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**IPMnet  
Integrated Pest  
Management for  
Commercial Horticulture**

[extension.umd.edu/ipm](http://extension.umd.edu/ipm)

If you work for a commercial horticultural business in the area, you can report insect, disease, weed or cultural plant problems (**include location and insect stage**) found in the landscape or nursery to [sklick@umd.edu](mailto:sklick@umd.edu)

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**A “Stinging” Caterpillar**

By: Stanton Gill

Eric Farrow reported last Friday that a caterpillar was stinging several of his workers who were working around Burford hollies. He said he had never seen anything like this caterpillar, called a saddleback caterpillar. It is very common in August and early September to find this general feeder on shrubs, small trees, herbaceous perennials, and weeds. Most people’s first reaction is what the heck stung me. The next thing is they usually get vengeful and get out what spray they can find. It is hard to tell someone to calm down and to enjoy the beauty of this caterpillar – from a good distance. The moth of this caterpillar flies at night and lays eggs in August. The caterpillar has wicked spines on both ends of its body. The spines on the topside of the caterpillar cause a painful version of a wasp sting.



**This saddleback caterpillar has recently molted and its cast skin is still nearby**

Show your workers a picture of this caterpillar and tell them to avoid touching it. By mid-September, you will not find any caterpillars present. If you must work on the plants, then wear gloves and long sleeved shirts.

## Cut Flower Farm Tours in Southern Maryland (St. Mary's County)

September 12, 2018

**Locations:** Loveville Produce Auction (Mechanicsville), Weaver's Cut Flower Farm (Mechanicsville), and Hertzler Family Cut Flower Farm (Charlotte Hall)

A brochure and registration information are available on the [IPMnet Conference](#) page.

### A Scale to Watch Out for in August

By: Stanton Gill

I was visiting a greenhouse grower that also has Christmas trees growing at their operation. They gave me a Douglas fir sample that had yellow discoloration on the foliage. I showed him that he needed to flip over the foliage and look on the underside. It was loaded with cryptomeria scale, *Aspidiotus cryptomeriae*.

One of the rather ridiculous common names for this scale is "fried egg" scale. I'm not sure who started using this name,

but it does describe what the 3rd instar female covers look like in the field. The scale is always found on the underside of the foliage. The yellowing foliage is seen on the top of the foliage. You cannot see the actual female body unless you lift up the hard covering using a needle probe and examine it under magnification. Cryptomeria scales are almost round in appearance. The light yellow females are clearly visible under a light-white, filmy, almost translucent waxy covering. The odd arrangement makes the females look like double rows of fried eggs on the underside of infested needles.



If there is yellow banding on Douglas fir needles, look on the underside of the needles for cryptomeria scale



Adult female cryptomeria look a bit like a fried egg

Photo: J.A. Davidson, Univ. of MD, College Park, Bugwood.org

This armored scale is a needle feeder and can be found on Douglas firs, Canaan firs, taxus yews, and hemlocks. I usually find it on fir trees. *Abies* species seemed to be the preferred host. The really important thing about this fir samples is that the females were loaded with eggs. The crawler period should be occurring very soon. I examined the sample on Wednesday of this week. Check for crawlers over the next week or so. An application of either Distance or Talus should provide good control. Throw in a spreader sticker since it seems to rain every other day here in Maryland.

### Japanese Maples in Maryland Landscapes: Plant Location & Care Are Keys to Success

David Clement, UME-HGIC, wrote a [blog article on Japanese maples](#) that covers planting, care, and pest problems. The article includes multiple photos.

## Boxwood Blight

By: Karen Rane

We continue to receive samples with active boxwood blight infections from landscapes in the region. In past years, hot, dry summer weather seemed to put the disease “on hold”, but this year’s excessive rainfall and relatively moderate summer temperatures have continued to favor disease development. Landscapers should be especially alert for symptoms of this disease, since the pathogen can be spread from plant to plant, and property to property, by normal landscape maintenance activities.

Look for dark lesions on the leaves, dark cankers on green stems, and defoliation. When in doubt, send a sample to a diagnostic lab for confirmation of the disease. If the disease is confirmed, it’s important for landscapers to discuss management tactics with their clients – this is not a disease that can be “cured” with one spray! Careful removal of infected shrubs and fallen leaf debris is still the most thorough way to eradicate this disease from a landscape.

Fungicides do not cure infected plant tissue, but they can be used to protect healthy, uninfected boxwoods on properties where infected shrubs have been removed. Applications have to be repeated (at labeled intervals) whenever the weather is favorable for disease, and in a wet year like this one, that could mean spraying throughout the growing season. Some researchers report success in “rescuing” infected boxwoods by using a combination of drastic, extensive pruning to remove all symptomatic tissue on the shrub and leaf debris underneath coupled with repeated fungicide sprays to protect the new growth. This may be a promising approach for specimen boxwoods in historic landscapes, but it’s too soon to tell how many growing seasons such plants will need treatments to keep the disease in check using this method.

