

Commercial Horticulture

July 12, 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

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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)

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Next Tech Day Set for December 5, 2024

By: Stanton Gill

For our next Tech Day for the commercial horticulture industry, we will emphasize solar systems. Since many of the newer tools and large equipment is moving heavily toward electric and battery usage, there will be a high demand on electric supply systems. This can only mean higher kilowatt charges coming down the road. If you are thinking ahead of the crowd, then a solar system would be worth your while to consider. We will visit 3 - 4 commercial horticulture operations using solar systems and have the owners explain the costs and pros and cons of each system. You can ask all the questions you need to help guide you. We will set up the complete schedule and registration this fall. Stay tuned.

August Extension Commercial Ornamental Horticulture Programs

August 5 - 8, 2024

[Drone School](#)

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

August 13, 2024 (afternoon)

[IPM Diagnostic Session](#)

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

Links for conference information are on the [IPMnet Conferences Page](#)

SPOTTED LANTERNFLY NEEDED FOR RESEARCH!

The Shrewsbury Lab is conducting research on spotted lanternfly (SLF) and need to collect large numbers of SLF (~300 or more). We need 4th instar SFL (red, white, and black bugs) and adults (when they become active). We will collect the SLF and bring the to our research site.

Email Emily Russavage (post doc in Shrewsbury Lab) if you have sites with large numbers of SLF that we can collect (erussava@umd.edu). THANKS!



Spotted lanternfly (mostly 4th instar) nymphs.
Photo: P.M. Shrewsbury, UMD

Japanese Maple Scale

By: Stanton Gill

We have crawler activity from Japanese maple scale in Sykesville. There are several long, overlapping generations of Japanese maple scale. Now is the time to apply Talus or Distance IGRs.

Look for purple Japanese maple scale crawlers to determine if it is time to treat with an IGR.

Photo: Suzanne Klick, UME



Powdery Mildew on Crape Myrtle

By: Stanton Gill and David Clement

We are getting in dozens of photos and emails reporting heavy powdery mildew damage on crape myrtle in 2024. USDA National Arboretum conducted extensive breeding work back in the 1960s through the 1980s to develop crape myrtles that were resistant to powdery mildew. Since then, many new cultivars have been brought into the nursery market and many are not resistant to powdery mildew.

David Clement and I would like your input. Please send us a list of crape myrtle cultivars that you are seeing with powdery mildew. We would also like to develop a list of cultivars that are not showing symptoms of powdery mildew. If you give us input, we will pull the list together and make it available to all nurseries and landscape companies.



Heavy infestation of powdery mildew on crape myrtle foliage.
Photo: Melvin Detweiler, Melvin's Lawns and Landscapes

Camphor Beetles

Jeff Davis is reporting camphor beetles causing heavy damage on sugar maples in New Jersey. The extreme heat is stressing trees and making them more susceptible to beetle infestations. Consider making a bifenthrin application at this time.



Camphor beetles infested sweet bay.
Photo: Suzanne Klick, UME

Chiggers Active in July – What to Do?

By: Stanton Gill

Chiggers are thriving with this hot weather, punctuated with heavy rainfall in 2024. We had a couple of e-mails last week on nursery owners being bitten by chiggers. Dealing with chigger bites is no fun and results in sleepless nights from the itching. If dislodged from the host, chiggers die quickly, but the irritation and itching continue for several days. You end up scratching into the wee hours of the night after an attack. If dislodged from the host, chiggers die quickly, but the irritation and itching continue until the body neutralizes the saliva and repairs the tissue damage. The fluid oozing from the wound solidifies into a hard “cap” which is distinct for chigger bites and not other arthropods. Spraying to control chigger populations in infested areas has limited effectiveness and gives temporary control of only a few days or weeks, depending on environmental conditions. Still, after you have been bitten many times, the tendency is to get revenge by spraying the area. Once the area is mowed, then chigger problems tend to drop down significantly.

