RUTGERS MASTER GARDENERS OF MORRIS COUNTY
COMMUNITY GARDEN IPM TEAM REPORT #5
June 26, 2026

RUTGERS UNIVERSITY
Cooperative Extension of Morris County
New Jersey Agricultural Experiment Station

WHAT'S IN THIS REPORT

Tips

- Fertilize to keep your plants healthy

New Problems

- Colorado potato beetle larvae (adult and eggs previously seen)
- Three-lined potato beetle larvae (adult and eggs previously seen)
- Cercospora leaf spot disease on beets
- Pigweed flea adult beetle on amaranth
- Squash vine borer adult
- Angular leaf spot disease

Spotlight

- Galinsoga (weed)
- Purslane (weed)

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 from throughout the growing season:

- Rutgers University: FS1123: Vegetable Insect Control Recommendations for Home Gardens (Rutgers NJAES)
- Rutgers University: FS1124: Vegetable Disease Recommendations for Home Gardens (Rutgers NJAES)

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, the Randolph Community Garden and the Washington Township Community Garden. The team also reports on sightings in the Pequannock Community Garden and their own vegetable gardens.

IPM Team Reports are available on the Rutgers Morris County Master Gardener website: Morris County Master Gardener website. Scroll to the bottom of the page to view the reports. On the website, you can also subscribe to the IPM Team Reports. When you subscribe, you will be sent a confirmation email that you need to respond to. If you don't see the confirmation email, check your spam.

GENERAL OBSERVATIONS and TIPS

GENERAL OBSERVATIONS

The gardens we visit continue to look quite lush. Spring crop production is slowing down, but summer garden treats will be producing soon. Continue to harvest often. Most vegetables are of prime quality when they are just fully ripe. Overripe produce doesn't taste as good and many plants will lose vigor if they are allowed to go to seed.

Soon, early tomatoes will start to ripen. Picking them when they're not quite ripe is a good way to discourage birds and other animals from pecking holes in the fruit. The fruit can be allowed to finish ripening indoors and you will notice very little if any taste difference. Sweet peppers on the other hand will be sweeter if left on the plant until they turn red, or whatever their fully ripe color is.

If you grow June bearing strawberries and they have finished producing for the season, now is a good time to consider renovating your strawberry bed. If you grow hardneck garlic, you may want to harvest the scapes. Research indicates removing the scapes will improve the yield in most varieties, but there may be exceptions. It might be interesting to experiment by harvesting some scapes and leaving them on other plants. In any case, the scapes provide an early garlic-flavored harvest.

Disease and insect pest pressure are likely to increase as the temperatures continue to rise. Continue to be vigilant for early signs of issues, so you can address them before they become bigger problems. Also remember that not all insects are problems in the garden. Your first instinct may be to squash any bugs you see on your plants. I know mine is. Try to look closely and identify the insect before acting. It may be a beneficial one for your garden.

If you find that you've planted too densely, consider thinning your plants to improve air flow and nutrition. Thinning plants like carrots provides a tasty treat. On the other hand, if you have space in your plot, succession planting of some vegetables can be planted until mid-summer. Enjoy the fruits of your gardening labor.

TIP: FERTILIZE TO KEEP YOUR PLANTS HEALTHY

Your garden plot may produce well without any added fertilizer during the season. However, giving plants a little boost may improve their vigor and productivity. If you decide to fertilize mid-season, do some research first. Too much fertilizer can be worse than not enough. The best way to know what and how much fertilizer to apply is if you've had a recent soil test. Follow the directions in your report.

As with most everything in the garden, observation is often your best source of information. If your plants aren't thriving, investigate what may be the cause. If you haven't applied fertilizer recently and you've ruled out other sources of the problem, then consider fertilizing. Yellow leaves, for instance, are sometimes a sign of low nitrogen.

Different food crops can vary greatly in their need for added fertilizer. Many herbs like oregano, chives and rosemary grow well in poor soil and don't need added fertilizer. Many legumes have the ability to fix nitrogen from the air and hence require less added nitrogen. Crops like squash and corn are heavy feeders and may do much better when given added fertilizer as often as every two to three weeks. Tomatoes may benefit from fertilization every four to six weeks.

Soil pH can limit nutrient availability. Most vegetables grow best in slightly acid to neutral soil, a pH of between 6 and 7.5. There are exceptions. A pH outside of that range could affect nutrient bioavailability. In this case you may want to take steps to adjust the pH. This adjustment may take time.