For more detailed information on boxwood blight management, including best management practices for landscapers caring for properties with boxwood blight, check out the Virginia Boxwood Blight Task Force website: <https://ext.vt.edu/agriculture/commercial-horticulture/boxwood-blight.html>



**Leaf symptoms of boxwood blight, caused by *Calonectria pseudonaviculata***  
Photo: D. Clement, UME



**Dark stem cankers due to boxwood blight**  
Photo: K. Rane, UMD

## Bald-faced Hornets

Carlos Sandoval and Jim McWilliams, Maxalea, Inc. reported that they are finding bald-faced hornet nests in nurseries and in the landscape. Bald-faced hornets, *Dolichovespula maculata*, are members of the family, Vespidae. They are actually yellowjackets and not hornets (*Vespa* sp.). This is not really important to someone who gets stung, but interesting science. The sting is very painful and they start to get aggressive late in the season. Nests are often attached to trees and shrubs, but can also be found on structures such as poles and buildings. Be careful when working in areas near their nests; they can be aggressive if threatened. Bald-faced hornets feed on a variety of insects (including many pests), but common prey includes flies and other yellowjackets so avoid removing the bald-faced hornets nests if possible. Nests may need to be removed if they are too close to human activity.



**This bald-faced hornet's nest was 7 feet off the ground in a hedge of *Euonymus sieboldi***  
Photo: Jim McWilliams, Maxalea, Inc.

## Fall Webworms

Andrew Walker, The Care of Trees, reported finding “an amazing display of fall webworm damage” this week. We’re getting reports that they are active in higher than usual numbers this year. It is late in the season to apply control measures. They will be moving throughout the landscape in September looking for places to pupate.



**Fall webworms have completely engulfed this small tree in their webbing while feeding**  
Photo: Andrew Walker, The Care of Trees

## Grubs in Turf

Brian Haga, Scientific Plant Services, found grubs in turf in Ellicott City on August 13. Brian noted that “*the location had been dry for 3 days and the damage was then evident.*” Grubs that damage lawns are the larvae of Japanese beetles, May or June beetles, masked chafer beetles, or Oriental beetles. In the [August 3, 2018 IPM Report](#), Paula Shrewsbury, covered the digger wasp, *Scolia dubia*, which mainly feeds on Japanese beetle and green June beetle grubs. Materials to use in late August for grub control include Mainspring, grubGONE! from Phyllom company (Btg), Mach II, or imdicaloprid.



Monitor for grubs in turf by cutting out sections (about 1 ft<sup>2</sup>)  
Photos: Brian Haga, Scientific Plant Services

## Lightning Strike

Charlie Dalton, Dalton Ventures, Inc. sent in a photo of a poplar tree struck by lightning in the evening of August 21 in Glen Echo. He noted that splinters were embedded in neighboring trees.



This photo shows the path of the lightning strike  
Photo: Charlie Dalton, Dalton Ventures, Inc.

## Beneficial of the Week

By: Paula Shrewsbury, UMD

### Milkweed assassin bugs provide biological control.

The milkweed assassin bug, *Zelus longipes*, gains its name not because it eats milkweed bugs, *Oncopeltus fasciatus*, but because it resembles them. They are both orange and black in color, and elongate in shape. Milkweed assassin bugs, also known as longlegged assassin bugs, are true bugs in the family Reduviidae as are other predatory bugs we have learned about such as the wheel bug, *Arilus cristatus* ([May 25, 2018 IPM Report](#)) and green assassin bug, *Zelus luridus* ([August 1, 2014 IPM Report](#)). The milkweed assassin bug is orange and black, has long black legs with white markings, and a long somewhat scary piercing-sucking beak (proboscis) that it uses to stab its prey. Females are larger than males and get to be about ¾" long. The eggs are cylindrical and elongate in shape and laid in clusters of about 15 eggs. There are 5 nymphal instars (stages) before adulthood.

