

Number 1 - April 18, 2011

### **First Issue for 2011**

This is the first issue of the Home, Yard, and Garden Pest Newsletter for 2011. We plan on having 18 issues through the growing season. The next issue will be in two weeks, we will have weekly issues during May and June, switching to issues every other week during July, August, and September, and finishing with a single issue in October.

This newsletter is written for professional horticulturists, including arborists, landscapers, lawn care professionals, golf course superintendents, nursery growers, sod growers, and garden center operators. Homeowners can gain information from pest descriptions and biologies, but recommended pesticides may not be available to them. Homeowners should refer to the Home, Yard, and Garden Pest Guide for pesticide recommendations and non-chemical control options not practical for the professional.

We will provide information concerning insect, disease, and weed occurrence throughout Illinois as it is happening. We will also try to predict when controls should be enacted. To provide this information, we rely on reports from around the state and ask that you let us know what you are seeing. Please send reports to the newsletter coordinator, Phil Nixon, at [pnixon@illinois.edu](mailto:pnixon@illinois.edu). Phil writes most of the insect articles and Stephanie Porter writes most of the dis-

ease articles. You can contact Stephanie directly at [satterle@illinois.edu](mailto:satterle@illinois.edu). (*Phil Nixon*)

### **Pest Watch**

There are numerous insect and mite pests that are active and controllable at this time. Control can be obtained throughout the state on ash plant bug, fall cankerworm, spring cankerworm, hemlock eriophyid mite, leaf crumpler, pine bark adelgid, spruce needle miner, spruce spidermite, and Zimmerman pine moth. In southern Illinois, European pine sawfly, hawthorn mealybug, honeylocust pod gall, and Eastern tent caterpillar are susceptible to control. In northern Illinois, Cooley spruce gall adelgid and Eastern spruce gall adelgid are still controllable. (*Phil Nixon*)

### **Spruce Spidermite**

Spruce spidermite and its relatives, pine mite, arborvitae mite, and juniper mite, actively feed during early spring and early fall. They spend the summer as eggs on the host. Most miticides are effective primarily against active, feeding stages, providing little control of eggs.

Spidermites are tiny relatives of spiders, having eight legs and spinning very fine silk. They are so small that they are barely visible to the unaided eye, a hand

lens is needed to see them on the foliage. Scout by holding a piece of white paper under a branch and striking it sharply with your hand or stick. This knocks some of the mites onto the paper where they can be easily seen. Spidermites are greenish-gray and move relatively slowly. Predatory mites are commonly red and move quickly compared to the spidermites. These predatory mites feed on the spidermites; numerous individuals will likely control the spidermites, making spray application unnecessary.

A spidermite sucks the contents from several adjacent cells, removing the green contents, resulting in a white spot on the needle. These cells soon die, causing that spot to turn brown. The mites feed separately from each other, leaving green, healthy tissue between the feeding spots. This type of damage is called stippling, being a number of tiny dots. In art, the shaded area of a drawing caused by numerous little dots is called stippling and is the source of this damage designation. From a distance, the brown stipples meld with the green areas of the needle, resulting in a bronze appearance to the foliage.

Spruce spidermite and its relatives are actively feeding in southern Illinois from about mid-March through April. They feed in central Illinois from early April through mid-May and in northern Illinois from mid-April through May. Before applying a miticide, verify that mites are present by scouting with the white paper method described above. Spray a labeled miticide or acaricide such as acequinocyl (Shuttle), bifenthrin (Talstar, Onyx), insecticidal soap, spiromesifen (Forbid), or summer spray oil to obtain control. (*Phil Nixon*)

## Japanese Beetle Control

Adult Japanese beetles feed on the upper leaves of crabapple, linden, serviceberry, flowering cherry, birch, willow, rose, and many other trees and shrubs from late June through mid-August. They can defoliate or window-feed at least the upper third of the tree. Window-feeding consists of eating the upper surface and center of the leaf, leaving the lower surface which is whitish and somewhat transparent. The cells of this exposed lower surface soon turn brown. The adult Japanese beetles are three-eighths to one-half inch long and stocky with metallic green bodies and coppery wing covers.

