



**TPM/IPM Weekly Report for Arborists,  
Landscape Managers & Nursery Managers  
University of Maryland Cooperative Extension  
Central Maryland Research and Education Center**

**May 11, 2007**

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Go to [www.agnr.umd.edu/IPMNET](http://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 finding insect, disease, weed or cultural plant problems. Send submissions to [Sklick@umd.edu](mailto:Sklick@umd.edu) or call Stanton Gill at 301-596-9413.

**Crane Fly**

Bob Mead reported adult activity of crane flies this week in Howard County. Crane flies look like a very large mosquito. Fortunately, they don't bite, in fact they do little feeding as adults. The immature stages of crane fly are often found in moist decaying organic matter in soils or decaying logs. There are numerous species of crane flies in our region. None of these species are known to cause damage.



**Control:** Crane flies in this region do not require control as adults or larvae. HOWEVER, BE AWARE that there are 2 species of introduced crane fly, the European crane fly, *Tipula paludosa*, and the Common crane fly, *Tipula oleraceae*, that have recently been identified in upstate (2004) and Long Island (2006), NY. These crane flies are causing significant aesthetic and economic damage to turfgrass (larvae feed on roots) in lawn, golf, and sod habitats. NY is not that far from MD. You should be aware of the potential threat of these pests, and how to identify. *For more information on these potential threats GO TO:* <http://www.nysipm.cornell.edu/factsheets/turfgrass/ecf.pdf>

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### **Hawthorn Leafminer**

Steve Sullivan reported hawthorn leafminer on hawthorn on May 7 in D.C.

**Monitoring:** Hawthorn leafminer is a sawfly that causes large brown blotch mines to form on the leaf usually along the margin. It overwinters in the pupal stage. The adults are now laying eggs in the leaves and larvae are busy mining between leaf surfaces.

**Control:** Orthene on foliage for larvae.

### **Cankerworms**

Damian Varga, Scientific Plant Service, found cankerworms defoliating white oaks, Japanese maple, red maple, and sweet gum on May 2 in Pasadena. Feeding activity will continue for about the next three weeks. **Is anyone seeing it in areas other than Pasadena and Ellicott City? Give us a call at 301-596-9413**

**Control:** The larvae are just starting to be active and now is a good time for control using Bt or Conserve. See pictures in the April 13, 2007 report.

### **Euonymus Leaf Notching Caterpillar**

Bradley Seay, Bartlett Tree Experts, found *Euonymus* leaf notching caterpillars defoliating a *Euonymus japonicus* shrub on May 10. The homeowner said that it was defoliated last year also. He noted that caterpillars are so numerous that they are crawling all over the house, up the windows, along the gutters and eaves.



### **Emerald Ash Borer Update**

In Ohio, Dan Herms determined that the emergence of emerald ash borer adults occurred at the time of black locust flowering. We contacted Dick Bean, MDA, and he confirmed that the phenology of black locust flowering corresponds with the first emergence of *Agrilus planipennis* Fairmaire here in Maryland. Black locust started flowering about Wednesday May 2, 2007 in the Brandywine/Clinton area. On May 4 they found a few trees that had not been removed in the core infested area to the east of Lusby's Lane and destructively sampled one 5" DBH tree completely, finding 2 empty pupal chambers, 29 adults (several near the bark surface chewing their way out), 1 pupae, and 1 late instar larva. There was a pretty uniform distribution from top to bottom. The other trees were partially sampled with similar results. This find will not require an additional bump-out of the current buffer. However, it does suggest that EAB was likely pretty well established in this area of MD.



MDA plans on leaving some EAB-free ash trees in place until the fall, using them as trap trees. This area has the majority of the 611 2" caliper bare root ash planted as trap trees within the 1.5 mile containment/eradication area. They are also setting up 200 purple pyramid sticky traps in this area.

You are the eyes and ears out there with the plants. Keep watch for ash trees in PG and even other counties for signs of EAB. For more information on diagnostic signs and symptoms and where to report potential citations go to: <http://www.mda.state.md.us/plants-pests/eab/current.php>

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### **Pine Bark Beetles**

Damian Varga reported adult pine bark beetles activity on white pine on May 2 in Ellicott City.

