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Beneficial of the Week:

Hyperaspis lady beetles

Weed of the Week: Goutweed

Plant of the Week: *Cercis canadensis* 'Flame Thrower'

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[Pest Predictive Calendar](#)

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), David Clement (Extension Specialist) and Fereshteh Shahoveisi (Turf Pathologist)

Weed of the Week: Chuck Schuster (Retired Extension Educator), Kelly Nichols, Nathan Glenn, and Mark Townsend (UME Extension Educators)

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)

Biological Control Conference in June 2024

By: Stanton Gill

We are getting strong interest in the bio-control conference set for June 5 and 6, 2024. We still have some openings for the afternoon lab session on June 5th and the June 6th lectures. We can handle up to 128 people in the conference hall.

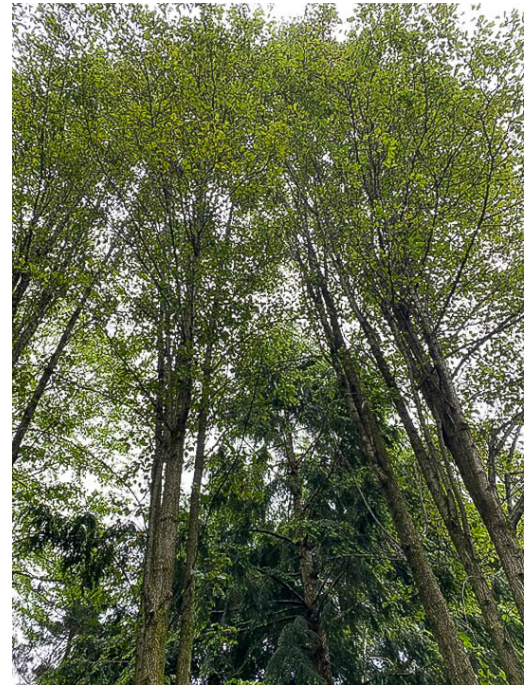
If you are interested, [program details and registration are available online.](#)

We will be at Carroll Community College in Westminster, Maryland. The University of Maryland Extension is working closely with Maryland Nursery, Landscape, and Greenhouse Association (MNLGA) and University of Delaware Extension in conducting this 2-day event. We are bringing in experts from Canada and across the United States to share their knowledge in practical biological control in nurseries, greenhouses and landscapes.

Leaf Drop and Callery Pears

Comments from Connie Bowers, Garden Makeover Company: "Several weeks ago, I noticed very significant leaf drop from a group of 3 Cleveland Select Pears — *Pyrus calleryana* 'Cleveland Select' (this is a type of Callery Pear that is narrow and not prone to the trunk splitting of Bradford pears.). I took a couple photos after seeing your note in the recent IPM report. The leaf drop now is still noticeable, though not as significant as earlier."

Bob Mead, Mead Tree and Turf, is seeing leaf drop on the trees along the driveway at his office. Dave Clement and Stanton Gill will go look at the site next week.



The shot of the full trees shows how thin they look with so much foliage loss. Connie did note that they did flower very nicely.

Photos: Connie Bowers, Garden Makeover Company

Comments from Marie Rojas, IPM Scout: You mentioned problems with callery pears in the IPM report last week. I noted at a nursery last week that *Pyrus* 'Chanticleer' looked particularly bad with fire blight and possibly other leaf disease issues.



Callery pear infected with fire blight and possibly other diseases.
Photo: Marie Rojas, IPM Scout

Expect Brown Patch to Occur Earlier This Year!

By: Dr. Fereshteh Shahoveisi, Turfgrass Pathologist

Brown patch is a common disease on home lawns and high-cut turfgrass. This disease affects cool-season grasses such as tall fescue, perennial ryegrass, and Kentucky bluegrass, and is most prevalent during warm, humid weather conditions. In Maryland, the disease normally starts late June to early July. However, this year brown patch has been spotted on tall fescue in multiple locations in MD during the past week. Hence, it is advisable to closely monitor turfgrass stands and look for symptoms of brown patch.

Brown patch symptoms include circular, irregular patches of brown, dead grass that can range from a few inches to several feet in diameter. On individual leaves, lesions are irregular and tan in color with a dark brown border. Under high humidity or long leaf wetness conditions, white-gray cottony growth, called mycelium, may appear on the turfgrass canopy.

Effective management of brown patch in turfgrass involves an integrated approach that includes cultural practices, proper fertilization, and, when necessary, fungicide applications. Key cultural practices to minimize the risk of brown patch include improving air circulation by reducing tree canopy cover, watering deeply but infrequently to avoid prolonged leaf wetness, and mowing at the recommended height to reduce stress on the grass. Fertilization should be balanced, avoiding excessive nitrogen, particularly during the peak disease season (June to late September). Regular monitoring is critical to identify the disease on time and also to effectively manage the disease.



