UNIVERSITY OF MARYLAND EXTENSION

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

Commercial Horticulture **September 19, 2025**

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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)

Upcoming Conferences

The Cut Flower Tour on the Eastern Shore will be on September 24, 2025.
A program on Operator Certification (FTC) for Writing Nutrient Management Plans for Nurseries, Greenhouses, and Controlled Environments on October 2, 2025 at the Wye Research and Education Center, Queenstown, MD.

2026 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 5 - Thursday, January 8, 2026 from 8:00 am – 3:00 pm
Lab dates: Monday, January 5 - Thursday, January 8, 2025 from 3:30 pm – 5:30 pm (space limited)
Course information: https://landscapeipmphc.weebly.com/
Registration: https://go.umd.edu/ipm26courseregistration
Questions contact: Amy Yaich, 301-405-3911, umdentomology@umd.edu

Go to our Conferences' web page to get details and the links to register for these programs.

Spruce Spider Mites

By: Suzanne Klick

In late summer-fall as the weather cools down, spruce spider activity increases. Monitor evergreens such as spruce, cryptomeria, Leyland cypress, arborvitae, juniper, hemlock, pine, Douglas-fir, and dwarf Alberta spruce (*Picea glauca* 'Conica') closely for damage and mites. Mites cause yellow stippling damage on needles. You can tap the branches over a white paper on a clipboard to check for active mites. With heavy infestations, needles can turn brown and drop prematurely.

Heavy infestations of spruce spider mites can cause extensive stippling damage on hemlock.
Photo: Suzanne Klick, UME

Horticulture oil at 1% gives a fair level of control. Females start laying eggs on needles in October. In early November after plants have gone dormant, you can use a 3% oil and target the overwintering eggs. Do not apply to blue spruce or Douglas fir. On blue spruce, it takes out the blue color on the needles since the blue is from a wax layer covering the needles. On Douglas firs, a 3% oil rate can cause phytotoxicity. Another option is hexythiazox (Heyxgon). The mite growth regulator is very effective in controlling the immature stages of spruce spider mites. It will also prevent eggs that have been laid from hatching. Adult females treated with hexythiazox will lay sterile eggs. Hexythiazox is a selective miticide and only kills spider mites, not predatory mites or other beneficial insects. You may need to include a 1% horticultural oil to kill adult mites.

Monitor for Crawlers of Tuliptree Scale and White Prunicola Scale

By: Paula Shrewsbury

This is the time you should be seeing crawlers of white prunicola scale and tuliptree scale. We have not received any reports about crawler activity yet. Please let us know if you see crawlers, and on what plants and where (pshrewsbury@umd.edu, sklick@umd.edu).

Sam Fisher, Bartlett Tree Experts, reported seeing "an annoying amount" of white prunicola scale in landscapes this week. He sent pictures of two sites in DC with it.

Tuliptree scale crawler activity begins around 3472 DD (hosts are tuliptree and magnolia) and white prunicola scale crawler activity begins around 3238 DD (hosts are plants with the genus Prunus). This week in MD DD accumulations ranged from 3208 DD (Greater Cumberland) to 4070 DD (St. Mary's City). Be sure to

Black overwintering crawlers and dead brown crawlers of tuliptree scale.
Photo: John Davidson, UMD

monitor plants with scales for crawler activity. Also monitor for the presence of lady beetle predators that feed on scale insects.

If controls are appropriate, there are multiple chemical controls that are available for suppression. These include systemics such as dinotefuron but be careful to avoid plants in flower and consider pollinator protection. Contacts such as horticultural oil, neem oil or other labeled products, and insect growth regulators such as pyriproxyfen (ex. Distance or Fulcrum) or buprofezin (ex. Talus). Be sure to follow label directions to protect natural enemies and pollinators and get optimal control. You can use a soft scrub brush and water to physically wash the scales off the branches and trunk of the tree to reduce the populations where feasible.

