UNIVERSITY OF MARYLAND EXTENSION

TPM/IPM Weekly Report
for Arborists, Landscape Managers & Nursery Managers

Commercial Horticulture **April 30, 2021**

In This Issue...

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 sgill@umd.edu

Coordinator Weekly IPM Report:
Stanton Gill, Extension Specialist, IPM and Entomology for Nursery, Greenhouse and Managed Landscapes, sgill@umd.edu. 410-868-9400 (cell)

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 (Retired Extension Educator)
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)

Ambrosia Beetle Update

By: Stanton Gill

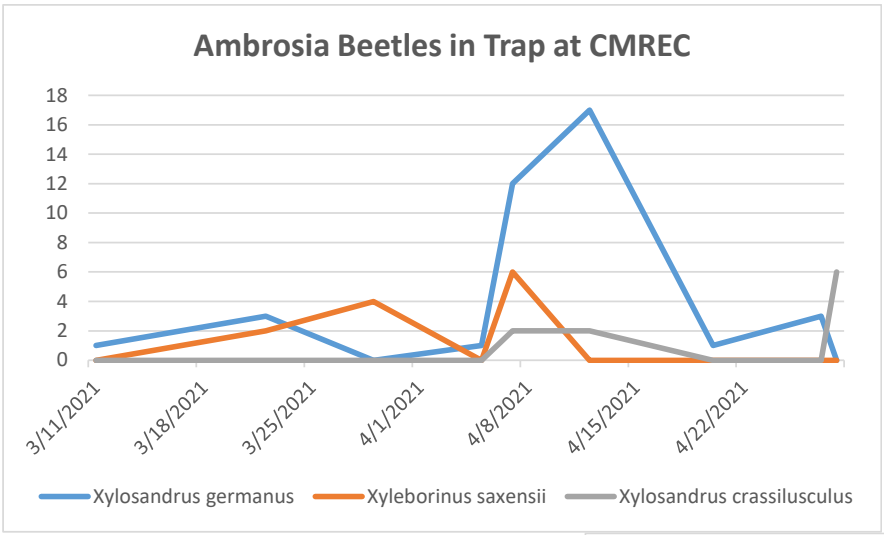
We put out a special IPM Alert on Wednesday alerting you that ambrosia beetle activity of *Xylosandrus* species was increasing with the warm weather.

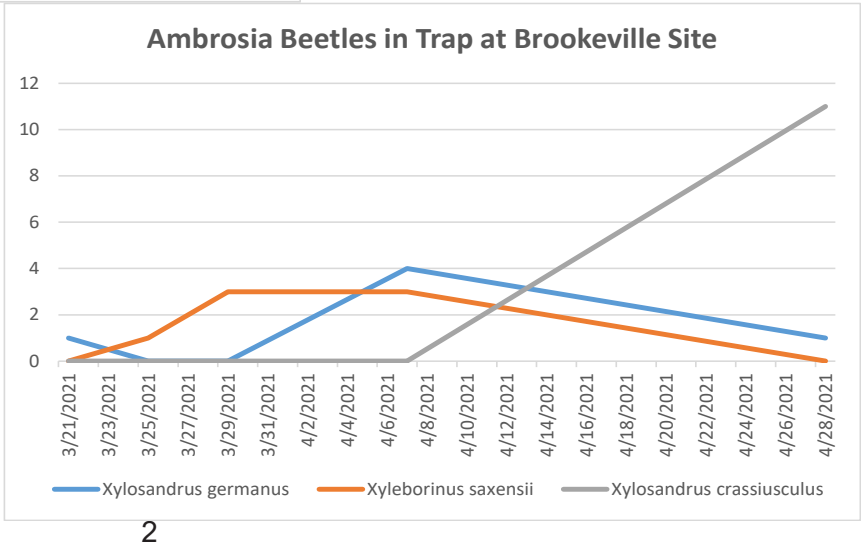
Marie Rojas reports ambrosia beetles are damaging *Styrax obassia* in central Maryland. In Federalsburg, Richard Uva and Andrew Ristvey had 14 *Xylosandrus* species and 21 *Cnestus mutilatus* (camphor beetle also called sweet gum borer). In Central Maryland, ambrosia beetles are hitting baited wood bolts in high numbers during the hot weather. Today, with the wind, we are seeing very little activity in the traps or baited bolts. Dan Cannaday, Greenlink, Inc., found wet areas from ambrosia beetles on a red maple in New Market on April 29. Dan noted that the tree was in full leaf last week and now it is already in 80% decline.

The summer-like temperatures of Tuesday through Thursday resulted in an increase in the flight activity of ambrosia beetles this week. We will have a few cooler days, so activity should decrease until it warms up again.

Look for wet areas on trunks which indicate ambrosia beetle activity
Photo: Dan Cannaday, Greenlink, Inc.