Brown patch symptoms on a tall fescue stand (left), Brown patch symptoms on leaves (inside the red circle) (right)

Photo: Fereshteh Shahoveisi

Pollen Counts

By: Stanton Gill

Grass pollen counts are high this week, but tree pollen counts have dropped to the moderate level.

Hemlock Woolly Adelgid

Paul Wolfe, Integrated Plant Care, found a heavy population of hemlock woolly adelgid. Earlier in the spring, he made an application of 2% horticultural oil, and Paul reports that he got close to 100% of control. Crawler activity is finishing up at this point. Look for the second generation in September. Systemic insecticides applied as soil drenches can be used for control.



An application of horticultural oil provided a high level of control for hemlock woolly adelgid.
Photo: Suzanne Klick, UME

Cottony Azalea Scale

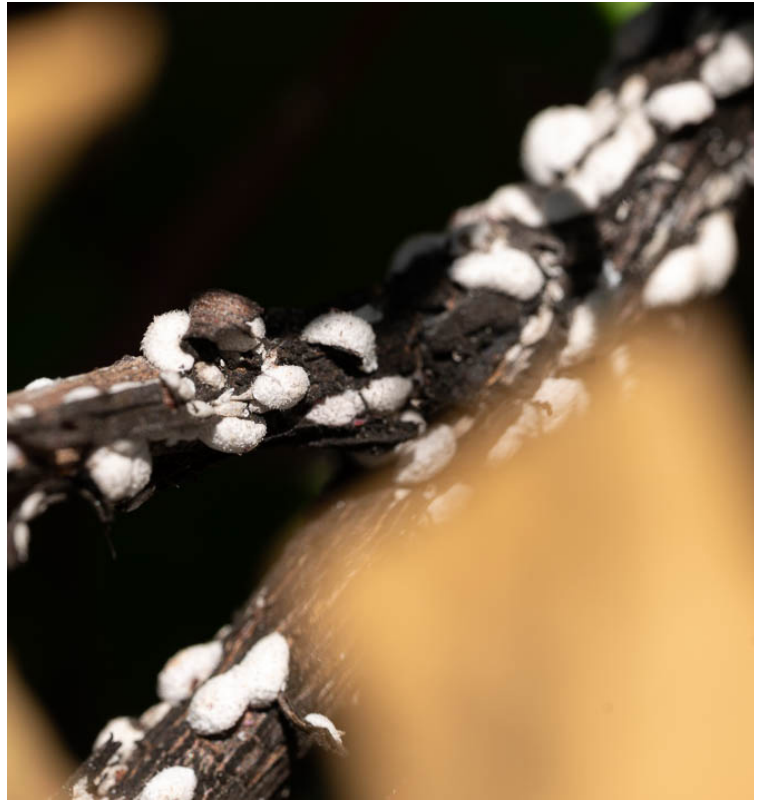
Sam Fisher, Bartlett Tree Experts, found cottony azalea scale activity on a client's property in DC. on May 20. Females are laying eggs now. Look for egg hatch in June before making any treatments. Blueberry is another host plant for this scale.



Look for crawlers of cottony azalea scale in June.
Photos: Sam Fisher, Bartlett Tree Experts

Crapemyrtle Bark Scale

Nancy Harding, UMD, is monitoring a population of crapemyrtle bark scale in on campus in College Park. As of May 23, she is not seeing crawlers active yet. Continue to monitor scale populations for egg hatch, which will be happening soon, if not already. When crawlers are present, apply Talus or Distance.



Late spring stage of crapemyrtle bark scale.
Photo: Suzanne Klick, UME

Cottony Camellia/Taxus Scale

Heather Zindash, The Soulful Gardener, found cottony camellia/Taxus scale crawlers while scouting on May 24 in Montgomery County. If crawlers are present, apply Talus or Distance.



Cottony camellia/Taxus scale are producing crawlers now.
Photo: Heather Zindash, The Soulful Gardener

Maskell Scale

Heather Zindash, The Soulful Gardener, found Maskell Scale with a low number of crawlers and a high number of eggs under covers on *Pinus thunbergii* in Montgomery County on May 21. Maskell scales are extremely small and difficult to detect. They tend to congregate in the leaf axils. Use materials such as Talus or Distance when crawlers are active.



Female Maskell scale covers (left) and flipped cover to show eggs (right).
Photos: Heather Zindash, The Soulful Gardener

Powdery Mildew

Elaine Menegon, Good's Tree and Lawn Care, found powdery mildew infecting ninebark this week in Lancaster, PA.