Imidacloprid, sold as Merit and other brand names, moves systemically through the tree into the leaves where it effectively controls the adult beetles. Imidacloprid moves through the tree within about two weeks if trunk injected. When applied to the soil as a soil injection or soil drench, it takes up to eight weeks to move throughout the tree. With the beetles due to emerge in about two months, soil applications should be applied by the end of April. Avoid application of imidacloprid into mulch, thatch, or other dead organic matter as the insecticide adsorbs onto it, making it unavailable for root uptake. Soil inject below the sod or mulch or pull back the sod or mulch to soil drench. Apply within two feet of the trunk.

Imidacloprid remains in the tree for at least a year after application, so application at any time during the growing season is effective as long as there are active leaves on the trees for eight weeks after

application. The active leaves are needed to drive the transpiration which moves the imidacloprid throughout the tree.

There is concern about imidacloprid moving into the pollen and nectar of flowers and affecting honey bees and other pollinators. Imidacloprid is known to move into linden flowers, so its use on that tree should be avoided. Wind-pollinated trees, such as birches, are unlikely to be visited by pollinators. Roses with double blossoms are usually not visited by pollinators either, but watch for flower visits by bees or other pollinators before applying imidacloprid. Imidacloprid does not move into crabapple flowers. (*Phil Nixon*)

### **Change at the University of Illinois Plant Clinic**

The University of Illinois Plant Clinic will open its doors for the 2011 season on Monday, May 2nd. The following are new staff at the Plant Clinic, but will continue to provide the same quality services, recommendations, and education:

**Suzanne Bissonnette** was hired in August as the U. of I. Extension, Plant Clinic and IPM Coordinator. Her primary responsibilities are to centralize IPM educational outreach, diagnostics, and programming within the context of a virtual Center of Extension IPM outreach and provide program leadership for the NIFA Extension IPM (E-IPM) Illinois program, and the NPDN grant program as supports the Plant Clinic operation. She will provide leadership and deliver educational programming that includes the content areas of: plant disease and pest diagnostics and management; chemical, biological, cultural and physi-

cal pest control methods; rural and urban pest management. As coordinator, Suzanne is responsible for the supervision of the operation of the University of Illinois Plant Clinic.

**Stephanie Porter** was hired in February as the Visiting Plant Diagnostic Outreach Specialist-Crop Sciences. She will serve as a plant diagnostician at the University of Illinois Plant Clinic, collaborate with departmental Extension Specialists to diagnose plant health problems and provide management recommendations, manage the database for plant disease (NPDN), insect and weed identification, and interface with counterparts in the North Central Plant Diagnostic Network. Additionally, Stephanie will develop short courses and outreach for plant diagnostics as outlined in the NIFA-Extension IPM (E-IPM) grant.

I would also like to take this time to introduce the U of I Plant Clinic's Social Media!

### **Follow the U of I Plant Clinic on Facebook:**

<http://www.facebook.com/UofIPlantClinic>

The Plant Clinic Facebook Page provides pictures, links to websites, press releases, and “questions or samples of the day” about relevant, horticultural and crop issues in Illinois. We also have several Extension educators that share administration of our page in order to add to its content.

### **Follow Stephanie Porter on Twitter:**

<http://twitter.com/skporter>

My twitter account: @skporter also provides updates on crop and horticultural issues in Illinois by use of pictures, links to the Plant Clinic Facebook Page or websites, and general blurbs.

## Follow the U of I Plant Clinic on Blogger:

<http://universityofillinoisplantclinic.blogspot.com>

My goal is to blog at least once a week, with a focus on a relevant plant issue, event, or whatever comes to my mind at that time. The U of I Plant Clinic blog is posted on the U of I Plant Clinic Facebook Page and my Twitter account: @skporter. The U of I Plant Clinic blog may be a good spot to find answers to plant problems that may be happening in “your neck of the woods.”