The frass tubes are a sign that ambrosia beetles are active on this *Styrax obassia*
Photo: Marie Rojas, IPM Scout





Bristly Roseslug Sawfly, *Cladius difformis*

By Nancy Harding and Paula Shrewsbury

Sawflies are not true flies (Diptera) they are wasps (order Hymenoptera) and named for the adult female's saw-like, abdominal appendage used for inserting eggs into plant tissue. There are three slug-like sawflies of rose: the bristly roseslug sawfly (*Cladius difformis*), the roseslug sawfly (Endelomyia aethiops), and the curled roseslug sawfly (*Allantus cinctus*). These insects are not meticulous when it comes to choices of roses to feast upon.

Bristly roseslug sawfly was found on 'Knock Out' roses in Bowie on April 27th. The accumulated growing degree days in Bowie as of 4/27 were 299 DD. John Hochmuth, Jr. found them in the area this week. Heather Zindash, The Soulful Gardener, found them active in D.C. on April 23. This roseslug sawfly is an introduced insect from Europe. The larva of this sawfly resemble caterpillars, except they have more than five pairs of abdominal prolegs and the prolegs lack hooks. They can range in size from 1/2" to 5/8" long and greenish white (pale green) with a light tan head capsule with long, and usually covered with distinguishing short stout bristles. Adults are small, thick-waisted wasps, mostly black in color. Feeding of the early instar larvae of the Bristly roseslug sawfly causes leaf etching on the lower leaf surface (Fig. 1) where the later instar larvae feed between the main veins, producing skeletization of the leaves (Fig 2). This sawfly is the most damaging of the three species, as it has multiple generations (reported 5 – 6) throughout the season, so control is often necessary.

Monitor: Look closely on the underside of the leaves with a hand lens for the bristly roseslug sawfly as they are hard to see due to their size and color. Look for early signs of etching on the leaves, and then look for active sawflies on the underside of the leave.

Control: Sawflies are best controlled when they're young larvae. You can simply pick them off by hand. A forceful spray of water from a hose can also knock off sawflies. Once dislodged, they cannot climb back onto the plant. If control is warranted, Spinosad, Mainspring, and Acelepyrn all work very well on this pest.

For more information on the Roseslug sawfly go to:

Bug of the week http://bugoftheweek.com/blog/2018/5/21/rosie-defoliators-roseslug-sawfly-iendelomyia-aethiopsi-and-curled-rose-sawfly-iallantus-cinctusi

And/or https://extension.umd.edu/hgic/topics/rose-slugs-shrubs

Fig. 1 Early instar bristly roseslug sawfly plant damage.
Photo: Nancy Harding, UMD

Fig. 2 Bristly roseslug sawfly (later instar) and damage.
Photo: Nancy Harding, UMD

Cicada Update

Paula Shrewsbury reports the first emergence of adult cicadas from the 5th instar stage in College Park. The early riser cicadas were seen on Tuesday, April 27th. Numerous nymphs and molting adults were seen on a large oak tree on the UMD campus.

Chuck Schuster has been measuring soil temperatures for weed emergence, and it was 62 °F on Wednesday in central Maryland. We are getting close to the magic 64 °F soil temperature for emergence of 5th instar nymphs from the soil throughout the area.

Cicada – Looking Back to 2004

By: Stanton Gill

Suzanne Klick dug through our IPM Alerts from 2004 when the last cicada Brood X emergence occurred. It is interesting to look back at what we recorded in 2004 and the parallels with what we are seeing in 2021. Here are some of the reports we saw from March through May of 2004. This might help you predict what will happen over the next couple of weeks.

March 26, 2004
Periodical cicadas: Chuck Schuster reports that cicadas are active in Potomac in the **upper 2-3 inches of soil**. He hasn't seen any at his office in Derwood yet.

April 9, 2004
Cicada Watch: Steve Sullivan from The Brickman Group found cicada nymphs 3 – 4" down in the soil in Marriottsville on April 8, 2004 (76 degree days). That same day, one of Brickman's crew chiefs in Bethesda (86 degree days) found mud tubes with cicadas in them that were ready to come out. The red eyes were visible. It won't be too long before the cicadas emerge in the areas closer to the city.

April 16, 2004
Cicada Update: On April 13th Stanton Gill (U of MD) and Steve Sullivan (The Brickman Group) examined a commercial landscape site in Bethesda. They found many holes in a mulched area under a dogwood with the round tunnel holes of the cicada just under the thin mulch layer. When the mulch was pulled back the nymphs who were sitting at the hole entrance would react quickly pulling themselves back into their gallery. When we tried to dig them out they retreated into the holes pulling back as we dug after them. After the heavy rain on early in the week followed by a warming trend we expect to see the cicada to start their emergence in the city areas in the next week or so.

Cicadas found on April 13, 2004: Cicada in its gallery Cicada prodded out of its gallery

April 23, 2004
Cicada Update: As soil temperatures reach 64°F we should see emergence of cicada. We should see some of the nymphs move up onto trees sometime this week. We have been receiving reports that cicadas are chewing through landscape fabric as they emerge from their holes in the ground. Let us know if you find adults in your area.

