UNIVERSITY OF MARYLAND EXTENSION

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

Commercial Horticulture **September 7, 2018**

In This Issue...

[Pest Predictive Calendar]

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)
Fertility Management: Andrew Ristvey (Extension Specialist, Wye Research & Education Center)
Design, Layout and Editing: Suzanne Klick (Technician, CMREC)

Yews Dying Back and Cherry Trees Dropping A Lot of Leaves

By: Stanton Gill

Several nursery managers and landscapers are all reporting dieback of branches and browning of foliage on taxus yews. The yew has a large fleshy root system that tends to have root issues when we have excessive moisture. We had excessive rain most of the summer with August being the worst with over 15" of rain fall. The heat of the last week has caused the foliage to lose water rapidly causing the browning and collapsing of tissue. We are basically seeing the same sort of damage on spruce this summer from the excessive soil moisture levels. We just need to ride out this weather and move into more moderate rain fall patterns.

The hot humid weather continued this week and the cherry trees are taking it on the chin with leaf spot diseases and defoliation. Some of the trees I examined over the last week had over 50 % of the foliage prematurely dropped off. There is not much you can do for your customers at this point other than tell them they are not alone.

Plants are dying back from the wet weather and water logged soils
Photo: Ross Fornaro, Naturalawn of America

Scale on Evergreens

By: Stanton Gill

Two of the major scales found damaging Leyland cypress, spruce, arborvitae, chamaecyparis, and junipers are minute cypress scale (*Carulaspis minima*) and juniper scale (*C. junperi*). Why do plants like Leyland cypress and arborvitae keep cropping up with scale problems? Good question. Both of these plant groups are propagated vegetatively by cuttings that are rooted under a mist system. Often these two scale insects are on the stock (mother) plants. The person taking the cuttings and doing the rooting is not detecting the presence of scale on the cuttings. The scale population may be very low in the propagation stage and then slowly builds up while in the nursery. Again, the scale blends in and goes unnoticed. It moves into the landscape on plant material, and there the scale builds up to damaging levels.

A Leyland cypress hedge damaged by scale (above) and a close-up of the scale found (below). To identify the species, it necessary to remove the scale cover and look at the insect under a microscope
Photo: Heather Zindash

Hopefully, plant propagators and nursery growers who receive our IPM Alerts will begin to recognize these scales and take care of the problem while the plants are small and sprays can be applied effectively. That said, Heather Zindash sent in photos of a Leyland cypress hedge with dieback because they are heavily infested with scale. These plants were being used in the typical method of blocking out a view. Now, the plants will thin out as the scale kills back branches.

In the field, it is nearly impossible to distinguish juniper scale from minute cypress scale just based on visual observation of the scale covers. The covers have to be removed to expose the mature females which are punctured, cleared, and stained with dye to see the characteristics that distinguish the two armored scales. The good news is that both have somewhat similar life cycles. Both scale species have single generations per year. Their crawler periods are within 2 – 3 weeks of each other. The minute cypress scale hatches slightly later than the juniper scale.

At around 400 degree days, place out either painter's blue tape or electrical tape with the sticky side facing outward. Examine the tape regularly for the presence of crawlers that get stuck on the sticky surface. For both species, fertilized females overwinter and eggs hatch in May to early June (go with the degree days for a closer estimate) and crawlers are present for 2 – 3 weeks (depending on the weather). Adult males and females are present in early July.

Both armored scale species can be controlled with applications of 2 – 3% horticulture oil in November when temperatures are about 55 °F or applied in spring, again when temperatures are about 55 °F. At crawler period and 1st instars, the IGRs Distance or Talus will give effective control.

Would systemic insecticides work on these scales species?
Good question. We have done trials with dinotefuran on cryptomeria scale with good success. Cryptomeria scale is a leaf feeder as these two scale tend to be also. We tested Altus from Bayer Company on Japanese maple scale as both a foliar and soil drench and both materials worked well on Japanese maple scale on holly trees. I have not seen refereed published results on these scales with some of the newer material such as Altus, Acelepryn, and Mainspring.

Chinch Bugs

Eric Wenger, Complete Lawn Care, Inc., is finding active chinch bugs in zoysiagrass in the Kensington.

From: Home and Garden Information Center, Lee Hellman and J. Kevin Mathias, Institute of Applied Agriculture, University of Maryland, College Park, MD.

