TPM/IPM Weekly Report EXTENSION for Arborists, Landscape Managers & Nursery Managers

Commercial Horticulture

May 2, 2025

In This Issue...

- Maple petiole borers
- Drought stress and arborvitae
- Ambrosia beetle update
- Zig-zag sawflies on cherry
- Spotted lanternfly hatch
- Pocket gall on American elm
- Harlequin bugs
- Fourlined plant bugs
- Calico scale
- Elder shoot borers
- Boxwood pyllids
- Gymnosporangium rust
- Taphrina leaf curl diseses
- Spring viruses
- Grass or eye gnats
- Soft scale on magnolia
- Caterpillars on rose buds
- Spiders in the landscape

Beneficial of the Week: Predators of aphids Weed of the Week: Annual bluegrass (Poa annua) Plant of the Week: Black locust for wooded areas

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)

Maple Petiole Borers

Marie Rojas, IPM Scout, found maple petiole borer larvae just starting to hit the growing tips of Acer rubrum in Montgomery County. The larvae bore into petiole bases and cause wilting. The damage usually occurs in the spring on new tip growth on 1 to 2 year old maples. Look for flagging tips and prune out damaged branches.





Look for maple petiole borer larvae in the tips of maples at this time of year. Photos: Marie Rojas, IPM Scout

Drought Stress and Arborvitae

By: Andrew Ristvey and David Clement

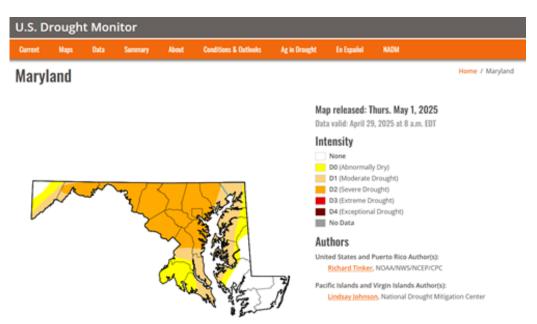
Last year our horticulture IPM team received many calls regarding arborvitae dieback and death. In most cases, we found no pests, nor disease, just stem dieback or even whole tree death. After being cared for with fertilizer, irrigation, insecticides and fungicides in the nursery, sometimes trees are being dropped in a hole and forgotten about in the landscape. From feast to famine. While feeding a tree is not recommended before establishment, necessary watering is often overlooked. Interestingly enough, we saw trees established years ago, succumbing to the dry conditions. What we theorized at the time, was that saturated soil conditions from heavy rainfall earlier in the spring of last year may have contributed to poor root health. Later into the growing season, rainfall diminished and unusually dry soil conditions stressed the trees further.

While we do not know how this year will proceed climate-wise, much of Maryland continues to be experiencing drought conditions and the possibility of further tree stress and decline may be in the cards for the summer of 2025. An Ohio State Extension fact sheet (https://bygl.osu.edu/index.php/node/2471), also discusses the same issues being seen in our neighboring State of Ohio.

If you start seeing tree dieback and do not know the cause, contact the University of Maryland Extension IPM team.



Dieback on arborvitae.



A large portion of Maryland is presently in a severe drought according to the U.S. Drought Monitor.

Ambrosia Beetle Update: Now boring in trees!

By: Paula Shrewsbury

Temperatures this past week have been in the upper 70's and 80's so not surprisingly **ambrosia beetle activity in the traps has increased**. Of the top three damaging beetles of concern for nurseries and landscapes in our region there were 37 granulate ambrosia beetles, *Xylosandrus crassiusculus*; 8 black stem borers, *Xylosandrus germanus*; and 1 camphor shoot beetle, *Cnestus mutilatus* (the first of the season). Marie Rojas (IPM Consultant) found **ambrosia beetles actively boring into alcohol baited bolts of wood** in Frederick County MD on Wednesday April 30th (*Cnestus mutilatus*, see image). This is the first report of ambrosia beetles attacking trees this year. No beetle boring activity was found in Gaithersburg MD by Marie.

