

WHAT'S IN THIS REPORT

TIPS	NEW PROBLEMS SEEN	WATCH OUT FOR	SPOTLIGHT
<ul style="list-style-type: none"> • Season end review of trellis and container growing 	<ul style="list-style-type: none"> • Hawthorn lacebugs • Tarnished plant bug • Sunflower Seed Maggot • Citrus Plantid Leafhopper • Potato Scab • Saddleback caterpillar 	<ul style="list-style-type: none"> • Allium Leaf Miners 	<ul style="list-style-type: none"> • Goldenrod, <i>Solidago spp.</i>

IPM TEAM REPORTS

The Morris County Rutgers Master Gardener Integrated Pest Management (IPM) Team scouts one or more community gardens each week. Every other week the team provides IPM Team reports on problems first observed during the two-week period. These reports contain summary descriptions, management methods, and research-based references for more information.

Refer to Rutgers Fact Sheet 1123 and 1124 for all recommended controls for insect and disease pests. They are valuable resources throughout the growing season:

Rutgers Fact Sheet on Vegetable Insect Control: <https://njaes.rutgers.edu/fs1123>

Rutgers Fact Sheet on Vegetable Disease Control: <https://njaes.rutgers.edu/pubs/publication.php?pid=fs1124>

The gardens scouted by the IPM Team include the Morris County Park Commission Community Garden, the Morris Township Ted Largman Community Garden, the Madison Community Garden, the Wick Garden in Jockey Hollow National Park, and the Randolph Community Garden. The team also reports on sightings in the Pequannock Community Garden and their own vegetable gardens.

GENERAL OBSERVATIONS AND TIPS

Our scouting of the community gardens has now closed for the 2025 season, and we are reporting these final recent findings for your review. Our hope is you will continue learning about the IPM approach to plant, grow and harvest. We thank you for reading these reports and look forward to scouting these gardens again next year!

Trellis and Container growing was a winning combination

Over the years we continue to enjoy observing IPM cultural methods being applied in plots and gardeners finding solutions. This year was distinguished for the vertical growing. We found excellent examples within several gardens. Be it teepees, A-frames, trellises or cages, the variety of crops and materials used were outstanding.

Some benefits to trellis growing include:

- Scouting for pests and disease is uncomplicated
- Saves space
- Easy harvest
- Greater plot accessibility
- Increased air flow
- Decrease in foliar disease
- Leaves, fruits and pods are off the ground

University of Maryland <https://marylandgrows.umd.edu/2017/11/03/think-vertical/>

University of Nebraska-Lincoln <https://lancaster.unl.edu/vertical-gardening-makes-most-small-garden-footprint/>



An excellent example of IPM cultural methods at work in The Wick Garden. Teepee with Scarlet runner beans growing provides air flow, easy picking and bean flowers are a pollinator magnet. Once final beans are harvested, stems are cut, but nitrogen fixing roots and nodules remain to enrich the soil. A straw mulch suppresses weeds. The companion planting of Summer Savory border helps deter Mexican Bean Beetles. Aesthetically pleasing as well!
Photos: J. Basile, NJAES



This lovely wooden A Frame in The Morris Twsp. Community Garden is draped with melons just waiting to ripen. See how the bottom border of bush beans and Ageratum use the space? Shade loving greens such as lettuces or spinach could also be grown beneath the shade of the frame. The beans provide harvest, leave nitrogen fixing roots and the flowers are a pollinator powerhouse. Great to see, keep it growing!



A thriving metal A Frame in the Madison Community Gardens. Here, the frame was placed between two raised beds and these butternuts were flourishing. Getting the leaves and fruits off the ground is important to help prevent disease and rot. Note the mesh bag coverings. This supports the fruit and helps deter any critter damage. Looks like a beautiful harvest is on the way!

Grow bags and containers were also found being applied in various plots and with much success. Grow bags do require consistent monitoring of the moisture level and supplementing with fertilizer, but can help refresh your growing practices and simplify harvest. Best of all, is the easy harvest for sweet potatoes and potatoes. Instead of digging up and possibly slicing into the delicate tubers, just tilt, sift through and sort your harvest. It is a win win.

