

In This Issue...

- [June programs](#)
- [Fire blight](#)
- [Viburnum clearwing borer](#)
- [Fall webworms](#)
- [Roseslug sawflies](#)
- [Beech leaf disease](#)
- [Spotted lanternflies](#)
- [Anthracnose diseases](#)
- [Frost ring on apple](#)
- [Invasive thrips in Delaware](#)
- [Gall aphids and witch hazels](#)
- [Volutella blight](#)
- [Penn State fruit disease update](#)
- [Reminder-Diagnostic Lab](#)
- [Ambrosia beetle update](#)
- [Exobasidium galls request](#)
- [Crapemyrtle bark scale](#)
- [Bagworm hatch](#)
- [Spittlebugs](#)
- [Boxwood spider mites](#)
- [Rove beetle](#)
- [Plant bug on maple](#)
- [Hyperaspis lady beetles](#)

Beneficial of the Week: Two-spotted predatory stink bug

Weed of the Week: Plantain species

Plant of the Week: Hairy beardtongue (*Penstemon hirsutus*)

[Pest Predictive Calendar](#)

[Phenology](#)

[Conferences](#)

**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 sklick@umd.edu

Coordinator Weekly IPM Report:

Paula Shrewsbury, Professor and Extension Specialist in Ornamental and Turf IPM, Department of Entomology, pshrewsbury@umd.edu

Regular Contributors:

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

Disease Information: David Clement (Extension Specialist) and Ana Fulladolsa (Plant Pathologist and Director, UMD Diagnostic Lab)

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

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)

June 17, 2025 IPM Scouts' Session

1:00 - 3:00 p.m. (check-in starts at 12:30 p.m.)

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

Program to diagnose insect, disease, and cultural problems on greenhouse, nursery, cut flower, and landscape plants. Bring samples for help with identification of plant problems. The program will focus on how to diagnose plant problems. Microscopes will be available for looking at samples. Paula Shrewsbury, Andrew Ristvey, and Dave Clement will be available to answer questions and provide additional information.

[To register via Eventbrite](#)

To register via check, send check payable to University of Maryland to June 17 IPM Session, 4240 Folly Quarter Road, Ellicott City, MD 21042.

Stanton A. Gill Symposium

June 24, 2025

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

Co-Sponsors: University of Maryland Extension and Maryland, Nursery, Landscape, and Greenhouse Association (MNLGA)

MNLGA is handling [the registration](#) for this symposium.

Fire Blight

By: David Clement and Ana C. Fulladolsa

Fire blight is a serious bacterial disease of plants in the rose family. The most commonly damaged plants in the landscape are apple, cotoneaster, firethorn, hawthorn, quince, and pear (including Bradford pears). However, the list of susceptible plants includes over 130 plant species. Additional plants that can be infected include chokeberry, kerria, photinia, serviceberry, and spirea.

The first symptoms usually start on the blossoms as they quickly droop, shrivel or turn brown. The disease progresses from the blossoms into the twigs and branches. The very tips of the branches often droop or characteristically curl over to give a hooked appearance. The affected leaves turn a dark brown to black and remain attached to the branch. This gives the appearance of scorching as if by fire. With few exceptions, the disease moves more slowly in woody tissue and often moves down to the base of a branch where it forms a lesion or canker. The color of the infected wood beneath the bark is often a reddish-brown. The most damaging cankers are those formed on the main stem or base of the plant since they often girdle and kill the plant. During wet weather droplets of bacterial ooze form on the surface of cankers and can be spread by wind, rain, birds, humans or insects to other plants. The most common insects that spread the disease are pollinators such as bees and flies. The disease-causing bacteria overwinter at the margins of cankers and become active again in the spring.



Brown to black leaves still attached to a branch with a hooked appearance.

Photo: Ana C. Fulladolsa, UMD

Disease management often involves selecting resistant plant varieties. Avoid cultural practices, such as over-fertilizing, that encourages excessive succulent growth, which is more susceptible to infection. Fungicides that contain copper can be applied at bloom to slow down infections. Infected branches should be pruned 8-12 inches below any visible symptoms. Wait for dry weather and don't prune infected shoots back to a healthy branch. Leave a 4-5 inch stub that can be pruned off over the winter when the disease is dormant. The recommended type of pruning for this disease is called [Ugly Stub Pruning](#). Remove pruned branches from the area and discard them.

Viburnum Clearwing Borer

By: Paula Shrewsbury

Damage to viburnum by clearwing moth borers (Lepidoptera: Sesiidae) was reported on viburnums in landscapes in Chester County PA last week. There are two species of clearwings that attack viburnum, the viburnum clearwing borer, *Synanthedon viburni*, and the lesser viburnum borer, *S. fatifera*, also referred to as viburnum crown borers. They are found through most of the eastern U.S. In addition to attacking viburnum species, they also are known to attack currant, raspberry, and gooseberry.

The larva (caterpillar borers) bore into the cambium around the soil line from several inches below the soil to as high as 18 inches above the soil line. Below ground feeding results in girdling at and below the crown of the

shrub, and attacks above ground result in stems that are gnarled and scarred. Feeding by viburnum clearwing borers can severely damage or kill the host plant. Viburnum clearwing borers overwinter as larvae under the bark of their host.

Around May, the larvae pupate and emerge as **adults in June**. Like other clearwing borers they are day fliers and wasp mimics. Males find female moths using pheromone cues. Females lay eggs near wounds. When eggs hatch, the larvae bore into the bark down to the cambium and inner bark where they feed. There is one generation per year. Monitor viburnums for damage now. Adult emergence usually happens in June. To determine adult flight, look for shed pupal skins at the damage point or a pheromone trap can be hung in early May (pheromones for clearwing borer and sticky traps can be purchased commercially).

Recommendations:

Cultural - Viburnum clearwing borers are attracted to stressed plants, so implement practices to avoid plant stress. Prevent injuries or wounds to the crowns, trunks and roots.

Biological – Beneficial nematodes (*Heterorhabditis bacteriophora*) can be applied as a soil drench to target larvae in crown area and roots.

Chemical - Best control is a preventative protective treatment that should be timed to target when eggs are hatching and begin to bore into the wood, which usually begins about 10 or so days after catching the first moths in pheromone traps. The reduced risk insecticide chlorantraniliprole is labeled against clearwing borers. Residual insecticide (ex. pyrethroid) can also be used. Insecticides should only target the area around the crown and up to 18”.

More information can be found at:

<https://mortonarb.org/plant-and-protect/tree-plant-care/plant-care-resources/viburnum-crown-borers/#management>

<https://hyg.ipm.illinois.edu/pastpest/200108c.html>



Damage to viburnum from viburnum clearwing larvae boring and feeding near the crown of the plant. Note the empty pupal cases sticking out of the damaged area indicating that adult moths are emerging.