Recommendations: Beetle counts are up and active boring from beetles was found. Time to step up your monitoring of known susceptible host trees and be ready to provide protective barrier sprays where needed. A partial list of *Xylosandrus* susceptible trees includes styrax, yellowwood, birch, zelkova, redbud, hybrid series of *Cornus florida* and *C. kousa*, Kwanzan cherries, *Ilex opaca* 'Satyr Hill' and 'Miss Helen', and paperback maples. Trees in low lying areas that stay wet are particularly attractive to *Xylosandrus* and *Cnestus*. Look for wet areas on tree trunks, frass tubes ("toothpicks") produced by the beetles, and beetles in and around the holes. Preventive applications to protect the trunks of trees with permethrin or bifenthrin have been found to be more effective than other conventional insecticides. Be sure to check product labels to ensure that pollinator protection guidelines are followed.

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.



The butt end of an ambrosia beetle (appears to be *Cnestus mutilatus*, ~3mm in size) found on April 30, 2025 in Frederick County, MD. Photo: Marie Rojas, IPM Consultant



A newly produced frass "toothpick" produced by an adult ambrosia beetle boring into the wood on April 30, 2025.

Photo: Marie Rojas, IPM Consultant

Zig-zag Sawflies on Cherry

By: Kelsey McGurrin, Dept. of Entomology, UMD

While working in the field on my research, I found sawflies belonging to the genus *Sterictiphora* feeding on a volunteer cherry (*Prunus*) seedling on April 24. The somewhat unusual zig-zag pattern of the feeding damage caught my eye. *Sterictiphora* sawflies are in the same family as the invasive elm zig-zag sawfly, *Aproceros leucopoda*, which may explain their similar feeding patterns. Larvae are bright green and eat a winding channel through foliage starting from the leaf margin. The "S" or zig-zag shaped feeding damage is less distinct in older instars. There are at least 5 species of *Sterictiphora* sawflies in this area known to feed on plants in the Rosaceae family. There is only one generation per year, so control is not necessary.





Sterictiphora sawfly larvae with characteristic zigzag shaped feeding damage on charry (*Prunus*) leaves. Look closely to see the two small green sawfly larvae on the leaf.

Photos: Kelsey McGurrin, UMD

Spotted Lanternfly Eggs are Hatching!

By: Paula Shrewsbury

This was the week! We had several reports of spotted lanternfly (SLF, *Lycorma delicatula*) eggs hatching from egg masses that were laid last fall by female SLF. The earliest reports of egg hatch were in Washington D.C. on April 24th (Emily Mueller, Architect of the Capital) and Wheaton, MD (Montgomery Co) on 4/25/2025 (Christa Carignan, Mont. Co. Dept. of Env. Protection). There were also reports of SLF egg hatch in Adamstown (Frederick Co.), Gaithersburg and Germantown (Montgomery Co.), and Sharpsburg (Washington Co.) MD, and multiple locations in D.C. Host plants included tree of heaven (*Ailanthus altissima*), pear, Ashe magnolia, white garlic (*Allium neapolitanum*), and willow oak (*Quercus phellos*). Thanks to all of you who have kept us informed of what you are seeing in the field!

Keep your eyes open! This should be the week that more of you see spotted lanternfly eggs hatching. <u>Click here to see a time lapse video of SLF nymphs wriggling their way of the eggs (video by M.J. Raupp, UMD)</u>. If you look at the degree day (DD) accumulations listed at the end of the newsletter you will see that most locations have reached or surpassed 270 DD, the number of degree days that let us know it's time to monitor for SLF egg hatch. If you see SLF eggs hatching, please let us (<u>pshrewsbury@umd.edu</u> and <u>sklick@umd.edu</u>) know when, where, and on what host tree (if you know it) you see egg hatch.

What should you do with all the SLF nymphs that will be on plants soon? It depends on the circumstances. In landscapes, at this time of year when SLF are in early nymphal stages on established trees and other vegetation you likely do not need to do much. The nymphs are small and do not produce much honeydew and they move a lot among different types of plants and vegetation. In landscapes and nurseries, if you are moving plants or

other materials with SLF nymphs, then you need to follow state quarantine and treatment regulations which involves removing / getting rid of SLF on plants before movement. For information on chemical and other control options for SLF, and their biology and ecology, go to this Penn State Extension SLF Management Guide. Be sure to consider pollinator and natural enemy protection when using chemical options.



Throughout the DMV, spotted lanternfly nymphs are popping the lid (operculum) at the top of their egg case and emerging head-first from eggs deposited last autumn by females. The emerging nymphs are white with distinct black eyes for about an hour.

