



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

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Go to www.agnr.umd.edu/IPMNET to view past issues of this IPM report and to find about upcoming classes and seminars. Please call in if you are a commercial horticultural business finding insect, disease, weed or cultural plant problems. Send submissions to Sklick@umd.edu or call Stanton Gill at 301-596-9413.

Still Seeing Ambrosia Beetle Activity

Paul Wolfe, Integrated Plant Care, Inc., reported ambrosia beetle activity in yellowwood this week in Montgomery County. Beetles are still pushing out thin threads of frass from the trees.

Yellowwood is susceptible to borer attacks when stressed. The ambrosia beetle larvae have about a 55 day lifecycle in the tree so if drought conditions continue, we will probably see more activity through September.

Control: Control needed to be done earlier in the season.

Tuliptree scale, *Toumeyella liriodendri*

The tuliptree scale females are swelling up in August and producing copious amounts of honeydew. Black sooty mold often grows on the honeydew that this scale excretes. The crawlers will occur in September to October for tuliptree scale. We will update you when we find crawlers active.

Control: One option is to apply Safari as a soil drench at the base of the plants. The other option is to wait until crawlers appear and apply Distance and oil.



Thank you to the Maryland Arborist Association, the Landscape Contractors Association of MD, D.C. and VA, Professional Grounds Management Society, 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.

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Flathapple Apple Tree Borer, *Chrysobothris femorata*

We received samples of red maple from a nursery that had planted them in 2006. A few days later another nursery had the same situation. Neither of the sites uses trickle irrigation. The trees were infested with flatheaded apple tree borer. This borer is an opportunist that attacks weakened trees. If you have a nursery and you were not using trickle irrigation in a year like this one when we had bright sunny weather and drought conditions you can expect to suffer damage from this borer.

Symptoms on red maples include yellowing which then turns red and the tree collapses.

Control: Keep red maples irrigated. The borer has a one year life cycle so next year in mid-May, plan to apply bifenthrin (Onyx) to the trunk as a protectant spray.



Bacterial Leaf Scorch

Glenn Gladders, Delaware Forest Service, reports seeing symptoms of bacterial leaf scorch (BLS) throughout Delaware. As in 2006, they are again surveying and having samples analyzed using ELISA at the University of Delaware Plant Diagnostic Clinic. This year they are focusing on traditional (non-urban) forests and have submitted samples from Blackbird State Forest in northern Delaware as well as Redden State Forest in southern DE, near Georgetown. Most results have been positive, including northern red oak, scarlet oak and, for the first time in Delaware, southern red oak. He notes that BLS is generally considered an urban shade and street tree disease, but it is clearly also present in rural woodlots. They are also seeing BLS in urban trees throughout Delaware.



The photo from Glenn Gladders is a view of an infected scarlet oak in Blackbird State Forest. Marginal scorching of foliage and crown dieback are visible.

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Caterpillars

At this time of year, we begin to receive many reports of various colorful or unusual caterpillars. Most often, they occur in small numbers and there are enough predators present that no control is necessary. Sarah Davis, John Shorb Landscaping, reported that someone from their company brought in a **white flannel moth caterpillar** that was found on redbud. Other hosts include black locust, elm, and hackberry. Here at the research center, we found one of the slug caterpillars, ***Parasa chloris* (smaller parasa)** on crabapple. It has been parasitized. Common food plants include apple, beech, birch, cherry, dogwood, elm, and oak. Both of these caterpillars have 'stinging' hairs. Jeff Johnson, Maxalea, Inc., found a **hickory horned devil caterpillar** in Owings Mills this week. It may look menacing, but it is harmless to handle. It can be found on woody plants including ash, cherry, hickory, lilac, sumac, sweet gum, sycamore, and walnut.



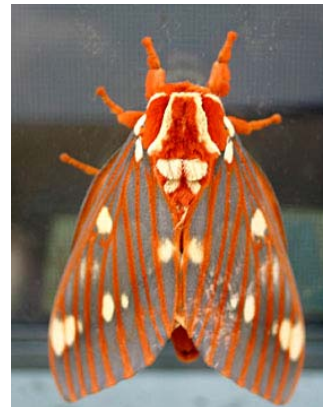
Parasitized smaller parasa caterpillar



White flannel moth caterpillar



Hickory horned devil caterpillar.



The adult of the hickory horned devil is the regal moth.

