

Cultivating Cumberland

October - 2024

Vol. 29, Issue 10

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Attachments

- Box Tree Moth is on the move throughout NE
- Cumberland County Board of Agriculture Scholarship

Rutgers - Horticulture Plant Health Educational Series

Virtual (10/10, 10/15) & In-person (10/22/2024)

We invite ALL growers and landscape professionals (nursery, greenhouse, Christmas tree, vegetable, row crops, turf management, etc.) to attend the following educational sessions surrounding overall plant health topics, pest management principals, and pesticide use considerations.

The virtual sessions (on Zoom 10/10 & 10/15) are **free** and **will count as "in-person"**, meaning all attendees will receive offered CEUs if they: **have a live video feed** (and are visible the entire time), **upload** a government issued **photo ID + NJ Pesticide license** prior via a secure Rutgers Connect folder, and **participate** in poll questions. Government issued photo ID and NJ Pesticide License **MUST BE** uploaded prior to meeting!

See attached flyer for detailed upload information and scannable QR code registration links.

October 10th (TH) - virtual: Register here: <https://go.rutgers.edu/qyuee803>
 5:30-6:00pm: Login and ID verification: 5:30 – 6:00pm, (Poll #1 at 6:00pm)
6:00 – 7:00PM: Beech Leaf Disease & Experimental Treatment Options – Jean Epiphan RCE
 Credits requested: 2 each - PP2, 2, 3A, 6B, 8C, 10
7:15-8:15PM: How Chemicals Work and Which to Use – Tim Waller RCE
 Credits requested: 2 each - CORE, 1A, 3A, 3B, 6B, 8C, 10, PP2

October 15th (TU) - virtual: Register here: <https://go.rutgers.edu/qyuee803>
 5:30-6:00pm: Login and ID verification: 5:30 – 6:00pm, (Poll #1 at 6:00pm)
6:00 – 7:00PM: Root Disease Management in Plants – Tim Waller RCE
 Credits requested: 2 each - PP2, 1A, 2, 3A, 3B, 3C, 6B, 7C, 8C, 10, 11
7:15-8:15PM: Designing a Pesticide Regime - Tim Waller RCE
 Credits requested: 2 each - CORE, PP2, 1A, 2, 3A, 3B, 3C, 6B, 7C, 8C, 10, 11

October 22nd (TH) – IN-PERSON (Cumberland RCE - 291 Morton Ave. Millville, NJ 08332)

There is a **\$30.00 fee per participant** on 10/22/24. Only checks or cash will be accepted. Please make checks payable to "Rutgers the State Univ. of NJ". Pre-registration is encouraged.

Registration: By phone - Cumberland County RCE Office: **856-451-2800, EXT 1**, or walk-in.

5:30-6:00pm: Arrival and sign in.

6:00 – 8:15PM: Horticultural Plant Health – CORE 101– Tim Waller RCE
 Credits requested: 4 each - CORE, 1A, 3A, 3B, 6B, 8C, 10, PP2

Resistance-breaking Tomato Spotted Wilt Virus in New Jersey

Plant and Pest Advisory - Andy Wyenandt - September 13, 2024

Tomato spotted wilt virus (TSWV) has caused significant problems for some fresh-market tomato and pepper growers in New Jersey the past few growing seasons. Although not uncommon, economic losses these past few years have been extensive on some farms.

TSWV is vectored by various species of thrips, a common vegetable insect pest that seems to be on the incline and very difficult to control in vegetable production throughout the state. The most important vector of TSWV is the western flower thrips, *Frankliniella occidentalis*. Its mode of transmission is persistent propagative, meaning that thrips nymphs have to feed on an infected plant, whereby followed by a short incubation period (lasting from hours to days), the virus is then persistently transmitted throughout the rest of the insect's life span.

TSWV cannot be passed from infected females to eggs; and TSWV is not transmitted in seed.

The western flower thrips and TSWV both have a wide host range! Western flower thrips host range includes: tomato, pepper, onion, celery, cucumber, lettuce, potato, basil, strawberry; a wide range of herbaceous ornamentals (e.g., impatiens, geranium, marigold, petunia, *dahlia*, gerbera daisy, carnation) as well as many common weeds (e.g., pigweed, chickweed, lambsquarter, thistle, galinsoga). TSMV can infect over 1,000 plant species from more than 90 plant families.

In California and other tomato production regions, resistance-breaking (RB) strains (C118Y, C118F, T120N) of TSWV have recently been discovered that can overcome the single gene resistance (Sw-5b) bred into widely-grown processing and fresh-market tomato varieties. Recent research in Texas has also shown that RB TSWV strains may increase western flower thrips fitness (ability to reproduce) by prolonging the adult period and increasing fecundity (i.e., a measure of an insect's reproductive success, often expressed as the number of eggs or offspring produced by an insect) compared to non-RB and non-viruliferous controls. Unfortunately, the breakdown of genetic resistance along with the potential increase in TSWV-infected thrips reproduction rates, may lead to significant problems in thrips and TSWV control in New Jersey and elsewhere.

Recent work in Texas has shown that RB-TSWV can break resistance (conferred by the commonly deployed TSW-mediated single gene resistance) in TSWV-resistant pepper (*Capsicum annuum*) with varying levels of symptom development in both resistant and susceptible cultivars; with none being completely immune.

