# $\frac{\text{UNIVERSITY OF}}{\text{MARYLAND}}_{\text{E X T E N S I O N}}$

# **TPM/IPM Weekly Report**

for Arborists, Landscape Managers & Nursery Managers

#### Solutions in your community

#### **Commercial Horticulture**

#### In This Issue...

- Fireblight
- Ambrosia beetles
- Euonymus scale
- Lesser peachtree borer
- Calico scale
- Anthracnose
- Powdery mildew
- Phyllosticta on witchhazel
- Bagworms
- Spiny witchhazel gall aphids
- Sawfly on creeping jenny
- Scale on pachysandra
- Grape tumid gall
- Peach leaf curl
- Salt damage and vole damage

Beneficial of the Week Weed of the Week Plant of the Week Phenology Degree days Conferences

Integrated Pest Management for Commercial Horticulture

www.ipmnet.umd.edu

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

#### **Coordinator Weekly IPM report:**

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#### **Regular Contributors:**

Pest and Beneficial Insect Information: Stanton Gill and Paula Shrewsbury (Extension Specialists) and Brian Clark (Extension Educator, Prince George's County)

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 (Regional Specialist, Wye Research & Education Center)

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#### **Fireblight Symptoms**

Unfortunately, this weekend I (Stanton) found the first symptoms of fireblight dieback on Asian pears in Westminster.

**Mangement:** When we have some dry weather, prune several inches (at least 12 - 18") below the dieback section on the branches. Rainy weather spreads this bacterial disease.



Firelbight on crabapple

#### Ambrosia Beetles

We received a report this week that ambrosia beetles are boring into hybrid elms and killing the trees. We have not seen samples yet to identify which species is present.

#### **Euonymus Scale**

We are finding mainly second instars of euonymus scale on euonymus plantings in central Maryland this week. We should see crawlers sometime in late June or early July.

### May 20, 2011

#### Lesser Peachtree Borer, Synanthedon pictipes

This week, I (Stanton) picked up lesser peachtree borer in a deltoid sticky pheromone trap in Westminster (Carroll County). The lesser peachtree borer infests the upper parts of the trunk and scaffold branches and is most troublesome on injured or weak trees. Borers feed on the growing inner bark of trees and tunnel between the inner bark and the sapwood. The bark eventually peels off of damaged areas. Damage weakens the tree and



Lesser peachtree borer damage Photo: Carroll E. Younce, USDA Agricultural Research Service, Bugwood.org

predisposes it to attack by other pests and diseases. A gummy mass mixed with sawdust is usually found on the outer bark at the place where a borer started an attack. Entries are often found where there are cankers or wounds caused by other factors such as pruning or winter injury.

Adult borers are moths that look a lot like wasps. Males have a blue-black body with narrow yellow bands on the abdomen, thorax, head, and legs. Its front and hind wings are clear but the edges and veins are outlined with blue-black scales. The male is 15 to 23 mm long with wings that have a slight yellow tinge, and it usually has only two narrow bands of yellow visible on the abdomen. The female lesser peachtree borer is very similar to the male except for features of the antennae and tip of the abdomen. Lesser peachtree borer usually has two generations per year in Maryland, with adult emergence in May and June, then again in August and September.

#### **Control Options:**

Several species of wasps parasitize eggs or larvae of lesser peachtree borer. Ants, spiders, and lacewings prey on larvae in exposed locations, and birds feed on larvae and adults. These natural enemies do not adequately control borers. Avoid improper pruning, mowing, fertilizing, or harvesting operations that injure bark and thus attract borers. Cultural practices that promote healthy trees also make borer attacks less likely. Trees should be trained so that branches form wide angles rather than narrow angles. Mating disruption is a

strategy that can be used for borer control. Small dispensers filled with lesser peachtree borer pheromone are attached to all trees in the orchard. As this pheromone permeates the orchard, male moths become confused and are unable to locate female moths. Mating is prevented, and no fertile eggs are laid. This strategy is effective only in large (>5 acre) plantings. I have used this method in my orchard for the last 3 years with good success. It is very expensive (around \$350 to protect an acre area).

**Chemical Control:** Apply an insecticide as a preventive to trees before borer eggs hatch so that small borer larvae contact a toxic residue as they crawl into trees. Fumigant action of the insecticide can kill larvae already in trees at the time of application. An insecticide with long residual action gives the best control of borers. Thorough coverage is necessary. Insecticide should be applied as a bark drench to the trunk and scaffold branches at a rate of at least one-half to one gallon of spray mix per tree. Carbaryl (Sevin) is labeled for borer control in home peach plantings.



