



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

**August 28, 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.

**Water – The Next Big Issue**

There was an excellent article in the Outlook section of the Washington Post last Sunday. Robert Glennon wrote an article about the shrinking water supply. He had several good points about water supplies. Wise nursery and landscape managers should plan out a way to address this issue. He points out that in areas of the country where the population is exploding water will have to be limited or regulated. Maryland is one of those states predicted to see large population increases. One of the proactive things you can do is use trickle irrigation where possible, and install landscape plant material that can survive on minimal water inputs. In some counties, such as Montgomery County, the county government is encouraging installation of rain gardens and systems that capture rain from roofs and use storage tanks to irrigate the landscape.

At the University of Maryland Extension, John Lea-Cox, David Ross and Andrew Ristvey are looking at electronic monitoring devices to measure water levels in soils in nurseries. Their long-term goal is to help nursery managers make more efficient use of trickle irrigation systems and decide when to operate the system and for how long of an irrigation episode.

You can see this system at the **October 2, 2009 Sustainable Nursery Field Day** that we will be holding at Snell Nursery in Union Bridge, Maryland. Go to <http://www.ipmnet.umd.edu/crses97> for a copy of the announcement. You can also contact us at 301-596-9413 or [sklick@umd.edu](mailto:sklick@umd.edu) for more information on this field day.

*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.

### White Prunicola Scale, *Pseudaulacaspis prunicola*

Hal Neill, Chapel Valley Landscape Company, brought in a sample of cherry laurel that had many yellowing leaves and dropping foliage. The stems of the plant were covered with a lot of white, male covers of the white prunicola scale. The white male covers are very, very conspicuous. There were also some female covers which are not as showy as the males. The female covers are circular, white with a distinct spot. We popped off covers of the females at the research center on Monday and the females were loaded with eggs. We also found a couple of crawlers walking around on the branches. This is the 3<sup>rd</sup> generation of white prunicola scale. If you plan to apply control material – **now is the time.**

**Control:** Talus or Distance with a 1% horticultural oil.



They may be hard to see in the photo, but there are crawlers present. (salmon in color)

Male covers

Female cover

### Japanese Maple Scale

We are finding 2<sup>nd</sup> generation crawlers of the Japanese maple scale active this week in Central Maryland. The crawlers are purple and if you flip over the female covers you will see the purple colored females and the purple eggs she lays (**as shown in photo**). If you plan to make an application of Distance or Talus it is the time to do it.



We are conducting trials at two Maryland nurseries for control of Japanese maple scale. Back in June these nurseries applied the insect growth regulator Talus and horticultural oil at the 1% rate for control of Japanese maple scale crawlers and early instars. The material worked well in killing newly settled crawlers and 2<sup>nd</sup> instars for about 3 weeks. The interesting thing is that the first generation females continued to lay eggs past this 3 week period. What we are seeing at the sites where Talus was used is that the 2<sup>nd</sup> generation crawlers are not present yet. We suspect that since we wiped out the early developing scale this took out the population that is producing crawlers at other locations. We plan to delay the next application at these two sites until crawlers start to show up.

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. 2

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

If you made an application in June you may want to send us samples so we can examine them to see if crawlers are present in your nursery. Call first so we can discuss how to take a sample – 301-596-9413. Samples are sent to CMREC – University of Maryland, 11975 Homewood Road, Ellicott City, Maryland 20142.

### **Pine Adelgid**

We've received calls from landscapers finding heavy populations of pine adelgid in several landscapes.

**Control:** Control is usually not necessary, but a 1 – 2 % horticultural oil application can knock down a high population.

**Photo by Marie Rojas**



### **Velvet Ants**

Judith Owen, a Cecil County master gardener, sent in this photo of a velvet ant. We thought this was an opportunity to alert you to their activity in August and September. This unusual insect is occasionally seen running around open areas in the yard during August and September. Brightly colored velvet ants look like large hairy ants, but they are actually wasps. The males have two pairs of transparent black wings. The females are wingless and are sometimes confused with ants. Although not aggressive, females have a very painful sting if handled. Adult velvet ants feed on nectar and water. The immature stages are external parasites of bees and wasps that nest in the ground. A few species parasitize some flies and beetles. Velvet ants prefer areas with sandy soil where their prey is most likely to be found. There is no effective control measure for them. If they are particularly abundant in an area, overseeding to get a better grass cover would discourage the ground nesting bees and wasps on which velvet ants feed.



