Experiment Station

Cooperative Extension of Cumberland County Extension Education Center 291 Morton Avenue Millville, NJ 08332-9791 http://cumberland.njaes.rutgers.edu



Cultivating Cumberland

April- 2024

Vol. 29, Issue 4

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Attachments

- Boxwood Blight
- Projected GDD50 accumulation
- Red-headed Flea Beetle Updated Predictions

USDA Webinar on Updates to the USDA Harmonized Good Agricultural Practices and GAP Plus+ Audit Standards

The U.S. Department of Agriculture (USDA) Agricultural Marketing Service (AMS) will hold a webinar on the updates to the USDA Harmonized Good Agricultural Practices (GAP) and GAP Plus+ audit standards.

April 5, at 1 p.m. ET

To Register go to:

https://www.zoomgov.com/meeting/register/vJIscOmrrjljGHyM1vmhaP-ju931yT09SPg#/registration

These updates become effective **May 1, 2024**, and will allow AMS' GAP audit services to remain applicable and relevant for its specialty crops industry customers.

The USDA Harmonized GAP and GAP Plus+ audit standards will be updated to align with the Produce GAPs Harmonized Combined Standard. Updates will include:

- Adding more consistent language and reducing redundancy.
- New requirements relating to water treatment, recall program, soil amendments, and maintenance.

For more information on the updates to the standards or the webinar, contact Jill Dunlop, AMS Audit Services Branch, at Jill.Dunlop@usda.gov.

Changes to the Harmonized and Harmonized Plus+ Audits for 2024

USDA just released the new Harmonized GAP Standard and Harmonized Plus+ Standard Audits. They go into effect May 1, 2024. There are several changes related to section numbers and deleted numbers so if you have your audit plan setup by section number check to make sure they have not changed. Also, eight questions have been added. Following is a summary of those questions:

- G 2.4 Approved service provider list required (the grower approves the list)
- G 7.2 A designated recall team is required
- G 7.3 Must perform a mock recall exercise annually
- G 11.5 Must have labels and instructions for any water treatment chemical used
- G 11.8 Compressed air or other gases contacting food or food contact surfaces must be maintained
- F 6.3 Must have a procedure for storing and handling growing media (e.g., perlite, peat, rock wool, etc.)
- F 9.4 Re-used water must be treated with a labeled product
- P 5.2 A master cleaning schedule with standard operating procedures (SOP) must be established

There are two documents for each audit: Harmonized GAP Standard (v 3.0) or Harmonized GAP Plus+ standard (v 5.0). Each also have a summary of changes document will be help finding the changes. Go to **Harmonized GAP | Agricultural Marketing Service (usda.gov)** to download a copy of each standard.

NRCS-NJ Accepting Applications for Joint Chiefs' **Landscape Restoration Partnership**

Gail Bartok 732-537-6042 / Gail.Bartok@usda.gov

Apply by May 31, 2024

HAMILTON SQUARE, N.J., March 1, 2024 - The United States Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) in New Jersey is accepting applications for forest management activities on private lands for the purposes of reducing wildfire risk in municipal watersheds and the wildland-urban interface, implementing carbon defense activities, improving habitat for threatened and endangered species, and mitigating the effects of Southern pine beetle, through the New Jersey Pine Barrens Joint Chiefs' Landscape Restoration Partnership.

Landowners located in the Pinelands region, which covers portions of Atlantic, Burlington, Camden, Cape May, Cumberland, Gloucester, and Ocean counties, are encouraged to contact their local service center to apply. While NRCS accepts applications for programs year-round, landowners should apply by May 31, 2024 to be eligible for this funding cycle.

The Joint Chiefs' Landscape Restoration Partnership is one of 14 projects selected across the U.S. bringing together agricultural producers, forest landowners, and National Forest System lands to improve forest health using available Farm Bill conservation programs and other authorities.

The Joint Chiefs' Landscape Restoration Partnership enables the Forest Service and NRCS to collaborate with agricultural producers and forest landowners to invest in conservation and restoration at a large enough scale to make a difference. Working in partnership, and at this scale, helps reduce wildfire threats to communities and critical infrastructure, protect water quality and supply, and improve wildlife habitat for at-risk species.

Initially funded in Fiscal Year 2023, this is the second year of the three-year project in which landowners work with local USDA experts and partners to apply targeted forestry management practices on their land, such as thinning, hazardous fuel treatments, fire breaks, and other systems to meet unique forestry challenges in their area.

To apply, contact an NRCS representative at your local USDA Service Center. You can find your local Service Center at www.farmers.gov/service-locator. Additionally, on farmers.gov, you can create a secure account, apply for NRCS programs, electronically sign documents and manage your conservation contracts.

USDA is an equal opportunity provider, employer and lender.

Water Testing Requirements Under the Food Safety Modernization Act **Produce Safety Rule for 2024**

Does your farm fall under the FSMA: PSR? Find out at the link below:

https://rutgers.ca1.qualtrics.com/jfe/form/SV 4lagP1mbPyrp42N. The requirements for water management only apply to operations that are not exempt or qualified exempt. Check out the link above to determine whether you fall under an exemption category.

Note: If you are third party audited (GAP/GHP, Harmonized, Global GA, Primus, etc.) continue to follow the water testing requirements for your audit!

Harvest and Post-Harvest Water (including water used to wash hands, washing produce, ice making, hydro cooling, chemical application and for cleaning and sanitizing)

Water Test Requirements:

- For Public Water: No test required, you need to have a copy of the report from the municipality.
- For well water: You must test just wells used for harvest and post-harvest four times in the first year and then if there is no detectable generic E. coli on any tests you may test each well once per year after that initial year.
- For surface water: Untreated surface water is not allowed to be used for harvest and post-harvest purposes.