Photo: David Parsons, University of Wisconsin, Bugwood.org

Fall Webworm 1st Generation Are Active

By: Paula Shrewsbury

On Tuesday May 20th, Marie Rojas (IPM Consultant) observed a small, silken tent (a.k.a. nest) with early instar first generation fall webworm (FWW, *Hyphantria cunea*, Lepidoptera: Erebidae) caterpillars in Beallsville, MD (see image). There are two generations of FWW a year with **first generation caterpillars emerging in May around 1142 DD** and the **second generation are active around August (1962 DD)** through October. The first generation of this caterpillar tends to be small and often goes unnoticed, while the second is usually larger and much more noticeable. FWW caterpillars are known to feed on over 100 species of deciduous trees in natural and urban forests. The most common host trees are walnut, mulberry, hickory, sweet gum, willow oak, linden, ash, apple and other fruit trees.

Adult moths are about ¾" long and the wings are white with black spots. The caterpillars reach only ~1" when in their last instar. Interestingly, there are two color forms of larvae: one is yellowish-white with a black head and the other is brown with a red head. Both color forms have pairs of black tubercles that go down their back (dorsal side) and they are covered with long, grayish hairs.

FWW produce fine silken tents that cover the terminal ends of the branches. These gregarious caterpillars feed on foliage inside the tents and enlarge the tent as they grow and need more foliage. The tents can become quite large and unsightly, and the old tents often hang on trees through the winter. Densities and damage by FWW vary from year to year. In most years FWW do not cause enough damage to reduce tree health and warrant control measures, although the silken tents can be aesthetically displeasing. I have seen years where entire hillsides dominated by walnut that appeared covered in webbing, whereas two years later there were very few webbed tents. There are over 75 species of predators and parasitoids reported to attack this native caterpillar and are likely regulating FWW populations in most areas.

Recommendations: Physical control is the most effective and environmentally sound. Scout for silken tents on preferred host trees and when found you can prune out the tents (easy since tents are on the terminal ends of branches), or you can physically rip open the tents knocking the caterpillars to the ground and exposing them to natural enemies. If populations are high and physical control is not feasible, then chemical applications targeting the early instar caterpillars with products containing *Bacillus thuringiensis*

var. kurstaki (biopesticide), horticultural oil, tebufenozide (IGR, biopesticide, OMRI listed, ex. Confirm), azadirachtin (IGR, botanical, some products are OMRI listed), or other products labeled for caterpillars.



A small, silken tent with early instar (likely 1st instar) fall webworm caterpillars (first generation) found this week in Montgomery County MD. Photo: Marie Rojas, IPM Scout



Note the characteristic position of fall webworm tents on the terminals of the branches. This is a large tent that was seen at the end of the summer (2nd generation).

Photo: M.J. Raupp, UMD

Roseslug Sawflies

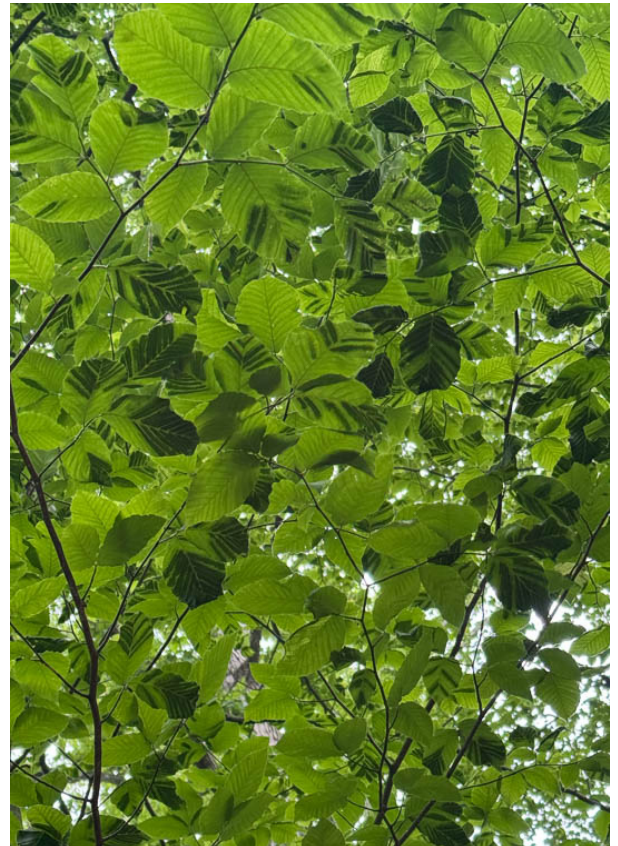
Luke Gustafson, The Davey Tree Expert Company, found roseslugs on May 22 in Catonsville. Monitor roses closely for damage and active sawflies. Bristly roseslug sawfly and curled roseslug sawfly are the two species with multiple generations and will be found on plants throughout the summer. See the [May 16th IPM report for more information](#).



Two species of roseslug sawfly will continue to be active through the summer.
Photo: Luke Gustafson, The Davey Tree Expert Co.

Beech Leaf Disease

Andy Kness, UME-Harford County, sent photos of beech leaf diseases from samples in Harford County. Andy noted that he has received a few calls about beech trees this spring. See more information on this disease in the [May 9th IPM report](#).



Beech leaf disease symptoms on a tree in Harford County.
Photo: Andy Kness, UME-Harford County

Spotted Lanternfly

Spotted lanternfly nymphs are active throughout the area. Joni Desherow, Fine Landscapes Limited, found them on bittersweet in Western Loudon County, VA on May 15. Kevin Bosch found them on May 18 on three of his 100 rose bushes. He noted that when they are on a bush, they are heavy infestations.

Anthracnose Diseases of Sycamore, Oak, Beech and Maple

By: D.L. Clement, Ana C. Fulladolsa, and K. Rane

It's that time of year when anthracnose disease symptoms are beginning to be observed on common landscape trees. For the most part each tree has its own fungal anthracnose pathogen, however oak and beech share the same pathogen. Anthracnose fungi produce asexual spores (conidia) within pads of fungal tissue known as acervuli. These are visible within infected tissue with a hand lens. Initial infections by anthracnose fungi are favored by cool, wet conditions during bud break. Foliar symptoms typically extend along the veins and sometimes cause marginal lesions. These pathogens overwinter in killed buds, twig cankers as well as vein lesions on fallen leaves where they initiate spring infections. Healthy trees that are defoliated early are often able to flush a new set of foliage and recover.

Sycamore anthracnose is caused by the fungal pathogen, *Apiognomonia veneta*, and is most severe on American sycamore while the London planetree cultivars, *P. × acerifolia*, exhibit varying degrees of resistance, and the Oriental planetree, *P. orientalis*, is considered resistant.

