UNIVERSITY OF MARYLAND EXTENSION

TPM/IPM Weekly Report

for Arborists, Landscape Managers & Nursery Managers

Commercial Horticulture **September 26, 2019**

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 sklick@umd.edu

Coordinator Weekly IPM Report:
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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 (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)

Dry Weather - Impact Will Show Up

By: Stanton Gill

We are into about 8 weeks of a severe dry period with plenty of sunny weather. It has been great weather to work in, but very tough on newly transplanted plant material. The soil is bone dry and plant foliage is losing tremendous amounts of water each day. This situation makes it really tough on newly transplanted plant material. You need to make sure you or your customers are watering several times during the week as long as this hot, dry weather continues. If this plant material goes into winter on the stressed side, it will suffer much more winter injury with dieback showing up in the spring and summer of 2020.

Irrigating during this extended period of abnormally dry conditions is critical to helping plants survive

Trees Dying

By: Stanton Gill

Thanks to all you who sent in emails with pictures of dying oaks and other trees. Ok – STOP Now. No more pictures. I was overwhelmed with the number of emails I received on dying trees. Karen Rane, David Clement, and I are visiting some sites and trying to figure out what is going on. There is little doubt that compromised root systems from the previous rain soaked periods of 2018 and early 2019 are one of the major factors at work.

I can tell you the ground is bone dry and plants are under major stress. For the last 8 weeks we have basically had California style weather with bright sunny days and very little rain, if any.

Mark Schlossberg, ProLawn Plus, Inc., sent a link to the NOAA website which shows September tied with 2005 as the driest for Reagon National Airport and was the second driest for BWI and Dulles. There are only a few more days left in the month to see if these rankings change.

Tuliptree Scale

By: Stanton Gill

I examined tuliptree scale in the New Windsor area on Sunday and crawlers were just starting to emerge. Check deciduous magnolia for this soft scale. Systemics such as Dinotefuran work on this scale. Talus and Distance applied at the crawler stage are very effective.

Check tuliptree scale infestations for crawlers

Milkweed Bugs

Ron Miller, Super Lawns, found milkweed bug nymphs this week. Most likely they are large milkweed bugs, but there is also a species that is similar called small milkweed bugs (which are actually about the same size). Both milkweed bugs feed on the pods, but the small milkweed bug is also a predator of other insects. Since they show up later in the season, they are rarely a problem for the plants.

Milkweed bugs feed on the pods

Dragonfly Swarms

Pat Sherman sent along this article (https://www.wbur.org/hereandnow/2019/09/17/dragonflies-swarm) on dragonfly swarms. It includes a link to research being conducted to figure out more of the details as to why they swarm. Bruce Hellerick, Brightview, saw swarms of dragonflies in Bucks Co, PA on September 22. He noted that there were hundreds of them moving across open fields.

Beneficial of the Week

By: Paula Shrewsbury

If you have an aphid outbreak you likely have predatory midge larvae!

An adult aphid midge, *Aphidoletes aphidimyza*. Note the long legs and antennae, and slender body that are characteristic to midge adults. Photo: J. Gross, BugGuide

Midges are true flies (order: Diptera) and many are in the family Cecidomyiidae. Some Cecidomyiids are gall making midges and attack plants, while others are predatory and feed on spider mites and aphids. Examples of common plant feeding midges are boxwood leafminer and fungus gnats which are often considered pests. Two common predatory midges are *Aphidoletes aphidimyza* which feeds on aphids, and *Feltiella* spp. which are great predators of spider mites. Adult midges are "mosquito-like" in appearance. They are about 2-3 mm in length and have long legs and long thin antennae. Immatures or midge larvae, a.k.a maggots, are legless and tend to be tapered in appearance. The wider end is the posterior and the tapered end is the anterior where the mouth is located. There are 3 instars (larval stages) which start off very tiny and in the last instar reach only 2-3 mm in length.

