UNIVERSITY OF MARYLAND EXTENSION

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

Commercial Horticulture **October 3, 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 and Laura Nixon (Extension Specialists) 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)

Spruce Spider Mites like the Cooler Weather

By: Laura Nixon

Magnified mite-damaged needles from Norway spruce.
Photo: Laura Nixon, UME

This week, we received a sample of Norway spruce (*Picea abies*) from Paul Wolfe (Integrated Plant Care) with mite damage. As he is seeing an active infestation on these trees, it is most likely damage from spruce spider mite, *Oligonychus ununguis* (Trombidiformes: Tetranychidae). Spruce spider mite attacks a range of conifers including, but not limited to, spruce, hemlock, pine, and juniper. This is a cool weather mite with adults most active in Fall and early Spring. During this time, the mites feed heavily which leaves visible stippling damage on the needles (pictured) and stresses the plant. As is common with spider mite species, you may also see webbing when a population is present. Adults lay their eggs on the undersides of needles around October, and it is the eggs that overwinter and hatch again in the Spring.

Spruce spider mite adults can be treated with miticide or a low rate of dormant/horticultural oil (1-2%, check your product labels); horticultural oil

has been shown to have phytotoxic effects on waxy needled spruces, including blue spruce and white spruce. Later in the winter, a higher rate of dormant oil (3-4% as labelled) can be applied to deal with the overwintering eggs to minimize next year's Spring infestation.

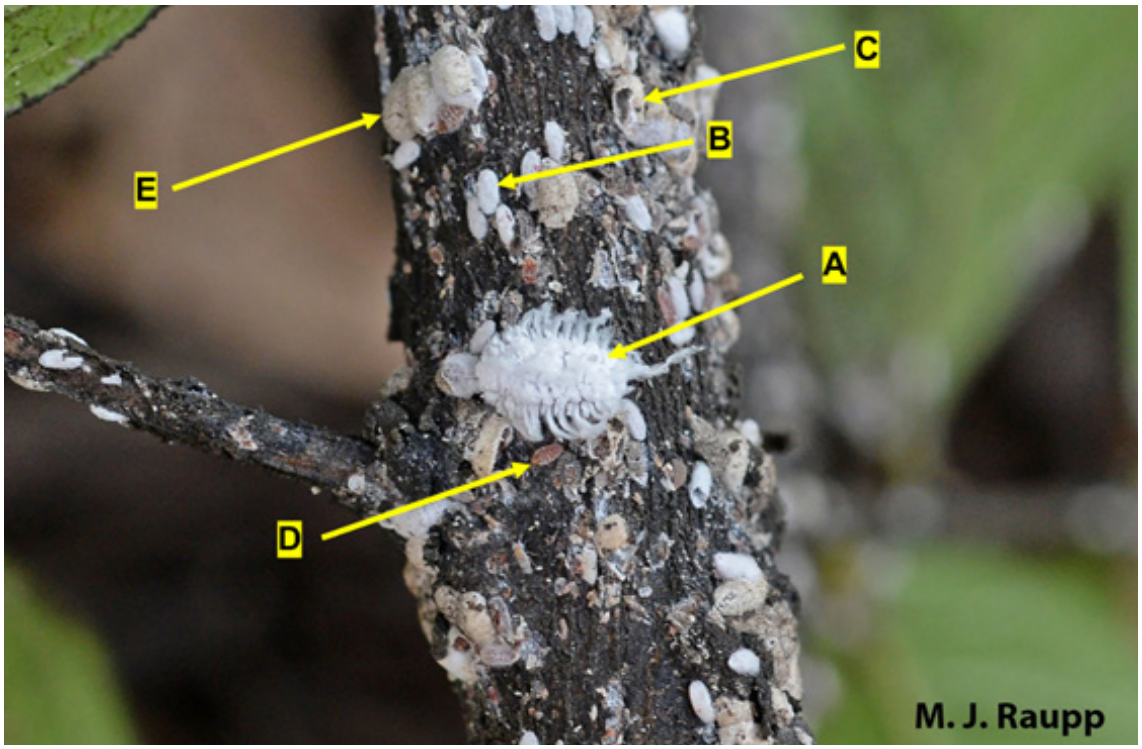
Spruce spider mite damage and webbing on hemlock. Photo: Suzanne Klick, UME

Spruce spider mite eggs laid on Cryptomeria. Photo: Suzanne Klick, UME

Crapemyrtle Bark Scale Update

By: Paula Shrewsbury

This week in University Park and College Park, MD, Sheena O'Donnell (UME Technician) continued to monitor crapemyrtle bark scale (CMBS) life stages. Sheena was finding mostly ovisacs with eggs and crawlers. Marie Rojas, IPM Consultant, monitored CMBS in western Montgomery County, MD and found mostly ovisacs that had eggs (see image). It will be interesting to see if the eggs hatch or if they spend winter in the egg stage.



