

Commercial Horticulture

October 16, 2026

In This Issue...

- [Redheaded flea beetles](#)
- [White pine sawfly](#)
- [Peach leaf curl](#)
- [Hammerhead worms](#)
- [AgTech position at UMD Turfgrass Facility](#)
- [How to find out how many pesticide recertification credits you have](#)

Beneficial of the Week:

Jorō spider

Weed of the Week: Hairy bittercress

Plant of the Week:

Franklinia alatamaha

Pest Predictive Calendar
Degree Days
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:

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Regular Contributors:

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

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

Weed of the Week: Kelly Nichols and Nathan Glenn, (UME Extension Educators) and Dan Buonaiuto, (Assistant Professor), Dept. of Plant Sciences and Architecture

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Do You Have Adult Redheaded Flea Beetles?

By: Laura Nixon

I am looking for some redheaded flea beetle (*Systema frontalis*) adult specimens for a study; if you are observing the adults in your nursery, please reach out to me (Lnixon1@umd.edu) and I can either come and collect some or guide you through the collection process.

Redheaded flea beetles are an increasingly common pest in container nurseries and greenhouses, although you can also see them in the landscape. In the fall, adults are active and laying their eggs into soil and substrate. These eggs will overwinter and hatch in the spring, then the beetle grubs will stay

Redheaded flea beetle adult on a damaged Aconitum.

Photo: Dave Freeman, Oaktree Property Care



in the soil and feed on plant roots. Adults emerge later in the summer and skeletonize foliage. If you are seeing adults now, you can knock them down with diamides (ex. Acelepryn, Mainspring), bifenthrin (ex. Talstar), or combination products such as XXpire (sulfoxaflor + spinetoram). It is important to keep track of which plants and areas of your nursery have redheaded flea beetle this fall, as that is where the larvae will be a problem in the spring. The larvae can be effectively treated with drenches of biologicals, such as azadirachtin (insect growth regulator), *Beauveria bassiana* products (ex. Botanigard, Principle WP), or nematodes (*Steinernema carpocapsae*).

White Pine Sawfly

By: Laura Nixon

White pine sawfly can become a pest on Eastern white pine. There are also reports of this species on red and mountain pine. The female sawflies have sharp ovipositors which they use to carefully slice into pine needles and lay their eggs. When the larvae hatch, they feed gregariously and consume the pine needles. We don't get a lot of reports of this species as a major pest, so if you see a few of these sawfly larvae, I recommend hand-picking the larvae or pruning of the infested section. Only large, persistent populations would necessitate treatment. If treating, be sure to use a product labelled for sawflies.



White pine sawfly larva posing on white pine needle. The head is a reddish brown, with a pale body spotted black.

Photo: Dave Freeman, Oaktree Property Care

Peach Leaf Curl - Treat in the Fall

By: David Clement

We receive reports of peach leaf curl disease in the spring when it is too late to treat. Peach leaf curl, caused by the fungus *Taphrina deformans*, causes distortion, puckering and reddish discoloration of infected leaves in the spring. In severe infection years even blossoms and young green shoots can be infected. Infected leaves will fall prematurely and this defoliation can result in high yield losses. After symptoms occur, a white coating will appear on the infected leaf surfaces, which is the layer of fungal spore bearing structures. The spores from these structures will germinate and spread throughout the plant during the growing season by rain. The spores can survive hot dry periods and winter freezing.

For effective disease management it is very important to get thorough spray coverage of the tree from all sides. By the time spring symptoms are visible it is too late to manage this disease with fungicides. The best time to apply a preventative fungicide (such as copper products, or chlorothalonil) for this disease is in the fall, after the leaves have dropped. Spraying after leaf drop also allows better fungicide coverage of the trees. Spring applications often fail if warm weather during winter thaws causes bud swell which allows the fungal spores to invade and colonize the tissue. If last spring's infection was severe then fall and spring applications would add extra insurance from damage. For more information on this disease, check out the Peach Leaf Curl fact sheet by Dr. Kari Peter, Penn State University fruit pathologist.