Aphidoletes aphidimyza larvae feed on over 60 species of aphid and are often referred to as the aphid midge. Aphid midges can be purchased commercially as pupa and are frequently used in augmentative biological control programs in greenhouses. In nature aphid midges occur on a variety of cropping systems and plant types including ornamental plants. The larvae are most commonly noticed on plants in mid-late season that are infested with aphids. There can be several generations of aphid midges per season. As adults they are active at night (nocturnal) and therefore seldom seen. Adults feed on honeydew excreted from phloem feeding insects (ex. aphids). Adults live up to about two weeks and an individual female can lay about 70 orange colored eggs either singly or in clusters on leaves of plants during her life time. Adult females are very good at finding plants that have aphids to lay her eggs, ensuring a food source for her larvae when the hatch (what a good Mom!). The orange colored midge larva attacks the leg joint (knee) of aphids, paralyzes them, and then sucks the insides out of the aphid (CLICK HERE to see a video and CLICK HERE to see a second video of an aphid midge larva feeding on aphids). The circle of life sounds a little torturous! The remaining aphid body turns dark in color and often stays attached to the leaf. A single larva may eat up to ~70 aphids / day. Aphid midges will drop to the ground where they pupate and emerge as adults in 2-3 weeks depending on temperature. As day length becomes shorter they begin to diapause (an insect's form of hibernation) and will overwinter as larvae in cocoons in the ground.

Aphid midges, especially the adult stage, are susceptible to a range of pesticides. As a rule of thumb for most

aphid infestations, I recommend waiting (do nothing) and let the aphid midges, along with aphid parasitoids, lady beetles, and syrphid flies come in and feast on the aphid populations. This suite of natural enemies can usually eliminate an aphid infestation leaving no need for pesticide applications.

An orange colored, legless aphid midge, *Aphidoletes aphidimyza*, larva on the underside of leaf surrounded by its aphid prey (yum!).
Photo: Whitney Cranshaw, Colorado State University, Bugwood.org

Weed of the Week

By: Chuck Schuster

Giant foxtail, *Setaria faberi*, is a weed growing tall at this time of year. This summer annual germinates in the spring, grows in clumps, has a fibrous root system, and is found throughout the United States. Over the next several weeks, I will compare it to other foxtails.

A lot of giant foxtail is growing in this turf area
Photo Courtesy of Mark Schlossberg

Leaf blades of giant foxtail can be up to sixteen inches in length, and width is between one-half and one inch. The leaf blade upon close examination has small hairs covering most of the upper surface and margin except near the leaf base. The inflorescence, (flower and seed head) of giant foxtail is where the plant gets its name. When fully mature, the seed head looks like the tail of a fox and droops. It is cylindrical, with many spikelets; each spikelet will have between one and three bristles that are one quarter to one half inch long.

Cultural control in landscapes can start with mulches. It will not germinate if buried more than 1 inch which is not a license to put excessive mulch in the landscape. Instead, consider renewal of the mulch with clean products each year. Control of giant foxtail needs to start early in the season. Most pre emergent grass weed control will control giant foxtail. In landscapes, consider using trifluralin (treflan) or a mix of trifluralin and isoxaben (snapshot). A lack of good control this year may be related to the change in precipitation patterns. In landscape beds with giant foxtail that has eluded early season control, post emergent control can be obtained easily using glyphosate products, Burnout or Prizefighter.

