RUTGERS
New Jersey Agricultural Experiment Station

Rutgers Master Gardeners of Morris County Community Garden IPM Team Report #3 May 30, 2025

WHAT'S IN THIS REPORT		
TIPS	**NEW PROBLEMS SEEN**	**SPOTLIGHTS**
• Compost versus Topsoil • What to fill raised beds with • Soil tests	• Aphids • Three lined potato beetles • Diamondback moth caterpillars • Striped cucumber beetles • Harlequin bugs • Leaf hoppers • Spittlebugs • Basil downy mildew disease (on purchased basil plants) • Grey mold disease on strawberries • Rhubarb leaf spot disease	• Ladybird beetles, larvae, eggs and pupae (beneficials) • Ground ivy (weed)

IPM Team Reports

The Morris County Rutgers Master Gardener Integrated Pest Management (IPM) Team scouts one or more community garden(s) each week. Every other week the team provides IPM Team reports on problems they 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

Gardeners are happy to be harvesting cool season crops like lettuce, greens, radishes, asparagus and rhubarb.

Temperatures in the second half of May were cooler than usual and a challenge for gardeners itching to plant warm season crops like tomatoes, peppers, cucumbers, squash, and beans. Warm season crops planted then were stressed but most will survive the cool spell. As discussed in the last IPM Team report, best results are achieved by waiting until warmer weather to plant those crops.

Spring harvest

TIPS

Topsoil versus Compost

The difference between "topsoil" and "compost" can be confusing especially to new gardeners. Topsoil is the top six to ten inches of native soil while compost is a term used to describe decomposed organic material. Compost is often used as an amendment to topsoil.

Gardeners can purchase compost or make their own. Several of the community gardens that the IPM Team scouts provide compost for their gardeners that comes from the Morris County Municipal Utilities Authority (MCMUA). MCMUA recycles vegetative waste materials from around Morris County. Sometimes gardeners mistakenly think these piles of compost are topsoil.

Compost delivered to a community garden
Photos: M. Albright, NJAES

Should Raised Beds be Filled with Compost?

Gardeners who construct raised beds need to fill them. Filling raised beds with compost alone, especially at gardens that provide piles of free compost, is tempting but not a good idea. Gardeners who fill their raised beds with just compost often find that their beds initially produce well but after several years, even with fertilizer amendments, their crops grow poorly. A Rutgers fact sheet by Dr. Stephanie Murphy, the Director of the Rutgers Soil Testing Laboratory, gives several reasons why this happens. After continued decomposition of the compost:

- Organic matter loses its original physical structure resulting in volume reduction and other problems, and it may develop a paste-like or "mucky" consistency.
- There may be a lack of potassium and copper which are needed nutrients.

The fact sheet has the following recommendations for filling raised beds:

- For low raised beds, native soils with small amounts of clean sourced, well-rotted compost often provide an ideal growing medium. Blending compost into the native soil will increase the depth of the bed while improving aeration and nutrient and moisture retention.
- For higher raised beds, it may be necessary to use a combination of on-site native soils with additional soil from a clean source. Compost can be blended into the soil.
- In cases of contaminated on-site soil, imported soil enhanced with organic matter can be used to layer over the existing soil.

Raised beds at a community garden
Photo: M. Albright, NJAES

The second reference below recommends filling raised beds with a mixture of around 2/3 to 1/2 topsoil and 1/2 to 1/3 compost.

See the references below for more information.

- Rutgers Fact Sheet Soil for Raised Beds: FS1328: Soil for Raised Beds (Rutgers NJAES)
- UMN Fact sheet on Raised Beds: https://extension.umn.edu/planting-and-growing-guides/raised-bed-gardens

Soil Tests

Before starting any vegetable garden, be sure to have a soil fertility test done. The analysis provided will give specific information on what nutrients should be added for optimum fertility for crops you wish to grow. If the soil has not previously been tested for lead, that should be done as well. Soil testing kits are available from your County Extension Office https://njaes.rutgers.edu/county/ or go online to the Rutgers Soil Testing Laboratory: https://njaes.rutgers.edu/soil-testing-lab/

REPORTS ON NEW PROBLEMS

Problem: Aphids *(Aphis spp.)*	**Where: Morris Township Community Garden (5/18)** **Morris County Community Garden (5/19)** **Pequannock Community Garden (5/18)**

Description: Aphids can overwinter as eggs on bark or buds and become active in early spring. They are small, 1/16" to 1/8" long, soft-bodied, pear-shaped insects that range in color from pink, green, bluish green, black, brown, tan, or yellow. Aphids suck the juices from plants, which causes the leaves to curl and wilt. The sweet honeydew excreted by aphids often attracts ants. Aphids will flourish with temperatures of 65-80 degrees and reproduce rapidly with several generations a season.

