



**TPM/IPM Weekly Report for Arborists,  
Landscape Managers & Nursery Managers  
University of Maryland Cooperative Extension**

**October 23, 2009**

**Coordinator of the electronic weekly IPM report:**

Stanton Gill, Extension Specialist, IPM for Nursery, Greenhouse and Managed Landscapes,  
[Sgill@umd.edu](mailto:Sgill@umd.edu). 301-596-9413 (office) or 410-868-9400 (cell)

**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 Ctr)

**Design, layout and editing:** Suzanne Klick (Technician, CMREC)

Please call us if you are a commercial horticultural business finding insect, disease, weed or cultural plant problems in the landscape or nursery. Send submissions to [Sklick@umd.edu](mailto:Sklick@umd.edu) or call Stanton Gill at 301-596-9413.

**Pear Blister Mite**

Over the last couple of years we have been seeing more pear blister mite damage on Asian pears, European pears and ornamental pears. These mites are very small and you will need at least a 15 to 20X hand lens to see them. They are white, long, slender, and striated. They also have a few long hairs. Eggs are spherical and pearly white.

**Monitoring:** Look under bud scales during winter where these mites feed. This feeding can cause buds to dry and fail to develop in spring. In the spring, pear blister mites feed on emerging leaves, flowers and developing fruit. Feeding results in blistered leaf spots that start red and eventually turn black. The spots on the fruit are usually depressed with a halo of clear tissue that tend to run together. Eggs are laid inside the blister which is where young mites start feeding so they are rarely seen.

**Control:** In late October the females will begin to seek out places on the branches to overwinter. They like to settle down into the bud scales and bark cracks. At this time of year they are moving about on the twigs and are susceptible to pesticide applications. You have a relatively small window in which to treat for this pest. A 2% rate horticultural oil can be applied in late October. The kill rate can be improved with addition of Abamectin (Avid) to the horticultural oil.



*Thank you to the Maryland Arborist Association, the Landscape Contractors Association of MD, D.C. and VA, the Maryland Nursery and Landscape Association and FALCAN for your financial support in making these weekly reports possible. Photographs by Suzanne Klick, Stanton Gill or Shannon Wadkins unless otherwise noted.*

The information given herein is supplied with the understanding that no discrimination is intended and no endorsement by Maryland Cooperative Extension is implied.

***Phytophthora ramorum* Found in Maryland**  
***Phytophthora ramorum* was found in Bethesda on a witch hazel plant that was mail ordered and shipped from Oregon.** The disease kills oaks and other species of tree and has had devastating effects on the oak populations in California and Oregon as well as also being present in Europe. Symptoms include bleeding cankers on the tree's trunk and dieback of the foliage in many cases eventually leading to the death of the tree. *P. ramorum* also infects a great number of other plant species, significantly rhododendrons, causing a non-fatal foliage disease known as *P. ramorum* dieback. Such plants can act as a source of the inoculum for the disease, with the pathogen producing spores that can be transmitted by wind and rainwater. *P. ramorum* was first reported in 1995, and the origins of the pathogen are still unclear but most evidence suggests it was introduced as an exotic species. Very few control mechanisms exist for the disease so early detection and proper disposal of infected plant material are important. **Photo of *P. ramorum* leaf symptoms on California laurel (bay) by Joseph O'Brien, USDA Forest Service, Bugwood.org**



**Viburnum Leaf Beetle**

New York State has been where the largest populations of viburnum leaf beetle have been actively damaging viburnums. While in Pittsburgh for the EAB meetings, I (Stanton) was talking with Dan Hermes of Ohio State University and found out that viburnum leaf beetle has been found damaging plants in Michigan. This pest severely damages viburnum plants. Here in Maryland viburnums have been relatively pest free and hopefully we won't have this pest visit our fair state for a long time. If you do find a leaf beetle on viburnum please send it in for identification. We don't need this pest and want to prevent its entry for as long as possible.



**Typical feeding damage by adult on arrowwood viburnum**  
**Photo by Paul Weston, Cornell University, bugwood.org**



**Second and third instar larvae of viburnum leaf beetle**  
**Photo by Paul Weston, Cornell University, bugwood.org**

Thank you to the Maryland Arborist Association, the Landscape Contractors Association of MD, D.C. and VA, the Maryland Nursery and Landscape Association and FALCAN for your financial support in making these weekly reports possible. Photographs by Suzanne Klick, Stanton Gill or Shannon Wadkins unless otherwise noted.

The information given herein is supplied with the understanding that no discrimination is intended and no endorsement by Maryland Cooperative Extension is implied.

## **Emerald Ash Borer**

The USDA has defined over 230,000 square acres of quarantine area for emerald ash borer in the United States in 2009. This insect has spread into Minnesota which has the second largest population of ash trees in the United States.

**Photo of emerald ash borer by David Cappaert, Michigan State University, Bugwood.org**



**Purple Baited Traps:** USDA APHIS coordinated placing purple deltoid traps in 42 states in the US with over 50,000 traps being placed out in 2009. The traps were baited with oil made up of 20% Phoebe oil and 80% Manuka oil. In 2008, 25 new counties were found to have Emerald ash borer. Forty percent were detected by purple baited traps. In 2009, 8 traps per square mile were placed at the edge of the areas where EAB is spreading. In 2009, 40 new counties were found to be infested with emerald ash borer. In 2009, 49% of the detections was through use of purple baited traps.

