UNIVERSITY OF MARYLAND EXTENSION

TPM/IPM Weekly Report

for Arborists, Landscape Managers & Nursery Managers

Commercial Horticulture | Special Report | February 15, 2023

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) 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)

Early Spring in 2023?

Karen Rane, UMD, pointed out the National Phenology Network website to us this week. She noted that there are interesting "maps of how early spring is this year throughout the country". This site reports the Chesapeake Bay area is 3 - 4 weeks ahead of a "normal spring".

https://www.usanpn.org/usa-national-phenology-network

Some areas in Maryland are seeing daffodils, and other early flowers, in bloom.

Early Spring Weather Means Early White Mold

By: Karen Rane, UMD

We commonly see Sclerotinia blight, also called white mold, in March and April on greenhouse bedding and pot plants, particularly on the Eastern Shore and southern Maryland. This year, we received our first case of white mold in early February, on cut flowers grown in a high tunnel. The fungus, *Sclerotinia sclerotiorum*, can infect a wide variety of herbaceous ornamentals, vegetables, soybeans and weeds. Even some woody ornamentals, like forsythia, are susceptible. Symptoms of the disease include crown rot, stem rot, and flower blight. The pathogen produces hard, black structures called sclerotia that are irregular in shape and about 1/8 to 1/4 inch in size. Under cool, moist conditions, sclerotia produce cup-like spore structures that release airborne spores that cause infections. Humid conditions encourage fluffy white fungal growth to develop on infected plant parts as well. Sclerotia are very resistant to environmental extremes, and can survive in soil and plant debris for several years. Management of Sclerotinia involves excellent sanitation – discard symptomatic plants, but do not compost them (many composts do not reach the uniformly high temperatures needed to kill thick-walled sclerotia). For commercial greenhouse ornamental growers, soil drench application of fungicides such as Terraclor or thiophanate-methyl can help protect uninfected plants from Sclerotinia blight. Some growers report successful management of white mold with a biological control product called Contans WG. This product contains a fungus (*Coniothyrium minitans*) which breaks down sclerotia when applied to soil in and around high tunnels pre-plant or post-harvest.

For more information and photos of white mold-infected plants, check out this recent article from e-Gro: https://www.e-gro.org/pdf/2023-12-4.pdf

Bleached, rotted crowns of iris with Sclerotinia blight, also called white mold.
Photo: Karen Rane, UMD

Rotted base of iris leaf, showing white fungal growth and black sclerotium (circled) of Sclerotinia.
Photo: Karen Rane, UMD

Sooty Mold and Beech Blight Aphids

Steve Nagy, Mead Tree and Turf, found sooty mold (*Scorias spongiosa*) that grows on the honeydew secreted by beech blight aphids, on American beech this week. This aphid is found throughout areas where there are beech trees, but it's considered a nuisance, not a real problem in forests. Ohio has a good web page on beech blight aphids at https://bygl.osu.edu/node/1871. At the end of the Ohio article webpage, it includes the following information: "A Possible Cascading Effect on Forest Regeneration - Beech blight aphids may not have a direct impact on their tree hosts; however, they may have an indirect impact on forest regeneration. A study published in 2014 illuminated a link between these aphids and decreased growth and survival of tree seedlings beneath heavily infested trees. The study described it as a "cascading effect" associated with the triumvirate of American beech, beech blight aphids, and the unique *S. spongiosa* fungus." The honeydew and sooty mold impact leaf function.

This sooty mold (*Scorias spongiosa*) that grows on the honeydew secreted by beech blight aphids. Photo: Steve Nagy, Mead Tree and Turf

Warm Weather and Tick Activity

By: Stanton Gill

The warm weather last week and this week has been great for a winter reprieve for February weather. We are getting reports of daffodils blooming in Westminster, crocus popping up in Takoma Park and even forsythia is in bloom in several locations in central Maryland and on the Eastern Shore of Maryland. People were out hiking on trails with the warm weather over the weekend. We found black legged ticks active in Westminster and Brookeville last Saturday. Since the black legged tick is a potential vector of Lyme disease, be sure to check yourself thoroughly after hiking on trails and hanging out at the edge of wooded areas. Maryland is a bit of a hotspot for deer tick activity, especially around counties surrounding the Chesapeake Bay. I use pants and shirts treated with permethrin when walking in my woods, and it has worked well for the last 8 years. You can purchase permethrin treated clothing from sports stores or online.

While giving a presentation in Grantsville, PA for the Pennsylvania Nursery Association, I saw an interesting printed booklet entitled "Lyme Disease and Associated Diseases". It is described as a plain language introduction to tick borne diseases. It is published by the Lyme Disease Association of Southeastern Pennsylvania, Inc. You can obtain a copy by visiting their web site at www.LymePA.org.