Photo: M.J. Raupp, UMD



Shortly after emergence from the egg mass, the first instar nymphs turn black with white spots and can be quite active (jumping, walking, feeding) as they move up the tree canopy to suck sap from leaves. Photo: Emily Mueller, Architect of the Capital



Variations in spotted lanternfly egg mass appearance. Photo: Heather Leach and Emelie

Pocket Gall on American Elm

Marie Rojas, IPM Scout, found pocket galls on American elm this week in Frederick County. These galls are caused by either eriophyid mites or aphids. These galls do not impact the overall health of the tree, so control measures are not necessary.



Although unsightly, these galls do not impact the overall health of the tree.

Photo: Marie Rojas, IPM Scout

Harlequin Bugs

Christopher Mirkovich, Charm City Landscapes, found a harlequin bug adult in their Druid Hill Park City Farm in Baltimore City this week. He also found several nymphs hanging out on horseradish plants. Harlequin bugs feed on a wide variety of woody and herbaceous plants. There are 2 -3 three generations per year in Maryland, so look for nymphs and adults throughout the spring and summer. Feeding causes white spotting on foliage that turns brown. Control options include insecticidal soap, neem products, Acephate (Orthene), and synthetic pyrethroids. Management also includes hand removal of active stages and searching for egg clusters on the underside of the leaves and squishing them.



Harlequin bugs overwinter as adults and are active early in the spring.

Photo: Christopher Mirkovich, Charm City Landscapes

Fourlined Plant Bugs

Christa Carignan, Montgomery County Dept. of Environmental Protection, found fourlined plant bug nymphs causing significant damage to new growth of *Monarda fistulosa*, *Penstemon digitalis*, and marjoram in Montgomery County. When they feed, the fourlined plant bugs inject a toxin into the leaves causing necrotic spots which coalesce on the foliage. Look for nymphs, adults, and damage on a wide variety of herbaceous plants. There is only one generation of this pest early in the season. Often, the new growth covers up the old damage and control measures are not necessary.





Fourlined plant bugs can cause significant damage early in the season that is often covered up by the new growth.

Photos: Christa Carignan, Montgomery Co. Dept. of Environmental Protection

Calico Scale

Marlee Muchinsky, Good's Tree and Lawn Care, found calico scale on maple trees in Palmyra, PA this week. This scale is a general feeder and is found on a variety of nursery and landscape plants. In late May to June, look for copious amounts of honeydew. Crawlers hatch in June at around 765 degree days. Target crawlers with Insect Growth Regulators (IGR) such as pyriproxyfen or buprofezin.

Female calico scale will be producing eggs throughout Mav.

Photo: Marlee Muchinsky, Good's Tree and Lawn Care

Elder Shoot Borers

Marie Rojas, IPM Scout, found elder shoot borers inside *Sambucus nigra* 'Eva', causing flagging tips. Recently hatched caterpillars are boring into new shoots. When they reach maturity in early summer, they tunnel into dead stalks to pupate. Look for frass at the base of old wood. Prune out infested green shoots or mature canes during the growing season. In winter, remove dead canes to reduce pupation. Be sure to remove prunings from the area.





Feeding by elder shoot borer larvae causes flagging of plant tips. Photos: Marie Rojas, IPM Scout

Boxwood Psyllids

Boxwood psyllids continue to be active this week. Ben Morris, SavATree, is finding them active in New Jersey. It is the nymphs that produce the waxy material. There is only generation per year early in the season. Adults do feed, but do not cause as much damage as the nymphs.



Boxwood psyllid nymphs produce white, waxy material on the growing tips of plants. Photo: Ben Morris, SavATree

Gymnosporangium Rusts

Gymnosporangium rusts continue to infect rosaceous plants such as serviceberry, hawthorn, apple, and crabapple. Marie Rojas, IPM Scout, is finding rust infeciton on *Amelanchier* 'Autumn Brilliance' in Frederick County. Since we are still within the infection period, continue to treat rosaceous plants with labeled fungicides.



Gymnosporangium rust infection on serviceberry. Photo: Marie Rojas, IPM Scout

Taphrina Leaf Curl Diseases

Marie Rojas, IPM Scout, is finding leaf blister on American hophornbeam (*Ostrya virginiana*) caused by the fungus, *Taphrina virginica*, in Gaithersburg. Elaine Menegon, Good's Tree and Lawn Care, found peach leaf curl infection that is caused by the fungus, *Taphrina deformans*, on trees in Lancaster, PA this week. These diseases cause curling and distortion of foliage. Once infection occurs, it is too late for control measures.