Crapemyrtle bark scale life stages and a *Hyperaspis* lady beetle larva. *Hyperaspis* lady beetle larva (A) feeding on crapemyrtle bark scale (CMBS); CMBS male pupal case (B), CMBS female ovisac that has been fed on (C), CMBS crawler (D), and CMBS intact ovisac made by female CMBS (E).
Photo: Mike Raupp and Paula Shrewsbury, UMD

Crapemyrtle bark scale image from October 1, 2025, showing an abundant number of ovisacs.
Photo: Marie Rojas, IPM Scout

Crapemyrtle bark scale image from October 1, 2025, showing a CMBS ovisac that has been broken open to expose the pink viable eggs that were inside the ovisac.
Photo: Marie Rojas, IPM Scout

Spotted Lanternfly Continues to be Abundant and Active in Many Areas

By: Paula Shrewsbury

This week (Sept. 29th) Tom Croghan, The Vineyard at Dodon, found spotted lanternfly (SLF) **egg masses** on a line post at the vineyard in southern Anne Arundel County, MD. I have seen this before in vineyards where various types of posts are frequently used by SLF for oviposition. A control tactic is to remove egg masses before they hatch in the spring (by late April). For details on how to effectively find and remove egg masses go to: https://extension.psu.edu/spotted-lanternfly-management-guide **If you see SLF egg masses, please email us (pshrewsbury@umd.edu and sklick@umd.edu) and let us know the date found, where, and on what type of plant.**

Tom Croghan also shared that they use multiple tactics to manage SLF in the vineyard which is the best strategy to get optimal

Spotted lanternfly egg masses found on a line pole in a vineyard in Anne Arundel County, MD on September 29th.
Photo: Tom Croghan, The Vineyard at Dodon

control. Removing SLF egg masses and tree of heaven are critical management steps. At the vineyard they provide habitats to conserve natural enemies, including bird and bat boxes. They use chickens in the vineyard to reduce SLF densities where there are hot spots of SLF. (Note: Check federal and state Good Agricultural Practices (GAP) regulations if considering using chickens on a GAP certified farm).

In the past week or so, adult SLF continue to be abundant but seem to have moved from the "flying" phase to that of aggregating on trees in large numbers where they will mate and lay eggs. Marie Rojas, IPM Consultant, found SLF adults were congregating on red maples in Montgomery County, MD. She observed that some of the SLF were mating but found no egg masses yet. Marie also noticed some of the SLF were doing a "fluttering" behavior with their wings and wondered if this was part of a mating behavior. Indeed, the fluttering of the wings is believed to be part of an SLF courtship ritual. Although there is still a lot to learn about SLF mate finding and courtship behavior, there is evidence that there are multiple steps that include pheromones, host plant cues, and vibrational communication (M. Cooperband, Forest Pest Methods Lab, USDA APHIS). Vibrational communication in part, consists of the males rapidly vibrating their wings to attract females, and females responding to the sound of the vibrations. See this video of an observation of a male vibrating his wings and the female's response. You might be done with SLF's being all over the trees but take some time and watch their behaviors. From a science and behavior perspective, SLF can be quite interesting.

Spotted lanternfly adults aggregating on the trunk of a red maple tree.
Photo: Marie Rojas, IPM Scout

A mating pair of spotted lanternflies on the trunk of a red maple tree.
Photo: Marie Rojas, IPM Scout

Dusky Birch Sawfly

By: Suzanne Klick

Marie Rojas, IPM Scout, found dusky birch sawfly larvae feeding on young birch transplants in a nursery. This sawfly is finsihing up its second generation of feeding. No control is necessary this late in the season. Monitor next year for the first generation starting in April. Horticultural oil can be used for early instar larvae. Spinosad is another control option.