In October 2022, samples of a TSWV-infected fresh market tomato variety with Sw-5b resistance were collected in southern New Jersey and sent for analysis. Results determined that RB (C118Y) TSWV was present in the state; and the strain found in New Jersey was similar to the RB TSWV found in fresh-market tomato from Mexico and processing tomato in California suggesting a high potential for its widespread movement.

So, where do we go from here? Based on the isolated report of TSWV being found on resistant fresh-market tomato in New Jersey in 2022, and the more recent reports of it this year, it does not appear that RB TSWV is currently widespread throughout the state. However, this may likely change.

All vegetable growers, those who produce their own transplants or bring them in, need to carefully evaluate their thrips monitoring and mitigation programs this winter.

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Resistance-breaking Tomato...Continued from page 2

1. Start fresh. Prior to the transplant production season, clean and disinfect the greenhouse or any other structure where you might be holding transplants. Remove any weeds within and around the structure. Use sticky cards to monitor the potential carryover thrips population during the winter months, especially if you have any plant material in the greenhouse during those months.
2. Never produce or keep tomato or pepper transplants you start yourself or bring in, in the same greenhouse with any ornamental plants.
3. Segregate any transplants that are brought into your operation from your own transplants, as well as segregate different source of transplants as best you can.
4. Evaluate all incoming transplants for thrips damage.
5. Treat all incoming transplants with an insecticide immediately.
6. Use yellow sticky cards to continually monitor for thrips populations in the greenhouse from the start of the transplant season until the end.
7. Consider using biological or natural control(s) in the greenhouse.
8. The use of silver reflective mulches have been shown to reduce thrips populations in fields.
9. Develop a season-long insecticide program prior to the production season; from applying an insecticide at transplanting through cover sprays until harvest.
10. Monitor thrips populations and feeding damage in the field with regular scouting and sticky cards.
11. Closely monitor thrips feeding injury on pepper and tomato fruit during the production season.
12. Proper weed control is essential since many weeds may harbor the virus or infected thrips. This includes areas around the production field.
13. Rogue out any suspicious looking plant(s) prior to transplanting, or any suspicious looking plant early in the production season (e.g., any plant that starts to stunt out early) to help mitigate the within field spread.

Growers should continue to utilize TSWV-resistant tomato and pepper varieties realizing the effectiveness of those in limiting TSWV is becoming compromised. All growers need to continue to follow best management practices (such as those listed above) and pay careful attention to current weaknesses in their production practices and thrips control programs and adjust their management practices heading into 2025 growing season.

by: Andy Wyenandt and Kris Holmstrom

References: Macedo MA, Melgarejo T, Cespedes M, Rojas M, Lazicki P, Turini T, et al. (2024) An all-out assault on a dominant resistance gene: Local emergence, establishment, and spread of strains of tomato spotted wilt orthospovirus (TSWV) that overcome Sw-5b-mediated resistance in fresh market and processing tomatoes in California. PLoS ONE 19(7):e0305402.

PLoS ONE 19(7):e0305402.

Tomato spotted wilt virus on pepper and tomato. Inga Meadows and Andy Cooper, NCSU 2024.

Gautam et al., 2022. First report of a resistance-breaking strain of tomato spotted wilt orthospovirus infecting *Capsicum annuum* with Tsw resistance gene in Texas. Plant Dis.107:1958.

Southeast Strawberry Expo

Registration is under way for the Southeast Strawberry Expo, slated for Nov. 12-14 at the Double Tree by Hilton Atlantic Beach Oceanfront Hotel in Atlantic Beach, North Carolina. The Expo will be divided into different events held each day.

A new grower workshop will be held on Tuesday, Nov. 12, from 2 p.m. to 6 p.m. A farm tour will be held on Wednesday, Nov. 13, from 8:30 a.m. to 6 p.m. The conference, including educational breakout sessions and exhibitors will be held on Thursday, Nov. 14, from 7 a.m. to 5:30 p.m.

Different topics will be discussed on Nov. 14, including the Produce Safety Rule, U-Pick operations, Neopestalotiopsis disease, weed and insect control, disease management, drip irrigation and plant nursery updates.

Registration is due by Oct. 21. A \$35 late fee will apply after Oct. 21. (https://mcusercontent.com/c1b6937f07328c70497919f49/files/07e2cb42-baee-cebe-8a0a-3aeb1ec00659/Expo_Attendee_Registration_2024_digital.02.pdf)

Registration information: (https://mcusercontent.com/c1b6937f07328c70497919f49/files/07e2cb42-baee-cebe-8a0a-3aeb1ec00659/Expo_Attendee_Registration_2024_digital.02.pdf)

For more information, contact info@ncstrawberry.com or by phone at 919-537-2287.

Wildlife Fencing Still Available for Unpreserved Farms

The NJDA Wildlife Fencing Program makes cost-share funding available for the installation of wildlife fencing on unpreserved farms. Unpreserved farm owners, operators, or tenants in New Jersey may receive up to 50 percent matching funds (\$50,000 maximum) if their application is approved. The application form is available through a link below. More information about the program is available through the Notice of Availability link below.

Grants will be awarded on a first-come, first-served basis until all funds for the fiscal year are expended. All applicants who are approved for a cost-share grant will need to sign a Grant Award Agreement. Applicants who operate but do not own the farmland described in their application must receive written authorization from the landowner to install wildlife fencing on the land. Applicants must review a copy of the Grant Award Agreement before applying – please see the links below.

