

Commercial Horticulture

July 22, 2022

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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 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) and Kelly Nichols (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)

Crazy Hot in 2022

By: Stanton Gill

England experienced record temperatures this week with temps topping 100 °F. Portugal and parts of France are also experiencing record heat waves. Here in Maryland, we have been relatively cool for July, until this week, when it finally became hot and humid. In a sense, we have lucked out so far in Maryland this summer. This is not the case for the West Coast and parts of the mid-west where major drought and high temperatures are plaguing the regions.

Catalpa Sphinx Moth Caterpillar

George Birmingham, Montgomery County Parks, found a sphinx moth caterpillar on July 16 at Black Hills Park in Montgomery County. We will continue to see these caterpillars through late summer. Spray applications are often not practical, and parasites pretty efficiently take care of this colorful caterpillar. If you have to treat, then use Bt in the early stages.



Catalpa sphinx moth caterpillar
Photo: George Birmingham, Montgomery County Parks

Boxwood Leafminers – Into Diapause

By: Stanton Gill

I examined some boxwood foliage from CMREC on Wednesday. With the hot temperatures, the larvae have moved into the summer diapause stage. When the insects go into the diapause stage, they stop feeding and move very little. Now is not the time of year to apply insecticides for this pest. When it cools down a bit in August, the larvae will start feeding and moving again, providing an opportunity to kill them with systemic insecticides.



Storm Damage

By: Karen Rane and Dave Clement

As a result of severe storms and high winds on the evening of July 12, many communities are dealing with downed trees and branches. Healthy trees can be damaged by extremely strong winds, but trees with pre-existing problems, like large trunk cankers, cavities or dead branches, are particularly vulnerable. For example, the trunk of this maple was already weakened by a large elongate canker, and it was at this point that breakage occurred (Figure 1, 2). Figures 3 and 4 show a large declining mature willow oak that lost several large branches in the storm – cavities and wood decay are visible in the broken ends of the branches.

Proper tree care that promotes healthy growth and reduces the chances of wood decay can help reduce the effects of some storm damage. Planting trees at the proper depth, avoiding root damage from construction activities within the tree root zone, and pruning out dead and dying branches, will help maintain tree health and minimize wood decay problems.



Figure 1 Storm damage to maple.
Photo: K. Rane, UMD



Figure 2 Maple trunk broken at site of previous canker.
Photo: K. Rane, UMD



Fig.3. Declining willow oak that lost several large branches.
Photo: K. Rane, UMD



Fig. 4 Closeup of willow oak with storm damage showing dark decayed wood and branch cavities.
Photo: K. Rane, UMD

Spotted Lanternfly Update

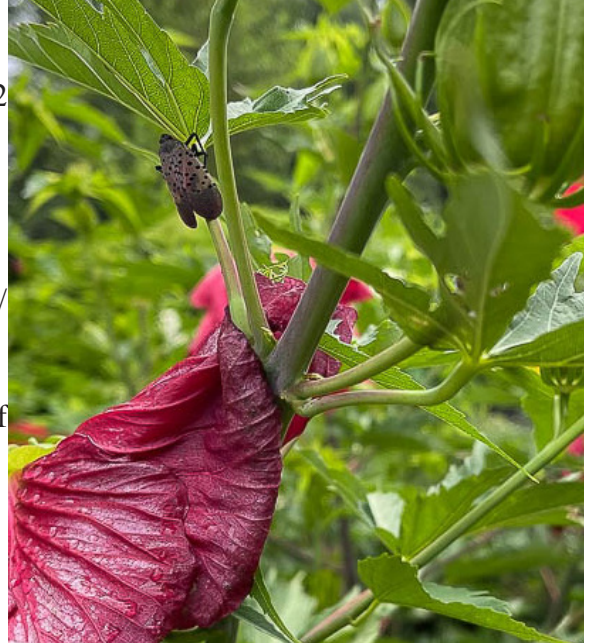
By: Stanton Gill

Thanks to each of you who have sent in reports and pictures of adult spotted lanternflies showing up this week in Maryland and Pennsylvania.