White prunicola scale female and eggs exposed when the scale cover was removed. Crawlers will look like eggs but slightly larger with legs and will be moving around. Photo: Brian Kunkel, University of Delaware, Bugwood.org

Wood Wasp on Dead Elm Wood

By: Paula Shrewsbury

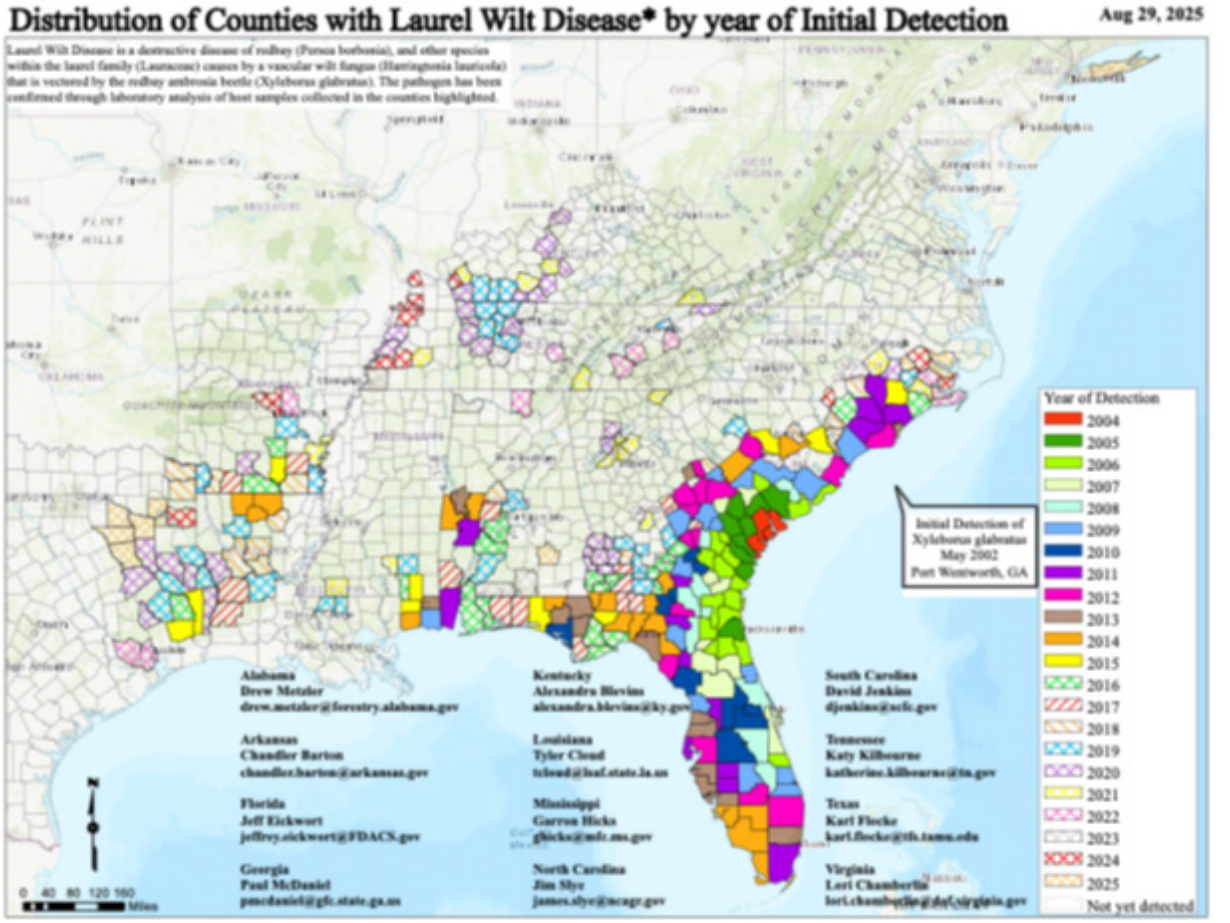
Craig Greco, Yardbirds, reported seeing the Pigeon tremex, *Tremex columba*, on the trunk of a dead elm tree. Pigeon tremex is in a wasp group referred to as wood wasps or horntails. Pigeon tremix adult female have a long ovipositor which it pushes into wood and deposits an egg. After the larvae hatch, they bore deeper into the tree, it takes up to two years to reach the pupation stage which happens inside the tree. New adults come out and infest other trees. The main host trees of pigeon tremex are declining elms and sugar maples, but they also attack other stressed hardwood trees. They can also transmit a rot fungus, *Cerrina unicolor*, into the wood.

A pigeon tremex wood wasp on the trunk of a dead elm tree. Photo: Craig Greco, Yardbirds

Laurel Wilt Found in Long Island, NY

By: Ana Cristina Fulladolsa, UMD

On September 2, 2025, the state of New York reported finding laurel wilt in sassafras in Suffolk County (https://dec.ny.gov/news/press-releases/2025/9/dec-and-partners-confirm-laurel-wilt-invasive-plant-disease-on-long-island). Laurel wilt was first found in the U.S. in Florida in 2004 and has steadily spread north. Twelve states have confirmed findings of the disease, but we have not yet found it in Maryland.



