

# **TPM/IPM Weekly Report** $E \times T = N S I O N$ for Arborists, Landscape Managers & Nursery Managers

#### Commercial Horticulture

October 26, 2018

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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 (include location and insect stage) found in the landscape or nursery to sklick@umd.edu

## **Coordinator Weekly IPM Report:**

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Pest and Beneficial Insect Information: Stanton Gill and Paula Shrewsbury (Extension Specialists) and Nancy Harding, Faculty Research Assistant

Disease Information: Karen Rane (Plant Pathologist), David Clement (Extension Specialist), and Joe Roberts (Plant Pathologist for Turf)

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)

Design, Layout and Editing: Suzanne Klick (Technician, CMREC)

## Yellow-bellied Sapsucker Damage is Starting

By: Stanton Gill

A photo of a leatherleaf viburnum was sent in by Tony Murdock this week. The stems had recent damage from yellow-bellied sapsucker feeding. This bird is active in the fall. We have had reports of injury on Chinese holly and sugar maple trees. There is not much you can do about it since woodpeckers are protected.



The yellow-bellied sapsucker bores holes into trees to feed on the sap

**Photo: Tony Murdock, Fine Pruning** 

# **IPM Report Survey - Help Us Out**

By: Stanton Gill

Thank you to those of you who have filled out the IPM report survey. If you haven't done so yet, please follow the link in today's email.

#### Beneficial of the Week

By: Paula Shrewsbury, UMD

## More Halloween themed predators: Spinybacked Orbweaver

Halloween is getting closer so I thought I would continue with Halloween themed beneficials. This week, I was fortunate to be able to spend a few days visiting gardens and nature preserves in Florida (I know... tough life). While there, I saw one of my favorite spiders, the spinybacked orbweaver (Gasteracantha cancriformis). This spider also occurs in Maryland. As you can see from the image, this spider has an interesting pattern and shape to its abdomen. To me it looks like a smiley face mask of some type. I am thinking of creating this look into a Halloween mask this year. Because of its unique shape and pattern, Gasteracantha cancriformis is known by multiple commong names such as the star spider, spiny orb weaver spider, crab-like orb weaver spider, crab-like spiny orb weaver spider, crab spider, jewel spider, spiny-bellied orbweaver, jewel box spider, and my favorite the smiley face spider.



A spinybacked orbweaver adult hanging out in her web waiting for prey to get caught. The pattern on the abdomen reminds me of a happy Halloween mask.

Photo: P.M. Shrewsbury, UMD

Back in the September 14th newsletter, I discussed a few other orbweavers, the spotted orbweaver and the black and yellow garden spider. The spinybacked orbweaver is in the same family as these others (Araneidae) but is much smaller in size. The female spinybacked orbweaver is 5-9 mm long and slightly wider than long and has a very distinct appearance. There are six spine-like projections coming off of its abdomen. There is color variation between spiders within this species. The spines may be red or black, and the abdomen may be yellow or white. Males are much smaller (2-3 mm long) and they are longer than wide, and their spines are not as prominent as in females. The spinybacked orbweaver has been reported from 9 countries and across most of the southern U.S. and northward to Maryland. These spiders are harmless unless of course you are an insect that gets caught in its web.

The spinybacked orbweaver makes a large circular web which it uses to catch its prey. The web is usually made by the female. The male spider will hang from a single thread of silk near the web of a female spider he wishes to get together with. Up to 3 males may hang from silk threads near a female's web. As with other orbweavers, the large webs are usually seen in an open space with silk strands attached to nearby branches of vegetation to support the circular web. The spinybacked orbweaver female sits in the central area of the web waiting for its prey to get caught on the sticky silk of her web. Once a prey item is caught, the female quickly moves to it, and fangs it to inject toxins that immobilizes but doesn't kill the prey. She then wraps the prey in silk. She may eat the prey then or save it for later. Spinybacked orbweavers and their webs are most commonly found in landscapes with trees and shrubs and at woodland edges. They are often seen in nurseries and citrus farms in their range. The web captures flying, and sometimes crawling, pest insects such as beetles, moths, mosquitoes, whiteflies, and small flys providing some biological control of pest insects.