Fire Ants (*Solenopsis*)

We received an email this week from a grounds supervisor who discovered several large colonies of fire ants in one of their landscape beds. Fire ants form mounds of soil over their colonies, and will swarm out and cover the mound within seconds if it is disturbed. Fire ants bite and inject formic acid into the skin, causing painful burning and blistering.

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Fire ants are usually associated with the rootballs of container nursery plants that have been shipped into the state. This is not the first time that they have been found in Maryland- in 2006 fire ants were reported in Ocean City on plant material brought in from Florida. In this particular case, the mounds were isolated to one bed. All of the plants in that bed were also shipped in from Florida this spring.

Fire ant mounds are small and can easily go unnoticed until it is too late. Nursery and landscape managers need to stay alert. Watch for aggressive, biting ants that attack in large swarms. Report any suspicious ant colonies to the Maryland Department of Agriculture – Plant Protection Division.



Photo by Forest and Kim Starr, www.insectimages.org

Weed of the Week

Shepherd's-purse, *Capsella bursa-pastoris*, is a fall germinating annual weed found throughout the United States. This herb is a member of the mustard family, and prefers partial to full sun, moderately to well-drained soils. It will grow in both poor and rich soils, and in landscape settings where fertilizer is used it can obtain a height of up to two feet. The main leaves will grow from two to six inches in length, are irregular in shape, usually deeply lobed and pointing away from the base. These leaves are prostrate to the ground, arise from a crown and will occur with rough hairs. The stem will be found starting in the center of the rosette, has very few leaves, and will have a small white flower which will be followed by a wedge shape seed pod. The two-part pods contain yellow oblong seeds. This weed has a branched taproot. This plant is used by some for its medicinal benefits and in the spring can be eaten as a green.

Control of Shepherd's-purse in turf can be obtained using cultural methods which include maintaining a dense stand, mowing to prevent seed formation and preventing bare spots. Pre-emergent landscape weed control will include Barricade, Snapshot and Surflan. Post-emergent products containing glyphosate easily control this weed.

Photo courtesy of Utah State, Department of Agriculture



Plant of the Week

Liriope or lily turf is a wonderful shade tolerant grass-like groundcover that is winter hardy to zone 6. The evergreen leaves are dark green, dark green and white or dark green and yellow. Liriope's lavender flowers grow in spikes above the foliage in August and ripen into dark purple berries later in the fall and persist throughout the winter. Although liriope grows very well in shade, some will accept sunny spots like 'Silvery Sunproof'. Others like 'Munroe's White' need to be planted in the shade or the foliage will



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burn. Liriope can be planted in most garden soils with good drainage and it has have few disease pests. Scale can be an insect pest that can be hard to control. Mowing the old foliage in the early spring will remove any winter damage, but be sure to mow early if spring bulbs have been inter-planted with the liriope. **Photo by Ginny Rosenkranz**

OPEN HOUSE - University of Maryland Central Maryland Research and Education Center - October 6 , 2007

The University of Maryland will open its doors to the public to visit the beautiful 700 + acre research farm in central Maryland from 10:00 a.m. - 3:00 p.m. The public is welcome to come visit educational displays on agriculture, view modern agricultural practices, investigate wildlife with local bird groups, learn more about agricultural animal production, see weird and cool insects and check out local reptiles. The Maryland Arborists' Association will have a live demonstration on tree maintenance and safety procedures when pruning trees. Members of MAA will be available to answer tree problem questions. The CMREC staff and faculty members of the University Maryland Cooperative Extension will be on hand to help educate you on current research and agricultural practices. You will learn how agriculture can continue to thrive as the state becomes more urbanized. The Home and Garden Information Center faculty and staff will help you solve plant problems. There will be horse demonstrations and many exciting events for the whole family.

Come help us celebrate agriculture and expand your horizons. We look forward to see you on October 6th at 4240 Folly Quarter Road, Ellicott City 21042.

Degree Day Information (as of August 30):

Baltimore, MD (BWI)	3151
Dulles Airport	3261
Hagerstown, MD	2932
Mechanicsville, MD	3057
National Arboretum	3427
Reagan National	3476
Salisbury	2775

Composting Materials for the Landscape and Nursery Industry

October 9, 2007

Chesterfield Farms and the Big Fish Grille, Crofton
For more information: 301-596-9413

Getting Green: Sustainable Energy Use for the Green Industry

November 8, 2007

Maryland State Fairgrounds, Timonium
For more information: 301-596-9413

Registration forms are available on-line at <http://www.agnr.umd.edu/ipmnet>

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