noticed that a number of stations have not reported data since yesterday, August 7. This appears to be a widespread problem across the network of instruments. The folks at NEWA are working with Rainwise to correct the problem. So take the results of this week's table with a grain of salt as most of the results are not coming from stations, rather it is being generated from forecasts. The good news is that we are still a ways away from the timing for the next insecticide application (1620 DD). Looking at the forecasted temperatures, it looks like most areas will be hitting 1620 DD toward the end of next week. Scouting is important to see if vineyard blocks are at, or above, the economic threshold of 15% damaged clusters. Prepare to scout all vineyard blocks for grape berry moth damage when the model reports DD between 1470 and 1620. Keep checking the NEWA website for the most current information from the model. Remember to type in the wild grape bloom date from your area each time you visit to get the best information out of the model.

I will be out of the office next Thursday at the NYS IPM Program's Spotted Lanternfly conference in Binghamton, NY (see the flyer later in this Crop Update). While the meeting agenda is packed with experts on pest biology, regulation, research and extension, I know many of you are looking for pesticide recertification credits. This meeting has received 6 NYS Pesticide recertification credits and Pennsylvania has given 6 – 10 credits for this meeting depending on category.

Rainwise Servers are Down

According to the NEWA blog, Rainwise Inc. has been experiencing a complete server outage since 5PM EST Wed August 7, 2019. You can check the NEWA blog http://blogs.cornell.edu/yourenewa/2019/ for regular updates. Or you can follow Rainwise, Inc. on Twitter @RainwiseNet for immediate updates or @yourNEWA where they will be reposted.



	Wild grape bloom	DD Total on August 8, 2019	Forecasted DD for August 13, 2019
NEWA Location	date*	,	5 ,
Versailles	June 7	1401	1497
Hanover	June 8	1420	1519
Sheridan	June 6	1492	1594
Silver Creek	June 8	1445	1546
Dunkirk Airport	June 9	1446	1547
Forestville	June 8	1430	1529
East Fredonia	June 9	1396	1499
Fredonia	June 9	1361	1462
Brocton Escarp.	June 9	1386	1487
Portland Escarp.	June 7	1448	1549
Portland	June 8	1434	1535
East Westfield	June 9	1392	1496
Westfield	June 9	1401	1505
Ripley	June 8	1457	1563
Ripley Escarp	June 8	1411	1517
Ripley State Line	June 8	1451	1556
North East State Line	June 9	1386	1479
North East Escarp	June 7	1446	1546
North East Sidehill	June 8	1421	1521
North East Lab	June 8	1480	1593
Harborcreek	June 8	1441	1553
Harborcreek Escarp	June 9	1360	1470
Lake City	June 7	1482	1593
Ransomville	June 11	1409	1515
Burt	June 19	1210	1318
Corwin	June 13	1345	1449
* Estimated date provided by NEWA website			

Table 1. Phenology-based Degree Day model results for Grape Berry Moth by NEWA station location in the Lake Erie Region on August 8, 2019.

5th Annual New York State Integrated Pest Management Conference





Spotted Lanternfly: At Our Doorstep or Already in Our Fields?

It's not if but when and where this invasive pest will show up in NYS. Be on the front line of stopping the invasion! Learn where to look and how to correctly identify and report sightings of all Spotted Lanternfly life stages.

Spotted Lanternfly is a concern to: Growers; Foresters; Nursery, Greenhouse and Christmas Tree Operations; Landscapers, Master Gardeners and all NYS residents. In fact, anyone whose business or travel takes them through quarantine zones should understand New York State's regulations.



Register at: lergp.cce.cornell.edu/ event.php?id=416



More information: tinyurl.com/y39aeemh

This conference has been approved for 7.5 Certified Nursery Landscape Professional credits, and 6 NYS Pesticide Recertification credits in the categories of 1a, 2, 3a, 6a, 9, 10, 22 and 25.

Environmental

Conservation

August 15, 2019

8:30 am - 4:30 pm Statewide Public Conference Broome County Regional Farmers Market 840 Upper Front St., Binghamton NY

Experts from across PA and NY will provide updates on what is being done to prevent SLF's establishment in New York and tools available to combat this threat to our fields, forests and homes.

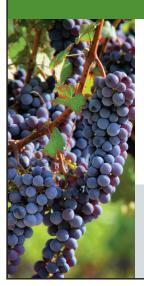








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INSURING GRAPES

NY, 2019

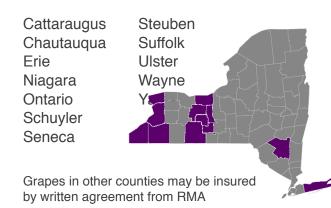
Crop insurance is a safety net for farmers that helps you **manage risk**. If you have a crop failure, crop insurance can help you farm again next year.

Important Insurance Deadlines

- Aug. 15, 2018: Premium Billing Date
- Nov. 20, 2018: Sales Closing, Policy Change, Cancellation, Termination Date
- Nov. 20, 2019: End of Insurance Period
- Jan. 15, 2019: Acreage / Production Report Date



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NYS Grape Crop Insurance



for every \$1 grape producers spent on crop insurance premiums from 2012 to 2016, **they received \$2.07** in losses

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Learn more about crop insurance options available to New York producers at <u>agriskmanagement.cornell.edu</u>

To sign up, contact a crop insurance agent. Find an agent using the Agent Locator tool at rma.usda.gov/en/Information-Tools/Agent-Locator-Page

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