Mid and late instars of dusky birch sawfly. Sawfly larvae feed in groups and when disturbed form an s-shape and sway back and forth to deter predators.
Photos: Marie Rojas, IPM Scout

MNLGA Annual Field Day Recap

By: Laura Nixon

The Maryland Nursery, Landscape, and Greenhouse Association's (MNLGA) Annual Field Day was hosted at Raemelton Farm, Adamstown (Steve Black) on September 11th. There were a total of 169 attendees on the day, including nursery and greenhouse growers and landscapers from across the state, industry partners, and university collaborators; as well as representatives from the Maryland National Capital Park and Planning Commission, Maryland Department of Agriculture (MDA), and the National Park Service. Annual updates came from MNLGA, MDA, UMD Extension, and AmericanHort, with a behind-the-scenes look at the nursery operations from Steve Black and Angela Burke. Four educational tour stops covered the topics of aerial drone use in management, successful seeding and propagation, use of cover crops, and organic production.

It was a great day enjoyed by all, huge thanks to MNLGA and Raemelton Farm for organizing and hosting this event. We would highly encourage you to consider attending next year's Annual Field Day!

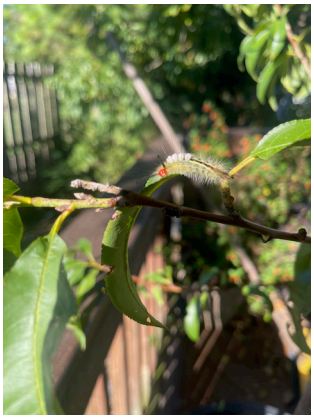
For a full list of this year's speakers, see https://mnlga.org/events/EventDetails.aspx?id=1954597&group=

Speakers and participants at the nursery field day.
Photo array courtesy of MNLGA

Caterpillar Activity

Craig Greco, Yardbirds, LLC, found a white-marked tussock moth caterpillar on a peach tree this week. Diseases, parasites, and predators attack this caterpillar, so control measures are rarely necessary. There are at least two generations per year. The hairs can cause an allergic reaction for some people.

While visiting a cut flower operation yesterday, there were about eight woolly bear caterpillars moving along the walking paths. The width of the orange band of this caterpillar increases with each molt. Other color forms (blond, brown, rust, and tan) occur. This caterpillar feeds on an extensive variety of plants and overwinters as a late instar caterpillar. Look for them again moving around fields and across paved areas next spring when they start to feed again.



White-marked tussock moths overwinter in the egg stage.
Photo: Craig Greco, Yardbirds, LLC

Look for woollybear caterpillars moving around landscapes and fields this fall. The amount of orange banding indicates it is a later instar - it doesn't predict winter weather.
Photo: Suzanne Klick, UME

Predator Activity in the Fall

The weather is cooler and predators are still feeding on insects at this time of year. Some are also laying eggs now. Marie Rojas, IPM Scout, found lacewing larvae and lady beetles on trees with Japanese maple scale. Here at the research center in Ellicott City, we have seen a Carolina praying mantid laying eggs and there is a black and yellow Argiope spider with her web in a planting by the building catching insects such as spotted lanternflies and grasshoppers.

Hopefully these newly hatched lady beetle larvae have enough time and food to go through their life cycle to reach the adult overwintering stage.
Photo: Marie Rojas, IPM Scout

Underneath the plant debris on this tree trunk is a lacewing larva. Marie saw it moving while she was scouting. See Mike Raupp's Bug of the Week to find out what is going on here.
Photo: Marie Rojas, IPM Scout

This Carolina mantid female is full of eggs and will be laying them very soon.
Photo: Marie Rojas, IPM Scout

Miri Talabac, UME-HGIC, found this Carolina mantid finishing laying her eggs here at the research center.
Photo: Suzanne Klick, UME

A yellow and black garden Argiope spider is wrapping her prey.
Photo: Suzanne Klick, UME

Beneficial of the Week

By: Paula Shrewsbury

Goldenrod blooms – Seven-spotted lady beetle are there

At this time of year most goldenrods (*Solidago* spp., Family Asteraceae) are in full bloom and are adding beautiful color to gardens and roadsides. Moreover, they provide floral resources (nectar and pollen) and habitat for a large diversity of insects, especially beneficial insects such as pollinators and natural enemies. Last week we discussed the Locust borer that was feeding on the pollen of goldenrod. On Tuesday (9/30) I was at Richard W. DeKorte Park in the Meadowlands in NJ (a great place to visit nature just across the water from NYC). Goldenrod was abundant in their gardens and so were the arthropods visiting the goldenrod. I saw three different species of lady beetles (Coccinellidae), one of which was native and two were non-native. Not surprising, the multi-colored Asian lady beetle, *Harmonia axyridis*, was one of the non-natives. Today I would like to talk about the other non-native, the seven-spotted lady beetle (*Coccinella septempunctata*).