Control Information

By Karen Rane and David Clement (June 2, 2023 IPM Report)

Control begins with the selection of plants resistant to powdery mildew. Place susceptible plants where there is adequate sunlight and good air circulation to reduce humidity levels. Allow proper plant spacing for the same reasons. Pruning (thinning out plants) for better air circulation also may help. Registered fungicides may be needed if disease is severe. Check the label registration for organic products such as horticultural oil formulations for powdery mildew control listings.



We will see powdery mildew throughout the season when weather conditions are good for infection.
Photo: Elaine Menegon, Good's Tree and Lawn Care

Sycamore Anthracnose

By: David L. Clement, Extension Specialist, and Karen K. Rane, Retired Plant Clinic Director

Todd Armstrong, The Davey Tree Expert Company, found sycamore anthracnose in Pennsylvania. The foliage infection cycle is most active during rainy conditions when temperatures rise into the 60's. Leaf blight starts in the lower canopy and moves up the tree during rainy periods. Leaf lesions typically extend along veins and can also cause irregular marginal lesions before blighting the entire leaf resulting in defoliation. The disease will slow when temperature rise through the summer months and the weather becomes drier.



Recent rainy weather has created ideal conditions for sycamore anthracnose infection. Photo: Todd Armstrong, The Davey Tree Expert Company

Management

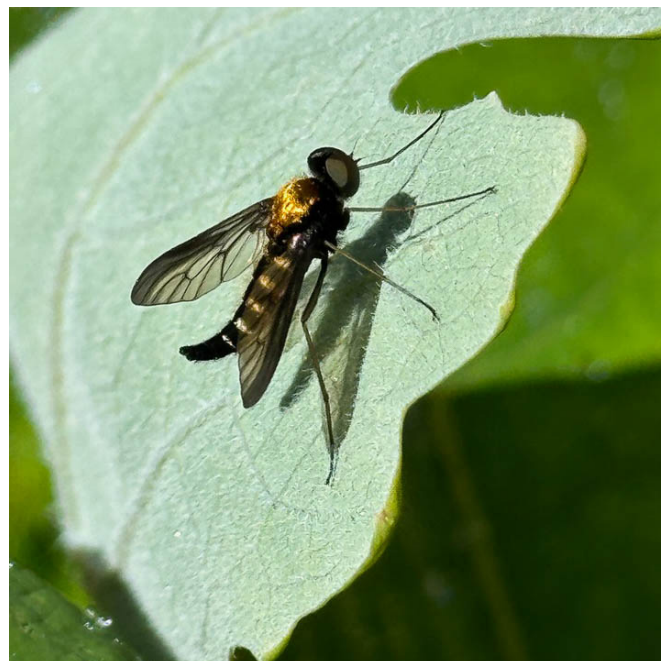
Reduce tree damage by planting resistant cultivars of London and Oriental planetrees. Practices that increase air flow and sunlight penetration, such as thinning, can help to inhibit the pathogen by accelerating the drying of foliage after rain. Remove fallen leaves and prune infected twigs and branches, if possible, to reduce inoculum in the canopy. Pruning is not practical for large mature trees.

Even when disease severity is high during wet springs, sycamores will typically produce a full set of foliage by late summer. Therefore, chemical control is only warranted in select cases such as young trees suffering from transplant shock, repeated insect defoliation, or other site related stresses. Preventative applications should be applied at bud break and on labeled intervals until foliage is fully expanded or dry weather prevails. Injections of labelled systemic fungicides can also be performed for large mature specimen trees

Golden-backed Snipe Fly

David Freeman, Oaktree Property Care, found a golden-backed snipe fly in Fairfax, VA this week. Snipe flies are often seen resting on a grass blade or stems of vegetation. Adults and larvae are predators. Adult golden-backed snipe flies are known to feed on aphids and other small insects.

Paula Shrewsbury covered snipe flies in the [June 2, 2023 IPM Report](#).



Keep an eye out for the colorful golden-backed snipe fly which is active now.

Photo: David Freeman, Oaktree Property Care.

Potato Leafhoppers

Marie Rojas, IPM Scout, is reporting that potato leafhoppers have arrived in the area. She has seen them in Frederick County this week. Marie found them on red maple tips, *Tilia* species, and *Carpinus caroliniana*. Adults arrive from the south, riding up on the jet streams. Potato leafhoppers tend to be a problem on nursery trees and are not as likely to be found in high numbers on landscape trees. Potato leafhopper feeding by adults and nymphs causes the tip growth on maples to curl over and harden which is typically referred to as 'hopperburn'. The distorted growth is often mistaken as herbicide damage. Multiple generations continue to damage the new tip growth that flushes out on maples. A systemic insecticide can be used for control.