**Biological Control:** Biological control is the exciting new development. USDA Aphis has helped to establish a lab in Brighthon, Michigan which is rearing parasites for EAB. USDA Aphis has also set up equipment that checks the dendrology of trees and will be used to check age of the infestation of EAB in a tree. *Spathius* and *Oobius* wasps are being released in the mid-west. These stingless wasps hold the best potential for long term control of EAB. The Maryland Department of Agriculture has released parasitic wasps for EAB control in the Prince George's County area.

**Impact of Canopy Loss:** Impact of canopy thinning of the forest from EAB in Michigan showed reduced populations of frogs, lizards and salamanders. With the death of ash trees and opening up of the canopy there has also been an impact on the increase of invasive species of plants such as Japanese bittersweet and bearberry.

**Does Cold Slow Down EAB Spread:** In Canada entomologists are looking to see if the cold weather slows down the spread of emerald ash borer. Seventy five percent of EAB larvae overwinter as pupae and 25% overwinter as larvae. EAB 'supercools' its body before it freezes so it can survive. Based on two years' work, the cold weather of Montreal, Canada did not appear to impact the EAB in overwintering or spread of the population.

**Ash and Seedlings:** Dan Hermes from Ohio State has been examining ash trees infested with emerald ash borer and he has noted that infested trees produce very few seeds. This is unusual in that most stressed trees that are dying produce more seeds for survival of the species. Healthy ash trees are producing a lot of seeds but these seedlings are very susceptible to EAB infestations. They found 99% of the seedling ash trees die from EAB once they reach a 1" DBH. Since EAB infested trees produce few seeds the big question is "Can EAB exist on a dwindling population of ash"?

*Thank you to the Maryland Arborist Association, the Landscape Contractors Association of MD, D.C. and VA, the Maryland Nursery and Landscape Association and FALCAN for your financial support in making these weekly reports possible. Photographs by Suzanne Klick, Stanton Gill or Shannon Wadkins unless otherwise noted.*

The information given herein is supplied with the understanding that no discrimination is intended and no endorsement by Maryland Cooperative Extension is implied.

## **Freak Snow Storm in Mid-October**

Frank Dudek, Carroll Tree Service, reported that 3- 4” of wet snow hit the White Marsh area causing heavy tree branches to break. This is one of the earliest snow incidences recorded in Maryland in the last 40 years.

## **Iron Chlorosis on Birch**

Will Healy called in to report an interesting situation he experienced in a landscape. A birch tree had been planted 6 - 7 years ago and a weed barrier had been placed down around the tree to control weeds. Over the years a layer of hardwood mulch had been placed over the weed barrier. He noticed that the foliage of the tree was showing iron chlorosis. Probes of the soil showed that the pH was fine. They decided to excavate the root system to examine them. When they started the examination they found that the root system had expanded heavily above the root barrier and into the hardwood mulch layer. Most of the roots below the weed barrier had died out. The mulch layer had a high pH and low iron content.

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

The multicolored Asian lady beetle (MLAB), *Harmonia axyridis*, was introduced from Asia for classical biological control of aphids, mites, thrips, scale and Lepidoptera (eggs). Since its introduction, it has achieved control of numerous pests with ruthless efficiency, often reducing insecticide applications. It is an aggressive feeder as both an adult and larvae. As an adult, the MLAB can have several different color patterns, which is why it is known as “multicolored”. However, it always has a characteristic “M” on the pronotum, just behind the head.



The MLAB lays its eggs in or near prey infestations. The larvae are larger than most native ladybird larvae, giving them a competitive advantage. This competitive advantage is believed to be one of the reasons for the decline of other insects that also feed on the same pests. These advantages have allowed MLAB to spread from its release points throughout the country.

This beetle can also become a pest. It is attracted to light-colored dwellings and other manmade objects which it uses for overwintering. As a result of this behavior, the beetle can enter homes and businesses through cracks, crevices and other small openings around windows, doors, and roofs. During bright, warmer days (50°F) during the winter, MLAB overwintering within the warmer southern walls can become active, releasing a constant supply of beetles into buildings. Control with a vacuum, while effective, causes the beetle to release a foul smelling defensive chemical. Therefore, control of these pests is best achieved through locating possible entrance points and sealing them.

*Thank you to the Maryland Arborist Association, the Landscape Contractors Association of MD, D.C. and VA, the Maryland Nursery and Landscape Association and FALCAN for your financial support in making these weekly reports possible. Photographs by Suzanne Klick, Stanton Gill or Shannon Wadkins unless otherwise noted.*

The information given herein is supplied with the understanding that no discrimination is intended and no endorsement by Maryland Cooperative Extension is implied.