So, get someone else to mow the area, preferably, someone you don't care for too much. Clothing treated with permethrin gives fairly good protection against chiggers biting the individual wearing the treated pants.

Chiggers avoid direct sunlight and normally will not infest areas that are mowed or otherwise well maintained. Mowed areas are not growing back quickly due to the extensive drought conditions.

Harlequin Bugs

Marie Rojas, IPM Scout, is finding a lot of harlequin bugs hanging out on dwarf *Catalpa speciosa* in Montgomery County. Harlequin bugs are generalist feeders found on a wide variety of herbaceous and woody plants. In cut flower operations, they are often found causing considerable damage to crops such as cleome and snapdragon. If you are growing ornamental cabbage and kale, harlequin bugs can be a problem on these plants, too.

Look for white spotting on foliage that turns brown. Control options include insecticidal soap, neem products, Acephate (Orthene), synthetic pyrethroids.

Harlequin bug on *Catalpa speciosa*.
Photo: Marie Rojas, IPM Scout



Chigger mite
Photo: Susan Ellis, Bugwood.org



Heat and Drought Encouraging Peach Tree Borer Attacks

By: Stanton Gill

It is hot in Maryland, and the drought is getting to be very extensive. It is impacting a lot of plant material in landscapes, nurseries, and even Christmas tree operations. We are receiving several emails with pictures attached of stressed plants. It may be hot here, but Las Vegas is worst off. It reached 118 °F last week. NOAA reports that the Atlantic Ocean in July is at temperatures it normally does not reach until August. This is creating perfect weather for heat waves and hurricanes. Hurricane Beryl that rampaged through the south reached level 5, the highest category, with winds up to 160 mph. These high winds beat the earlier record set in 2005.

Peachtree borer damage in July

Back to what this heat impact is having on plants. One of the plant photos sent to me this week was a peach tree with gobs of gelling sap on the bark. This is the peach tree reacting to the activity of the larvae of the clearwing moth called the peachtree borer, *Synanthedon exitiosa*. Three weeks ago, we published a report that we were picking up adult males in our pheromone traps. Preventative sprays of Altacor to trunks would have helped prevent larvae from entering the cambial tissue of the tree. The clearwing moth borer will lay eggs on stressed trees, and I generally do not see it infesting healthy, vigorously growing peach and plum trees.

We are seeing damage on cherry laurel plantings, again damaging stressed plant material. For this ornamental plant, Mainspring could have been used as a preventative trunk application or permethrin applied to the trunk and main branches.

Not much can be done now we are into July. If the plant is somewhat healthy, I have seen trees recoup, if cambial damage is not extensive.



Peachtree borer damage on peach.
Photos: Stanton Gill, UME



Luke noted, " I'm seeing a lot of heat stress on herbaceous and woody plants alike. This Nandina in Baltimore City was definitely feeling the heat today!"

Photos: Luke Gustafson, The Davey Tree Expert Company

Spider Mites

With the hot temperatures and so little rain this summer, spider mites are very active and causing a lot of damage. Marie Rojas, IPM Scout, is reporting that, "Spider mites are high on many species of oaks, *Taxodium distichum*, as well as Green Giant arborvitae." Todd Armstrong, The Davey Tree Expert Company, found a hedge of burning bush euonymus infested with spider mites in Lutherville on July 10. Spider mite feeding causes heavy yellow stippling damage to foliage. Damaged tissue can turn yellowish brown over time. Registered miticides such as Avid can be used for control if necessary. When using horticultural oil, be sure to get good coverage of the undersides of the foliage. Avoid using oil during periods of high temperatures above 90 °F, hot and humid periods, and on wilted or stressed plants (due to drought for example)..



Burning bush euonymus is a plant we often receive reports of being infested with spider mites.
Photo: Todd Armstrong, The Davey Tree Expert Co.



Heavy spider mite damage on *Quercus x robur* 'Long'.
Photo: Marie Rojas, IPM Scout

Leafslug Sawfly on Blackgum

Marie Rojas, IPM Scout, found blackgum leafslug sawfly on *Nyssa sylvatica* in a nursery in Frederick County this week. The larvae skeletonize the leaves. Heavy infestations can cause early leaf drop.



