

Commercial Horticulture

August 9, 2024

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**IPMnet
Integrated Pest
Management for
Commercial Horticulture
extension.umd.edu/ipm**

If you work for a commercial horticultural business in the area, you can report insect, disease, weed or cultural plant problems (**include location and insect stage**) found in the landscape or nursery to sgill@umd.edu

Coordinator Weekly IPM Report:

Stanton Gill, Extension Specialist, IPM and Entomology for Nursery, Greenhouse and Managed Landscapes, sgill@umd.edu. 410-868-9400 (cell)

Regular Contributors:

Pest and Beneficial Insect Information: Stanton Gill and Paula Shrewsbury (Extension Specialists) and Nancy Harding, Faculty Research Assistant

Disease Information: Karen Rane (Plant Pathologist), David Clement (Extension Specialist) and Fereshteh Shahoveisi (Turf Pathologist)

Weed of the Week: Chuck Schuster (Retired Extension Educator), Kelly Nichols, Nathan Glenn, and Mark Townsend (UME Extension Educators)

Cultural Information: Ginny Rosenkranz (Extension Educator, Wicomico/Worcester/Somerset Counties)

Fertility Management: Andrew Ristvey (Extension Specialist, Wye Research & Education Center)

Design, Layout and Editing: Suzanne Klick (Technician, CMREC)

European Hornets Very Active in August

By: Stanton Gill

One of the imports that came into the United States a long time ago continues to have an impact in our landscapes. The European hornet, *Vespa crabro*, was introduced from central Europe into North America and first detected in the 1840s. European hornets have since become widespread and well established in the eastern United States and are found throughout Maryland.

They are among the largest wasps in the areas where they occur. The head is red and yellow, the thorax is red and brown, while the abdomen is brown anteriorly and mostly yellow posteriorly with brown tear-drops.

European hornets are large and menacing, especially as the number of pollen sources dry up this summer. The adults will show up at summer outdoor picnics and love to visit soda cans to obtain the sugary liquid. Be careful when consuming food and drink outdoors if adult European hornets are buzzing around. They are also meat eaters and will consume other insects including butterflies. On the good side, they are also voracious feeders on the invasive spotted lanternfly. Brian Kunkel and I have found them at many of our spotted lanternfly test sites.

People will often mistake a cicada killer wasp for the European hornet. Eastern cicada killers, which are also active in August, can be distinguished from European hornets based on coloration and behavior. The abdomens of cicada killer wasps are mostly black with yellow markings while European

hornet abdomens are mostly yellow with brown markings. European hornets construct paper nests in aerial locations, while cicada killers nest in the ground. Cicada killers are solitary, so each female digs her own nest, but may nest communally, with many nests in a small area that has the right soil substrate.



European hornets feeding on sap on buddleia
Photo: Suzanne Klick, UME



Cicada killer wasp on hydrangea
Photo: Suzanne Klick, UME

Polyphemus Moth Caterpillar

By: David Phan, UME Intern

The Polyphemus moth will also be active in the month of August. These native moths are one of the largest silk moths in North America and are named after the giant cyclops in Greek mythology. Caterpillars are known to feed on many woody plants, such as ashes, dogwoods, elms, hickories, maples, and oaks. Caterpillars can eat up to 86,000 times their weight. They're not known to cause serious damage to these plants.



Polyphemus moth caterpillars feed on a wide variety of woody plants.
Photo: Stanton Gill, UME

Magnolia Scale and Cottony Maple Scale

Elaine Menegon, Good's Tree and Lawn Care, found magnolia scale in Hummelstown, PA this week. Adult females are feeding at this time and increasing in size getting ready to lay eggs. Magnolia scale (and tuliptree scale) produce crawlers late in the season. Look for them this month and as we move into September.

Marie Rojas, IPM Scout, found some cottony maple scale on the undersides of the leaves of red maples. This scale produced crawlers in June and July.

Spotted Lanternfly Update

We are receiving regular reports of spotted lanternfly adults and honeydew/sooty mold.

Todd Armstrong, The Davey Tree Expert Company found a group of SLF adults around a stump of an ailanthus tree on August 7 in Baltimore County. Todd noted that "the tree was cut down 2 weeks ago and treated with an herbicide to prevent regrowing".

Matt Smith-Davis, Bartlett Tree Experts, found spotted lanternfly on some English Ivy in Dagsboro, DE. Kyle Ewing, Bartlett Tree Experts, reported that it was the first time they saw them there and that they have just started getting calls about 2 weeks ago about them in Lewes.

Gabrielle Dandy-Horn, Gardens Remembered, LLC, saw one on their screen in Laytonsville.

