UNIVERSITY OF MARYLAND EXTENSION

PennState Extension

Greenhouse TPM/IPM Report

Central Maryland Research and Education Center
Ellicott City, Maryland

August 19, 2026

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Summer 2026

Patricia Prade

What a difference a month or two can make! After a spring with erratic temperatures and relatively low pest pressure, the past couple of months brought plenty of heat and humidity across the region. These conditions can influence plant growth as well as pest and disease development, so keep scouting closely.

This is also a great time to keep good records of what you are seeing. Make notes of which pests are present, when they first appear, how pest pressure changes throughout the season, and which crops or varieties are most affected. These records can help identify patterns from year to year, making it easier to anticipate problems and be better prepared for future growing seasons.



2026 Penn State Flower Trials 90th Anniversary event.
Photo: Penn State College of Agricultural Sciences.

A Day Out Looking at Flowers? If You Insist…

Laura Nixon

In July, Penn State Extension hosted their 2026 Penn State Flower Trials Field Day. Of course, we from Maryland drove there to support our wonderful colleagues and experience all the flowers!

There were some really great educational talks on flower and greenhouse management, but the highlight for the day was Krystal Snyder's tour around all the trial flower varieties. We were able to see individual varieties, as well as pre-made combinations in both pots and hanging baskets. If you missed out this summer, Penn State hosts the event annually, plus there is a Fall Flower Trials Open House on September 25, 2026.

To register for the fall event: Click Here



Dave Clement, Holly Greenberg, and Laura Nixon (UME) enjoying the 2026 Penn State Flower Trials Field Day.



Dave's favorite were these blue *Delphinium* Pixie Rocket 'Sky'; Delphinium are great for cooler summers and reminiscent of English cottage gardens.



Laura's favorite of the day was this *Lantana* 'Passionfruit' variety; Lantana are fairly drought tolerant and great for pollinators.



Holly loved this beautiful strawflower variety; straw flowers have papery bracts which look and feel like petals made from straw.

IPM Diagnostic Session (1 - 3 p.m.)
August 26, 2026
Location: CMREC, Ellicott City, MD

This session is a great opportunity to bring plant samples with problems you need identified. Entomology, plant pathology, and horticulture extension specialists will be available to look at samples under the microscope and answer questions. There will be short presentations on tarnished plant bugs and another timely insect pest.

Dahlia Viruses

David L. Clement and Ana C. Fulladolsa

Dahlia flowers are starting to become more numerous in production fields and various retail outlets across the region. Dahlias are a profitable crop but require long season commitment both in terms of pest management and maintenance. Despite grower's best efforts however, virus pathogens seem to be among the most common and troublesome dahlia diseases. At this time of the year, it's not uncommon to see 30-50% of the dahlias in a field exhibiting some virus symptoms. These symptoms include distinct chlorosis along veins, shortened internodes, mosaic, stunting, chlorotic spots, general chlorosis of leaves, systemic chlorosis, flower color breaking, deformation of newly emerging foliage, necrotic leaf spots and marginal leaf necrosis. To further confuse symptom diagnosis, certain cultivars, although infected, will be symptomless.



Virus symptoms on dahlia leaf.

Photo: David Clement

Viral infection of dahlias can occur either singly, or as mixed infections. Some of the most frequently seen infections include dahlia mosaic virus (DMV), and the related virus called dahlia common mosaic (DCMV), that have aphid vectors. DMV can be transmitted by 16 different aphid species (non-persistently), as well as by mechanical sap inoculation (pruning tools/ propagation), and through seed. Tomato spotted wilt virus (TSWV) and impatiens necrotic spot virus (INSV), have thrips vectors. There is also a tomato-ringspot (ToRSV), related virus that most likely has a nematode vector. Virus infected dahlias often exhibit similar or overlapping symptoms that are so alike that specific viruses cannot be differentiated from one another by symptoms alone. In addition, several of these viruses can infect perennial weed hosts that will serve as new sources of infection each season.



Distorted foliage can be an indication of a virus infection.

Photo: Suzanne Klick

Since infected dahlias cannot be cured, virus disease management requires an integrated strategy. Likely introductory paths include infected tubers, or cuttings. Begin by buying certified virus-free tubers and cuttings. Before propagation, submit symptomatic and asymptomatic plants to a diagnostic lab. Separate newly acquired plants and untested cuttings so that they do not share common water or propagation trays. Implement early aphid and thrips management strategies to reduce virus transmission by insect vectors. In the field, continue to remove symptomatic plants. It is not enough to remove symptomatic tissue as the virus is also present in asymptomatic tissue throughout the rest of the plant. Sanitize tools with disinfectant wipes or 70% ethanol before and in between uses to prevent mechanical sap transmission of DMV.

Snapdragon Pests

Holly Greenberg, UME

This summer, we conducted a flower trial at the CMREC facility in Ellicott City, MD, monitoring the impact of plastic weed barrier vs. biodegradable weed barrier on matricaria and snapdragon flowers. We observed the insects present on the flowers twice a week, while also measuring the height of the plants. Common pests included grasshoppers, tarnished plant bugs, and twice-stabbed stink bugs.



Grasshopper on Snapdragon

Photo: Holly Greenberg, UME

Grasshoppers were present in high densities throughout the last few months, leaving behind plenty of frass on the flowers. They excessively chewed leaves, leading to defoliation and a decrease in photosynthesis. The nymphal stage does the most damage as the insects feed while molting multiple times before developing into adults. They are attracted to humid, weedy, and sunny environments.