This program is conducted in accordance with N.J.S.A. 4:20-6.1.

Notice of Funding Availability (<https://www.nj.gov/agriculture/divisions/anr/pdf/NJDA%20-%20NOFA%20-%20Wildlife%20Fencing%20Cost-Share%20Grant%20-%20OAL%20approved%20for%208.19.2024%20NJ%20Register%20publication.pdf>)

Application Form (<https://www.nj.gov/agriculture/grants/Application%20Form%20-%202024%20NJDA%20Wildlife%20Fence%20Cost-Share%20Grant%20Program.pdf>)

Owner's Written Approval Form (<https://www.nj.gov/agriculture/divisions/anr/pdf/Owner's%20Written%20Approval%20Form%20-%20approved%20final.pdf>)

Appendix A: Deer Fence Design and Installation Specifications (<https://www.nj.gov/agriculture/divisions/anr/pdf/Appendix%20A%20WFCS%20Grant%20-%20Deer%20Fence%20Design%20Specifications%20final.pdf>)

Appendix B: Electric Bear Fencing Specifications (<https://www.nj.gov/agriculture/divisions/anr/pdf/Appendix%20B%20Electric%20Bear%20Fence%20Specifications%20-%20final.pdf>)

Standard Agreement (<https://www.nj.gov/agriculture/divisions/anr/pdf/Agreement%20Document%20-%202024%20Wildlife%20Fencing%20Grant%20Program-%20final%20with%20sample%20watermark.pdf>)

For questions or more information, email or call the Division of Agricultural and Natural Resources at njdadeerfence@ag.nj.gov or 609-913-6490.

ACT NOW: New Jersey Accepting Applications for 2025 Program Offerings

HAMILTON SQUARE, N.J., Sept. 17, 2024 – The United States Department of Agriculture’s (USDA) Natural Resources Conservation Service (NRCS) in New Jersey is now accepting FY2025 applications for the Environmental Quality Incentives Program (EQIP), climate-smart practices through EQIP funded by the Inflation Reduction Act (IRA), the Agricultural Management Assistance (AMA) program, the Regional Conservation Partnership Program (RCPP), and Conservation Incentive Contracts (CIC). Also being offered through ACT NOW funding are Conservation Planning Activities (CPAs), Design and Implementation Activities (DIAs), Conservation Evaluation and Monitoring Activities (CEMAs), Soil Health Practices, Tree Mortality Practices, and High Tunnels.

While NRCS accepts applications year-round, New Jersey producers and landowners should **apply by October 18, 2024**, to be considered for funding in the current cycle.

How ACT NOW Works

Act Now minimum ranking thresholds and eligible practices are determined at the state-level. The process enables states to pre-approve a ranked application in a ranking pool designated for Act Now when an application meets or exceeds a state’s pre-determined minimum threshold ranking score.

Producers do not apply separately to Act Now and will be considered for priority funding when applying to an eligible practice through EQIP and AMA. Applications are processed in the order they are received and applications that rank at or above the state-established threshold ranking score will be pre-approved as long as funds are available. When the available funding limit through Act Now has been reached, remaining applications may be considered in other relevant ranking pools or rolled over to the next funding cycle.

Once a producer’s application is pre-approved, they must still meet eligibility requirements including establishing a farm tract number with USDA’s Farm Service Agency if they have not previously utilized USDA programs. After establishing eligibility, producers must complete the planning process and receive notice of approval from NRCS prior to beginning work. Projects started before final contract approval are ineligible for cost-share assistance unless the producer has been granted an early start waiver.

The Environmental Quality Incentives Program (EQIP)

Through EQIP, NRCS provides agricultural producers with one-on-one help and financial assistance to plan and implement conservation practices to address a variety of issues such as water quality degradation, soil erosion, soil quality degradation and inadequate habitat for fish and wildlife.

Special initiatives include:

- Working Lands for Wildlife (WLFW) - Golden Winged-Warbler
- The National Water Quality Initiative (NWQI) and
- The New Jersey Pine Barrens Joint Chiefs’ Landscape Restoration Partnership
 - o Forest landowners can verify their land is located within the target area by entering their address into the Pinelands Commission Interactive Map. (https://www.nj.gov/pinelands/home/maps/interactivemap/?utm_medium=email&utm_source=govdelivery)

The Environmental Quality Incentives Program (EQIP) - Inflation Reduction Act (IRA)

EQIP-IRA funds will provide direct climate mitigation benefits for producers to advance conservation through practices like cover cropping, conservation tillage, wetland restoration, prescribed grazing, nutrient management, tree planting and more.

- See a list of eligible practices here. (https://content.govdelivery.com/attachments/USDAFARMERS/2024/09/17/file_attachments/3000984/FY2025%20NRCS-CSAF-Mitigation-Activities.pdf)

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ACT NOW: New Jersey...Continued from page 5**Agricultural Management Assistance (AMA) Program**

The Agricultural Management Assistance (AMA) helps agricultural producers manage financial risk through diversification, marketing or natural resource conservation practices. Producers eligible for AMA can apply for financial and technical assistance to voluntarily address resource issues such as water management, water quality, and erosion control by incorporating conservation into their farming operations.