Click <u>here</u> to see an interesting video of the spinybacked orbweaver building its web. The video is long. but it is worth watching a few minutes of it.

## **Spotted Lanternfly**

## Marylanders Urged to Be Vigilant for New Invasive Species October 25, 2018

ANNAPOLIS, MD – The Maryland Department of Agriculture has confirmed that a single adult spotted lanternfly has been found on a trap in the northeast corner of Cecil County near the border of Pennsylvania and Delaware. This is the first confirmed sighting of the invasive species in Maryland, and the department does not believe there is an established population of the pest in the state.

The spotted lanternfly poses a major threat to the region's agricultural industries as they feed on over 70 different types of plants and crops – including grapes, hops, apples, peaches, oak, pine and many others. Originally from Asia, the spotted lanternfly is non-native to the U.S. and was first detected in Berks County, Pennsylvania in the fall of 2014. As a known plant-hopper and hitchhiker, the spotted lanternfly has spread to 13 counties within Pennsylvania and has confirmed populations in Delaware, Virginia, and New Jersey.

"The spotted lanternfly has been on our radar since Pennsylvania's first sighting in 2014," said Maryland Agriculture Secretary Joe Bartenfelder. "The Maryland Department of Agriculture's Plant Protection and Weed Management Program and our partners have been proactively monitoring for spotted lanternfly across the state in an effort to keep the destructive pest from establishing a population in Maryland. By staying ahead of the spotted lanternfly we can keep our farmers' crops and the state's agricultural industries safe."

The department's Plant Protection and Weed Management Program continues to work with the University of Maryland Extension, the U.S. Department of Agriculture (USDA), the USDA Animal and Plant Health Inspection Service (APHIS), Plant Protection and Quarantine (PPQ), and others to monitor the insect in Maryland via trap surveys. The department has also launched outreach and education campaigns aimed at agricultural operations and the general public. There is no spotted lanternfly quarantine for businesses or homeowners in Maryland at this time.

"Luckily, we found the first spotted lanternfly towards the end of the season and the confirmed spotted lanternfly is a male, which means it did not produce any egg masses in the state," said Kim Rice, the department's Plant Protection and Weed Management Program Manager. "It is extremely important that businesses, agricultural operations, farmers, and homeowners in Maryland, especially in Cecil County, are aware of this pest, its potential consequences, and how to identify it. Early detection is key to stopping the spotted lanternfly from spreading."

Throughout the fall and into the winter the department will continue to conduct surveys and visual inspections for spotted lanternfly egg masses on the tree-of-heaven (*Ailanthus altissima*)—the spotted lanternfly's preferred tree to feed on. As cold weather continues to set in, adult spotted lanternflies will start to die off, and egg masses can be seen from now until late spring. Come spring time, egg masses will hatch producing 30-50 black and white-speckled nymphs.

If you suspect you have found a spotted lantern fly egg mass, nymph, or adult, snap a picture of it, collect it, put it in a plastic bag, freeze it, and report it to the Maryland Department of Agriculture at <a href="DontBug.MD@maryland.gov">DontBug.MD@maryland.gov</a>. Deceased samples from any life stage can be sent to the Maryland Department of Agriculture—Plant Protection and Weed Management at 50 Harry S. Truman Parkway, Annapolis.

## Foliar Disease on Apple and Crabapples

By: Stanton Gill

Kari Peter, Plant Pathologist with Penn State Extension published an interesting article in their fruit alert earlier this month. The article is on a disease that has shown up on apple and crabapples with the wet, wet season of 2018. I asked her if we could reprint her article and pictures and she agreed. You may have seen this disease on your customers' trees. You need to destroy foliage this fall to reduce innoculm for next season

# October 9, 2018 Disease Update: Marsonnia Blotch on Apples

By: Kari Peter, Penn State Extension

Marssonina blotch is a foliar disease first identified in Pennsylvania in September 2017. Conditions are favorable for this disease and symptoms have been observed in several orchards.