Black bean aphids on the underside of an artichoke plant leaf. Note how small the aphids are and that the leaf is curled under from feeding damage by the aphids.
Photo: M. Albright, NJAES

Aphid found on Calendula
Photo: J. Basile, NJAES

Winged aphid on the underside of a kohlrabi leaf (about 1/8th inch long)
Photo: M. Albright, NJAES

Management:

- Encourage beneficials such as ladybugs and lacewings, which feed voraciously on aphids.
- Use a strong stream of water to knock aphids off plants.
- Avoid over-fertilization with nitrogen, as the lush growth that results makes the plants especially
- attractive to aphids.
- To avoid spreading the problem, remove severely affected plants from the garden.
- As a last resort, spray with insecticidal soap or neem.

References:

- Rutgers University https://njaes.rutgers.edu/fs230/

Problem: Three-lined Potato Beetles *(Lema daturaphila)*	**Where: Morris Township Community Garden (5/18)**

Description: Three-lined potato beetles are found on plants in the Solanaceae family. 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. Gardeners sometimes mistake three-lined potato beetle adults for striped cucumber beetles.

Three-lined potato beetle
Photo M. Albright, NJAES

Eggs of Three-lined potato beetle
Photo M. Albright, NJAES

Three-lined potato beetle larvae. The backs of the larvae are often covered with a dark layer of their own excrement.
Photo: L. Terraneo, 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 https://njaes.rutgers.edu/pubs/publication.php?pid=FS242
- University of New Hampshire https://extension.unh.edu/resources/files/Resource001192_Rep1517.pdf

Problem: Diamondback moth caterpillars *(Plutella xylostella)*	**Where: Morris Township Community Garden (5/18)**

Description: Diamondback moth (*Plutella xylostella*) caterpillars are small (up to 1/3 inch long), yellowish-green, and tapered at both ends. If disturbed, they often wriggle vigorously and sometimes hang by a silk-like thread. When the population is low, feeding damage often appears as small holes from beneath the leaf but not completely through to the upper surface of the leaf, or as very small, numerous pinholes. When the population is high, plants may become riddled with holes.

Caterpillars of the diamondback moth feed almost exclusively on cole crops such as broccoli, cabbage and kale.

The females lay small, round, yellowish-white eggs that are difficult to see on the underside of leaves. Young larvae can become fully grown in 20–25 days and attach themselves to the underside of the leaf in a small, delicate-appearing, lace-like cocoon which loosely covers the pupa. There are multiple generations per year.

Diamondback moth caterpillars are yellowish-green and up to 1/3 inches long
Photo: Rutgers Pest and Plant Advisory

Diamondback moth pupa (about 3/8 inch long)
Photo L. Terraneo, NJAES

Diamondback moth adult (about 3/5 inch)
Photo: J.R. Baker, N. C. State U.

Management:

- Use row covers to prevent egg laying. Be sure to check under row covers regularly to make sure no pests have gotten under them.
- Scout for caterpillars and pupae.
- Because the diamondback moth can overwinter in plant debris, clean out cole crop plants after harvest.
- *Bacillus thuringiensis* can be used to treat severely infested crops (As with any pesticide, follow directions carefully. This pesticide only works if the insect eats a treated leaf and needs to be re-applied after rain.)

References

- Rutgers fact sheet 232 – diamondback moth: https://njaes.rutgers.edu/pubs/publication.php?pid=FS232
- NC State Extension: https://content.ces.ncsu.edu/diamondback-moth

Problem: Striped cucumber beetles *(Acalymma vittatum)*	**Where: Morris County Community Garden (5/19), Madison Community Garden (5/26) Morris Township Community Garden (5/20)**

Description: Striped cucumber beetles feed on and damage the foliage and fruit of cucurbit plants (cucumbers, squash and pumpkins). Importantly, striped cucumber beetles carry the bacterial wilt pathogen that can cause plants, especially cucumbers, to wilt and die. Cucurbits are broadly susceptible. These beetles become active in late May or early June and feed on the blossoms of early flowering plants, such as dandelions, apples, and hawthorns, until their host crops are available.