Lesser peachtree borer damage Photo: Randy Cyr, Greentree, Bugwood.org



Lesser peachtree borer larva Photo: Clemson University -USDA Cooperative Extension Slide Series, Bugwood.org

#### **Calico Scale**

We received a sample from the Eastern Shore with calico scale crawlers emerging this week. Also, Ben Hall, Mainscapes, Inc., brought in a sample of calico scale found on Japanese maple on May 18 from Timonium. There were eggs, but no crawlers yet, but they should emerge very soon.

Control: Use Talus or Distance for crawlers.

Calico females and eggs found under a female cover Photo: Sarah Kenney, UMD



#### Anthracnose in the Landscape

We continue to receive reports of anthracnose on woody plants in the landscape including red maple, dogwood, and ash. Damian Varga, Plant Scientific Services, Inc., reported it on and beech (so far beech samples have not been confirmed by the University of Maryland Diagnostic Lab) in Ellicott City, Baltimore, Phoenix, and Cockeysville.

#### **Powdery Mildew**

Paul Wolf reports finding euonymus bushes in the District of Columbia with the worst powdery mildew infection that he has seen. The plant was completely defoliated for this season.

#### **Phyllosticta on Witchhazel**

While doing a pest walk in Salisbury this week, David Clement and I (Stanton) found phyllosticta on witchhazel. This disease starts out as spots with light centers and dark borders. Plants can be defoliated during high infection periods.

**Management:** Plants can be pruned to help increase air circulation and reduce the spread of this disease. Clean up the area in the fall to remove the fungus that overwinters in the leaves. There is nothing to apply at this time of year for control. Next spring, a fungicide spray might be used to prevent infection on individual specimens that had severe leaf blight this year. Many fungicides should work including but not limited to: BannerMaxx, Cleary's 3336, Cleary's Protect TO, Heritage, Compass, Daconil Ultrex, Medallion, Terraguard.



Early symptoms of Phyllosticta on witchhazel foliage Photo: David Clement, HGIC



As the infection spreads, many leaves die and drop off the plant Photo: David Clement, HGIC

#### **Bagworms Continue To Hatch Out**

John McLeod, The Brickman Group, reported that bagworms were just emerging from egg-filled sacks on May 19 in Alexandria, VA.

**Control:** While the larvae are still small, Bt can be used. Other options inlcude Acelpryn, Confirm, and Conserve.

#### Spiny Witchhazel Gall Aphids

Norm Brady, Bartlett Tree Experts, Inc., reported that spiny witchhazel gall aphids are active on birch leaves in Talbot County and Ben Hall, Mainscapes, Inc., is finding them on plants in central Maryland as well. The corrugated leaves and woolly aphids make this one easy to spot.

**Control:** Often, plenty of beneficial insects are present to keep this aphid under control. On one of the samples, there were several lady bird beetle larvae searching for the aphids.



Spiny witchhazel gall aphids on underside (left leaf) of leaf and damage on topside of leaf (right leaf)



Lady bird beetle larva found on birch searching for aphids

#### Sawfly

Brian Haga, Scientific Plant Services, Inc., reported sawflies feeding heavily on creeping jenny in Finksburg on May 19. **Control:** Conserve

Sawfly feeding on creeping jenny Photo: Brian Haga, Scientific Plant Services, Inc.



#### Scale on Pachysandra

Paul Wolf found an armored scale on pachysandra which is either white peach scale or white prunicola scale. We should see crawlers in the next couple of weeks. White prunicola scale are active about two weeks earlier than white peach scale. Male white peach scale crawlers are white and females are salmon in color. Both male and female crawlers of white prunicola scale are salmon in color.

**Control:** When crawlers are out, Distance mixed with 1% horticultural oil gives excellent control.



White prunicol scale

#### Galls on Grape Foliage

Ginny Rosenkranz found grape tumid gall (also known as grape tomato gall) on grape foliage this week. This pink or green gall is caused by a midge which is native to the U.S.. This midge only infests wild and cultivated grapes (Vitus spp.). Infestations occur sporadically in crops and on vines. Look for a hole in the gall to see if the larva has emerged. The larvae drop to the ground to pupate. Usually, damage is not significant to warrant any control measures.



Galls on the topside of the leaf Photo: Ginny Rosenkranz



View of the galls on the underside of the leaf Photo: Ginny Rosenkranz

#### Peach Leaf Curl

Ginny Rosenkranz reported peach leaf curl (*Taphrina deformans*) on an ornamental peach tree with bronze foliage and (non edible) peaches.