Marssonina blotch is problematic since it can cause severe defoliation of the tree. The disease is controlled easily with fungicides; however, the rainfall this season may have caused lapses in control. Marssonina blotch, caused by Marssonina caronaria, is found on leaves and fruit of apple. The disease is widely distributed and has been reported in North America, Europe, and Asia. Most recently, it was found in Pennsylvania in 2017. The disease can cause severe defoliation. Conventional fungicides, such as captan, easily control this disease; therefore, it is considered a minor pathogen in Pennsylvania. However, during a season where lot of rain has fallen, trees may not be protected due to fungicides being washing off. Consequently, the disease may sneak up on growers, even if captan has been used.

## Marssonina blotch symptoms on apple trees

Leaf spots first appear on the upper surface of mature leaves late summer. They are 5-10 mm in diameter, grayish, brown, and tinged purple at the periphery. Small black acervuli (small asexual fungal fruiting body) are often visible on the surface. When lesions are numerous, they coalesce, the surrounding tissue turns yellow, and defoliation results. Cultivars do not differ significantly in susceptibility to the disease. This fungus can also infect fruit; however, it is uncommon, and we have yet to observe fruit infection in Pennsylvania. Reports have shown trees with numerous leaf infections most likely will have fruit infections.





Marssonina blotch symptoms first show up on the upper sides of leaves in late summer Photos: Kari Peter, Penn State Extension

## Marssonina caronari disease cycle

Like apple scab, primary infections are initiated by ascospores produced on overwintered leaves. Mature ascospores have been found just before the bloom stage of bud development. Ascospore discharge usually lasts for 3–4 weeks. Rain is required for spore release. Primary symptoms appear in the middle of June, usually on mature leaves. However, we have observed the first symptoms as late as August and September. Infection of leaves by conidia takes place most frequently at 68 - 77 °F, and symptoms are present within 8 days of inoculation. Defoliation begins about 2 weeks after the symptoms appear.

## Marssonina blotch management

If you control for apple scab, you will also control Marssonina blotch year to year. Just like for apple scab, disease control is managed through orchard sanitation, pruning, and the use of fungicides. Removal of overwintered leaves on the ground may reduce the inoculum level. If already use a method to get rid of scab leaves year to year (flail mowing, urea), you will also get rid of leaves infected with Marssonina. Conventional fungicides commonly used for early and summer apple diseases easily keep this disease in check. However, growers must be mindful of rain washing off fungicides, especially captan. Anecdotally, sulfur has provided limited control.



Aaron Cook, MD DNR, reported from Clear Spring: "I was taking some pictures for the DNR fall foliage report, but the lilac in front of my office had the best color (notice the very green ridge in the background). Flowering 10/24/2018!"

Photo: Aaron Cook, MD DNR

# Weed of the Week By: Chuck Schuster, UME

Multiflora rose, *Rosa multiflora*, is an invasive bush that is found in many settings. The typical setting for multiflora rose is around the farm, but it is also found in residential settings that were recently converted from farms or on edges of properties adjoining wooded areas. This shrub was brought to the United States in the 19th century as an ornamental and was used to promote wildlife habitats and as a living fence for cattle at one time.

The leaves of multiflora rose are alternately arranged leaflets with seven to nine occurring on the petiole. Each leaflet is from .5 to 2.5 inches in length and from .25 to one inch in width. Leaflets are coarsely toothed with hairs on the bottom of the leaf. Stems are from three to ten feet in length, usually upright or erect, and have thorns. The root system is fibrous and stems that touch the ground will root and produce new plants. White flowers, usually with five petals, one inch in diameter are produced in June and July in this region. The base of

each leaf petiole will have a fringe of stipules which resemble stiff hairs fused together.