## Deer Management

Linda Barker sent an email mentioning that on September 29, 2009, the United States Environmental Protection Agency approved drug #56228-40, GonaCon, a gonadotrophin-releasing hormone (GnRH) immunocontraceptive vaccine for white-tail deer, developed by the National Wildlife Research Center. At EPA a fact sheet is available at <http://www.epa.gov/opprd001/factsheets/gonacon.pdf>

## Plant of the Week, Ginny Rosenkranz

*Gaura lindheimeri*, whirling butterflies, is an herbaceous perennial native to Texas and Louisiana that comes into its own in the late summer and throughout the fall. It is very drought and heat tolerant and can stand up against high humidity without diseases slaying it. It grows in an upright bushy form to a height of 2 - 3 feet and will flower continuously from spring till the first hard frost.

*G. lindheimeri* prefers a moist rich soil with a neutral to alkaline pH, but it grows very well in most soils regardless of moisture or pH. Despite its heat tolerance, *G. lindheimeri* can thrive from zone 5 - 10 as long as the roots are well mulched for the winter. The flowers are small and white or pink depending on the cultivar, but as the white flower matures it becomes a pale pink. They are arranged on the stem like a gladiola, with a few flowers blooming at a time and are held above the foliage. After flowering, the spent flowers fall cleanly without dead heading. The flower stalks are thin and wiry, often tinged with red or pink depending on the coolness of the night temperatures. *G. lindheimeri* can be used as a background plant or as a wild flower planting; it doesn't conform to a formal planting. Some of the newer cultivars are more compact like 'Swirling Butterflies' or a darker pink like 'Siskiyou Pink', 'Pretty in Pink' and 'Crimson Butterflies'. Pests include aphids, leaf galls, leaf spots, root rot and rust.



## Degree Day Information (as of October 22):

Baltimore, MD (BWI)	3537
Dulles Airport	3774
Frostburg, MD	2199
Martinsburg, WV	3261
National Arboretum	4385
Reagan National	4030
Salisbury	3726

Thank you to the Maryland Arborist Association, the Landscape Contractors Association of MD, D.C. and VA, the Maryland Nursery and Landscape Association and FALCAN for your financial support in making these weekly reports possible. Photographs by Suzanne Klick, Stanton Gill or Shannon Wadkins unless otherwise noted. 5

The information given herein is supplied with the understanding that no discrimination is intended and no endorsement by Maryland Cooperative Extension is implied.

## **UPCOMING PROGRAMS:**

### **December 10, 2009**

Chesapeake Green Energy Conference  
Location: Brookside Gardens, Wheaton, MD  
Contact: Suzanne Klick, 301-596-9413

### **December 18, 2009**

Pest Management Recertification Conference  
Location: Montgomery College, Germantown, MD  
Contact: Suzanne Klick, 301-596-9413  
**(Complete information on this program will be posted soon.)**

### **January 4 – 8, 2010**

Landscape IPM Short Course  
Location: College Park, MD  
Contact: Avis Koeiman, 301-405-3919

### **January 6 – 8, 2010**

MANTS  
Location: Baltimore Convention Center, Baltimore, MD  
Contact: 800-431-0066

### **January 20 – 21, 2010**

Maryland Arborist Association Winter Seminar  
Location: Turf Valley, Ellicott City, MD  
Contact: MAA, 888-638-7337

### **January 20 -21, 2010**

Green Industry Professional Seminar and Pesticide Re-Certification (MD, DC,VA)  
Location: Northern Virginia Community College, Annandale, VA  
Contact: Mary Bean 703-250-1369

### **January 27, 2010**

FALCAN Conference  
Location: Frederick County Fairgrounds (Null Building), Frederick, MD  
Contact: Dan Felice, 301-252-2116

### **February 3 and 4, 2010**

2010 Chesapeake Green Horticulture Symposium  
Location: Maritime Institute, Linthicum, MD  
Contact: MNLA, 410-823-8684

### **February 10, 2010**

Eastern Shore Pest Recertification Conference  
Location: The Fountains, Salisbury, MD  
Contact: Ginny Rosenkranz, 410-749-6141

### **February 16 – 19, 2010**

Cut Flower Short Course  
Location: BARC Facility, Beltsville, MD  
Contact: Suzanne Klick, 301-596-9413

### **February 25, 2010**

LCA Winter Workshop  
Location: National 4H Conference, Chevy Chase, MD  
Contact: LCA, 301-948-0810

### **March 4, 2010**

Greenhouse Conference  
Location: Chesapeake Community College, Easton, MD  
Contact: Shannon Dill, 410-822-1244



Stanton Gill  
410-868-9400  
[Sgill@umd.edu](mailto:Sgill@umd.edu)



Chuck Schuster



Paula Shrewsbury



Ginny Rosenkranz



Karen Rane  
301-405-1611  
[rane@umd.edu](mailto:rane@umd.edu)

*Thank you to the Maryland Arborist Association, the Landscape Contractors Association of MD, D.C. and VA, the Maryland Nursery and Landscape Association and FALCAN for your financial support in making these weekly reports possible. Photographs by Suzanne Klick, Stanton Gill or Shannon Wadkins unless otherwise noted.*

The information given herein is supplied with the understanding that no discrimination is intended and no endorsement by Maryland Cooperative Extension is implied.