Plant of the Week

By: Ginny Rosenkranz

Chamaecyparis pisifera 'Filifera Nana Aurea' also known as Sawara cypress 'Gold Mop' or even Japanese false cypress is a dwarf, slow growing shrub that reaches 2-3 feet tall and wide when young and up to 5 feet tall when mature. The plants prefer to grow in full sun to part afternoon shade in average well drained soils. Plants can thrive in many soil types with acidic to neutral pH. During the heat of summer, the afternoon shade will keep the plants from sunburn, and the medium to dry soils prevent root rot. The foliage of golden yellow scale-like leaves cover very thin, whippy branches that arch and cascade, in an airy, lacey mop. Early in the spring, the color is extremely bright with the new foliage. The silhouette is a broad pyramid that glows in the sunshine. This plant is cold hardy from USDA zone 5-7. The golden yellow color provides a bright focal point in the landscape, both in the summer months as well as the winter months, and possibly looks best against a dark green background. 'Gold Mop' can be used in foundation plantings, informal or cottage gardens, rock gardens, small courtyard gardens, and as a specimen. Once established, 'Gold Mop' can be drought tolerant and needs only light pruning. Root rot and juniper blight are occasional disease problems and bagworms can become an insect pest.

Sawara cypress prefers full sun to part afternoon shade
Photo: Ginny Rosenkranz

Degree Days (as of September 24)

Abingdon (C1620)	3730
Annapolis Naval Academy (KNAK)	4528
Baltimore, MD (KBWI)	4066
College Park (KCGS)	3746
Dulles Airport (KIAD)	3850
Frederick (KFDK)	3876
Ft. Belvoir, VA (KDA)	4018
Gaithersburg (KGAI)	3695
Greater Cumberland Reg (KCBE)	3384
Martinsburg, WV (KMRB)	3563
Natl Arboretum/Reagan Natl (KDCA)	4463
Salisbury/Ocean City (KSBY)	3988
St. Mary's City (Patuxent NRB KNHK)	4266
Westminster (KDMW)	4139

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: 95Calculation type: simple average/growing dds Start: Jan 1

CONFERENCES

October 30, 2019
FALCAN Truck and Trailer Safety Seminar
Location: Urbana Volunteer Fire Hall
To Register

December 4, 2019
Trees Matter Presents: Green Cities Summit
Location: Kellog Conference Center, 800 Florida Ave NE
For more information

December 6, 2019
Pest Management Conference
Location: Carroll Community College, Westminster,

December 17, 2019
Biocontrol Conference
Location: Maritime Insitute, Linthicum Heights, MD

Advanced IPM PHC Short Course
Monday, January 6 - Thursday, January 9, 2020
Location: University of Maryland, College Park, MD
Contact: Amy Yaich, Admin. Assist. II, 301-405-3911, umdentomology@umd.edu
Registration Information: https://landscapeipmphc.weebly.com/
Recertification credits will be posted on the website

January 17, 2020
FALCAN Pest Management Conference
Location: Frederick Community College, Frederick, MD

January 20 and 21, 2020
MAA Safety and Pesticide Recertification Seminar
Location: Turf Valley, Ellicott City, MD

February 13, 2020
2020 Pesticide and Fertilizer Recertification Conference
Location: Rockville, Maryland
Organized by and registration through LCA

February 19 and 20, 2020
Chesapeake Green: A Horticulture Symposium
Location: Maritime Institute, Linthicum Heights, MD
Organized by and registration through MNLGA

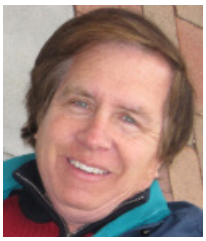
February 28, 2020
Manor View Farm & Perennial Farm 21st Annual Education Seminar
Location: Shepard Pratt Conference Center, Timonium, MD

University of Maryland Extension Job Announcement

The University of Maryland Extension seeks a part-time Horticulture Consultant to join the Ask an Expert Team at the Home & Garden Information Center located at the Central Maryland Research & Education Center in Ellicott City. Answer gardening, lawn, insect, and plant problem questions of MD residents via a web-based service. Must have horticulture knowledge and experience and be adept with computer software. Hours are flexible (up to 20 hrs./week). Pay is $19.66 per hour. Health ins. not available. Supportive, collegial work environment; on-going training provided. Full job announcement and position description.

For best consideration, submit resume by Friday, October 18, 2019 to Jon Traunfeld (jont@umd.edu), Center Director; jont@umd.edu.

CONTRIBUTORS:



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