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TPM/IPM Weekly Report

for Arborists, Landscape Managers & Nursery Managers

August 26, 2011

In This Issue...

Integrated Pest Management for Commercial Horticulture

www.ipmnet.umd.edu

If you work for a commercial horticultural business in the area, you can report insect, disease, weed or cultural plant problems found in the landscape or nursery to sklick@umd.edu

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Pest and Beneficial Insect Information: Stanton Gill and Paula Shrewsbury (Extension Specialists) and Brian Clark (Extension Educator, Prince George's County)
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 (Regional Specialist, Wye Research & Education Center)
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Some Hail Damage in the Area

Last week's thunderstorms included hail storms for parts of central Maryland. In Silver Spring, neighborhoods were covered with shredded leaves from a 15 minute hailstorm with some stones the size of quarters. Plants with large leaves, like hostas, are especially vulnerable to hail damage. Hail can also damage thin-barked trees, causing bruises, cracks or discolored areas in a line along the upper branch surface (the undersurface will be undamaged).

Hail on deck on August 18, 2011 (top) and hail damage to hosta (bottom)
Photos: Karen Rane, UMD

Orangestriped Oakworm Caterpillars

Orangestriped oakworm caterpillar is finishing up feeding on oak foliage and is now migrating down the trunks of trees and wandering across your customers' lawns. Common plant hosts include red oak, chestnut, other oak species, birch, hickory and maple. Larvae feed in clusters and initally skeletonize leaves. Later instar larvae can defoliate sections of plants or entire plants if they are small, leaving only the leaf mid-rib.
Control: No control is needed at this time of year.

Orangestriped oakworm caterpillar Photo: Erich G. Vallery, USDA Forest Service - SRS-4552, Bugwood.org

Japanese Maple Scale

We examined maples this week with Japanese maple scale and found mainly mature females that had eggs inside the female body.

Tulip Tree Scale

Examine tulip trees and magnolias for tuliptree scale and you will notice the females are humped up into a army helmet shape as we move through August. The crawlers should be out in September. Look on plants for honeydew that is produced in large quantities by this soft scale.
Control: Distance mixed with 1% horticultural oil when crawlers are out.

Tuliptree scale

Curled Roseslug Sawfly

Activity by the curled roseslug sawfly continues on roses here at the research center this week. A large number of larvae present that are defoliating several plants. Early instar larvae skeletonize the foliage while later instars chew through the foliage.
Control: Roseslug sawfly larvae look like caterpillars but since they are not, insecticides such as *Bacillus thuringiensis* will not kill them. It is best to control sawfly larvae when they are small. Conserve or Orthene can be used to control the larvae.

Curled roseslug sawfly on rose

Brown Marmorated Stink Bug Update

Last week I (Stanton) had 6 different frustrated gardeners send or bring pictures to me of their tomatoes, peppers and sweet corn covered with nymphs and adults of brown marmorated stink bugs. Each person was so frustrated by this bug they were ready to give up on gardening. One gardener said they went out to their garden with a wet/dry vac and vacuumed off the insects, and then dumped the canister contents down the toilet. Actually this method is not a bad idea and some innovative person could develop a small garden vacuum that gardeners could easily handle in gardens which is lightweight and powerful enough. In entomology we have large bug vacs we use in the field to collect insects, but it would be slightly unwieldy around a vegetable garden. So, innovative thinkers, give me a call and let's talk about a cool, portable BMSB vac.

Adult stink bugs are very active and starting to show up in and around houses at this point in the summer. The best thing you can do is vacuum them up inside. This fall, Zodiac Company is supposed to have an EPA label (sometime early this fall) for an ester form of a pyrethroid that will have a label for homeowners to use inside houses for BMSB and bedbugs. Keep in mind, even though this will kill the bugs you will still have to sweep or vacuum them up after they are dead. Why not just use a vac and vacuum them up and skip the insecticide application? Still, people seem to like to spray bugs and I am sure this product will sell well once in the market-place.

BMSB Trials

We have set up BMSB traps at several greenhouse and nursery facilities. At each of these operations we are monitoring BMSB in high tunnels or greenhouses compared to adjacent outdoor growing areas. We will be collecting data through the fall.

BMSB: What are they feeding on?