Some benefits of grow bags include:

- Assists with crop rotation needs
- Easy harvest
- Allows root growth
- Good drainage
- Durable/cost effective alternative

Rutgers University <https://somerset.njaes.rutgers.edu/2025/03/28/benefits-of-grow-bag-gardening/>

Kentucky State University

<https://franklin.ca.uky.edu/sites/franklin.ca.uky.edu/files/Gardening%20in%20a%20grow%20bag%20edit%202.pdf>



A trio of grow bags overflowing with potatoes in the Morris Twsp. Community Garden. These bags are in full sun, easy to monitor and manage. No pest or disease damage here! Potatoes can be harvested once the tops yellow and die back or wait till the first frost. Brush off soil, allow to dry out of the sun to prevent greening. Prevent rotting by washing just before use and store out of the light in cool, moist area such as a basement or root cellar. Each bag could produce approximately 7+ lbs.

Photos: J. Basile, NJAES






Sweet potato vines spilling and sprawling over their grow bags. These were also found in the Morris Twsp. Community Garden and thriving. Cut vines and spill bag before a frost. Soil temps at 50°F can cause injury to roots. Fresh skins are delicate. Allow soil to dry then brush off. Bring indoors, space evenly on a table or counter. They need heat and high humidity to cure for ten days. Store in a cool, dark place, but do not refrigerate. You can wrap individual ones in newspaper to help maintain moisture, but check periodically for any deterioration. Good storers are Mahon Yam (Not a yam, a sweet potato), Beauregard, and Covington.



Pepper plants, and, surprisingly in the left corner a bit of asparagus. Yes, it can be done! These plants were found in a plot at the Morris County Community Garden. All containers were evenly spaced, in full sun and highly productive. Each plant was staked and tied to allow for air flow and keeping the fruits upright. The peppers had no disease or pest damage, were growing well and full of uniform fruits waiting to ripen. This method helps with crop rotation by giving the soil in the plot a break from buildup of pests or disease. Enjoy the harvest!

REPORTS ON NEW PROBLEMS

Hawthorn lacebugs (<i>Corythucha cydoniae</i>)	Where: Wick Garden 8/14	
Description: Lacebugs are small insects that are named for the transparent texture of the wings of the adults. Hawthorn lacebugs feed on hawthorn, quince, and a number of other trees. A prior IPM Team report (report 9, 2023) discussed eggplant lacebugs which feed on eggplant, tomato, potato, sunflower, sage, cotton and horsenettle. Lacebugs are 1/8 to 1/4 inch long, with lacy wings held flat on the back. Immature lace bugs (nymphs) are oval and colorless at birth, but soon turn black and spiny. Nymphs do not have wings. Both adults and their nymphs can be seen with the naked eye. They are found on the underside of leaves. One to three generations are produced throughout the summer, depending on the weather. Eggs or adults may overwinter, depending on the lace bug species.		
Lacebugs are sap suckers. Adults and nymphs pierce and suck leaves, causing the upper leaf surface to appear stippled. Light feeding produces a yellowish stippling while heavier feeding causes leaves to appear white before they dry completely and fall off. Plants are more susceptible to lacebugs if they are planted in full sun and have drought stress.		
		
Lacebug feeding damage on upper side of leaf shows a stippled appearance.	Lacebug nymphs and feeding damage as shown on underside of leaf.	Lacebug adult on underside of leaf. Adults are 1/8 to 1/4 inch long. Photos: L. Terraneo, NJAES
Management: <ul style="list-style-type: none">• Keep plants watered during dry periods and mulch lightly to conserve moisture.• Insecticidal soap and horticultural oil will help control lace bugs, but to be effective, must contact them directly on the underside of the foliage. Follow label instructions.		
References: <ul style="list-style-type: none">• Rutgers University https://njaes.rutgers.edu/pubs/publication.php?pid=FS783		

Description: Tarnished plant bug adults were found on both flowers and bean plants. They are oval, bronze/brown colored and ¼ inch long. They undergo incomplete metamorphosis, with nymphs and adults both feeding by piercing mouth parts. Damage can be found on many different vegetables including celery, tomatoes, potatoes, beans, as well as fruits and flowers. Adults will overwinter in plant debris and emerge in spring. Females lay eggs in plant stems, buds, and leaf veins, so be sure to check for damage on young shoots and flower buds. There are 4 to 5 generations per year here in New Jersey, which is a lot of plant damage potential and lost crops for both home gardeners and commercial growers.



