

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

Commercial Horticulture

October 12, 2018

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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 sklick@umd.edu

Coordinator Weekly IPM Report:

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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), David Clement (Extension Specialist), and Joe Roberts (Plant Pathologist for Turf)

Weed of the Week: Chuck Schuster (Extension Educator, Montgomery County) Cultural Information: Ginny Rosenkranz (Extension Educator, Wicomico/Worcester/ Somerset Counties)

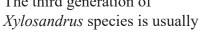
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Rain and Ambrosia Beetle Activity

By: Stanton Gill

At the Arborist MAC-ISA Conference in Frederick this week, an arborist asked how late we will continue to see ambrosia beetles active in 2018. He had a tree that was showing fresh frass tubes in the last 2 weeks. The continual rain periods through the fall have super saturated some soils which has resulted in some plants producing large quantities of ethyl alcohol. The third generation of





Third generation ambrosia activity has been unusually high this fall

not a big problem for us in the fall in most years. This year, the heavy and frequent rains continuing into the fall have created situations where trees continue to produce ethyl alcohol that attracts Xylosandrus ambrosia beetles.

2018 has to go down as a year with record-setting amounts of rainfall spread over most of the summer into the fall. I cannot remember seeing activity spread throughout the whole growing season.

Cherry Laurel Problems

By: Stanton Gill

John Austin, Green Gardens, inquired if cherry laurels were reported as having problems. John is seeing large, mature plants collapsing in the landscape in 2018. One of the common problems found on cherry laurel is Botryosphaeria fungi that causes wilting and dieback of twigs and branches and cankers in cherry laurel trees. These fungi attack stressed trees, and the spores are spread through air, water and the use of contaminated tools. The wood beneath the bark of infected branches will be brown to reddish-brown, and cankered areas of twigs and branches may exude a gumlike substance. Botryosphaeria fungi colonize





Cherry laurel plants at a site in Ellicott City site on June 21, 2018 Photos: Steve Clancy, Town Creek Landscaping

dead wood and then spread to healthy wood. Control may be gained by pruning dead and infected wood and cleaning debris from the soil around your tree.

I visited two sites last week, and in both cases, the root systems had been severely impacted from the frequent rain periods this summer into the fall. One of the fungi that becomes active on cherry laurel in wet years is Armillaria root rot. Armillaria shoestring root rot is a fungal infection of cherry laurels caused by several species of Armillaria fungi. Symptoms of infection include stunting and yellowing or browning of leaves The foliage may look unhealthy and sparse over a period of several years as leaves eventually die and drop. Armillaria shoestring root rot also produces a white, felt-like growth between the bark and the wood at the base of the tree and the roots. At the edges, the fungus has a fan shape and forms blackish, stringy strands between the bark and the wood. These strands may also appear on the roots or in nearby soil.

Steve Clancy of Town Creek Landscaping reported problems with cherry laurel at a couple of their sites this week. Here is his email: "Hi Stantonhave lost many skips this season in Ellicott City area. All planted high with topsoil and leafgro. After planting they looked stressed but came back strong only to die in late summer. Root ball looked small for size of plants A cherry laurel from the same site as 5-6'? Site was always wet."

above that has completely collapsed **Photo: Steve Clancy Town Creek** Landscaping

Skip laurels do not do well in heavy soil and soil that remains saturated for extended periods of time. 2018 has had record-setting frequency and amounts of total rain extending over most of the spring, summer and early fall. In some of these cases, we just need the soils to dry out.

I received this email from Holly Walker of the Smithsonian: "I saw your note in the IPM Weekly Report about major dieback in cherry laurels. We have actually been having issues with our cherry laurels at the National Museum of Natural History. So far we have had to remove two laurels with significant dieback and are seeing more with similar symptoms."

Out of Sync Blooming Continues

By: Stanton Gill

Steve Arrington, Sun Nurseries, sent in pictures of lilacs blooming at his house in Frederick. At the MAC-ISA conference in Frederick, we saw cherry laurels with flower blooms starting to open. We saw an azalea with blooms opening. In Laytonsville on October 10, there was a rhododendron and an azalea in bloom. The weather continues to confuse our spring blooming plants this fall.

Boxwood Blight Goes Nuts This Week

By: Stanton Gill

My sympathy goes out to landscapers and nurseries growing boxwoods this week. The poor boxwoods are taking it like a tired boxer cowering in the corner taking punch after punch. It's round 7, and it looks like boxwoods are going down. The weather pattern has been perfect for boxwood blight and the reports of boxwood blight are popping up left and right.

This week I received calls from Paul Wolfe, Integrated Plant Care, Bernie Mihm, Fine Earth Landscape, and Steve Horn, Garden's Remembered, reporting many, many customers with boxwoods heavily infected with boxwood blight. Paul reported a lot of boxwood blight in Bethesda and Chevy Chase. Steve Horn reported many infected plants at customer sites in the Georgetown area of D.C. Earlier in the season, we recieved reports from Craig Greco, Yardbirds, Inc., of infection in Virginia.



