UNIVERSITY OF MARYLAND EXTENSION

TPM/IPM Weekly Report

for Arborists, Landscape Managers & Nursery Managers

Commercial Horticulture — October 9, 2020

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IPMnet
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 sgill@umd.edu

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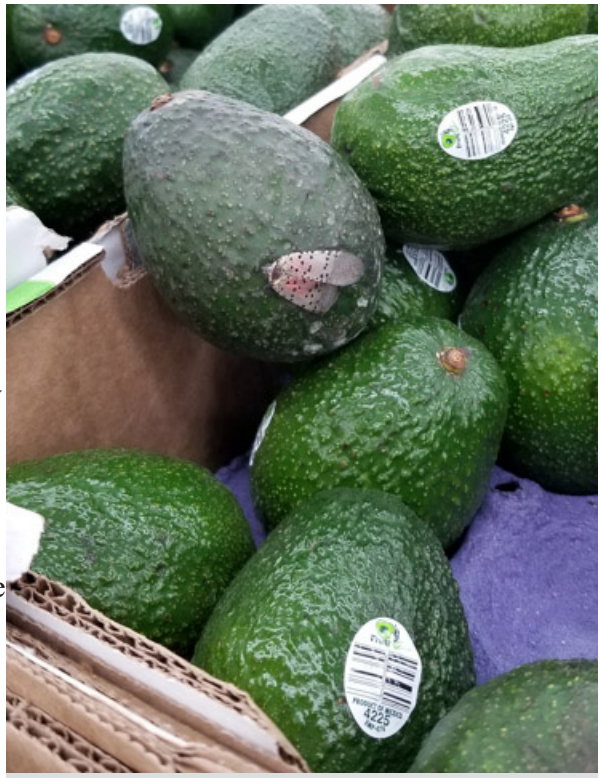
Regular Contributors:
Pest and Beneficial Insect Information: Stanton Gill and Paula Shrewsbury (Extension Specialists) and Nancy Harding, Faculty Research Assistant
Disease Information: Karen Rane (Plant Pathologist) and David Clement (Extension Specialist)
Weed of the Week: Chuck Schuster (Retired 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)

Spotted Lanternfly

By: Stanton Gill

I received a call from one of our IPM readers reporting an egg mass of spotted lanternfly in Cecil County in a park. Cecil County and Harford County are presently under quarantine with established populations of spotted lanternfly. He wanted to know if the state would be applying insecticide for controlling the spotted lanternfly in parks in Cecil county.

Kim Rice, program manager with MDA reported: "We work with our USDA partners who are in charge of treatments in MD. All treatments in 2020 have ended. In general, treatments focus on agricultural areas and travel sites."



A dead adult was found on an avocado in a Maryland grocery store
Photo: Paul Passe, Baltimore County Arborist

At this time of year, many of the re-wholesale plant nurseries are shipping in plant material from many sources. If you are shipping in plants from VA or PA quarantine areas, be sure to check the plant material for egg masses on trunks, branches and containers.

Elaine Menegon, Good's Tree and Lawn Care, is reporting that SLF have been laying eggs for a week or so in Pennsylvania in and around Harrisburg. Elaine notes that "adults are slowing down with little feeding the last week from what I see."

For questions related to the quarantine, permitting, treatment, or to report a sighting of the spotted lanternfly, especially outside of the quarantine zone, call 410-841-5920 or email DontBug.MD@maryland.gov.

Look closely at the trunks of trees for spotted lanternfly egg masses; these eggs were found in Hummelstown, PA.
Photo: Elaine Menegon, Good's Tree and Lawn Care

Giant Crane Fly

Bob Mead, Mead Tree and Turf, found a giant crane fly (*Tipula abdominalis*) on the trunk of an ash tree. Gaye Williams, MDA, confirmed the identification. Gaye noted that it "is a female adult giant crane fly and that females can reach 45mm body length, males are smaller. Although some call them 'mountain mosquitoes' or ' mosquito hawks', they are harmless, cannot bite. Their large, legless larvae live in moist soil/ leaf litter and are sometimes used as fish bait."