Adult Tarnished plant bug on leaf. Damage to plants is caused simultaneously during feeding. The piercing mouthpart sucks out plant juice while inserting a toxin. This is a noteworthy pest of strawberries.

Photo: L. Terraneo, NJAES



Adult Tarnished plant bug on Cosmos flower. The adults will overwinter in plant debris and emerge in spring to mate, reproduce and continue to attack an extensive range of fruits, vegetables, and flowers.

Photo: L. Terraneo, NJAES



Above nymph is wingless and has five dots on back.

Photo: J. Basile, NJAES



Parasitic wasp, *Peristenus digoneutis*, laying an egg in a Tarnished plant bug nymph. Within a week, the wasp larvae feed on nymph and destroy it.

Photo: Scott Bauer, USDA AR



Strawberry damage can be extensive with significant crop loss for farmers.

Photo: David Handley, The University of Maine Cooperative Extension.

Management:

- Row covers can help protect young plants.
- Handpick and destroy.
- Reduce weeds, practice good garden sanitation.
- Encourage parasitic wasp, *Peristenus digoneutis*. Adults feed on nectar and pollen. Larvae feed on nymph.
- In early spring, scout plants for adults and any plant damage.

References:

- Rutgers University <https://njaes.rutgers.edu/pubs/publication.php?pid=FS244>
- Penn State <https://extension.psu.edu/tarnished-plant-bug>
- Cornell University <https://biocontrol.entomology.cornell.edu/parasitoids/peristenus.php>

Description: This is a new discovery for us and does not present to be a threat for the few sunflowers we found growing. However, this pest does have potential to be a destructive threat for commercial growers. It is a ¼ inch fruit fly with distinct brownish wings in a spotty pattern. These undergo complete metamorphosis and the pupae overwinter in the soil. In June, adults emerge, mate, and eggs are laid and develop within the florets of sunflowers. Once hatched they feed within the seeds, which could cause seedheads to become misshapen, unmarketable, and sterile. Parasitoid wasps can help keep population in check.



Photo at left shows a Sunflower Seed Maggot resting on a flower petal of a zinnia. Note the decorative pattern on the wings.
Photo: L. Terraneo, NJAES



Photo at left shows a Sunflower Seed Maggot on petal. Right photo shows a mating pair on sunflower bud.
Photos: J. Basile, NJAES



Management:

- Scout seedheads consistently for any damage.
- Late planting may help mitigate egg laying. Try fast growers such as Goldy Double, Gold Rush or Zohar.
- Encourage parasitoid wasps with additional pollen and nectar sources.

References:

- University of Minnesota <https://ipmworld.umn.edu/charlet>
- University of Wisconsin <https://uwm.edu/field-station/bug-of-the-week/got-sunflowers/>

Description: This planthopper is native throughout eastern North America. These sap suckers feed not only on citrus trees, but other fruit trees, dogwood, elder, grapes, maples, willows, raspberries, and other plants. It has a distinct 'woolly' appearance with two spots at the base of their wings and adults measure ¼ inch long. Antennae are attached below their amber eyes. They are a jumping nuisance. Single eggs are laid in the stem or bark of the host plant and will overwinter. Nymphs emerge in spring and adults mate in summer to start the cycle anew. Females can lay up to 100 eggs. There is one generation per year. Their honeydew secretions can cause leaves to feel sticky.





Above photos show an adult planthopper on a sunflower leaf. Note the fluffy residue on the underside of the sunflower leaf. This doesn't harm the plant. It is shed by the nymphs. Photos: L. Terraneo, NJAES

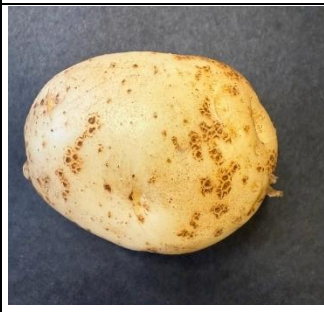

Management:

- Spray with garden hose to knock off plants. They are a nuisance, but damage is minimal.
- Row cover may help prevent landing. They can jump up to 18 inches.

