## Commercial Horticulture

### Coordinator Weekly IPM Report:
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### Regular Contributors:
- Pest and Beneficial Insect Information: Stanton Gill and Paula Shrewsbury (Extension Specialists) and Nancy Harding, Faculty Research Assistant
- 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 (Extension Specialist, Wye Research & Education Center)
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### Beneficial of the Week

**Weed of the Week**

**Phenology**

**Degree Days**

**Announcements**

### Orangestriped Oakworm Caterpillars – Timing is Everything

By: Stanton Gill

Diane Sparks Knighton, ISA certified arborist, sent in these great pictures of an orangestriped oakworm caterpillar moth female laying eggs on oaks leaves on July 14. The eggs are laid on the undersides of most leaves. These eggs should hatch by late July. Steve Sullivan, Brightview, found some caterpillars on an oak in Howard County on July 20. Look for these small striped caterpillars consuming foliage of oak trees.

![an orangestriped oakworm moth covers an oak leaf with eggs](Photo: Diane Sparks Knighton)

![early instar orangestriped oakworms are feeding now](Photo: Steve Sullivan, Brightview)

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**IPMnet Integrated Pest Management for Commercial Horticulture**

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 found in the landscape or nursery to sklick@umd.edu. Please include location.
**Giant Resin Bee Continued**

By: Stanton Gill

Thanks to each of you who have sent in pictures of the giant resin bees. It looks like it is fairly widespread in Maryland. The interesting one is from Judy Laushman, ASCFG. On Monday morning, Judy sent a picture of two bees on a flower in Oberlin, Ohio. They are two giant resin bees; the male is the smaller one.

Again, there is not much we can do about this new invasive pollinator since it hangs out on flowers like our native pollinators and any insecticide would kill both. It is not a good situation.

**Miscanthus Blight**

Brian Scheck, Maxalea, Inc., found miscanthus blight on miscanthus plants in Pasadena. Miscanthus blight is caused by the fungus *Stagnospora* sp. (*Leptosphaeria* sp. sexual stage). The symptoms usually start with tip dieback. Reddish or purple colored spots and streaks appear along the rest of the leaf and leaf sheaths below the blighted tips. On variegated cultivars the reddish streaks can occur in the white areas on the leaf. Miscanthus blight can be confused with other leaf diseases and can be mistakenly called rust, however, miscanthus also gets a true rust disease that has orange colored spores. Rust diseases can be easily diagnosed by rubbing a white tissue along the leaf and looking for the orange stain left by the spores.

**Ambrosia Beetle Update**

By: Stanton Gill

We are getting reports of second generation activity of ambrosia beetles in crape myrtles in Charles County. Luke Gustafson, UME-Charles County, found crape myrtles with many frass tubes coming out of the trunks two weeks ago in Charles County. We should be moving into the third generation in mid-August for this pest.
**Diplodia Tip Blight**
Mark Schlossberg, ProLawn Plus, Inc., found a pine in Pikesville on July 19 infected with diplodia tip blight. This disease is caused by the fungus, *Sphaeropsis sapinea*, which mostly infects weakened trees causing tip blight and death of lower branches. Infection only occurs on new growth in the spring. In the fall when it is dry, prune out infected plant growth. Fungicides can also be used early in the season.

**Tree Girdling**
Erik Goerner, Maxalea Inc., found a wire girdling a 20 foot blue spruce in Hunt Valley this week. He noted that at this time, the tree still looks healthy despite the wire. If partially embedded wires are noticed, remove as soon as possible. If the trunk completely encases the wire, it may cause more damage to remove it. Trim excess wire, remove stakes, and monitor the tree. Over time, this girdling will weaken the trunk and make it prone to breakage at the site of the embedded wire.

**Powdery Mildew**
Powdery mildew is a chronic problem on many plants throughout the season. Mark Schlossberg, found powdery mildew on crape myrtle in Reisterstown on July 19. Powdery mildew appears as white patches on leaves and stems and is caused by several related fungi. The disease typically occurs in mid to late summer and causes leaf yellowing, defoliation, and stunting of the plants. In most cases it is not lethal to the plants it infects, however it reduces plant vigor and size.
Leaf Spots on Maple
Several leaf spots commonly show up on maples. One is an anthracnose disease. The other leaf spot is caused by a fly midge. Check the leaf for raised areas and note if the center of the spot has fallen out which are good indications that it is the eyespot gall caused by the midge. If the leaf surface is smooth and you can see small black dots in the center of the area, then it is the fungal pathogen. Neither leaf spot causes significant problems for the trees.

Damage From a Lightning Strike
With summer storms, lightning strikes can hit trees in the landscape. Brian Scheck, Maxalea, Inc., found this tulip tree hit by a lightning strike. On page 174 of *Abiotic Disorders of Landscape Plants: A Diagnostic Guide* (L. Costello, E. Perry, N. Matheny, J. M. Henry, and P. Geisel, University of CA Ag and Natural Resources Pub#3420, 2003), tulip tree is listed as one of the tree species most often struck by lightning; others listed are maple, elm, spruce, pine, sycamore poplar, oak, hemlock, and ash. Least often struck are horsechestnut, birch, and beech.
Hummingbird moth – a very fitting name