This giant crane fly, that is hard to spot on this ash tree trunk, is harmless
Photo: Bob Mead, Mead Tree and Turf

Increase in Boxwood Blight Reports

By: Karen Rane

We usually see an increase in reports of boxwood blight throughout the Mid-Atlantic region in early fall, and this year is no exception. Nick Cavrak and Chris Stephan of Carroll Tree Service took these photos last week of boxwood blight in the landscape. The extent of the "September Surge" of boxwood blight reports depends on how much rainfall we receive and how moderate the temperatures are. We had a very dry late summer and fall in 2019, so the spread of boxwood blight was kept somewhat in check. However, this year, as in 2018, we've had several September rain events, and temperatures have been mild. These conditions favor boxwood blight infection. AmericanHort's Horticulture Research Institute (HRI) has updated their best management practices for boxwood blight, and their guidelines can be found at this link: https://www.hriresearch.org/Boxwood. Another excellent source of information on this disease is the Virginia Boxwood Blight Task Force website: https://ext.vt.edu/agriculture/commercial-horticulture/boxwood-blight.html.

Boxwood Blight
Photos from Nick Cavrak and Chris Stephan, Carroll Tree Service

Early Fall Foliage - Turning Brown and Dropping

By: Stanton Gill

We have had several reports of foliage turning brown and dropping from oaks, sycamores, birches, and several other plant species. The soil is extremely dry and many of the trees are showing drought stress with browning of foliage. Trees under major stress going into the winter are going to be more susceptible to ambrosia beetle activity in the spring of 2021.

With dry conditions this fall, oaks and other trees are dropping leaves at this time
Photo: Joy Rafey, UME

Azalea Lace Bugs

Dan Feingold and Jim McWilliams, Maxalea, Inc. found lace bugs still active on azaleas in Baltimore County on October 2. Look on the undersides of leaves for black fecal spots and the different life stages. The adults are laying eggs at this time of year and azalea lace bugs overwinter in the egg stage. The eggs are inserted into foliage, usually along the midvein area. Azalea lace bug populations tend to be highest when plants are grown in full sun and the damage can be the most severe at these sites. Feeding damage is mostly finished for the season. Next year, monitor infested plants for egg hatch and treat to control the nymphs.

Azalea lace bug adults are laying eggs at this time of year
Photos: Jim McWilliams, Maxalea, Inc.

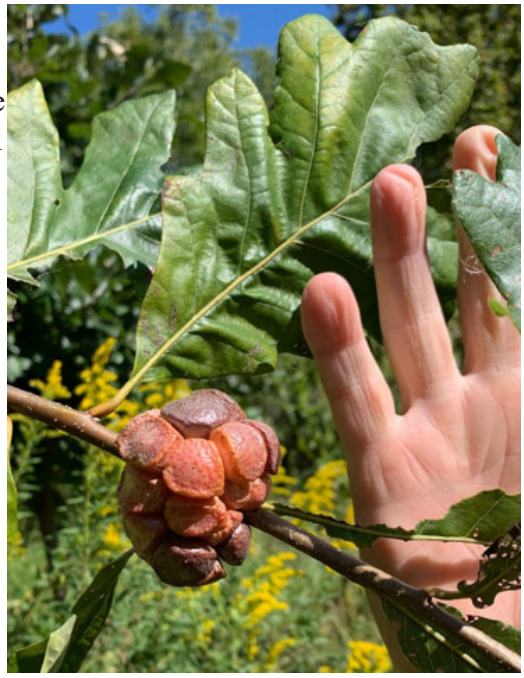
Another Fall Mushroom

Ginny Rosenkranz, UME, found this chicken of the woods mushroom on September 29. For more information on this mushroom, check out the post on the Cornell University Mushroom blog.