Peach leaf curl causes new leaves in the spring to turn bright red, yellow, pink, or purple.
Photo: Suzanne Klick, UME

Invasive Hammerhead Worms After the Rain

By: Laura Nixon

After a heavy rainfall this week, Dave Freeman (Oaktree Property Care) observed invasive hammerhead worms (*Bipalium* spp.) in Northern Virginia. There are a few species of hammerhead worms in Maryland, all of which are invasive. These worms predate on our native earthworms, as well as slugs and snails, and release a toxin called tetrodotoxin which causes muscle paralysis in prey. Although this toxin doesn't pose a major threat to humans, it can make smaller creatures (like cats, dogs, and toddlers) sick if ingested, so be careful not to allow your pets or little ones to put these worms in their mouths. These worms will also cause minor skin irritation if touched.

Hammerhead worms are identifiable by the distinctive shape of their heads. If you are seeing these around, you can handle them with gloves and drop them in bleach or freeze them to kill them. If they are a bit too quick for you, you can sprinkle them with salt to slow them down.

Hammerhead worms can grow up to 3 inches long, and have the distinctive hammer-shaped head.
Photo: Dave Freeman, Oaktree Property Care



Job Opening at the Central Maryland Research and Education Center at the Paint Branch Turfgrass Facility

The University of Maryland is currently accepting applications for an Agriculture Technician Lead position at the Turfgrass Facility located in College Park, MD. This position assists the Facility Manager in the daily operations of turfgrass research including tilling, planting, fertilizing, spraying, and mowing turfgrass plots. The successful candidate will operate equipment including farm tractors, skid steers, sprayers, mowers, and other turf management equipment. They will carry out routine maintenance of equipment, grounds, and facilities including calibrating spray equipment and maintaining underground irrigation. This position assists researchers in the implementation of research protocols and provides assistance to instructors with the lab portions of their classes in the field. For more information and to apply to the position, visit [UMD's job website](#).

Need to Check How Many Pesticide Credits You Have?

By: Kelly Nichols

Not sure how many pesticide credits you still need? There is a way to check! Most states in our region, as well as D.C., have an online database that you can log into to see the status of your license. These websites can also be used to find upcoming meetings that are approved for credits. If you have issues logging in or have questions about your license, reach out to the appropriate agency, also listed below.

D.C.

Online Database: [D.C. Plants](#)

Department of Energy and Environment: [website](#), 202-535-2600

Delaware

Online Database: [Delaware Applicators Search](#)

Delaware Department of Agriculture: [website](#), 302-698-4571, amanda.strouse@delaware.gov

Maryland

Online Database: [Maryland Pesticide Licensing and Certification](#) (Note: your code number can be found on the postcard or the renewal email from a .gov address.)

Maryland Department of Agriculture: [website](#), 410-841-5710, Pest.reg@Maryland.gov

Pennsylvania

Online Database: [PA Plants](#)

Pennsylvania Department of Agriculture: [website](#) (see the Recertification or Pesticide Applicators tabs), 717-772-5231, pesticides@pa.gov

Virginia

Virginia Department of Agriculture and Consumer Services: [website](#), 804-786-3798, opsclrt.vdacs@vdacs.virginia.gov

West Virginia

Online Database: [WV Plants](#)

West Virginia Department of Agriculture: [website](#), 304-558-2209

Beneficial of the Week

By: Paula Shrewsbury, UMD

Jorō spiders are increasing in the DMV area

The non-native Jorō Spider, *Trichonephila clavata*, is a large, orb-weaving spider that is native to Japan and eastern Asia. It was first detected in the U.S. in 2014 in Georgia, and has since spread to multiple states, including the DMV. Jorō spiders are active throughout the season, but [most observations are made in September and October](#) when females and their webs are large and easy to see. The [Jorō spider is a beautiful spider, with females about 3-4" in size](#) (bodies ~1", legs about 3") (males are much smaller) and amazing body colors of bright yellow, red, and blue with black and yellow legs (see images). It builds large, irregular orb webs that are a diameter of ~ 1 meter (3') or more, often stretched between tree and/or shrub branches in urban landscapes, parks, and natural areas. The silk is yellow in color and described as having a gold sheen when the sunlight hits it.