The Regional Conservation Partnership Program (RCPP)

Through RCPP, NRCS seeks to co-invest with partners to implement projects that demonstrate innovative solutions to conservation challenges and provide measurable improvements and outcomes tied to the resource concerns they seek to address. New Jersey's RCPP land management projects are:

- **Salem River Bog Turtle Protection and Restoration** – Lead partner, New Jersey Audubon, will help private landowners increase wildlife habitat and habitat suitability for the endangered Bog Turtle population in the Upper Salem River Watershed by offering financial incentives to install and maintain conservation practices.
- **Northern NJ Small Food Link Conservation Project** – NRCS Partner, Urban Agriculture Cooperative, will deliver technical and financial assistance to new and historically under served urban farmers in Northern N.J.
- **Mine Brook Gorge Twin Dam Removals and Floodplain Restoration** - Lead partner, Musconetcong Watershed Association will work to restore habitat for native cold-water fishes, reduce stream temperatures, and enhance biodiversity in the Mine Brook Tributary and Gorge.
- **New Jersey Coastal Aquaculture** - NRCS partner Ocean County SCD will lead this aquaculture project to promote aquatic habitat on shellfish leases and enhance water quality throughout the coastal bays of New Jersey.

Conservation Incentive Contracts (CIC)

Conservation Incentive Contracts (CIC) are an option available through EQIP that offers producers financial assistance to adopt conservation management practices on working landscapes. Producers may use incentive contracts as a “steppingstone” from correcting resource issues on specific land units through EQIP to achieving sustainable stewardship on their entire operation. Conservation Incentive Contracts are available nationwide and help producers address priority resource concerns, like sequestering carbon and improving water quality in high-priority areas.

Applications are available through your local USDA Service Center and online at <https://www.nrcs.usda.gov/getting-assistance/get-started-with-nrcs>

While NRCS accepts applications year-round, if you apply after the program ranking date, your application will automatically be considered during future funding cycles.

USDA Launches Assistance Network to Support Financially Distressed Farmers and Ranchers

Contact: FPAC.BC.Press@usda.gov

Saratoga Springs, N.Y., Sept. 21, 2024 - The U.S. Department of Agriculture (USDA) is announcing the launch of the Distressed Borrowers Assistance Network, an initiative designed to provide personalized support to financially distressed farmers and ranchers across the nation. Through a series of Cooperative Agreements, this national network will connect distressed borrowers with individualized assistance to help them stabilize and regain financial footing. USDA's Farm Service Agency (FSA) made this announcement today at the Farm Aid Festival in Saratoga Springs, N.Y.

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USDA Launches Assistance...Continued from page 6

"I started my off-ranch career as a Farm Advocate, working hand-in-hand with other tireless farmer advocates. Having someone with experiences in ag finance help producers work through financial difficulties can be the difference between them losing the farm or prospering," said FSA Administrator Zach Ducheneaux. "The Distressed Borrowers Assistance Network underscores our dedication to farmers and ranchers receiving the tailored support they need. These partnerships also illustrate that USDA acknowledges the importance of these advocates and sees them as part of the solution to ensure program access for all farmers, ranchers, and producers."

Network partners include Farm Aid, Rural Advancement Foundation International, the University of Arkansas, the Socially Disadvantaged Farmers and Ranchers Policy Center at Alcorn State University, and the University of Minnesota. Through this initiative, we are collaborating with community-based organizations to better serve financially distressed producers. Network partners will provide farm loan policy training to the community-based organizations so the organizations can work alongside FSA to help producers understand financing available through FSA, ensuring that when they visit an FSA office, the partner organization representative and FSA staff can better assist.

FSA, in collaboration with farm support organizations and land-grant institutions, will facilitate this network, which will provide the technical resources and guidance of USDA partners to experts from distressed and underserved communities. The network's approach includes integrating knowledgeable service providers to deliver one-on-one support to borrowers so they can best make plans and understand options to overcome their financial challenges.

The Distressed Borrowers Assistance Network will address the immediate needs of distressed borrowers and provide comprehensive, wraparound services aimed at addressing the unique challenges faced by financially distressed producers. Once stabilized financially, these borrowers will be better positioned to access new opportunities and continue contributing to the agricultural economy. These investments will also build a system of service providers that can better support agricultural communities for years to come. Investing in a network of agricultural financing service providers to help bridge access to FSA loans is a benefit for rural and agricultural communities.

Additional Farm Loan Programs Improvements

FSA recently announced significant changes to Farm Loan Programs through the Enhancing Program Access and Delivery for Farm Loans rule. These policy changes, to take effect Sept. 25, 2024, are designed to expand opportunities for borrowers to increase profitability and be better prepared to make strategic investments in enhancing or expanding their agricultural operations.

FSA also has a significant initiative underway to streamline and automate the Farm Loan Program customer-facing business process. For the over 26,000 producers who submit a direct loan application annually, FSA has made several meaningful improvements including:

- The Loan Assistance Tool that provides customers with an interactive online, step-by-step guide to identifying the direct loan products that may fit their business needs and to understanding the application process.
- The Online Loan Application, an interactive, guided application that is paperless and provides helpful features including an electronic signature option, the ability to attach supporting documents such as tax returns, complete a balance sheet, and build a farm operating plan.
- An online direct loan repayment feature that relieves borrowers from the necessity of calling, mailing, or visiting a local USDA Service Center to pay a loan installment.
- A simplified direct loan paper application, reduced from 29 pages to 13 pages.
- A new educational hub with farm loan resources and videos.