Chinch bugs are small insects (about 1/8 inch when mature) with piercing-sucking mouthparts that feed on the sap of grass plants. They are found in the thatch area of turfgrass and feed on the lower leaf sheath and crown area of the plants. There are 3 species of chinch bugs (that feed on turf) in the U.S.: the hairy chinch bug, common chinch bug, and the southern chinch bug. The hairy chinch bug is the most common species found in Maryland. The adults are 1/8 inch long and black with white wings. The wings are held flat over the body and there is a small black spot in the center area of the wings. Adults may be long or short-winged. Young chinch bugs vary in appearance from adults. There are five instars or stages. The first two are red with a white band across their abdomen, the third and fourth are orange with wing pads beginning to form and the fifth instar is black with more developed wing pads.

Grass damaged from chinch bugs does not recover after it has turned brown, making reseeding necessary
Photo: Eric Wenger, Complete Lawn Care Inc.

Chinch bugs have piercing sucking mouthparts and feed on the lower sheath and crown areas of plants
Photo: Eric Wenger, Complete Lawn Care Inc.

Damage from chinch bugs appears as patches of gradually yellowing or dead grass, especially near radiant heat sources such as sidewalks and roads. Chinch bugs feed by inserting their mouthparts into the stems, sucking the sap and injecting chemicals into the plant, which clog the vascular system. The grass does not recover once it has turned brown. Chinch bugs prefer to feed on the following grasses in order of preference: bentgrasses, fine fescues, Kentucky bluegrass, perennial ryegrass, and zoysiagrass. They avoid feeding on endophyte-infected grasses such as tall fescue, fine fescue, and perennial ryegrass. Reseeding is usually necessary for damaged areas. Insecticides can be applied to supress chinch bugs when they are feeding during the summer.

Euonymus Scale

By: Stanton Gill

Heather Zindash found male euonymus scale in the pupal stage which means they will emerge later this month into early October for a final generation this season. After emergence, they will mate with females who will begin to lay eggs. There is no control at this time - wait until late September into early October. If you are able to get samples to our office later in the month, I can check to determine when crawlers hatch.

A cluster of male euonymus scale (left) and an euonymus scale male with cover slit open to show it is in the pupal stage
Photos: Heather Zindash

Butternut Woollyworm Sawfly

Andy Ross, RTEC Tree Care, found butternut woollyworm sawfly active in Fairfax, VA on September 5. It was crawling under a black walnut tree which is one of its hosts. It also feeds on hickory and butternut. The larva has long, waxy filaments on its body to help protect it from predators. It is not considered a problem insect, but at times it can show up in large numbers in specific locations. Butterworm woollyworm sawfly overwinter in the pupal stage in the ground. There is one generaton per year.

The waxy filaments on woollyworm sawflies help protect them from predators

Sightings of Beneficials

Marie Rojas, IPM Scout, saw a mantid hunting on the side of her house over the weekend. She noted that she "*had not seen a gray/mottled praying mantis before, so had to look it up to discover that the Carolina mantids can change colors at molt time to match its surroundings. Very cool!!*"

Carolina mantids can change colors when they molt
Photo: Marie Rojas, IPM Scout

Annette Cormany, UME-Master Gardener, found scolia wasps, *Scolia dubia*, on garlic chives, *Allium tubersum*, in Boonsboro. Here at the research center in Ellicott City, we are seeing them nectaring on goldenrod and boneset flowers. Paula Shrewsbury covered these wasps in the August 3, 2018 IPM Report. Adult female wasps lay eggs on Japanese beetle and green June beetle grubs in turf.

Look for digger wasps on flowers through September
Photo: Annette Cormany, UME

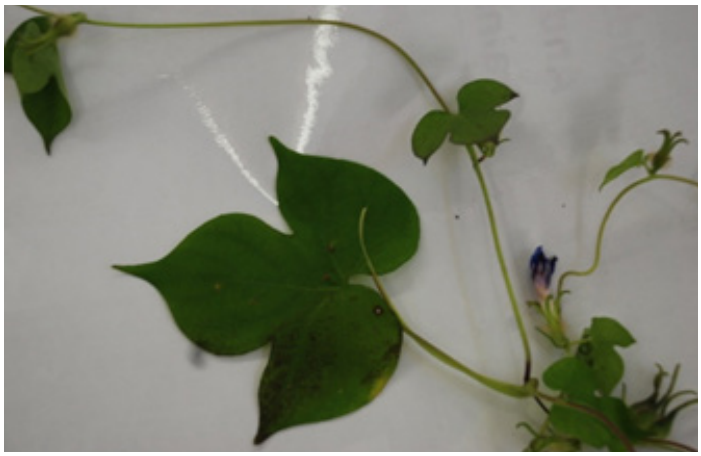
Andy Ross, RTEC Tree Care, reported that a snake hung out in a 4' pine sapling for 2 days in a row. Depending on the species, snakes feed on slugs, grubs, voles, and other plant feeders.