Sycamore anthracnose has three phases that start with twig and corresponding bud mortality, followed by shoot blight and then leaf blight. The fungal pathogen overwinters in cankers that form at the bases of twigs during autumn, and continue to enlarge during mild winter conditions and into early spring. Fungal growth in the cankers kills girdles the twigs and the buds. Fungal colonization of older branches creates perennial cankers.

Cool spring temperatures prolong twig tissue susceptibility however, warmer temperatures promote faster shoot growth which is less susceptible to shoot blight. Shoot blight may resemble late spring frost damage. The foliage infection cycle is most active during rainy conditions when temperatures rise into the 60's. Leaf blight starts in the lower canopy and moves up the tree during rainy periods. Leaf lesions typically extend along veins and can also cause irregular marginal lesions before blighting the entire leaf resulting in defoliation. The disease will slow when temperature rise through the summer months and the weather becomes drier.

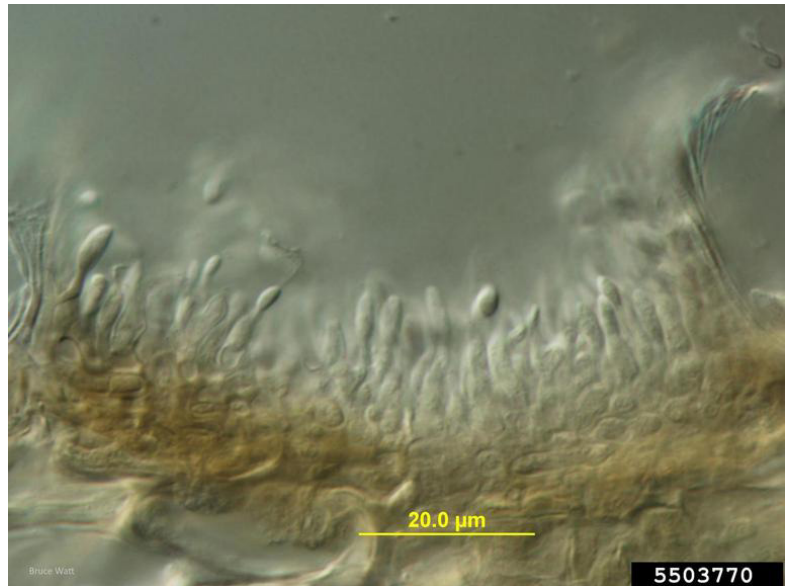


Anthracnose on maple.
Photo: University of Massachusetts



Sycamore anthracnose.
Photo: Dave Clement, UME

Oak anthracnose is caused by the fungal pathogen, *Apiognomonia errabunda*, and typically is a cool, wet weather, spring disease. However, in wet cool summers the symptoms can continue through the season. Interestingly, this fungus can reside as a year-round inhabitant inside buds, twigs and leaves. White oak species are very susceptible and show the most severe infection symptoms. White oak symptoms can range from leaf and shoot blight, to irregular dead areas on distorted newly expanding leaves. Infection of mature leaves is usually limited to scattered small brown spots. Red oak species will typically show less severe symptoms that include vein lesions, leaf distortion, and marginal necrosis that may give the appearance of leaf scorch. This disease in oaks typically does not cause severe leaf drop.



Close-up of acervulus fruiting body.
Photo: Bruce Watt, University of Maine

Beech anthracnose is also caused by the fungal pathogen *Apiognomonia errabunda*. Early foliar symptoms appear as lesions along the veins with necrosis spreading to interveinal areas causing large dead areas on leaves. Severe infections can cause extensive premature defoliation.

Maple anthracnose is caused by several fungal pathogens including several *Discula* species, *Aureobasidium apocryptum*, and *Colletotrichum gloeosporioides*. Typical symptoms in wet weather include vein-associated lesions and spreading brown leaf blotches. Infected immature leaves may become shriveled and blackened. Young shoots may also be killed. Severe infections may cause premature defoliation especially under drought conditions.

Management.

Maintaining tree vigor through adequate fertilization, watering the root zone, mulching and pruning can help lessen the impacts of anthracnose. Practices that increase air flow and sunlight penetration, such as thinning, may help reduce the duration of leaf wetness necessary for infection to occur, and help reduce symptoms. On young, or stressed trees, preventative fungicides can be applied at bud break at labeled intervals until foliage is fully expanded, or until dry weather prevails. Injections of labelled systemic fungicides can also be performed for large mature specimen trees.

Frost Ring on Apple

Craig Greco, Yardbirds, LLC, found frost rings on apples in McLean, VA this week. This damage occurs as a result of freezing temperatures during the bloom stage or early fruit development time period. The surface of the apple is damaged, but there is no impact to the taste of the fruit.



Apples with frost rings are still edible.
Photo: Craig Greco, Yardbirds, LLC

***Thrips parvispinus* found in Delaware**

Brian Kunkel, University of Delaware, let us know that the Delaware Department of Agriculture found *Thrips parvispinus* on mandevilla in a couple of nurseries in Delaware (Sussex and New Castle counties). This species is an invasive insect and can damage ornamental plants, fruits, and vegetable crops. Penn State has [information on *T. parvispinus* on-line](#). This article notes that known ornamental plant hosts include hibiscus, dahlia, chrysanthemum, poinsettia, and mandevilla.

Spiny Witch-hazel Gall Aphid and Witch-hazel Pouch Gall Aphid

By: Paula Shrewsbury

This week there were a few reports of galls on witch hazel which led to a discussion of the witch hazel gall aphids, of which there are two species, and their somewhat complicated life cycles. There is the spiny witch hazel gall aphid, *Hamamelistes spinosus*, that was discussed in the 4/18/2025 IPM Report. The other is the witch hazel pouch gall aphid, *Hormaphis cornu*. Both aphid species alternate between witch hazel (their winter / spring host) and river birch (their summer host). In both species, aphids overwinter on witch hazel and in the spring their feeding results in galls in which the aphids develop and undergo a few generations. The aphids then migrate to river birch. Each species produces a unique gall on witch hazel and look very different on river birch.

Spiny witch hazel gall aphid produces spiny galls on the buds of witch hazel in the spring, and on river birch aphid feeding results in “corrugated” galls/leaves where on the underside of the leaves there are high densities of aphids and the white wax they produce.

Witch hazel pouch gall aphid produces “pouch” like galls on the leaves of witch hazel in the spring / early summer, and on river birch the aphids look a lot like a whitefly nymph. They do not look like a typical insect. They are flattened against the underside of the leaf, black with a white fringe of wax, and look more like a whitefly nymph, such as the Mulberry whitefly, rather than an aphid. Luke Gustafson (Davey Tree) sent in images of the pouch galls on the leaves of witch hazel that he found in Baltimore City on May 21st. See the image of the pouch gall cut open exposing the cluster of aphids within the gall.