Compliance Dates:

- Large Growers (over \$500,000): Currently in effect
- Small Growers (\$250,000-\$500,000): Currently in effect
- Very Small Growers (\$25,000- \$250,000): January 26, 2025

When complying a grower must inspect the agricultural water system that is under their control to determine any hazards. The water source test results must ensure that there is no detectable generic E. coli per 100 ml of water and untreated surface water cannot be used.

If a water test does not meet the criteria for non-detectable generic E. coli the farm must immediately stop using the water. The grower must take several steps before using the water including reinspecting the entire affected agricultural water system, under their control and make corrections or treat the water.

There are other required measures including having a water change schedule; visually monitoring the quality of water (for buildup of organic material) and monitoring the temperature of certain commodities.

The records required include the agricultural water system inspection; water test results; any water treatment; and corrective actions. Review Subpart E sections 112.41-112.48, 112.50, 112.151 and 112.161.

Pre-Harvest (Irrigation, Frost Protection, Sprays) Water

There is some confusion as to whether growers need to test their water for pre-harvest uses in 2024. The pre-harvest irrigation water requirement is still under review by the Food and Drug Administration, so testing is not required in 2024.

What we suggest you do now:

- For well water: Test once a year
- For surface water: Test three times a year. (when the pump is started, mid-season and close to harvest.)

This will give the grower a baseline as to the quality of water being used. When the final rule goes into effect the largest growers (over \$500,000) will have nine months; small growers (\$250,000-500,000) will have 1 year, and nine months and the very small growers (\$25,000-250,000) will have two years and nine months to start complying.

Source: The On-Farm Food Safety Team (Meredith Melendez, Jennifer Matthews and Wesley Kline)

Four Water Samples Required for Harvest and Post-Harvest Water Under **Food Safety Modernization Act Produce Safety Rule**

Growers that have been testing their wells for years have been asking us if that historical data would meet the four-sample requirement for FSMA for the first year and the answer we got from the FDA is NO.

What that means for you:

For harvest and post-harvest water, you are required to test each well for non-detectable generic E. coli four times in the first year. If all initial results meet the numerical requirements of 112.44(a) (no detectable generic E. coli per 100 ml) then you are only required to test those harvest and postharvest water wells once a year moving forward.

The four-sampling requirement is now in effect for operations over \$250,000 and smaller operations (\$25,000-250,000) will be required starting in January 2025. Remember not all wells need to be tested four times. It is only water from wells used in harvesting or in the packing area which come in direct contact with the produce or the harvesting and packing equipment during cleaning and sanitizing.

Here is the answer we got from the FDA:

"As farms come into compliance with harvest and post-harvest agricultural water requirements, those growers who are using untreated ground water for the purposes of 112.44(a) must test the water 4x per year initially. If all initial results meet the numerical requirements of 112.44(a) (no detectable generic E. coli per 100 ml), then the grower may reduce the testing frequency to one sample year, as long as the agricultural water continues to be reflective of use. FDA may consider guidance on what growers might be able to do with historical data as compliance and implementation guidance is developed."

2024 Greenhouse Strawberry School Online



Presented by Ohio State Univ & CropKing May 3, 2024

Online learning (May 3, 2024) by live lectures (Dr. Chieri Kubota and Mark Kroggel)

Live lectures will cover basics on strawberry physiology and production practices in greenhouses – topics include 1) cultivars, 2) transplants and flowering physiology, 3) crop schedule, 4) nutrient solution and rootzone management, 5) environmental conditions and benchmark yields, and 6) IPM and environmental disorders.

Live lectures are scheduled from 9:00 AM to 11:30 AM ET (Part 1) and from 1:30PM to 4PM ET (Part 2) on May 3rd Friday.

Students will be given additional three weeks (till May 24th) to access lecture recordings. Course fee is \$135 per person. Registration site will open on April 1st. Please let us know if you have questions.

Deadline to Enroll: May 2nd, 2024

Live lectures: May 3rd, 2024

More information & Registration: https://u.osu.edu/indoorberry/strawberry-school/

Allium leaf miner (ALM)

Kris Holmstrom - Plant and Pest Advisory

Many weather stations on the NEWA network except for typical colder sites in northern New Jersey have surpassed 250 growing degree days (GDD) base 39°F. 39°F is close to the lower developmental temperature (38.3°F) which our colleagues at Penn State recommend for predicting the first emergence of ALM adults. In recent years, initial feeding/egg laying scars have been detected within a few days of local weather stations recording the 250 GDD threshold. Growers who feel they may be impacted by this pest should check the accumulated GDD from local weather stations. Growers in southern counties may reasonably assume there will be ALM activity in their area soon, if not already happening. To determine GDD from local weather stations, the NEWA website https://newa.cornell.edu/ is very helpful. From the NEWA home screen, select the nearest weather station from drop down menu at the center of the page. Next, scroll down to "Weather Tools" on the right side of the page, and select "DD Calculator". Select your start date (1/01/24) and end date as well as Degree Day Type (39 F) from the menu at the left of the page. The site will automatically generate the accumulated GDD base 39F to the last day of your requested sample, and then offer a forecast of accumulated GDD for the next week. If you should select 1°C (34 F), then the DD accumulation should be 350.

Growers should consider initiating the control method of their choice at this time, if any allium crops are in the field. Affected crops include chives, scallions, garlic, onions and leeks. Look for neat rows of white spots descending from the upper tips of allium leaves. Initial injury often occurs on the tallest leaves. Under warmer, less breezy conditions, adults may be seen near the tips of leaves. Perennial chive beds are often the first, and most heavily infested alliums of the spring season, so this makes chives an ideal crop to confirm ALM adult activity.