Josh Warner, Antietam Tree, sent this picture of an adult SLF on Tuesday. Here are his comments: “First adult SLF observed on north edge of Hagerstown Monday morning. At least 4 adults and 2 different nymph stages were seen.”

Carmen Chlada, Design With Nature, reported on July 18: “No adults yet. 4th instar spotted in Bel Air today.”

Megan Carr, Baltimore City Rec & Parks: “The most recent TPM/IPM Weekly Report requested sightings of adult spotted lanternfly; we in Baltimore City are tracking SLF and other incipient invasives via an iNaturalist project, and received our first reports of adults just last Friday, July 15. These are coming from some of the densest (i.e., most heat island-influenced) parts of the city, which may be unsurprising. We still have some 4th instar reports from areas away from the urban core as of last Thursday. If viewing the iNaturalist reports is of interest, they can be found [at this link.](#)”



Elaine Menegon, Good’s Tree and Lawn Care, found fourth instar SLF in Marietta, PA on July 14, but no adults yet. sent pics

An adult spotted lanternfly fly found in Hagerstown this week.

Photo: Josh Warner, Antietam Tree

Robert Dallmann, Davey Tree Experts, passed along photos taken by his technician, Al Fowler, who was working on an HOA property in Warwick, Md. and spotted fourth instar SLF.

Be extremely cautious if you drive your trucks or other vehicles into spotted lanternfly infested areas such as Cecil and Harford Counties. Spotted lanternflies are in 4th instars and some adults, both of which readily hitch rides on vehicles in late July through August.

The spotted lanternfly quarantine has been expanded in Virginia. The original quarantine area included the counties of Clarke, Frederick and Warren, and the city of Winchester. The Virginia Department of Agriculture and Consumer Services (VDACS) announced on July 8 that quarantine has been imposed on the counties of Albemarle, Augusta, Carroll, Page, Prince William, Rockingham, Rockbridge, Shenandoah and Wythe, and the cities of Buena Vista, Charlottesville, Harrisonburg, Lexington, Lynchburg, Manassas, Manassas Park, Staunton and Waynesboro.

VDACS and USDA-APHIS will work together on quarantine and regulatory procedures, as well as treatment in some areas. Under the quarantine protocol, businesses will be subjected to permitting and inspection requirements when transporting regulated items. These regulated items include the insects themselves and of any life stage (of course, but who would do that?), nursery stock, garden plants, lumber, outdoor equipment, shipping containers and many more.

To find more information about SLF quarantine in Virginia, visit the VDACS website.