Spiny witch-hazel gall aphid on the underside of the leaves of river birch, their summer host. These aphids produce an abundance of white wax.

Photo: Marie Rojas, IPM Scout



Spiny witch-hazel gall aphid gall (left) and a normal bud (right) on witch-hazel in the spring. Aphids are protected inside the gall.

Photo: J. Boggs, OSU Extension

To learn more about these two species of galls and their interesting and somewhat complex life cycles go to:

<https://content.ces.ncsu.edu/witchhazel-leaf-gall-aphid#:~:text=Description%20and%20Biology&text=The%20witchhazel%20leaf%20gall%20aphid,to%20nymphs%20that%20develop%20wings>

<https://content.ces.ncsu.edu/spiny-witchhazel-gall-aphid>

<http://extension.msstate.edu/newsletters/bug%E2%80%99s-eye-view/2024/spiny-witch-hazel-gall-aphid-vol-10-no-07>



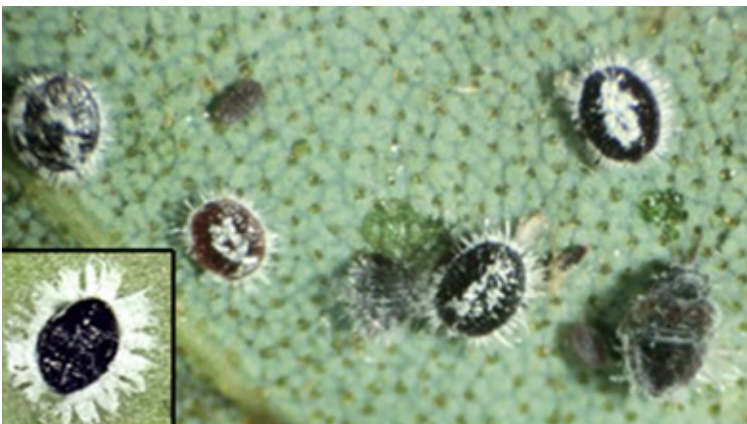
Witch hazel pouch galls on the leaves of witch hazel found May 21, 2025.

Photo: Luke Gustafson, Davey Tree



A witch hazel pouch gall cut open exposing the active aphid population within the gall. This is from May 21, 2025 so aphids are still active in the galls on witch hazel.

Photo: Luke Gustafson, The Davey Tree Expert Co.



Witchhazel leaf gall aphids on birch (the aleurodiform stage) greatly resemble dark whitefly nymphs such as the mulberry whitefly (inset).

Photo by J. R. Baker

Volutella Blight and Stem Canker on Boxwood

By: Ana Cristina Fulladolsa

Since late January, the UMD Plant Diagnostic Lab has received several inquiries regarding leaf blight and twig dieback on boxwoods. Volutella blight was confirmed on submitted samples. The disease is caused by two species of fungi: *Pseudonectria buxi* and *Pseudonectria foliicola*. Symptoms of Volutella blight include leaf discoloration to light tan or brown, cankers often found further down on the branches with discolored leaves, and stem bases with loose bark and girdling. With moist weather, the fungi form fruiting structures seen as white or salmon-colored “cushions” and release spores.

Eliminating diseased tissue is important for management. This includes pruning diseased branches when the foliage is dry and removing old fallen and diseased leaves. Wounded leaves are susceptible to infection, therefore thinning (pruning) rather than shearing is recommended. Thinning will also allow light and air to better circulate throughout the canopy, reducing favorable disease conditions.

The symptoms of Volutella blight can be easily confused with those of boxwood blight caused by *Calonectria pseudonaviculata*, which continues to be a disease of concern in the state. The publication [*Boxwood: Identify and Manage Common Problems*](#) is a great resource for scouting. If you need help diagnosing the problem, reach out to the [UMD Plant Diagnostic Lab](#).



Light tan (“straw color”) leaves on boxwoods with Volutella blight.

Photo: Yonghao Li, The Connecticut Agricultural Experiment Station, Bugwood.org



The Volutella pathogens produce fungal fruiting structures observed as salm-colored “cushions” on the underside of boxwood leaves.

Photo: David L. Clement, University of Maryland, Bugwood.org

Penn State Fruit Disease Updates

Dr. Kari Peter at Penn State publishes frequent fruit disease occurrence and management updates for Pennsylvania and surrounding states. The most recent update includes recommendations for disease prevention through sanitation and dormant copper sprays: <https://extension.psu.edu/2025-disease-update-not-too-late-for-dormant-copper-sprays>.

Reminder: the UMD Plant Diagnostic Lab is open!

The UMD Plant Diagnostic Lab has a new director and new contact information. Dr. Ana Cristina Fulladolsa is plant pathologist and works closely with UMD entomologists and IPM specialists to help answer plant problem questions and diagnose samples. You can find contact information and guidance for sample collection and submission on the lab's website: <https://go.umd.edu/plantlab>. This information also available in Spanish in the UMD blog [Extensión en Español](#).

Lab email: plantlab@umd.edu

Lab phone: 301-405-0730

Physical location: 3171 Plant Sciences Building, 4291 Fieldhouse Drive, College Park, MD 20742

Mailing address:

UMD Plant Diagnostic Laboratory

4291 Fieldhouse Drive

4112 Plant Sciences Building

College Park, MD 20742-4454

Ambrosia Beetle Update

It has been a rainy and cool week and ambrosia beetle activity in the traps is low. However, we had two reports of ambrosia beetle borer activity in figs, one in Wyoming, DE and the other in Severn, MD. There was also a report of ambrosia beetle activity in *Hydrangea paniculata* “Limelight” tree form. Be sure to continue to monitor for signs of borer activity and treat to protect susceptible trees as needed.

We will continue to run the ambrosia beetle traps and keep you informed on what we find.

If anyone finds ambrosia beetle activity in trees, please let me know (pshrewsbury@umd.edu and copy sklick@umd.edu) where, when, and on what type of tree and send pictures.



A newly produced frass “toothpick” produced by an adult ambrosia beetle boring into the wood.