Look for this brightly colored chicken of the woods mushroom on the bark of trees, especially on oaks
Photo: Ginny Rosenkranz

Pine Cone Oak Gall

We received another report of the pine cone oak gall this week. Annette Cormany, UME-Washington County reported that a client sent her a photos of this very large pine cone oak gall, a type of twig gall. Annette noted that "wasps lay eggs on oak branches and inject a chemical which causes abnormal growth. The galls provide protection, food and shelter for the developing wasp larva."



This pine cone gall is caused by small cynipid wasps
Photo submitted to UMD Extension

Apple Tree Swelling

By: Stanton Gill

Some of your customers installed apple trees recently. It seems everyone feels the need to produce fruit at home with Covid-19 pushing this along. We received an email, with pictures, inquiring about strange swellings on the owner's dwarf apple tree. Many apple trees are grafted onto an understock plant. Common understocks are M-9, M-26, and M- 7 for dwarf to semi-dwarf apple trees. Some cultivars of apples are very compatible with these understocks while other cultivars are not so happy being grafted onto the understock. These "unhappy"

cultivars will form swellings on the major branches and sometimes on the trunk. Small bumps occur on this swollen tissue. The scion wood (cultivar grafted onto the understock) is trying to form adventitious roots. If these branches were bent to the ground, they would form roots.

There is nothing you need to do for these odd swellings on the trunk. An apple tree can continue to live with this condition for many years.

These odd swollen areas on this dwarf apple tree are due to undertock grafting incompatibility
Photo submitted to UME

Going Electric

By: Stanton Gill

University of Maryland Energy Specialist, Drew Schiavone, is conducting a series of online zoom sessions on solar energy Wednesdays this fall from 1:00 – 2:00 p.m. EST. More information and how to register is available at the AgSolar Energy website.

I learned something I did not know in the first session. Maryland produces 68% of its electric energy from coal. Solar contributes 4.5 %. Maryland has set ambitious goals to increase solar use dramatically over the next 20 years. I have been switching much of my equipment at my farm over to electric when possible and have been very happy with the results. We use electric chainsaws, Stihl electric hedge trimmers, and electric push mowers. In searching online, I find there are several companies releasing electric zero turn mowers with 100-watt batteries that will cover a 2-acre mowing area on a single charge. All of this equipment is much quieter when in operation and not needing to store and handle liquid fuel is a great benefit.

In 2021, several of the companies will be releasing electric pickup trucks. Adding solar arrays to your operation makes sense as more and more of our equipment used in the horticulture industry moves into electric power.

Beneficial of the Week

By: Paula Shrewsbury

Damsel bugs are generalist predators with a broad diet

Damsel bugs, also known as nabids, are in the family Nabidae. They belong to a group of insects referred to as “true bugs” (order Hemiptera), which include predators such as assassin bugs, stink bugs, minute pirate bugs, and others. Damsel bugs have piercing / sucking mouthparts, bulging compound eyes, spiny raptorial legs to grab prey, are tannish-brown in color, and usually ½” or smaller in size with an elongate body shape and long thin antennae. Nymphs look similar to adults but the wings are not fully developed. Damsel bugs spend the winter as adults or late instar nymphs in protected places (ex. field edges, leaf litter). During the growing season females lay eggs in the stems of low-growing plants and develop through the season. A single female can lay up to 200 eggs in her lifetime. They have 1 -2 generations per year and are most abundant in late summer.

Damsel bugs are generalist predators and nymphs and adults feed on prey. Damsel bugs usually forage for prey on low-growing plants, like the perennials, ground covers, and grasses. In addition to foraging for prey on ornamental plants, they are common in agricultural crops attacking pests. Damsel bugs capture and eat aphids (click here), small caterpillar and sawfly larvae, leafhoppers, treehoppers, thrips, spider mites, and other economically important pests. Damsel bugs, although predators themselves, also attack and feed on other predators such as spiders and assassin bugs. Predators that feed on other predators are referred to as "intra-guild predators", They feed on prey within their same guild – the predator guild. Although damsel bugs are beneficial insects and provide biological control in many situations, in some circumstances they might disrupt biological control when they feed abundantly on other predators. This is a good example of the complexity of ecosystems and food web dynamics.