Laurel wilt distribution map.
Image: Georgia Forestry Commission.

Laurel wilt is a fungal disease of trees and shrubs in the Lauraceae family, including sassafrass and spicebush. The fungus, Harringtonia lauricola, is carried to the plant by the redbay ambrosia beetle (Xyleborus glabratus). The beetle is about 2 mm in length and is similar in appearance to other ambrosia beetles. The adults bore into trees and create tunnels in the wood. They carry the fungus on their bodies, introduce it into the tunnels, inoculating the tree, and cultivate the fungus as food.

Redbay ambrosia beetle.
Photo: Rachel Osborn, Southeast Asian Ambrosia Beetle ID, USDA APHIS PPQ, Bugwood. org

The fungus grows in the vascular system of the tree and "clogs" the vascular tissue. Initial symptoms are leaf wilting and discoloration on isolated branches. As the disease progresses, more branches are affected with wilting, brown leaves and defoliation. Dark streaking of the sapwood occurs beneath the bark and small, round entrance and exit holes may be visible where the redbay ambrosia beetles were present. Sapwood discoloration on cut ends of branches appear as dark-colored dots beneath the bark layer.

There is no cure for infected trees, though studies continue to evaluate different control methods for both the fungus and the beetles. Currently, the most important management strategies are prevention and early detection. To prevent the disease, cut, chip and mulch trees and use the wood on-site. Do not move firewood! If you observe wilting in sassafras or spicebush, take note of the damage and the location, and report it. Send images of suspicious symptoms to your local extension office, the UMD Plant Diagnostic Lab (plantlab@umd.edu), Suzanne Klick (sklick@umd.edu), UME-CMREC, the UMD Home and Garden Information Center (https://extension.umd.edu/programs/environment-natural-resources/program-areas/home-and-garden-information-center/ask-extension/).

Redbay trunk with ambrosia beetle frass tubes and entrance holes.
Photo: Ronald. F. Billings, Texas A&M Forest Service, Bugwood.org

If you suspect that a symptomatic plant is affected with laurel wilt, please contact the UMD Plant Diagnostic Lab. Send an email to the UMD PDL (plantlab@umd.edu) with clear images of the site, the whole symptomatic plant and close-up images of specific symptoms observed. When sampling, look for living branches showing wilting symptoms or evidence of ambrosia beetle damage. Check for vascular discoloration using a knife or similar tool to remove the bark, exposing the sapwood to check for discoloration, or by checking the wood beneath the bark in a cross-section. If you see discoloration, collect 5-8 branch segments of about 6 inches in length. Do not remove the bark from all branch segments so that the wood does not dry out in transit. Submit the samples to the lab with a completed submission form, as indicated on the PDL website: https://extension.umd.edu/programs/agriculture-food-systems/program-areas/fruit-vegetable-production/plant-diagnostic-laboratory/submission-forms/. The PDL will perform a general analysis of the sample and determine if further testing is needed. If so, the PDL will work with you, regulatory authorities (MDA), and expert diagnostic labs to confirm the presence of the laurel wilt fungus.

Follow the links below for information on laurel wilt disease and the redbay ambrosia beetle:

Cornell Laurel Wilt Resources Webinar: https://plantclinic.cornell.edu/be-on-the-look-out-bolo/laurel-wilt/
USDA Invasive Species Information Center: https://www.invasivespeciesinfo.gov/terrestrial/pathogens-and-diseases/laurel-wilt

University of Florida RAB-LW: https://edis.ifas.ufl.edu/topics/rab-lw_disease

Vascular discoloration in a cross-section of a redbay tree (*Persea borbonia*).
Photo: Albert (Bud) Mayfield, USDA Forest Service, Bugwood.org

Vascular streaking on sapwood of a redbay tree with laurel wilt disease.
Photo: Ronald. F. Billings, Texas A&M Forest Service, Bugwood.org

Beneficial of the Week

By: Paula Shrewsbury

Weed biological control: the large thistle weevil against Canada thistle

As with the many invasive insects and diseases we attempt to manage, there are also a number of invasive weeds. One tactic in the IPM toolbox is biological control of invasives which, if successful, usually provides long term more sustainable suppression of the invasive pest. For weeds, this can involve the introduction of a herbivorous insect that feeds, hopefully specializes, on a particular invasive weed.