The milkweed assassin bug is a generalist predator that feeds on a wide array of soft-bodied prey in landscapes, vegetable gardens, and natural habitats such as mosquitoes (yay!!!), flies, beetles, aphids, and a number of caterpillars. In particular it is an important predator of several economic pests such as fall armyworm, Asian citrus psyllid, and the genista broom moth. The milkweed assassin bug has a diabolically clever "sticky trap strategy" for catching its prey. The milkweed assassin bug hides in foliage with its forelegs outstretched as if reaching for something. It sits very still awaiting the approach of an unsuspecting victim. The front legs of this assassin bug are coated with sticky goo perfect for trapping a victim. Once captured, the prey is stabbed with a hungry beak that injects proteolytic enzymes, which breakdown the body contents of the victim. Once that is accomplished, the liquefied contents of the prey are sucked into the digestive tract of the milkweed assassin bug with the aid of a tiny muscular pump in the assassin bug's head. Mmmm... good lunch! This little bug is pretty fierce and can feed on prey up to 6x its own size.

When you see a milkweed assassin bug, and other assassin bugs too, you should not handle them. Although they are too small to eat you, they can inflict some pain when they use the sucking-piercing mouth part to defend themselves! This result can include a slight burning sensation and a red bump or reaction in response to the enzymes the bugs inject.

For more information and images go to: [http://entnemdept.ufl.edu/creatures/beneficial/bugs/zelus\\_longipes.htm](http://entnemdept.ufl.edu/creatures/beneficial/bugs/zelus_longipes.htm)

## Weed of the Week

Chuck Schuster, University of Maryland Extension

Hemp dogbane, *Apocynum cannabinum*, is a perennial herbaceous plant weed that is found in many areas of the United States. During the last week, it has been a common weed to come across my desk or emailed to me. This plant can be found in many different locations, including landscapes, nurseries, forest fringe areas, and in turf on occasion. This plant is poisonous if ingested. Hemp dogbane will grow to a height of six feet, starting from a taproot with an extensive, branched, horizontal root system that produces vegetative buds along the lateral roots allowing it to grow in clumps or colonies. Roots from a two-year-old plant can be found to grow fourteen feet in



**Sticky forelegs help the milkweed assassin bug capture its prey**  
Photo: M.J. Raupp, UMD

depth and twenty feet in diameter. The leaves are opposite on the upright stem, being up to five inches in length and one to one and one half inch in width. The leaves have a short petiole attachment to the stem and will have only a few, if any, hairs on the underside of the leaves. The stems will develop a reddish color as they mature and will have multiple branches nearer to the top of the plant. The entire plant will secrete a milky sap when cut or broken. The sap is able to cause skin blisters. Flowers occur on terminal clusters, are bell-shaped, small, white or very light green in color with five petals. They produce a small pair of long narrow seed pods called follicles that will turn reddish brown when fully mature. These pods can be four to eight inches in length.

Very similar to spreading dogbane, the flowers of this plant are pinkish-white and form in clusters on the main stems, at the ends of the principle branches, and at stem nodes where leaves attach to stems. Spreading dogbane is also a perennial and has similar rooting abilities. Another similar plant is common milkweed (*Asclepias syriaca*) which shares the creeping roots system, the milky sap, and the opposite leaves. One will also find that common milkweed produces young leaves with fine hairs while hemp dogbane will be nearly hairless.



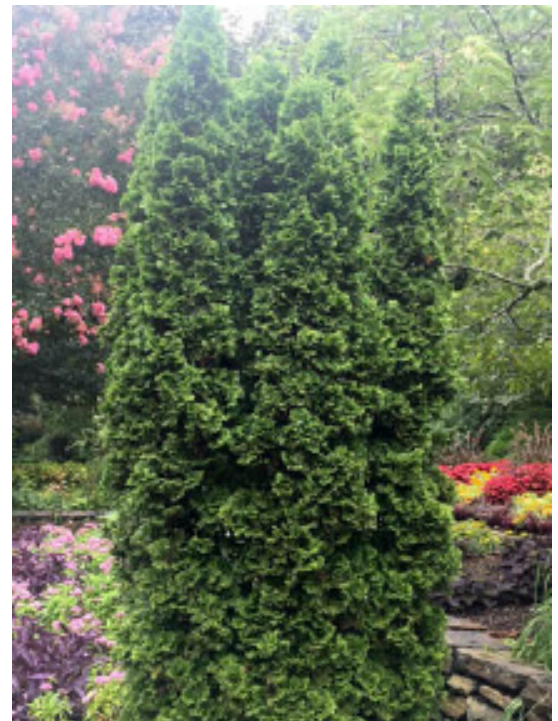
**Hemp dogbane is poisonous if ingested**  
**Photos: Chuck Schuster, UME**

Control can be obtained in many settings through mowing and simple disturbance if caught in the early stages. Seed production should be monitored to prevent further occurrences. 2, 4D is very effective on turf providing excellent control. In landscapes and nursery settings, 2, 4D is not an option and targeted applications of glyphosate will be necessary for eradication. Organic control can be obtained using Burnout with a minimum of two applications several weeks apart. Pre-emergent products do not produce good results in landscape and nurseries with hemp dogbane.