Blackgum leafslug sawfly larvae skeletonize leaves.
Photo: Marie Rojas, IPM Scout

White Prunicola Scale (WPS)

By: David Phan, UME Summer Intern

We are currently in the second generation of white prunicola scale, so you may start to see some build-up of “flocking” on cherry laurel, *Prunus* spp., hollies.. etc. The “flocking” is the build-up of male WPS covers. At this time, contact pesticides will be unsuccessful because settled instars have already begun to create their protective cover. The next peak crawler emergence is typically at around 3238 degree days, and we are in the 2000s. Smaller trees may benefit from systemic or IGR at this point, but the best course of action would be to scout for crawlers and treat them.



Many male white prunicola scale are covering this cherry laurel branch.

Photo: Suzanne Klick, UME

Barklice

Nancy Woods found barklice (*Cerastipsocus venosus*) on her crape myrtle a few weeks ago. These Psocids show up in hot humid weather, usually after a rain incidence. They feed on lichens, decaying organic matter, dead insects, molds, fungi, and pollen. At times, they show up in large numbers on tree trunks. Barklice do not feed on living plant material, so control is not necessary.



Barklice adults were found on the trunk of crape myrtle.

Photo: Nancy Woods

Spotted Lanternfly Update – Start of adult activity

By: Paula Shrewsbury

Spotted lanternfly (SLF) continue to move through their developmental stages. Insects are cold blooded animals so these hot days resulting in faster development of SLF. SLF have incomplete development. Their life cycle includes the egg stage, 4 nymphal (immature) instar stages, and the adult stage. In the last report there were mostly 3rd and 4th instar nymphs being found. On July 1st (almost 2 weeks ago) Emily Russavage (Shrewsbury lab, UMD) reported the first adult which she observed in Riverdale Park, MD. Since then, she has seen several adults in Columbia, MD (July 11th) and a few adults in Bluemont, VA (July 11th). On July 10th, Lucas Fisher from BrightView reported a SLF adult in Laurel, MD. On July 12th, Todd Armstrong from The Davey Tree Expert Company found adults (and many 4th instars) on an *Ailanthus* tree in Reisterstown, MD.

Although we are seeing SLF adults, the numbers are still relatively low. We are still receiving reports of 3rd and 4th instar nymphs from several locations including 4th instars in Frederick, MD on Virginia creeper (David Keane, Howard County Recreation and Parks); 4th instars in Clarksville, MD (Suzanne Klick, UME); 4th instars in Cloverly (Wayne Noll); 4th instars (Heather Zindash); mostly 4th instars in Columbia, MD (Emily Russavage, UMD); and 3rd and 4th instars in Bluemont, VA at somewhat high elevations where is a little cooler (Emily Russavage, UMD).

If you see SLF adults, please let Stanton (sgill@umd.edu) and I (pshrewsbury@umd.edu) know.