USDA encourages producers to reach out to their local FSA farm loan staff to ensure they fully understand the wide range of loan making and servicing options available to assist with starting, expanding, or maintaining their agricultural operation. To conduct business with FSA, producers should contact their local USDA Service Center.

More Information

To learn more about FSA programs, producers can contact their local USDA Service Center. Producers can also prepare maps for acreage reporting as well as manage farm loans and view other farm records data and customer information by logging into their farmers.gov account. If you don't have an account, sign up today.

FSA helps America's farmers, ranchers and forest landowners invest in, improve, protect and expand their agricultural operations through the delivery of agricultural programs for all Americans. FSA implements agricultural policy, administers credit and loan programs, and manages conservation, commodity, disaster recovery and marketing programs through a national network of state and county offices and locally elected county committees. For more information, visit fsa.usda.gov.

Recommendations for Early-Season (Fall) Chemical Treatments in Strawberry Crops with Known Presence of the *Neopestalotiopsis* Pathogen

A new article by Dr. Phil Brennan (University of Georgia) from the Strawberry News website (UGA) has been published with information compiled by Dr. Guido Schnabel (Clemson University) and Dr. Bill Cline (North Carolina State) on managing fall-planted strawberries with the known presence of *Neopestalotiopsis*. New Jersey growers who may have purchased strawberry plants this fall from sources with known *Neopestalotiopsis* issues need to be proactive in mitigating it as best they can this fall and develop a plan for the upcoming spring.

The below information was compiled by Guido Schnabel (Clemson University), Bill Cline (North Carolina State), and I to give a recipe of sorts for *Neopestalotiopsis* management with fungicides after planting this fall. It does not address spring applications, but you will need to incorporate remaining applications of fungicides at that time.

Whether or not *Neopestalotiopsis* will substantially harm your strawberries this season depends on many things – including the cultivar, sanitation practices, initial inoculum levels, weather conditions, the fungicides you apply, and application timing. This article focuses on chemical management options after planting – including thiram, fludioxonil (a component of Switch, Alterity, Miravis Prime), and the DMI fungicides propiconazole, difenoconazole, and flutriafol. There are a few issues that need to be discussed, but let's not get into the possible cancellation of thiram. That is another story. Here are some key points to consider:

1. Spray fungicides every 10-14 days even when conditions are dry, and when conditions are wet, your spray program should be tightened to include a fungicide application every 7-10 days.
2. We only have 4 applications of Switch (or any of the labeled generics such as Alterity) if applied at the full rate of 15 fl oz. If you use the lower rate (11 fl oz) you may use it five times. We will need most, if not all, of those applications in spring/early summer for fruit rot prevention. And no, you cannot legally use four more applications of Miravis Prime after having exhausted the Switch label restrictions.
3. Thiram solo applications should be the backbone of your spray program to keep inoculum levels low. It is a good *Neopestalotiopsis* and *Botrytis* material.
4. Ahead of an infection event (12 hrs of rain at >70F), spray a mixture of Thiram with something else. Use a DMI, but note that some (including propiconazole and difenoconazole) can act as plant growth regulators (PGR), especially on young plants. That is why nurserymen know not to use propiconazole when growing plugs or bare-root plants from tips. Also, repeated application of propiconazole and difenoconazole on bigger plants have been shown to stunt plants and cause reduced yields. We still need to investigate how much (if any) one or two applications of these DMIs will stunt plants when applied in the fall or whether there are differences in cultivar susceptibility. We do know that Rhyme (flutriafol) does not have this negative effect, but it is also the least effective of the three DMIs.

For the first 4 weeks after planting, we do not recommend you use a DMI fungicide (especially propiconazole and difenoconazole) for fear of PGR effects. Use Rhyme with Thiram if you must use a DMI during this time. During late fall, be aggressive before high disease-pressure situations by using Thiram PLUS Inspire OR Thiram PLUS Tilt tank mixtures because we need to kill the spores before plants are wet. High disease pressure will occur when it rains for over 12 hours at temperatures (>70F). Don't use this mixture twice in a row. Use the Thiram PLUS Rhyme mixture instead if you need consecutive applications. Until we have more crop safety data, this may be a good strategy to minimize the PGR risk but maximize protection of your plants against *Neopestalotiopsis*.

During low infection conditions (temp <60F plus rain), use a less aggressive approach and apply Thiram only.

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Recommendations for Early-Season...Continued from page 8

Fall application recommendations:

First four weeks after planting and before low-disease-pressure situations:

Thiram SC at 2 to 2.5 qts per acre or

Thiram SC at 2.5 qts PLUS Rhyme at 7 fl oz (if you must apply a mixture during early plant establishment)

Before high-disease-pressure situations

Thiram SC at 2.5 qts PLUS Tilt OR Inspire at labeled rates

followed by (if high-pressure situation persists)

Thiram SC at 2.5 qts PLUS Rhyme at 7 fl oz

Followed by (if high-pressure situation persists)

Thiram SC at 2.5 qts PLUS Switch at 11 fl oz

The Rutgers Agrivoltaics Program launches New Website

Plant and Pest Advisory - Andy Wyenandt - September 3, 2024

The Rutgers Agrivoltaics Program is a multidisciplinary group of Rutgers faculty and staff committed to designing and conducting applied agrivoltaics research and outreach for stakeholders in New Jersey and throughout the region.