### **Bamboo Control:**

We received a question this week on how to control bamboo. Below are comments made by Jeff Derr, Virginia Experiment Station, on bamboo control from the August 13, 2004 Report.

*We have had success with using Roundup. We cut the bamboo down to the soil line and treated when regrowth reached about 2 to 3 feet tall. Roundup stops it from growing for about a month then regrowth appears. It took two applications of Roundup per year for 2 years to eradicate it. If a neighbor has uncontrolled bamboo, however, it will keep moving into the treated yard. You would need to dig a ditch and install a physical barrier to stop the rhizomes from spreading.*

*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.

## Rose Rosette Disease

We're still receiving reports on rose rosette disease. Below are information and photos that were included in the April 10, 2009 report.

(All rose rosette disease photos by James W. Amrine Jr., West Virginia University, Bugwood.org)



Witches' broom



Irregular reddening



Diseased stem with many thorns on left; normal stem on right



Symptomatic inflorescence (red panicle), accompanied by normal flowers on healthy foliage (a separate plant)

Symptoms of rose rosette disease vary, but some of the more recognizable symptoms include rapid elongation of new shoots and witches' broom on small branches. Leaves are small, distorted, and may have a conspicuous red pigmentation. The red pigmentation is not a consistent symptom. Canes can develop excessive growth of unusually soft and pliable red or green thorns which may stiffen later. This excessive thorniness on the stems is diagnostic for rose rosette disease. Flowers may be distorted with fewer petals than normal, and flower color may be abnormal. Diseased plants may not exhibit all of these symptoms, especially in the early stages of the disease, so diagnosis can be difficult. The red pigmentation may be subtle and hard to distinguish from the normal reddish tinge of new leaves in spring. Monitor roses closely for symptoms to catch this disease as early as possible to help prevent its spread to nearby plants.

**Control:** Once a plant is infected there is no cure. The plant will die over the next 2 – 4 years. Plants that are showing all of the symptoms should be destroyed immediately. Some people try to

*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.

control the eriophyid mite that spreads the disease. This involves applying Avid to the foliage every two weeks from May through October. This is obviously a lot of spraying. Forbid does have eriophyid mites on the label. It should provide control for at least 2- 3 weeks. You might be able to extend the spray intervals.

### **Stinging Caterpillars**

In response to the mention of saddleback caterpillars in last week's report, Linda Doub from Queenstown emailed us to mention that two weeks ago she was stung by the puss caterpillar. She found several on an American holly. Last year, we had multiple reports of people being 'stung' by puss caterpillars from this area as well. In addition to the saddleback and puss caterpillars, other caterpillars with 'stinging' hairs include the io moth, white flannel moth, and hag moth caterpillars. The hairs on webworms can also cause skin irritations. For more information, see the article on stinging caterpillars at <http://ipmnet.umd.edu/StingingCaterpillars-UMD.pdf>

**These two photos below show two color variations of the puss caterpillar.**



**Io moth caterpillar**



**White flannel moth caterpillar**

*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.

### **Pink-striped Oakworm**

Ginny Rosenkranz reported pink-striped oakworms (*Anisota virginiensis*) feeding on an oak last week. This insect is a native late season defoliator of primarily oaks, but it can sometimes feed on maples. The moths are day flyers and the female lays eggs on the underside of oak leaves. The caterpillars feed in groups and there is only one generation a year. Their range is from Nova Scotia to central Florida and west to Minnesota. Control is usually not necessary. **Photo by Ginny Rosenkranz**



### **Robber Flies**

At the research center this week we found a robber fly that had caught a smaller fly. Robber flies are predators of other insects. Adults perch on plants or other objects and catch their prey (wasps, bees, beetles, dragonflies and other flies) in midair. Larvae live in the soil and feed on organic matter and other insects such as white grubs and grasshopper eggs.



### **Braconid Wasps**

Lee Talboys, Maxalea, Inc., sent us this photo of tobacco hornworm that has been parasitized by a braconid wasp. The female wasp paralyzes a larva and then lays its egg beneath the skin of the caterpillar. The larva will feed before emerging to form a cocoon on the outside of the caterpillar. When parasitized the hornworm stops feeding. It's good to leave hornworms with these braconid wasp cocoons in the garden so emerging wasps can find other hornworm larvae to parasitize.