April 30, 2004
Cicadas: Marie Rojas sent photos of holes in landscape fabric that were caused by cicadas.


May 7, 2004
Cicada update: David Barylski reported seeing two adult periodical cicadas on a tree trunk in Reisterstown (Baltimore County) on Saturday, May 1.

May 21, 2004
Cicadas: David Gosch saw his first sighting of cicada of the year when he found 1 adult cicada on May 9th in Catonsville, MD. There were many cicada holes in his vegetable garden when he removed the plastic. Large numbers of cicadas have also been reported in Wheaton, Clinton and Columbia,Maryland. On May 18th we found our first adult cicada at the Central Maryland Research and Education Center in Ellicott City.

May 29, 2004
Cicada Update: Cicadas are humming away this week. It is the males that sing. We are getting reports of all sorts of animals eating cicada including chipmunks, squirrels, birds, dogs, cats and people. This weekend we caught two harvestmen (Daddy long legs) feasting on a freshly emerging adult cicada. They got it before its wings fully developed.
Monitoring: The females use their ovipositor to make the slits in which they insert their eggs into pencil-size branches over the next couple of weeks. Oviposition scars (rows of ~1/4 to 1/2 "slits) are already abundant on many trees and shrubs. David Silverman in Silver Spring reports that he is finding females cutting into the branches of Japanese red maple and Exbury azalea this week. Plant damage has just started to show up (reported on chestnut in College Park by Mike Raupp) and will continue to show up through June and July. Oviposition will result in flagging / dieback and likely breakage of numerous branches. Several people have sent e-mails describing the mating habits of cicada. In case you are interested, most of the males and females back-up to each other and couple.

Free Range Chickens for Cicada Nymph Reduction

By: Stanton Gill

With the Covid-19 situation for the last 14 months, many people have purchased chickens for home egg production. Tractor Supply Company reports record sales of chickens over the last year. In many urban /suburban counties, they changed the zoning laws to allow 5 – 6 chicken hens (not roosters) in residential neighborhoods. We have 5 chicken hens at our Brookeville (Howard County) house. During the night they are locked up in a predator-proof chicken house, but during the day, we let them have free range through our wooded lot. I noticed they have been using their claws to dig among the leaves over the last 10 days. I investigated what they were digging up and consuming. It was 5th instar cicada nymphs. They appear to love these tempting insect morsels. So, if you have a suburban, free range chicken flock, you may benefit from the chickens helping reduce the population of emerging nymphs over the next 2 or 3 weeks.

Chickens pecking in the soil to find periodical cicada nymphs
Photo: Stanton Gill

Snakes and Cicadas

By: Stanton Gill

Ray Bosmans published a very nice article on snakes and one of their favorite foods – cicada nymphs. Bill Stocker read Ray's article and sent in a few pictures. He saw a garter snake, *Thamnophis sirtalis sirtalis,* in Columbia this week. At first he thought it was feasting on a nymph of a cicada, but on second look, he saw it was practicing on a frog. Bill described it as a "cold blooded attack". He is hoping this snake hangs around to feed on the cicada nymphs. He gently moved it to a nice spot out of harm's way.

A garter snake feeding on a frog - it will likely be feeding on cicadas soon
Photo: Bill Stocker

Fifth instar cicadas emerge when the soil temperature is at 64 °F.

SOIL TEMPERATURES

	Glenwood	Stevensville
April 25	51	50
April 26	49	54
April 27	50	55
April 28	55	61
April 29	61	65
April 30	57	65

Webinar: Brood X - The Cicada Takeover on May 4th at 2:00 - 3:00 PM
Coordinated by W.S. Connelly Companies. Presentation by: Stanton Gill
Registration Links: https://conta.cc/2RDNJpy or https://us02web.zoom.us/webinar/register/WN_ZT8GoD1eQDOl8PGWZoBeWw

Maryland Arborist Program

We still have open seats for our 40th Annual Safety & Pesticide Recertification Seminar on May 11, 2021 at Turf Valley. Attendees (both in-person and virtual) can earn all 8 MD LTE credits they need to renew their license in just a single day! A complete breakdown of available credits can be found on the event website: https://recertficationseminar2021.eventbrite.com. Registration will close next Friday, May 7 and will not be available at the door.

Giant Bark Aphids

Terry Martin, Treemovers, found giant bark aphids on some large London plane trees that they were transplanting on April 22. Giant bark aphids are the largest aphid that occur in the United States. Look for the grayish aphids that cluster in groups on trunks. Aphid populations tend to be highest in late summer. Damage to trees is very minimal and control is not necessary. Lady beetles, syrphid flies, and other predators feed on these aphids.