Leaf blister disease damage on American hophornbeam.

Photo: Marie Rojas, IPM Scout



Distorted foliage caused by peach curl disease. Photo: Elaine Menegon, Good's Tree and Lawn Care

Spring Virus Symptoms in Perennials

By: D.L. Clement and Karen Rane

Many virus symptoms on landscape perennials are very visible in the spring as new foliage emerges. Infected plants may decline over time and produce fewer flowers. Symptom expression is most common when temperatures are moderate, and plants may seem to "recover" and symptoms diminish during hot summer weather. When symptoms are subtle, holding an infected leaf up to the light and comparing it to a healthy leaf can make symptom identification easier.

Several plant viruses can cause line patterns and ringspots on foliage. Tobacco rattle virus, TRV, is a common pathogen of perennials such anemone, hosta, and peony, as well as ajuga and bleeding heart. Virus infections can easy be spread through asexual propagation such as divisions of infected stock plants especially if the plant show few symptoms. TSV has a wide host range and can be spread by certain species of soil inhabiting plant parasitic nematodes. TRV can also reside in including numerous weed species, field crops, and vegetables.



by certain species of soil inhabiting plant Virus symptoms are showing up on some landscape plants this week.

Photo: David Clement, UME

Hosta can also be infected with Hosta Virus X, HVX. This virus can be spread by mechanical contact with pruning tools that have become contaminated with the sap of infected hostas.

Another common virus that can infect ornamentals is Cucumber Mosaic Virus, CMV. This virus has a wide host range and is spread by over 80 species of aphids which can pick up the virus from infected plants and transmit it to healthy plants as they feed as well as by mechanical contact with tools that have become contaminated with sap. Over 80 species of aphids can potentially transmit CMV. Herbaceous ornamental hosts include aconitum, aster, astilbe, campanula, coreopsis, delphinium, echinacea, gypsophila, helianthus, heuchera, hosta, ligularia, lilium, lysimachia, oenothera, penstemon, phlox, primula, scabiosa, sedum, and viola. Other hosts include numerous weed species, field crops, and vegetables. Symptoms vary widely depending on the host plant and include distortion of foliage, mosaic, mottling, stunting, and necrosis. Symptoms can sometimes resemble herbicide injury.

Management:

The only management option for infected plants is to remove them. With most virus diseases, the plants are systemically infected so removal of symptomatic leaves does not cure the plant.

Grass or Eye Gnats - So Annoying!

By: Paula Shrewsbury

As you may have noticed I am quite fond of insects. However, there are a few I could do without. Specifically, the flies that are referred to as eye gnats or grass flies (*Liohippelates* spp.). I am referring to the small flies that constantly try to get in your eyes when you are outside and can drive you a bit crazy. People have been mentioning anecdotally that eye gnats seem worse than usual. I can't say for sure but in events where patterns in insect populations are widespread over diverse areas, are sometimes related to weather. With the extreme weather we have had, including times of heavy rain, this could result in habitats that is more favorable for eye gnats.

Understanding a little bit about eye gnat biology may help understand why they do what they do, and why sometimes they are worse than others. Eye gnats are small (1/16 to 1/8" long), with



A close up image of an adult eye gnat, Liohippelates sp., collected in north central Florida.

Photo: Lyle J. Buss, University of Florida

shiny black or gray bodies and yellow to orange legs. They are attracted to moisture such as tears and other body fluids resulting in them being attracted to eyes, nose, mouth, sweat, or wounds which they need for protein to make eggs. They do not bite to draw blood to feed on like some other flies. They have sponge-like mouth parts that allow them to soak up body secretions.

The optimal environment for eye gnats is temperatures between 70-90°F. Eye gnats breed and develop in damp areas where there is decaying vegetation, manure, or other organic matter. Eggs are laid on the soil, larvae hatch and quickly bore into the soil where they begin to feed on decaying organic matter and roots. After about 5-20 days depending on temperature, the larvae pupate near the soil and then emerge as flying adults. Females are not good fliers, and they crawl on your skin to get to your eyes, etc. They are persistent and keep coming back when brushed away. They tend to be more of a nuisance in spring and fall, but depending on the weather, can be a problem at other times of the year.