Mother Nature is quite amazing sometimes (actually lots of times)! For those of you who have seen a hummingbird moth flying and nectaring around flowers you will understand what I mean. Hummingbird moths are appropriately named. The first time I saw a hummingbird moth I thought it was a humming bird, but as I looked closer I could tell something wasn’t quite right with that identification. Hummingbird moths belong to a family of moths (Sphingidae). Hummingbird moths are found throughout the U.S. They are also known as clear-winged moths because there wings have relatively few scales compared to other moth species and appear clear. The size, shape, coloration and movement of the moth are similar to that of humming birds. But most notable are the wings and the speed at which they beat – over 70 beats / second. Yes, I said per second, not per minute! Like hummimg birds feeding at a flower or feeder, the wings of the moth appear almost motionless and allows the moth to hover at a flower. Go to https://youtu.be/Dg24gOzmuZQ to view a YouTube of a hummingbird moth feeding on flowers while in flight. As you can see in the image the mouthpart of the hummingbird moth is a long straw-like proboscis which it uses to reach down deep into tubular-type flowers to withdraw the nectar. Some of the favorite flowers of hummingbird moths are honeysuckle, snowberry, lilac, phlox, bee balm, trumpet vine, vetch, butterfly bush, and thistles. But it is not uncommon to see them nectaring on Monarda and even vinca flowers. Why would a moth want to look like a humming bird and have similar feeding and flight behaviors? We do not know for sure but some scientists hypothesize that it might be to confuse potential predators. Some predators may think of a moth as an “easy prey” and a humming bird just a little too energetic for them.

Female moths lay their eggs on the leaves of a number of shrub species and vines such as honeysuckle, snowberry, viburnum, hawthorn, and cherry. Of course every moth has its caterpillar larva and most caterpillars eat foliage. Like its relatives the hawk and sphinx moths, hummingbird moth larvae are referred to as hornworms. They have a notable “horn” or spine-like protrusion sticking out from the back end of the caterpillar. One of the most commonly known hornworms is the tomato hornworm. After hatching from its egg the hornworm caterpillars of hummingbird moths feed on and consume foliage for several weeks. They
then leave their food source and move down to the ground to pupate. Unlike their tomato hornworm relative, hummingbird moth larvae seldom are abundant enough to reach damaging levels.

So plant lots of bright colored tubular flowers and you will have the pleasure of these amazing moths!

**Weed of the Week**
By: Chuck Schuster

It’s really feeling like summer right now. Warm temperatures are pushing many plants that are out of place or ones the economic value has not been determined. With poison ivy growing so well this year and in recent years, this plant has value to some and not to others.

Jewelweed, *Impatiens capensis*, often called touch-me-not, is an annual weed common to landscapes, edges of steams and low lying moist areas throughout this region of the United States. It is easy to identify with its distinctive orange funnel-shaped flowers. It prefers damp soil, or cooler slopes.

The leaves are ovate to triangular in shape, two to five inches in length, and and one to three inches in width. The leaves have a dull upper surface and are without hairs. The leaf edge is slightly toothed. The flowers are funnel-shaped and produce a seed capsule that will project the seed several feet.

Mechanical control of jewelweed through pulling or cultivation has been very successful as the plant is fragile for those desiring non chemical control. Chemical control of jewelweed can be successful with most non-selective post emergent herbicides. Pre emergent broadleaf herbicides successfully control this without difficulty.

**Plant Phenology Indicators**

<table>
<thead>
<tr>
<th>PLANT</th>
<th>PLANT STAGE (Bud with color, First bloom, Full bloom, First leaf)</th>
<th>LOCATION</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Eupatorium fistulosum</em></td>
<td>Bud showing color</td>
<td>Ellicott City (July 22)</td>
</tr>
<tr>
<td><em>Hibiscus moscheutos</em></td>
<td>Bud showing color</td>
<td>Ellicott City (July 22)</td>
</tr>
</tbody>
</table>
Important Note: We are now using the Online Phenology and Degree-Day Models site.

Use the following information to calculate GDD for your site at the Online Phenology and Degree-Day Models site: Select your location from the map

Model Category: All models
Thresholds in: °F
Calculation type: simple average/growing dds

Once you know the GDD and/or plant phenological indicators (PPI, what plants are blooming) in your location, you can go to the Pest Predictive Calendar to determine what pests you can expect to be active soon in that location.

2016 Conferences

**FALCAN 2016 Truck & Trailer Safety Seminar**
August 10, 2016, 8:00 to 2:45
Location: Urban Fire Hall, Urbana, MD

**Topics include:**
State and Federal laws as they apply to our various industries.
Pick-up, one-ton, and larger truck requirements, as well as inspection points.
Permits, licenses, covers, tie-downs, and fuel.
Real truck and trailer demonstrations done on site.

All instruction provided by Maryland State Police and Safety Industry Representatives.
Added Feature Topic: Commercial Drone Technology

**Biological Control for Greenhouses and Nurseries**
August 18, 2016
Location: Brookside Gardens, 1800 Glenallan Avenue, Wheaton, MD 20902
Contact: 410-823-8684, office@mnlga.org

**5th Annual Trees Matter Symposium**
October 19, 2016, 7:30 AM – 4:00 PM
Silver Spring Civic Building
Details are available online

Maryland Department of Agriculture: Pesticide Container Recycling Program

MDA has posted its schedule of collection sites for the 2016 Pesticide Container Recycling Program. Triple-rinsed (or equivalent) will be colleted on the scheduled days and times at the sites. See the brochure for details.
IPMnet Has a New On-line tool: The Pest Predictive Calendar

This Pest Predictive Calendar is intended to assist landscape managers, growers, IPM professionals and others in predicting the appearance of pest insects and mites in order to make more timely management decisions. By using the Plant Phenology Indicators (PPI) and Growing Degree Days (GDD) on this table you can anticipate when the susceptible life stage(s) (stage you want to target for control measures of pest insects and mites are active.

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