For Arborists, Landscape Managers & Nursery Managers

Commercial Horticulture

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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 (Extension Educator, Montgomery County)
Cultural Information: Ginny Rosenkranz (Extension Educator, Wicomico/Worcester/Somerset Counties)
Fertility Management: Andrew Ristvey (Extension Specialist, Wye Research & Education Center)

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Perfect Weekend
By:-Stanton Gill, UME

April 17, 18, and 19 could not have had more perfect weather – sunshine and good temperatures. Sales were strong for greenhouses and nurseries last weekend making it two good to excellent weekends in a row. This weekend will be a little tougher with colder weather and cloud cover in the forecast.

Trillium grandiflorum in bloom in Carroll County
Photo: Marty Adams, Bartlett Tree Experts

If you work for a commercial horticultural business in the area, you can report insect, disease, weed or cultural plant problems found in the landscape or nursery to sklick@umd.edu

IPMnet is now on Facebook at http://facebook.com/umdipm
Cherry Laurel and Peachtree Borer
By: Stanton Gill, UME
Neal Cogswell, Solar Gardens, sent in photos of a cherry laurel with damage to the base of the plant from peachtree borer injury. Cherry laurel is being used in a lot of commercial landscape sites. It is very deer resistant and has a great flower display in May – all good qualities. It is highly susceptible to two major insects: peachtree borer and white Prunicola scale.

Peachtree borer generally attacks stressed, weakened plants. Cherry laurel is a tough plant but performs poorly in heavy clay soils, especially ones that do not drain well. If your customer’s cherry laurel is in poor soil conditions then you may have to deal with peachtree borer. The adults are active in early July and females lay eggs at the base of the plants. The larva feeds in the cambial tissue and girdles the plant, as seen in Neal’s photo from this week.

Control: Protectant sprays are applied to the base of the plant – either bifenthrin (Onyx) or permethrin (many brand names). We will let you know when we pick up the peachtree borer adults in our baited pheromone traps.

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Ambrosia Beetle Update
By: Stanton Gill, UME

On Monday, I thought that there would be swarms of *Xylosandrus* species in our traps, but that did not happen. It might take a couple of really warm days to get the activity going. With the cool weather coming in over the weekend, I don’t expect to see much activity between now and early next week. No ambrosia beetles were found in the trap at CMREC on Friday morning. We are recieving reports from Harford County of high counts especially of *Xyleborinus saxenti*. That site also has trapped a few *Xylosandrus germanus* and *X. crassiusculus*. Marie Rojas, IPM Scout, found *Styrax* trees with active ambrosia beetles.

Correction on Ground Bee Information

Sam Droeg, USGS, noted that we mentioned in last week’s report that ground bees won’t sting unless you disturb their nests. Sam let us know that “It turns out that ground bees do not defend their nests (only bumblebees do...and not very strongly at that) and most of the ground bees are physically unable to sting because their sting can’t penetrate our skin (bee in the genus *Andrena*).”

Update on Emerald Ash Borer
By: Stanton Gill, UME

Jody Fetzer, Montgomery County Parks, reported that emerald ash borers have damaged trees in Montgomery County near Olney and Wheaton. The County plans to take down the trees.
Cherry Laurel Problem
By: Karen Rane, UMD

We had a large balled and burlapped *Prunus laurocerasus* (cherry laurel) cv. “Otto Luyken” plant submitted to the UMD Plant Diagnostic Laboratory this week, showing extensive discoloration of the foliage (Fig. 1). Our first thought was that the symptoms were due to winter injury – we have received so many reports and samples of winter damage in broadleaf evergreens in our area this spring. But the client who submitted the sample wondered about a root problem, so we carefully untied the burlap and exposed the root ball. Most of the soil held no roots and just “fell away”, revealing a severely chopped root system (Figs. 2 and 3). With so many large roots cut off and virtually no fine roots left, the root system on this shrub was not large enough to support the moisture needs of the stems and foliage. The shrub looked fine when the weather was cold, but once temperatures increased and the foliage started to lose moisture, the roots were unable to provide it and the foliage turned brown. This is a good illustration of how the quality of the nursery stock really has an impact on the survival of the plants in the sales yard and in the landscape.
Winter Damage on Leyland Cypress (and Hollies)

By: Stanton Gill, UME

I received a couple of phone calls and emails inquiring how Leyland cypress fared this winter. Marie Rojas, IPM Scout, reported winter damage on Leyland cypress as well as 'Yule Brite' hollies. Sam Fisher spotted a holly with severe winterburn. Sam noted that is was planted at the end of a row. Interestingly that the reported damage on Leylands in 2014 was in greater frequency than we are receiving in 2015...at least so far. The damage is showing up in April as the temperature slowly moves upward. I visited a couple of sites where the Leyland cypress were just starting to show whole branches browning up as an aftermath of the low temperatures in February. The lower number of Leyland cypress damage reports in 2015 might be because many of the heavily damaged trees from 2014 were removed. If you are seeing Leyland cypress with heavy winter injury send photos to Sgill@umd.edu.