Currently there are no effective area wide control measures for eye gnat populations. This would involve modifying their breeding sites. This would be a challenging process to pursue. Repellants that are used for other pests such as mosquitoes (ex. deet or picaridin) should help but read the labels about safe applications near your face.

While eye gnats are a nuisance, the upside is that they do not bite or transmit diseases.

For more information and images, go to: https://edis.ifas.ufl.edu/publication/IN884 https://ipm.ucanr.edu/PMG/PESTNOTES/pn74164.html

Soft Scale on Magnolia

By: Paula Shrewsbury

A heavy infestation of soft scale on Saucer magnolia was found in Chevy Chase, MD on May 1st by Colin Campbell (Bartlett Tree Experts). He also reported honeydew on the foliage already. There are two common soft scales on magnolia, magnolia scale (*Neolecanium cornuparvum*) which only gets on magnolia, and tuliptree scale (*Toumeyella liriodendra*) which gets on magnolia and tuliptree. For both scale species, nymphs are present now and they will mature in late summer and give birth to live young in early fall. It is the crawler stage in the fall that should be targeted with an insect growth regulator (IGR) or other labeled products in the fall. In looking at these photos and the stage of nymphal instars in them, it is difficult to tell if these are magnolia or tuliptree nymphs. As the scale matures, the differences between the two scales is quite distinct. See the <u>fact sheet from Penn state on magnolia and tuliptree scales</u> that has good images showing the difference between the two.

If honeydew becomes a problem, and it's possible (tree size and number), use a soft scrub brush and water to physically remove scales from the branches to reduce populations and honeydew.



Heavy infestation of soft scale nymphs on saucer magnolia found on May 1, 2025. Photo: Colin Campbell, Bartlett Tree Experts



Soft scale nymphs on saucer magnolia found on May 1, 2025, showing honey dew on foliage already.

Photo: Colin Campbell, Bartlett Tree Experts

Feeding Damage on Buds of Roses

By: Paula Shrewsbury

We had two reports of caterpillars feeding on the buds of roses. Mark Schlossberg (Pro-Lawn Plus) sent in the image of a green caterpillar feeding on a rose bud of a Knockout Rose in Bethany Beach, DE on May 1, 2025. Sam Fisher (Bartlett Tree Experts) saw similar damage by a green caterpillar on April 23, 2025. From the images, the host plant, and the damage it looks like this might be tobacco budworm, *Heliothis virescens*. In addition to rose, it also attacks petunia and geraniums along with several other hosts. Small white eggs are

laid on the flower bud, the caterpillar hatches and begins feeding on the rose bud leaving clear signs of feeding damage (see images) and black frass in and around the flower bud. Caterpillars may also move to flower petals and leaves to feed. Best control measures are to inspect plants closely for signs and symptoms of tobacco budworm and hand remove or prune off infected buds.

For additional information and images of tobacco budworm go to: https://content.ces.ncsu.edu/tobacco-budworm https://ucanr.edu/blog/fresno-gardening-green/article/tobacco-budworms-roses-really



Likely a tobacco budworm feeding on the bud of a Knockout rose. Photo: Mark Schlossberg, Pro-Lawn Plus



Another caterpillar, maybe tobacco budworm, feeding on the bud of this rose plant.

Photo: Sam Fisher, Bartlett Tree Experts

Spiders in the Landscape

David Freeman, Oaktree Property Care, found a magnolia green jumping spider this week. Spiders are one of the many predators found in landscapes and nurseries to help keep pest populations down. See Paula Shrewsbury's article below for some of the predators often found feeding on aphids.



This magnolia green jumping spider actively pursues its prey. Photo: David Freeman, Oaktree Property Care

Beneficial of the Week

By: Paula Shrewsbury

Lots of aphids = lots of natural enemies!

Over the last few weeks there have been several reports of aphids on a variety of plants. Such as spiny witch hazel gall aphid on river birch, a Periphyllus species of aphid on Japanese maple, woolly apple aphid on elm, along with other aphid infested plant species. The good news is that we have had an equal number of reports of natural enemies showing up in force on these aphid infested plants. Reports of natural enemies included lady beetle egg, lady beetle larvae, and syrphid / flower fly larvae (Marie Rojas, IPM Consultant; Luke Gustafson, The Davey Tree Expert Company).