Seven-spotted lady beetle (*Coccinella septempunctata*) adult found on goldenrod. In addition to having floral resources, the goldenrod also had aphids. Note the pattern of the seven spots on the wings. Photo: Paula Shrewsbury, UMD

The seven-spotted lady beetle (adult and larvae) is a predatory (also omnivorous) beetle native to Europe, Africa and Eastern Asia. Due to its potential as a biological control agent, seven-spotted lady beetles were introduced multiple times into the U.S. to control aphids and was first described as established in 1973. It is now widespread in the U.S. and there is concern that it may competes with and displace native lady beetles. Seven-spotted lady beetles have also invaded many other regions of the world with temperate climates. Interestingly, the seven-spotted lady beetle is reported as the official state insect in five different states: Delaware, Massachusetts, New Hampshire, Ohio, and Tennessee.

Seven-spotted lady beetle adult showing the pattern of the white spots on the black head and pronotum, and the upper wings where they meet the pronotum. Photo: Quartl/Via Wikipedia – CC BY-SA 3.0

Seven-spotted lady beetles are predators of many soft bodied insects that include aphids, beetle and butterfly eggs and larvae, mealybugs, scales, psyllids, and whiteflies. They are found in a wide range of habitats but mainly those that have plants infested with aphids. The adult beetle is about 0.3-0.5" long and very convex and shiny. It has a black head with one white spot over each eye; the pronotum (section just behind the head) is black with two white squarish spots; and then there are 7 black spots on it reddish-orange wings (3 on each wing and one in the middle where the wings join with two adjacent small white spots). The wing color and size of the spots can vary. There are two generations per year, and the seven-spotted lady beetle overwinters as adults in protected locations such as under tree bark or in ground litter.

Larva of the seven-spotted lady beetle feeding on aphids.
Photo: Gilles San Martin / vis Flickr – CC BY-SA 2.0

Weed of the Week

By: Kelly Nichols

With spotted lanternfly being found in many areas, it is necessary to understand its host weed tree, tree-of-heaven (*Ailanthus altissima*). Spotted lanternflies can be found on this tree throughout their lifecycle. Tree-of-heaven, *Ailanthus altissima*, is also known as ailanthus, sumac, stinking sumac, and Chinese sumac. This tree invades urban, agricultural, forest, and landscape areas, where it displaces the more desirable tree species. It was introduced into the United States in the late 1700's as an ornamental species. Right now, the female trees have very showy clusters of orange-red maturing seeds across the upper crowns, which cause it to look like uniquely colored hydrangeas.

Figure 1. Smooth, gray bark of tree-of-heaven.
Photo: Chuck Schuster, University of Maryland Extension, Ag Agent Emeritus

Tree-of-heaven will have smooth gray bark when young (Figure 1) and turn grey to light brown when older. At maturity, it can have a diameter at breast height (DBH) of thirty-six inches. Rarely growing much taller than 80 feet, it is a tree that will shade out and outcompete other desired species of trees. Leaves are alternate along a single stem that will have 11 or more individual leaflets (Figure 2). Leaflets are lanceolate with entire margins except that one to two teeth can be found near the base. Leaves and stems, when crushed, will emit an unpleasant odor that can be described as burnt peanut butter. The roots can produce saplings up to ten feet away from the main trunk and will do so when the tree is cut if appropriate actions are not taken. Fruit is produced and seeds are formed in clusters that have a winged structure called samaras (Figure 3). This is a prolific seed producer; a mature tree can produce as many as **300,000** seeds per year. Trees are in seed production currently. This tree is known to live 30 to 70 years.

Control of this weed tree can be done using several methods. Cutting the trees down with no other treatment will not provide satisfactory results, as stump and root suckers will appear quickly, and additional treatment will be necessary. Small forests can grow from roots when the main stem is cut and not properly treated with an herbicide. A basal bark application to smaller trees (less than six inches in diameter) will be successful. Apply the herbicide on the trunk during late summer/fall. Use 20% triclopyr (Garlon 4) with an oil base carrier. Ready

to use products include Pathfinder II, are also available with the same active ingredients and contain the basal oil. Hack and squirt (stem injection) is more effective on the larger trees and needs to be done during mid to late summer; the herbicide must be applied immediately after cutting. Products that will work with this method include triclopyr at a 20% rate. Glyphosate has been used but is not always effective and may require more than one application. Foliar application of glyphosate and triclopyr will work, but the site must be free of desirable plant species as these herbicides will damage or destroy most species. Foliar applications should be applied during active growth, from early June through early September. Other products have been used for foliar sprays but have a residual soil activity that will prevent non target plants from growing.