Photo: P.M. Shrewsbury, UMD

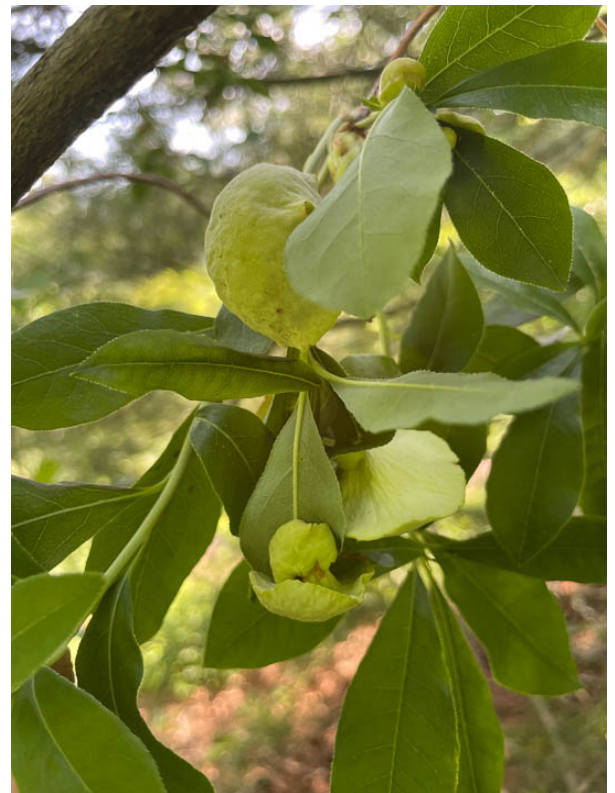
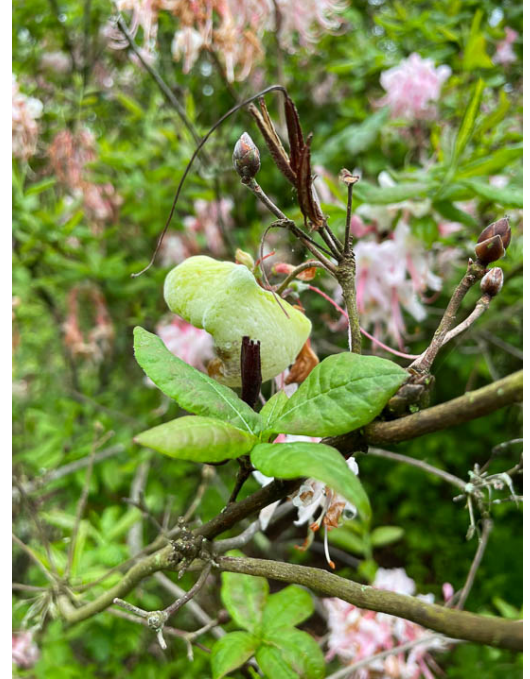


An ambrosia beetle near its hole in *Hydrangea paniculata*.
Photo: Phil Suchman, Salisbury, MD

Request for Exobasidium Gall Samples

By: Elena Karlsen-Ayala, U.S. Forest Service

We are soliciting samples of *Exobasidium* fungi which form fungal galls in Ericaceous plants such as azaleas (*Rhododendron*), mountain laurel (*Kalmia*), *Lyonia*, blueberries, and cranberries. If you see trees with symptoms of fungal galls please contact Benton Willis (caroline.willis@ufl.edu) and Elena Karlsen-Ayala (Elena.Karlsen-Ayala@usda.gov) with photos and additional information.



Exobasidium galls
Photos: US Forest Service

Crapemyrtle Bark Scale: A lot of eggs and crawlers JUST starting

By: Paula Shrewsbury

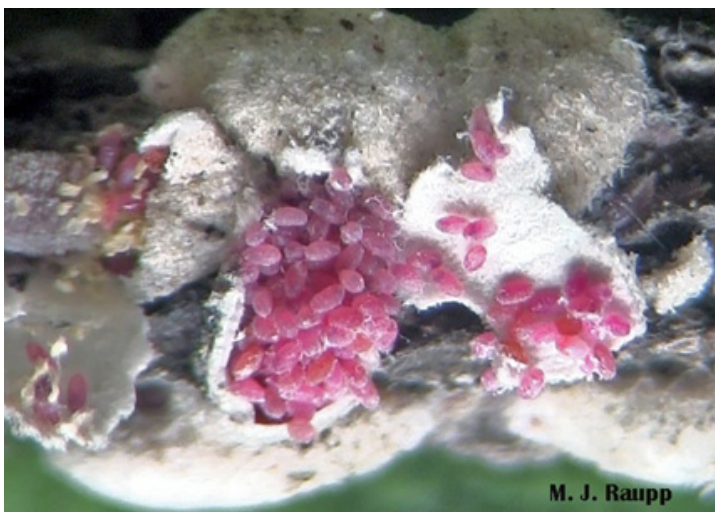
Sheena O'Donnell (CMREC Research Tech., UME) has been monitoring crape myrtle trees for crape myrtle bark scale (CMBS), *Acanthococcus lagerstroemia*, in University Park, MD. This week she noted that the majority of CMBS life stages were adult females under white ovisacs, most of which were laying eggs. She was seeing soft bodied pink female and pink eggs under the ovisacs. Out of hundreds of eggs that were examined just a few had hatched into crawlers. Egg hatch and **crawler activity CMBS is reported to occur around 724 DDs**. Many, but not all, areas of MD are around 724 DDs.

Recommendations: What this information tells us is the peak crawler activity is not far away. Be sure to monitor crape myrtle trees for crawler activity and be prepared to treat heavily infested trees for CMBS. Be sure to use a hand-lens or other magnification. Flip the white ovisacs and look to see if there are live CMBS pink females, pink eggs, or pink crawlers. Eggs mean crawlers will emerge soon; crawlers mean it is time to treat with an IGR or systemic product. Live CMBS will be pink to purple in color and will gush this color when you squish them, dead ones won't gush. Depending on the density of the population and how many trees you are managing, you can use mechanical control such as a soft scrub brush and water to physically wash the scales off the branches and trunk of the tree. There are also multiple chemical controls that are available for CMBS suppression. These include systemics such as dinotefuron, or contacts such as horticultural oil or other labeled products. Good options for suppressing CMBS are to target the crawler stages with insect growth regulators such as pyriproxyfen or buprofezin. Be sure to follow label directions to protect natural enemies and pollinators, and get optimal control.



A close-up of several ovisacs (egg-sacs) of female CMBS and encrustations of black sooty mold covering a branch.

Photo: M.J. Raupp, UMD



Hundreds of pink eggs from beneath the CMBS egg sac were exposed. If you are seeing lots of ovisacs with eggs, then keep monitoring for crawlers and target treatments for that stage.

Photo: M.J. Raupp, UMD



White, wax covered larva of a *Hyperaspis* lady beetle foraging on crape myrtle bark scale. Be sure to conserve these and other natural enemies feeding on your crape myrtle bark scale.

Photo: M.J. Raupp, UMD

Bagworms are Hatching!