Floating row covers, kept on until this flight ends will help minimize access to plants. Insecticide applications targeting adults may be helpful as well, although frequency of applications is uncertain. Spinosyn materials (Radiant, Entrust (OMRI approved)),pyrethroids (Mustang Maxx, Warrior), neonicotinoids (Scorpion, Venom), the diamide Exirel (section 2ee recommendation) and the insect growth regulator Trigard are labeled for miner control.

Adult activity and observations of feeding will be reported on in the IPM Update as they occur.

EPA Update on Existing Stocks Provisions for **Three Chlorpyrifos Products**

March 15, 2024 by Pat Hastings

Note: The official notice can be viewed at in the March 15, 2024 Plant and Pest Advisory or check out the EPA Chlorpyrifos website highlighted below for more details.

For growers, this notice reaffirms that, at this time, all the chlorpyrifos tolerances have been reinstated and are currently in effect, and products can be used according to the product label. Additionally since use of existing stocks of Chlorpyrifos 4E AG, Quali-Pro Chlorpyrifos 4E, and Vulcan on food, food processing sites, and food manufacturing sites is now permitted until June 30. 2025, it is probable that chlorpyrifos products can be used according to the product label for the 2024 growing season.

HOWEVER, EPA has published its next anticipated steps. Specifically, EPA has published that it "expects to expeditiously propose a new rule to revoke the tolerances associated with all but the 11 uses referenced by the court... and ... EPA is also engaged in discussions with the registrants to further reduce exposures associated with the 11 uses of chlorpyrifos that were referenced by the Eighth Circuit, a process that will also include taking into account the 2020 draft document and public comments received thereto. This approach would allow use on alfalfa, apple, asparagus, cherry (tart), citrus, cotton, peach, soybean, strawberry, sugar beet, wheat (spring), and wheat (winter) with additional restrictions for geographic location and rate of application to address safety of the tolerances, as well as potential additional restrictions to protect farmworkers and other vulnerable populations, and vulnerable species and their habitats."

Source: EPA Chlorpyrifos website.

To check on the status of tolerances for chlorpyrifos, please directly consult § 180.342 Chlorpyrifos; tolerances for residues.

On-Farm Readiness Reviews Available

Have you gone through the Produce Safety Alliance training for the Produce Safety Rule? If so, now is your chance to find out if your farm is ready for an inspection. The New Jersey Department of Agriculture (NJDA) and the Rutgers On-Farm Food Safety Team are collaborating to perform assessments on any farm who has gone through the PSR training. This is free and confidential for your operation. One member from each team will walk around the farm with you and help you decide whether any changes may be required to pass an inspection. The team will leave with you a list of the top three or four items considered most important. All notes taken during the visit will be left with you and nothing will be photographed. This is your opportunity to get a firsthand assessment about what you need to do before inspectors show up.

The best time for the team to visit is when the farm is getting close to harvest, so they can assess practices from field production through packing. The assessment will take approximately two hours depending on the size of operation.

To schedule a review contact NJDA at 856-839-3388 or email fvinspection@ag.nj.gov.

Ed Wengryn Named N.J. Secretary of Agriculture

TRENTON, N.J. – Governor Phil Murphy announced that Edward D. Wengryn will serve as the New Jersey Secretary of Agriculture, following his appointment by the State Board of Agriculture. The State Board of Agriculture unanimously confirmed Ed Wengryn at their meeting, and the Governor approved the appointment. Since July 1, 2023, Assistant Secretary Joe Atchison III has directed the Department of Agriculture, assuming the responsibilities of Secretary, after the retirement of Secretary Douglas Fisher. Incoming Secretary Wengryn will begin on Monday, March 25, 2024.

"I am proud to announce the appointment of Ed Wengryn to serve as New Jersey's Secretary of Agriculture," said Governor Murphy. "As the Garden State, agriculture is one of the most important facets of our state's identity and heritage. Ed comes from a farming family and is a passionate advocate for our agricultural community. I am confident that his experience and leadership will benefit the many residents who depend on the Department's programs and services, including for access to healthy, locally grown food. Ed will help to ensure that the agricultural community remains top of mind as we continue to expand economic opportunities for businesses across our state."

"I also want to thank Assistant Secretary Joe Atchison for this exemplary leadership following the retirement of the state's longtime Secretary of Agriculture, Douglas Fisher," continued Governor Murphy. "Joe has led with dedication and commitment, and his reliable and steady leadership has served as an asset to the Department."

"I want to thank the State Board of Agriculture for the population and the apportunity to serve the agriculture industry in

"I want to thank the State Board of Agriculture for the nomination and the opportunity to serve the agriculture industry in New Jersey as Secretary. I also want to thank Governor Murphy for his support and approval of my nomination. As the grandson of Ukrainian immigrants who settled here in New Jersey as farmers, I am humbled and honored to be able to lead an agency that has been critical to the success of not only my family, but all the farming families in New Jersey. I look forward to ensuring the Department succeeds in its multifaceted missions and to serving the citizens of our great Garden State," said Ed Wengryn, incoming New Jersey Secretary of Agriculture.

"The Board enthusiastically endorses Mr. Edward D. Wengryn to be the next, and only eighth overall since 1916, Secretary of Agriculture for New Jersey. In our modern age, farmers are asked to help devise solutions to address challenges facing our nation and world. Whether it's climate change, food insecurity, animal health and welfare, or the increase in invasive species from worldwide trade, agriculture as an industry must be a key player in adapting methods of production and distribution to fit our changing world. We're also seeing incredible growth in opportunities farmers can find to market their fresh agricultural products and services like agri-tourism to residents of New Jersey and beyond," said Holly Sytsema, President of the New Jersey State Board of Agriculture. "Both the obstacles farmers face and the opportunities they can find are often rooted in legislation and regulation. With Ed's background of decades influencing agricultural policy on a state and federal level, he is in a unique position to know the history of, and the most current thinking on, agricultural legislative and administrative issues. The Board is confident that Ed will effectively lead both the Department and the agriculture industry in an age where the knowledge and skill set he brings to the table will be invaluable."