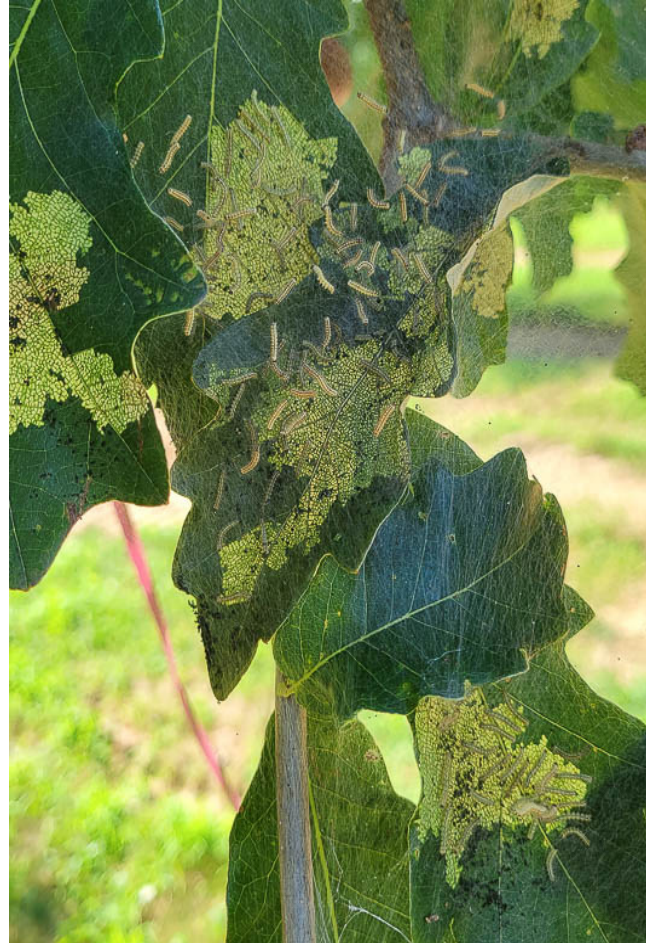
Fall Webworms

Elaine Menegon, Good's Tree and Lawn Care, found second generation fall webworms on a pecan tree in Palmyra, PA on July 20. Marie Rojas, IPM Scout, found them on *Quercus bicolor* in Laytonsville. Fall webworms feed on a wide range of woody plants within webbing they produce on tips of branches. If possible, prune out webbed terminals.

Control: Spinosad and Bt can be used for control. Look for predators and parasites that help keep caterpillars below damaging levels.



Second generation of fall webworms are feeding on a pecan tree
Photo: Elaine Menegon, Good's Tree and Lawn Care



Fall webworm larvae feeding on swamp white oak
Photo: Marie Rojas, IPM Scout

Red Milkweed Beetle

Ben Morris, SavATree, found a red milkweed beetle this week. These beetles are often found on various species of milkweeds and dogbane.

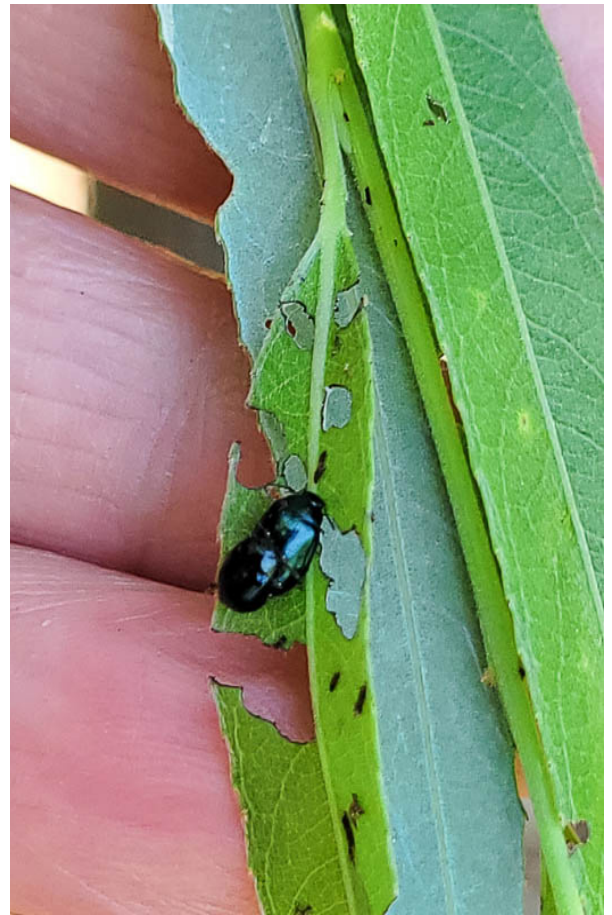


Red milkweed beetle adult
Photo: Ben Morris, SavATree

Imported Willow Leaf Beetles

Marie Rojas, IPM Scout, found imported willow leaf beetles feeding on *Salix alba* 'Tristis' in Laytonsville this week. Look for notches and chewed leaves caused by the adults feeding. Larvae which are also feeding during the summer skeletonize the leaves. There are several generations a year. Adults overwinter under bark or in leaf litter.

Control: Often control is not necessary. Plants will continue to grow and mask the damage. If the damage is not tolerable, then an insecticide treatment might be necessary.



Adult imported willow leaf beetles leave notches and chewed holes in leaves after feeding.
Photo: Marie Rojas, IPM Scout

Japanese Beetles on *Tilia*

By: Stanton Gill

No doubt about it. If you have *Tilia* trees growing where Japanese beetles are active, you can count on the beetles swarming to the foliage to feed. We shot this picture on July 21 at a nursery. Everywhere in the nursery that *Tilia* was growing, there was heavy Japanese beetle feeding. Another favorite host is birch. At this point in the season, the Japanese beetles have rained their damage on these plants. Plan next year to get out early with Mainspring or Acelepryn applications.