Striped cucumber beetle adults
Photo: M. Albright, NJAES

Damage caused by striped cucumber beetles on zucchini plant
Photo: M. Olin, NJAES

Management:

- Check for cucumber beetles early in the season, especially in the cotyledon and first to third true-leaf stage, when the plants can suffer defoliation and bacterial wilt. Once beetles are present, monitor more frequently (every couple of days).
- Keep your garden clean. Remove weeds in and around your garden, as they may be potential hosts for adults. If a plant is showing signs of bacterial wilt, remove the infested plant before more beetles can feed on the plant and spread the bacterium.
- Use a physical barrier, such as a floating row cover, during early to mid-June to keep the striped cucumber beetles away from your plants. Be sure to remove the barrier when cucurbits start to flower unless you are growing a parthenocarpic variety (one that doesn't require insect pollination).
- Choose a pesticide that has a minimal impact on beneficial insects, such as ladybird beetles and pollinators. Neem is a plant-based pesticide that prevents insects from feeding, which eventually kills them. Spinosad and pyrethrins can also be used. Pyrethrins should come in contact with the beetles to be effective.

References:

- Rutgers University https://njaes.rutgers.edu/fs1123/
- University of Maryland https://extension.umd.edu/resource/cucumber-beetles-spotted-or-striped-vegetables/

Problem: Harlequin bugs ***(Murgantia histrionica)***	**Where: Morris County Community Garden (5/19)**

Description: Harlequin bug adults and nymphs pierce stalks, leaves, and veins with needle-like mouth parts and extract plant juices from cabbage, cauliflower, collards, mustard, Brussels sprouts, turnip, kale, kohlrabi, radish, and horseradish. If infestations are heavy, harlequin bugs may also feed on asparagus, bean, beet, corn, eggplant, lettuce, okra, potato, squash, and tomato. Damaged plants develop irregular cloudy spots around the puncture wound. Young plants may wilt, turn brown, and eventually die while older plants become stunted or deformed. Harlequin bugs can become a significant pest if not controlled.

Adult bugs overwinter on plant debris and rubbish. In spring, adults congregate on any cole crop available. Females usually lay eggs in double clusters of approximately 12 on the undersides of leaves, until the female has deposited a total of about 150 eggs. Eggs hatch in 4–11 days, depending on weather and temperature. Nymphs feed for about five to six weeks and pass through five instars over the next two months before becoming adults. There are two generations annually.

Harlequin bug adults. Harlequin bugs often have different colorations as seen in the photo.
Photo: M. Albright, NJAES

Harlequin Bug adult. Note the characteristic white areas caused by feeding damage on the leaf.
Photo: L. Voo, Gardener at the Morris Township Community Garden

Harlequin bug eggs
Photo: Rutgers University

Management:

- Handpicking of adults, larvae and eggs is an effective means of managing Harlequin bugs. Since the bugs have an odor, gardeners may want to wear disposable gloves.
- Remove all plant debris at the end of harvest since adults overwinter on plant material.

References:

- Rutgers University https://njaes.rutgers.edu/pubs/publication.php?pid=fs246

Problem: Leafhoppers (Family: *Cicadellidae*)	**Where: Morris County Community Garden (5/19)**

Description: Leafhoppers are small, less than 1/4-inch wedge shaped insects that can injure many vegetable crops, including potato, beans, carrot, celery, eggplant, lettuce, parsnip, parsley, rhubarb, and others. Leafhopper feeding causes leaves to develop pale specks. Leaves of plants may turn yellow then brown and curl and die. Leafhoppers also excrete honeydew on which blackish sooty mold grows. As nymphs molt into the next (larger) instar, they leave whitish cast skins on the underside of foliage. Some leafhopper species transmit plant pathogens that cause plant disease. There are many species of leafhoppers.

Leaf hoppers were found on bean and amaranth plants.

Leafhopper
Photo: Missouri Department of Conservation

Potato Leafhopper

Photo: C. E. Rice

Management:

- Row covers are effective at excluding leafhoppers but must be removed at flowering if the plant needs pollination by insects. Row covers are effective for potato plants since they do not need pollination. In addition, row covers over potato plants exclude pests such as Colorado potato beetles and three lined potato beetles.
- Regularly inspect plants if leafhoppers were a problem the previous growing season.
- If nymphs are abundant early in the growing season, the plant can be sprayed with Pyrethrins or Canola oil. It is important to get thorough coverage because the nymphs are on the undersides of the leaves.