Potato leafhopper adult photographed under the microscope.
Photo: Stanton Gill, UME

Rust on Amelanchier (Serviceberry)

Marie Rojas, IPM Scout, is finding rust infection starting to show up on *Amelanchier* 'Autumn Brilliance', both on fruit and causing petioles to swell up too.



Rust can damage and distort serviceberry fruit and leaf petioles.

Photo: Marie Rojas, IPM Scout

Paving Around a Tree

Todd Armstrong, The Davey Tree Expert Company, sent in photos of what he calls "the worse paving job ever". An area was paved with the asphalt put down right up against an American beech that is doing poorly.



Nothing like putting asphalt right up against the trunk to stress and eventually kill a tree.
Photo: Todd Armstrong, The Davey Tree Expert Company

Yellow-bellied Sapsucker Damage

David Freeman, Oaktree Property Care, found extreme sapsucker damage on a 'Foster' holly tree that is in decline in Fairfax, VA.



Holes in a relatively straight row is a good indicator that yellow-bellied sapsuckers have been in the area.
Photo: David Freeman, Oaktree Property Care

San Jose Scale

By: Stanton Gill

If you have customers with fruit trees, sample the stems for San Jose Scale. I found crawlers emerging this morning. Insect growth regulators (IGR) labeled for fruit tree. such as buprofezin, sold as Applaud, with minimal impact on beneficials. IGRs will provide excellent control.

Thinning Paw Paw Fruit

By; Stanton Gill

I looked at my paw paw trees this morning and the fruit is now about 1 - 1.5 long. If you have clusters of fruit forming of 5 - 6 fruit, thin them down to two fruit for better size. The larger the paw paw fruit, the more flesh for consuming in September.

Oriental Fruit Moth

Jason Hipp, Deeply Rooted Tree Care, has found Oriental fruit moth damage in Highland. There are multiple generations of this insect. When you see gummosis coming out of the fruit, the fruit is not edible. Stanton covered this insect in the [June 16, 2023 IPM Report](#).



Gummosis indicates that the fruit infested with the Oriental fruit moth caterpillar is no longer edible.

Photo: Jason Hipp, Deeply Rooted Tree Care

Giant Willow Aphids

Dan Clayton, The Davey Tree Expert Company, is finding giant willow aphids on weeping willow in Alexandria VA this week. These aphids hatch in the spring and are usually most abundant later in the summer. They can produce a lot of honeydew, but are not a problem for the overall health of a tree. Control is usually not necessary. Predators and parasitoids keep this aphid under control



Giant willow aphids line along the trunk of this tree.

Photo: Dan Clayton, The Davey Tree Expert Company

Spotted Lanternfly Update

By: Stanton Gill

We are getting reports from most parts of the state that spotted lanternfly has hatched and 1st instar nymphs, and some 2nd instar nymphs, are active in landscapes. Nick Cavrak, Carrol Tree Service, found SLF nymphs on blackberry in Baltimore City on May 13. Dave Keane found them on figs in Frederick. At the research center here in Ellicott City, a few nymphs were on common burdock. They tend to migrate to tip growth on trees at this time of year with nymphs feeding on soft tip growth. Damage is not generally really noticeable.



Spotted lanternfly nymphs along a blackberry stem.

Photo: Nick Cavrak, Carroll Tree Service



Spotted lanternfly nymphs along a fig stem.

Photo: Dave Keane

Earwig Nymph

Mike Knouse, Macpeak Landscaping, sent in a photo of an earwig nymph that his wife photographed. She found it in her garden where she is going to plant squash and cucumbers. Earwigs are often found in damp mulch, plant debris, and under logs or bark. Earwigs are predators, scavengers and omnivores and consume a wide variety of living and dead material.

It was Paula Shrewsbury's Beneficial of the Week in the [April 22, 2022 IPM Report](#).



An earwig nymph found in a garden.
Photo submitted by Mike Knouse

Japanese Maple Scale

Bernie Mihm, Fine Earth Landscape, has a client with a *Styrax japonica* that he noted was beautiful last year. He was at the site this week and it was covered with Japanese maple scale and Bernie noted that the tree had about 20 percent dead branches in the top.

In June, look for crawlers before treating with Talus or Distance.



Japanese maple scale populations can defoliate sections of trees.

Photos: Bernie Mihm, Fine Earth Landscape

Problems With Hinoki Cypress?