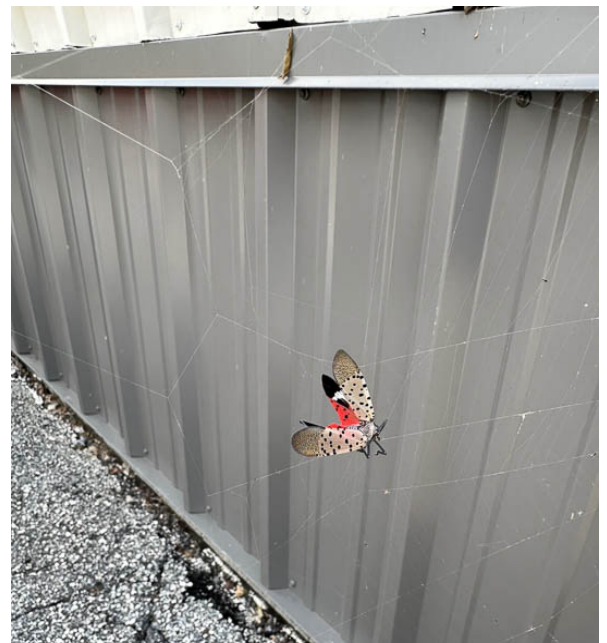
Anna Schrad, Howard County Department of Recreation & Parks, found SLF adults congregating at the base of dead Ailanthus trees that were treated last September using the hack & squirt method. Anna noted, "The pictures are from 8/1/2024 in Ellicott City at a site where dozens of Ailanthus were treated and have died but the SLFs were still attracted to them."



Spotted lanternfly adults on English ivy.
Photo: Matt Smith-Davis, Bartlett Tree Experts



Spotted lanternfly adults at the base of a dead *Ailanthus* tree.
Photo: Anna Schrad, Howard Co. Dept. of Recreation and Parks



An adult spotted lanternfly caught in a spider web. It goes to show that the best control is predators.
Photo: Bob Mead, Mead Tree and Turf

Spotted Lantern Fly and Insecticidal Soap

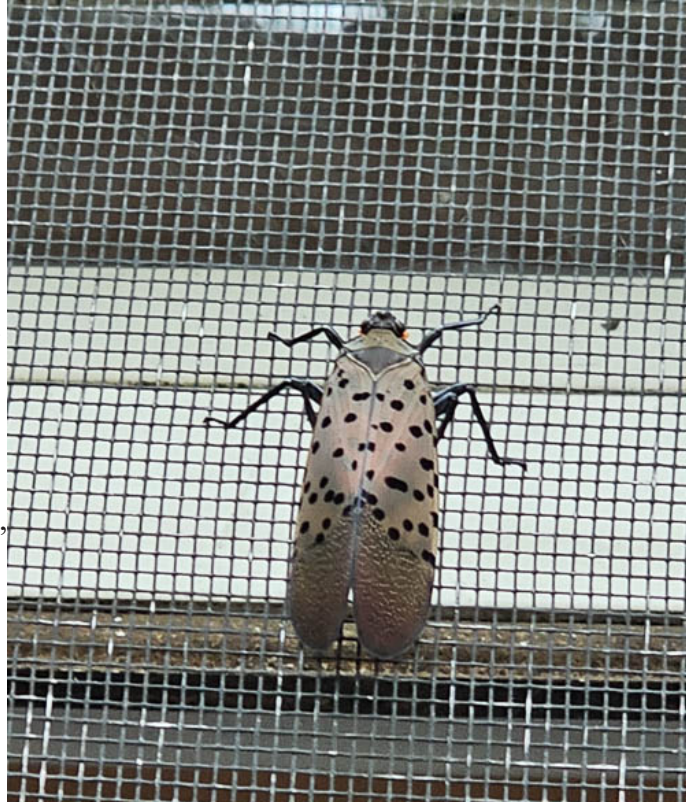
By: Stanton Gill

Last week, we mentioned insecticidal soap should give good knockdown of adults. I checked with Dr. Greg Krawczyk, Penn State. Here are his comments:

"We do not have a good data for controlling adult SLF with insecticidal soap. In our bioassays it was one of the weakest materials tested.

If I assume correctly, the reason the grower is asking about soap is they want to go organic? Products with natural pyrethrum are much better options although they have relatively short residual activity.

If synthetic option are possible, then almost any pyrethroid, neonicotinoid or even malathion are much more effective options against adult SLF."