The Plant Clinic is located on the north border of the University of Illinois farms in Urbana, nestled between the historic round barns and the new golf facility. The mailing address is: Plant Clinic, 1401 W. St. Mary's Rd., Urbana, IL 61801. The Plant Clinic's website is at <http://plantclinic.cropsci.illinois.edu/index.html>. Please refer to our website for details concerning services offered. If you prefer talking to a person, our telephone number is 217-333-0519. Whenever submitting a sample, provide as much information as possible on the pattern of injury in the planting, the pattern on individual affected plants, and details describing how symptoms have changed over time to cause you concern. Most disease problems are handled in-house, but other problems may require us to find the appropriate campus specialist to help. (*Stephanie Porter*)

## Brown Marmorated Stink Bug Found in Illinois

The brown marmorated stink bug (BMSB) has been making headlines in Illinois the past couple of weeks. After the first confirmation of this invasive

insect was reported in the fall of 2010 (Cook County), additional reports have continued to in 2011. In January, a homeowner reported an infestation in their home in Kane County, and just a couple of weeks ago, a homeowner in each of Normal (McLean County) and Urbana (Champaign) each submitted a single specimen for identification. Reports continue to circulate in northeastern Illinois.

### *Why is BMSB important?*

Like many invasive species, BMSB has a long list of host plants, including many woody ornamental trees as well as several agricultural crops including fruit trees, grapes, tomatoes, corn, soybeans and others. Also, like many other invasive insects, it is easily moved from location to location by humans (hitchhiking on vehicles, movement of shipping materials, and movement of plants). In addition to feeding on plants, BMSB is also considered a nuisance pest to homeowners. Much like boxelder bugs or multi-colored Asian lady beetles, these stink bugs congregate on houses in late fall and move indoors. Homeowners are likely to first spot new infestations as these insects will initially feed on common landscape ornamentals.

### *How can I tell the difference between BMSB and other stink bugs found in Illinois?*

Adult BMSB have the typical “shield” shaped body of all stink bugs. In reference to their name, they have a marmorated or mottled brown color. Their antennae have distinct white bands; on the edge of their abdomen they have alternating black and white bands. The un-

derside of the abdomen is white and the legs may also have faint white banding.

*When should I expect to see the BMSB?*

Typically, the adults will begin to move to overwintering locations in September, with peak movement in late September and early October. Homeowners may start to see BMSB begin gathering on homes, barns, garages during this time. In the spring, adults will begin to emerge from their overwinter locations as temperatures begin to warm. After mating, eggs are laid on the undersides of leaves from June to August, with hatch occurring 3-7 days later. Nymphs will pass through 5 instars (each instar stage lasting about a week). New adults begin to appear in late July or August.

*What kind of injury does BMSB cause?*

Unlike many insect pests that only attack plants during certain times of the growing season, the BMSB will feed on host plants all season long. This causes great concern in fruit crops where they begin feeding early in the season and continue through harvest. Growers

should monitor fruit for sunken areas where the insect has fed. These areas will be discolored and corky areas will be present under the skin of the fruit. In corn and soybean, BMSB feed on the developing pod or corn ear. They are able to feed through the husks and pods with their sucking mouthparts, causing shriveled kernels and beans, respectively. In tomatoes and peppers, feeding will also result in corky areas and discoloration, much like injury in fruit.

*What do I do if I think I have the BMSB in my home/on my property?*

We are very interested in where these insects may be and continue to try to determine their distribution in Illinois. If you believe you have a suspect specimen, we would be very interested in looking at it. To positively confirm any insect as BMSB, we need to look at an actual specimen. Suspect stink bugs may be sent to Kelly Estes, 1816 S. Oak St., Champaign, IL 61820. Please put stink bugs in a crush-proof container (pill bottle, check box, etc). You can also send a photo to [kcook8@illinois.edu](mailto:kcook8@illinois.edu) for preliminary screening if you wish. (*Kelly Estes*)