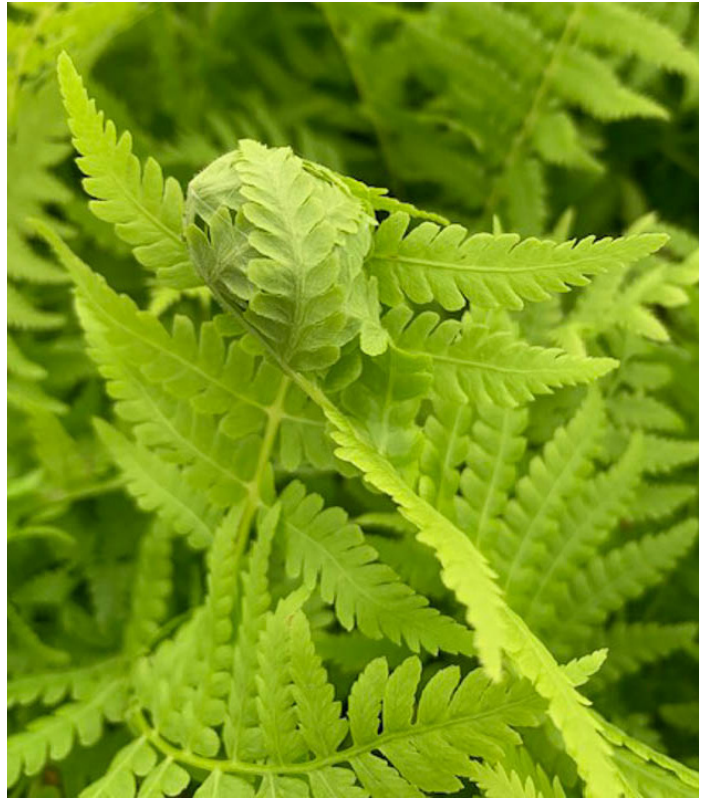
Two spotted lanternfly adults found on July 11, 2024 in Columbia, MD. feeding on the edge of a tree wound on tree-of-heaven.
Photo: E. Russavage, UMD



Many fourth instar spotted lanternflies are covering this *Ailanthus* tree trunk.
Photo: Todd Armstrong, The Davey Tree Expert Company

Fern Leaf Folder Activity in Hoop Houses

Heather Zindash, The Soulful Gardener, found many fern leaf folder adults and some nests in ferns in a hoop house and nursery starting last week. The caterpillar rolls itself in the tips of the fronds where it pupates. Heather noted that they are "releasing *Trichogramma* wasps to target eggs in the hoop houses and using Btk when needed for early instar caterpillars." Heather also mentioned, "We have had very little damage using this strategy for the last couple years." This is one of the pests we tested Acelepryn on when it was still a number and alphabetic designation. Acelepryn worked well compared to Bt.



Look for folded over balls of fern foliage as indicator of fern leaf folder caterpillar activity.

Photo: Heather Zindash, The Soulful Gardener

Lace Bugs

Heather Zindash, The Soulful Gardener, found lace bug adults, nymphs, and eggs on the underside of a white oak in Clarksburg. The feeding by oak lace bugs on the undersides of leaves causes yellow spots on the top of the leaves. Damage can be unsightly, but control is usually not necessary.

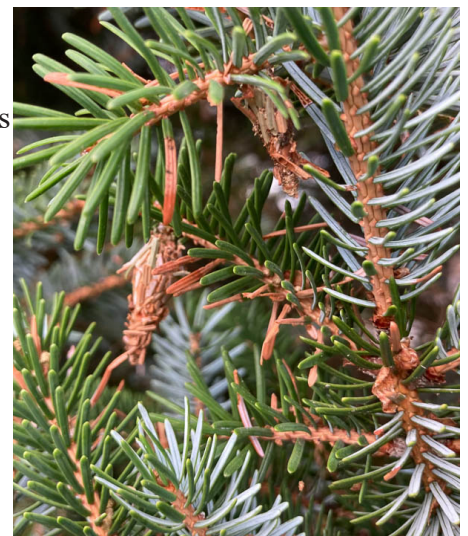


All stages of oak lacebug are present on the underside of this white oak leaf.

Photo: Heather Zindash, The Soulful Gardener

Bagworms

We continue to receive reports of bagworm activity. Elaine Menegon, Good's Tree and Lawn Care, found active bagworms in Hummelstown, PA on July 10. The size of the larvae will vary depending on your location and time of egg hatch. The smaller the larvae, the more effective the control.



Bagworms are still active this week.

Photo: Elaine Menegon, Good's Tree and Lawn Care

It's That Scarab Beetle Time of Year

By: Paula Shrewsbury

In the last few weeks, I have seen adult activity of almost every adult scarab beetle (family Scarabaeidae) that are common in the mid-Atlantic area.