Boxwood blight infection is extensive this fall after heavy amounts of rain this summer

Photo: Bernie Mihm, Fine Earth Landscape

Steve Horn was trying to disinfect all of his equipment. Lysol has been recommended by several pathologists to treat pruning equipment. Steve asked if Physan20, which is a general disinfectant, used in greenhouses could be used to disinfect his equipment to prevent spread to other locations. Physan 20 is a broad range disinfectant labeled for greenhouses, hard surfaces, lawn and turfgrass, seedlings and flowers, fountains, and pools. It is toxic to fish. This material may work as disinfectant for the boxwood blight disease, but I could not find anything in the literature that confirms this use.

I asked Ramesh Pokharel, Plant Pathlogist at MDA, to comment on the use of Physan 20: "I have not seen any data on the use of Physan20 for boxwood blight, so it is hard to comment on this. For cleaning purpose, it may work as water, but regarding disinfecting tools, cloths, equipment, it is difficult to say. Moreover, cleaning boxwood blight on or in the plant is tricky, as it forms micro-scloretia, a resistant structure, which can remain for long time in infected materials such as plant, soil, mulch etc.. Generally, such resistant structures are produced when the pathogen is in stressed such as lack of food, adverse environment or other factors."

For more information:

Boxwood Blight Pest Alert

Boxwood Blight and Other Problems on Boxwood Plants: <u>June 1, 2018 IPM Report</u>

If you are seeing boxwood blight send me an email so we can see how far this is going this fall. Sgill@umd.edu

Dead Ash

By: Stanton Gill

Last month, I wrote an article noting all of the dead and dying ash near roadways in central Maryland. When ash die, the branches rapidly go brittle and drop. At the MAC-ISA meetings on Monday after my presentation on scales, I was talking with an arborist who just testified at a court hearing involving a tree on county property that fell on a person sitting in their car. The tree severely wounded the person. I hate to make predictions, but I suspect we will be seeing more of these ash trees falling onto roadways in 2019 and 2020. If you are a city forester or county forester, I would work with your local officials to aggressively start taking down dead ash trees near roadways. It is going to be expensive, but lawsuits are even more expensive.

Interesting Caterpillar on Knock Out Roses

By: Stanton Gill

Christine Klass a caterpillar feeding on Knock Out roses this week. It is a paddle caterpillar; the adult moth stage is called the "dagger moth". this caterpillar feeds on on a wide range of woody plants. In mid-October, there are a lot of caterpillar species feeding. Many of these cateprillars are present in low numbers and do not need to be controlled.



This paddle caterpillar was feeding on Knock Out roses
Photo: Christine Klass

Help Us Out

By: Stanton Gill

To continue serving you, we need your help. Please follow the link **in today's email** to respond to the annual IPM Report Survey. Please take a few moments to fill it out. We can only continue these IPM Alerts in the future if you provide us with the input. Thanks.

Lace Bug Resistance From Connecticut

By: Stanton Gill

Richard Cowles, entomologist with Connecticut University Experiment Station, Windsor, CT reports on imidacloiprid resistant lace bugs. He would like to alert folks that the imidacloprid-resistant lace bugs found at a nursery in Connecticut is cross-resistant to flupyradifurone (Altus), AND that the mechanism for resistance is due to target site insensitivity. Richard noted that "although PBO (a tank mix synergist) does enhance toxicity to some degree, it does not restore toxicity of these insecticides." The bugs are still sensitive to dinotefuran.

Richard Cowles noted this test method: "For a quick diagnostic test for imidacloprid resistance, apply one ml of the spray mixture to a filter paper in a Petri dish. Apply a mixture of PBO + one ml of spray mixture to another filter paper. I am seeing about 5 - 10% mortality with imidacloprid and 25 - 40% mortality of bugs in an overnight bioassay with Altus. The first number given is without PBO, the second number is with PBO."

Classic Webbing of Spider in October

By: Stanton Gill

Some of the best biocontrol is going on in mid-October with orb spiders making webs everywhere in the landscape. On moist mornings, the webs are highlighted on the plants. These webs are a sign of a healthy landscape. Leo Hastings, Tannenhof Horticultural, sent in pictures of webbing on his customer's holly trees. The customer was less than impressed.



Spider webs are a common sight on plants in the fall Photo: Leo Hastings, Tannenhof Horticultural

Mosquito Control Without Pesticide Spraying

By: Stanton Gill

Entomology Today (Entomological Society of America) published an interesting article (May 31, 2016) on mosquito control without using chemical sprays. The trap catches pregnant females that then lay eggs in a mixture of hay and water. Very few males have been captured with this trap. The article, 'GAT Mosquito Traps Can Be Effective Even without Pesticides' is available online with more details on this trapping system.

Mike Raupp, University of Maryland, mentioned at the MAC-ISA pest walk, that a community in Kensington was trying these traps out in 2018. I searched on the web and found Bioquip Company carries these traps. It is a little late in the season to purchase now, but it might be worthwhile to try out next year. The traps are around \$20. Bioquip has additional information on the Biogents GAT Trap (Gravid *Aedes* Trap).



