

Number 1 – April 16, 2010

First Issue for 2010

This is the first issue of the Home, Yard, and Garden Pest Newsletter for 2010. In each issue, we provide information about plant diseases and insect pests that are occurring or about to occur throughout the state. There are also occasional articles on weeds, new pesticides, and other topics.

The articles are primarily meant for professional landscapers, arborists, lawn care specialists, golf course personnel, nurserymen, and garden center operators. Homeowners benefit from the articles as well, but homeowner control options are frequently not included. Thus, homeowners may not find the recommended pesticides in garden centers, and labor intensive control options appropriate for homeowners but not professionals may not be included.

With this first issue being produced in mid-April, the next issue will be two weeks later at the end of April. We will then have weekly issues through May and June when disease and insect problems arise quickly. In July, August, and September, issues will be produced every two weeks, as the pest problems are less intense and time-sensitive during that time. We will finish the year with an issue published in late October,

for a total of 18 issues. The newsletter is free of charge and issued only on the Internet. There are pdf files provided for those who wish to print the issues, but there are no paper subscriptions.

We welcome input from our readers. We are particularly interested in reports of disease, insect, and other pest sightings that you come across. Our state is 400 miles long, with spring events occurring in extreme southern Illinois a month before they occur in extreme northern Illinois. We can easily miss the first occurrence or not realize the severity of pests in various parts of the state. We are also interested in comments on the quality and timeliness of the newsletter issues. To provide disease information, contact Nancy Pataky at npataky@illinois.edu or 217-333-0519. To provide insect information, contact Phil Nixon at pnixon@illinois.edu or 217-333-6650. Comments about the newsletter should be directed to Phil Nixon.--*Phil Nixon*

Commercial Handbook Available

The 2010 *Illinois Commercial Landscape and Turfgrass Pest Management Handbook* is available. This publication provides management recommendations for diseases, weeds, and insect pests associated with trees, shrubs, turf, and flowers for

professionals including arborists, turf care professionals, landscapers, golf course personnel, nurserymen, and garden center operators. We strive to provide recommendations that are effective, based on research results, feedback from professionals, and our understanding of the biology of the pests and pesticide mode-of-action.

New handbooks are produced every 2-3 years, with the previous one being published in 2007. This handbook is priced similar to its predecessor at \$16.50 plus shipping and handling through the University of Illinois pubsplus website. The URL: <https://pubsplus.uiuc.edu/ICLT-10.html> will direct you directly to this publication. The handbook is also available at local extension offices, pesticide applicator training clinics, and other extension activities. The price at these locations is likely to reflect the cost of shipping and handling incurred. -
-Phil Nixon

Pin Oak Gall Larvae

We have received reports of large numbers of larvae being found under pin oak trees in the Springfield area. Based on somewhat sketchy information, these appear to be the mature larvae of a gall midge in the genus *Contarinia*. The larvae are whitish to yellowish and are likely to be about one-eighth inch long. This insect attacks the male catkins of pin oak, and the mature larvae drop to the ground. They burrow into the soil. It is assumed that pupation occurs in the soil, and that the adult flies emerge the following spring to attack the developing male flowers.

The larvae become noticeable on sidewalks and other paved areas where the larvae are unable to burrow into the soil. No control is recommended, other than the client sweeping up the larvae. Sweeping them off of the sidewalk, driveway, or porch onto the soil will aid the larvae in completing their development, which is acceptable. This is probably a native insect that will be controlled eventually by a predator, parasite, disease, or other natural enemy, although it may take two to three years for control to be noticed.

We received a similar report occurring in the St. Louis area under a silk tree or mimosa, *Albizia julibrissin*, in early April. Based on the photo provided, it is likely that this is another gall midge, but no reports were found in the literature to assist in its identification. --Phil Nixon

Emerald Ash Borer

The Illinois Department of Agriculture (IDOA) has added Ford and Iroquois counties to its emerald ash borer (EAB) quarantine. The expansion became necessary after the discovery of the destructive beetle outside the boundaries of the former quarantine in March. The detection was made in Iroquois County north of Loda at a highway rest area along Interstate 57. The infestation is heavy enough that the borer has probably been at that location for at least five or six years. With native forest nearby, it is likely that the insect has spread outside of the rest area. Infested trees are to be removed from the rest area by mid to late May when the adult beetles are expected to emerge.

Although EAB hasn't been confirmed in Ford County, it was included in the quarantine because it's situated between known infestations in Iroquois County to the east and McLean County to the west. With the addition of Ford and Iroquois, all or parts of 23 counties in northern and central Illinois now are under quarantine. The quarantine is intended to prevent the artificial spread of the beetle through the movement of infested wood and nursery stock.

Specifically, the quarantine prohibits the removal of the following items:

- The emerald ash borer in any living stage of development.
- Ash trees of any size.
- Ash limbs and branches.
- Any cut, non-coniferous firewood.
- Bark from ash trees and wood chips larger than one inch from ash trees.
- Ash logs and lumber with either the bark or the outer one-inch of sapwood, or both, attached.
- Any item made from or containing the wood of the ash tree that is capable of spreading the emerald ash borer.
- Any other article, product or means of conveyance determined by the Illinois Department of Agriculture to present a risk of spreading the beetle infestation.