Do we have to worry about bites from Jorō spiders? According to scientists, the risks to humans are low, given the puny size of the Jorō's fangs which are unlikely to pierce human skin. In addition, the Jorō spider is not aggressive, it is a passive hunter. As you can see from images and [videos](#), many arachnophiles have handled Jorō spiders with no consequences except for the feeling of pleasure in being so close to these beautiful creatures.

Have Jorō spiders been spreading to new areas? Yes, both in the number of states and the number of locations within a state where it has been observed. In MD, we first saw Jorō spiders in a forested area of a Howard County Park in 2022. At that time when searching the area for Jorō spider, only a few webs were found. Recently, a colleague went back to the same park and noted "it was hard to walk through the forest without bumping into a web". According to [iNaturalist](#), the Jorō spider now occupies locations in more than a dozen states and here in the DMV Jorō has been sighted in several locations in Virginia, and in Howard, Anne Arundel, Prince Georges, and Baltimore Counties in Maryland.

Ecosystem impacts of the Jorō spider are relatively unknown at this time. A remaining concern is how the Jorō spider will impact our current ecosystems. As with all non-native species that arrive in our country, it is



A non-native Jorō spider female with her newly captured non-native spotted lanternfly prey... lunch time.
Photo: Mike Raupp, UMD



In nature, females are often larger than males as demonstrated by this female (and pregnant) Jorō spider with a male Jorō spider on her abdomen.
Photo: Mike Raupp, UMD

difficult to predict what impact they will have on our natural and managed ecosystems. Experts suggest that Jorō spiders may have a negative impact on our large native orb weavers such as the [black and yellow garden spider](#). In locations in other parts of the country where Jorō is established, it often becomes the most abundant and dominant orb weaver. On the flip side, the non-native Jorō spider has been observed to readily feed on introduced pests such as spotted lanternfly and brown marmorated stink bug in the U.S. Why not... they all evolved together in Asia and have now met up in the U.S.. For now, we will have to learn to live with Jorō spiders like we do other large spiders we encounter and watch for ecological impacts on other native orb weaver spiders and native and non-native pest insects.

[Click here to see a great video of a Jorō spider enjoying snacks of invasive insects \(by M. Raupp, UMD\)](#)



The sunlight highlights webs of the Jorō spider in a Georgia landscape.
Photo from: <https://news.uga.edu/joro-spiders-likely-to-spread-beyond-georgia/>

Weed of the Week

By: Kelly Nichols

Hairy Bittercress

Hairy bittercress, *Cardamine hirsuta*, is a broadleaf winter annual weed found throughout northeast landscapes and turf. It grows best in a cool, moist environment, and often when a turf manager is mowing their lawn too short. Hairy bittercress can be identified in its vegetative stage by its basal rosette of pinnately lobed or compound leaves, each with more than 3 leaflets (Figure 1). The leaflets are rounded, emerging from a petiole that is hairy. Leaf size decreases as they emerge higher on the stem. The flower of this weed will appear in the spring and be in clusters at the end of flowering stems. The flowers are two to three millimeters in diameter and will be made up of four petals (Figure 2). Hairy bittercress also has distinct fruiting stems that end with slender seedpods (siliques). These siliques (Figure 3) are narrow capsules that are designed to release the seeds that are held within in an explosive manner, spreading the seed up to ten feet from the plant. In one research study, the average plant produced 68 of these siliques or seed pods with an average of 29 seeds per pod.



Figure 1. Pinnately lobed leaves.
Photo Credit: Kelly Nichols, UME

Here in Central Maryland, hairy bittercress is emerging. It is best controlled by maintaining a healthy, dense turf that can compete and prevent weed establishment. Hand pulling is an option if it covers a small area. If a pre-emergent herbicide was not applied in August or September, post-emergent herbicides can be applied this month. Post-emergent herbicide options include 2,4-D or dicamba alone or in a tank mix. Mecoprop (MCP), dichlorprop, or triclopyr can also be tank mixed with 2,4-D. If hairy bittercress is not able to be controlled this fall, make a note of where the population is and mow it prior to producing the seedpods early next spring.