The immature stages of scarab beetles are known as white grubs. The amount of damage caused by adult and immature scarabs varies with species, and other factors such as environmental conditions and management practices. Of the scarab beetle adults, Japanese beetles are usually the most damaging. That's not to say, however, that other scarab adults can't be particularly abundant and damaging some years. Let's review a bit about the adults of the different common scarab beetles. To see pictures of adult scarab beetles that frequent our area, go to: <http://ohioline.osu.edu/hyg-fact/2000/pdf/2510.pdf>



Japanese beetle adult and feeding damage.
Photo: P.M. Shrewsbury, UMD

Japanese beetle and Oriental beetle adults are relatively similar in their life cycles and management. We have had reports of moderate Japanese beetle activity so far this season. Japanese beetle adults skeletonize foliage and can cause significant damage to many species of ornamental plants (over 300), most commonly linden trees and roses. Oriental beetles are usually less conspicuous and damaging than Japanese beetles. I have seen low numbers of Oriental beetles for at least 3 weeks already. I often find them feeding on the flower petals of many herbaceous plants. They seem to particularly like Shasta daisies and cone



Oriental beetle feeding (and pooping) on coneflower flowers.
Photo: P.M. Shrewsbury, UMD

flowers. Oriental beetles usually do not warrant control. Japanese beetles often require control measures.

Control: Research has shown that once Japanese beetles start feeding on plants the plant releases a chemical cue that calls in other Japanese beetles to the plant. A good practice is to stop Japanese beetles as soon as you see them, before they do much feeding damage and attract their friends. If there is relatively small amounts of skeletonization damage on leaves, I suggest you remove those leaves. If you do not have “lots” of plants

you can try hand removing beetles. I suggest a 16 oz Solo type plastic cup half filled with water and a teaspoon or so of dish liquid. Place the cup under the leaf the beetles are on because when you go to grab the beetles they usually “drop” from the plant (it might take some practice to get good at this game). Chemical controls are also available. Products with Neem are classified as low risk, short residual products. Studies have found these are affective, but they usually have to be applied every 4 or so days. Other options are the systemics Acelepryn or Mainspring. Acelepryn has been found to be affective for Japanese beetle adult control 3-4 weeks and is listed as a “reduced risk” pesticide by EPA. It has been shown to not be toxic to honey bees. Mainspring does have a bee warning on the label. There are also other labeled products available. Be sure if you are considering applying pesticides to flowering plants, or areas where flowering plants are nearby, to read the labels carefully. It is often required that you wait until after flower to apply many pesticides to protect pollinators or natural enemies.

Green June beetle adults are just starting to be active this last week or so. I have seen them in Boonsboro, MD and Richmond, VA. Green June beetles are large metallic green and gold scarab beetles. They are often seen swarming around trees (often those with thin skinned fruits that the beetles feed on) or over turfgrass where they are likely looking for mates or a site to lay their eggs. As adults, these beetles seldom warrant control measures, except in golf course environments due to their behavior of burrowing in the soil.

Asiatic garden beetle adults are tricky little guys. About a month ago I started to see significant feeding damage on the foliage of my Buddleia (butterfly bush) and sunflowers, but saw no insects on the plant. From past experience, research and monitoring, I knew it was Asiatic Garden beetles causing the damage. Asiatic



Green June beetle adult feeding on cherry.
Photo: P.M. Shrewsbury, UMD



Asiatic garden beetle feeding on butterfly bush at night.
Photo: P. Shrewsbury, UMD

garden beetle adults are nocturnal – only active at night. During the day they hide in turf and grassy areas near their food plants and largely go unnoticed. At night temperatures below 70°F the beetles fly very little. On warmer nights, like we have had many of lately, you can see hundreds of beetles flying around and feeding on plants, especially in July and August. Most interestingly, they usually become active around 9:30 p.m. or so. Their time of activity is that specific. These beetles are also attracted to lights so large numbers can accumulate at outdoor lights. Asiatic garden beetle adults feed on about 100 species of plants but seem to like butterfly bush, boxelder, cherry, sunflower, and more. They do not skeletonize like Japanese beetle. Asiatic garden beetle often defoliates the majority of leaves leaving behind only the mid-vein. Their occurrence in high numbers is patchy and localized so they often do not warrant control (unless you have or are managing plants they like and the beetles are in that area). Reducing weedy habitat can reduce Asiatic Garden beetle densities. Hand collecting the beetles and dropping them into a cup of soapy water should work on these beetles too. Otherwise, management is similar to that of Japanese beetle adults.