Side-dressing with a little compost is almost always a safe bet. Compost is unlikely to cause over fertilization since it is slow acting. Though compost generally doesn't have a large amount of macronutrients (NPK), it does add some, and it may provide micronutrients. If you make your own compost, you won't know the nutrient numbers. It's still beneficial to your garden though as it also adds organic matter to your soil, improves soil texture, and enhances nutrient availability. Many community gardens don't allow synthetic fertilizers, but there are many organic options available. The choices can be overwhelming. Be sure your choice has the nutrient mix you want and don't apply more than recommended on the label. One decision is whether to use granular fertilizer or liquid. In general liquid fertilizers are faster acting. They may be a good choice for leafy vegetables or newly planted seedlings, where you want to provide a fast boost of nitrogen. Granular fertilizers are generally slower acting, which could be a good choice for established plants. The ideal time to apply granular fertilizer is before watering or rain.

Keeping good records can help fine-tune your approach next year and beyond. For optimal growth, listen to what your plants are telling you and provide them with added nutrients in appropriate amounts, but don't overdo fertilization.

References:

- Rutgers University: FS626: Fertilizing the Home Vegetable Garden (Rutgers NJAES)
- Iowa State University: Fertilizer Rates and Requirements for the Home Garden | Yard and Garden

REPORTS ON NEW PROBLEMS

Problem: Colorado potato beetle larvae *(Leptinotarsa decemlineata)*

Where: Morris Township Community Garden June 15

Description: Colorado potato beetle larvae have hatched and can quickly defoliate plants. Both adults and their larvae feed on the leaves of potatoes, eggplant, tomatoes, peppers, groundcherry and other nightshade plants. The larvae go through several stages and grow quickly over a two-to-three-week period.

Adult Colorado potato beetles overwinter in the soil and emerge in early spring, laying bright, orange-yellow eggs in small clusters on the undersides of the leaves of host plants in the *Solanaceae* family. The Colorado potato beetle is approximately 3/8th of an inch long and has a black and yellow striped body with an orange head. A second generation will emerge in late summer and then overwinter in the soil. If not controlled, they can reproduce rapidly and defoliate plants. Monitor and destroy to disrupt any future infestations.

Figure: Colorado potato adult with yellow eggs on the underside of leaf
Photo: Rutgers University

Figure: Newly hatched red-orange larvae of Colorado potato beetle eating a leaf. Shows leaf damage happens quickly.
Photo: Rutgers University

Figure: Adult Colorado potato beetle on potato leaf
Photo: M. Olin, NJAES

Management:

- Colorado potato beetle adults and larvae can be effectively hand-picked.
- Destroy beetles and their larvae by crushing or placing them in a can of water with a few drops of dish detergent. Be sure to scout under leaves for their yellow eggs and remove/crush them.
- Row covers can protect young plants and prevent the beetles from reaching crops.
- Rotate crops each year and plant Solanaceae family as far as possible from previously infected areas.

References:

- Rutgers University: FS224: Colorado Potato Beetle (Rutgers NJAES)
- University of Maryland, Extension: Colorado Potato Beetle on Vegetables

Problem: Three-lined potato beetle larvae *(Lema daturaphila)*

Where: Morris Township Community Garden June 15

Description: Three-lined Potato Beetles are found on plants in the family Solanaceae. Both adults and larvae feed on leaves including tomatillo, potato, and sometimes tomato and eggplant. Damage to tomatillos can be severe. Eggs are yellow and often found on the underside of leaves. Both adults and larvae feed on leaves. Larvae use their excrement to disguise themselves from predators. Gardeners sometimes mistake three-lined potato beetle adults for striped cucumber beetles.

Figure: Eggs of three-lined potato beetle on underside of leaf
Photo: M. Albright, NJAES

Figure: Three-lined potato beetle larvae with excrement
Photo: R. Terry, NJAES

Figure: Adult three-lined potato beetle
Photo: M. Albright, NJAES

Management:

- The eggs, larvae and adults can be handpicked.
- Floating row covers are an effective barrier to the beetles while the plants are small.
- Neem and pyrethrins can be used. As with any pesticide, be sure the plant and pest is listed on the label and use according to instructions.

References:

- Rutgers University: Three-Lined Potato Beetle (Rutgers NJAES)
- University of New Hampshire: Three-Lined Potato Beetle

Problem: Cercospora leaf spot disease on beets

Where: Morris Township Community Garden June 15

Description: Cercospora leaf spot is an overwintering fungal disease that causes small circular spots with tan or white centers and red halos on leaves. The lesions begin small but can expand in size, resulting in significant loss of foliage. This fungus favors high humidity and temperatures between 75 and 85 degrees. It is spread by wind, rain splash, insects, shared tools, nearly anything in the garden it comes in contact with. Crops at risk are beets, Swiss chard, carrots, spinach, peanuts, cucumbers, squash, melons, and pumpkins.