Figure 2. Hairy bittercress flower.
Photo Credit: Kelly Nichols, UME

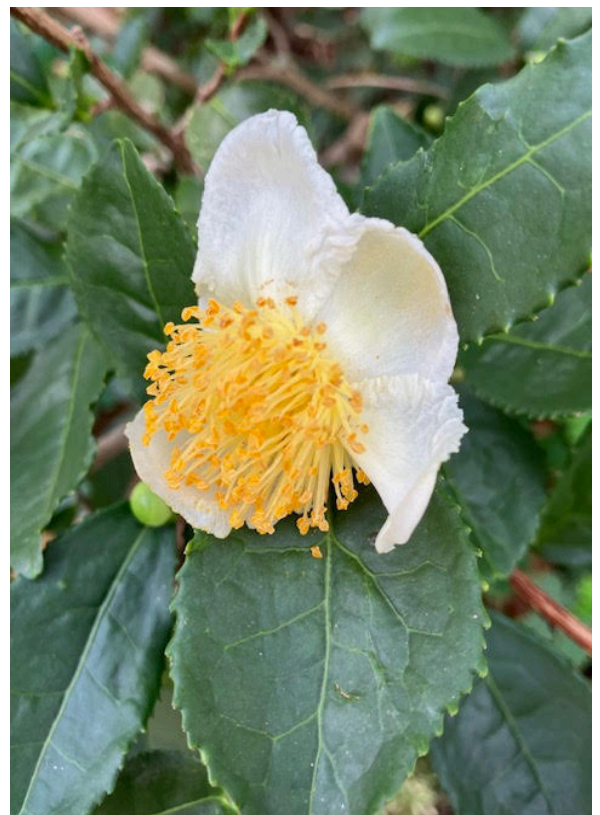


Figure 3. Hairy bittercress seed pods (siliques).
Photo Credit: Kelly Nichols, UME

Plant of the Week

By: Ginny Rosenkranz

The Franklin Tree (*Franklinia alatamaha*) is a small ornamental tree named in honor of Benjamin Franklin of Philadelphia. It typically grows 10–20 feet tall and 6–15 feet wide, making it an attractive choice for smaller landscapes. It thrives in full sun to part shade and prefers organically rich, acidic, moist, well-drained soils. The Franklin Tree has a sparse, fibrous root system and is intolerant of drought, requiring careful attention to soil moisture. It can be grown as a single-trunk tree or a multi-trunked shrub. The glossy, dark green, oblong leaves can reach 5 inches long and have finely serrated margins. Arranged alternately along the stems, the leaves provide beautiful autumn colors, turning shades of burgundy, orange, purple, and red. One of the Franklin Tree's most attractive features is its fragrant, white flowers. The cup-shaped blooms measure approximately 3–6 inches across and have five petals surrounding a prominent cluster of golden-yellow stamens. Flowering typically begins in mid- to late summer and



***Franklinia alatamaha* is a late season bloomer.**
Photo: Tracy Causey-Jeffery, UME

may continue until the first frost, filling the surrounding air with a sweet fragrance. The copper-colored fruit is a small, woody, round capsule, approximately ½ inch in diameter, containing five sections that hold the seeds. The Franklin Tree is cold-hardy in USDA Zones 5–8, although plants may benefit from winter protection in Zone 5. The Franklin Tree is also known for being difficult to establish, particularly where soil moisture and drainage are unsuitable. An important consideration when selecting a planting site is the tree's sensitivity to *Phytophthora cinnamomi* that causes root and crown rot to both cotton and the Franklin trees. With its fragrant summer flowers, glossy foliage, and brilliant fall color, the Franklin Tree can be a remarkable addition to the landscape when provided with the proper growing conditions.