Note the piercing-sucking mouthpart and raptorial front legs of this predatory damsel bug adult. Photo: P.M. Shrewsbury, UMD

A damsel bug (*Nabis* sp) adult feeding on prey (likely a fungus gnat). Photo: S. Scholnick, MD Biodiversity Project

Weed of the Week

By: Chuck Schuster

As many of the leaves start to fall and we have more time to observe what is growing around us, this plant comes to mind. Having friends that actually like to use the berries, and having others with questions on how to eliminate it from the landscape, one needs to have more information.

Wineberry, *Rubus phoenicolasius*, is easy to see on the fringes of some forested areas as well as appearing in some landscapes currently. A member of the bramble family, it is still used for some breeding purposes. This plant has a following, which causes a divide when one attempts to list methods of control. As with any plant, this particular one is loved by some and disliked by others. It does have economic value, so the rule that a plant is a weed when it has no economic value rule of thumb does not apply. Very importantly, it is considered an invasive in Maryland. Wineberry is a vigorously growing plant, forming a large dense thicket. It spreads by seeds, root buds, and where the canes come in constant contact with the soil. The stems, or canes, will have reddish to purple hairs (Photo 1) and a small spine. Canes grow quickly and can reach nine feet in height.

Leaves appear in groups of three, are heart-shaped, have purple veins and have white dense flattened wool-like hairs (tomentose) on the underside. The leaves are serrated (Photo 2). Flowers are small, with white petals and red hairs that occur in the spring. The berry is edible, appears similar to a raspberry, and is a bright red color. The fruit is held within a calyx as it is developing and will emerge as it ripens.

Cultural control is a good option with this plant. Control options include manual removal when possible and pruning to limit growth. Non selective products including glyphosate and triclopyr will work well on regrowth after mowing or pruning. Please consider caution when using non selective products when near desired species. Some herbicides have the ability to move and can cause damage to desired species of plant material.

Photo 1 (left) shows the reddish to purple hairs on the cane; Photo 2 (right) shows the serrated leaves Photos: Chuck Schuster

Plant of the Week

By: Ginny Rosenkranz

Panicum virgatum 'Heavy Metal' is a wonderful native switch grass that grows in a strong column 3 feet tall and only 1-2 feet wide. In summer, 'Heavy Metal' produces airy bouquets or panicles of pink-tinged flowers on thin stems which become seeds in the autumn and add another 2 feet to the height of the plants. The 1-2 inch wide foliage is a metallic blue in color from spring through the summer and turns a golden yellow in the autumn, gradually changing to a soft tan color in the winter. The seeds stay on the grass through the winter into February, and is enjoyed by many native winter birds. 'Heavy Metal' grows best in USDA zones 4-9 and because it does not grow true from seed all seedlings should be removed. This warm season grass grows in clumps and spreads very slowly by rhizomes. *Panicum virgatum* 'Heavy Metal' thrives in full sun and moist, sandy or clay soils. Like a lot of our native grasses, 'Heavy Metal' is tolerant of many different environments including different soil pH, soil types from dry and drought to wet and flooding, growing in part

***Panicum virgatum* 'Heavy Metal' turns a golden yellow in the fall Photo: Ginny Rosenkranz**

shade, air pollution, deer browsing and growing near black walnut trees. It is also listed as tolerant of salt, so it can be planted near roads that are salted in the winter or close to the tidal rivers, lakes and the ocean. All the warm season grasses should be left alone through the autumn and winter and cut down to the ground in the very early spring to allow the biomass of the foliage to protect the roots from winter temperatures. 'Heavy Metal' can be used to control erosion, as a perennial boarder or hedge, in cottage gardens, native gardens, rain gardens and water-wise gardens. Although no serious pests were listed, there is some susceptibility to rust, crown rot, Japanese beetles, thrips and spider mites.