The University of Wisconsin has come up with a novel method of teaching entomology students and the general public how to search for deer ticks on a body. They are using Vanessa and Valerie, tick mannequins

to help people locate ticks. At Extension and educational outreach events in Wisconsin, Vanessa and Valerie allow people to train their eye and to practice how and where they would check for ticks on themselves and others. Dead ticks are glued to commonly reported attachment areas: the hairline, back of the knees, and under waistbands, to name a few. People can readily see what it looks like to have a tick tucked away in an armpit and how they're easier to spot on light-colored clothes compared to darker colors. Maybe we can rent them out for Extension education events in Maryland. Stay tuned. Read more on this technique at https://entomologytoday.org/2023/02/10/americas-next-top-entomology-outreach-model-tick-check-mannequin/

Infrastructure Bill and the Horticulture Industry

By: Stanton Gill

One of the provisions of the infrastructure bill is to encourage the adoption of electric powered devices. One device they have listed is commercial electric mowers, including Zero-Turn mowers. Looking into this we still have a way to go. The prices are not inexpensive, but on the plus side the maintenance is greatly reduced and obtaining a tax break should help take the sting out of a purchase. Look into the tax incentive and if it applies before you make a leap.

Mean Green claim is that they introduced the world's first commercial grade, electric, zero-turn mower over a decade ago. They also claim only Mean Green offers a commercial grade mower that can last all day on a single charge. Here is their product that is being sold on the market place presently: **Commercial Ride-on ZTR.** EVO proclaims it is the flagship mower in the Evolution Commercial ZTR Series. With up to 8 hours of continuous mowing time, an expansive 74″ deck, speeds up to 13 mph, 20-degree slope ability, and horsepower comparable to a 40-horsepower diesel mower. Mean Green mowers use single fixed batteries to run continuously for up to 8 hours on a single charge. It is a lithium battery. I called a dealership in Hanover, PA to see how they are selling. They said they had sold a homeowner model but have not sold a commercial 74" deck zero turn as of date. The price is $48,000. The dealership salesperson in Hanover told me they are made in Ohio.

Husqvarna is working on an electric zero-turn mower, but I could not locate one in the marketplace yet. They do have self-propelled walk behind mowers for commercia use. Under their pro-grade line, they list the Husqvarna Lawn Xpert LE-322R lawn mower. The claim is that this "self-propelled mower cuts through thick grass easier and lasts longer on a single charge". Part of the MAX Battery Series, these products are designed to be easy to use while still giving you the power you need to finish the job the first time. Kubota has an electric zero-turn lawn mower that the dealerships tell me is supposed to be out in 2024.

Everything appears to be heading toward electric, but we are still in the early stages for zero-turn mowers at this point.

Howard County Extension Agent Hired

The Howard County Extension Ag Educator position has been unfilled for the last 12 years. Recently a candidate was hired. **Nathan Glenn** has been hired as the new Agriculture and Food Systems Extension agent associate in Howard County. He served five years as agriculture educator/agribusiness development agent for Hope in the Harvest/Liberia International Christian College in Liberia, West Africa. As an independent consultant, Nathan developed AgriCorps training program curricula and train-the-trainer workshops for 4-H Liberia Field Agents. He was an AgriCorps Fellow/Booker Washington Institute agriculture teacher in Margibi County, Liberia. Nathan held agriculture teacher positions at Harford and Washington County Public Schools. He was an undergraduate teaching assistant at University of Maryland, College Park. Nathan had a variety of agriculture-related internships, and college and community leadership roles. He received B.S. degrees in animal science and education from UMD and a MBA from Anderson University. Nathan grew up on the Glenn Family Farm in Highland, Maryland. He will start March 13th.

IPM Report Indexes for 2022

The subject indexes (left column on the web page) for the 2022 Landscape and Nursery IPM reports are now updated.

Early Monitoring

We are starting to accumulate degree days. Early activity includes spruce spider mite egg hatch at 179 degree days and white pine weevil adult activity at 84 degree days.

Degree Days (as of February 14)

Aberdeen (C1620)	14
Annapolis Naval Academy (KNAK)	26
Baltimore, MD (KBWI)	40
College Park (KCGS)	34
Dulles Airport (KIAD)	39
Ft. Belvoir, VA (KDA)	36
Frederick (KFDK)	19
Gaithersburg (KGAI)	31
Gambrils (F2488, near Bowie)	39
Greater Cumberland Reg (KCBE)	15
Perry Hall (C0608)	12
Martinsburg, WV (KMRB)	9
Natl Arboretum/Reagan Natl (KDCA)	49
Salisbury/Ocean City (KSBY)	49
St. Mary's City (Patuxent NRB KNHK)	62
Westminster (KDMW)	37

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

Go to the IPMnet Conference Page for links and details on these programs.

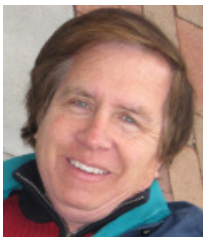
February 16 and 17, 2023
Chesapeake Green Horticultural Symposium
Location: Maritime Institute, Linthicum Heights, MD

February 22, 2023
Southern Maryland Pest Management Conference
Location: Baden Fire Hall, Brandywine, MD

36TH ANNUAL LAHR NATIVE PLANTS SYMPOSIUM
Saturday, March 25, 2023, 9:30 a.m.–3:45 p.m.
Native Plants: From the Wild to the Garden
Location: Administration Building Auditorium, U.S. National Arboretum
Reserve your spot now! $100 (FONA members $80)
View the full program here.

Commercial Ornamental IPM Information
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
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.