***Franklinia alatamaha* is a good choice as a late in the season bloomer that doesn't get too big in a smaller landscape.**

Photo: Tracy Causey-Jeffery, UME

Degree Days (as of October 14, 2026)

Annapolis Naval Academy (KNAK)	4269
Baltimore, MD (KBWI)	4187
Belcamp (FS836)	4145
Clarksville (001MD)	3493
College Park (KCGS)	4309
Dulles Airport (KIAD)	4212
Ft. Belvoir, VA (KDA)	4379
Frederick (KFDK)	3816
Gaithersburg (KGAI)	3998
Greater Cumberland Reg (KCBE)	3744
Martinsburg, WV (KMRB)	3853
Millersville (MD026)	4195
Natl Arboretum/Reagan Natl (KDCA)	4692
Perry Hall (C0608)	3903
Salisbury/Ocean City (KSBY)	4195
St. Mary's City (Patuxent NRB KNHK)	4426
Westminster (KDMW)	4009

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

Maryland Turfgrass Conference

December 15, 2026

Location: Turf Valley Resort, Ellicott City, MD

December Integrated Pest Management Conference

Date and location will be posted when confirmed.

2027 Advanced Landscape IPM PHC Short Course

This is a recertification short course for arborists, landscapers, IPM consultants, horticulturalists, professional gardeners, and others responsible for urban plant management. The course lectures will be held over four days at the University of Maryland, College Park, MD. In addition, there will be a hands-on lab following lecture (available to a limited number of course attendees). Coordinators: Drs. Paula Shrewsbury and Mike Raupp, Dept. of Entomology, University of Maryland

Lecture dates: Monday, January 4 - Thursday, January 7, 2027 from 8:00 am – 3:00 pm

Lab dates: Monday, January 4 - Thursday, January 7, 2027 from 3:30 pm – 5:30 pm (space limited)

Course information: <https://landscapeipmphc.weebly.com/>

Registration: <https://www.eventbrite.com/e/2027-advanced-landscape-ipm-phc-short-course-tickets-1992372702386?aff=oddtcreator>

Questions contact: Amy Yaich, 301-405-3911, umdentomology@umd.edu

Maryland Arborists' Association Conference

January 12, 2027 (snow date in January 13, 2027)

Location: Howard Community College, Columbia, MD

FALCAN Pest Management Conference

January 22, 2027 (snow date is March 12, 2027)

Location: Frederick Community College, Frederick, MD

LCA Pest Management Conference

January 28, 2027

Location: Turf Valley Resort, Ellicott City, MD

2027 Manor View Farm & Perennial Farm Education Seminar

February 2, 2027. Valley Mansion, Cockeysville MD

Laura Nixon is speaking at this event.

Chesapeake Green Horticultural Conference

February 11 and 12, 2027

Location: Maritime Institute and Conference Center, Linthicum Heights, MD

Eastern Shore Pest Management Conference

February 16, 2027

Location: Wicomico Civic Center, Salisbury, MD

2027 Precision Agriculture Technology Conference

February 25, 2027

Location: Crowne Plaza in Annapolis, Maryland.

This year's theme, Plowing Through the Hype: What Happens When AgTech Meets the Field?, will focus on the practical applications and profitability of agricultural technology. Topics include artificial intelligence, robotic weed management, drones for nutrient management and prescription mapping, and the economics of adopting these tools.

If you need recertification in Maryland Category 3b (interior ornamentals), here is an option:

Course Name: Interiorscape Commercial Applicator Training

Course Subtitle:

Course Number: 20270225

Course Dates: From 12/09/2026 to 12/09/2026

Course Time: From 9:00AM To 12:00PM

Course Description: Training for Interiorscape -

In-house: No

Internet: No

Course Syllabus: [Interiorscape Training \(1\).pdf](#)

Course Location: Zoom Webinar, 600 West Woodside, McPherson, KS 67460

Course Website: <https://extension.k-state.edu/pesticides-ipm/pesti>

Contact Person: Frannie Miller

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Commercial Ornamental IPM Information

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

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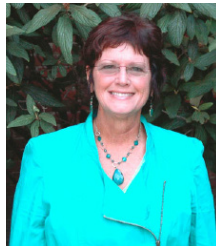
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