The Rutgers Agrivoltaics Program (RAP) was initiated over 3 years ago with the signing and passage of the Dual Use Solar Act by the New Jersey legislature. In 2023, Agrivoltaics research installations were established at three Rutgers-New Jersey Agricultural Experiment Stations (NJAES). One at the Clifford E. and Melda C. Snyder Research and Extension Farm in Pittstown, NJ; one at the Animal Farm on the Rutgers New Brunswick (SEBS) Campus, and one at the Rutgers Agricultural Research and Extension Center (RAREC) near Bridgeton, NJ. Members of the Rutgers RAP Team in collaboration with the New Jersey Board of Public Utilities, NJ Department of Agriculture, and NJ-DEP are now in the process of implementing the Dual-Use Solar Energy Pilot Program.

The agrivoltaics research at the Rutgers Agricultural Research and Extension Center (RAREC) near Bridgeton, New Jersey has been designed to study the effects of agrivoltaic (AV) systems on the production of specialty crops and soybeans. This year eggplant, pepper, fresh-market tomatoes, and soybeans are being grown under three different treatments: single-axis tracking array with one row of panels, single-axis tracking array with two rows of panels, and no panels (conventional production as a control) to determine the effects caused by the presence of the panels on specialty crop and soybean plant growth and yield.

At the Clifford E. and Melda C. Snyder Research and Extension Farm in Pittstown, NJ the effects of a single-axis tracking array with one row of panels on hay production is being studied.

At the Rutgers SEBS Campus Animal Farm in New Brunswick, New Jersey, which hosts equine and livestock facilities, the AV research has been designed to study pasture forage production and animal grazing patterns in combination with vertical bifacial solar panels.

For more information on the Rutgers Agrivoltaics Program and more AV resources please visit the new website (<https://agrivoltaics.rutgers.edu/>). Stakeholders interested in keeping up the what's going on can now subscribe to the new website and have information sent directly to their email account.

Just go to our contact page and follow the instructions to subscribe! The Rutgers Agrivoltaics Program in collaboration with the American Farmland Trust will be holding upcoming workshops for those stakeholders in New Jersey interested in learning more.

Calendar of Events

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

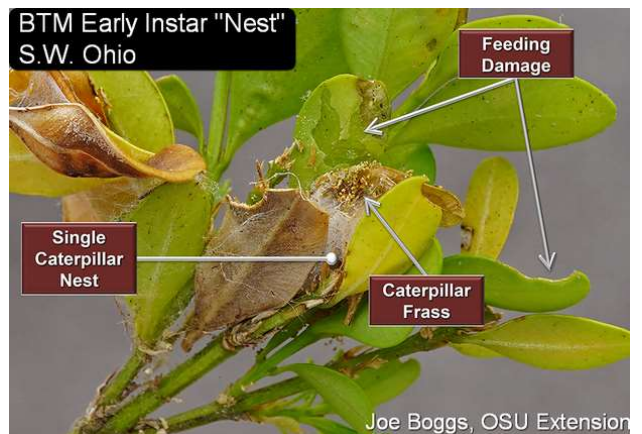
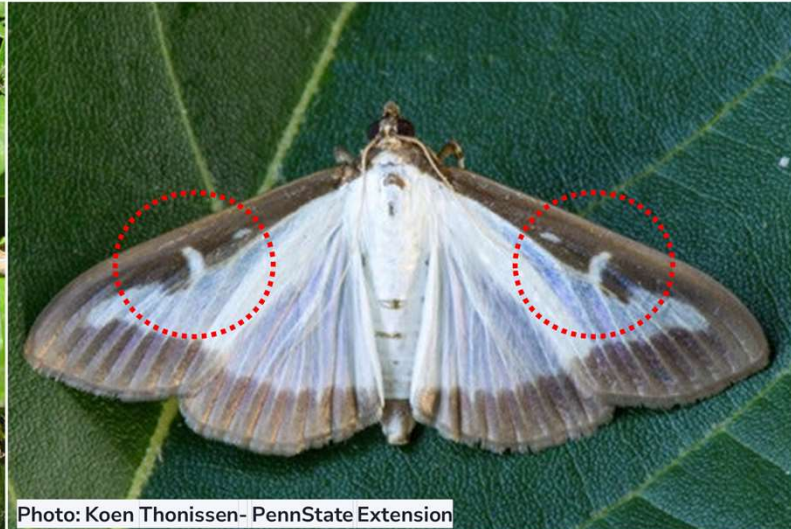
- **October 10 (TH)** *
 VIRTUAL Horticulture Plant Health Educational Series: 6-8:15pm, login at 5:30pm
 Speakers: Jean Epiphan (Beech Leaf Disease) and Timothy Waller (CORE) – Rutgers
 Registration link: <https://go.rutgers.edu/qyuee803>
 ID and NJ Pesticide License upload: <https://go.rutgers.edu/16b5hfmy>
 Credits requested: CORE, 1A, 3A, 3B, 6B, 8C, 10, PP2
 (Free with mandatory registration)
- **October 15 (TU)** *
 VIRTUAL Horticulture Plant Health Educational Series: 6-8:15pm, login at 5:30pm
 Speaker: Timothy Waller (Root Disease) & (Pesticide Regimes)– Rutgers
 Registration link: <https://go.rutgers.edu/bk87lbf>
 ID and NJ Pesticide License upload: <https://go.rutgers.edu/16b5hfmy>
 Credits requested: CORE, PP2, 1A, 2, 3A, 3B, 3C, 6B, 7C, 8C, 10, 11
 (Free with mandatory registration)
- **October 22 (TU)** *
 IN-PERSON Horticulture Plant Health Educational Series: 5:30-8:30pm
 Rutgers Cooperative Extension of Cumberland County – 291 Morton Ave. Millville, NJ 08332
 Speaker: Timothy Waller (CORE 101) – Rutgers
 Credits requested: 4 per category – CORE, 1A, 3A, 3B, 6B, 8C, 10, PP2
 Registration: By phone - Cumberland County RCE Office: 856-451-2800, EXT 1, or walk-in.
 (There is a \$30.00 fee per participant. Only checks or cash will be accepted. Please make checks payable to “Rutgers the State Univ. of NJ”)
- **October 22-24**
 Ag Robots and Autonomous Solutions in Action- Woodland Sacramento, Calif. Yolo County Fair
www.fira-usa.com Registration: <https://app.swapcard.com/login/event/fira-usa-2024/registration>
- **December 3-4**
 38th Annual Southeast Vegetable & Fruit EXPO, Embassy Suites by Hilton Myrtle Beach Oceanfront Resort
 9800 Queensway Blvd., Myrtle Beach, SC -(www.ncvga.com) email (cathy@seasag.com)
- **December 10-12**
 Connect Innovate Grow, Great Lakes Fruit, Vegetable and Farm Market EXPO- www.glexpo.com