By: Paula Shrewsbury

Marie Rojas (IPM Scout) was scouting in Frederick County MD this morning (May 23rd) and found newly hatched bagworms and their very small (<1/2") bags on *Hammamelis* (witch hazel). Bagworms egg hatch is predicted to occur at 635 DD; In Frederick MD they reached 662 DD this week. See the end of this IPM Report to see what DD accumulations are in different areas in the region. Since temperatures vary from location to location, be sure to monitor potential bagworm host plants or plants that had bagworms last season closely for bagworm activity. You want to catch the caterpillars when they are young and easier to control. Although bagworms are generalists and they get on both evergreen and deciduous plants, there are host plants that are commonly attacked by bagworms so monitor them closely. Common host plants include Lelands, arborvitae's, and spruce.



Bagworms have started hatching this week in Frederick County.

Photo: Marie Rojas, IPM Scout

Control options for young bagworms, and other caterpillar pests, include applications of products with the following active ingredients: *Bacillus thuringiensis kurstaki*, spinosad (ex. Conserve), chlorantraniliprole (ex. Acelepryn), tebufenozide (ex. Confirm), or other labeled products.

Spittlebugs are Showing up on a Diversity of Plants

By: Paula Shrewsbury

Spittlebugs were found by Marie Rojas (IPM Consultant) on mountain mint in a nursery in Montgomery County, MD. Adults of spittle bugs as a group are referred to as frog hoppers. One of the most common spittle bug species is the two-lined spittle bug, *Prosapia bicincta* (**Hemiptera**: Cercopidae) and they are common on a diversity of ornamental plants and turfgrass. Spittle bugs can be damaging in some situations. For more information on spittle bug biology, damage and management go to: <https://edis.ifas.ufl.edu/publication/IN1369>



Spittle bug nymph that was found within the spittle mass.

Photo: Marie Rojas, IPM Scout



Two-lined spittlebug adult, *Prosapia bicincta* on turfgrass.

Photo: Lyle J. Buss, UF/IFAS



Characteristic spittle made that protects the spittle bug nymphs within the spittle.

Photo: Marie Rojas, IPM Scout

Boxwood Spider Mite Damage on Boxwood

By: Paula Shrewsbury

Last week, Steve Clancy (Absolute Landscaping) submitted a boxwood sample to UME HGIC. Miri Talabac (UME HGIC) took some great images of boxwood spider mites, *Eurytetranychus buxi* (Acari: Tetranychidae) from the sample. The boxwood spider mites were abundant, active, and causing stippling / streaking discoloration to the foliage. Boxwood spider mites overwinter on as eggs and these eggs hatch around 141 DD. There are several generations of boxwood spider mites per year. They tend to prefer to feed on European, common, and English boxwoods. Monitor your boxwoods for spider mite damage and spider mite activity and life stages.

If damage and mite densities are low, consider applying a 1-2% horticultural oil or insecticidal soap spray. If damage and spider mite populations are high, use residual or foliar absorbed miticides. Reduced risk miticides include bifenazate (ex. Floramite), spirotetramat (ex. Kontos), spiromesifen (ex. Forbid), and hexythiazox (ex. Hexygon). Be sure to avoid spraying miticides when temperatures are above 90 °F.



Boxwood spider mite discoloration damage to boxwood foliage.

Photo: Marie Rojas, IPM Scout



Boxwood spider mites on underside of foliage.

Photo: Miri Talabac, UME HGIC

Rove Beetle

David Freeman, Oaktree Property Care, found a rove beetle at Great Falls, VA. It is a predator and often feeds on insects that are found in decaying organic matter.



A rove beetle.

Photo: David Freeman, Oaktree Property Care

***Neolygus vitticollis* - A sucking plant bug whose damage looks like defoliation**

By: Paula Shrewsbury

On Tuesday May 20th, Marie Rojas (IPM Consultant) found the plant bug, *Neolygus vitticollis* (Hemiptera: Miridae), also known as the Y-crossed cream bug, feeding on the new growth of red maple cultivars at a nursery in Montgomery County, MD. Marie first found this bug in a nursery in 2021, and this year has found it in a second nursery. In searching the literature, I could not find much on the biology and distribution of *N. vitticollis*. In addition to MD, there have been reports of it in PA and VA.

Neolygus feeds on the underside of newly expanding maple leaves with their piercing-sucking mouthparts. Interestingly, the leaf tissue that is damaged from *Neolygus* feeding, falls out of the leaves making the foliage appear as if it was chewed. This could make diagnostics of the causal pest tricky! *Neolygus vitticollis* has one generation a year and it is active early in the season (late May – June). Most years *Neolygus* is considered a minor pest, however some years densities can get high.



An adult of the plant bug *Neolygus vitticollis*. Note the interesting brown and tan color pattern of this insect. Photo: Marie Rojas, IPM Scout



Damage to the newer growth of red maple by the sucking plant bug *Neolygus vitticollis*. Note that the leaf tissue damaged by plant bug feeding falls out, looking like damage caused by a chewing insect. Photo: Marie Rojas, IPM Consultant

***Hyperaspis* Lady Beetles**

Hyperaspis species of lady beetles are very active this season. Casey Bartoe, Monarch and Complete Landscaping, found many larvae feeding among tuliptree scale this week. The lady beetles are in a genera called *Hyperaspis* and there are multiple species in this group that prefer to feed on different scale insects. The *Hyperaspis* lady beetle larvae (immatures) are covered with white wax. The larvae look similar to mealybugs and woolly aphids. Flip the insect over. The lady beetle larva will have chewing mouthparts.

With scale populations so prevalent on ornamental plants, *Hyperaspis* lady beetles, like the white waxy larvae in the photo, are often showing up.

Photo: Casey Bartoe, Monarch and Complete Landscaping



Beneficial of the Week

By: Paula Shrewsbury

Two-spotted predatory stink bug

In last week's *Beneficial of the Week* we talked about the Florida predatory stink bug, *Euthyrhynchus floridanus*, one of two red and black predatory stink bugs that we sometimes see in this area. The other red and black stink bug is the two-spotted predatory stink bug, *Perilus bioculatus* (Hemiptera: Pentatomidae).