Giant bark aphids are found in clusters on branches and tree trunks
Photo: Terry Martin, Treemovers

Boxwood Leafminer – Diptera (*Monarthropalpus flavus*)

By Nancy Harding and Paula Shrewsbury

Boxwood leafminer adults were active in Bowie, MD on April 25th clinging to leaves and hovering within inches of a pyramidalis boxwood (*Buxus sempervirens* 'Pyramidalis'). The accumulated growing degree days in Bowie on 4/25 was **280 DD.** They are also active here at the research center in Ellicott City this week.

The adult boxwood leafminer is a tiny orange-yellow gnat-like fly about 1/8" long (Fig.1) Adult leafminers emerge over a two week period in early spring but each fly only lives about 24 hours. After mating the female lays about 30 eggs into the leaf tissue and then the female dies. Tiny whitish maggots (legless larvae) hatch in about 2 weeks and begin feeding on tissue between the upper and lower leaf layers until the weather warms. During the heat of the summer the larvae do not feed much. In the cooler fall months, the larvae actively feed again and this is when most of the damage is done. As the larvae grow, they will become bright yellow and

overwinter as partially-grown larvae. The boxwood leafminer larval feeding between the upper and lower parts of the leaf causes blister-like mines on the underside of the leaf. Leafmining damage can cause the plants to look as though they have received severe winter burn, and damaged leaves drop early.

Monitoring: Shake shrubs to detect flying adults during the spring (now). Look at the underside of the previous year's leaves for mining and pupal cases sticking out of the lower leaf surface to easily detect infestation. Mines of the current season do not become obvious until fall.

Control: Encourage natural enemies such as green lacewings and spiders. Keep plants healthy. Use boxwood cultivars that are more resistant to boxwood leafminer. Mechanical controls can reduce populations. Prune the foliage before adults emerge, or if they have already emerged wait until adults are done laying eggs in the leaves. For more information regarding boxwood leafminer control see the April 9, 2021 TPM/IPM Weekly Report for Arborists, Landscape Managers & Nursery Managers (pages 4-5).

Fig. 1 Boxwood leafminer adult.
Photo: Nancy Harding, UMD

Boxwood leafminer larvae and pupae can be found inside the galled leaf tissue before adults emerge in spring.
Photo: M.J. Raupp, UMD

Orange blisters on boxwood leaves are a good indication of leafminers.
Photo: M.J. Raupp, UMD

Boxwood Psyllids

We are seeing an incredible increase at the research center in Ellicott City this week on the boxwood planting blocks. A lot of wax is being exuded by the psyllids. Make sure you monitor your customers' plants closely this week.

Woodland Rusts

By: Karen Rane and David Clement

Gardeners often believe that native plants are not susceptible to plant diseases – after all, native plants are well adapted to local areas and have survived for countless years, right? Plant pathologists will tell you otherwise – there are a number of plant diseases that occur on native plants, and now is the time to observe two common examples. Mayapple rust, caused by the fungus *Allodus podophylli,* and rust on jack-in-the-pulpit, caused by *Uromyces caladii* are appearing now in our area. These rust fungi are specific to their respective hosts, and cause yellow angular spots on the upper leaf surfaces. On the undersides of the lesions, you can see the orange spore structures (small cup-like protrusions) that develop singly or in clusters. These rust diseases are very noticeable, but infected plants seem to tolerate the infection, and survive for at least a few years. In the case of rust on jack-in-the-pulpit, the rust fungus invades the entire plant (this is called a systemic infection). Management of these diseases is usually not warranted.

Orange spore structures of the mayapple rust fungus on the undersides of infected leaves. Photo: K. Rane

Yellow-orange spore structures of the rust *Uromyces caladii* on leaves (left) and spathe (right) of jack-in-the-pulpit. Photos: K. Rane

Cold Injury From April 21 and 22

By: Stanton Gill

The cold injury was very isolated from this last cold front. Some areas reported temperatures of 26 – 28 °F with frost showing up in the morning hours. Steve Sullivan, Landcare Company, reported damage to dogwood bracts on several Rutgers cultivars and *Cornus florida* f. *rubra*. He also had strawberry flowers damaged with blackened centers showing up this week.

Top to Bottom: Frost damage on *Cornus florida*, *Cornus florida f. rubra*, and strawberry
Photos: Steve Sullivan, Landcare Company

Crape Myrtle Aphid – Starting early

By: Stanton Gill

We received our first report of activity of crapemyrtle aphid from Sam Fisher, Bartlett Tree Company, this week on April 27. Sam found these aphids on a crape myrtle in Northwest Washington, D.C. The aphids are concentrating on the new growth just emerging out on crape myrtles in late April. This aphid species feeds mainly on foliage and not on woody tissue, and it is specific to crape myrtle. The number of incidences of this aphid showing up each season appears to be increasing as more and more people plant crape myrtles in landscapes. This aphid has multiple generations per season and can produce copious amounts of honeydew. If we get a rainy period, you will see sooty mold covering the foliage as the season progresses.