Fact Sheets:

E296: Agricultural Management Practices for Commercial Equine Operations
 Carey Williams, Extension Specialist in Equine Management
 Michael Westendorf, Extension Specialist in Animal Sciences
<https://njaes.rutgers.edu/E296/>

Box Tree Moth is on the move throughout NE

Box tree moth has been confirmed in
Kent County, DE - Erie County, PA - Barnstable County, MA



The caterpillars are the most damaging and easily identified stage of the Box tree moth's lifecycle. If you see **webbing on boxwoods**, please report this to the contacts listed below.

The United States Department of Agriculture's Animal and Plant Health Inspection Service (USDA-APHIS) has confirmed a find of box tree moth (BTM; *Cydalima perspectalis*) at a private residence in **Kent County, Delaware**. The box tree moth is a federally regulated pest that primarily feeds on boxwood species (*Buxus* spp.). Box Tree Moth poses a serious threat to boxwood production, maintenance, and export.

**Scan here for
more resources**



If you see or suspect this pest please contact:

Rutgers RCE Agent (Nursery) – Tim Waller twaller@njaes.rutgers.edu

NJDA Nursery Inspection Program Manager- Sarah Katzenbach – sarah.katzenbach@ag.nj.gov

Rutgers - Horticulture Plant Health Educational Series

Virtual (10/10, 10/15) & In-person (10/22/2024)

The virtual sessions are **free** and ***will count as "in-person"***, meaning all attendees will receive offered CEUs if they: have a **live video feed** (and are visible the entire time), **upload** a government issued **photo ID + NJ Pesticide license** prior via a secure Rutgers Connect folder (follow directions below, only the agents will have access to information for verification), and **participate** in poll questions.

Scan to upload your Gov. issued photo ID and NJ Pesticide License
(<https://go.rutgers.edu/16b5hfmy>)

(ID UPLOAD)



“Last name_ First_ Photo ID” AND “Last name_ First_ Pesticide License

If you click on the photo ID upload link using a smart phone/tablet you will have the option of simply taking a photo of your ID and uploading it directly into the system. Otherwise, you can scan a copy of your photo ID into a computer and follow the directions at the upload link.

October 10th (TH) - virtual: Register here: <https://go.rutgers.edu/qyuee803>

5:30-6:00pm: Login and ID verification: 5:30 – 6:00pm, (*Poll #1 at 6:00pm*)

6:00 – 7:00PM: Beech Leaf Disease & Experimental Treatment Options

– Jean Epiphany RCE

Credits requested: 2x - PP2, 2, 3A, 6B, 8C, 10

7:15-8:15PM: How Chemicals Work and Which to Use – Tim Waller RCE

Credits requested: 2x - CORE, 1A, 3A, 3B, 6B, 8C, 10, PP2

(10/10 registration)



October 15th (TU) - virtual: Register here: <https://go.rutgers.edu/qyuee803>

5:30-6:00pm: Login and ID verification: 5:30 – 6:00pm, (*Poll #1 at 6:00pm*)

6:00 – 7:00PM: Root Disease Management in Plants – Tim Waller RCE

Credits requested: 2x - PP2, 1A, 2, 3A, 3B, 3C, 6B, 7C, 8C, 10, 11

7:15-8:15PM: Designing a Pesticide Regime - Tim Waller RCE

Credits requested: 2x - CORE, PP2, 1A, 2, 3A, 3B, 3C, 6B, 7C, 8C, 10, 11

(10/15 registration)



October 22nd (TH) – IN-PERSON (Cumberland RCE - 291 Morton Ave. Millville, NJ 08332)

There is a **\$30.00 fee per participant** on 10/22/24. Only checks or cash will be accepted. Please make checks payable to “Rutgers the State Univ. of NJ”. Pre-registration is encouraged.