Spotted lanternfly adult in Laytonsville.
Photo: Gabrielle Dandy=Horn, Gardens Remembered, LLC

Peachtree Borer

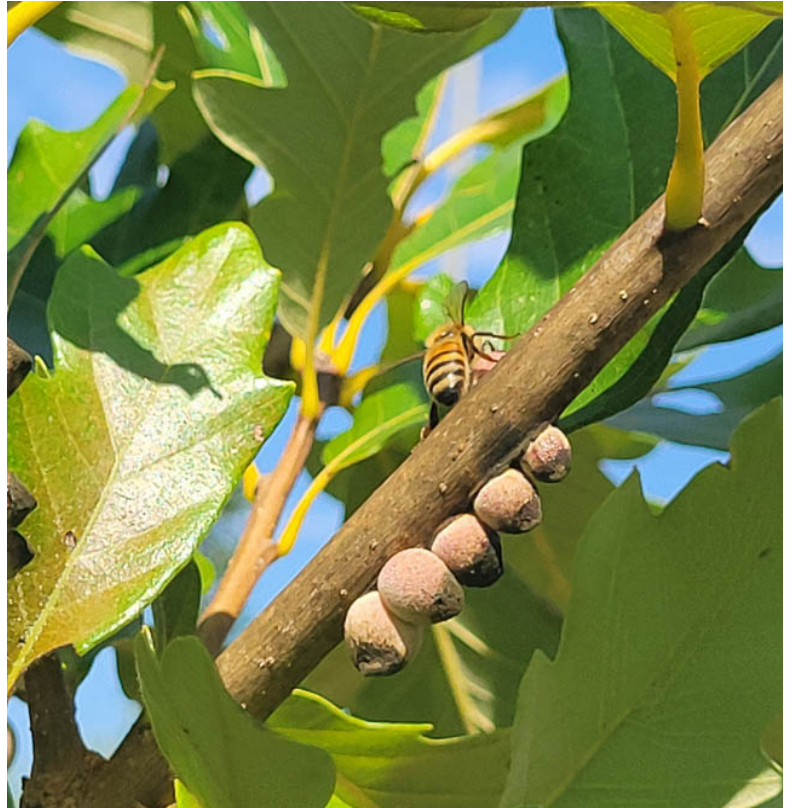
Brandon Allison, Brightview, found ornamental plums with a lot of sap oozing from trees at a property in Columbia. This oozing is a sign that peachtree borers are attacking the tree. The plant is producing sap to try to drown the larvae feeding in the cambium area of the plant.



The oozing on this ornamental plum is caused by peachtree borers.
Photo: Brandon Allison, Brightview

Rough Bulletgalls on Oak

Marie Rojas, IPM Scout, found some rough oak bulletgalls on the stems of *Quercus bicolor* trees in Montgomery County. Marie noted that, "They had lots of wasp, bee and hornet visitors, feeding on the nectar exuded. There was even some sooty mold forming on some of the galls." More information is available in an [Ohio State fact sheet](#) (with many photos).



Rough oak bulletgalls with sooty mold (left) and attracting bees (right).
Photo: Marie Rojas, IPM Scout

Jagged Ambush Bug

Katie Grant, Green Thumb Garden Services, found a well camouflaged, jagged ambush bug on a Shasta daisy in West Ocean City this week. It's another general predator that can be found in landscapes. The ambush bug lies in wait until an insect comes along for it to reach out and grab it.



This jagged ambush bug is in a Shasta daisy flower waiting for prey.
Photo: Katie Grant, Green Thumb Garden Services

Porcupine Damage

From: Bob Trumble, Robert Trumbule Horticultural and Entomological Consulting

I was scouting a Christmas tree farm in Garrett County on Tuesday. The grower was concerned about browning and dieback in Concolor Firs, especially high in the crowns of the trees. Investigation revealed girdled trunks and limbs. Wounds were partially healed, so I believe the damage occurred in winter, but the signs only began to manifest as hot, dry weather set in. Close inspection matches photos and description of Porcupine injury from the Utah State extension bulletin: <https://extension.usu.edu/forestry/publications/utah-forest-facts/038-porcupine-damage-to-trees>

I had never seen this type of injury before, so thought it might be of interest.



Porcupine damage on Concolor firs.
Photos: Bob Trumble, Robert Trumbule Horticultural and Entomological Consulting

Southern Blight

Katie Grant, Green Thumb Garden Services, reported finding a lot of plant collapse on various properties due to southern blight.