### **Weed of the Week, Chuck Schuster**

Now is the time to review winter weed control programs. August into September can provide the opportunity to apply pre emergent herbicides to landscape areas to prevent many of the fall germinating weeds. Annual broadleaf weeds of interest will include common chickweed, corn speedwell, henbit and rockets, and perennial winter broadleaf weeds would include bulbous buttercup and mouse ear chickweed. Moisture conditions at this time of year may also improve control since moisture is important in the activation of some herbicides.

Products to control these weeds would include isoxaben (Gallery) a formulation of Trifluralin and Isoxaben (Snapshot), oryzalin and oxyfluorfen (Rout). Dichlobenil can control some perennials; it also has some post emergent activity. Fall is a good time to apply these products since as temperature moderates the opportunity to volatilize decreases.

*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.

**Plant of the Week, Ginny Rosenkranz**

*Tilia americana*, American linden, is a native tree that grows 60 - 80 feet tall and is hardy in zones 3 to 8. The tree is shaped like a pyramid while young, and then as it matures the branches droop lower to the ground and swing up at the tips. *Tilia americana* is also known as basswood and has been used to carve duck decoys and furniture because the wood is diffuse porous, showing very little difference between the spring and summer wood. American linden grows best in full sun but is shade tolerant. The leaves of the American linden are dark green above and light green below, fading to a pale yellow for fall color. The tree prefers acidic to slightly alkaline soils that are moist, fertile and well drained. As large as the tree grows, it is best suited to large landscapes. The leaves of *Tilia cordata* or little leaf linden are smaller and the tree itself makes an excellent shade tree. Aphids are the main insect problem followed by Japanese beetles, linden borer, European bark borer, walnut lace bug, caterpillars, basswood leaf miner and linden mites. Diseases include anthracnose, leaf blight, canker, leaf spots, powdery mildew and Verticillium wilt. The American linden is not as tolerant to air pollution as the little leaf linden, which has been used as a street and city tree.



*Tilia americana* photos by Ginny Rosenkranz

**What's in Bloom**

Plant	Plant Stage (Bud with color, first bloom, full bloom, first leaf)	Location
<i>Aralia spinosa</i>	Full bloom	Ellicott City (August 26)
<i>Sedum</i> 'Autumn Joy'	First bloom	Ellicott City (August 27)

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.

## Degree Day Information (as of August 27):

Baltimore, MD (BWI)	2784
Dulles Airport	2971
Frostburg, MD	1773
Martinsburg, WV	2605
Mechanicsville, MD	2705
National Arboretum	3497
Reagan National	3128
Salisbury	2942

## Expanding Your Education This Fall:

This fall you have a couple of chances to expand your diagnostic and IPM skills. On September 16, 2009, Karen Rane and Stanton Gill, University of Maryland Extension, and Jeff Gabric, Becker Underwood Biological Company, will conduct a one-day session on diagnosing disease and insect problems and the use of practical biological control with the Landscape Contractors Association of MD/VA/ and D.C. This training will be at White Flint Mall, Rockville, MD. To obtain a brochure and registration information contact LCA at 301-948-0810 or <http://www.lcamddcva.org/conferences/monthly.cfm>.

If you want to improve your skills even further, Stanton Gill, will be teaching the **Integrated Pest Management for Landscape and Nurseries** class at Montgomery College, Germantown Campus, on Wednesday evenings from 6:00 – 9:30 p.m. This is a 3 credit college class and the first class starts on Wednesday, September 2, 2009. This class can be taken for college credit or you can audit it. You can contact Montgomery College or contact Steve Dubik at 301-353-7803 or e-mail: [Stve.Dubik@Montgomerycollege.edu](mailto:Stve.Dubik@Montgomerycollege.edu).

If you are interested in pest control in Interiorscapes, Carol Allen will be teaching a first time class at U. D.C. on interiorscape IPM. For registration information contact: David Jefferson, Extension Specialist, PSEP Coordinator, University of the District of Columbia Cooperative Extension 4200 Conn. Ave. N.W. Washington DC 20008, Phone 202-274-7122, Fax 202-274-7130 E-mail: [djefferson@udc.edu](mailto:djefferson@udc.edu)



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.