

Rutgers Master Gardeners of Morris County Community Garden IPM Team Report #2 May 5, 2023

WHAT'S IN THIS REPORT		
TIPS	NEW PROBLEMS SEEN	SPOTLIGHTS
Special Annual Reports	Flea beetlesAsparagus beetle eggsCold weather damage to plants	Common chickweed (weed)

GARDENS SCOUTED FOR THIS REPORT: Morris County Park Commission's Community Garden in Morristown, ValleVue Preserve Community Garden in Morris Township, and Madison Community Garden.

FIVE YEAR ANNIVERSARY OF THE IPM TEAM

The Rutgers Master Gardener Integrated Pest Management (IPM) Team recently celebrated its fifth anniversary. This award winning team began in 2018 and has now scouted Morris County community gardens and provided timely, local reports to area vegetable gardeners for five years. The team's bi-weekly reports alert gardeners to problems and provide helpful information. The reports also include gardening hints and spotlights on weeds and beneficial insects. The document you are reading is the second report of the 2023 season.

SPECIAL ANNUAL REPORTS

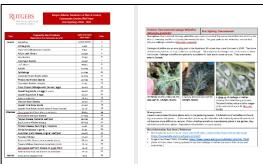
Two special annual reports are included as separate documents. While the regular reports alert gardeners to what has already been seen, these special annual reports tell gardeners when to start watching for specific issues. By watching for problems, gardeners can take early action to manage issues and help prevent problems from occurring in the first place.

Top Problems

This new report includes the top problems that the IPM Team observed over the past five years. You can use the information to help know when to start watching for particular pests. For example, you need to monitor for Colorado Potato Beetles starting in May, Squash Bugs in June, and Squash Vine Borer adults in late June. The report also provides information on how to identify the problems, how to manage them, and how to help avoid them.

First Observation Dates: Visual View

This report gives a detailed visual view of the team's first sightings data of all problems reported on between 2018 and 2022.





REPORTS ON NEW PROBLEMS

Problem: Flea Beetles (many species)

Where: Morris County Community Garden (4/24) Morris Township Community Garden (5/1)

Description: Since most flea beetles are very small, new gardeners often wonder what is causing the holes in their plant leaves. Flea beetles feed on many different vegetables including tomato, potato, eggplant, radish, Swiss chard, sweet potatoes, kale and others. Flea beetle infestation may affect the growth of young plants and can be a significant pest of eggplant. Flea beetles are so small they can sometimes be mistaken for specks of soil but will jump if disturbed.

There are many species of flea beetles and most feed on specific plants. Most flea beetle species are 1/20th to 1/8th inch long and are black, bronze, bluish, or brown to metallic gray in color.



Flea beetle feeding holes on radish plants Photo: M. Albright, NJAES



Flea beetles and their characteristic feeding holes on an eggplant leaf Photo: P. Nitzsche, NJAES

Management:

- Row covers can protect young plants.
- Plants grown from small seeds are less tolerant to flea beetle damage than transplants, thus planting large-seeded crops or transplants can help.
- Early season plantings usually have more severe flea beetle infestations. Delaying planting, if possible, can reduce flea beetle problems.

More Information: Fact Sheets / References

- Rutgers University: <u>Flea Beetles (Rutgers NJAES)</u>
- University of Minnesota fact sheet: <u>Flea beetles | UMN Extension</u>

Problem: Common Asparagus Beetle (Crioceris asparagi)

Where: Morris County Community Garden (4/24)
Morris Township Community Garden (5/1)

Description: The Common Aparagus Beetle, *Crioceris asparagi*, is 1/4 inch long, slender, and blue-black in color with three, yellowish-white squares on each wing cover. Asparagus beetle adults feed on young shoots during the harvest season, chew holes in the shoots, and lay small, dark brown eggs standing on end on the spears

There is also a Spotted Asparagus Beetle but they are usually active later in the season (mid-May).