The following article was included in the August 11, 2023 issue of the IPM report:

Southern Blight on Hosta

By: Karen Rane and David L. Clement

We've had several samples of declining hosta come in recently. Upon inspection the signs and symptoms of Southern Blight were evident. The disease is caused by the fungus *Athelia rolfsii* (formerly *Sclerotium rolfsii*), and symptoms include wilting and collapse of leaves and stems, followed by rotting of the plant at the soil line. When inspecting plants, look for white mycelium and tan sclerotia that resemble "millet seeds" on the lower stems, or the soil and mulch, around the base of the affected plant. The disease can spread through movement of contaminated soil and sclerotia, and the sclerotia can overwinter in our region. Southern Blight can occur on a wide range of plants, but is commonly found on aster, ajuga, black-eyed Susan, dahlia, daylily, gladiolus, hosta, and peony. Vegetables like tomato, pepper and beans, and even small woody trees and shrubs can be affected.



Southern blight infection on penstemon.
Photos: Katie Grant, Green Thumb Garden Services

Response to August 2, 2023 Article on Heat Impact on Plants

Linda Barker, Halcyon Landscapes, commented on the information in last week's IPM report:

"In the latest report there is an article on leaf scorch of a threadleaf Japanese maple. I wonder if you ever give advice on cultural practices as in this case, it seems to me that the tree needs a green groundcover to mitigate the heat collected by dark mulch surrounding it, and possibly an elimination of the night illumination from the garden spotlight. Plants need some rest from light, too, and especially after 90 °F days."

Stanton's Comment: "Good points. It looks like a hot spot in the landscape where the Japanese red maple was scorching, likely from a less than ideal planting site."

Second response from Linda Barker: "Yes it may be helpful to bring up the cultural aspects of plantings. Plants are having a rough time dealing with changing climate since they cannot move away from where we put them. More than ever we need to exercise great care in our designs and installations, with perhaps a new realization that heat is a major factor and some full sun plants may not actually be happy there anymore. The Weekly Reports are useful and timely and maybe adding a climate section with this kind of news would also help. Surely others are noticing some of these changes."

Report regarding weather impact from Marie Rojas, IPM Scout: "I'm also seeing some leaf discoloration due to the heat/dry conditions. I saw marginal chlorosis on *Carpinus*, as well as bright yellow leaf spotting on *Cercis canadensis* var. *texensis* (pic).



***Carpinus* (left) and *Cercis* (right) showing symptoms from the impact of the recent hot/dry weather.
Photos: Marie Rojas, IPM Scout**

Ticks - Active With This Summer Weather

By: Stanton Gill

We are receiving emails reporting deer ticks and lone star tick activity in the last 3 weeks. The high humidity and hot weather are ideal for ticks to thrive. I found a deer tick that had settled and insert into my thigh this week.

When working in the nursery rows or in the landscape near wood edges, check yourself regularly for ticks. When spending time outdoors in tick-prone areas, apply insect repellents labeled for tick prevention. Deer ticks can cause very serious health problems for humans and domestic pets. Also called black-legged ticks, deer ticks can transmit pathogens that cause Lyme disease, Powassan virus, and several other severe medical conditions. The pests get their common name because they often feed on deer, which transport the ticks wherever they roam. Deer ticks are especially prevalent in tall grassy areas that border woodlands.

Ticks pass through immature stages called larvae and nymphs on their way to adulthood. These immature phases look like adult ticks, only smaller. Nymphs, behind most human tick bites in the U.S., are about the size of a poppy seed. Larvae are even smaller. Adult deer ticks are apple-seed sized, but they become much larger when engorged with blood.

To check for deer ticks, slowly drag a white cloth or towel (approximately one square yard) across an area for 15 to 30 seconds. Then check the cloth. Though ticks are small, they'll show against the cloth. If a tick bite develops a rash that expands in a target-like pattern, see your physician immediately. That's a classic sign of Lyme infection.

Walkingsticks Active in August

By: Stanton Gill

Liz MacBride found these large insects on the front of her car this week. They are active in August and you find them falling out of trees through late summer into the fall. The insect is in the order Phasmatodea whose members are variously known as stick insects, stick-bugs, walkingsticks, stick animals, or bug sticks.

Your customers may freak out about this large insect if it shows up in their landscapes. They do not bite, sting, or attack humans. In most cases, you can simply leave them alone or admire them from afar.