Aphids are an interesting group of insects. They have evolved to become quite efficient at reaching high densities quickly. For example, during the summer season for most species of aphids, all the individuals are females so every aphid in the population is reproducing, they give live birth so no time needs to be spent in the egg stage, and they are parthenogenic so females do not have to spend time searching for a mate or mating to reproduce. This is a pretty impressive biology that results in high densities of aphids in relatively short periods of time. Interestingly, even with these high population building attributes of aphids, chemical controls are seldom needed for many aphid species. The Photo: Marie Rojas, IPM Consultant major reason for this is because there is an entire suite of natural enemies that ultimately reduce, and often eliminate, aphid populations.

Many species of natural enemies move into landscape and nursery plantings in response to increased "food" availability. Some species of lady beetles are generalist like the multi-colored Asian lady beetle (see images) that feed on aphids and other insects, while others tend to specialize such as spider mite destroyers, Stethorus spp., that prefer spider mites. The aphid natural enemy complex includes various species of lady beetles, predatory flies such as syrphid or flower flies and Aphidoletes midges, lace wing predators, several species of parasitic wasps, and a number of other types of generalist predators. I frequently monitor plants for populations of aphids and their natural enemies (always interesting to watch!).



Lady beetle egg mass on River birch with spiny witch hazel gall aphids.



Early instar multi-colored Asian lady beetle, Harmonia axyridis, larvae (3) feasting on an unidentifiable food resource.

Photo: Marie Rojas, IPM Consultant

Flower or syrphid flies (Syrphidae) larvae are often seen on the underside of leaves of aphid infested plants. Adult flower flies, although they are true flies, are bee mimics (no potential predator wants to get stung), and feed on the nectar and pollen of flowers. They cue in on branches infested with aphids and lay small white eggs individually on the aphid infested leaves. Once the flower fly eggs hatch, the maggot-like larvae voraciously search for and consume aphids.

So, the take home message is: *Don't spray! Wait! The natural enemies will come!* If there is a need to treat aphids (ex. high amounts of honeydew, high levels of distorted new growth), then use a short residual product, such as horticultural oil, that will reduce the aphid populations and have the least detrimental impact on natural enemy populations. In addition, avoid using high nitrogen, fast release fertilizers. These fertilizers will favor aphids by increasing the nutritional value of the food and/or reducing plant defensive compounds, leading to greater densities of aphids and their damage.

Aphids do have a good side to them. As I mentioned they attract a large and diverse suite of natural enemies into a landscape or nursery. Once the natural enemies consume most of the aphids on aphid infested plants, they will then move onto other plants in the area that have food (other herbivores) for them. For example, many natural enemies of aphids also feed on scales, spider mites, thrips, or small caterpillars, among other insects, providing biological control of these pests. When possible, let mother nature (or her natural enemies) take care of aphid infestations and you will have the added benefit of reductions in other pest species by an abundant diversity of natural enemies.



Multi-colored Asian lady beetle, *Harmonia axyridis*, adults feed on spiny witch hazel gall aphids on organically grown river birch. This pair is also mating so soon there will be even more lady beetles in this landscape. The distortion on the foliage is the damage on the upper leaf caused by aphids feeding on the underside. Photo by Steve Black, Raemelton Farm



Flower or syrphid fly larva on the underside of a river birch leaf that is infested with spiny witch hazel gall aphids.

Photo: Luke Gustafson, The Davey Tree Expert Company



Flower or syrphid fly larvae are voracious predators of aphids. Note the aphid carcasses on the predator's body.

Photo by P.M. Shrewsbury, UMD



A flower or syrphid fly adult feeding on floral resources from a shasta daisy flower. In addition to providing biological control, syrphid flies also provide pollination services.

Photo by P.M. Shrewsbury, UMD

Weed of the Week

By: Nathan Glenn

Annual bluegrass (*Poa annua*) is one of the most common and troublesome weeds in turf and landscapes across the Mid-Atlantic and much of the United States. Though it resembles desirable bluegrass species, it stands out in the lawn due to its slightly lighter color and different texture—especially in spring.

Typically classified as a **winter annual**, annual bluegrass often germinates in the **early fall**, especially in regions like ours with mild winters. That means **pre-emergent herbicides should be applied in August or September** to target its establishment.