Figure 3. Samaras on tree-of-heaven. Photo: Chuck Schuster, University of Maryland Extension, Ag Agent Emeritus.

Figure 2. Tree-of-heaven stems have 15 or more individual leaflets. Photo: Chuck Schuster, University of Maryland Extension, Ag Agent Emeritus

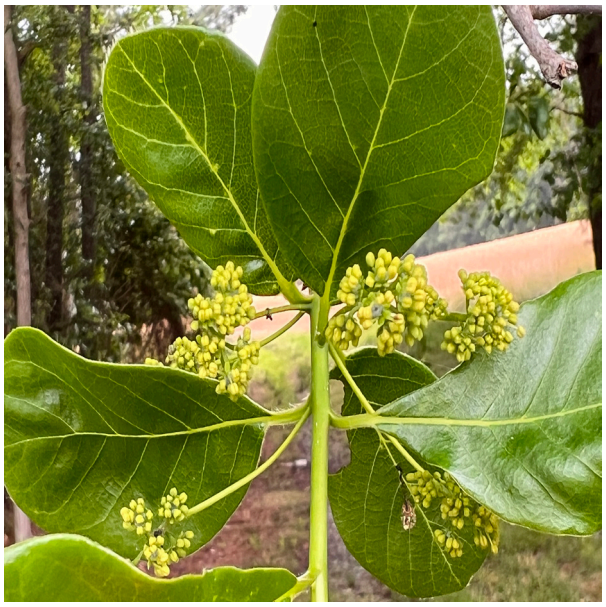
Plant of the Week

By: Ginny Rosenkranz

The start of fall color on black gum. Photo: Ginny Rosenkranz, UME

Nyssa sylvatica or black gum, sour gum or black tupelo are native deciduous trees that can grow 30-50 feet tall and 20-30 feet wide. These slow growing, medium-sized trees prefer to grow in moist, acidic soils in full sun to partial shade, and will tolerate wet and some drought conditions. They have straight trucks with a rounded crown, deep tap roots, and are dioecious with separate male and female trees. Both types of trees produce perfect flowers as well as their own male or female flowers in the early spring. The tiny 1/8 inch female green and white flowers are in loose clusters while the male flowers are collected in dense clusters. The flowers nectar is sought after by bees, and their tupelo honey is highly prized. Only the flowers on the female trees mature into egg-shaped blue-black berries. The dark green leaves are pale green on the underside with dentate or toothed margins, growing 3-6 inches long and 1-3 inches wide. They are attached in an alternate fashion and in the autumn turn bright red, yellow, orange and purple. Black tupelo provides local wildlife in many ways; young tree sprouts are eaten by the white-tailed deer, spring flowers provide nectar for native bees and other pollinators, the fall berries are eaten by songbirds during their fall

migration, wild turkeys, foxes, raccoons, opossums and black bears. There are natural hollows that form in the trees that are used by tree frogs, bats, reptiles and other wildlife. The trees can be planted in native, pollinator drought tolerant or rain gardens. They are deer resistant and tolerate black walnuts, salt, heat, drought, wet soils and wind.



Black tupelo trees provide food for various wildlife.
Photo: Ginny Rosenkranz, UME

Degree Days (as of October 1, 2025)

Annapolis Naval Academy (KNAK)	3868	Baltimore, MD (KBWI)	3960
Belcamp (FS836)	3659	College Park (KCGS)	3943
Dulles Airport (KIAD)	3902	Ellicott City	3767
Ft. Belvoir, VA (KDA)	4043	Frederick (KFDK)	3774
Gaithersburg (KGAI)	3811	Greater Cumberland Reg (KCBE)	3520
Martinsburg, WV (KMRB)	3620	Millersville (MD026)	3823
Natl Arboretum/Reagan Natl (KDCA)	4383	Perry Hall (C0608)	3565
Salisbury/Ocean City (KSBY)	3767	St. Mary's City (Patuxent NRB KNHK)	4343
Westminster (KDMW)	4219		

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

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.

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

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

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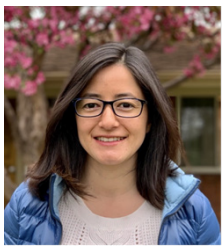

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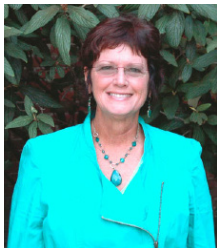

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