A pair of walkingsticks.
Photo: Liz MacBride

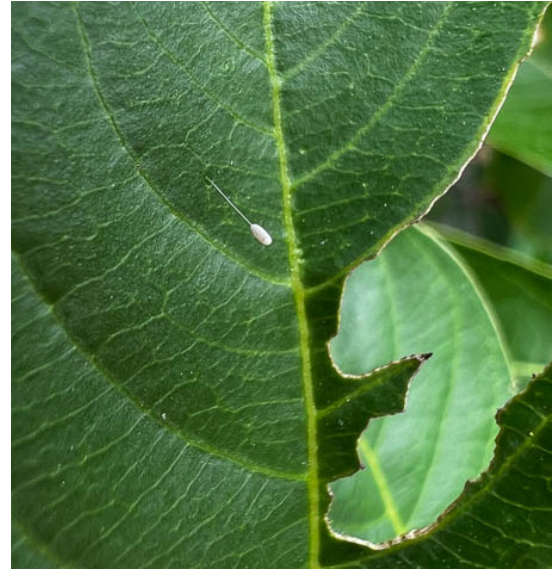
Crapemyrtle Bark Scale

By: Sheena O'Donnell and Stanton Gill

Paul Wolfe, Integrated Plant Care, called me on Tuesday to let me know he treated a customer's crapemyrtle bark scale last September with a basal trunk application using dinotefuran. He visited the site this week and reported close to 100% control on the vast majority of the tree. One branch that was 2" in diameter and had a healthy population of crapemyrtle bark scale. This population was likely due to uneven uptake of the dinotefuran into this branch. He suggested cutting out the large branch. Uneven uptake does happen. We are receiving many reports of lady beetle larvae feeding on crapemyrtle bark scale in many landscapes. This is great to see this biological control going on in the Maryland landscapes.

Update on CMBS Population at our CMREC field plots from Sheena O'Donnell: I went out to check on the CMBS today, and could not find any established on the new trees (or the old ones either for that matter). There were many parasitoid holes in the covers from the samples we collected in Takoma Park, and an assortment of generalist predators out there including lacewing eggs, Orius (not pictured), a mantis, and lots of small wasps/flies. I could not ID the wasps/flies to species but I am assuming at least one of these are what's causing the parasitoid holes in the covers.

Update From Brian Kunkel, University of Delaware Extension: The population in Georgetown has crashed and we have found few crawlers for most of the summer. This is on trees heavily infested and planted at the station last fall and those we artificially infested. These trees are within a couple hundred yards of a diverse planting of flowering ornamentals in a MG garden and the number of lady beetles and lacewings found on the trees has been alarming. On south campus (near the creamery), the crapemyrtles have had decent populations all year. We have been monitoring those for crawler activity and it seems to be a week to ten days behind what we were seeing for Georgetown last year.



A lacewing egg on a crape myrtle leaf.
Photo: Sheena O'Donnell, UME



The hole in the crapemyrtle bark scale is likely from a wasp parasitoid.
Photo: Sheena O'Donnell, UME



A Carolina praying mantid on a crape myrtle that had been infested with scale.
Photo: Sheena O'Donnell, UME

Bird's Nest Fungi

By: Suzanne Klick

With the recent rains over the past week, we have seen an explosion of bird's nest fungi in the mulch in our landscape plantings here at the research center. Millions of fungal spores are in the 'eggs' (called peridioles) in the nest-like structure of these fungi. Raindrops splash the peridioles out of the nest onto other areas of mulch or building structures nearby. Bird's nest fungi obtain nutrients from decomposing wood and are often found in mulched areas in landscapes. They are not a problem for plants and are also cool to observe.

You can get more information on the [University of Florida web site on bird's nest fungi](#).



Various stages of bird's nest fungi in landscape mulch.
Photo: Suzanne Klick, UME

Adventitious Roots on Rosemary

By: Stanton Gill

Anna Beall, Edible Eden Foodscapes, sent rosemary photos asking what was going on with the plant. The photos show adventitious shoots developing on the stems of the rosemary plant. Environmental conditions cause the formation of shoots that come off the stems. If the stem is near the ground, it will form roots into the soil. We see this commonly in tomato plants. There is nothing to do about it since it is a physiological development.



Adventitious roots on rosemary.
Photo: Anna Bealle, Edible Eden Foodscapes

Beneficial of the Week

By: Paula Shrewsbury

Bess beetles and their decomposing log homes

Bess beetles, *Odontotaenius disjunctus* (family Passalidae), are beneficial because they are prime decomposers and recyclers of wood from fallen or dead trees, an important ecosystem service. Bess beetles make their homes in logs where they live, breed, and feed, assisting in the decomposition of the wood. Over 500 Passalid beetle species have been described, but only a few occur within the U.S. with *O. disjunctus* being the most common of the Passalid beetle on the eastern half of the U.S. Adult Bess beetles are large and cylindrical in shape (~1.2” – 1.6” long), are very shiny dark brown to black in color, and they have deep grooves going down their front wings (elytra) and a single groove down the midline of the pronotum (section behind the head). They have very distinct, powerful looking jaws (mandibles) and quite an impressive curved horn on their head just above their eyes. Based on their appearance it is not surprising that Bess beetles are also known as patent leather beetles or the horned Passalus beetle. Bess beetle larvae are white grubs, similar in appearance to scarab white grubs, but much larger. However, one identifying characteristic is that the Bess beetle grubs appear to have only two pairs of legs because the third pair is greatly reduced and difficult to see (see image).