### **Oystershell Scale**

Marie Rojas, IPM scout, found crawlers of oystershell scale on *Nyssa sylvatica* in Adamstown this week.

**Control:** Apply Distance or Horticultural oil now.



### **Aphids**

Rose aphids are active on roses in Severna Park and College Park and on burning bush in Clarksville this week.

**Control:** I have already seen lady beetles voraciously feeding on these aphids. More natural enemies will be moving in shortly. Chemical controls should not be necessary.

### **Woolly Apher on Hawthorn**

Marty Adams brought in a sample of hawthorn with woolly aphids feeding within the folds of the leaves and turning the leaves purple.



### **Spider Mites**

Brian Clark, University of Maryland, reported an infestation of spider mites on Chinese holly in College Park this week. Marie Rojas is also finding spider mites on red maples in Beallsville and Laytonsville. There are mainly nymphs but some adults found.

**Control:** Avid, Akari, Floramite, horticultural oil

### **Boxwood Leafminer Adults Out This Week**

Marty Adams, Bartlett Tree Experts, reports continuing adult activity of boxwood leafminer on English boxwoods in Baltimore and John Speaker, IPM Scout, is finding them in Wheaton this week.

**Control:** Apply soil drenches of imidacloprid to control newly hatching larvae.

### **Boxwood Psyllid**

John Speaker is finding boxwood psyllid populations producing wax in Wheaton this week. They are still active in College Park.

**Control:** The damage (cupping of terminal leaves) by boxwood psyllid tends not to be aesthetically displeasing enough to warrant control measures in most cases.

### **Pruning of Boxwoods – Now is the time**

It is recommended that boxwoods be pruned using a Renewal Pruning technique. This method consists of reaching down into the center of the shrubs and removing entire branches. The idea is to open the center of the plants and improve the overall health and appearance of the plants. Renewal

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pruning will increase new growth within the center of the plant. It also increases air flow which should reduce the likelihood of diseases such as Volutella and other potential pest problems.

### **Rose Slug Sawfly**

Marty Adams found rose slug sawfly larvae active on hybrid tea roses on May 7 in Eldersburg. These sawflies are difficult to see but you should notice defoliation of the foliage.

**Control:** Hand remove sawflies (they are usually not very abundant on any given plant). Conserve can also be used.



### **Larch Casebearer**

Marty Adams found larch casebearer larvae on larch on May 8 in Westminster.

### **Pine Tip Moth**

John Stuart reported pine tip moth larval activity on mugo pine on May 9 in D.C. and sent in this picture of the damage.



### **Gypsy Moth**

Marie Rojas reports that early instar gypsy moth activity continues in Beallsville (found on *Acer rubrum*) and Laytonsville (found on *Acer saccharum*).

**Control:** Dimilin or Bt or Conserve

### **Eastern Tent Caterpillar**

Blaine Tapscott, The Brickman Group, found eastern tent caterpillars in Upper Marlboro last week. They were only found on the pin oaks and not the red maples that were in the same row of trees.

**Control:** These caterpillars are starting to migrate to find places to pupate. Most damage is done so controls are not warranted.

### **Pearleaf Blister Mite**

Pearleaf blister mite damage is showing up on *Pyrus* species in Beallsville and Laytonsville this week. Marie Rojas sent in a picture of the damage.

**Control:** Not easy to control at this time of year. October to November is the time to control this pest to kill overwintering females.



### **Calico Scale**

Calico scale females with eggs underneath their bodies were found on *Cornus florida* in Chevy Chase. We also received a report of calico scale producing large amounts of honeydew on Zelkova in Westminster. So far, there are still no reports of crawlers.

**Control:** Wait for the crawlers and then apply Distance or horticultural oil.



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## Lace Bugs on Amelanchier

John Speaker reported hatching of lace bug nymphs on amelachier in Wheaton on May 10.

**Hawthorn lace bug, *Corythuca cydoniae*** – Adults are laying eggs this week in Central Maryland  
Talk about timing. I walked down the hill this morning at CMREC and looked at our cotoneaster trial block. We found adult hawthorn lace bugs. The females had been laying eggs and inserting them into the undersides of leaves this week.