Jason Sersen, Kingsdene, has heard from 3 different retail customers that "in just 2 days say that their 'mature' Hinoki Cypress (each at least 8 ft tall, planted years ago) has suddenly died over the past 2 weeks". Has anyone else seen problems with these trees? The cause of the dying trees would have happened earlier in time, possibly due to temperature/moisture stress issues over the winter.

Damage on Apple Fruit

By: Stanton Gill

We are receiving pictures of apple fruit with worms boring into the fruit. Two weeks ago, I put an article out on Tortricid moths that are laying eggs. Well, we are getting in pictures of fruit being damaged by the 1st instar larvae. The ones in the apple fruit are codling moth (*Cydia pomonella*). This is the first generation and not much you can do for it right now.

Mature larvae exit the fruit, drop to the ground and crawl away to sheltered places to spin cocoons. So, the best thing you can do for your customers at this point is collect up dropping fruit to reduce the population for the second generation.

You can purchase pheromone traps and place them out to collect the males from the second generation so you can time an application of Delegate or Alachlor later in the season. For next year in early May, hang the trap at about eye level on the outside of the tree canopy. Check the trap weekly to see if you have codling moths in your area.

Elder Shoot Borer

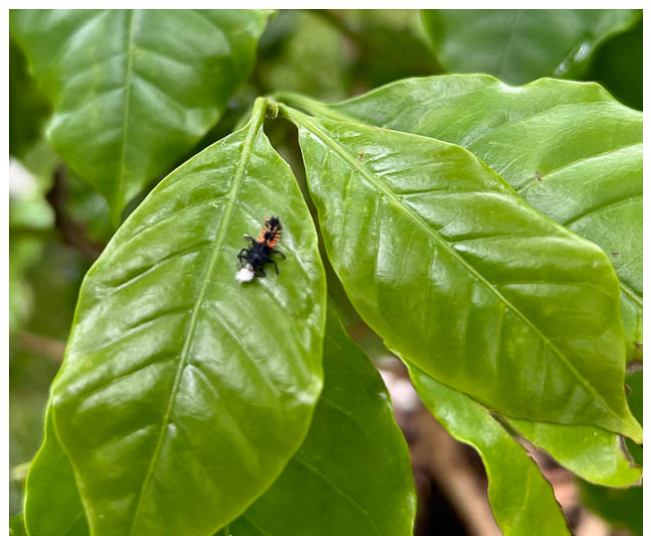
David Freeman, Oaktree Property Care, is finding larvae and damage of the elder shoot borer in McLean, VA. A sign of this pest are wilted shoot tips. This borer overwinters in the egg stage and caterpillars hatch in the spring and bore into new shoots. When they reach maturity in early summer, they tunnel into dead stalks to pupate. Look for frass at the base of old wood. Prune out infested green shoots or mature canes during the growing season. In winter, remove dead canes to reduce pupation. Be sure to remove prunings from the area.



Elder shoot tip borer damage and a larva within the stem.
Photo: David Freeman, Oaktree Property Care

Predator Activity Continues

Bob Kestell, Smithsonian Institution, found a lady beetle larva on a potted coffee plant in Rockville on May 22. Here at the research center this week, we have found 4 lady beetles in the pupal stage as well as spotted a few adults on plants with a lot of aphids.



A lady beetle feeding on prey on a coffee plant.
Photo: Bob Kestell, Smithsonian Institution

Beneficial of the Week

By: Paula Shrewsbury

Crapemyrtle bark scale outbreaks: *Hyperaspis* lady beetles to the rescue!

A few weeks ago in the newsletter ([May 10, 2024](#)), I wrote about *Hyperaspis* lady beetles that are adapted to feeding on soft scales (Coccidae), especially those scale insects that lay their eggs in cottony white ovisacs (*Pulvinaria* spp.). The scale I did not mention was crape myrtle bark scale (CMBS) (Eriococcidae) which is an invasive pest that is attacking, and significantly damaging, many crape myrtle shrubs in the DMV and other areas. Stanton Gill and his team have been monitoring CMBS to determine when the crawler stage of this pest is active. Crawlers are the most susceptible stage to target for most scale species. For the past few weeks, CMBS have been in the egg stage, as reported by Heather Zindash in the May 10th newsletter, which are found under the ovisac left by the female CMBS. Note: by the time you are reading this, CMBS may be hatching into crawlers in some areas. Monitor to determine what life stage is present.