The seeds of *Panicum virgatum* 'Heavy Metal' persist into February
Photo: Ginny Rosenkranz

Degree Days (as of October 7)

Aberdeen (KAPG)	3371
Annapolis Naval Academy (KNAK)	3825
Baltimore, MD (KBWI)	3916
Bowie, MD	3998
College Park (KCGS)	3619
Dulles Airport (KIAD)	3711
Frederick (KFDK)	3641
Ft. Belvoir, VA (KDA)	3846
Gaithersburg (KGAI)	3522
Greater Cumberland Reg (KCBE)	3146
Martinsburg, WV (KMRB)	3359
Natl Arboretum/Reagan Natl (KDCA)	4244
Salisbury/Ocean City (KSBY)	3932
St. Mary's City (Patuxent NRB KNHK)	4130
Westminster (KDMW)	3895

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

New Natural Area Management Course Designed to Expand Green Industry Professional Services

COLLEGE PARK -- The University of Maryland Extension (UME) is offering a webinar series to provide education on land care practices for small-scale natural area management.

The webinar series, which will take place from 7 to 8:30 p.m. over four Thursdays beginning on October 22 through November 12, will focus on natural area management services including wildlife habitat enhancement, forestry practices, invasive plant control, tree planting, tree management, trail development, and more.

This project is funded by the Harry R. Hughes Center for Agro Ecology and part of The Woods In Your Backyard partnership, composed of UME, Penn State Extension, Virginia Cooperative Extension, the Virginia Dept. of Forestry, and the Alliance for the Chesapeake Bay.

"This project began as one that focused on Maryland and Virginia but has since expanded to partners in Pennsylvania. This is a testament to the importance of incorporating forestry practices in areas of small tract woodlands and natural areas previously not maintained," said Dr. Kate Everts, director of the Harry R. Hughes Center for Agro-Ecology and the Wye Research and Education Center.

"This series was developed with green industry professionals in mind, and those looking to expand services to offer natural area enhancement, but it is also appropriate for landowners and anyone with an interest in environmentally-sustainable management practices," said Jonathan Kays, Forestry Specialist with UME.

"Whether you are a landowner looking to create recreational opportunities on your wooded property, or a landscaper looking to incorporate forestry practices into your suite of services, a wide audience can benefit from this upcoming webinar series," said Everts.

The course series includes four online classes, with a complementary resource manual and specialized checklist tool to help green industry professionals determine which enhancement practices are suitable for a given property or site depending on the landowner's goals. The four class topics include:

Oct. 22 - Expanding Your Business: Land Care Practices on Small Acreage Properties
Oct. 29 - Land Care Practices for Woodland Health
Nov. 5 - Land Care Practices for Woodland Health (continued)
Nov. 12 - Introduction to Woodland Health Assessment and Incorporating Woodland **Health** Practices

The cost for the series is $35 and includes the Woodland Health Practices Handbook, the Woodland Health Assessment Checklist and Management Actions, and two Woody Plant Identification Guides. For an additional $20, participants can also receive a copy of the original "Woods In Your Backyard" book (normally $29 plus shipping).

To register for the webinar series, go to https://go.umd.edu/NaturalAreasServices. For more information on UME's Woodland Stewardship Education Program, go to https://extension.umd.edu/woodland.

Late 2020 and 2021 Conferences

There will be a mix of in-person and virtual pesticide recertifications conferences over the winter. We will include information in future reports or send out as a separate email.

IPMnet
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extension.umd.edu/ipm

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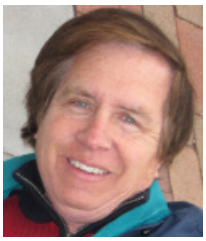

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Photos are by Suzanne Klick or Stanton Gill unless stated otherwise.