Crapemyrtle aphids have become a regular problem on crape myrtles
Photo: Sam Fischer, Bartlett Tree Experts

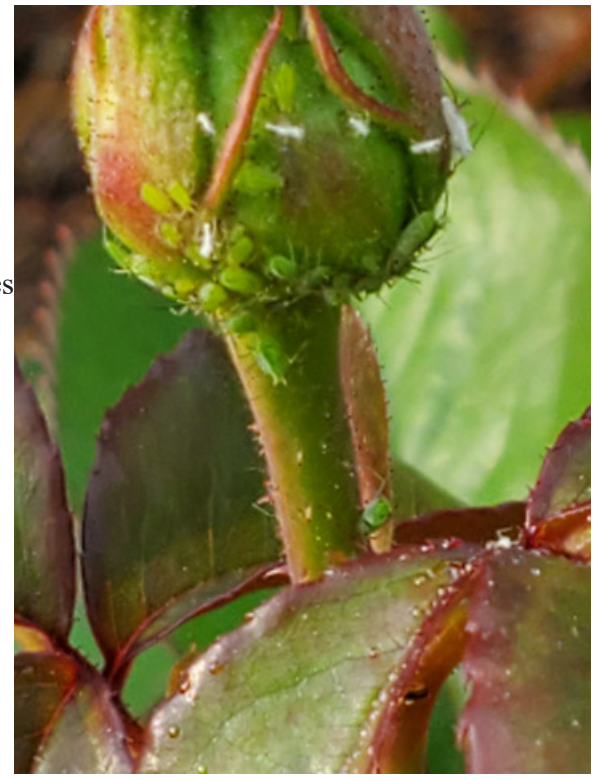
We have several good materials for control of this aphid species including Endeavor (stylet blocker) and Altus (true systemic) insecticides. Insecticidal soaps or Suffoil-X and Azadirachtin also work on small populations.

Other Aphids

Marie Rojas, IPM Scout, is reporting that aphids are very active this week. Marie found a lot of aphids on plants, including: aphids on apple cultivars, hawthorn aphids on *Crataegus* 'Winter King', and spiny witch-hazel gall aphids on *Betula nigra* cultivars. She noted a lot of beneficial insects and spiders were feeding on all of them, including lady beetles, spiders, and soldier beetles.

Aphids on Roses: Brian Scheck, Maxalea is finding aphids on roses in the Baltimore area. Marc Vedder is finding high populations on roses as well in D.C. Marc also notes that th good guys are on the job.

Monitor plants closely for the beneficials feeding on the aphids. If populations continue to build, use an insecticide with minimal impact on the beneficials.



Several people are reporting high populations of aphids on roses this week
Photo: Marc Vedder

Eastern Tent Caterpillars

Eastern tent caterpillars continue to feed and expand their tents this week. Marie Rojas, IPM Scout, found them on *Malus* 'Indian Summer' in Gaithersburg. Look for webbing (tents) in the branch forks of host plants. **Control:** Mechanical control works well. Reach into the tent tearing it open, pull out the caterpillars, and toss them in a bag and dispose of them. If necessary, you can also spray foliage with Bt or Conserve which gives good control with minimal impact on beneficials.

Breaking up the tents is an effective method to remove eastern tent caterpillars. Photo: Marie Rojas, IPM Scout

Scale Insects

Marie Rojas, IPM Scout, is finding calico scale on *Parrotia persica* and tuliptree scale on magnolias in Gaithersburg this week. Calico scale crawler activity starts in mid June. At that time, use Talus or Distance for control. Tuliptree scale crawlers are not active until later in the summer.

She is also finding cottony camellia/Taxus scale on 'Dragon Lady' and 'Nellie R Stevens' hollies in Beallsville.We have not had reports of this scale producing egg sacs yet. Look for crawlers of this scale as we move toward the end of May.

Calico scale does not produce crawlers until mid June Photo: Marie Rojas, IPM Scout

Fruit Tree Disease Warning

From: Kari Peaters, PA State Extension and Experiment Station

With the warm temperatures pushing the apple trees to full bloom, we will meet the conditions for fire blight infection on April 28–29, 2021. Growers are encouraged to apply protection to apple trees by April 28, 2021. The rain is currently predicted to begin late on April 28 and will continue as scattered showers on April 29. Although the chance of precipitation is hovering 50-60% for the region, growers are highly encouraged to protect their trees since this has the potential for a significant fire blight infection event throughout Pennsylvania and Maryland.

Short-winged Blister Beetles

Jim McWilliams, Maxalea, Inc., found three short-winged blister beetles feeding on weeds in the lawn in Baltimore County this week. These blisters feed on a variety of plant material, but usually do not cause significant damage in the landscape. These beetles can be toxic, and in some cases, lethal to horses, sheep, and cattle. Avoid handling these beetles because crushing them against the skin can cause painful blistering.

Avoid handling blister beetles
Photo: Jim McWilliams, Maxalea, Inc.