Last week, Nancy Harding (UMD Shrewsbury Lab) went out to monitor the crape myrtle bark scale (they were mostly in the egg stage) that are on the crape myrtles on the UMD College Park campus. Near our building, there are 3 large crape myrtles that have had CMBS for a few years and the populations have been quite high. The trunk and branches of the crape myrtles are covered with black sooty mold. To Nancy's delight, she noticed there were larvae of *Hyperaspis* lady beetles on the crape myrtles. Not just a few larvae, but hundreds of larvae. How exciting! I went out a few days later to check out the *Hyperaspis* and crape myrtles. What I found were hundreds of *Hyperaspis* larvae as Nancy did. When I checked the CMBS population, I noted that there were hundreds or more ovisacs on the trunks and branches of the crape myrtle, but almost all them had been feasted upon and were empty. The *Hyperaspis* lady beetle larva uses its chewing mouthparts to make a hole in the ovisac. The [larva then sticks its head into the hole and eats up all the eggs](#) (video by M.J. Raupp, UMD). When all the eggs in that ovisac are consumed, the larva moves onto



White, wax covered larva of a *Hyperaspis* lady beetle foraging on crape myrtle bark scale. Note the chewed openings on some of the ovisacs indicating that a *Hyperaspis* has fed on the eggs in the ovisac.

Photo: M.J. Raupp, UMD



A pair of *Hyperaspis* lady beetle adults, most likely *H. bigeminata*, that were on a plant with crape myrtle bark scale last year. *Hyperaspis bigeminata* is also known as twice twin-spotted lady beetle. Note the two pairs of red spots and their head is also red.

Photo: M.J. Raupp, UMD

the next ovisac. There were very few healthy ovisacs or live CMBS to be found. *Hyperaspis* lady beetles were providing excellent biological control of CMBS, an impressive biological event to witness.

Two weeks ago, Heather Zindash reported *Hyperaspis* larvae on CMBS, and I have looked at CMBS on a few other crape myrtles and also found *Hyperaspis* larvae. It looks like *Hyperaspis* lady beetles are showing up at different sites and may be a significant predator of CMBS. When you are monitoring your crape myrtles for scale, be sure to watch for natural enemies such as *Hyperaspis* adults or larvae, and their signs (ex. holes in the ovisacs). Take the presence of natural enemies into account when choosing your pest management tactics.

Weed of the Week

By: Chuck Schuster, UME

Recently a phone call was received about this weed mixed in a landscape. How can it be controlled? Goutweed, *Aegopodium podagraria* L. is being found in landscapes and in some nursery settings currently throughout Maryland. Goutweed will sometimes cause concern with its growing habit of “leaves of three”, but this plant is in a different family altogether than poison ivy. Goutweed, also known as Bishop’s-Weed and Snow-On-the Mountains. It is from the carrot family (Apiaceae family) and considered as a desired plant by some. It is classified by others as an aggressive invasive. It is a creeping perennial that can grow to three feet in total height. It prefers moist shaded areas in most cases, but has been found in open areas of full sun. One of the reasons it is considered an aggressive herbaceous plant is that it has rhizomes, which increase the difficulty to obtain control. It is classified as invasive in some states. The leaves are found in groups of three with each having three leaflets, called triternate. This is one of the plants some people will love and will purchase to plant. The plant can be found variegated and sold in garden centers, the weed form having a lighter green leaf color. White, five-petaled flowers are small in size and can be found in bloom currently (May) and will continue to bloom through mid to late summer. These flowers are found on a leafy stem, which will reach heights up to three feet tall. Seeds are similar to carrot seeds, maturing in late summer. In understory settings, flowering stems rarely develop. This plant produces a long, white rhizome, which branches often. Goutweed produces a dense cover or canopy often preventing other vegetation from emerging. In the cultivated form, it is often used as a ground cover.