References:

- University of Florida <https://edis.ifas.ufl.edu/publication/IN605/pdf>
- University of Maryland <https://extension.umd.edu/resource/planthoppers/>

Saddleback caterpillar (<i>Acharia stimulea</i>)	Home garden 8/11
<p>Description: These small ¾ inch caterpillars are quite distinctive with a chartreuse green body, small brown ‘saddle’ on its back, with menacing hairs found along the body. It has a wide range of host crops, but causes low impact of damage. They undergo complete metamorphosis and the larvae can presently be found chewing many ornamentals.</p> <p>Be mindful not to brush up against the hairs or walk barefoot. <u>Avoid handling this caterpillar.</u> Especially keep children away from handling any caterpillars that are spined or have hairs, as these can cause irritation, painful stings and possible severe allergic reactions leading to anaphylaxis. When you brush up against the hairs, stinging and swelling are sure to follow. Nausea and a rash are also common. Be vigilant out there!</p>	
 <p>These photos show detail of the saddle marking on the back of the caterpillar. Note how the venomous hairs extend along the body.</p> <p>Photos: L. Terraneo, NJAES</p>	 <p>These small larvae will feed on leaves and then spin a cocoon to pupate over winter in plant debris. Adult moths will emerge in spring to mate and females will lay eggs. The interesting thing about this find was, they were discovered on kale, which is not considered a host plant.</p> <p>Photo: J. Basile, NJAES</p>
<p>Management:</p> <ul style="list-style-type: none"> • Do not weed with bare hands. Use gloves and wear long sleeves when out weeding or clearing up. • Do not attempt to handle and avoid allowing children to handle. • Remove spines immediately with adhesive tape and be sure to seek medical attention for severe reactions. 	
<p>References:</p> <ul style="list-style-type: none"> • University of Maryland https://extension.umd.edu/resource/stinging-caterpillars-shrubs/ • University of Florida https://edis.ifas.ufl.edu/publication/IN923 	

Potato scab (<i>Streptomyces scabies</i>)	Morris Twsp. Community Garden 8/11
<p>Description: Potatoes presented with rough scabby spots at harvest time. This bacterial disease is naturally occurring in the soil, but can also become established from diseased seed stock. Although the skin may be unsightly, the tubers are edible after a thorough peel. Other root vegetables affected are beets, parsnips, turnips, and radishes.</p>	
 <p>This whole potato presents with raised scabs on the outside skin. These rounded spots are cosmetic and can still be sliced to roast or boil. Of course, if you prefer to peel, that works too.</p>	 <p>This sliced potato shows no damage to the interior. The potato is still edible and flavor is not affected.</p> <p>Photos: M. Albright, NJAES</p>
<p>Management:</p> <ul style="list-style-type: none"> • Purchase certified disease free seed stock. • Plant more resistant varieties such as Kennebec, Norland, and Superior. Pontiac and Yukon Gold are not resistant. • Keep plants watered during dry, hot periods when the tubers are forming. • Remove Pigweed, as it is a host plant for the disease. • Good garden clean-up in fall. Remove any tubers and plant debris, as this can overwinter in your plot. • Crop rotation. • Soil test to check pH. Consider lowering soil pH with sulfur if pH is greater than 6.2 	
<p>References:</p> <ul style="list-style-type: none"> • Cornell University https://www.vegetables.cornell.edu/pest-management/disease-factsheets/potato-scab/ • University of Massachusetts Amherst https://www.umass.edu/agriculture-food-environment/vegetable/factsheets/potato-scab 	

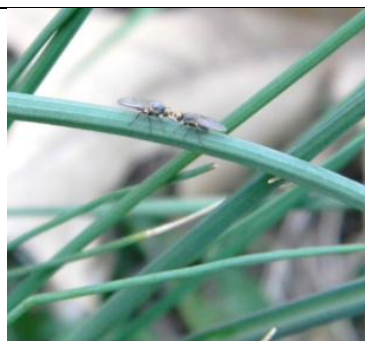
ADDITIONAL PEST LIKELY TO BE SEEN NEXT MONTH

Allium Leaf Miner adults (*Phytomyza gymnostoma*)

Description: Allium Leaf Miner (ALM) adults are small flies that are active in Morris County from late March/early April to late May/early June. A second generation occurs in September to October / November. The adults lay eggs on the leaves. The larvae mine the leaves and migrate into the bulb and pupate. The injury caused by the larvae often leads to a rot in the bulb or neck of the plant and distortion of leaves. Injury to leeks, onions and scallions can be severe. Large numbers of orange pupae may also be found in harvested alliums, particularly leeks.