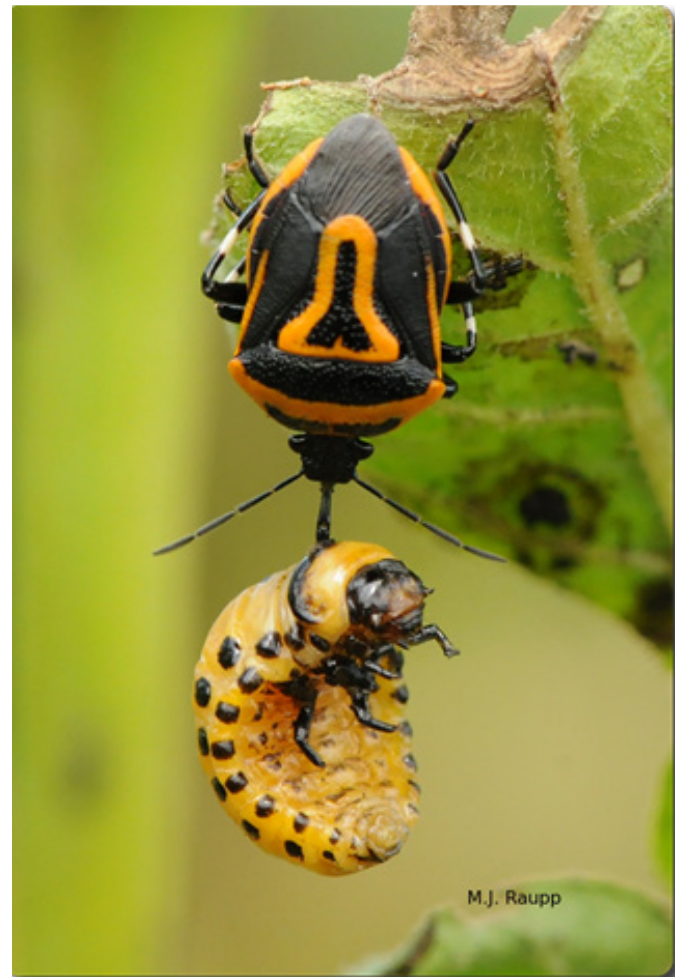
The two-spotted stink bug is native to North America and ranges from southern Canada, through out much of the U.S. and down to Mexico. The two-spotted stink bug was originally a western species but had moved eastward tracking its prime prey, the Colorado potato beetle. Two-spotted stink bugs have been introduced to Eastern Europe in attempts to provide a biological control agent for Colorado potato beetles. Studies have shown that both adult and nymphal two-spotted stink bugs are voracious predators of Colorado potato beetle feeding on both adult and larval stages of the beetle. Each individual predatory stink bug can destroy an average of 231.5 Colorado potato beetle eggs during its nymphal development and 150 to 200 larvae during its lifetime. Two-spotted predatory stink bugs are also known to feed on other leaf beetle pests and on a diversity of caterpillars.

Adults are 8.5 to 11.5 mm and slightly smaller than the Florida predatory stink bug. An interesting aspect of the two-spotted stink bug is that its pattern is distinctive, but the color of the bug is variable. I mentioned the red and black pattern of the two-spotted stink bug, but there is also a tan and black form. Two spotted stink bugs turn red in response to feeding on Colorado potato beetles from which they obtain a pigment called carotin. The bugs change from a light tan color to an orange color to red. Interestingly, once they change color they do not change back to the lighter color. Regardless of the color, two-spotted stink bug adults can be identified from their characteristic markings that includes 2 dark spots on the pronotum (area behind the head), a dark "keyhole" shape on its scutellum (the triangular section between its wings), and they have a small white stripe on darker colored legs on the 2nd and 3rd pair of legs. Nymphs have a dark head, thorax, and legs with an orange or tan abdomen that has a black pattern on it.



A mating pair of two-spotted predatory stink bug, *Perilus bioculatus*. One bug is the lighter tan form and the other is an orange color form.

Photo: W. Cranshaw, Colorado State University



An adult two-spotted predatory stink bug, *Perilus bioculatus*, using its sucking mouthpart to feed on a larva of a Colorado potato beetle.

Photo: M.J. Raupp, UMD

The two-spotted predatory stink bug may not have a huge impact on the biological control of pest insects on its own, but they are one of many generalist natural enemies that, as a complex, can provide an impactful biological control service for pest insects.



A nymphal stage of two-spotted predatory stink bug, *Perilus bioculatus*.

Photo: Claude Pilou, UC IPM

Weed of the Week

By: Nathan Glenn

Broadleaf & Buckhorn Plantain (*Plantago major* & *Plantago lanceolata*)

Recent weather patterns across Maryland have brought unseasonably warm temperatures and intermittent rainfall, accelerating plant growth and weed emergence. These conditions are favorable for turfgrass growth but may also increase disease pressure, particularly in newly established lawns and nursery stock. High humidity and scattered showers forecasted for the coming week could lead to foliar diseases in ornamentals and stress in container-grown plants. Irrigation management and disease monitoring will be key as we move into late spring.

Two common perennial weeds that thrive in turf and landscape settings—especially in compacted or high-traffic areas—are **Broadleaf Plantain (*Plantago major*)** and **Buckhorn (or Narrowleaf) Plantain (*Plantago lanceolata*)**. These resilient weeds grow low to the ground and are often overlooked until they become well-established.

The name "plantain" comes from the Latin word *planta*, meaning the sole of the foot—an apt description for the flat, ground-hugging growth habit of these weeds.

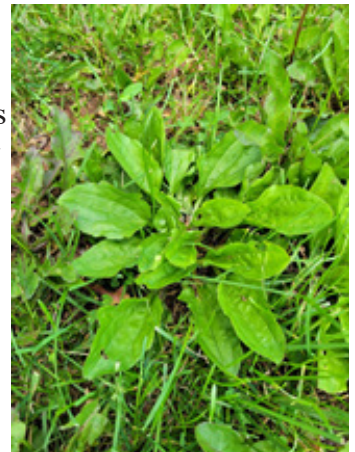


Figure 1: Broadleaf plantain as a seedling in turf.
Photo: Nathan Glenn, UME

Identification Tips:

- ❑ **Growth habit:** Basal rosette (low-growing leaves in a circular pattern at ground level)
- ❑ **Leaf shape:**
 - ❑ *Broadleaf plantain*: Wide, oval leaves that may appear slightly wavy
 - ❑ *Buckhorn plantain*: Long, narrow leaves resembling blades of grass
- ❑ **Leaf features:** Prominent parallel veins and smooth (entire) leaf margins
- ❑ **Flowering stalks:**

- ☐ *Broadleaf plantain*: Seed heads form **along the entire stem**
- ☐ *Buckhorn plantain*: Seed heads form **only at the top of the stem**
- ☐ **Reproduction**: Each plant can produce **thousands of seeds**

Fun Fact: Despite their weed status, both species of plantain are considered edible and have been used historically in herbal medicine for wound care, insect bites, and digestive issues.

Cultural Control:

- ☐ **Soil compaction**: Aerate compacted areas regularly
- ☐ **Hand removal**: Difficult due to deep taproots
- ☐ **Mowing**: May reduce seed spread but won't control the basal rosette
- ☐ **Turf competition**: Maintain proper mowing height, fertility, and irrigation to encourage dense turf that can outcompete plantain



Figure 2: Broadleaf plantain basal rosettes growing in a turf setting.
Photo: Nathan Glenn, UME



Figure 3: Broadleaf plantain (left) and buckhorn/narrowleaf plantain (right).
Photo: Broadleaf plantain—Chris Evans, University of Illinois, Bugwood.org
Photo: Buckhorn plantain—Ohio State Weed Lab, The Ohio State University, Bugwood.org

Chemical Control:

If you choose this option, spot treat weeds with a liquid, selective, postemergent, broadleaf weed killer. Apply your postemergent chemical control of choice when weeds are actively growing. Look for a product with one or more of the following active ingredients: 2, 4-D, MCPP (mecoprop), Dicamba*, or Triclopyr.