***Tilia* trees are often heavily damaged by Japanese beetle adults.**
Photo: Stanton Gill

IPM Scouting Reports

Marie Rojas, IPM Scout, reports the following insect activity in Laytonsville:

- There are very high populations of white prunicola scale on *Prunus* 'Okame'.
- Powdery mildew is infecting *Platanus* 'Exclamation'.
- Aphids are causing a lot of sooty mold on *Tilia* 'Greenspire'.

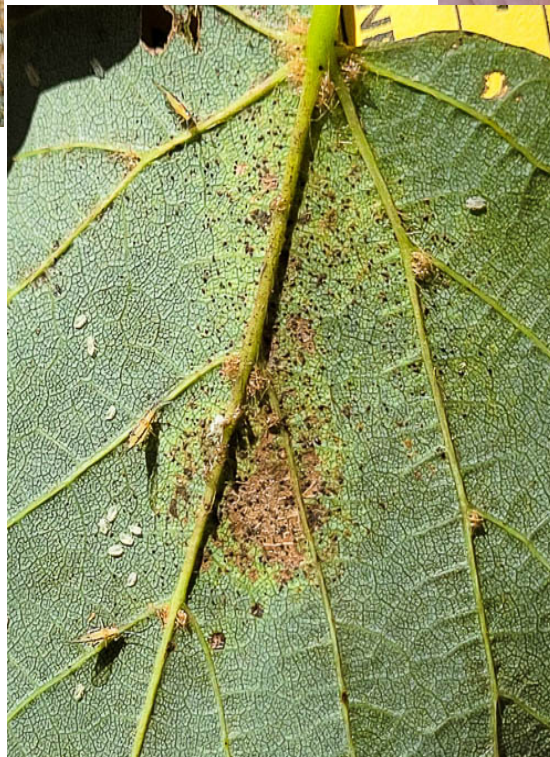
Bagworms: Mark Schlossberg, ProLawn Plus, Inc., is reporting that he is still seeing newly hatched and first and second instar bagworms in Towson. Bagworm hatch has been spread out over a long period of time this season.



White prunicola scale on *Prunus* 'Okame'



Powdery mildew on *Platanus* 'Exclamation'

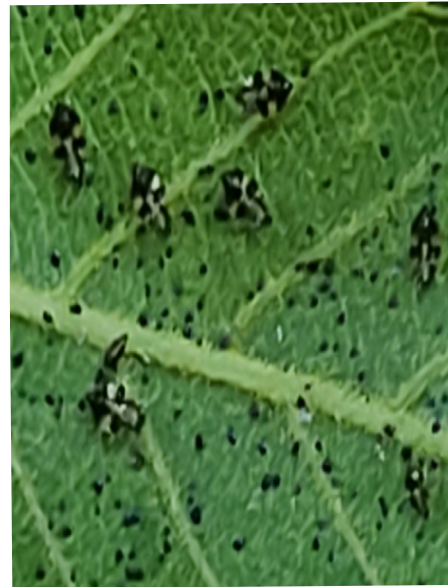


Aphids on *Tilia*

Photos: Marie Rojas,
IPM Scout

Lace Bugs

Ben Morris, SavATree, found lace bugs on sawtooth oak this week. There are several generations of this lace bug each season. Usually, these lace bugs do not cause significant damage to warrant control in the landscape. Look to see if predators such as lace wings are present.



If you see stippling on the top sides of leaves, look underneath for insects such as lace bugs
Photos: Ben Morris, SavATree



Eastern Hercules Beetle

Phil Suchman, Marshall's Riverbank Nurseries, Inc., He noted that he found "another adult hercules beetle this morning in Salisbury. Looks like it wants to go inside our office, with temperature lately who claim blame him?"

Eastern hercules beetle found in Salisbury on July 22
Photo: Phil Suchman, Marshall's Riverbank Nurseries, Inc.