Eastern Tent Caterpillar

Marie Rojas, IPM Scout, is still finding very young nests of eastern tent caterpillars which are easily picked out and destroyed.

Scale Insects and Twice-stabbed Lady Bird Beetle Activity

Marie Rojas, IPM Scout, reported that Japanese maple scale and white prunicola scale both continue to be prevalent at her scouting site in Montgomery County. Of note, there were LOTS of twice-stabbed lady beetles feeding on the Japanese maple scale. We will report when scale crawlers are active later in the season.

Secondary Pests

Tony Murdock, Fine Pruning, sent in a photo of buprestrid beetle larvae he found in a decaying stump. It’s not possible to identify the species, but it’s a secondary insect that is helping to break down the dead tree.
Azalea Lace Bug  
By: Stanton Gill, UME

Last week when I was giving a talk on the Eastern Shore, I obtained a couple of samples of azaleas from the to haul back to the CMREC lab. I also examined azalea samples from Olney on Monday. In both cases eggs were present along the mid-rib veins on the undersides of the foliage. In both locations the eggs have not hatched yet. Hatch should occur just after flowering and when new growth is emerging on the azaleas. If you have azaleas in your area you can send in samples so I can take a look to see if the eggs hatched. If you see hatch in your area send in a picture with the location. Thanks.

Pine Bark Adelgid

Jason Cole, Lawn Doctor, found pine bark adelgid infesting a white pine in Berlin. This adelgid overwinters as nymphs on the bark of its hosts. Pine bark adelgid has several generations per year. 

Monitoring: Visually monitor the bark and larger branches of pines for fluffy white wax. It often starts at the base of needles. Black wingless adults will be within the wax along with yellow eggs. When populations are high, trunks of trees can be almost covered with white wax. Trees can generally tolerate relatively high levels of this pest. They are sucking insects so they remove plant sap.

Control: Pine bark adelgids are often kept at low populations by a number of different generalist predators (flower fly larvae, lady beetles). Horticultural oil can be applied now or at most times of the year to reduce populations of adelgids. The horticultural oil should help conserve the natural enemies that should prevent adelgid populations from returning to high levels. Wait for egg hatch if you decide to apply a chemical.

Plum Curculio

By: Stanton Gill

Several people have sent e-mails wanting to know if plum curculio is active yet on fruit trees. The name plum curculio is deceptive because the insect attacks fruits other than plums. Apples, peaches, pears, and cherries (as well as plums) are all susceptible to plum curculio. Damage from these beetles can be extensive. I have not detected it yet on yellow sticky cards placed out at my orchard in Westminster. The cool front that came in this week should slow down their activity. Apples are in the full pink stage and some early varieties like ‘Pink Lady’ are in full bloom. I usually find plum curculio active just as the apple and peach blooms are dropping. These insects overwinter under debris. Damage begins as soon as the adults emerge in the spring. The adults feed on buds, flowers and newly set fruit, and then mate and lay eggs in the newly emerging fruit. The first plum curculio damage occurs when, to lay her eggs, the female eats a crescent shaped slit that looks like someone punctured the skin with a fingernail. You can hang yellow sticky cards among fruit trees to find the weevils. Send me an email at Sgill@umd.edu if you find activity in your area.

Control: Imidan applications work fairly well. Avaunt is a new, improved, with a high LD50, product. This material needs to go on as soon as plum curculio is active. We will keep you up to date when we detect them.
Euonymus Leaf-notcher Caterpillar
Richard Chaffin, The Brickman Group, found late instar euonymus leaf-notcher caterpillars feeding on euonymus in Baltimore County on April 21.

**Control:** Since the damage occurs early in the season, control is not always necessary. There is only one generation of this pest and plants can recoup. If you decide to treat, control options include Conserve (spinosad), Talstar (bifenthrin), and Orthene (acephate). Bt is effective only when the caterpillars are small.