Figure: Cercospora leaf spot on beet leaves
Photo: C. Mathis, NJAES

Figure: Cercospora leaf spot on Swiss chard
Photo: B. Monaghan, NJAES

Management:

- Remove infected leaves.
- Feed and water affected crops regularly to avoid undue stress to plants and harvest infected crops as soon as possible.
- Since the fungus overwinters in plant debris, remove all infected plant material. Throw out, do not compost.
- Avoid planting succession crops of beets, Swiss chard, and spinach close together.
- Water in the morning at the base of the plant to help make sure the plant is not wet during the night.
- Plant resistant beets such as Boldor, Bulls Blood, Cylindra, Detroit Dark Red, and Touchstone Gold.
- Practice a two-year crop rotation.
- Remove weed hosts like lambsquarters and pigweed.

References:

- Rutgers University, RCE of Cumberland County: Controlling Cercospora Leaf Spot in Beet Crops in 2023
- University of Massachusetts: Cercospora Leaf Spot of Swiss Chard, Beets, and Spinach : Vegetable

Problem: Pigweed flea beetle adult *(Disonycha glabrata)*

Where: Morris Township Community Garden June 16

Description: The Pigweed flea beetle is easily mistaken for both the striped cucumber beetle and the three-lined potato beetle due to similarities in its color and stripe pattern. While their coloration seems similar, there are notable differences as you can see in the side-by-side photos below. The Pigweed flea beetle has pronounced black and white stripes, a red pronotum with either one or three black dots, and a black and red head.

Pigweed flea beetles feed upon plants in the Amaranth family, including pigweed, amaranth, callaloo, and the flower, love-lies-bleeding. They lay their eggs at the base of the plant as well as on both upper and lower leaf surfaces. The eggs are yellow orange. The larvae are light in color (almost white), about ¼ inch long with a dark-colored head and a bumpy texture to their body. They feed on foliage until ready to pupate at which time they burrow into the soil. After about 13 days, the mature adults emerge.

Figure: Adult pigweed flea beetle
Photo: S. Brighouse, NJAES

Figure: Adult striped cucumber beetle
Photo: University of Minnesota

Figure: Adult three-lined potato beetle
Photo: University of Minnesota

Management:

- Hand pick adults and larvae. Successfully managing the first generation will help prevent subsequent generations.
- Spray plant foliage with the insecticide Spinosad (such as Captain Jack's Deadbug Brew).
- Remove pigweed and other amaranth-related plants from weedy borders as these provide a place for this pest to shelter.
- Adults overwinter in leaf litter so doing a good cleanup in the fall will help prevent problems the following year.

References:

- Connecticut Agricultural Experiment Station: Pigweed Flea Beetle

Problem: Squash vine borer adult *(Melittia satyriniformis synonym M. cucurbitae)*

Where: Morris Township Community Garden June 17

Description: The squash vine borer is a significant pest of squashes and pumpkins and a lesser pest of cucurbits and melons. Frass, which is greenish yellow excrement, indicates that borers are feeding and tunneling inside the stems of the plants. If the borers are not removed, they will cause the plant to wilt and die.

Figure: Squash vine borer eggs
Photo: B. Werling, MSU Extension

Figure: Frass (excrement) from squash vine borer
Photo: M. Albright, NJAES

Figure: Squash vine borer larva inside a stem
Photo: P. Nitzsche, NJAES

Figure: Adult squash vine borer on pea leaf
Photo: M. Olin, NJAES

Management:

- Watch for and destroy adults.
- Inspect plants for eggs. They can be anywhere on the plant. Most often they are at the base of the plant, on the stems, or on leafstalks. They can be removed with the sticky side of tape.
- If frass is seen, cut a longitudinal slit halfway through the vine above the frass to find and remove the borer.
- If there are multiple locations with frass, there may be multiple borers.
- Remove infested vines that cannot be saved to prevent the borers from overwintering, and remove all vines once the plants have stopped producing fruit.
- Floating row covers can be used early in the season to keep adults from laying eggs on the plants. The covers need to be removed when the plant flowers to allow for pollination. If row covers are used, don't plant near locations that had borers the previous year, since adults could emerge from the soil under the row cover.
- Spinosad (Captain Jack's Dead Bug Brew and Monterey Garden Insect Spray) or *Bacillus thuringiensis* can be applied to kill the larvae as they hatch from the eggs before they bore into the stem. The pesticides will not work once the larvae enter the stem. Be sure to read and follow all pesticide label instructions.

References:

- Rutgers University: Squash Vine Borers (Rutgers NJAES)
- University of Connecticut: Squash Vine Borer | Home Garden Education Office | College of Agriculture, Health and Natural Resources | University of Connecticut

Problem: Angular leaf spot disease on cucumber

Where: Morris County Park Commission Garden June 22

Description: Angular leaf spot is a bacterial disease that favors warm, humid conditions and affects members of the Cucurbitaceae family, notably cucumbers. It is spread via water splash, handling, garden tools, and may be seed-borne. Initial symptoms are small, white or tan-brown water-soaked spots that eventually expand until they reach the leaf veins, resulting in the angular appearance. In wet conditions, a bacterial ooze may form on these spots, causing a white deposit when it dries. Infected spots may dry and crack, giving the leaf a tattered appearance. Eventually the leaves deteriorate, reducing plant vigor. Stems and fruit can also become infected, with fruit transferring bacteria to seed.