Marie Rojas, IPM Scout, took this photo of assassin bugs that were just starting to hatch out in Frederick County on April 29.

Beneficial of the Week

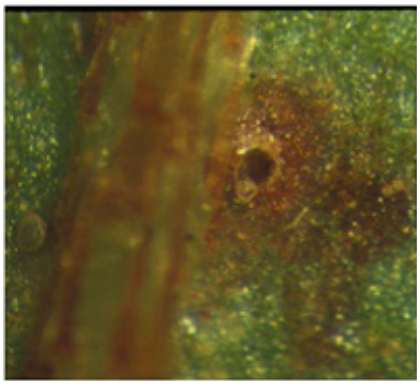
By: Paula Shrewsbury

Very tiny wasps find lace bug eggs even though they are covered in frass.

Azaleas are blooming and providing a beautiful spring feel to landscapes. Being an entomologist brings to mind a key pest of azaleas, the azalea lace bug (*Stephanitis pyrioides*, Hemiptera: Tingidae). Most of us in MD are in the right degree-day range for the overwintering eggs of azalea lace bug to hatch (egg hatch ~ 214 DD).

Azalea lace bug adult on the underside of an azalea leaf. Black fecal droplets are the diagnostic sign of lace bugs. The droplets concentrated along the mid-vein of the leaf are covering lace bug eggs that were inserted into the leaf tissue. Photo: Pest and Diseases Image Library, Bugwood.org

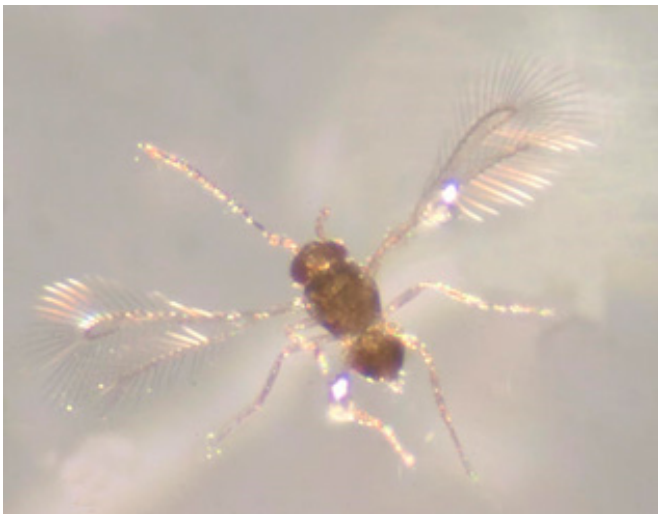
There are several generalist and some specialist predators know to feed on lace bugs. Today we want to talk about a specialist parasitoid that attacks the egg stage of lace bugs. These are very tiny wasps in the family Mymaridae, known as mymarid wasps or fairywasps. In North America, there are about 145 species of mymarids, and body sizes of most of these are between 0.5 – 1.0 mm long. Some species of mymarids are among the smallest insects known in the world. All mymarids are egg parasitoids of other insects, and especially of eggs that are concealed or inserted in plant tissue or soil. Since lace bug adult females insert their eggs into leaf tissue it is not surprising that there is a species of mymarid that attacks lace bug eggs. Not only do lace bugs insert their eggs into leaf tissue, but the female covers the outer tips of the eggs with her frass (a.k.a. poop). It is believed that these behaviors camouflage the eggs both visually and chemically from natural enemies. However, as natural selection would have it, mymarid wasps have overcome these defenses and may likely use them as cues allowing them to more efficiently find the eggs of their hosts.



A close up of the tip of an azalea lace bug egg parasitized by a mymarid wasp. Note the exit hole in the tip left when the adult mymarid wasp emerged. Photo: K. Braman, University of Georgia

The mymarid wasp, *Anagrus takeyanus*, is known to specialize on eggs of lace bugs. *Anagrus takeyanus* is an exotic parasitoid, native to Asia, and believed to have been accidently introduced into the U.S. on eggs of Andromeda lace bug, *Stephanitis takeyai*, an introduced (exotic) lace bug. *Anagrus takeyanus* was first described from Andromeda lace bug in Connecticut in the 1970's. Both Andromeda and azalea lace bugs were inadvertently introduced to the U.S. from Asia before 1945 and 1916, respectively. In 1992, *A. takeyanus* was reported attacking azalea lace bug in Georgia. Most of the research in the U.S. on *A. takeyanus* biology and ecology has been done on azalea lace bug in Georgia (see Balsdon et al. 1996, Environmental Entomology). In the early to mid-1990's when I (Paula) was working on azalea lace bug for my Ph.D., I frequently found *A. takeyanus* attacking azalea lace bug eggs in MD. Azalea lace bug has 4 generations per year and overwinters as eggs inserted into azalea leaves in MD and GA. *Anagrus takeyanus* has multiple generations per year that are in synchrony with the presence of lace bug eggs. Studies in the early 1990's in GA found that *A. takeyanus* parasitized azalea lace bug eggs at rates that ranged from 9 – 19%. Azalea lace bugs lay their eggs by inserting them into the leaf tissue on the underside of leaves along the mid or other major veins and then cover them with a droplet of black-colored frass. To determine if an egg is parasitized by *A. takeyanus*, using a handlens look for a circular hole in the tip of the egg (see image) left behind when the adult wasp emerged from the lace bug egg that it developed in. Although these rates of parasitism are likely not high enough to suppress

lace bug populations below damaging levels on their own, these parasitoids combined with the suite of generalist and specialist predators that attack lace bugs work as a community to reduce lace bug populations and their damage.