New Jersey's Secretary of Agriculture is the Department's executive officer, Chair of the State Agriculture Development Committee, and a member of the Governor's cabinet. The Office of the Secretary supports programs relating to the economic development of production agriculture; the marketing of agricultural products through the Jersey Fresh program; conservation and development of natural and renewable resources; distribution of surplus federal commodities to soup kitchens, food pantries, schools, State hospitals, and institutions; and the health and well-being of the state's greenhouse/nursery and livestock industries as well as other programs related to these areas.

Since 1998, Ed Wengryn served with the New Jersey Farm Bureau, where he worked closely with farming communities. His field work included the direct marketing of farm products as well as oversight on issues such as sales taxes. Ed's work at the Farm Bureau spanned ornamental horticulture, land use, forestry, and equine and other livestock issues. From 2002 through 2004, he served as Confidential Assistant to Charles Kuperus, the Secretary of Agriculture for the State of New Jersey, where he coordinated the development of industry-specific action plans to improve the economic viability of New Jersey's varied agriculture sectors. Since 2009, Ed has represented the private agriculture sector on the New Jersey Industry Advisory Council at the State Office of Homeland Security and Preparedness, ensuring concerns of the agricultural community are considered in State emergency response plans. This work was critical for keeping agricultural businesses open and running during the recent COVID-19 public health emergency.

Ed has been recognized for his service to the Equine Industry by receiving the NJ Horse Person of the Year award in 2021 and currently serves as Co-Chair of the Rutgers University Board for Equine Advancement (RUBEA). Ed grew up in the Neshanic Station section of Branchburg Township, and his interest in agriculture and horticulture began when he was helping on the Wengryn Family farm, a dairy and field crop operation in Hillsborough, New Jersey. As a youth, he worked with his father, Myron, growing and selling pumpkins and pick-your-own strawberries, as well as growing and selling tomatoes to area delis in the summer.

Ed is a 1986 graduate of Delaware Valley College of Science and Agriculture Doylestown with a Bachelor of Science in Ornamental Horticulture. He is a resident of Trenton, New Jersey, residing in the Mill Hill Historic District.

Locations for Pesticide Recycling Containers - 2024

Below is the locations and dates for recycling pesticide containers. The locations will not be manned by NJDA. Individuals dropping off containers (triple rinsed, holes drilled in bottom of container or slit w a knife & sans paper booklet on container) may do so during business hours and can pick up the form with a stamped self-addressed envelope to NJDA. Completed form must be returned to NJDA. Individuals will receive 1 core point PER CALENDAR YEAR!

More information can be found at www.nj.gov/agriculture/divisions/anr/nrc/processingsteps.html

| Atlantic County | Monmouth County |
|--|--|
| Helena Chemical | Rutgers Fruit and Ornamental |
| 66 Route 206 | Research Extension Center |
| (North of the Route 30/206 intersection) | 283 Route 539 |
| Hammonton, New Jersey | Cream Ridge, NJ 08514-9634 |
| Friday, April 12 | Friday, April 26 |
| Friday, May 10 | Friday, May 24 |
| Friday, June 14 | Friday, June 28 |
| Thursday, July 12 | Friday, July 26 |
| Friday, August 16 | Friday, August 30 |
| Friday, September 13 | Friday, September 27 |
| Friday, October 11 | Friday, October 25 |
| | Helena Chemical 66 Route 206 (North of the Route 30/206 intersection) Hammonton, New Jersey Friday, April 12 Friday, May 10 Friday, June 14 Thursday, July 12 Friday, August 16 Friday, September 13 |

Items that Will Not Be Accepted and Will Be Returned to the Participant

Pesticide containers with dried formulation on the container, pour spout or the spout threads;

Pesticide containers with any liquid residue;

Pesticide containers where the insides are caked with dried residue;

Mini-bulk, saddle tanks and nurse tanks, which can be made of fiberglass;

Pesticide containers with lids; or

Containers that held any type of petroleum oil product or antifreeze.

Non-Waxy Cardboard

Helena Chemical will also be accepting non-waxy cardboard 1 p.m. to 3 p.m and during the scheduled pesticide container collection times. The clean non-waxy cardboard must be broken down and flattened. Cardboard delivered to the Atlantic County site must be tied. Clean Non-waxy cardboard will also be accepted year-round at the Cumberland County Solid Waste Complex's Convenience Center.

1 CORE credit given if you take your NJ Pesticide License with you to drop off.

More information can be found at www.nj.gov/agriculture/divisions/anr/nrc/processingsteps.html

Edward R. Hall/robert R. Hanna Scholarship Announcement

The objective of the scholarship is to acknowledge students for their academic and personal accomplishments in the field of conservation and/or natural resources.

ELIGIBILITY

The applicant must:

- 1. be a full-time student in good standing at any New Jersey accredited university/college, or a resident of New Jersey attending any accredited out-of-state university/college; and
- 2. have successfully completed, or will complete by the award date, at least two semesters of study; and
- 3. be an undergraduate enrolled in a curriculum related to natural resources including but not limited to: agriculture, agronomy, conservation, ecology, environmental science, fisheries, forestry, geography, journalism, plant science, soil science, and/or wildlife. Other areas related to conservation may also qualify.

AMOUNT OF SCHOLARSHIP

A \$1,000 Scholarship will be awarded in memory of Edward R. Hall and Robert R. Hanna. APPLICATION DEADLINE: April 30, 2024

HOW TO APPLY:

Mail the completed application form, the current university/college transcript, a list of clubs and/or organizations related to conservation and natural resources, a one-page essay that states your qualification, a list of experiences related to conservation and/or natural resources, and a list of two references with complete contact information to the address below:

FIRMAN E. BEAR CHAPTER, SWCS
C/O Nancy Paolini
8 Lopatcong Drive
Ewing, NJ 08638

The application must be postmarked by April 30, 2024.

http://www.njswcs.org

CULTIVATING CUMBERLAND

Calendar of Events

- Indicates a newly added event
- * Indicates Pesticide Credits Offered

April 9

South Jersey Tree Fruit Meeting:

6:00pm-8:00pm.