Feeding marks
from ALM adults
Photo: M. Sample, NJAES



ALM Adults
Photo: Pennsylvania Department of
Agriculture



ALM Pupae
Photo: Pennsylvania
Department of
Agriculture



Plants damaged by ALM
larvae
Photo: Pennsylvania Department of
Agriculture

Management:

- Row covers are effective at preventing egg laying during periods of adult activity. The spring row covers can be removed in early June after the adults quit flying. Row covers should be used again in the fall to prevent damage from the second generation of adults.
- Spinosad (for example, Captain Jack's Deadbug Brew) can be used for allium leaf miners. Please spray only allium foliage (not other plants) to protect beneficial insects and pollinators.
- Removal of all host debris prior to the end of the season can help prevent overwintering.

References:

- Cornell University <https://cals.cornell.edu/new-york-state-integrated-pest-management/outreach-education/fact-sheets/allium-leafminer>

Goldenrod (*Solidago spp.*)

Description: Goldenrod is an herbaceous perennial and member of the Aster family. There are at least 120 species of goldenrod, a dozen or so are native to New Jersey. Depending on the species, this plant grows from two to five feet tall on slender erect stems. Its leaves are smooth, lance-shaped, and from three to six inches in length. The leaves may have serrated margins and are alternately arranged. Goldenrods' most recognizable feature is their showy golden yellow flower clusters on arching branches at the top of the plant. Blooming varies by species, but occurs July thru October. This plant spreads by seed and vegetative growth through underground rhizomes. Once established, it tends to form colonies. Goldenrod thrives in full sun, average well-drained soil and can tolerate drought conditions. It is considered deer resistant and is not bothered by any serious disease or insect problems.

Although categorized as a weed by many gardeners, there are valid reasons to include goldenrod in or near your plot. Goldenrod produces a thick nectar and large quantities of heavy dense pollen that contains protein, fats, and nutrients essential to migrating butterflies. This high-quality pollen is irresistible to many species of native bees, honeybees, moths, wasps, and beetles. Beneficial predatory insects such as parasitoid tachinid flies, parasitoid wasps and beetles use this plant to lay their eggs. Songbirds consume the plants' seed for nourishment.

Often blamed for causing hay-fever, the lightweight wind-borne pollen of concurrently blooming ragweed is the real offender. Goldenrod relies on insects and not wind for pollination.

Established goldenrod colonies in the garden bed can easily be kept in check by hand pulling the stems and roots as needed. If planted against a physical barrier such as a wall, or in a container, aggressive spreading can be managed.



Stem and lance shaped goldenrod leaf.
Photo: J. Carlson, NJAES



Close-up of goldenrod composite flowers. Photo: J. Carlson, NJAES



Goldenrod plant growing adjacent to a community garden in Morris County.
Photo: J. Carlson, NJAES

References:

- Rutgers University [Know Your Natives: Solidago sp. – RCE of Somerset County](#)
- North Carolina State University [Solidago \(Goldenrod, Golden Rod\) | North Carolina Extension Gardener Plant Toolbox](#)
- Penn State University [Goldenrod: Not Just Another Pretty Face](#)

ADDITIONAL RESOURCES

All Rutgers Gardening and Landscaping Fact Sheets & Bulletins

<https://njaes.rutgers.edu/pubs/subcategory.php?cat=5&sub=1001>

Rutgers Master Gardener Program <https://njaes.rutgers.edu/master-gardeners/>

Rutgers Soil Testing Laboratory <https://njaes.rutgers.edu/soil-testing-lab/>

Community Gardening Series <https://njaes.rutgers.edu/community-garden/>

Office of the New Jersey State Climatologist <https://climate.rutgers.edu/stateclim/>

Rutgers New Jersey Weather Network <https://www.njweather.org/>

Ticks and Tick-borne Disease <https://njaes.rutgers.edu/tick/>

Rutgers NJAES You Tube Channel <https://www.youtube.com/user/RutgersNJAES>

Plant Spotlight: Jody Carlson

Report Editor: Jennifer Basile