Kim, a plant and cut flower grower from Carroll County, reported that BMSB were feeding heavily on crape myrtle trees this year. The plants that were most heavily infested were reported to be aborting blooms. The BMSB was also feeding on the seed pods. We will try to visit this site to confirm this damage. At CMREC we have observed BMSB feeding on *Hibiscus moscheutos* and other species of hibiscus. They tend to cluster on the foliage but are also found feeding on the stems. There is damage on the foliage, but it is hard to discern this damage from leafspot diseases that show up on the foliage in August.

Various instars of BMSB on peach

We will be setting up monitoring stations at several additional operations over the next two weeks. We would like to extend a special thanks to the Maryland Nursery and Landscape Association for their financial support for this project.

Thousand Cankers Disease

There is bad news on the invasive species front. Thousan Cankers Disease (TCD) has been detected in Pennsylvania.

Details on this find are available at:
http://www.prnewswire.com/news-releases/agriculture-department-announces-detection-of-thousand-cankers-disease-in-pennsylvania-trees-enacts-quarantine-to-prevent-spread-127584993.html

Announcement on Imprelis Herbicide

Alert to Homeowners, Landscape and Pest Control Professionals: Grass Clippings Treated and Trees Injured by Herbicide Imprelis Should Not Be Used For Composting or Mulching

As part of EPA's efforts to minimize injury to trees following use of the herbicide Imprelis, EPA is reminding people that grass clippings that have been treated with Imprelis should not be used for composting or mulching, and trees that may have been injured from Imprelis should also not be used for compost or mulch. This is because clippings from grass treated with Imprelis or mulch from trees injured by Imprelis could continue to cause non-target plant damage.

Specifically, the Imprelis label has the following restrictions on mulch and compost:

Do not use grass clippings from treated areas for mulching or compost, or allow for collection to composting facilities. Grass clippings must either be left on the treated area, or, if allowed by local yard waste regulations, disposed of in the trash. Applicators must give verbal or written notice to property owner/property manager/residents to not use grass clippings from treated turf for mulch or compost.

On August 11, EPA issued an order to immediately stop sale, use and distribution of the herbicide Imprelis and DuPont is voluntarily implementing a product return program. While these steps are focused on stopping future sale and use of the product, it is important that plant material from areas that have already been treated with Imprelis not be used for composting or mulching.

Imprelis is an herbicide that was sold by DuPont to licensed lawn care professionals, was used on residential, industrial and institutional lawns and on golf courses. The active ingredient in Imprelis is aminocyclopyrachlor. EPA has received numerous reports of injury to trees, including the Norway spruce and white pine related to the use of Imprelis. In response, EPA has taken a number of steps to provide federal oversight to help eliminate any further damage to trees.

More information is available at: http://www.epa.gov/pesticides/regulating/imprelis.html

Pine Wood Nematode

We looked at a sample of Thundercloud pine that was infested with pine wood nematode. Symptoms with this nematode are that there is no sap when you slice through the wood and the tree turns brown. You can check for this nematode by putting 1/2" diameter chips in water overnight. This nematode is vectored by sawyer beetles and is a problem on introduced species of pine.
Control: There is nothing that can be done to control this nematode. The infested trees need to be destroyed.

Dead pine from pine wood nematode

Dodder

Aaron Tennant is reporting dodder in McLean, Vienna and Arlington in Virginia. Dodder is an annual vine with thread-like stems that are yellow, orange or red. It is a parasitic plant with roots that are modified to penetrate the host plant. Flowers are small, white or sometimes pink and numerous in compact clusters. Plants die at the first frost, but seeds will germinate the next year in spring and early summer. The seed is long-lived in the soil. Control dodder with a pre-emergent herbicide in early spring to prevent flowering and seed production.

Beneficial of the Week, Paula Shrewsbury

Will those wasps sting me?

Scoliid wasps on celosia and monarda

Only if you are a green June beetle white grub! In the last week or so I have had several people comment on the abundant number of wasps they have seen flying around their turf – and of course the accompanying questions "what are they?" and "will they sting me?". The wasps are referred to as Scoliid or digger wasps. Scoliid because they are in the family Scoliidae (order Hymenoptera) and digger because they locate white grubs, mainly green June beetle, in the soil and "dig" down to parasitize them. Scoliid wasps are not aggressive wasps and it is highly unlikely that one will sting you. Scoliid wasps are considered beneficial because they help to suppress populations of green June beetle and other white grubs. There are several species of scoliid wasps. *Scolia dubia* is the common species active at this time in MD. They are ~ ¾" in length, have blue-black wings (2 pairs like most Hymenoptera), and black bodies except the end of the abdomen is reddish brown. There are two distinct yellow spots on their abdomen.