A mymarid adult parasitoid (not *Anagrus takeyanus*) depicting the "feather-like fringe" of hairs on their wings.
Photo: Susan Leach Snyder, BugGuide.org

Weed of the Week

By: Chuck Schuster

The weather has been up and down. Overall, we are dry (unless rain falls after I write this article). Soil temperatures started the week at 44 °F, hovered in the upper 40's for several days, then jumped up to the mid 50s at the end of the week starting the day with temperatures in the low 60 °F range. Weeds are loving it.

Control of roughstalk bluegrass is difficult in established turf
Photo: Mark Schlossberg, ProLawn Plus, Inc.

This week brought in some calls dealing with roughstalk bluegrass, *Poa Trivialis*. This perennial grass being found in turf has been showing itself in some of our well managed turf areas this spring. It is classified as a fine textured, cool season grass with a prostrate spreading growth habit. Roughstalk bluegrass will spread quickly by way of stolons, which can be a problem for the desirable turf species. It will appear at times to be a clumping growing habit, but that is not the reality of it once one starts to manually remove it from a turf site. Reaching a total height of up to three feet, it will produce a panicle seedhead, this being typical of other bluegrass species. This bluegrass can form a dense mat that can make it harder for other desired turfgrass species to grow. It does well in wet areas, and sites that have irrigation promote the growth of this weed turf. As weather gets hotter, it will go into a dormant stage, returning to active growth when the temperature moderates and will grow through the cooler months.

The stems have bands of purple at each node, and the stems have small hairs. Leaves have the boat-shaped tip found on most bluegrass species, have a shiny light green color, and may discolor to a bronze when stressed by

heat or drought. Each leaf blade can be up to seven inches in length and one quarter inch wide. Leaf blades are covered with small hairs. The presence of very small, scabrous hairs give the leaf margins and leaf surface a rough texture, from which it has received its common name 'roughstalk bluegrass'. It also has a large ligule that is membranous and occurs with a hook near the top. This weed will be affected by dollar spot and brown patch disease.

One of the most common perennial grass weeds in turf is roughstalk bluegrass. In most cases, the only control is to hand weed the turf or spot treat with a nonselective herbicide that contains glyphosate or glufosnate. Control of this weed is difficult in established turf. Bispyribac-sodium (Velocity)- sod and golf course only and amicarbazone (Xonerate) –residential turf herbicides are labeled for roughstalk bluegrass and annual bluegrass. Warmer temperatures are really needed for these chemicals to be effective. Post emergent, non selective products can be used for small areas in a lawn, they would include glyphosate and glufosinate.

Plant of the Week

By: Ginny Rosenkranz

Deutzia 'NCDX$_2$ ' Yuki Cherry Blossom® is a delightful deciduous shrub that blooms from May to June with tiny, 5-petal, bell-shaped flowers that are held in short clusters or panicles along and at the tips of the branches. The buds are a dark pink in color which open to white inner petals and pink with white edged outer petals. *Deutzia* Yuki Cherry Blossom® is a compact plant with an upright and rounded form that grows 1-2 feet tall and wide. Like many of the *Deutzia*, it has the tendency to spread by arching stems which root when the tips of the stems touch the ground. Yuki Cherry Blossom® is a cross between *Deutzia gracilis* 'Nikko' and *Deutzia rosea* 'Carminea', which give the plants their bronze-purple foliage color in the autumn. The dark green oppositely spaced leaves expand to 3 inches long with an extended or acuminate tip and red serrated margins. These plants are cold hardy from USDA zone 5-8 and thrive in full sun to part shade in rich, moist but well drained soils. They can be planted to form a naturalized shrubby groundcover or pruned after flowering to plant in foundations or in shrub borders. It is listed as both drought and deer tolerant with infrequent pests that include aphids, leaf miners and leaf spots.

***Deutzia* 'NCDX2 ' Yuki Cherry Blossom® grows 1-2 feet tall and wide**
Photo: Ginny Rosenkranz

Pest Predictive Calendar "Predictions"

By: Nancy Harding and Paula Shrewsbury

In the Maryland area, the accumulated growing degree days (DD) this week range from about 187 DD (Aberdeen) to 382 DD (Reagan National Airport). The Pest Predictive Calendar tells us when susceptible stages of pest insects are active based on their DD. Therefore, this week you should be monitoring for the following pests. The estimated start degree days of the targeted life stage are in parentheses.