Earlier this week, I was walking outside the Columbia Mall in Columbia, MD and came across a **large thistle weevil**, *Cleonis pigra* (Coleoptera: Curculionidae) walking on the ground. The large thistle weevil is referred to as a sluggish weevil and it is native to Eurasia. The large thistle weevil was introduced into North America to help control the invasive **Canada (aka creeping) thistle**, *Cirsium arvense* (Asteraceae), which is also native to Eurasia. Large thistle weevil was first recorded in North America in 1919 and more recently it has been recorded in a small area in the northeastern US and southeastern Canada.

A large thistle weevil, *Cleonis pigra*, showing the diagnostic two dark colored "V" patterns and long snout.
Photo: Paula Shrewsbury, UMD

Canada thistle is a perennial flowering plant that has been widely introduced from its native range to other countries and is highly adaptive to diverse habitats which makes it one of the worst invasive weeds worldwide. As with many plants, even though they are weeds in some situations, Canada thistle still has several good life history characteristics. For example, the seeds provide food for gold and other finches, the foliage is fed on by over 20 Lepidoptera species (ex. the painted lady), and the flowers provide nectar for numerous species of pollinator insects. In the US, Canada thistle is located across the country, and it is listed as a noxious weed in over 43 states. It creates dense patches and spreads through its aggressive root system and seeds. Canada thistle is responsible for millions of dollars of crop loss and control is difficult. It usually requires an integrated management approach, of which one tactic is biological control.

Larva of *Cleonis pigra* in the root crown of *Cirsium* sp.
Photo: Semyon Volovnik (from Skuhrovec et. al. 2019. Insects)

The large thistle weevil is approximately 1/3" long, mottled tan to brown color with double V-pattern on its elytra (outer wings), and its long snout contains the antennae and mouthparts on the tip. In addition to Canada thistle, it feeds on other plants in the Asteraceae family such as those in the genera *Carduus*, *Centaurea*, and *Onopordum* (*Skuhrovec et.al. 2019. Insects*). Adults overwinter in the soil near the base of Canada thistle. In the spring, adults emerge and feed on young thistle leaves. In the summer, adults lay eggs at the base of the stem or neck of the roots, C-shaped legless larvae hatch and bore into the stem base and feed on the roots of its host plant. Several larvae may be found in the roots of the same plant, ultimately killing the thistle, providing a biological control service of an invasive weed.

Editor's Note: In a previous "Weed of the Week" article, Virginia Creeper was incorrectly labeled as invasive. It is, in fact, a native species valued by many for its ornamental, wildlife, and environmental benefits. While it can be viewed by some in the commercial horticulture industry as a weed, it is highly desirable to others. In fact, it has been highlighted as a "Plant of the Week" in a previous issue—check that out here: Plant of the Week— Virginia Creeper.

Weed of the Week

By: Chuck Schuster

Giant foxtail, *Setaria faberi*, is a plant that can be growing quickly and tall at this time of year. This summer annual, germinates in the spring, grows in clumps, has a fibrous root system and is found throughout the United States. A native of China, it is found in compacted soils with higher fertility.

Leaf blades of giant foxtail can be up to sixteen inches in length and width is between one half and one inch. The leaf blade upon close examination will be found to have small hairs covering most of the upper surface and margin except near the leaf base. The inflorescence, (flower and seed head) of Giant Foxtail is where the plant gets its name. When fully mature, the seed head looks like the tail of the fox, and droops. It is cylindrical, with many spikelets; each spikelet will have between one and three bristles that are one quarter to one half inch long. A single plant can produce an average of 900 seeds.

Cultural control in landscape can start with mulches. It will not germinate if buried more than 1 inch. This is not a suggestion to put excessive mulch in the landscape but consider renewal of the mulch with clean products each year. Cultural control of this plant in turf includes maintaining a near neutral pH, as it tends to remain dormant in pH near 7 much more than it does in a soil pH near 5. Seeds will remain viable for up to 30 years, with most seeds germinate the first year after being deposited.

Control of giant foxtail needs to start early in the season. Most pre-emergent grass weed control will control Giant Foxtail. In landscapes consider using trifluralin (treflan) or a mix of trifluralin and isoxaben (Snapshot). A lack of good control this year may be related to the change in precipitation patterns. In landscape beds with Giant foxtail that has eluded early season control, post emergent control can be obtained easily using, Burnout or Prizefighter.

Giant foxtail established in a turf area.
Photo Courtesy of Mark Schlossberg

Editor's Note: In last week's Plant of the Week, Ginny Rosenkranz noted that *Salvia azurea* is a native plant. Judy Fulton, EcoPlant Consulting, responded that *Salvia azurea* is not native to Maryland or any other state in the mid-Atlantic region. Judy mentioned that a source for nativity information is the Maryland Plant Atlas. According to the Missouri Botanical Garden, it is native to North Carolina and Tennessee south to Florida and Texas.