## **Plant of the Week**

By: Ginny Rosenkranz, University of Maryland Extension

*Thuja occidentalis* ‘Degroot’s Spire’ is a wonderful cultivar of the American arborvitae. All arborvitae grow best in full sun to part afternoon shade in moist, but well drained soils. The fan-shaped dark green foliage is arranged on short branches which has a twisted texture giving both color and texture to the garden. ‘Degroot’s Spire’ is a slow growing dwarf that features an upright growth habit that is often very narrow, growing only 20-30 feet tall and 4-6 feet wide. Cold tolerant in USDA zones 2-7, ‘Degroot’s Spire’ can be used as a specimen plant, a screen hedge, or as a part of the foundation planting. It is tolerant of heat, drought, high humidity, air pollution, clay soils, and black walnut tree roots. It is also slightly tolerant of coastal areas. This beautiful specimen was growing for over 25 years at the Sarah P. Duke Gardens at Duke University. Pests include bagworms and deer with mealybugs, scales, spider mites, cankers, and leaf blights only considered occasional problems.



***Thuja occidentalis* ‘Degroot’s Spire’ is a slow growing dwarf arborvitae with an upright growth habit**  
**Photo: Ginny Rosenkranz, UME**

## Degree Days (As of August 22)

Aberdeen, MD (KAPG)	2736	Annapolis Naval Academy (KNAK)	3314
Baltimore, MD (KBWI)	3005	College Park (KCGS)	2925
Dulles Airport (KIAD)	2948	Frederick (KFDK)	2924
Ft. Belvoir, VA (KDAA)	3065	Greater Cumberland Reg (KCBE)	2739
Gaithersburg (KGAI)	2864	Martinsburg, WV (KMRB)	2733
Natl Arboretum.Reagan Natl (KDCA)	3408	Salisbury/Ocean City (KSBY)	3059
St. Mary's City (St. Inigoes, MD-KNUI)	3201	Westminster (KDMW)	3054

The Weather Underground site for degree days is no longer functioning as it had been for us to get degree days. We are returning the site that we had used for several years before changing this year.

**Important Note:** We are now using the [Online Phenology and Degree-Day Models](#) site.

Use the following information to calculate GDD for your site: Select your location from the map

Model Category: All models                      Select Degree-day calculator  
Thresholds in: Fahrenheit °F                  Lower: 50                      Upper: 95  
Calculation type: simple average/growing dds                      Start: Jan 1

### CONFERENCES

#### Cut Flower Operation Tour

September 12, 2018

Location: St. Mary's County (Loveville and nearby sites)

[Brochure and Registration](#)

#### New Plants for Nursery Growers

October 25, 2018

Location: Country Springs Nursery, Woodbine, MD  
Details will be available later in the summer

#### Turf Nutrient Management Conference

December 6, 2018

Location: Carroll Community College, Westminster, MD

#### December Pest Management Conference

December 18, 2018

Location: Carroll Community College, Westminster, MD

#### Advanced IPM PHC Short Course

January 7-10, 2019

Location: University of Maryland, College Park, MD

Contact: Amy Yaich, Admin. Assist. II, 301-405-3911

Email: [umdentomology@umd.edu](mailto:umdentomology@umd.edu)

Information: <https://landscapeipmphc.weebly.com/>

Recertification credits will be posted on the website

Recertification page listing participating states.

#### FALCAN Conference

January 18, 2019

Location: Frederick Community College, Frederick, MD

#### MAA Winter Conference

January 22-23, 2019

#### LCA Winter Conference

February 14, 2019

#### Chesapeake Green Horticulture Symposium

February 20 - 21, 2019

Location: Maritime Institute, Linthicum Heights, MD

## 2018 MDA Pesticide Recycling Program

The Maryland Department of Agriculture is offering the empty plastic pesticide container recycling program in 2018. You can view the locations and requirements in the [online brochure](#). Montgomery County is a new location this year and will also accept clean containers from Prince George's County as well as D.C., as they do not have a collection.



## Learn How to Diagnose Plant Problems

By: Stanton Gill

If you would like to hone your diagnostic skills for insect and mite problems, we will have two sessions this fall and winter. The first one will be held in Frederick, MD on October 8 as part of the MAC-ISA Fall meeting. Go to the [MAC-ISA conference page](#) to register.

The other session is January 22, 2019. Karen Rane, David Clement, Mary Kay Malinoski, and I will hold a multiple-hours session on diagnosis of disease and insect problems in landscapes. This session will be part of the Maryland Arborist Association winter conference at Turf Valley, Ellicott City, MD. Details and registration information will be available on the Maryland Arborists' [website](#) when the program is completed.

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