- Azalea lace bug – egg hatch 1st gen (214 DD)
- Roseslug sawfly – egg hatch / early instar (230 DD)
- Hemlock woolly adelgid – egg hatch 1st gen (235 DD)
- Boxwood leafminer – adult emergence (249 DD)
- Spruce spider mite – adult/nymph (276 DD)
- Andromeda lace bug – egg hatch (281 DD)
- Pine needle scale – egg hatch (307 DD)
- Spirea aphid – nymph / adult (326 DD)
- Lilac borer – adult emergence (350 DD)
- Hemlock woolly adelgid – egg hatch 2nd gen (411 DD)
- Basswood lace bug – adult/nymph (415 DD)

See the Pest Predictive Calendar for more information on DD and plant phenological indicators (PPI) to help you better monitor and manage these pests.

Degree Days (as of April 28)

Aberdeen (KAPG)	187
Annapolis Naval Academy (KNAK)	266
Baltimore, MD (KBWI)	295
Bowie, MD	328
College Park (KCGS)	251
Dulles Airport (KIAD)	280
Ft. Belvoir, VA (KDA)	292
Frederick (KFDK)	246
Gaithersburg (KGAI)	260
Greater Cumberland Reg (KCBE)	215
Martinsburg, WV (KMRB)	210
Natl Arboretum/Reagan Natl (KDCA)	382
Salisbury/Ocean City (KSBY)	311
St. Mary's City (Patuxent NRB KNHK)	312
Westminster (KDMW)	321

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 Select Degree-day calculatorThresholds in: Fahrenheit °F Lower: 50 Upper: 95 Calculation type: simple average/growing dds Start: Jan 1

Conferences (CDC guidelines for Covid-19 may cause changes to the programs below.)

Maryland Arborist Association Pesticide Recertification Program (limited in-person and on-line program)
May 11, 2021
Location: Turf Valley, Ellicott City, MD
More information is available at http://www.mdarborist.com/calendar_day.asp?date=5/11/2021&event=315

Pest Management Recertification Program (limited in-person program)
June 3, 2021
Location: Carroll Community College, Westminster, MD
Details will be coming soon

June On-line IPM Scout Training (June 2, 9, 16, and 23 from 12 to 1:30 P.M.)
Registration Link: https://mnlga.memberclicks.net/IPMScoutTraining#/
Program agenda

Eastern Shore Procrastinators Pesticide Conference on June 8, 2021
https://www.eventbrite.com/e/2021-eastern-shore-procrastinators-pesticide-conference-tickets-150763609013
Once the attendees pay via evenbrite, they will be emailed the link to the zoom conference.

Greenhouse Program (limited in-person program)
July 8, 2021
Location: Catoctin Mountain Growers, Keymar, MD
Details will be available at a later date

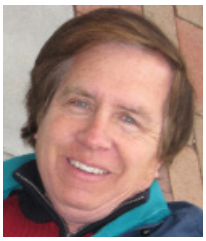
Advanced IPM Conference and Pesticide Re-Certification Session June 3, 2021

The Advanced IPM conference we normally hold in December at the Carroll community College in Westminster of each year was pushed back to June 3, 2021. We held many Zoom re-certification sessions this winter, but we decided to keep this one intact as an in-person conference. Presently, the University will allow us to have gathering of 50 people. Carroll Community College will allow 48 people in their conference room with social distance. For now, we will be limiting the registration number to the first 48 people to sign up. This may be expanded as more people get vaccinated and the State increases the number allowed for gatherings. Recertification and registration information is posted on the MNLGA website.

New IPM Website

The new website for Extension went live this month so our urls for IPMnet have changed. To quickly get to the new site, use https://go.umd.edu/ipmnet. It has links to the IPM alerts and conferences etc. It's still a work in progress at the moment and more information will be added throughout the spring and summer.

CONTRIBUTORS:



Stanton Gill
Extension Specialist
sgill@umd.edu
410-868-9400 (cell)

Paula Shrewsbury
Extension Specialist
pshrewsb@umd.edu

Karen Rane
Plant Pathologist
rane@umd.edu

Chuck Schuster
Retired, Extension Educator
cfs@umd.edu

David Clement
Plant Pathologist
clement@umd.edu

Andrew Ristvey
Extension Specialist
aristvey@umd.edu

Ginny Rosenkranz
Extension Educator
rosnkrnz@umd.edu

Nancy Harding
Faculty Research
Assistant

Thank you to the Maryland Arborist Association, the Landscape Contractors Association of MD, D.C. and VA, the Maryland Nursery, Landscape, and Greenhouse Association, Professional Grounds Management Society, and FALCAN for your financial support in making these weekly reports possible.

Photos are by Suzanne Klick or Stanton Gill unless stated otherwise.