Snakes also feed on plant feeding insects and slugs
Photo: Andy Ross, RTEC Tree Care

Weed of the Week

Chuck Schuster, University of Maryland Extension

Ivyleaf morningglory, *Ipomoea hederacea*, is being noticed in many landscapes and nurseries throughout the eastern regions of the United States. Ivyleaf is a summer annual that is a member of the bindweed family. It has ivy-like, three lobed leaves, a twining and climbing growth habit, and a taproot root system. Leaves are alternate, attached to the stem with a petiole, hairy, and up to two to five inches in length. The twining stems also have erect hairs on both surfaces. The stems, whether growing prostrate to the ground or erect, will reach a total length of ten feet. Flowers are one to two inches in size,



white or blue/purple in color, and funnel-shaped. The fruit bearing seeds are egg-shaped capsules containing dull gray, brown or black seeds.

Control of ivyleaf morningglory can obtained using several pre-emergent herbicides including isoxaben (Snapshot), oryzalin (Surflan), and many post emergent products containing 2, 4D (selective) and glyphosate (non-selective). Use caution when using post emergent products. If ivyleaf morning glories are twining up a desired plant, most of these products can damage desired plant species.

Ivyleaf morninglory can grow to a length of 10 feet
Photos: Chuck Schuster, UME

Degree Days (As of September 5)

Aberdeen, MD (KAPG)	3114	Annapolis Naval Academy (KNAK)	3757
Baltimore, MD (KBWI)	3408	College Park (KCGS)	3321
Dulles Airport (KIAD)	3342	Frederick (KFDK)	3330
Ft. Belvoir, VA (KDAA)	3462	Greater Cumberland Reg (KCBE)	3119
Gaithersburg (KGAI)	3254	Martinsburg, WV (KMRB)	3111
Natl Arboretum.Reagan Natl (KDCA)	3852	Salisbury/Ocean City (KSBY)	3459
St. Mary's City (St. Inigoes, MD-KNUI)	3606	Westminster (KDMW)	3434

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

Cut Flower Farm Tours in Southern Maryland (St. Mary's County)

September 12, 2018

Locations: Loveville Produce Auction (Mechanicsville), Weaver's Cut Flower Farm (Mechanicsville), and Hertzler Family Cut Flower Farm (Charlotte Hall)

A brochure and registration information are available on the IPMnet Conference page.

Learn How to Diagnose Plant Problems

By: Stanton Gill

If you would like to hone your diagnostic skills for insect and mite problems, we will have two sessions this fall and winter. The first one will be held in Frederick, MD on October 8 as part of the MAC-ISA Fall meeting. Go to the MAC-ISA conference page to register.

The other session is January 22, 2019. Karen Rane, David Clement, Mary Kay Malinoski, and I will hold a multiple-hours session on diagnosis of disease and insect problems in landscapes. This session will be part of the Maryland Arborist Association winter conference at Turf Valley, Ellicott City, MD. Details and registration information will be available on the Maryland Arborists' website when the program is completed.

CONFERENCES

Cut Flower Operation Tour
September 12, 2018
Location: St. Mary's County (Loveville and nearby sites)
Brochure and Registration

New Plants for Nursery Growers
October 25, 2018
Location: Country Springs Nursery, Woodbine, MD
Details will be available later in the summer

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/
Recertification credits will be posted on the website Recertification page listing participating states.

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

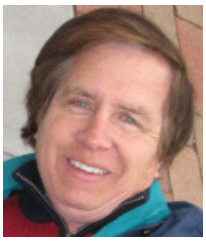
MAA Winter Conference
January 22-23, 2019
Location: Turf Valley, Ellicott City, MD

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

CONTRIBUTORS:



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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.

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