*Do not spray herbicides containing dicamba over the root zone of trees and shrubs. Roots can absorb the product, possibly causing plant damage. Refer to the product label for precautions.

Always read and follow the herbicide label for specific application instructions, site restrictions, and mix rates. The label is the law.



Figure 4: Broadleaf plantain (left) and buckhorn plantain (right) seedheads.
Photo: Joseph M. DiTomaso, University of California - Davis, Bugwood.org

Plant of the Week

By: Ginny Rosenkranz

Penstemon hirsutus or hairy beardtongue is a lovely native herbaceous perennial that blooms from May to June. It is one of the first of the penstemons to bloom and the only one with a 'hairy stem' that sets it apart from other beardtongues. Plants prefer to grow in full sun, but will adapt to partial shade and will thrive in the full range of well drained soils. Hairy beardtongue grows 1-2 feet tall and wide and produces lavender to purple delicate trumpet-shaped flowers with white lips that grow up above the foliage. The 1-inch hairy flower clusters grow on short hairy stems opposite each other. Each flower has 5 petals with a protruding hairy lower lip, which gives the plants their common name. Each flower is nearly closed by the arched base of the lower lip. When in flower the blossoms attract hummingbirds, bumble bees, and other pollinators like moths, skippers and butterflies which include the Baltimore checkerspot, Arachne checkerspot and the Chalcedon checkerspot, which uses the plant as a host for its larva or caterpillar. If the spent flowers are deadheaded or pruned back, the plants may bloom more.

The lance-shaped leaves have toothed margins and are attached directly to the stems opposite each other. The leaves have a velvety touch, change to red or burgundy in the autumn. Plants slowly spread by rhizomes, and clusters of stems can grow from the same rhizome. Plants can self-seed, but don't spread aggressively. These lovely spring flowering native perennials can be used to border walkways, hold the soil on slopes, in foundation plantings, in a butterfly or pollinators garden. The texture of the foliage makes it both rabbit and deer resistant, and plants are cold tolerant in USDA zones 3-9. There are no serious pests of *Penstemon hirsutus*, but growers are encouraged to watch for slugs and snails as well as nematodes. Powdery mildew, leaf spot and root rot can occur if plants are grown in wet soil or have overhead irrigation. Rust can cause pustules on the stems and the leaves which can lead to stunted growth.



Penstemon hirsutus flowers attract various pollinators. 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 **542 DD** (Clarksville) to **968 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.

Locust leafminer – adult emergence (**429 DD**)
Honeylocust plant bug – egg hatch, early instar (**433 DD**)
Fourlined plant bug – egg hatch, early instar (**435 DD**)
Lesser peachtree borer – adult emergence (1st gen) (**468 DD**)
Oak erricoccin scale (oak felt scale) – egg hatch / crawler (**469 DD**)
Maskell scale – egg hatch / crawler (1st gen) (**470 DD**)
Oystershell scale – egg hatch /crawler (1st gen) (**486 DD**)
Minute cypress scale – egg hatch / crawler (**511 DD**)
White prunicola scale – egg hatch / crawler (1st gen) (**513 DD**)
Euonymus scale – egg hatch / crawler (1st gen) (**522 DD**)
Bronze birch borer – adult emergence (**547 DD**)
Potato leaf hopper – adult arrival (**603 DD**)
Black vine weevil – adult emergence (**607 DD**)
Twospotted spider mite – egg hatch (**627 DD**)
Bagworm – egg hatch (**635 DD**)
Cottony camellia/Taxus scale – egg hatch / crawler (**649 DD**)
Mimosa webworm – larva, early instar (1st gen) (**674 DD**)
Juniper scale – egg hatch / crawler (**694 DD**)
San Jose scale – egg hatch / crawler (1st gen) (**723 DD**)
Crapemyrtle bark scale – egg hatch / crawler (1st gen) (**724 DD**)
Calico scale – egg hatch / crawler (**765 DD**)
Oak lecanium scale – egg hatch / crawler (**789 DD**)
Rhododendron borer – adult emergence (**815 DD**)
Japanese maple scale – egg hatch / crawler (1st gen) (**829 DD**)
Dogwood borer – adult emergence (**830 DD**)
European elm scale – egg hatch / crawler (**831 DD**)
European fruit lecanium scale – egg hatch / crawler (**904 DD**)
Cyrptomeria scale – egg hatch / crawler (**937 DD**)
Azalea bark scale – egg hatch / crawler (**957 DD**)
Hibiscus sawfly – larva, early instar (**1015 DD**)
Japanese beetle – adult emergence (**1026 DD**)
Fletcher scale – egg hatch / crawler (**1105 DD**)
Spotted lantern fly – first adult activity (**1112 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 May 21, 2025)

Annapolis Naval Academy (KNAK)	699
Baltimore, MD (KBWI)	768
Belcamp (FS836)	630
Clarksville (001MD)	542
College Park (KCGS)	763
Dulles Airport (KIAD)	747
Ft. Belvoir, VA (KDA)	833
Frederick (KFDK)	662
Gaithersburg (KGAI)	715
Greater Cumberland Reg (KCBE)	618
Martinsburg, WV (KMRB)	661
Millersville (MD026)	720
Natl Arboretum/Reagan Natl (KDCA)	962
Perry Hall (C0608)	620
Salisbury/Ocean City (KSBY)	725
St. Mary's City (Patuxent NRB KNHK)	968
Westminster (KDMW)	807

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

June 17, 2025 (afternoon)
IPM Scouts' Diagnostic Session
Location: CMREC, Ellicott City, MD
[Registration Information](#)

June 18, 2025
[Eastern Shore Pesticide Recertification Conference via Zoom](#)

June 24, 2025
Stanton A. Symposium and Lab Dedication
Location: CMREC, 4240 Folly Quarter Road, Ellicott City, MD 21042
Co-Sponsors: University of Maryland Extension and Maryland, Nursery, Landscape, and Greenhouse Association (MNLGA)
MNLGA is handling [the registration](#) for this symposium.

June 27, 2025
Pesticide Recertification Conference
Location: Montgomery County Extension Office, Derwood, MD
[Registration information](#)

July 24, 2025
MNLGA Growers Day at North Creek Nurseries
[Program and Registration Information](#)

September 11, 2025
MNLGA Field Day
Location: Raemelton Farm, Adamstown, MD

Commercial Ornamental IPM Information

<http://extension.umd.edu/ipm>

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