Will the Cold Impact Your Customers’ Fruit?
By: Stanton Gill
A cold Front moved in late this week and may cause some damage to fruit this year. See Tara Baugher’s information on fruit damage from the cold at:

Beneficial of the Week
By: Paula Shrewsbury

Green flashes before your eyes – the six-spotted green tiger beetle
Tiger beetles are appropriately named since they are hunters of their prey and voracious predators. There are multiple species of tiger beetles (Coleoptera: Carabidae: Cicindelinae) in MD. Species vary in color, but most have a metallic hue to them, and all are ground foraging predators. As noted from several of you (thanks), the six-spotted green tiger beetles, *Cicindela sexguttata*, have begun their activity. From this time of year into early July you will frequently see the six-spotted green tiger beetle active on hiking and biking trails in wooded areas, especially in sunny spots.

Six-spotted green tiger beetle adults are about 10-14 mm long, and have 6 white spots on their metallic green elytra (front wings). This species occurs across the eastern half of the U.S. with the exception of the very South and the Florida Panhandle. As you approach a tiger beetle on the trail they will take flight and land about 5 – 10’ away. Unlike assassin bugs or preying mantids which are “sit and wait predators”, tiger beetle adults are “active hunters”. They actively stalk, chase, and capture their prey along the ground. Tiger beetles have quite long legs for running and large eyes that enable them to search their surroundings for any signs of movement which would indicate potential food or danger. Most intimidating are their jaws. They are powerful with very prominent “teeth” or mandibles which they use to grab, crush, and slice their prey – yikes! Both adult and immature tiger beetles are carnivorous.
Weed of the Week
By: Chuck Schuster

Soil temperatures are warming even with this morning’s cooler (35°F) temperature at 8:00 this morning. Many of the annual grassy weeds are starting to germinate. Several calls this week on our weed of the week, which I seem to do every year.

The weed this week is annual bluegrass, *Poa annua*. This weed is a common weed in this region and the United States, and is being noted by the sharp eyed turf managers. Annual bluegrass is an annual, usually classified as a winter annual, though the location of the site can change this status in some regions. Most winter annuals will die soon after seed production in the spring, but on warmer protected sites it may continue to grow much like a perennial. Annual bluegrass is noticed as it grows in an erect or small clump. It has a tolerance for close mowing, but can reach heights of nearly one foot in landscapes and unmanaged turf, which makes cultural control using mowing harder to achieve. It will appear light green when compared to other bluegrass species that are desired. One distinctive characteristic is the “boat shaped” tip that the leaf blades form. The leaves are without hairs and are narrow but long. Blade dimensions can reach four inches in length, and one eighth inch in width. Annual bluegrass prefers a moist to wet soil.

Moisture control is one of the methods used to prevent problems with this weed. That can be difficult when we have an overabundance of natural moisture as some areas have this spring. Use of irrigation water properly can help manage this issue, especially in shady areas. Compaction is another condition that creates the ideal site for annual bluegrass. Field use that leads to compaction and cultural practices that correct this problem should be considered. Do not aerate during the germination period for annual bluegrass. While collecting clippings is not usually recommended, if you have an area with a stand of annual bluegrass, consider collecting the clippings during seed production periods to reduce the seed bank for the following fall.

Prevention is always the best method of control. Mulch in landscape settings using a weed barrier beneath, and in turf settings, prevention of seed movement to a site on mowers by cleaning is very useful. Early detection and elimination is the next line of defense. Rogue out when possible. Chemical control in landscapes includes prodiamine (Factor, Barricade), oxadiazon (Ronstar), benefin/oryzalin (XL), benefin/trifluralin (Team), and Surflan as pre emergents. In turf, early post emergent control can be obtained using ethofumesate products (Prograss). Non selective post emergent control can be easily obtained using glufosinate (Finale) and glyphosate.

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The eggs of tiger beetles are laid in the soil, where once hatched, the larvae build an underground burrow. The larva waits in the burrow for an unsuspecting prey to pass by. When this happens the tiger beetle larva jumps from its burrow, grabs the prey, pulls it into the burrow and enjoys a feast. These beautiful insects are interesting to watch, but if you have the need to catch one beware – they have been known to draw human blood with their sharp mandibles.

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Look for this bright green predaceous beetle in sunny spots along wooded trails
Photo: Richard Chaffin, The Brickman Group
products. Remember that pre emergent failures are often the fault of improper timing of applications. Since this weed is a winter annual, it should have pre emergent products applied in the August and September timeframe.