Common asparagus beetle adult (1/4 inch long) Photo: J. Basile, NJAES



Asparagus beetle eggs Photo: Univ. of Maryland



Close up of asparagus beetle eggs.
The eggs will hatch in a week and feed
for two.

Photo: J. Basile, NJAES



Asparagus beetle larvae (1/3 inch long when fully grown)
Photo: Univ. of Minnesota



Asparagus beetles can be found feeding within spears, disfiguring and destroying crop. Fast removal of eggs will help prevent damage and additional generations.

Photo: J. Basile NJAES

Management:

- Hand pick any existing beetles, larvae and eggs and destroy them.
- Asparagus in the affected area should be harvested daily.
- The best time to check for asparagus beetles is in the afternoon when they are most active.
- Organic controls include neem, pyrethrin, and Spinosad. Be sure to read the label, make sure asparagus beetles are included, and follow the directions.

More Information: Fact Sheets / References

- Rutgers University: <u>FS221: Asparagus Beetles (Rutgers NJAES)</u>
- University of Minnesota: Asparagus beetles in home gardens | UMN Extension

Problem: Cold damage to plants

Where: Morris County Community Garden (4/24)

Description: Cold temperatures can sometimes cause damage to plants including cool weather crops.

Cold injury can take many different shapes on affected plants. In some cases, symptoms may show up on the newest growth as a result of non-lethal injury to plant tissue. In pepper and tomato, new growth may be distorted with misshapen leaves or the entire plant killed. In some cases, new leaves may have a mottled, or mosaic look much like a plant infected with a mosaic virus. In these instances, plants will grow out of the problem.



The yellow and brown areas on lower leaves of these kale plants were likely caused by cold temperatures earlier in the month. Note that the newer leaves are healthy.

Photo: C. Mathis, NJAES



Cold damage to an asparagus spear.
Once damaged, a spear will not grow. The two healthy spears likely emerged after the cold snap was over.

Photo: B. Monaghan, NJAES

Management:

- Make sure transplants have been hardened off before putting them in the garden.
- You can use row covers or individual clear plastic cloches to create a warmer microclimate in your garden.
- Delay planting tender plants such as tomatoes until after the last frost in Spring. The last frost date is May 20th for Northern New Jersey and May 15th for Central New Jersey. (Note: Average last frost dates are earlier than that but it is not safe to plant at the average date.)
- The second reference below has a guide to planting dates for various vegetables. Don't assume that plants for sale at garden centers are ready to put in the garden. Garden centers often sell plants before it is safe to transplant them.

More Information: Fact Sheets / References

- Rutgers Plant and Pest Advisory: <u>Recognizing cold injury in spring crops Plant & Pest Advisory</u> (<u>rutgers.edu</u>)
- Rutgers Fact Sheet Planning a Vegetable Garden: https://njaes.rutgers.edu/fs129/

WEED SPOTLIGHT

Common Chickweed (Stellaria media)

Description: Common chickweed is a cool-season annual plant that can rapidly grow in vegetable gardens especially in the spring. Seeds germinate and start to grow in the fall or spring, and plants grow quickly in warm spring weather. This plant spreads by reseeding itself but it can also spread by rooting at the leaf nodes along the stems. This plant can occur in natural habitats but prefers ground that has been disturbed, so it grows very well in gardens.

Common chickweed has a shallow and fibrous root system. If you attempt to pull it up by grasping the stems, they will simply break off while the roots remain in the ground. Getting under the shallow roots with fingers or a garden tool and lifting up can be an effective way to remove this plant. To help prevent a spring explosion of chickweed, remove chickweed plants in the fall when they are small. Since it sets flowers and seeds at the same time, gardeners should be sure to remove the plants before they set flowers.



Common Chickweed Photo: M. Albright, NJAES



Common Chickweed Flower Closeup Photo: M. Olin, NJAES



A community garden plot in April overgrown by chickweed Photo: C. Mathis, NJAES

More Information: Fact Sheets / References

North Carolina State Extension: https://plants.ces.ncsu.edu/plants/stellaria-media/

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

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