Last week, there was an article on voodoo lily (*Amorphophallus konjac*). We received a photo from a cut flower grower showing a pink flowering species, *Amorphophallus bulbifer*. Photo: Terry Jordan

Beneficial of the Week

By: Paula Shrewsbury, UMD

Twice-stabbed lady beetles – Sounds scary!

Most of the seven species of *Chilocorus* lady beetles that occur in the U.S. are predacious and feed on scale insects, although some will feed on aphids and adelgids. The twice-stabbed lady beetle, *Chilocorus stigma*, is a native predator that occurs through much of the U.S. except west of the Sierra Nevada. Twice-stabbed lady beetles are shiny black with 2 large red spots, one on each forewing, looking like it is "bleeding" from two spots hence its common name. Adults are 3.75-5.0 mm. A few other species of *Chilocorus* resemble the twice-stabbed lady beetle such as *Chilocorus kuwanae* whose 2 red spots are in a different location on the wings. The twice-stabbed lady beetle is the most common lady beetle that feeds on scales. Both the larvae and the adults feed a diversity of scale species. The larvae are grey and black with prominent spines. The larvae are often over looked on plants because larvae over hunker down under scale covers to feed on eggs or scale bodies. Twice-stabbed lady beetles prefer arboreal (tree) habitats. They provide biological control of scales in nurseries, urban and natural forests, and orchards. Since scales are major pests in ornamental systems we should try to conserve these lady beetles along with other natural enemies.



Note the diagnostic two red spots on this lady beetle. You can see where it gets the name twice-stabbed lady beetles.

Photo: Troy Bartlett, Bugguide.net



Larvae of the twice-stabbed lady beetle are grey and black with spines. Note the pupal stage in the upper part of the image.

Photo: Carl B. Barrantine, Bugguide.net

Degree Days (As of October 10)

Aberdeen, MD (KAPG)	3811	Annapolis Naval Academy (KNAK) 46	554
Baltimore, MD (KBWI)	4168	College Park (KCGS) 40	064
Dulles Airport (KIAD)	4095	Frederick (KFDK) 40)92
Ft. Belvoir, VA (KDAA)	4257	Greater Cumberland Reg (KCBE) 38	331
Gaithersburg (KGAI)	3980	Martinsburg, WV (KMRB) 38	306
Natl Arboretum.Reagan Natl (KDCA)	4704	Salisbury/Ocean City (KSBY) 42	298
St. Mary's City (St. Inigoes, MD-KNUI)	unavailable	Westminster (KDMW) 41	144

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

New Plants Conference at Country Springs Nursery on October 25, 2018

Plant-oriented people have to attend the October 25th NEW plants session at Country Springs Nursery in Lisbon, Maryland. You will learn of novel, new plants that can be sold to the public.

Succulents, Temperennials, and Shrubs for Low Maintenance Landscapes: Scott Aker, U.S. National Arboretum

New Cultivars from the University of Connecticut: Dr. Mark Brand, University of Connecticut Interesting Palms, Citrus and Aloes That are Hardy: Dr. Ralph Denton, Pungo Palms Nursery

Hot Tropical and Cool Edibles: Heather McDermott, AgriStarts **Bulbs as Companion Plants:** Brent Heath, Brent and Becky's Bulbs

Brochure and Registration Information

CONFERENCES

New Plants for Nursery Growers

October 25, 2018

Location: Country Springs Nursery, Woodbine, MD

Trees Matter Symposium

November 14, 2018

Location: Silver Spring Civic Center, Silver Spring, MD

Registration Information

Turf Nutrient Management Conference

December 6, 2018

Location: Carroll Community College, Westminster, MD

December Pest Management Conference

December 18, 2018

Location: Carroll Community College, Westminster, MD

Advanced IPM PHC Short Course

January 7-10, 2019

Location: University of Maryland, College Park, MD Contact: Amy Yaich, Admin. Assist. II, 301-405-3911

Email: umdentomology@umd.edu

Information: https://landscapeipmphc.weebly.com/

Mid-Atlantic Horticulture Short Course

January 15-17, 2019

Location: The Founders Inn, Virginia Beach, VA

FALCAN Conference

January 18, 2019

Location: Frederick Community College, Frederick, MD

MAA Winter Conference

January 22-23, 2019

Location: Turf Valley, Ellicott City, MD

Eastern Shore Pest Management Conference

February 6, 2019

Location: Fountains Conference Center, Salisbury, MD

Contact: Ginny Rosenkranz, 410-749-6141

LCA Winter Conference

February 14, 2019

Chesapeake Green Horticulture Symposium

February 20 - 21, 2019

Location: Maritime Institute, Linthicum Heights, MD

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Thank you to the Maryland Arborist Association, the Landscape Contractors Association of MD, D.C. and VA, the Maryland Nursery and Landscape Association, Professional Grounds Management Society, and FALCAN for your financial support in making these weekly reports possible.

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