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Cut Flower Education Seminar June 20, 2023

By: Stanton Gill

Our IPM team is setting up a one-day seminar at Castlebridge Farm in Ellicott City, MD for commercial cut flower growers on June 20, 2023. The Association of Specialty Cut Flower Growers is co-sponsoring this event with us. We have arranged to have speakers from The Botanical Trading Company, Syngenta Flower Division, Heartwood Nursery of Pennsylvania, and our IPM team with expertise in cut flower growing and problem solving. There will be a short tour of the farm in the morning.



For details and to register on-line: <https://23Jun20Cutflower.eventbrite.com>

For a brochure and to pay by check: [IPMnet Conferences Page](#)

Check for Allium Leafminer in Any Allium Species

By: Jerry Brust, UME and Karen Rane, UMD Diagnostic Lab

If you grow any type of *Allium* plant species (onion, leeks, garlic, ornamental onions), now and for the next few weeks is the time to watch for the tell-tale marks left by Allium leafminer. Allium leaf miner *Phytomyza gymnostoma* tell-tale marks consist of many linear small white dots (made by the female's ovipositor) that appear in leaf blades (fig. 1) of any *Allium* species. If you had some infestation last year you will especially want to be looking for the signs of this pest.

Figure two shows an ornamental planting of Alliums in downtown Bethesda. As you can see it is not doing too well, probably because of several different reasons. But upon close inspection you can find active oviposition marks of Allium leafminer on the leaves, which will lead to larvae in the bulb of these plants opening them up to pathogens. In addition to the Bethesda problem, we have seen two cut flower farms on the Eastern Shore in the past couple of years that have had devastated *Allium* plantings that had been in the ground for several years. While there usually were some disease problems too, we found Allium leafminer larvae and pupa as well as damage in the bulbs (fig 3). This feeding damage allows entry points for disease causing organisms into the plant.

To go over recommendations for this pest: new transplants or seedlings of *Allium* should be watched closely for the tell-tale signs of the fly's damage. When eggs hatch the larvae at first mine leaves and then move down to the bulbs and leaf sheathes where they feed and eventually pupate. You can cover any just-transplanted *Allium* planting with a row cover to keep the flies off or if needed treat with insecticides. Adult flies are active from April through May and September through October. After adult flies are no longer active in June through August plants do not need to be covered. Research out of Cornell University has found using applications of spinosad (Entrust, which is OMRI-labelled) two weeks after oviposition marks are **first** found and then another application 2 weeks after this will give adequate control of the pest. But the oviposition marks must be watched for carefully and discovered very soon after they are made. A penetrant adjuvant also is recommended to be used when treating for the larvae. If you have constant fly pressure (find new oviposition marks every week) weekly applications of an insecticide (such as pyrethroids or Spinosad) may be necessary to reduce damage.



Fig. 1 Onion leaf blade showing linear white dots made by female *Allium* leafminer
Photo: Todd Armstrong, The Davey Tree Expert Company



Fig. 2 An ornamental *Allium* planting not doing well
Photo: G. Brust, UME



Fig. 3 *Allium* leaf miner larvae, pupae and damage in bulb of ornamental *Allium*.
Photo: K. Rane, UMD

Downy Mildew on Basil as Part of IPM

By: Stanton Gill and David Clement

For the last 3 years, we have been evaluating basil cultivars for resistance to downy mildew. This disease can be a major killer of basil. We published an article in the May 2023 issue of GrowerTalks that discusses results of our trials. The article is available at <https://www.inside-grower.com/Article/?articleid=26251>



Downy mildew infection on basil.
Photo: David Clement, UME

Two-spotted Spider Mites

We are seeing outbreaks in greenhouses of two-spotted spider mites. Check on the undersides of foliage for these mites. They cause stippling damage on the top side of foliage when they feed. If populations are high enough, there will be webbing on the foliage. Control options include Sanmite, Akari, Pylon, and Floramite.



Two-spotted spider mites are active on a begonia stem.

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