[Adult Bess beetles use their powerful mandibles to chew into fallen, rotten logs where they form galleries](#) in which they feed and care for young.

Wood is composed of very strong polymers, lignin and cellulose, making it very difficult to digest by most organisms. Bess beetles however can accomplish this feat due to the micro-biome contained in their digestive system that allows them to break down these tough polymers. The beetles use their strong jaws to chew up and ingest the wood. The wood ingested by adults move through the beetle’s digestive system where it picks up digestive microbes, resulting in microbe-filled frass (excrement). Other microbes in the rotting wood help to further break down the sawdust-like frass, making nutrients more available to the adult beetles and their offspring that need to develop and survive.

Adult Bess beetles aggregate and sometimes compete for sections of a log. Clutches (groups) of eggs are laid throughout the frass-filled galleries made by the adults. [It is not unusual to find adults and their larvae in the](#)



Adult and larval Bess beetles, *Odontotaenius disjunctus*, found inside their decomposing log home.

Photo: M.J. Raupp, UMD



An adult Bess beetle, *Odontotaenius disjunctus*. Note the diagnostic shape and shiny dark color of the body, deep grooves on the elytra (front wings), and the fringe of orange hairs on the second pair of legs and around the pronotum (section behind the head).

Photo: M.J. Raupp, UMD

[same log](#). These beetles have a somewhat unique sub-social relationship where both male and female parents provide cooperative care for the larvae. Adults may lay multiple broods of larvae over time and the young adults from a previous brood will help care for their siblings. Adults will move eggs through their galleries to find the optimal food source. Adults live about one year, are territorial and protect their galleries from invaders. Depending on environmental conditions, development to adult may take from one season up to 16 months. Once larvae molt to adults and fully mature (turn from light brown to black color), they leave the log of their parents to find their own log and start their own families.

Bess beetles also have an interesting form of communication. Bess beetles are known for acoustic signals that they produce by a process called stridulation ([click here for an audio file of the defensive sounds](#)). Insects use stridulation to produce sound by rubbing two body segments or limbs together. In addition to Bess beetles, stridulation is found in other groups of insects such as crickets, katydids, grasshoppers, and cicadas. Stridulation is a form of communication within a species. In Bess beetles, both adults and larvae can produce sound via stridulation. Research has discovered 17 different sound signals of the Bess beetle, *O. disjunctus*, among adults and larvae (Reyes-Castillo and Jarman, 1980). All signals are used for communication relating to defense, group communication, and management of larvae, representing the most developed system of sound communication known in arthropods.

When you are out and about take the time to flip over a rotting log or peel back bark of a fallen tree. You might come across a family of Bess beetles doing their Bess beetle thing. Be sure to leave everything the way you found it so these beetles can keep on recycling.



Larva of a Bess beetle with a close up of the legs. Leg pairs 1 and 2 are normal sized, and pair 3 legs (inside white circle) are reduced in size. Legs 2 and reduced legs 3 have special structures which when rubbed together (stridulation) produce sound used for communication.
Photo by Lyle J. Buss, University of Florida



A tree-of-heaven, *Ailanthus altissima*, log showing the large galleries made by Bess beetle larvae as they work on decomposing the log.
Photo: M.J. Raupp, UMD

Weed of the Week

By: Kelly Nichols, UME-Montgomery County

Asiatic dayflower (*Commelina communis*), also called common dayflower, is an erect creeping annual found in damp or shaded areas in nurseries and landscapes. It is a monocot in the spiderwort family. Asiatic dayflower will have a fibrous root system and will often roots at the nodes. Leaves are lanceolate in shape, occurring with parallel leaf veins. The leaves will most often have hairs on both upper and lower sides. Leaves will be up to four inches in length, and from approximately one half to one and one half inch wide. Leaves will have no petiole and will clasp the stem, and hairs are often found in this region. Stems may grow to two and a half feet in length. Stems can root at the nodes when in contact with the soil or damp mulch. Flowers will be found on a long flower stalk, which arises from the area between the stem and the leaf axils. Each flower will have one white petal and two blue petals which will appear for only one day, thus its name.



Figure 1. Asiatic dayflower foliage.