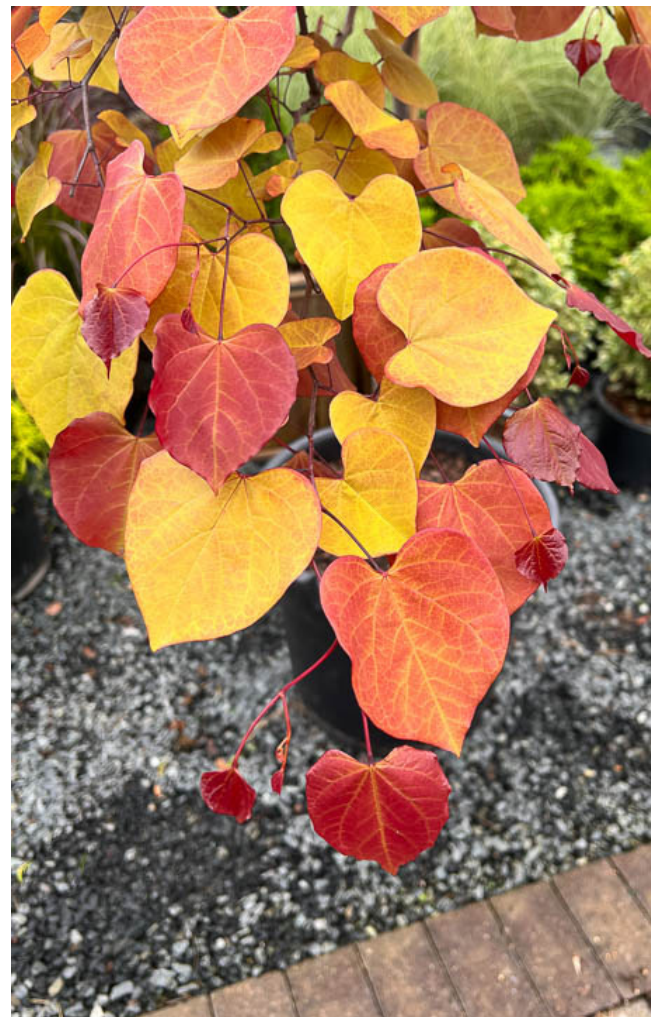
Goutweed foliage
Photo: Chuck Schuster, UME, Emeritus

Goutweed is difficult to control by mechanical means including pulling. The rhizomes, once broken, will create a new plant. Chemical control in landscape settings is possible using glyphosate products that will translocate into the roots/rhizomes. Remember to use extreme caution near desired plant materials. Carefully use where root to root contact may occur. Pre-emergent products do not work well with this plant as it also uses vegetative reproduction. Covering early in the season (mulch with landscape fabric) to prevent photosynthetic action can be a method of control. This method depletes the carbohydrate reserve, thus weakening the plant. This needs to be done early in the season prior to the plant storing reserves for the fall and winter. The smother and cover method is not always successful. Selective herbicides including 2,4-D, dicamba, and/or triclopyr can be used in turf areas successfully. Use of contact herbicides (Prizefighter, Burnout etc) are not as effective unless one is prepared to return to the site and repeat applications at least weekly, as this plant will leaf out readily after defoliation.

Plant of the Week

By: Ginny Rosenkranz

Cercis canadensis 'Flame Thrower' is a cultivar of the Eastern redbud, a small native deciduous tree that grows 15-20 feet tall and 10-15 feet wide with heart-shaped leaves. It thrives in full sun to part afternoon shade, and prefers fertile moist but well drained soils. 'Flame Thrower' is a cross between *C. canadensis* 'The Rising Sun' that has leaves that start out apricot then turn golden yellow and then green, and *C. canadensis* 'Ruby Falls' that has a weeping or cascading silhouette and has dark maroon to red leaves. The cross created a non-cascading, but slight pendant habit and the leaves go from burgundy to red as they expand then mature to chartreuse green, creating a colorful combination of colors throughout the seasons. The 3-5-inch leaves are arranged in an alternate fashion and the autumn color is a soft golden yellow. In April, the rose-pink pea-shaped ½ inch flowers cover the bare branches in clusters in the early spring, growing on new and old stems. The fruit is incased in brown flat oblong 2-4-inch seedpods that hold 5-9 seeds per pod. Plants are cold tolerant in USDA zones 5-9 and are hosts to 12 species of Lepidoptera as a larval host in the spring, the flowers share their pollen and nectar with bees, butterflies, and hummingbirds while other birds will eat the seeds in the autumn. *Cercis canadensis* 'Flame Thrower' usually needs to be grown on a stake until it is able to stand on its own and can be used as a specimen, in groups in shrub borders, butterfly and cottage gardens, beside patios and along woodlands. Plants are tolerant of clay, loam and sandy soils, Black Walnut and deer browsing. Insect pests can include borers, caterpillars, Japanese beetles, scale, treehoppers, and webworms. Diseases can include canker, blights, dieback, leaf spots, mildew, and Verticillium wilt.



Redbud 'Flame Thrower' foliage goes from burgundy to red as the leaves expand, then mature to chartreuse green, creating a colorful combination of colors throughout the season

Photos: Ginny Rosenkranz, UME

Pest Predictive Calendar “Predictions”

By: Nancy Harding and Paula Shrewsbury, UMD

In the Maryland area, the accumulated growing degree days (DD) this week range from about **518 DD** (Martinsburg) to **884 DD** (St. Mary’s City). 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.