Figure: Early stage angular leaf spot disease on squash leaf
Photo: M. Olin, NJAES

Figure: Later stage of disease on leaf showing a tattered appearance
Photo: M. Olin, NJAES

Figure: Closeup showing angular leaf spot disease
Photo: D. Tyson, NJAES

Management:

- Purchase certified seed and try resistant cucumber varieties such as Calypso, Diva, Fanfare and Marketmore.
- Try growing vertically on a trellis to limit contact with soil and water splash.
- Avoid overhead watering, and don't handle plants when leaves are wet to avoid transmission.
- Prune off infected leaves and stems or remove entire plant if the disease is widespread.
- Dispose of infected plants and diseased leaves responsibly, away from the garden. Do not compost.
- Practice good garden cleanup as bacteria overwinters on seeds and diseased plant debris.
- Practice a two-year crop rotation plan.

References:

- Rutgers University (Plant & Pest Advisory): Recognizing Angular Leaf Spot in Cucurbits
- University of Massachusetts: Cucurbits, Leaf Spots : Vegetable

SPOTLIGHT

Weed: Galinsoga (*Galinsoga* spp., aka Gallant soldier)

Description: Galinsoga is a fast growing annual that flowers from April to October. It grows 1-2 feet tall, with multiple branched stems, opposite leaves and small white flowers. One plant can produce nearly 7,500 seeds in a season. Because of this, the plant can become invasive rapidly since there is no seed dormancy. The new seed will quickly germinate, creating multiple generations in a season.

Figure: Galinsoga with yellow bud
Photo: J. Carlson, NJAES

Figure: Galinsoga with flowers
Photo: University of Maryland, B. Marose

Management:

- Pull plants by hand.
- Be sure to remove early in the season to prevent seed production.

References:

- University of Maryland Extension: Galinsoga

Weed: Purslane (*Portulaca oleracea)*

Description: Purslane is a summer annual succulent that grows low to the ground and spreads outward in a circular pattern. Emerging in spring through summer, its fleshy leaves are ½ to 1 inch long, club shaped, green with maroon tinged undersides. Purslane stems are also maroon on a mature plant. The root system is composed of a taproot and secondary fibrous roots. Five-petaled, 1/2-inch yellow flowers appear in clusters on terminal branches or individually at branch and leaf junctions. The flowers will only open if the plant is in a sunny location. Seeds are also very small and develop in a globe-shaped capsule that splits open to release the seeds. Purslane seeds are known to be viable in the soil for 30 or more years. A variety of soils are tolerated, but purslane thrives in fertile, moist, well-prepared planting beds. It will spread rapidly in a sunny location.

Figure: Single purslane plant with prominent maroon stems spreading outward in a circular pattern
Photo: J. Carlson, NJAES

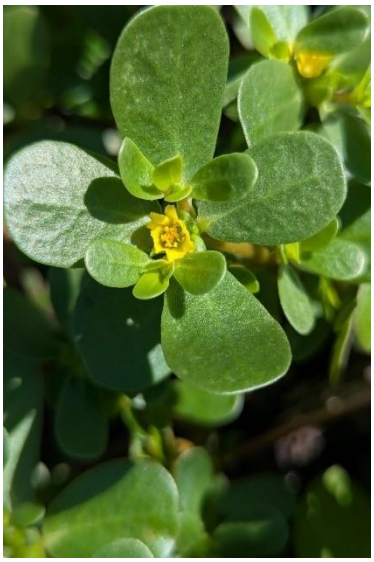

Figure: A single yellow purslane flower
Photo: L. Terraneo, NJAES

Figure: Heavy growth of purslane in a sunny community garden plot
Photo: L. Terraneo, NJAES

Management:

- After the soil has warmed, hand cultivating the top 1 or 2 inches of soil will remove most of the young plants.
- A thin layer of organic mulch does a good job of suppressing emerging plants.
- A densely planted garden will help shade out the prostrate and sun-loving purslane.

References:

- Cornell University, CALS: Common purslane

ADDITIONAL RESOURCES

Rutgers: Gardening and Landscaping Fact Sheets & Bulletins
Rutgers Master Gardener Program
Rutgers Soil Testing Laboratory
Rutgers Cooperative Extension: Community Gardening Series
Office of the New Jersey State Climatologist
Rutgers New Jersey Weather Network
Rutgers Cooperative Extension: Ticks and Tick-borne Disease
Rutgers NJAES: You Tube Channel

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