Photo Credit: Bruce Ackley, The Ohio State University, Bugwood.org.

Control of Asiatic dayflower can be achieved using post-emergent herbicides including bentazon (e.g. Basagran); for landscape setting, glyphosate or other non-selective post products can be used. Use care in landscapes with post emergent products to avoid contact with desired plant species to avoid damage to desired plant species. Time mowing and/or weed whacking during flowering to prevent seed production.



Figure 2. Asiatic dayflower foliage and flower.
Photo Credit: Bill Miller, The Azalea Works



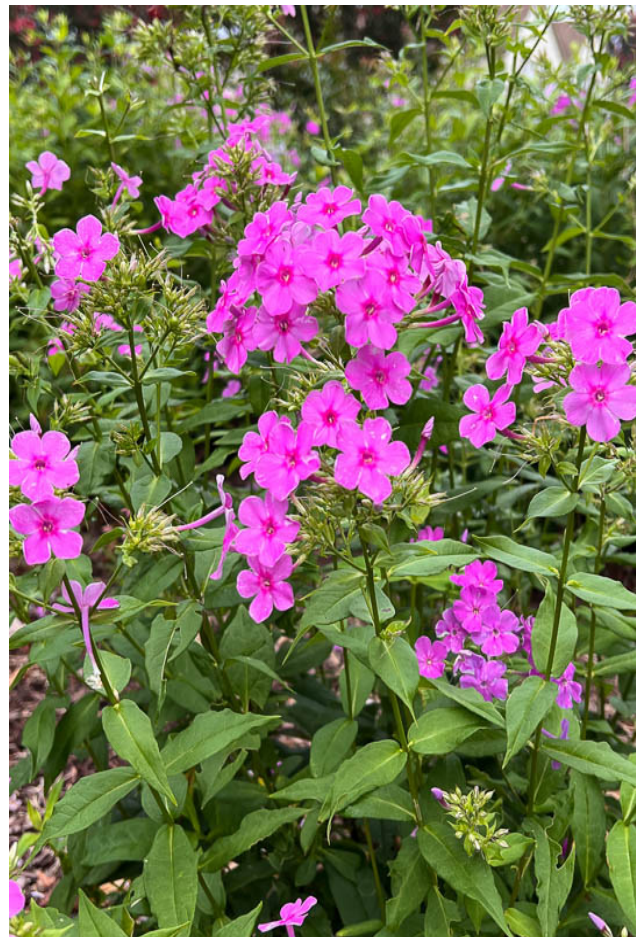
Figure 3. Asiatic dayflower flower next to a quarter for size reference. The two blue and one white petal can also be seen.

Photo Credit: Bill Miller, The Azalea Works

Plant of the Week

By: Ginny Rosenkranz

Phlox paniculata 'Ditomfra' Bubblegum Pink garden phlox is a native herbaceous clump forming perennial. These colorful mid-summer bloomers grow 12-24 inches tall and wide, thriving in full sun or very light shade with fertile, well drained soils and needs excellent air circulation. The species is very susceptible to powdery mildew so purchasing powdery mildew resistant varieties like 'David', 'Jeana', 'Bubblegum Pink', 'Shortwood', 'Katherine', 'Delta Snow', 'Peppermint Twist', 'Orange Perfection', 'John Fanick' will provide not only lovely flowers but clean, green foliage. Bubblegum Pink flowers bloom from July into early fall, providing almost 8 weeks of fragrant pink tubular florets that are densely packed on a terminal dome shaped cluster that is up to 6-8 inches tall. The clusters are tiered with the top florets blooming first and the next tier blooming afterwards. The tall stalks are covered with deep green 4-6 inch long leaves that are attached opposite on stiff stems. The whole plant billows with gentle breezes and the nectar rich flowers attract hummingbirds, butterflies and bees. Because of their height, most *Phlox paniculata* are placed in the back of the gardens, but they do mix well with early, mid, and late summer flowers and a combination of phlox of different colors including white, rose, red, lavender, purple, orange and bi-colors with the center 'eye' as a contrast. The colors can be soft pastels to brilliant vibrant colors. There are also compact varieties of *Phlox paniculate* that fit well into containers. Although the plants need well drained soils, they often need irrigation in the high heat of summer, and if possible, use soaker hoses rather than overhead irrigation. Besides powdery mildew, *P. paniculata* is susceptible to root rot, phlox plant bugs, and spider mites.