Masked chafer beetle adults have been showing up recently. There are two species of masked chafers that occur in this area, the northern and southern masked chafers. They have similar life cycles. Adults are also nocturnal and have similar activity as the Asiatic Garden beetle. The adult masked chafers, however, don't feed so no worries about the adults of this one. I often see the white grubs of masked chafer in the soil / root zone of plants in landscape beds and under trees, usually soils with a good organic content. I have also seen very high densities of chafer grubs in soils with no signs of damage to the trees.

Orange-striped Oakworms

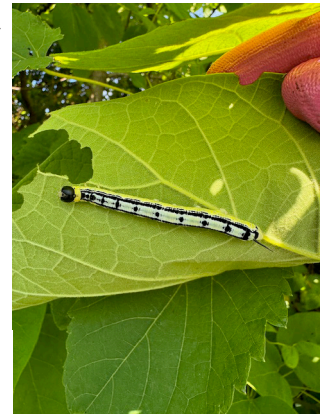
Marie Rojas, IPM Scout, reported that orange-striped oakworms were hatching out on July 11 in Montgomery County. Marie noted that she found them on several oak species, including the hybrid oak "Skinny Genes". Early instar larvae feed gregariously and skeletonize the leaves. Older larvae are defoliators and eat all but the mid-rib. Look for eggs on the underside of foliage or young caterpillars on oak, especially red oak, as well as birch, hickory and maple. If necessary, use Bt for small larvae. Look for caterpillars that have been parasitized by wasps.



There are no stripes on the early instars of orange-striped oakworms.
Photo: Marie Rojas, IPM Scout

Catalpa Sphinx Moth Caterpillars

Heather Zindash, The Soulful Gardener, is finding catalpa sphinx moth caterpillars (aka catalpaworms) on *Catalpa* this week. Heather noted that there were some early instars and some nice large older instars. We will see activity of these caterpillars throughout the summer.



Catalpa sphinx moth caterpillars will be active throughout the summer
Photo: Heather Zindash, The Soulful Gardener

Japanese Beetles

Mary Ramsay, Howard County Master Gardener reported having numerous Japanese beetles on her common milkweed flowers. Mary commented, "I have not had this many in the 23 years I've been in the county. They appear to be mating. I am not seeing them on other blooms at present."

Wasp Parasitoids

Dave Freeman, Oaktree Property Care, found an adult wasp parasitoid in Mclean, VA this week..It was hanging around a group of eggs.



A cool find - a wasp parasitoid - likely laying its own eggs into this cluster of eggs.

Photo: Dave Freeman, Oaktree Property Care

Beneficial of the Week

By: Paula Shrewsbury

Heat, sweat, and sweat bees

The weather has been a little on the warm side these past few weeks and we have all been sweating more than usual. Therefore, I thought a story about sweat bees (Hymenoptera: Halictidae) would be timely. The name “sweat bee” is somewhat misleading. These bees don’t really sweat of course, but some [sweat bees \(a.k.a. halictid bees\), alight on humans and imbibe salt-rich perspiration](#), hence they are called sweat bees. Beware, as you probably have already experienced, when a sweat bee is feeding on sweat behind your knees unknowingly to you, and you bend down, you will often feel the small sting of the female bee as she tries to defend herself.

Fortunately, along with this heat, an array of beautiful flowers are in bloom in full force attracting lots of insect visitors, especially bees, for us to enjoy. In observing flower beds, bees in the family Halictidae are frequently observed gathering pollen from a diversity of flower species and are known to be very important pollinators. Female [halictid bees gather and store huge loads of pollen in pollen baskets, called corbiculae, on their hind legs](#), which she brings back to her nest. The amount of pollen she can store in her corbiculae is quite impressive as seen in the images and above video.