Beneficial of the Week

By: Paula Shrewsbury

News fly: an interesting syrphid fly

This is the time of year when flowering plants are profuse, providing an abundance of resources for omnivorous natural enemies such as nectar, pollen, and prey. Syrphid fly adults are common on a diversity of flowers. Syrphid flies, also known as flower or hover flies, are beneficial insects in the order Diptera (true flies) and the family Syrphidae. As adults they are pollinators and as larvae they are predators. There are more 900 species of syrphid flies North America. I wrote about syrphid flies as a group in the [July 10, 2020 IPM Newsletter](#). Today, I would like to discuss an interesting syrphid fly species, *Milesia virginiensis*, also known as the News bee, the Yellowjacket hover fly, or the Virginia hover fly.

News fly adults are relatively large (~18-21 mm / 0.7 – 0.8” in length), and are bright yellow, black, and brown. The News bee could be mistaken for a European hornet and some say it mimics the Southern yellowjacket, although the News fly is larger than worker Southern yellowjackets. News flies also produce an ominous loud buzz making them seem even more like a yellowjacket / hornet than a harmless fly.

News flies are found throughout most of eastern North America. Someone reported seeing a News fly this past week in West Virginia. There have been over 75 reports of News fly adults in Maryland on the [Maryland Biodiversity Project website](#). News fly [adults are active](#) from mid-summer through the fall. Adults are seen on a diversity of flower species, which would make them pollinators, and hovering or landing on leaves and on the ground on forest edges and in sunny spots in forests. News bee larvae are believed to feed in wet rotting cavities of tree stumps and logs.



Image of a News bee (really a syrphid fly) on a flower taken in Allegany Co. MD.

Photo from MD Biodiversity Project by J. Moore



Image of a News bee (Syrphidae) on a flower taken in Washington Co. MD.

Photo from MD Biodiversity Project by J. Brighton

Also, of interest is the American folklore associated with News bees, which happens to be how they got their name. The News bee is known to hover in front of a person, and with the hovering combined with the loud buzzing, it is believed the News bee is “giving them the news”. More specifically folklore in the Appalachians believe “News bees hover around close to folks . . . because they are listening. After listening to the latest news, the bees take it back through the community sharing the information along the way...”. [The University of Wisconsin- Madison has a site the summarizes various folklore associated with News bees that date back to the 1800’s.](#)

Weed of the Week

By: Chuck Schuster

Hedge mustard, *Sisymbrium officinale*, is an annual, but can be either a winter or summer one. Used as an herb with medicinal properties, it is also being found in nursery and landscape settings in the mid-Atlantic states currently. As a winter annual, it will overwinter in the rosette stage. It is a tall erect annual with alternate leaves growing to three feet in height. Stems are light green to purplish green in color, having white hairs near the lower portion of the stem, but the upper portion will be hairless. Individual leaves are narrow, divided into three lobes being lanceolate-ovate in shape. The upper stems will terminate into a slender raceme with yellow flowers. These can be up to ten inches in length. Small cylindrical seedpods will develop, and one plant can produce between 2,500 and 9,000 seeds annually. Hedge mustard has a white taproot.

Control may be obtained by mechanical methods in landscapes. When found in turf or away from desirable trees and shrubs many broadleaf herbicides will provide excellent control. In landscape and nursery settings, pre emergent products that include Surflan, and Snapshot are labeled, Goal can be used as a pre emergent and early post emergent product. Glyphosate can be used in limited settings being cautious not to contact the stem, bark or leaves of desirable species.



Hedge mustard
Photos by Chuck Schuster, UME

Plant of the Week

By: Ginny Rosenkranz

Cryptomeria japonica 'Globosa Nana' is an evergreen dwarf Japanese cedar and is grown for its dense beautiful blue green foliage and its small size. 'Globosa Nana' thrives in full sun or very light shade and rich, fertile, acidic, moist but well-drained soils. Winter hardy from USDA zones 5-8, this Japanese cedar has fragrant, sharply pointed awl-shaped needles that are soft to the touch. The needles grow $\frac{3}{4}$ of an inch long and are arranged in a beautiful spiral fashion on the stems. During the cold winter months, plants need some protection from winds, and the needles change to a burgundy-red color giving the plants 4 seasons of beauty. A lovely

addition to any small garden, the dwarf 'Globosa Nana' grows in a dome shape reaching 3-4 feet tall and wide. Pruning is never needed and is considered resistant to most insect and disease pests. Plant are at home in cottage or Asian gardens, or anywhere a small lovely evergreen is needed.



