



TPM/IPM Weekly Report

for Arborists, Landscape Managers & Nursery Managers

September 2, 2011

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Conferences

**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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Disease Information: Karen Rane (Plant Pathologist) and David Clement (Extension Specialist)

Weed of the Week: Chuck Schuster (Extension Educator, Montgomery County)

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Wild, Wild Week

We started off last week with a 5.8 earthquake and followed this up with a hurricane that started at level 2 and moved to level 1 before becoming a tropical storm in this area. This week seems pretty benign in comparison.



The Eastern Shore had 8 - 10 inches of rain and the central part of Maryland had 3 - 5 inches of rain. The whole area had incredible wind storms that toppled trees into roadways and power lines everywhere. Jerry Faulring in Frederick reported only 1 inch of rain. It really did vary in the state how bad the winds and rain were with this storm.

We have had many reports from landscapers of trees that were transplanted this spring that were knocked over. The combination of soaking rains and high winds wrecked havoc on any tree that was not securely fastened down or well anchored. River birches snapped in the wind, as did tulip poplars.

I spoke with John Murphy of Murphy Johns Greenhouse on the Eastern Shore. He said there was a lot of flooding there, but no wind damage to greenhouse

structures. Cut flower growers in Central Maryland and the Eastern Shore reported no structural damage to high tunnels or greenhouses, but cut flowers growing out in the field were flattened and many cut flowers are growing horizontally at this point. In New Jersey, cut flower growers with plants in fields had the plants flattened by the rain and winds. Jim Davis, Deep Run Orchard, has 7 acres of paw paws and he said that the paw paws were flying off his trees with the heavy winds. He found some paw paws 20 feet from the trees.

Hurricane Irene and A Reminder About EAB

From: Carol Holko, Maryland Department of Agriculture

For recovery/aftermath issues, please know the following to prevent the spread of the Emerald Ash Borer - a devastating invasive beetle.

We hope that everyone is safe and recovering quickly from last weekend's hurricane. In the aftermath and clean up of fallen trees and branches, please be aware the Maryland EAB Quarantine prohibits the movement of ash wood or hardwood firewood from Maryland's Western Shore to the Eastern Shore, i.e. across the Chesapeake Bay and Susquehanna River, or out of state unless it is chipped to less than 1" in diameter in two dimensions. Quarantine restrictions apply to mixed wood of unknown species. Ash wood may move between and among the quarantined counties, Allegany, Anne Arundel, Baltimore, Calvert, Carroll, Charles, Frederick, Garrett, Harford, Howard, Montgomery, Prince George's, St. Mary's, Washington counties and Baltimore City. Please call 410-841-5920 with questions.

For more information, go to <http://www.mda.state.md.us/plants-pests/eab/current.php>

Spruce Spider Mite

As the nights become cooler then spruce spider mites generally starts it activity again. Monitor spruce, juniper and hemlocks in September. Place a clipboard with a light colored paper on it and tap the branches sharply over the paper and examine it for the mites using a 12 – 20 x magnifier.



Close-up of spruce spider mite damage on hemlock

Spotted Winged Drosophila

We wrote about this pest in the weekly IPM Alert last year, letting you know it was creating problems on the West Coast in the U.S.. This spring an article reported that it had reached Virginia and Pennsylvania. Last week, it was found in Maryland. What does this mean for you and your customers? It means that raspberries, blackberries, blueberries, strawberries, grapes and cherries can be damaged by this pest. Most species of fruit flies feed on ripe fruit. This invader from southeast Asia lays eggs in fruit that is not ripe and the maggots can be found as the fruit is ripening, making for a nasty treat at harvest time. The females overwinter and start activity in the spring and can have multiple generations over the season. At constant temperatures of 75 °F, it takes 9 days to go from larva to adult.

Monitoring: A homemade trap can be made using a bottle with apple cider vinegar in it and a drop of soap to reduce surface tension so the flies drown. You can obtain commercial traps from <http://www.contech-inc.com>. Check the trap and change the apple cider vinegar and soap mixture weekly.

Identification: Go to <http://www.ncipmc.org/alerts/drosophila.pdf> to view pictures of the adult flies. The males have two distinct spots on their wings. The females do not have spots on the wings. You have to examine the rear-end and look at the ovipositor to see the serrated ovipositor.

Brown Marmorated Stink Bugs

Stinkbugs are feeding on the trunks of trees as we move into September. I (Stanton) observed them feeding at a nursery on yellowwood. They were clustered on the trunk and branches. The workers commented at lunchtime that they watch the wasps come in and bump the BMSB aside and then they pull up the sap from the feeding wound. Sam Fisher reported BMSB feeding on red oak and amelachier. Mark Schlossberg, Pro-Lawn-Plus, Inc., is reporting that stink bugs are all over crape myrtles, *Acer rubrum*, *Magnolia stellata* and others. Mark is also seeing a few green stink bugs too.