References:

- Rutgers Fact Sheet on Leafhoppers: https://njaes.rutgers.edu/pubs/publication.php?pid=fs237
- Rutgers Fact Sheet on Insect Control for Home Gardens: https://njaes.rutgers.edu/fs1123/
- Penn State University: https://extension.psu.edu/potato-leafhopper-on-vegetables
- University of New Hampshire: https://extension.unh.edu/blog/2018/07/potato-leafhoppers
- University of California: http://ipm.ucanr.edu/PMG/GARDEN/VEGES/PESTS/leafhopper.html

Problem: Spittlebug ***(Cercopidae spp.)***	**Where: Morris Township Community Garden (5/18)** **Morris County Community Garden (5/19)** **Madison Community Garden (5/26)**

Description: According to the University of Connecticut, spittlebugs are common and easily recognized by the white foamy 'spittle' produced by the nymph or immature stage of the insects as they feed. Adults are less commonly seen but are known as froghoppers (close relatives of leafhoppers, etc). There are anywhere from 30 to 60+ spittlebug species in the United States. All feed on plants, including both woody and herbaceous types. Some spittlebugs have broad host ranges and others narrow. There is usually only one generation per year and most overwinter in the egg stage inside overwintering plant tissue where they were deposited by the females in mid to late summer to early fall, depending on species. Hatch occurs in the spring, probably in May. Even though Spittlebugs feed by extracting plant sap/juice through needle-like mouth parts, they seldom cause notable injury to the plant. There are a few exceptions including the meadow spittlebug (*Philaenus spumarius*) and the pine spittlebug (*Aphrophora cribrata*).

Spittlebug foam on the back of a cabbage plant leaf
Photo: M. Albright, NJAES

Adult meadow spittlebug.
Photo: Cheryl Moorehead, Bugwood.org/UCONN Edu

Management: Spittlebugs are unlikely to cause significant damage to either vegetables or ornamentals. According to UConn, "the biggest problem with spittlebugs in the garden, whether it's an ornamental or food garden, is the unsightliness of the spittle masses. Spittle and nymphs can both be washed off the plants with a steady stream of water. Normally, no chemical controls are recommended, and the spittle protects nymphs from contact insecticides. Not sure if there are enough spittlebugs to cause plants to be weakened? Look for distorted or stunted new growth, and of course numerous spittle masses on the same plant."

References:

- UConn Extension, Spittlebug: A Unique Little Insect: https://bugs.uconn.edu/2017/07/24/spittlebug-a-unique-little-insect/#

Problem: Basil Downy Mildew Disease *(Peronospora belbahrii)*	**Where: Madison Community Garden (5/26) on purchased basil plants**

Description: Basil Downy Mildew is neither a true fungus nor a mold, but a specialized pathogen called "oomycetes." It is wind-borne and can spread quickly, especially during wet, humid conditions. Infected plants develop yellow leaves that can be misdiagnosed as a nutrient deficiency or waterlogged soil. However, check the underside of the leaf and there you'll find a fuzzy mass of purplish-brown spores. Commonly grown sweet basils, such as Genovese, are the most susceptible to downy mildew, but new resistant cultivars are available. Spice types such as Thai, Cinnamon, Lemon, Lime, or Red Rosie are also less susceptible.

Basil plant with downy mildew disease

Photo: M. Albright, NJAES

Underside of a basil leaf showing purplish-brown spores of downy mildew

Photo: M. Albright, NJAES

Rutgers resistant basil varieties showing no signs of disease. Devotion left, Obsession right

Photos: M. Sample, NJAES

Management:

- Plant resistant varieties. Try Rutgers Devotion, Rutgers Obsession, Rutgers Passion, Rutgers Thunderstruck, or Prospera.
- If you buy basil plants from a nursery, check them carefully for disease symptoms before buying them. Do not purchase plants that show any disease.
- Cultural practices include proper plant spacing for optimum air flow, plant in full sun, and avoid overhead watering.
- Pathogen is transmitted by wind, rain splash, contaminated seeds, and plants.
- The disease moves from the bottom of plant to the top of plant, so harvest any unaffected leaves from top of plant and use promptly.
- Remove and throw out infected plants to reduce the spread of disease.
- Grow some plants in containers indoors.