Plant of the Week

By: Ginny Rosenkranz

Aralia spinosa also known as devil's walking stick or Hercules's club is a native plant in eastern and central North American. Its unusual name is due to the stout, sharp spines, technically prickles, on the branches, leaf stalks, and stems. True spines are situated on the plant-like leaves, prickles cover the stems like the prickles on roses, all over the plant and especially around the nodes. Plants can grow as small flat-topped tree, 10-20 feet tall, but are usually found as large upright deciduous shrubs that often form suckers. Plants prefer to grow in fertile, moist hummus loams, but can tolerate a wide range of soils and tolerate drought and urban pollutants. *Aralia spinosa* is cold tolerant from USDA zones 4-9, and plants thrive in full sun to part shade.

Plants are easily grown from suckers and seeds to form spiny thickets, usually in wood margins as well as fields and pastures. The plants create umbrellas-like canopies with their huge compound leaves. Each bipinnate to tripinnate leaf is arranged in an alternate fashion on the spiny stems. They are usually dark green in color, growing 2-5 feet long and 2-4 feet wide, each individual leaflet expands to 2-4 inches long, with strong toothed margins. Fall foliage varies from pale yellow to dull purple brown, while some turn yellow to red orange in color. The stems are ringed with leaf scars and sharp spines, as are the petioles and leave midribs. Stems are naked at the bottom with all the foliage on top. In June to September, the plant produces small 5-petaled white flowers that are grouped at the top of each plant in huge bouquets that can be 2- 4 feet long. The flowers are very attractive to bees, butterflies, and other pollinators for both the pollen and the nectar. The flowers mature into fleshy blackberry type fruit called drupes that ripens in late August to October. Once the drupes are ripe, they are devoured by songbirds, small mammals, foxes, racoons, and opossums. Devil's walking stick can cause allergic skin reactions and scratches from the bark, thorns, and roots. There are no serious insect or disease problems, both aphids and mealybugs may appear as well as leaf spots, but deer and rabbits leave the plants alone.

A devil's walking stick growing on the edge of a wooded area.
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 **3208 DD** (Greater Cumberland) to **4070 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.

Spotted lanternfly – egg laying **(September)**
White prunicola scale – egg hatch / crawler (3rd gen) **(3238 DD)**
Banded ash clearwing borer – adult emergence **(3357 DD)**
Tuliptree scale – egg hatch / crawler **(3472 DD)**

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

Degree Days (as of September 17, 2025)

Annapolis Naval Academy (KNAK)	3602
Baltimore, MD (KBWI)	3655
Belcamp (FS836)	3413
College Park (KCGS)	3642
Dulles Airport (KIAD)	3551
Ellicott City	3428
Ft. Belvoir, VA (KDA)	3732
Frederick (KFDK)	3450
Gaithersburg (KGAI)	3479
Greater Cumberland Reg (KCBE)	3208
Martinsburg, WV (KMRB)	3301
Millersville (MD026)	3526
Natl Arboretum/Reagan Natl (KDCA)	4058
Perry Hall (C0608)	3326
Salisbury/Ocean City (KSBY)	3497
St. Mary's City (Patuxent NRB KNHK)	4070
Westminster (KDMW)	3858

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

September 24, 2025
Cut Flower Tour on the Eastern Shore
Location: Wicomico County Extension Office and two cut flower operations
For more information

October 2, 2025
Operator Certification (FTC) for Writing Nutrient Management Plans for Nurseries, Greenhouses, and Controlled Environments
Location: Wye Research and Education Center, Queenstown, MD

October 29, 2025
FALCAN Truck and Trailer Safety Seminar
Location: Urbana Fire Hall, Urbana, MD
For more information

A list of Commercial Ornamental Horticulture Conferences through June 2026 is posted to our website on the Conferences' page.

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

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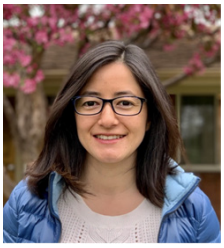

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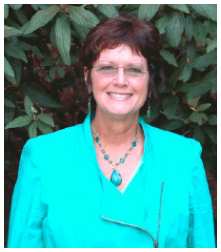

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Thank you to the Maryland Arborist Association, the Maryland Nursery, Landscape, and Greenhouse Association, Professional Grounds Management Society, FALCAN, and USDA NIFA EIP Award # 2024700043556 for their financial support in making these weekly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