

July 3, 2024

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Insects Showing Up on Cut Flowers

By: Stanton Gill

Dahlias are coming into bloom in July and thrips populations are migrating up into the flowers. Three years ago, we set up a 2-year trial to evaluate releases of the predacious mite, *Amblyseius cucumeris* on dahlias, starting in June. The mites do a good job of feeding on the 1st instar stage of thrips. We also released *Orius insidiosus*, minute pirate bug, in July to go after adults and it worked well. We planted purple flash peppers plants in early June, and as they came into bloom in July, they served as a host plant (banker plant) to give places for the beneficial *Orius insidiosus* to lay their eggs to increase the population in the dahlia beds.



Pepper 'Purple Flash' is commonly used as a banker plant.
Photo: Suzanne Klick, UME



Thrips are present on this geranium flower.
Photo: Suzanne Klick, UME

Other Insects Active in July

By: Stanton Gill

Dave Dowling sent in these pictures from a cut flower grower in Virginia. These are *Nysius raphanus* which is a small native North American insect in the order Hemiptera and family Lygaeidae. The bugs were all over celosia flowers, but were just feeding on the pollen and not inflicting a lot of damage. You may see these bugs in your operation in July. If you do send in some pictures, note if any damage is occurring to the plants. In Florida, cut flower growers have reported damage when populations build up to high levels.



***Nysius raphanus*, false chinch bug, found on celosia, but not causing damage.**
Photo: Dave Dowling

Japanese Beetle Adults Are Out

By: Stanton Gill

We are getting report of Japanese beetle adults coming out this week in fairly large numbers in parts of the state. Acelepyrn and Mainspring at 8 oz/100 gallons is giving good control for up to 2 weeks.

In 2023, we set up trials to evaluate use of a pheromone baited trap combined with a chamber that infected the adult beetles with an entomopathogenic fungus called *Beauveria bassiana*. We will be setting up similar trapping systems with 2 or 3 cut flower growers in 2024.



This is the trap that we were using in 2023.
Photo: Suzanne Klick, UME

Thrips parvispinus

I am seeing tons of mandevilla and hibiscus being sold this summer . Most of these plants arrived from Florida where *Thrips parvispinus* is common on these and other tropical plants. You may have already introduced it into your operation at this point in the season. *Thrips parvispinus* has demonstrated their ability to become resistant to pesticides after repeated exposure, there are some well-researched tactics to help avoid this situation.

Canadian entomologists Sarah Jandricic (OMAFRA) and Judy Colley (Plant Products) sent out these suggestions for a strategy for control of this species of thrips:

- Basing sprays on pest monitoring. Although reliable thresholds for *Thrips parvispinus* have not yet been developed, a good rule of thumb is the presence 1 thrips per 10 plants, or visible signs of damage on the growing points of 2 out of 10 plants scouted.
- Spray ONLY those plant species/varieties showing thrips presence and/or damage. Although spraying the whole range might make sense on a labour front, our work with this pest shows this will just push you into resistance faster. Leaving a “refugia” of unsprayed plants means there will be a few susceptible thrips in the population that will breed with resistant thrips, bringing down the overall resistance level.
- Avoid using too low or too high pesticide application rates: Blasting thrips with exceptionally high rates is how we quickly develop resistant lines in the lab. Similarly, spraying insects with repeated low levels of chemicals also can lead to resistance over time, as this leaves a high proportion of surviving individuals that have been exposed to chemicals. Generally, this pest responds well to label rates.
- Rotating between chemical classes. This means only spraying a chemical in an certain IRAC group ONCE a generation of the insect. For *Thrips parvispinus*, this means not repeating the same chemical class for at least 15 days at 25 C. At lower temps, this time will be longer (e.g. 21 days at 19 °C).

Conferences - Go to the [IPMnet Conference Page](#) for links and details on these programs.

August 5 - 8, 2024

Drone School

Location: CMREC, 4240 Folly Quarter Road, Ellicott City, MD 21042

August 13, 2024

IPM Diagnostic Session

Location: CMREC, 4240 Folly Quarter Road, Ellicott City, MD 21042

September 17 and 18, 2024

Cut Flower Program

Location: Central Maryland Research and Education Center, Ellicott City, MD and tour locations in Howard Co.

October 9, 2024

MNLGA Retail Day

Location: Homestead Gardens, Davidsonville, MD

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