Green June beetles lay eggs in the soil of turf in July in MD and white grubs are active in the root zone into October. Scoliid wasp adults are most abundant and noticeable during August. Adult wasps feed on the nectar of flowers. Scoliid wasps are often noticed flying several inches above turf infested with grubs in somewhat of a figure eight pattern searching for mates and white grubs. Once mated the female wasp locates a grub in the soil, and works its way down the burrow of the white grub. Once the grub is located she stabs it with a paralyzing sting. Although the grub can barely move, it lives for some time. The female wasp lays an egg on the underside of the grub, the egg hatches, and the paralyzed grub provides "fresh" food for the wasp larvae. The wasp larva passes the winter in a cocoon in the bottom of the grub burrow, pupates in the spring, and emerges as an adult in August. Sounds like the making of a horror movie to me – but it is just part of the food web.

The presence of Scoliid wasps indicates that there are white grubs in the turf and that you should monitor the turf for grub abundance and damage. If no damage is notable, let these beautiful wasps do their thing. Although Scoliid wasps may appear a bit intimidating when first seen over the turf, they are beneficial and can make a significant contribution towards suppressing white grub populations, and ultimately damage to turf.

For more information on Scoliid wasps go to:

http://www.ces.ncsu.edu/depts/ent/notes/O&T/lawn/note12/note12.html

Plant of the Week, Ginny Rosenkranz

Cryptomeria japonica or Japanese Cedar is a medium-sized evergreen tree that grows 50-60 feet tall and 20-30 feet wide in a pyramidal shape. The foliage is bright green to a bluish green during the summer, and a bright green in the winter. The bark is an attractive reddish brown that peels off in long strips, adding to the overall beauty of the tree, especially if the branches are limbed up. Winter hardy in USDA zones 5-8, cryptomeria prefer to grow in full sun with rich acidic soils that are moist but well drained. Able to tolerate compacted soils and some drought, cryptomeria can be used in urban settings and in parking lots. Like all evergreens, cryptomeria can tolerate light shade, but will grow in a more open structure than one grown in the full sun.

Cryptomeria japonica is also salt tolerant so it is able to grow close to the beaches and roadways that are salted during the winter. The winter winds can damage the foliage by drying it out and turning it brown, so planting it in a more protected area will improve the appearance and the health of the trees. Some cultivars are darker in color like 'Black Dragon' and 'Gyokuryu", some are more compact like 'Green Grizzly' and 'Compacta'. Some are yellow or white variegated like 'Elegans Aurea' and 'Albo Spica' and then there is *Cryptomeria japonica* 'Cristata' that is fasciated which has the stems growing together almost forming a 'cocks crown' effect. Pests include mites and Maskell scale, while leaf blight and leaf spots are a problem when the plants are not provided with good air circulation.

***Cryptomeria japonica* 'Cristata'**
Photo: Ginny Rosenkranz

Cryptomera japonica
Photo: Ginny Rosenkranz

PLANT	PLANT STAGE (Bud with color, First bloom, Full bloom, First leaf)	LOCATION
Aralia spinosa (devil's walking stick)	First bloom (August 26)	Ellicott City
Sedum 'Autumn Joy'	Bud - showing color (August 26)	Ellicott City

Degree Days (As of August 26)

Baltimore, MD (BWI)	3293
Dulles Airport	3211
Frostburg, MD	2148
Martinsburg, WV	2937
National Arboretum	3578
Reagan National	3636
Salisbury	3364

Upcoming Programs:

Green Industry Energy Tour
October 20, 2011
Locations: Capitol City Contractors (Woodbine) and Falcon Ridge Farm (Westminster)

Greenhouse Conference
November 18, 2011 (tentative date)
Location: Eastern Shore
(final details will be posted when available)

Association of Specialty Cut Flower Growers National Conference
November 7-10, 2011
Location: Reston, Virginia
www.ascfg.org

Evening Class for the Green Industry
Montgomery College starts the fall semester this Wednesday, August 31. There are several credit classes that professional arborist, landscape managers and nursery managers can take in the evenings at the Montgomery College in Germantown. Stanton Gill will be teaching a pest management class this fall. This is your chance to expand your knowledge base. Go to www.montgomerycollege.edu for more information.

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