Halictid bees are interesting because different species range in their level of “sociality”. A particular species can be solitary where every female care for her own young, like many mason bees that we have to discussed previously, while other species may be eusocial (truly social) with queens producing non-reproductive daughters, known as worker bees, tasked with foraging for nectar and pollen and tending the brood of their mothers, like honey bees.

Today, I will discuss a halictid bee in the genus *Halictus*, that I observed in abundance on coneflowers this week, likely *H. ligatus* or its sister species *H. poeyi*, two species that are difficult to tell apart. These two species are very common in North America, occur in diverse habitats from urban to disturbed environments, they are generalists and gather pollen from a diversity of plants from flowering weedy plants to flowers in managed



Halictid bees (a.k.a. sweat bees) are some of the most beautiful bees with their metallic coloration.

Photo: M.J. Raupp, UMD



Plant flowers to attract beautiful sweat bees like *Halictus* spp. (photo by P.M. Shrewsbury, UMD)

and natural areas, and they live in burrows they dig in the ground. *Halictus ligatus* / *poeyi* are considered to have a semi-social (=halfway social) or primitively eusocial lifestyle. This means they have some level of social organization and cooperation but not to the extent of honeybees. Semi-social bees, usually sisters, will work together to prepare a shared ground nest which will contain several galleries with nest cells to which they bring back pollen and nectar, and then lay an egg. Usually smaller individuals become the workers (nest builders and food foragers) and others, larger individuals, become the egg layers. The semi-social mothers and aunts never meet the offspring that they provided food and a nest. They die after the nests are built and provisioned. There is more than one generation per year. Females, known as foundress bees, will overwinter and start new nests next season.



This patch of cone flowers (Echinacea) attracts a diversity of pollinators and natural enemies.
Photo: M.J. Raupp, UMD

To enjoy these delightful native pollinators, consider letting part of your lawn go a little thin in a sunny spot to provide nest sites for these bees. In addition to *Halictus*, other sweat bee species are generalist pollinators and a diversity of flowering plants provide food for them. Design landscapes and nurseries with halictid bees and other pollinators and natural enemies in mind – incorporate plants that provide season long pollen and nectar sources.

Weed of the Week

By: Kelly Nichols, UME-Montgomery County

Despite the hot, dry weather, a few pokeweed plants in my flower beds seem to be thriving. Pokeweed (*Phytolacca americana*) is found throughout the eastern United States in many areas, including fields, mulched areas, roadsides, under power lines, and edges of wooded areas. Pokeberry is another common name for pokeweed.

As a perennial, pokeweed plants can germinate from existing roots as well as from seeds (Figure 1). Seedlings have long, somewhat narrow leaves that come to a point at the end. Mature leaves are large, alternately arranged on the stem, smooth, and often have a reddish color on the underside. Leaves can be longer than fifteen inches and are usually about one third as wide as they are long (Figure 2.) Right now, pokeweed plants are at the flowering stage (Figure 3). Noticeable dark, purple berries will soon begin to develop (Figure 4).



Figure 1. Pokeweed seeds germinating on the left, and regrowth from established roots is on the right.
Photo: Kelly Nichols, UME Montgomery County

Pokeweed can grow to heights of nearly ten feet if allowed. It produces a large deep taproot that can be three inches or more in diameter and is tan to white in color. Very mature roots can have several stems growing out of it. The stems are most often hollow, smooth, and reddish to deep purple in color. When allowed to grow to its full potential, the stems can reach diameters of four inches. The stems are branched on the upper portion of the plant. The roots are the most toxic part of the plant; however, all parts of this plant contain saponins and oxalates which are toxic when ingested with improper preparation. Each berry contains approximately 9 seeds, which adds up quickly with the number of berries one plant can produce! Birds can eat the berries without issues; this is also how the plant can spread. Pokeweed seeds can occasionally be found in vegetable seed.