Phlox 'Bubblegum Pink' is a powdery mildew resistant cultivar.
Photos: Ginny Rosenkranz, UME

Pest Predictive Calendar “Predictions”

By: Nancy Harding and Paula Shrewsbury, UMD

In the Maryland area, the accumulated growing degree days (DD) this week range from about **2417 DD** (Martinsburg) to **3219 DD** (St. Mary’s City). The [Pest Predictive Calendar](#) tells us when susceptible stages of pest insects are active based on their DD. Therefore, this week you should be monitoring for the following pests. The estimated start degree days of the targeted life stage are in parentheses.

Japanese maple scale – egg hatch / crawler (2nd gen) **(2508 DD)**

Fern scale – egg hatch / crawler (2nd gen) **(2813 DD)**

White prunicola scale – egg hatch / crawler (3rd gen) **(3238 DD)**

Banded ash clearwing borer – adult emergence **(3357 DD)**

Tuliptree scale – egg hatch / crawler **(3472 DD)**

See the [Pest Predictive Calendar](#) for more information on DD and plant phenological indicators (PPI) to help you better monitor and manage these pests.

Degree Days (as of August 7)

Annapolis Naval Academy (KNAK)	2874	Baltimore, MD (KBWI)	2898
College Park (KCGS)	2891	Dulles Airport (KIAD)	2927
Ft. Belvoir, VA (KDA)	2904	Frederick (KFDK)	2863
Gaithersburg (KGAI)	2690	Greater Cumberland Reg (KCBE)	2599
Martinsburg, WV (KMRB)	2417	Millersville (MD026)	2751
Natl Arboretum/Reagan Natl (KDCA)	3217	Perry Hall (C0608)	2643
Salisbury/Ocean City (KSBY)	2651	St. Mary’s City (Patuxent NRB KNHK)	3219
Susquehanna State Park (SSQM2)	2690	Westminster (KDMW)	3002

Important Note: We are using the [Online Phenology and Degree-Day Models](#) site. Use the following information to calculate GDD for your site: Select your location from the map Model Category: All models Select Degree-day calculator Thresholds in: Fahrenheit °F Lower: 50 Upper: 95 Calculation type: simple average/growing dds Start: Jan 1

Entomology and IPM Class Offered at Night this Fall at Montgomery College

By: Stanton Gill

Build your diagnostic skills this fall by enrolling in the HORT 215 class entitled: **HORT 215 Integrated Pest Management and Entomology**. The class is via Zoom and meets each Thursday evening from 6:00 – 9:30 p.m. from the end of August to the middle of December. Lectures will be by adjunct Professor II Stanton Gill, with guest lecturers David Clement, Steve Black of Raemelon Farm, David Gill of the American Chestnut society, and lab assistance from Sheena O’Donnell.

To register for HORT 215 - Integrated Pest Management and Entomology (CRN 22918 and CRN 22919). For new students go to <https://www.montgomerycollege.edu/admissions-registration/register.html>. If you’re already a student or a returning student at MC, log into MyMC. *Students can take this course for credit or audit.*

If you have questions or need assistance regarding registration, please contact Stephen Dubik (240) 567-7803 steve.dubik@montgomerycollege.edu

Conferences

August 13, 2024

[IPM Diagnostic Session](#)

Location: CMREC, Ellicott City, MD

September 17 and 18, 2024

Cut Flower Program

Locations: Central Maryland Research and Education Center, Ellicott City, MD and locations in Howard County

September 18, 2024

Urban Tree Summit (Casey Trees and Montgomery Parks)

Location: Silver Spring Civic Center. To register please visit [Urban Tree Summit](https://urbantreesummit.org/) or <https://urbantreesummit.org/>

October 9, 2024

MNLGA Retail Day

Location: Homestead Gardens, Davidsonville, MD

December 5, 2024

Tech Day: Focus on Solar

Location: CMREC, Ellicott City

December 12, 2024

2024 Cultivating Innovation in Maryland's Agriculture and Technology Conference

Location: Crowne Plaza, Annapolis, MD ([Program and registration information](#))

CONTRIBUTORS:



Stanton Gill
Extension Specialist
sgill@umd.edu
410-868-9400 (cell)



Paula Shrewsbury
Extension Specialist
pshrewsb@umd.edu



Karen Rane, Retir
Plant Pathologist
(retired)



Chuck Schuster
Retired, Extension Educator
cfs@umd.edu



David Clement
Plant Pathologist
clement@umd.edu



Andrew Ristvey
Extension Specialist
aristvey@umd.edu



Ginny Rosenkranz
Extension Educator
rosnkranz@umd.edu



Nancy Harding
Faculty Research Assistant



Fereshteh Shahoveisi
Assistant Professor
fsh@umd.edu



Kelly Nichols
Extension Educator
kellyn@umd.edu

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