References:

- Rutgers University https://njaes.rutgers.edu/fs1279/
- University of Maryland https://extension.umd.edu/resource/downy-mildew-basil-home-garden

Disease: Gray Mold Disease in Strawberries (*Botrytis cinerea*)	**Where: Morris Township Community Garden (5/24)**

Description: Gray mold of strawberries is caused by a fungus, *Botrytis cinerea*, which infects both the flowers and fruits. Because of this, Botrytis can greatly reduce fruit yields and is considered one of the most damaging diseases of strawberry. Botrytis is most prevalent during prolonged cool, wet weather during bloom and near harvest. Gray mold overwinters in old leaves, petioles and mummified fruit. In the spring during cool humid weather, spores form and spread by wind or water to wounded or extremely soft plant tissues. Infection can also occur from previously infected plant parts.

Gray mold on strawberries
Photo: A. Madeiras, U. Mass.

Gray mold on strawberries,
Photo: Edward Sikora, Auburn University

Gray Mold on strawberry,
Photo: M. Albright, NJAES

Management

- Space plants so they dry rapidly after rain and irrigation. Don't water from above. During the growing season, strawberry plants need about one inch of water a week. On sites with sandy soils or during very hot weather, plants may need more water. Wet the soil to a depth of six to eight inches with each irrigation. Avoid applying so much water that the soil remains saturated for long periods.
- Pick berries frequently, especially during wet and warmer periods.
- Remove and dispose of rotten or severely damaged fruit throughout the season.
- Remove infected plant parts. Collecting and removing infected plant parts can slow the spread of the disease. This should be done frequently especially during fruit bearing time.
- Fertilize established strawberries in late summer to keep them vigorous and best able to withstand disease and to promote fall growth. Spring fertilization results in excessive leaf growth and runner formation and doesn't promote more or larger berries.
- For June-bearing strawberries (not everbearing / day neutral strawberries) renovate the bed two to four weeks after the last harvest by removing old leaves being careful not to damage the crown. A hedge clipper or mower can be used to remove the leaves.

More Information: Fact Sheet / References

- OSU Extension Service: https://extension.oregonstate.edu/news/keep-those-gray-fuzzy-strawberries-check
- Rutgers University Fact Sheet FS097 Growing Strawberries in the Home Garden: https://njaes.rutgers.edu/fs097/

Problem: Rhubarb leaf spot (*Ramularia rhei)*	**Where: Wick Garden (5/15) Morris County Community Garden (5/19) Morris Township home garden (5/18)**

Description: Rhubarb is usually relatively problem-free in the garden. *Ramularia rhei*, a rhubarb leaf spot disease, doesn't usually seriously impact yield but it can weaken the plants over time if left unchecked. It first appears as small red dots that gradually enlarge to form circular lesions a half-inch or more in diameter. Larger spots become white to tan with purplish halos. The larger spots can lead to sunken lesions in the stalk tissue. Stalk infections can come later, appearing as small spots that elongate as the stalk grows. White fungus can develop in the centers of spots on leaves and/or stalks, becoming brown as the tissue dies. Fungi overwinter in infected plant debris.

Leaf spot on underside of rhubarb leaf
Photo: J. Basile, NJAES

Leaf spot on top of rhubarb leaf
Photo: L. Terraneo, NJAES

Minor leaf spot on top of rhubarb leaf
Photo: M. Sample, NJAES

Management:

- Remove and discard all leaves after hard frost
- Don't add infected leaves to compost
- When harvesting, remove stalks with infected leaves first
- Don't over-water and avoid overhead watering as much as possible
- Provide sufficient air flow by using adequate spacing

References:

- University of Minnesota: https://extension.umn.edu/vegetables/growing-rhubarb#diseases-923465

BENEFICIAL SPOTLIGHT

Lady Beetles (aka Ladybugs, Ladybird Beetles)
(*Coleoptera: Coccinellidae*)

Description: Troubled by asparagus beetles or too many aphids to count? Natural enemies of insect pests include predators, parasitoids, and pathogens. Common predators we encounter include flower flies, lady beetles, and lacewings. There are more than 450 species of lady beetles in North America, some native, some introduced. Most are beneficial.

Beneficial lady beetle adults and larvae are voracious predators; their most common prey are aphids, scale insects (such as mealybugs), whiteflies, spider mites, and other small-bodied insects. Beneficial lady beetles also devour the eggs of armyworms, asparagus beetles, bean beetles, cabbageworms, corn earworms, potato beetles, and small insect pests.