Mowing can be used to control pokeweed; as a perennial, it does not like frequent mowing. Preventing seed production is important to prevent the growth of additional plants; however, it is also important to control the root as well. Herbicide options in open areas include 2,4-D, dicamba, and Garlon 4; these are all selective products that can be used to control pokeweed. **Caution with these products needs to be considered as they can potentially drift or volatilize and damage desired plant species.** Prizefighter and Avenger can be used to control pokeweed when the plant is immature. Glyphosate can be used also but is non-selective and can damage any plant material it comes in contact with; however, volatilization is not an issue as with other products. Be aware that exposed roots and suckers of desired plants can uptake these products and cause damage.



Figure 2. Mature pokeweed foliage.
Photo: Robert Vidéki, Doronicum Kft., Bugwood.org.



Figure 3. Pokeweed flowers with small, green, immature berries beginning to form.
Photo: Karan A. Rawlins, University of Georgia, Bugwood.org.



Figure 4. Pokeweed berries.
Photo: Kelly Nichols, UME Montgomery County

Plant of the Week

By: Ginny Rosenkranz

Acanthus mollis 'Oak Leaf' is an herbaceous perennial also known as Bear's breeches and thrives in fertile, well drained soils, preferring morning sun and late afternoon shade. Plants are cold tolerant in USDA zones 7-10 and deer. The glossy dark green oak shaped leaves are deeply lobed with soft spines, growing up to 10 inches wide and 16 inches long, forming a mound of basal foliage about 2-3 feet wide. White 1-3 inch tubular flowers can have rose colored veins and are hooded by spiny purple bracts that bloom from May to July. The flower spike can grow 3-5 feet tall and the flowers are attached in vertical rows opposite each other. Flowers mature into green oval capsules after pollination. These are the leaves that inspired the Corinthian columns leaf motif in Greek and Roman art. Pests can include powdery mildew, and both slugs and snails can create holes in the foliage. Once established the Bear's breeches can spread by rhizomes aggressively.



Flowers and foliage of *Acanthus mollis* 'Oak Leaf' in the landscape.
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 **1643 DD** (Martinsburg) to **2318 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.

Pine needle scale – egg hatch / crawler (2nd gen) (**1561 DD**)

White prunicola scale – egg hatch / crawler (2nd gen) (**1637 DD**)

Obscure scale – egg hatch / crawler (**1774 DD**)

Spotted lanternfly – egg laying (**1825 DD**)
 Orangestriped oakworm – egg hatch / early instar (**1917 DD**)
 Magnolia scale – crawler (**1938 DD**)
 Fall webworm – egg hatch / early instar (2nd gen) (**1962 DD**)
 Maskell scale – egg hatch / crawler (2nd gen) (**2035 DD**)
 Euonymus scale – egg hatch / crawler (2nd gen) (**2235 DD**)
 Mimosa webworm – larva, early instar (2nd gen) (**2260 DD**)
 Japanese maple scale – egg hatch / crawler (2nd gen) (**2508 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 July 10)

Annapolis Naval Academy (KNAK)	2034
Baltimore, MD (KBWI)	2026
College Park (KCGS)	2014
Dulles Airport (KIAD)	2079
Ft. Belvoir, VA (KDA)	2043
Frederick (KFDK)	2001
Gaithersburg (KGAI)	1871
Greater Cumberland Reg (KCBE)	1796
Martinsburg, WV (KMRB)	1643
Millersville (MD026)	1914
Natl Arboretum/Reagan Natl (KDCA)	2303
Perry Hall (C0608)	1833
Salisbury/Ocean City (KSBY)	1846
St. Mary's City (Patuxent NRB KNHK)	2318
Susquehanna State Park (SSQM2)	1874
Westminster (KDMW)	2144

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

Conferences

August 5-8, 2024

[Drone School](#)

Location: CMREC, Ellicott City, MD

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

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](#)

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

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Photos are by Suzanne Klick or Stanton Gill unless stated otherwise.

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