**Management:** It is too late in the season to control this disease. If necessary, a fungicide spray should be made after trees have lost most of their leaves in the fall or in the spring before buds start to swell. Fungicides include chlorothalonil (Bravo), Lime Sulfur, and copper compounds (Kocide, COCS, etc.). Fungicides will not control the fungus once it is in the leaf tissue.



Peach leaf curl damage on peach **Photo: Ginny Rosenkranz** 

#### Salt Damage and Vole Damage

Steve Sullivan, The Brickman Group, is seeing a lot of salt damage on various plants with quite a bit on crape myrtles. Steve also found vole damage on juniper this week.





Vole damage on juniper (above) and salt damage on crape myrtle (far right photo) Photo: Steve Sullivan, The Brickman Group

#### **Beneficial of the Week, Brian Clark**

Dragonflies are back in town! I have seen the large darners cruising the soccer fields and happened to catch this skimmer (see photo) taking a break before it flew off again. Large dragonflies have a maximum speed around 22–34 mph with an average cruising speed of around 10 mph. They use their speed and excellent eyesight to catch their prey, usually small flying insects, while cruising the open areas around meadows, ponds, and the occasional athletic field. Immature dragonflies are aquatic, and depending on who you talk to, are called nymphs, naiads, or larvae. Most are predatory during their development in the water as well.

PS. Honeybees are swarming in Charles County.

Skimmer dragonfly Photo: Brian Clark

# Univ. of MD

#### Plant of the Week, Ginny Rosenkranz

*Convallaria majalis*, lily of the valley, is a deciduous groundcover that carpets the ground from early spring until late fall. It spreads by underground rootstock that thrives in the northern parts of Maryland in cool, moist soil conditions, and grows a bit slower in the heat of the Eastern Shore of Maryland. Plants prefer full shade, especially in the south, but can handle more sun in the northern areas. Lily of the valley is often planted as a groundcover in the dense shade of trees, where despite its love of moist soils, can grow in a bit of drought. The solid green or green and white variegated lance-shaped leaves grow 8 - 15 inches in height with the veins following the shape of the leaves. In May, the plants produce the arching stems that hold the lily of the valley flowers. The fragrant bell-shaped flowers are tiny in size but powerful in



Convallaria majalis (lily of the valley) **Photo: Ginny Rosenkranz** 

fragrance. Some varieties like 'Fortin's Giant' and 'Plena' have larger flowers, and 'Rosea' has light pink flowers. They all have a wonderful fragrance. The plants are hardy from USDA zone 2-7, growing stronger the further north in the cooler temperatures. Mammals do not bother lily of the valley because all parts of the plant are poisonous. Root knot nematodes, weevils, gray mold, crown rot and leaf spot are all pests.



PLANT	PLANT STAGE (Bud with color, First bloom, Full bloom, First leaf)	LOCATION
Chionanthus Pygmaeus	First bloom (May 20)	Silver Run
Chionanthus retusus	Full bloom (May 20)	Columbia
		Marriottsville
Clintonia umbellulata	Full bloom (May 20)	Silver Run
Cornus alternifolia	Full bloom (May 20)	Silver Run
Cotinus obovatus	Full bloom (May 20)	Silver Run
Iris pseudacorus	Full bloom (May 20)	Ellicott City
Robinia fertilis	Full bloom (May 20)	Westminster
Sophora davidii	Full bloom (May 20)	Silver Run
Stranvesia davidiana 'Winterthur'	Buds with color (May 20)	Silver Run
Stranvesta aavialana Piostiala		
Stewartia pseudocamellia	Buds with color (May 20)	Silver Run
-		Ellicott City

# Degree Days (As of May 19)

Baltimore, MD (BWI)	563
Dulles Airport	546
Frostburg, MD	262
Martinsburg, WV	467
National Arboretum	655
Reagan National	623
Salisbury	601

#### **Upcoming Programs:**

#### May 26, 2011 Taking Care of Trees: Top to Bottom Organic Turf Care - Opening Pandora's Box Location: Gwendolyn E. Coffield Community Recreation Center, Silver Spring, MD Contact: 301-948-0810

June 2, 2011 Pest Walk Location: Carroll County Extenison Office, Westminster, MD Contact: 410-321-8082

June 10, 2011 Procrastinator's Pest Management Conference Location: Montgomery County Extension Office, Derwood, MD Contact: 301-590-2807

June 23, 2011 MNLA Field Day Location: Priapi Gardens, Cecilton, MD Contact: 410-823-8684

June 25, 2011 (Saturday) Summer Maryland Christmas Tree Association Meeting Location: Sewell's Tree Farm, Taneytown, MD Contact: 410-452-9793

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