- Lesser peachtree borer – adult emergence (1st gen) **(468 DD)**
- Oak erricoccin scale (oak felt scale) – egg hatch / crawler **(469 DD)**
- Maskell scale – egg hatch / crawler (1st gen) **(470 DD)**
- Oystershell scale – egg hatch /crawler (1st gen) **(486 DD)**
- Minute cypress scale – egg hatch / crawler **(511 DD)**
- White prunicola scale – egg hatch / crawler (1st gen) **(513 DD)**
- Euonymus scale – egg hatch / crawler (1st gen) **(522 DD)**
- Bronze birch borer – adult emergence **(547 DD)**
- Potato leafhopper – adult arrival **(603 DD)**
- Black vine weevil – adult emergence **(607 DD)**
- Twospotted spider mite – egg hatch **(627 DD)**
- Bagworm – egg hatch **(635 DD)**
- Crapemyrtle bark scale – egg hatch (1st gen) **(638 DD)**
- Cottony camellia / Taxus scale – egg hatch / crawler **(649 DD)**
- Mimosa webworm – larva, early instar (1st gen) **(674 DD)**
- Juniper scale – egg hatch / crawler **(694 DD)**
- Calico scale – egg hatch / crawler **(765 DD)**
- Oak lecanium scale – egg hatch / crawler **(789 DD)**
- Rhododendron borer – adult emergence **(815 DD)**
- Japanese maple scale – egg hatch / crawler (1st gen) **(829 DD)**
- Dogwood borer – adult emergence **(830 DD)**
- European elm scale – egg hatch / crawler **(831 DD)**
- Cottony maple scale – egg hatch / crawler **(872 DD)**
- Winged euonymus scale – egg hatch / crawler **(893 DD)**
- European fruit lecanium scale – egg hatch / crawler **(904 DD)**
- Cryptomeria scale – egg hatch / crawler **(937 DD)**
- Azalea bark scale – egg hatch / crawler **(957 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 May 22)

Annapolis Naval Academy (KNAK)	696	Baltimore, MD (KBWI)	683
College Park (KCGS)	689	Dulles Airport (KIAD)	759
Ft. Belvoir, VA (KDA)	747	Frederick (KFDK)	693
Gaithersburg (KGAI)	627	Greater Cumberland Reg (KCBE)	639
Martinsburg, WV (KMRB)	518	Millersville (MD026)	655
Natl Arboretum/Reagan Natl (KDCA)	861	Perry Hall (C0608)	597
Salisbury/Ocean City (KSBY)	629	St. Mary’s City (Patuxent NRB KNHK)	884
Susquehanna State Park (SSQM2)	616	Westminster (KDMW)	761

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 calculator Thresholds in: Fahrenheit °F Lower: 50 Upper: 95 Calculation type: simple average/growing dds Start: Jan 1

Conferences

June 4, 2024

MNLGA Program: Focus on Garden Centers

Location: Ladew Gardens, Monkton, MD

[To register](#)

June 5 and 6, 2024

Biological Control Conference for Greenhouses, Nurseries, and Landscapes

Location: Carroll Community College, Westminster, MD

[Registration via Eventbrite](#)

June 14, 2023

Eastern Shore Pesticide Recertification Conference

Location: via Zoom

[For more information and to register.](#)

After you register, you will be emailed the Zoom link.

June 20, 2024

UMD Extension and MNLGA Technology Field Day for Nurseries

Location: Ruppert Nurseries, Laytonsville, MD

June 28, 2024

Procrastinator's Pesticide Recertification Conference

Location: Montgomery County Extension Office, Derwood, MD

[Registration information](#)

September 17 and 18, 2024

Cut Flower Program

Locations: Central Maryland Research and Education Center, Ellicott City, MD and locations in Howard Co.

October 9, 2024

MNLGA Retail Day

Location: Homestead Gardens, Davidsonville, MD

Go to the [IPMnet Conference Page](#) for links and details on these programs.

Commercial Ornamental IPM Information
<http://extension.umd.edu/ipm>

CONTRIBUTORS:



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



Paula Shrewsbury
Extension Specialist
pshrewsb@umd.edu



Karen Rane
Plant Pathologist
Retired



Chuck Schuster
Retired, Extension Educator
cfs@umd.edu



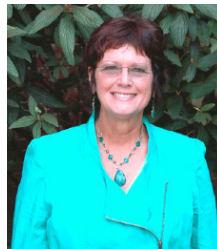
David Clement
Plant Pathologist
clement@umd.edu



Andrew Ristvey
Extension Specialist
aristvey@umd.edu



Ginny Rosenkranz
Extension Educator
rosnkranz@umd.edu



Nancy Harding
Faculty Research Assistant



Fereshteh Shahoveisi
Assistant Professor
fsh@umd.edu



Kelly Nichols
Extension Educator
kellyn@umd.edu

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