Green stink bug nymph (left) and brown marmorated stink bug nymphs (right)



Brown marmorated stink bugs on crape myrtle
Photo: Mark Schlossberg, Pro-Lawn-Plus, Inc.

Imprelis and Wood Chips

We received in an e-mail asking if you can use the wood chips of trees damaged by Imprelis. The answer is - do not use them.

Obscure Scale

Tony Murdock sent in samples of obscure scale on pin oak this week. Most of the obscure scale were settled 1st and 2nd instars. Obscure scale had a crawler period back in mid-July. It may be a little late, but probably Talus or Distance should still be effective for these life stages.



Obscure scale on pin oak

Ambrosia Beetle Flight

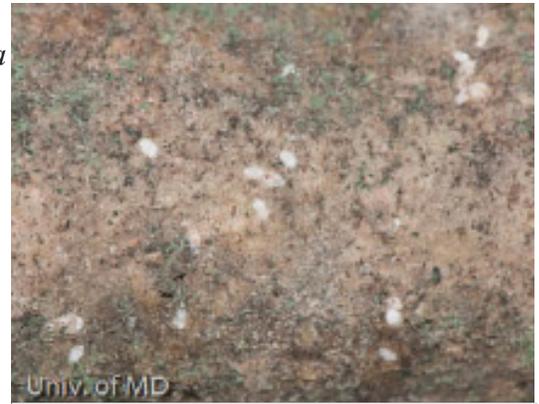
Marty Adams, Bartlett Tree Experts, found small beetles flying over his deck last week. He caught a few of them and brought them to me (Stanton) at CMREC. They appeared to be *Xylosandrus*. We sent a sample to Bob Rabaglia, USDA Forest Service, for confirmation. Bob identified them as *Xylosandrus crassiusculus*. It is interesting to note that they are flying now because usually we do not get reports at this time of year. These beetles must be a third generation. This is commonly called the granulated ambrosia beetle and attacks a wide range of nursery and landscape plants. Check styrax and yellowwood to see if you are finding frass projections from the trunks. If anyone is seeing boring activity please let me know - sgill@umd.edu or 410-868-9400.

Several Scales on Holly

Latania Scale

Norm Brady, Bartlett Tree Experts, sent in holly samples from the Eastern Shore with two scales on it. One is Latania scale, *Hemiberlesia lataniae*. Marty Adams reported this scale recently as well. The female covers are circular to convex and light gray to white in color. The females that settle on twigs and trunk tend to be circular, whereas the ones on leaves are more convex. This armored scale has two generations per year and males were out in mid-August. Most of the females had eggs present and we should see crawlers in mid-September. John Davidson describes the life cycle in his book, *Armored Scale Insect Pests*.

Control: In mid-September, Distance or Talus should work well to control this scale.



Univ. of MD
Latania scale

Holly Pit Scale

The second scale on this holly was holly pit scale, *Aterolecanium puteanum*.

Plants Damaged: American holly, Burford holly, and Japanese holly. Most of the infestations have been found on holly growing on the Eastern Shore of Maryland. I rarely receive any samples from other areas of Maryland.

Damage Symptoms: Pitting and distortion of woody tissue on branches and trunk of the tree. Heavy infestations cause dieback of the plant.

Life Cycle: Mature females overwinter in a pit. The pit is caused by the feeding damage to the plant tissue. Crawlers emerge over a long period of time during the summer. Once nymphs have settled on a place on the plant they do not move.

Monitoring: Examine twigs and trunk of tree for pit-like depressions with a scale insect in the middle of the pit.

Control: Horticultural oil or Distance and oil applied when crawlers are present. I (Stanton) did not find any crawlers on the sample Norm sent in to CMREC.



Holly pit scale
Photo: Mike Raup, UMD

Clearwing Moth Borer Control

DuPont has conducted about 7 trials using Acelpyrn against clearwing borers, which include peachtree borer, lesser peachtree borer, rhododendron borer, banded ash clearwing borer, and viburnum crown borer. When applied as a preventative bark treatment at rates between 4-32 fl oz/100 gallons, it has provided control as effective or more effective than the competitive standards according to Bruce Steward of DuPont Company.