Identification Tips:

Growth habit: Forms erect tufts or small clumps

Height: Tolerates close mowing but can grow up to 12 inches in unmanaged areas

Leaves: light green, folded in bud, lack auricles, slightly pointed membranous ligule, and hairless with a

distinctive boat-shaped tip

Blade dimensions: Up to 4 inches long and 1/8 inch wide

Habitat: Prefers moist to wet soil, often thriving in shaded, compacted, or overwatered areas. A weed of turf,

landscape, nursery crops, and vegetables

Fun Fact: Despite being considered a weed, *Poa annua* has been selectively bred and used as a specialty turfgrass on elite golf courses—especially for greens—due to its fine texture and tolerance to mowing.

Cultural Control:

Moisture management is key—avoid puddling from irrigation or downspouts

Reduce compaction by aerating in seasons other than fall, when the weed germinates

Catch clippings during seed production if infestation is heavy, to reduce the seed bank

Early detection and removal is helpful in small infestations

Clean mower decks to prevent spreading seed between sites

Chemical Control:

Pre-emergent options:

Prodiamine
Dithiopyr
Pendimethalin
Benefin
Benefin + oryzalin
Benefin + trifluralin
Oryzalin

Apply in **August–September** when daytime highs drop to ~75°F for several days. Pre-emergent failures are often due to **late applications**, not product failure. Proper timing and rotation of herbicide modes of action are critical.

Post-emergent (non-selective):

Glufosinate

Glyphosate

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



Figures 1 & 2. Photos: Chuck Schuster, UME Ag Agent, Emeritus



Copyright © 2007 The Regents of the University of California. All rights (hours 5386232

Clemson University, Home and Garden Information Center

Plant of the Week

By: Ginny Rosenkranz

Black locust is a phenological indicator for adult flight of emerald ash borers in the spring.

My plant of the week is the black locust, beautiful fragrant flowers, but not a tree for a yard or garden. Robinia pseudoacacia or black locust is a native tree that grows in dry to medium, well drained soil and prefers to grow in full sun. They can tolerate a wide range of soil types from sandy soils to moist, organically rich soils and the roots can fix nitrogen in the soil, which allows it to be planted to reclaim soils in abandoned sites. Plants are cold tolerant from USDA zones 4-8, and as fast growers, can quickly create thickets. Black locust can grow 30-50 feet tall and 20-35 feet wide and spreads by root suckers and self-seeding. Its silhouette is a columnar tree with an oval crown. In May the plants bloom with fragrant, wisteria-like flowers that cascade in 5-8-inchlong clusters which attract bees, who use the flower nectar to create delicious honey. Each 1-inch white flower blooms for 7-10 days. The leaves are attached alternately on the stems and are pinnately compound with 23 leaflets that can grow 8-14 inches long. Each leaflet is rounded with an entire margin and a dark blue green in color. The stems zigzag with the alternating leaves, and are armed with spiny, paired prickles that grow 1/4 to ½ inches long at each node. The flowers mature into smooth, flat seed pods that are purple black in color in July and can stay on the trees through the winter. There are 4-8 reddish brown seeds per pod, each shaped like a kidney bean. Black locust is a larval host for many different butterflies like the clouded sulphur, Zarucco duskywing, and the silver-spotted skipper. Bees love the flowers while birds love the leaf cover, and rabbits feed on seeds and sprouts during the winter. The plant is poisonous to humans, livestock, and pets. Insect pests include locust borer which can be fatal, locust leafminer, caterpillars, scale, weevils, and whiteflies. Diseases can include canker, leaf spots powdery mildew, verticillium wilt and wood rot.





Black locust is a food source and provides habitat for various butterflies, bees, and birds, but since thorny seedlings can show up in unwanted areas and leafminer can be a regular problem, it it best left to grow in wooded, natural settings.

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 **255 DD** (Clarksville) to **567 DD** (Nat'l Arboretum/Reagan Nat'l). The <u>Pest Predictive Calendar</u> 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.