**Control:** Acephate (foliar), Imidacloprid - soil drench can be applied to control this multi-generation lace bug



Adult hawthorn lace bug found on cotoneaster



Eggs are 'light-colored dots' on top of fecal droppings

## Indian Wax Scale

Brian Clark is finding Indian wax scale crawlers on Chinese holly in College Park.

**Control:** Soil drench or injection of imidacloprid.



## Holly Pit Scale, *Asterolecanium puteanum* on American Holly

Norm Brady, Bartlett Tree Experts, on the Eastern Shore called in on Friday morning to report that the holly pit scale is getting close to crawler emergence in the St. Michael's area. Norm reports that holly pit scale is on a lot of the American holly on the Eastern Shore and in heavy enough populations that it is killing the trees. Hopefully, we will have photos for next week's report.

**Control:** Safari (as soil drench), Distance when crawlers appear in the next couple of weeks.

## Camellia/Taxus Scale

Norm Brady reports that the camellia/taxus scale females are starting to produce their white ovisacs in the St. Michael's area this week on Burford holly.

**Monitoring:** Examine the undersides of foliage for the brown colored females producing the white cotton-like sac.

**Control:** Soil applications of imidacloprid.



## Gall on Oak

Marie Rojas sent us this picture of a gall found on an oak in Beallsville.

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### **Oakleaf Blister on Oak**

Marie Rojas found oakleaf blister (caused by *Taphrina caerulescens*), starting to show up this week on oak in Beallsville. This fungus infects the emerging leaves on many species of oaks. The initial symptoms are blistered areas that become covered in white fungal growth that eventually turns brown. There is only one infection period early in the season.

*Photo by Marie Rojas.*

**Control:** Not necessary.



### **Gall Rusts of Pine, Rich Anacker, Plant Disease Specialist, MDA**

Thanks to Bob Tichenor, MDA Forest Pest Management for an excellent sample of pine-oak gall rust on Virginia pine this week. This rust disease is also known as Eastern gall rust and is caused by the fungus *Cronartium quercuum* f. sp. *virginianae*. Hosts include Virginia pine (*Pinus virginiana*) and Sand Pine (*Pinus clausa*). Other species of pine-oak rust infect other pine species including *P. banksiana*, *P. nigra*, *P. sylvestris*, and others. These heteroecious rust diseases alternate with oak hosts such as bur oak (*Q. macrocarpa*), pin oak (*Q. palustris*), chestnut oak (*Q. prinus*), and red oak (*Q. rubra*).



### **Photo from MDA is pine-oak gall rust on Virginia Pine**

Another gall-forming rust disease of pine is caused by the fungus *Endocronartium harknessii* is commonly known as pine-pine gall rust or Western gall rust. This rust can cause similar galls on various pine species including, but not limited to: *P. banksiana*, *P. mugo*, and *P. nigra*. This species of rust requires no alternate host (an autoecious rust).

Monitor susceptible species in the nursery by scouting 50 trees, selected randomly. Scouting may be done anytime of the year. If trees are showing more than 3 galls per tree on average consider treating susceptible species.

Inspect nursery stock carefully prior to installation. If you are dealing with pine-oak gall rust treat alternate hosts (oak species) within a ¼ mile from your pine stands. Avoid planting oaks and pines in close proximity to each other. Remove alternate hosts from nearby wood edges to break the fungal life cycle. For either rust remove and destroy severely infected pines and prune out individual branches. Do not remove galls when they are actively sporulating. Consider applying a registered fungicide (mancozeb products) just prior to fungal spore production. If disease pressure is severe in a particular area year after year, consider alternative non-pine plantings.