Beneficial Photo of the Week

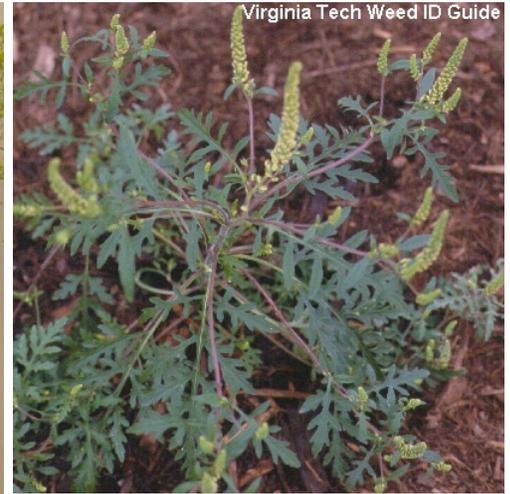
While visiting a site this week, we found braconid wasp cocoons (pupal cases) on a tobacco hornworm caterpillar. The pupal cases had holes on one end so the wasps had already emerged. When you find these wasps on caterpillars, leave them alone so the wasps can continue to reproduce.



Empty braconid pupal cases on tobacco hornworm caterpillar

Weed of the Week, Chuck Schuster

Common ragweed, *Ambrosia artemisiifolia*, is a summer annual found in most areas of the United States. It is of great interest to many of us as the pollen is a common cause of “hay fever” for many. Pollen from ragweed can reportedly travel up to 400 miles. While typically found in more rural areas including farm pastures, roadside ditches and waste areas, it will also be found in many landscape beds and turf areas. Common ragweed prefers poor soils, such as soils that have not been tilled and have low fertility levels. In landscape and turf areas maintain soil fertility to promote good plant growth.



Goldenrod (left) and common ragweed (right)
Photos: Virginia Tech Weed ID Guide

This summer annual can grow from several inches in height to more than 6 feet in total height. The plant has a shallow taproot and leaves that have hairs on the upper surface. Male and female flowers are found in separate heads on the same plant. Female flowers are in the upper leaves and bases of leaves, while the male flowers are found at the top of the plant. Pollen production stops as temperatures drop below 60 °F. Common ragweed seed can remain viable in the soil for many years. In one study it was found to germinate more than 20 years after harvest. Preventing seed formation is a critical part of both the allergy issue and the next several years of plants.

Ragweed can be confused with a perennial plant that is flowering at the same time of the year: Goldenrod. Goldenrod, with its large clusters of small yellow flowers, is similar to common ragweed, but it is not the source of many of our allergic hay fever problems. These flowers will appear from the end of summer until frost.

Cultural control of common ragweed can be obtained in turf settings using regular mowing. Ragweed will not thrive when mowed closer than four inches. Control of common ragweed can be obtained with post emergent use of glyphosate products, but broadleaf pre emergent materials may not give the desired control, as timing of germination often comes after pre emergent products are less effective. Use of broadleaf weed post emergent materials including 2,4-D have provided adequate control for turf settings, especially when used early in the season when the plant is actively growing and the leaf tissue is soft to aid in chemical uptake.

Plant of the Week, Ginny Rosenkranz

Artemisia schmidtiana ‘Silver Mound’, also known as angels hair or wormwood, is a silky, soft to the touch, mounding herbaceous perennial that is hardy in USDA zones 3-7. It grows best in full sun and is usually planted at the front of a perennial border or in front of foundation plantings as it only grows 10-12 inches tall and 24 inches wide. Like many artemisia, ‘Silver Mound’ is drought tolerant once it has become established. Moist but well drained soils that are slightly acidic with low fertility allow the plants to grow to their best potential. Medium to high fertility will cause the plants to grow rapidly and fall open in the center, so use fertilizer sparingly. Pruning the plants half way in July will prevent the mounds of plants from splitting down the center, and dividing



Artemesia ‘Silver Mound’
Photo: Ginny Rosenkranz, UME

the plants every 3-5 years is also beneficial. The foliage of *Artemisia* 'Silver Mound' is a silvery green, finely textured, twice palmately divided leaf. The bright silver color and soft texture remain until the first hard frost which kills the top of the plant. The silver color also enhances the garden colors by mixing well with all the blues and lavenders and toning down the hot reds, yellows and oranges. 'Silver Mound' is the only artemisia that does not spread invasively by underground rhizomes. Pests include stem rot and rust.

Note: Degree days are not available this week.

Upcoming Programs:

Green Industry Energy Tour

October 20, 2011

Locations: Capitol City Contractors (Woodbine) and Falcon Ridge Farm (Westminster)

Greenhouse Conference

November 18, 2011

Location: Chesapeake College, Wye Mills, MD
(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

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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.

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