Tea scale – egg hatch / crawler (1st gen) (195 DD) Hemlock woolly adelgid – egg hatch (1st gen) (197 DD) Viburnum leaf beetle – first egg hatch (210 DD) Azalea lace bug – egg hatch (1st gen) (214 DD) Birch leafminer – adult emergence (215 DD) Elm leafminer – adult emergence (219 DD) Roseslug sawfly – larva, early instar (230 DD) Honeylocust plant bug – egg hatch (230 DD) Elongate hemlock scale – egg hatch / crawler (1st gen) (232 DD) Boxwood leafminer – adult emergence (249 DD) Hawthorn lace bug – first adult activity (259 DD) Spotted lanternfly – egg hatch (270 DD) Bristly roseslug sawfly – larva, early instar (284 DD) Imported willow leaf beetle – adult emergence (290 DD) Hawthorn leafminer – adult emergence (292 DD) Andromeda lace bug – egg hatch (305 DD) Pine needle scale – egg hatch / crawler (307 DD) Cooley spruce gall adelgid – egg hatch (308 DD) Eastern spruce gall adelgid – egg hatch (308 DD) Spirea aphid – adult / nymph (326 DD) Lilac borer – adult emergence (350 DD) Melon aphid – adult / nymph (351 DD) Spongy moth – egg hatch (373 DD) Holly leafminer – adult emergence (375 DD) Hemlock woolly adelgid – egg hatch (2nd gen) (411 DD) Basswood lace bug – first adult activity (415 DD) Emerald ash borer – adult emergence (421 DD) 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)

See the <u>Pest Predictive Calendar</u> for more information on DD and plant phenological indicators (PPI) to help you better monitor and manage these pests.

Degree Days (as of April 30, 2025)

Annapolis Naval Academy (KNAK)	335
Baltimore, MD (KBWI)	388
Belcamp (FS836)	291
Clarksville (001MD)	255
College Park (KCGS)	395
Dulles Airport (KIAD)	399
Ft. Belvoir, VA (KDA)	455
Frederick (KFDK)	338
Gaithersburg (KGAI)	378
Greater Cumberland Reg (KCBE)	325
Martinsburg, WV (KMRB)	345
Millersville (MD026)	368
Natl Arboretum/Reagan Natl (KDCA)	567
Perry Hall (C0608)	294
Salisbury/Ocean City (KSBY)	364
St. Mary's City (Patuxent NRB KNHK)	522
Westminster (KDMW)	427

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 calculatorThresholds in: Fahrenheit °F Lower: 50 Upper: 95 Calculation type: simple average/growing dds Start: Jan 1

Conferences

Upcoming IPM Scouts' Diagnostic Sessions (afternoon)

June 17, 2025, July 30, 2025, and August 26, 2025

Location: CMREC, Ellicott City, MD

June 18, 2025

Eastern Shore Pesticide Recertification Conference via Zoom

June 24, 2025

Stanton Gill Symposium and Lab Dedication

Location: CMREC, Ellicott City

Co-sponsors: University of Maryland Extension and Maryland Nursery, Landscape, & Greenhouse Association

June 27, 2025

Pesticide Recertification Conference

Location: Montgomery County Extension Office, Derwood, MD

September 11, 2025 MNLGA Field Day

Location: Raemelton Farm, Adamstown, MD

Commercial Ornamental IPM Information http://extension.umd.edu/ipm

CONTRIBUTORS:



Paula Shrewsbury Extension Specialist pshrewsb@umd.edu



David Clement Plant Pathologist clement@umd.edu



Ana Cristina Fulladolsa Plant Pathologist acfulla@umd.edu



Nathan Glenn Extension Educator Howard County nglenn@umd.edu



Nancy Harding Faculty Research Assistant



Kelly Nichols Extension Educator Montgomery County kellyn@umd.edu



Karen Rane Plant Pathologist UMD-Retired



Andrew Ristvey Extension Specialist aristvey@umd.edu



Ginny Rosenkranz
Extension Educator
Wicomico,
Worcester, Somerset
Counties
rosnkrnz@umd.edu



Chuck Schuster Retired, Extension Educator, cfs@umd.edu

Thank you to the Maryland Arborist Association, the Maryland Nursery, Landscape, and Greenhouse Association, Professional Grounds Management Society, FALCAN, and USDA NIFA EIP Award # 2024700043556 for their financial support in making these weekly reports possible.

The information given herein is supplied with the understanding that no discrimination is intended and no endorsement by University of Maryland Extension is implied.

University programs, activities, and facilities are available to all without regard to race, color, sex, gender identity or expression, sexual orientation, marital status, age, national origin, political affiliation, physical or mental disability, religion, protected veteran status, genetic information, personal appearance, or any other legally protected class.