Many gardeners recognize the most common adult beneficial lady beetle species but may not know that different species can vary in color and size. Adults are nearly hemispherical; brightly colored red, orange, yellow, pink, brown, or tan; and usually have black spots on the wings. Some are black with red spots.

Ladybird beetle
(Harmonia axyridis)
Photo: L. Terraneo, NJAES

Ladybird Beetle
(Propylea quatuordecimpunctata)
Photo: L. Terraneo, NJAES

Ladybird beetle
(Coleomegilla maculate)
Photo: L. Terraneo, NJAES

Larvae of beneficial lady beetles look like small alligators and are up to 3/8" long with distinct body regions that are flattened and tapered. They are generally conspicuously colored with patches of orange, black, and blue. Some regions may have spines. Larvae color varies but often includes bright yellow to orange markings on black backgrounds. The larger, more brightly colored larvae species feast most heavily upon aphids. The smaller, darker, less colorful larvae species eat mainly scale insects.

Eggs, usually observable to the naked eye, are up to ⅛" long, yellow or white elongated ovals. Yellow eggs are laid on end in clusters of ten to twenty; after they hatch, eggshells look white. Species that eat scales and mites lay single, white eggs.

Since ants drink honeydew that insects such as scale and aphids produce, ants will fight off ladybird beetles. Lady beetles larvae sometimes mimic mealybugs' appearance with a wax covering to avoid attack from ants.

When prey is absent, lady beetle larvae can become cannibalistic, ensuring some survive to adults and reproduce. If

there is not enough prey to support another generation, adults leave that area without laying eggs. When autumn temperatures drop consistently below 65°F, lady beetles will cease activity and search for overwintering sites.

IPM encourages least toxic choices to address pests. Lady beetles may be a good choice for managing pest issues in your garden. Commercially available ladybird adults and larvae may or may not find the conditions they seek to remain in your garden.

Ladybird beetle eggs
Photo: Steve Schoof, NCSU

Newly Hatched larvae
Photo: L. Terraneo NJAES

Larva - coloration varies by species.
Photo: M. Albright, NJAES

Pupa - coloration varies by species.
Photo: L. Terraneo, NJAES

NOT a beneficial lady beetle. Most lady beetles are beneficial. The two exceptions are the introduced Mexican bean beetle, *Epilachna varivestis*, and the squash beetle, *Epilachna borealis*. Both adults and larvae of these two feed on plants.

Pictured here is the Mexican bean beetle which is a major pest of bean plants. The adult has 16 spots. Both the body and head are copper colored.

Photo: L. Terraneo, NJAES

References:

- Rutgers University Common Backyard Beneficials – Plant & Pest Advisory
- Rutgers University Fact Sheet FS295 Beneficial Insects of the Home Garden
- Cornell University: https://biocontrol.entomology.cornell.edu/predators/ladybeetles.php

WEED SPOTLIGHT

Ground Ivy
(Glechoma hederacea)

Description: Ground Ivy, also called "Creeping Charlie", "Gill-over-the-Ground", or "Creeping Jenny" is a low growing and spreading perennial evergreen weed. A common turf weed, it also invades vegetable gardens and ornamental beds. It can be identified by its distinctive oppositely arranged round leaves with scalloped edges and also by its small funnel shaped violet blue flowers. The blooms appear in early spring, usually in clusters of two or more. Ground ivy prefers moist, fertile, shady spots but will also creep into sunnier areas.

This plant can spread by seed, rhizomes, or more commonly by producing new plants on nodes along their sprawling stolons. The stolons and nodes continue to develop throughout the growing season and account for most of the plants' growth.

For home and community gardeners, hand pulling the roots and stems is an effective means to control ground ivy in the garden setting. A well mulched bed makes this task easier.

Ground Ivy stolon, nodes visible along stolon in upper third of photo
Photo: Dr. John Meade, Rutgers

Detail of Ground Ivy leaves and flowers
Photo: J. Carlson, NJAES

Ground Ivy expanding into a community garden plot
Photo: J. Carlson, NJAES

References:

- Rutgers University Fact Sheet: https://njaes.rutgers.edu/fs1219/
- Penn State University: https://extension.psu.edu/lawn-and-turfgrass-weeds-ground-ivy-glechoma-hederacea-l

RESOURCES

Pest control recommendations for vegetable insect and disease pests:
Refer to Rutgers Fact Sheet 1123 and 1124 for all recommended controls for insects and disease pests. They are valuable resources to refer to 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

Other 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

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