Roughstalk bluegrass *Poa trivialis*, is another bluegrass of concern at this time. This cool season, rapidly spreading weed can be a problem in golf courses and other turf settings. It also has a light green color, but its leaves appear shiny. It grows well in shady areas, and non selective herbicides are the only option besides mechanical methods for removal.

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**Plant of the Week**  
**By: Ginny Rosenkranz**

*Daphne genkwa*, lilac  
Daphne, is a compact deciduous shrub that grows 3-5 feet tall and 2-3 feet wide. In mid to late spring the long slender, erect branches are completely covered with an abundance of slightly fragrant lilac flowers borne in clusters of 2-7 flowers together. This particular *Daphne genkwa* is from the group bred by Don Kackenberry from seed by the Beijing Botanic Garden. After the flowers are finished, the silky textured leaves emerge and expand to 3 inches. Lilac Daphne grows best in full sun in moist, very well drained soils in USDA zones 5-7. They can be planted as a small specimen or in the perennial border. Pests include aphids, scale, southern blight and root rot.
### Phenology

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<th>PLANT STAGE (Bud with color, First bloom, Full bloom, First leaf)</th>
<th>LOCATION</th>
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<tr>
<td><em>Camellia japonica</em> ‘Jerry Hill’</td>
<td>Full bloom</td>
<td>Ellicott City (April 23)</td>
</tr>
<tr>
<td><em>Cercis canadensis</em> (redbud)</td>
<td>Full bloom</td>
<td>Columbia (April 24)</td>
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<tr>
<td><em>Erythronium americanum</em> (trout lily)</td>
<td>Full bloom</td>
<td>Silver Run (April 22)</td>
</tr>
<tr>
<td><em>Podophyllum peltatum</em> (mayapple)</td>
<td>Full leaf</td>
<td>Ellicott City (April 24)</td>
</tr>
<tr>
<td><em>Trillium grandiflorum</em></td>
<td>Full bloom</td>
<td>Silver Run (April 22)</td>
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### Degree Days (As of April 23)

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To check degree day (DD) accumulations in your local area go to: [http://www.yourweekendview.com/outlook/agriculture/growing-degree-days/](http://www.yourweekendview.com/outlook/agriculture/growing-degree-days/). Note: degree days reported in this newsletter use a base temperature of 50 °F, a start date of January 1st, and the date of monitoring as the end date.

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**Maryland Day 2015**

**April 25, 2015**

10 a.m. to 4 p.m.

Location: University of Maryland, College Park, MD

[marylandday.umd.edu](http://marylandday.umd.edu)

**Great Looking Lawns Using Bay-Friendly Practices**

Saturday, May 2, 2014

10:00 am – 12:00 pm

Learn about lawn care at the National Arboretum from University of Maryland Experts

**Free**, but space is limited and registration is encouraged. **Call 202-245-5965 to register**

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**Upcoming Conferences:**

**MAA Pest Walk**

May 20, 2015

Location: Irvine Nature Center, Owings Mills, MD

**Eastern Shore Pest Walk**

June 3, 2015

Location: Salisbury, MD

Contact: Ginny Rosenkranz, 410-749-6141

**Procrastinator’s Pesticide Recertification Conference**

June 5, 2015

Location: Montgomery County Extension Office

Contact: Chuck Schuster, 301-590-2807

[A brochure is on-line](http://2015pest.eventbrite.com)

**Eastern Shore Pest Management Recertification Conference**

June 12, 2015

Location: Wye Research and Education Center, Queenstown, MD

Contact: Ginny Rosenkranz, 410-749-6141


**MNLGA Nursery Field Day**

June 17, 2015

Location: Clear Ridge Nursery, Union Bridge, MD

**Greenhouse Tour and MNLGA Picnic**

June 25, 2015

Location: Greenstreet Growers, Lothian, MD
Summer Meeting of the Maryland Christmas Tree Association
June 27, 2015
Location: Pine Valley Christmas Trees, 342 Blake Road, Elkton, MD 21921
Meeting includes a 60th MCTA Anniversary celebration.
For more information: GaverTreeFarm@aol.com or http://www.marylandchristmastrees.org/

Alternative Greenhouse Crops Conference
August 5, 2015
Location: Brookside Gardens, Wheaton, MD

LCA Hands-on Training Seminar
September 16, 2015
Location: Johns Hopkins Univesity, Montgomery County Campus

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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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