Tarnished plant bugs have sucking mouthparts that allow them to feed on the sap of plants. They inject a toxin that breaks down tough tissues to allow for easier consumption of leaves, stems, and buds. Small populations can cause serious damage and decrease marketability. As generalists, they feed on a wide range of host plants, which is uncommon for plant bugs, which are usually specialists. The main evidence of tarnished plant bug damage is deformed buds and roots, black spots, discolored shoots, and ruined flowers. Sweep nets, sticky sheets, visual observations, and tap counts can be used to scout for this insect.

By far, the most prevalent insect spotted on the snapdragons was the twice-stabbed stink bug. The distinct marking of two red spots (which look like stab wounds) amid their black back allows for quick identification. Similar to the tarnished plant bug, these stink bugs also inject a toxic substance into the plant to break down tissues but rarely cause significant harm. They are commonly described as seed predators, as they feed on the seed pod rather than the leaves.

Reference the July 2026 Report for cut flower pest control options.



Twice-Stabbed Stink Bug Nymph

Photo: Holly Greenberg, UME



Twice-Stabbed Stink Bug Adult

Photo: Holly Greenberg, UME



Tarnished plant bug on Snapdragon

Photo: Holly Greenberg, UME

Lavender Production

Ginny Rosenkranz

Wildwood Lavender Farm grows English lavender in the sandy Eastern Shore soils. They began in 2016 and now have a field of ten different cultivars. They also have five different cultivars that they grow in pots. They hold a yearly Lavender Bloom Festival in June that provides lavender for cutting, plants to purchase, classes on growing and caring for lavender, distilling demonstrations, foraging tours, and live music. With their lavender flowers, they make flower crowns, sachets, and bath salts; they also distil the oils. Their main lavender is *Lavandula angustifolia* 'Munstead' and they have branched out to grow *Lavandula stoechas* 'Silver Anouk' or Silver Aouk Spanish Lavender.



Silver-spotted skipper butterfly on a lavender flower

Photo: Ginny Rosenkranz

English lavender, *Lavandula angustifolia*, is not really from England but from the Mediterranean including Spain, France, and Italy. It has always been loved for the colorful flowers and the fragrant essential oils. The plants thrive in full sun and need well drained, alkaline light sandy soil. Unlike many blooming flowering perennials, lavender prefers low fertility. English lavender is cold hardy in USDA zones 5-8 and usually grow 1-2 feet tall and wide. They bloom from June to August with fragrant lilac or purple flowers. Flowers are found on terminal spikes above the foliage. When in bloom, the flowers attract a number of pollinators but especially butterflies and moths. The evergreen fragrant foliage is 2 ½ inch long, narrow gray-green leaves that are attached to square stems. Both foliage and flowers provide color and fragrance from June to August. Not all lavender plants provide lavender-colored flowers. *L. angustifolia* 'Hidcote' has dark purple flowers, *L. angustifolia* 'Royal Velvet' has dark navy-blue flowers, while *Lavandula x intermedia* 'Grosso' has intense fragrance and deep violet flower spikes. Pink flowers provide a change in color, but they still have wonderful fragrances. These include *L. angustifolia* 'Little Lottie 'which is a dwarf lavender with a captivating fragrance, *L. angustifolia* 'Rosea' has pale pink flowers with robust fragrance, and *L. angustifolia* 'Miss Katherine' has deep pink fragrant flowers. There are lavenders that produce pure white flowers including *L. x intermedia* 'Edelweiss', *L. angustifolia* 'La Diva Spirit', and *L. angustifolia* 'Nana Alba'. There are several new cultivars that expand the range of the traditional lavender including *Lavandula* x *intermedia* Phenomenal® that thrives in extreme cold weather and high heat and humidity. *Lavandula x intermedia* Sensational! ® has exceptionally large, thick silvery foliage and dark purple flowers that provide intense, sweet fragrance. These colorful flowers bloom into late summer. The flower colors come from both the calyx or bud and 4-5 corolla or petals, with different hues. Lavender with its intense oils is deer and rabbit replent.



Cutting field of lavender

Photo: Ginny Rosenkranz



Blue Spear English lavender flower

Photo: Ginny Rosenkranz

A Beneficial Wasp to Help Manage Your Caterpillars!

Laura Nixon

Field-grown cut flowers attract many of the same pests as field crops (e.g. corn, vegetables, hops). One such pest is the European corn borer (*Ostrinia nubilalis*). The caterpillar of this species burrows into flower stems causing wilting and dieback. European corn borer has been such a significant pest of a range of crops that USDA APHIS approved importation and release of a parasitoid wasp from Asia in the 1990s. The parasitoid wasp, *Trichogramma ostriniae*, lays its eggs in the eggs of the pest species, where the wasp larvae develop and emerge instead of the caterpillars. A lot of research data shows that releases of *Trichogramma ostriniae* assist in managing caterpillar borers in a variety of field crops, including flowers. These wasps are commercially available to buy and release in your fields!

Thank you to Carol Glenister (IPM Labs) for suggesting this topic and providing information on *Trichogramma*!



European corn borer

Photo: Clemson University - USDA Cooperative Extension Slide Series, Bugwood.org



***Trichogramma ostriniae* getting ready to oviposit in a host egg mass.**

Photo: Sylvie Chenus, Cornell

If you have topics you'd like to hear more about in the monthly newsletter, or if you have anything to submit, let us know!

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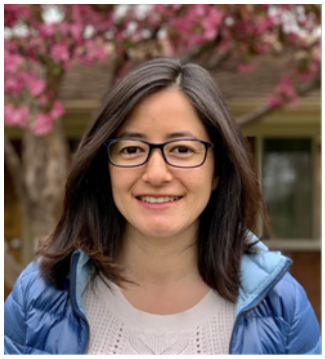
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