***Cryptomeria japonica* 'Globosa Nana'**
Photos: Ginny Rosenkranz, UME

Degree Days (as of July 20)

Aberdeen (KAPG)	1823
Annapolis Naval Academy (KNAK)	2043
Baltimore, MD (KBWI)	2116
College Park (KCGS)	1963
Dulles Airport (KIAD)	2011
Ft. Belvoir, VA (KDA)	2019
Frederick (KFDK)	1853
Gaithersburg (KGAI)	1887
Gambrils (F2488, near Bowie)	2002
Greater Cumberland Reg (KCBE)	1837
Martinsburg, WV (KMRB)	1776
Natl Arboretum/Reagan Natl (KDCA)	2332
Salisbury/Ocean City (KSBY)	2119
St. Mary's City (Patuxent NRB KNHK)	2355
Westminster (KDMW)	2203

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

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 **1776 DD** (Martinsburg, WV) to **2355 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.

- White prunicola scale – egg hatch / crawlers (2nd gen) (**1637 DD**)
- Obscure scale – egg hatch / crawlers (**1774 DD**)
- Spotted Lantern Fly – egg laying (**1825 DD**)
- Orangestriped oakworm – egg hatch / early instar (**1917 DD**)
- Magnolia scale – crawler (**1938 DD**)
- Fall webworm - egg hatch/early instar (2nd gen) (**1962 DD**)
- Maskell scale – egg hatch/crawler (2nd gen) (**2035 DD**)
- Euonymous scale – egg hatch / crawler (2nd gen) (**2235**)
- Mimosa webworm – larva, early instar (2nd gen) (**2260**)
- Japanese maple scale – egg hatch / crawler (2nd gen) (**2508 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.

Conferences

IPM Scouts' Diagnostic Session

August 25, 2022

Location: Wye Research and Education, Queenstown, MD

Urban Tree Summit

Dates: September 7, 8, 14 and 15, 2022

Montgomery Parks and Casey Trees, Washington D.C., present the eleventh annual conference — Urban Tree Summit. Presentations will focus on the health and welfare of trees in our increasingly developed landscapes. Learn from some of the world’s leading experts about innovative efforts to plant, protect and preserve trees in urban and suburban settings.

Registration Link: <https://montgomeryparks.org/about/divisions/arboriculture/urban-tree-summit/>

September 7, 2022

MNLGA Nursery Field Day

Location: Longwood Gardens

September 27, 2022

Cut Flower Tour

Location: Zekiah Ridge Farm, La Plata, MD, and second site TBD

Fall Horticulture Classes at CCBC

You can find out about Fall Horticulture classes at CCBC by going to [their website](#).

Fall Environmental Horticulture and Sustainable Agribusiness Classes at Montgomery College

You can find out about fall horticulture classes at Montgomery College by going to their [program website](#).

HORT 215 Integrated Pest Management and Entomology: Hone your pest management skills with Stanton Gill. Explore the identification of key pests, their life cycles and control methods, with emphasis on integrated pest management strategies.

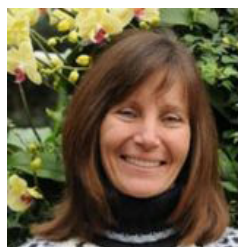
HORT 222 Sustainable Turfgrass Management: Discover the proper way to manage turfgrass by using the newest and most adaptable turfgrass varieties for minimum insect and disease problems. Organic lawn care and alternative groundcovers will be discussed.

**HORT 215 and HORT 222 and other select courses in the Program, have been approved by the MD Department of Agriculture to prepare Greens Industry professionals for pesticide application certification in Category III.

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
rosnkranz@umd.edu



Nancy Harding
Faculty Research
Assistant

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

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