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## **Beneficial of the Week** (by Paula Shrewsbury)

### **Assassin Bugs – a generalist predatory bug**

Assassin bugs (Family Reduviidae) are generalist predators that feed on a range of herbivorous insects. There are several species of assassin bugs that are common in ornamental systems. Assassin bug species vary in color and size but many are brightly colored with red and black, others camouflage well with plants. Their bodies are elongate, heads are narrow, and front legs are adapted for grasping prey. They all have very prominent, distinctly visible beaks (proboscis) that they hold under their body. Assassin bugs overwinter as “barrel-shaped” eggs on the trunks and branches of plants. The eggs began hatching this past week and colorful nymphs are now dispersing out onto your plants so be on the lookout. The newly hatched nymphs are a bright yellow color and within a few hours they turn their more characteristic color of black with bright red abdomens. The nymphs will feed on the assortment of caterpillars (ex. gypsy moth, eastern tent caterpillars, cankerworms, fall webworm), along with other plant feeding insects that are active at this time. Within a month or so these bugs grow up to be adults that will eat even more insects. These predators can have a significant impact, as nymphs and adults, on many of the plant feeding insects on your ornamental plants. Be careful if you handle these predators – they will defend themselves if they feel threatened (ex. picking them up) and their long beaks can result in what I am told is a painful bite. For more information on wheel bugs go to:

[http://www.raupplab.umd.edu/bugweek/archive/BugOfWeek\\_31.html](http://www.raupplab.umd.edu/bugweek/archive/BugOfWeek_31.html)



**Colorful assassin bug nymphs that have just emerged from their overwintering egg stage. It looks like something from a Sci-Fi movie. (image by M. Raupp, UMD)**



**A late instar Assassin bug nymph feeding on a fall webworm caterpillar. (image by M. Raupp, UMD)**

### **Plant of the Week: Encore Azaleas**

Azaleas are in full bloom now in most of Maryland filling the shady gardens with brilliant colors. The newest azaleas out on the market are the Encore azaleas, a plant that blooms in the early spring with the majority of azaleas, and then blooms again in the fall if the plant has adequate water and fertilizer. This fall was different in many ways. First it was a very dry fall so many of the broad leaf plants entered the winter in a drought stress state. This fall was also warmer than ever before, heating up to the mid to high 60 °F before falling to the low 20s overnight in the middle of January. Encore azaleas were in full bloom all fall and, on the Eastern Shore, were in full bloom in December. They never did have a period of gradual cooling off before the cold hit them. Many of the Encore azaleas are now showing signs of dead branches and stressed foliage. Keeping the

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Encore azaleas watered throughout the summer will help them recover their health and they will look great this fall when they are covered with beautiful flowers.



**Encore azalea flower**



**Winter damage on Encore azalea**

**Weed of the Week: Entireleaf Morning Glory**

Entireleaf morningglory, *Ipomoea hederacea* var. *integriscula*, is an annual weed found throughout the northeastern United States. This climbing and twining weed can grow to heights of up to ten feet. The leaves are alternate; heart shaped and will have hairs. This weed has a taproot, blue to purple (sometimes white) funnel shaped flowers. Hairs are the determining difference between Entireleaf and tall morningglory. Entireleaf morningglory hairs are at a right angle to the leaf surface and Tall morningglory has hairs that lie flat or at a very shallow angle to the leaf.

Control of entireleaf morningglory can be obtained using Surflan or Princep products before germination, and post emergent control is obtained using any of the translocated or contact products.

*Photo courtesy of VA Tech Weed Identification Guide*



**What's in bloom?**

| <b>Plant</b>                             | <b>Plant Stage</b><br>(Bud with color, first bloom, full bloom, first leaf) | <b>Location</b>                        |
|--|---|--|
| <i>Cornus kousa</i>                      | First bract (May 9)   | Ellicott City                          |
| <i>Robinia pseudoacacia</i>              | First bloom (May 8)   | College Park, Annapolis, Ellicott City |
| <i>Cotoneaster dammeri</i> 'Coral Bells' | First bloom (May 9)   | Ellicott City                          |
| <i>Prunus serotina</i> (Black Cherry)    | First bloom (May 8)   | Ellicott City                          |

**Degree Day Information (as of May 3):**

|                     |     |                    |     |
|---------------------|-----|--------------------|-----|
| Baltimore, MD (BWI) | 388 | Dulles Airport     | 439 |
| Hagerstown, MD      | 340 | Mechanicsville, MD | 390 |
| National Arboretum  | 447 | Reagan National    | 477 |
| Salisbury           | 373 |                    |     |

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