Fall can be an excellent time to get this plant under control. Control during the dormant season can prevent damage to desired plant materials. Triclopyr can be applied to cut stems with success if applied within several hours of the cutting. Basal treatments with triclopyr as found in Pathfinder during the winter months can be another way of providing a successful treatment plan. Regular mowing or cutting will not stop the growth of this plant. Pulling or grubbing out will decrease the size, but if any roots are left a new plant will grow.



MDA Weed Control Photo: Ginny Rosenkranz, UME

#### Plant of the Week

By: Ginny Rosenkranz, UME

Coreopsis Uptick<sup>TM</sup> Gold & Bronze is a hybrid of the native coreopsis or tickseed herbaceous perennial. Coreopsis Uptick<sup>TM</sup> Gold & Bronze has a bit more to offer than the species. Gold & Bronze is a compact plant with dark green mildew resistant foliage that grows into a tidy mound shape. The bright yellow gold petals have a bronze red eye zone center that advertises to the pollinators to come and visit a while. The flowers of Coreopsis Uptick<sup>TM</sup> Gold & Bronze start blooming earlier than the species and flower a longer period of time, from early May through late September and even into October. The flowers themselves can grow 3 inches across, but are smaller during the heat of summer. Plants are hardy in USDA zones 4-9 and thrive in full sun locations. Any soil that is well drained will support Coreopsis Uptick<sup>TM</sup> Gold & Bronze and they are not at all picky about the soil pH. The plant's compact size of 12-14 inches high and wide makes it easy to use as an edging plant in either a herbaceous perennial garden or a pollinators garden. Both honey bees and butterflies enjoy visiting the flowers of Coreopsis Uptick<sup>TM</sup> Gold & Bronze. Deadheading or trimming back the spent blooms will encourage the plant to create more flowers through the summer. These plants are listed as deer resistant, but other pests include aster yellows, bacterial leaf spot, downy mildew, and powdery mildew.

Coreopsis Uptick™ Gold & Bronze grows 12-14 inches high which makes it a good edging plant Photos: Ginny Rosenkranz, UME





## Degree Days (As of October 24)

Aberdeen, MD (KAPG)	3879	Annapolis Naval Academy (KNAK)	4792
Baltimore, MD (KBWI)	4249	College Park (KCGS)	4139
Dulles Airport (KIAD)	4164	Frederick (KFDK)	4164
Ft. Belvoir, VA (KDAA)	4341	Greater Cumberland Reg (KCBE)	3874
Gaithersburg (KGAI)	4092	Martinsburg, WV (KMRB)	3863
Natl Arboretum.Reagan Natl (KDCA)	4819	Salisbury/Ocean City (KSBY)	4395
St. Mary's City (St. Inigoes, MD-KNUI)	unavailable	Westminster (KDMW)	4214

Important Note: We are 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

Thresholds in: Fahrenheit °F

Calculation type: simple average/growing dds

Select Degree-day calculator

Lower: 50

Upper: 95

Start: Jan 1

#### CONFERENCES

#### **Trees Matter Symposium**

November 14, 2018

Location: Silver Spring Civic Center, Silver Spring, MD

Registration Information

## **Turf Nutrient Management Conference**

December 6, 2018

Location: Carroll Community College, Westminster, MD

Information will be coming soon

#### **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: <u>umdentomology@umd.edu</u>

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

#### Mid-Atlantic Horticulture Short Course

January 15-17, 2019

Location: The Founders Inn, Virginia Beach, VA

#### **FALCAN Conference**

January 18, 2019

Location: Frederick Community College, Frederick, MD

## **MAA Winter Conference**

January 22-23, 2019

Location: Turf Valley, Ellicott City, MD

## **Eastern Shore Pest Management Conference**

February 6, 2019

Location: Fountains Conference Center, Salisbury, MD

Contact: Ginny Rosenkranz, 410-749-6141

## **LCA Winter Conference**

February 14, 2019

## **Chesapeake Green Horticulture Symposium**

February 20 - 21, 2019

Location: Maritime Institute, Linthicum Heights, MD

# Manor View & The Perennial Farm Education Seminar

February 22, 2019

Location: Sheppard Pratt Conference Center, Towson

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