1200 N. Delsea Dr. Bldg #A Clayton, NJ 08312

April 10-11

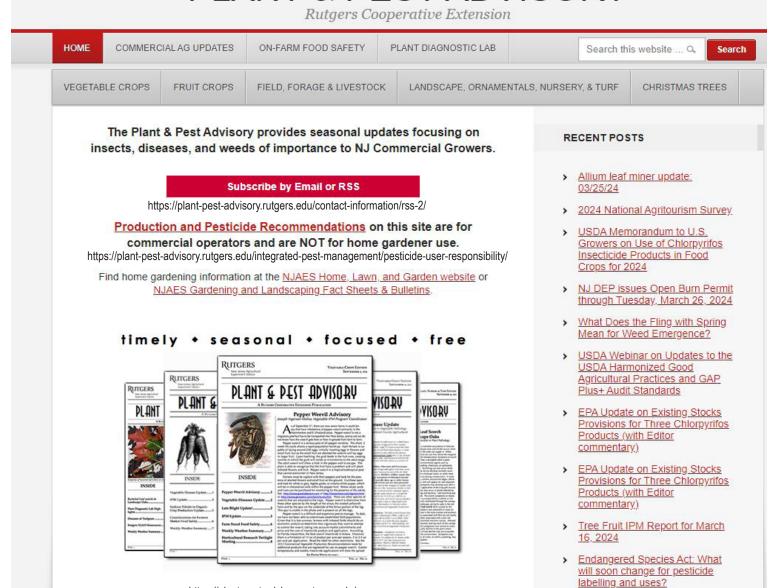
Bridging The Gaps: Approaches for treating pre harvest agriculture water on-farm.1:00pm-5:00pm.

Efs.uga.edu. Register for \$25.

May 29-30

Bridging The Gaps: Approaches for treating pre harvest agriculture water on-farm.1:00pm-5:00pm.

PLANT & PEST ADVISORY



https://plant-pest-advisory.rutgers.edu/

Boxwood Blight - It is time to begin protective fungicide applications in high value areas if you have not already done so. Protective fungicide applications should remain in effect or be initiated immediately for Boxwood Blight throughout NJ.

These advisories are general in nature and change rapidly over time and throughout the state! Someone from your business should be using this risk model daily if boxwood is important to your financial stability – In 30 seconds you can have a better idea of boxwood blight (and other pathogen) activity in your immediate area! Please visit the USPEST.ORG Boxwood Blight Risk Model –(https://uspest.org/risk/boxwood_app?sta=NJ50). At this website: Input your area code – select closest weather station – check 7-14 prediction – click on graph / table.

Boxwood Blight Risk Model - NJ

Fungicides

You very well may have these materials already applied as 'cover-sprays' – But – be mindful that protectant fungicides loose efficacy the more rain (or overhead irrigation) they are subjected to, and reapplication may be warranted.ROTATE between Fungicide Resistance Action Committee (FRAC codes) to avoid this pathogen becoming resistant to specific chemicals

Format: [FRAC code]: Chemical name (Trade names * no endorsement implied)

[M05]: Chlorothalonil (Daconil WS)

[M05 + 1] Chlorothalonil + Thiophanate methyl (Spectro 90WDG)

[11] Trifloxystrobin + [7] Fluopyram (Broadform)

[11] Trifloxystrobin + [3] Triadimefon (Armada 50WDG)

[M03] Mancozeb

[12] Fludioxonil (Medallion WDG)

[3] Tebuconazole (Torque)BW

Please contact Tim Waller for additional information (twaller@njaes.rutgers.edu OR 856-451-2800)

Intro Inputs Table **EXAMPLE** Station NJ50, UPPER DEERFIELD NJ, 2022 2022 2021 Risk class Date index Risk class index May 23 0 Very Low Risk 0 Very Low Risk May 24 Ω Ω Very Low Risk Very Low Risk May 25 34 Very Low Risk 0 Very Low Risk May 26 56 Low Risk 0 Very Low Risk May 27 415 Up to 3-13 Lesions Very Low Risk May 28 0 Very Low Risk 0 Very Low Risk May 29 0 Very Low Risk Verv Low Risk

To get this information by email, log in to or sign up for <u>USPEST.org.email notifications</u>. To see the model output together with relevant weather inputs, go to <u>MyPest Page</u>.







DISCLAIMER: The label is the law, always refer to it for allowable host crops, use-restrictions, application rates, reapplication intervals, re-entry intervals (REI), and mix compatibility information. Production and pesticide information on this site are for private/commercial pesticide applicators and landscape professionals only, and are **NOT for home gardener use**. Provided materials represent examples and do not cover all possible control scenarios. Tradenames listed do not imply endorsement and are used as examples only. Please contact your local agent or chemical sales representative for more information or to discuss additional pest management options.

| | Projected GDD50 ac | cumulation | as of 3/26, | /2024 | | |
|-------|------------------------|------------|-------------|-------|-------|-------|
| CODE | Location | 1-Mar | 1-Apr | 1-May | 1-Jun | 1-Jul |
| NJ50 | Upper Deerfield (NJ50) | 6 | 46 | 179 | 622 | 1334 |
| D4116 | Bridgeton | 18 | 46 | 180 | 625 | 1338 |
| KMIV | Millville Airport | 18 | 58 | 172 | 585 | 1271 |
| NJ05 | Greenwich | 9 | 53 | 195 | 648 | 1368 |