Registration: By phone - Cumberland County RCE Office: **856-451-2800, EXT 1**, or walk-in.

5:30-6:00pm: Arrival and sign in.

6:00 – 8:15PM: Horticultural Plant Health – CORE 101– Tim Waller RCE

Credits requested: 4x - CORE, 1A, 3A, 3B, 6B, 8C, 10, PP2

If you are unable to upload documentation prior to the meeting, please contact Tim Waller for assistance (twaller@njaes.rutgers.edu) or call Cumberland County RCE Office: 856-451-2800, EXT 1

Cumberland County Board of Agriculture Scholarship

Student must be a Cumberland County resident pursuing a degree in Production Agriculture/Horticulture, Agricultural Education, Agronomy or related field.

The purpose of this scholarship is designed to support the general welfare of agriculture in Cumberland County. Through this program the board wishes to encourage the scientific study of agriculture and promote as a useful, profitable, and dignified career. Education in production agriculture is a necessary tool in today's intensified agriculture field. The scholarship program hopes to encourage students to avail themselves of agriculture and related programs in higher education.

\$2,000 Scholarship

Return to: Cumberland County Board of Agriculture 291 Morton Ave. Millville NJ 08332 by May 30th

Name: _____ Age: _____

Address: _____

High School/ College: _____ GPA: _____

Phone: _____ Email: _____

Clubs and or volunteer work in the community: _____

Name of College or Technical School: _____

Address: _____

Course of Study: _____

Why have you chosen a career in agriculture:

What are your plans after college:

Why should the scholarship committee select you for this scholarship:

References: (at least 3)

Name: _____ Phone: _____

Name: _____ Phone: _____

Name: _____ Phone: _____

Please provide one letter of recommendation

Payment of the scholarship will be made directly to college or technical school pending acceptance and enrollment.

Signed: _____ Date: _____

(Applicant)

Singed: _____ Date: _____

(Parent/Guardian)

Regularly Scheduled Meetings

Locations for Pesticide Recycling Containers - 2024

Salem County

Helena Chemical
440 N. Main St.
Woodstown, New Jersey
Friday, October 18

Atlantic County

Helena Chemical
66 Route 206
Hammonton, New Jersey
Friday, October 11

Monmouth County

Rutgers Fruit and Ornamental
Research Extension Center
283 Route 539
Cream Ridge, NJ 08514-9634
Friday, October 25

Cumberland County Agriculture Development Board

Virtual Meetings Information
can be found on the
Public Meeting Calendar on
cumberlandcountynj.gov/

Meetings are held on the 3rd
Tuesday of each month.
Meetings start at 6 p.m. at
Rutgers Cooperative Extension
291 Morton Avenue
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 Groetsch-Lods
Sandra Taylor

Cumberland County Board of Agriculture

Meetings are held on the
3rd Thursday,
September - May at
Rutgers Cooperative Extension
291 Morton Avenue
Millville, NJ 08332

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

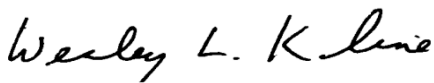
President: Timothy Eachus

Commissioner Liaisons:
1. Victoria Groetsch-Lods
2. Joseph Sileo

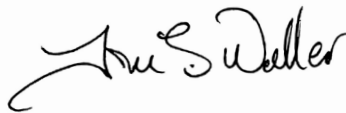
Meeting Times Vary by Month:
September & October - 7 PM
November, December, January,
February, & March - 6 PM
April & May - 7 PM

Cumberland County
For more information call
Timothy Eachus.

Sincerely,



Wesley L. Kline, Ph.D.
Cooperative Extension Agent
Vegetable Production and Food Safety
WKline@njaes.rutgers.edu



Timothy J. Waller, Ph. D.
Cooperative Extension Agent
Nursery Production
TWaller@njaes.rutgers.edu



Salvatore Mangiafico, Ph. D.
Extension Department Head &
Environmental and Resource Mgt. Agent
Mangiafico@njaes.rutgers.edu

Pesticide User Responsibility: Use pesticides safely and follow instructions on labels.

The user is responsible for the proper use of pesticides, residues on crops, storage and disposal, as well as damages caused by drift.
Use of Trade Names: Trade names are used in this publication with the understanding that no discrimination is intended and no endorsement is implied. In some instances the compound may be sold under different trade names, which may vary as to label.



RUTGERS UNIVERSITY
**Cooperative Extension
of Cumberland County**
New Jersey Agricultural Experiment Station

Have you visited the Cumberland County website for the Present and /or past issues of "Cultivating Cumberland"?

It's a great resource for information and dates...

<https://Cumberland.njaes.rutgers.edu/>

Public Notification and Non-discrimination Statement

Rutgers Cooperative Extension is an equal opportunity program provider and employer. Contact your local Extension Office for information regarding special needs or accommodations. Contact the State Extension Director's Office if you have concerns related to discrimination, 848-932-3584.

Cooperative Extension of Cumberland County



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New Jersey Agricultural Experiment Station