USPEST.ORG - Model: simple average/growing degree-day, Min: 50F - Max: 95F, NMME forecast

| | Forecast: 7-month | NMME based seasonal clim | ate foreco | ast (USPE. | ST.ORG) - S | ubject to change regularly = Check Often | |
|---|--------------------------------------|----------------------------|---------------------|---------------------|--------------------|---|---------------------------------|
| Group | Common Name | Scientific Name | GDD Min (50F) | GDD Max (95F) | Ref. | Developmental / Target Stage / Notes | Favored Host Plants |
| Caterpillar | European pine shoot moth / borer | Rhyacionia buoiana | 50 | 220 | 4 | 1st larvae active | Conifer |
| Mites | Maple bladdergall mite | Vasates quadripedes | 58 | 148 | 2 | Spring control of overwintering stage | Maples |
| Scale / Adelgid / Whitefly / Psyllid | Pine tortoise scale | Toumeyela parvicornis | 58 | 148 | 2 | Crawler activity | Conifer |
| Hemiptera (true bugs) | Honeylocust plant bug | Diaphnocoris chlorionis | 58 | 246 | 2 | Nympths / adults active | Honeylocust |
| Scale / Adelgid / Whitefly / Psyllid | Pine bark adelgid | Pineus strobi | 58 | 618 | 2 | Spring control of overwintering stage | Conifer |
| Aphids / Thrips | Balsam twig aphid | Mindarus abietinus | 60 | 100 | 4 | Egg hatch | Conifer |
| Mites | Southern red mite | Oligonychus ilicis | 69 | 157 | RU | Spring hatch | Many |
| Borer - Caterpillar | Eastern pine shoot borer | Eucosma gloriola | 75 | 200 | 4 | 1st adults active | Conifer |
| Scale / Adelgid / Whitefly / Psyllid | Cooley spruce gall adelgid | Adelges cooleyi | 90 | 180 | 4 | 1st adults active - Douglas fir | Conifer |
| Caterpillar | Eastern tent caterpillar | Malacosoma americanum | 90 | 190 | 2 | Larvae treatment before tents apparent (near 150-GDD50) | Malus, Prunus, many |
| Caterpillar | Spongy moth (formerly Gypsy) | Lymantria dispar | 90 | 448 | RU | Larvae treatment (early instars) | Many |
| Aphids / Thrips | Balsam twig aphid | Mindarus abietinus | 100 | 150 | 4 | Stem mothers present (control target) | Conifer |
| Beetle | Pine engraver (Ips bark beetle) | lps spp. | 100 | 150 | 4 | 1st adults active | Conifer |
| Sawfly - Wasp | European pine sawfly | Neodiprion sertifer | 100 | 195 | 4 | 1st larvae active | Conifer |
| Lacebug | Andromeda lacebug | Stephanitis takeyai | 115 | 279 | RU | Nymphs (1st generation) | Pieris |
| Lacebug | Azalea lace bug | Stephanitis pyrioides | 118 | 372 | RU | Nymphs (1st generation) | Azalea |
| Caterpillar | Larch casebearer | Coleophora laricella | 120 | 150 | 4 | Egg hatch | Conifer |
| Aphids / Thrips | , · | Eriosoma americana | 121 | 246 | 2 (6) | Control target | Elm, Service berry |
| Caterpillar | Spongy moth (formerly Gypsy) | Lymantria dispar | 145 | 200 | 4 | Egg hatch, 1st larvae | Many |
| Leafminer / Midge / Fly | Holly leafminer | Phytomyza ilicis | 147 | 265 | RU | Adults - egg laying | Holly |
| Caterpillar | Cankerworms, inch- worms, loopers | (many) | 148 | 290 | 2 | Larvae treatment | Many |
| Borer - Clearwing moth | Lilac / Ash Borer | Podosesia syringae | 148 | 299 | 2 | Adult flight | Lilac, ash, privet, many |
| Weevil | Black Vine Weevil | Otiorhynchus sulcatus | 148 | 400 | 2 | Pupation / Adult emergence | Yews, Rhododendrons, many |
| Borer - Clearwing moth | Dogwood Borer | Synanthedon scitula | 148 | 700 | 2 | Adult activity | Dogwood, many |
| Scale / Adelgid / Whitefly / Psyllid | Hemlock woolly adelgid | Adelges tsugae | 150 | 150 | RU | Eggs and 10% hatch | Conifer |
| Mites | Spruce spider mite | Oligonychus ununguis | 150 | 175 | 4 | 1st egg hatch | Conifer |
| Caterpillar | Spruce needleminer | Endothenia albolineana | 150 | 200 | 4 | 1st larvae active | Conifer |
| Leafminer / Midge / Fly | Balsam gall midge | Paradiplosis tumifex | 150 | 300 | 4 | Adults laying eggs | Conifer |
| Aphids / Thrips | Spiny witchhazel gall aphid | Hamamelistes spinosus | 171 | - | 6 | Control target | Witchhazel, River birch |

| Group | Common Name | Scientific Name | GDD Min (50F) | GDD Max (95F) | Ref. | Developmental / Target Stage / Notes | Favored Host Plants |
|---|-----------------------------|------------------------------|------------------|------------------|----------------|--|--------------------------------|
| Leafminer / Midge / Fly | Birch leafminer | Fenusa pusilla | 190 | 290 | RU | Larvae (1st generation) | Birch |
| Mites | Spruce spider mite | Oligonychus ununguis | 190 | 363 | RU | Immatures/Adults | Conifer |
| Leafminer / Midge / Fly | Honeylocust pod gall midge | Dasineura gleditchiae | 192 | 229 | RU | Larvae | Honeylocust |
| Leafminer / Midge / Fly | Holly leafminer | Phytomyza ilicis | 192 | 290 | RU | Egg hatch | Holly |
| Borer - Clearwing moth | Rhododendron borer | Synanthedon rhododendri | 192 | 298 | 2 | Typical treatment window | Rhododendron |
| Leafminer / Midge / Fly | *Native holly leafminer | Phytomyza ilicicola | 192 | 298 | 2 | Egg hatch | Holly |
| Sawfly - Wasp | Larch sawfly | Pristophora erichsonii | 192 | 299 | 2 | Typical treatment window | Larch |
| Lacebug | Andromeda lacebug | Stephanitis takeyai | 192 | 303 | RU | Adults | Andromeda |
| Leafminer / Midge / Fly | Rhododendron gall midge | Clinodiplosis rhododendri | 192 | 363 | RU | Larvae | Rhododendron |
| Beetle | Imported willow leaf beetle | Plagiodera versicolora | 192 | 448 | RU | Larvae/Adults | Willows, Cottonwood, Poplar |
| Aphids / Thrips | Privet thrips | Dendrothrips ornatus | 192 | 618 | 2 | Typical treatment window | Privet |
| Scale / Adelgid / Whitefly / Psyllid | Tea scale | Fiorinia theae | 195 | - | 6 | Crawlers (1st generation) | Holly, Camellia, many |
| Borer - Clearwing moth | Lilac / Ash Borer | Podosesia syringae | 200 | 299 | RU | Adults - 1st Treatment | Lilac, ash, privet, many |
| Caterpillar | Spruce budworm | Choristoneura fumiferana | 200 | 300 | 5 | Larvae | Spruce |
| Scale / Adelgid / Whitefly / Psyllid | Cooley spruce gall adelgid | Adelges cooleyi | 200 | 310 | 4 | 1st galls visible - Spruce | Conifer |
| Leafminer / Midge / Fly | Douglas fir needle midge | Contarinia pseudotsugae | 200 | 400 | 3 | Adults emerge from soil | Conifer |
| Leafminer / Midge / Fly | Elm leafminer | Fenusa ulmi | 215 | 240 | 5 | Adult emergence | Elm |
| Cicadellidae | Spotted Lantern Fly | Lycorma delicatula | 225 | 1100 | PA Dept. Ag | 1st-4th Instar (nymphs) - control target | Many |
| Sawfly - Wasp | Roseslug sawfly | Endelomyia aethiops | 230 | - | 6 | Egg hatch / early instars | Wild and cultivated roses |
| Lacebug | Hawthorn lacebug | Corythucha cydoniae | 239 | 363 | RU | Nymphs/Adults | Deciduous, many |
| Beetle | Redheaded flea beetle | Systena frontalis | 242 | 600 | Unv. Del | First control target - egg hatch / larval activity | Many |
| Leafminer / Midge / Fly | Arborvitae leafminer | Argyresthia thuiella | 245 | 360 | RU | Larvae Treatments (1st generation) | Conifer |
| Borer - Caterpillar | American plum borer | Euzophera semifuneralis | 245 | 440 | 5 | Adult flight, egg laying | Prunus |
| Mites | Boxwood mites | Eurytetranychus buxi | 245 | 600 | RU | All Stages | Boxwood |
| Leafminer / Midge / Fly | Lilac leafminer | Caloptilia syringella | 246 | 363 | 5 | Larvae Treatments | Lilac |
| Leafminer / Midge / Fly | Holly leafminer | Phytomyza ilicis | 246 | 448 | RU | Larvae Treatment | Holly |
| Scale / Adelgid / Whitefly / Psyllid | Taxus mealybug | Dysmicoccus wistariae | 246 | 618 | RU | Adults/Crawlers | Yew |
| Sawfly - Wasp | Pine sawflies (Red-headed) | Neodiprion lecontei | 246 | 1388 | RU | Larvae (1st generation) | Conifer |
| Leafminer / Midge / Fly | Boxwood leafminer | Monarthropalpusi flavus | 249 | - | 6 | Adult emergence | Boxwood |
| Scale / Adelgid / Whitefly / Psyllid | Eastern spruce gall adelgid | Adelges abietis | 250 | 310 | 5 | egg hatch, galls begin forming (not a control target) | Conifer |

SCAN HERE for Full – Nursery Pest Scouting Guide



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Conifer Pest Scouting Guide



Observations
& Pest pictures!





| References | |
|---|---------|
| Institution | Cited # |
| Rutgers Unv. | 1 |
| Cornell Unv. & Unv. of New Hampshire | 2 |
| Penn State Unv. | 3 |
| Michigan State Unv. | 4 |
| Unv. of New Hampshire | 5 |
| Unv. of Maryland | 6 |
| Michigan State Unv. | 7 |
| Unv. Delaware & North Carolina State Unv. | 8 |
| PA Department of Agriculture | 9 |
| Please contact for full reference i | ist |

TIONS – 3/26/24

| UPDA | TED . | UPDATED 3/26/2024 | 4 | (Subject to C. | hange) Calen | dar date pred | (Subject to Change) Calendar date predictions for target ranges | get ranges | | | Information compiled by Dr. Timothy J. Walter - Ruggers Cooperative Extension - Cumberland Courty | |
|---|-----------------|---------------------------|-------------------|------------------------|--------------------|---------------------|---|----------------------|--|--|---|-------------|
| | | - | GDD50 | SOUTH | TH | CEN | CENTRAL | NO | NORTH | NOTES | | |
| Growth Stage | Gen. T | TARGET TA RANGE R | TARGET L | Upper Deerfield (NJ50) | eld (NJS0) | Howell | Howell (NJ10) | High Po | High Point (NJ59) | (high infestation locations) | Material / Compound Considerations (Examples = no endorsements implied) | |
| | | | -HIGH- | LOW (DATE) | HIGH (DATE) | LOW (DATE) | HIGH (DATE) | LOW (DATE) | HIGH (DATE) | Systemic (S) - Contact (C) - Biologicals (B) - Herbicides (H) | [IRAC GROUP#] | |
| | | | | | | | | | | (S) Initiate systemic treatments 1-month prior to adult activity | SYSTEMIC DRENCHES | F |
| Egg hatch - larvae | - | 242 | 009 | 7-May | 30-May | 7-May 30-May 15-May | 8-Jun | | 24-May 16-Jun | (S) Systemic granular or granular incorporation @ planting is effective (C) Contact materials may be used to knock-down larvae (B) Some bio-rational / logicals are effective on larvae | Cyantraniliprole [28] (Mainspring) Chlorantraniliprole [28] (Acelepryn) Organophosphates [1B] - Acephate (Orthene, Acephate 97UP) Neonicotinoids [4A]- Dinotethran (Safari 20SC): Thiomethoxam | RED-H |
| | | | | | | | | | | - Look for larval activity on the outside of root balls | (Flagship 25 WG); Imidacloprid (Imidacloprid 2F, Marathon 1%G, Marathon II) | EAD |
| | | | | | | | | | | - Larvae may be active prior to this GDD50 timeframe | | ED |
| Adults (feeding/laying eggs) | - | 517 1 | 1028 | 26-May 19-Jun | 19-Jun | | 3-Jun 27-Jun 12-Jun | 12-Jun | 7-Jul | (S/C/B) Start adult contact sprays - continue systemic treatments (H) Control weeds - adults will hide-in and feed-on them - Adult feeding damage will be apparent - Scout to determine best time for applications - Use of agitator compounds may drive adults from hiding | GRANULAR APPLICATIONS and INCORPORATIONS Neonicotinoids [4A] Imidacloprid (Marathon 1%G; Coretect tablets, Mallet 0.5G) (Initiate systemic treatments 1-month prior to adult activity) | FLEA BE |
| | | | | · | | | | | | | | Ε |
| | | | | | POT | ENTIAL VERATIO | POTENTIAL OVERLAP OF GENERATIONS / STAGES | P OF | | (S) Continue systemic treatments | CONTACT | TLE |
| Egg hatch - larvae | 7 | 1570 1 | 1860 | 9-Jul | 19-Jul | 18-Jul | 28-Jul | 30-Jul | 11-Aug | (C/B) Contact materials to target larvae AND adults - Potential for considerable overlap of larvae - adult stages 30-Jul 11-Aug (H) Control weeds - adults will hide in and feed on them | Bifenthrin [3A] (UP Star SC, Talstar Select) Cyfluthrin [3] (Decathalon 20WP) - Rotation partner Carbamates [1A] - Carbaryl (Sevin SL) Tolfenpyrad [21A] (Hachi-Hachi SC) Cyclanlliprole [28] (Sariss) + Flonicamid [29] (Pradia) | UPDA |
| | | | | | | | | | | | BIOLOGICAL / BIORATIONAL | TEL |
| Adults (feeding/laying | 2 | 1878 | 2318 | 19-Jul 3-Aug | 3-Aug | | 15-Aug | 12-Aug | 2-Sep | (C/B) Adult contact sprays (S) * If pest pressure is high * - continue systemic materials (S) * If pest pressure is high * - continue systemic materials (H) Control weeds - adults will hide-in and feed-on them | Azadirachtin (Aza-Direct, Azatin-O) Beneficial nematodes (Millennium) |) PR |
| eggs) | | | | | | | | | | - Adult feeding damage will be apparent - Use of agitator compounds may drive adults from hiding | Entomopathogenic fungi (Ancora, BotaniGuard) Adult Agitator (Captiva Prime) | REDI |
| | | | | | | | | | THE STATE OF THE S | Estimated using TSPEST one—Others/fusiest one/dd/model arm)—NVIME Extended Seasonal Forecast ** | NAME Extended Sessonal Energast "Simmle average/onwing degree-days" "Min tenn: 50P" "Max tenn: 95F" | C1 |
| st A third generation of larvae and feeding adults is possible in warmer years st | ion of la | rvae and f | feeding a | dults is p | ossible in | warmer | years * | Insect dev | elopment grow | | e. Treament considerations based on research performed by Damy Landerdale - Area Specialized Agent - | 10 |
| DISCLAIMER: The label is the la | aw, always reft | er to it for allowable l. | host crops, use-r | restrictions, applica | ation rates, reapp | Meationirtervals, r | re-entryintervals (R | (EI), application to | ning and mix com | DISCAMER. The had do te less, always red to to the advantable host crops, use-restriction, application rates, respiratory, application in the companies of the contract of the | sorty, and are NOT for home gardener use. Provided materials represent examples and do not cover all possible control scenarios. | N. |

WE RHERE WHEN YOU NEED US

Red-headed flea beetle (Systema frontalis) - life stage predictions for South, Central, and Northern New Jersey with material considerations







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April 16

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Millville, NJ 08332

For more information call the Dept. of Planning, Tourism, and Community Affairs at 856-453-2175

Chair: Al Caggiano, Jr

Commissioner Liaisons: Victoria Groetsche-Lods

Sincerely,

Aus Waller

Board of Agriculture

Meetings are held on the

3rd Thursday,
September - May at
Rutgers Cooperative Extension
291 Morton Avenue
Millville, NJ 08332

Cumberland County

Next meeting March 21, 2024 at 6PM

Virtual Meeting Information

https://rutgers.zoom.us/my/smangia

Meeting ID: 529 557 9817

Pass-code: Sal2020

or call in at 1 (646) 558 - 8656

President: Timothy Eachus

Commissioner Liaisons:

1. Victoria Groetsche-Lods

Joseph SileoAlt. John Capizola Jr.

Meeting Times Vary by Month: September & October - 7 PM

November, December, January, February, & March - 6 PM

April & May - 7 PM

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