The full quarantine order and detailed information about the EAB program can be accessed on the Internet at www.IllinoisEAB.com.--*IDO news release with modifications and additions by Phil Nixon*

Scouting Watch

Eastern tent caterpillar has hatched in southern Illinois at least as far north as Effingham. Scout crabapple,

serviceberry, wild black cherry, hawthorn, and other rose family trees for whitish tents in the twig crotches. Initially, the tents are about two inches long and contain numerous black caterpillars one-quarter to one-half inch long. In southern Illinois on April 13, some of the tents were about three to four inches long. *Bacillus thuringiensis kurstaki* (Dipel, Thuricide, others), spinosad (Conserve), and other labeled insecticides are effective. Avoid bee kill by only using Btk on flowering trees.

European pine sawfly should be scouted for in southern Illinois. Clusters of these caterpillar-like larvae should be present on Scotch, mugo, and other susceptible pines. Remember that Btk is not effective against these wasp relatives. Labeled pyrethroid insecticides should be effective as well as hand-removal. --*Phil Nixon*

Plant Clinic Season Opener May 3rd

The University of Illinois Plant Clinic will open its doors for the 2010 season beginning at 8am on Monday, May 3rd. A few of the staff members are different this year, but hours, fees, and services remain the same as the 2009 season. This will be my last season as the director of the Plant Clinic as I prepare for retirement. For those of you new to our services, this is the 35th year of Plant Clinic operation, all at the same location.

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 practice facility. The mailing address is:

Plant Clinic
1401 W. St. Mary's Rd.
Urbana, IL 61802

The clinic web presence is at <http://plantclinic.cropsci.illinois.edu/index.html>. There you will find hours of operation, a map to our lab, and instruction on how to prepare samples, as well as required data forms, fees, and contact information. If you prefer talking to a person, our telephone number is 217-333-0519. We are not fully staffed for the first few weeks, so if you happen to call and get a busy signal, please leave a message with Sandy (Crop Science Extension) at 217-333-4424 or send an e-mail message to me at npataky@illinois.edu.

Whenever submitting a sample, provide as much information as possible on the pattern of injury in the planting, the pattern on one affected plant, and details describing how symptoms have changed over time to cause you concern. Data forms are required with all samples. You do not have to use our form, but please provide the same information requested on our form. We can be far more efficient, accurate, and helpful when background information is provided. It is a rare case when the sample alone provides us with a diagnosis.

Most disease problems are handled in-house, but other problems may require us to find the appropriate campus specialist to help. Many samples can be diagnosed within a day or two. Should culturing be necessary, isolates may not be ready to make a final reading for as much as two weeks. Nematode processing also requires about a week to complete. Please refer to our web site

for details concerning services offered. When in doubt, please call. Often mailing costs are greater than our sample fee, so calling ahead may save you time and money. --Nancy Pataky

Sudden Oak Death Update

Sudden oak death is a disease that kills oaks. It is present in California, Oregon, and Washington. The cause is a fungal-like pathogen, *Phytophthora ramorum*. The disease appeared in California in 1995. The last time I discussed Sudden Oak Death in this newsletter was April 15, 2008, <http://hyg.ipm.illinois.edu/pastpest/200801e.html>. Review that issue for details about this exotic invasive disease.

The main concern now is that Ramorum blight (also known as sudden oak death, ramorum leaf blight, and ramorum dieback) might spread to Midwestern and Eastern U.S. forests, killing oak stands. It will likely arrive on one of many shrub hosts. The disease has not been found in Illinois. It first started popping up in Eastern U.S. nurseries in 2004, on material shipped from the west coast. For that reason, state and federal inspectors became involved in quarantines and inspections for this disease. The disease was identified in an Indiana nursery in 2006 and was quickly identified and eradicated. That is the closest find to our state.

In April of 2010 (earlier this month), *Phytophthora ramorum* was confirmed from bay laurel seedlings at a commercial greenhouse in Pennsylvania. This time the source of infection has not been established. The

pathogen has been controlled and did not enter the forestry environment. As with any such discovery, inspectors conduct investigations to trace possible shipments both into and out of the nursery. Labs such as the University of Illinois Plant Clinic and others in the NPDN (National Plant Diagnostic Network) are utilized to test suspect plant material.

The US Department of Agriculture Animal and Plant Health Inspection Service (APHIS) monitors thousands of nursery surveys for this pathogen each year via cooperative programs with states. The University of Illinois Plant Clinic tested samples collected by the Illinois Department of Agriculture and Illinois APHIS inspectors in 2004, 2005, and 2006. Last year (2009) we performed enzyme linked immunosorbant assays (ELISAs) on 145 nursery samples. Nineteen of these had PCR follow-up testing, provided by the Michigan State University clinic. None contained *Phytophthora ramorum*. The pathogen has not been found in Illinois.

A link with more information on *Phytophthora ramorum* can be found at http://www.suddenoakdeath.org/html/p_ramorum_resources.html. As of February 2010, there are 45 proven hosts regulated for *Phytophthora ramorum*. There are also 82 plants associated with *Phytophthora ramorum*. The current list of hosts can be found at http://www.aphis.usda.gov/plant_health/plant_pest_info/pram/downloads/pdf_files/usdaprlist.pdf.

If you purchase plants from the west coast, find out whether they may carry this pathogen. Start by reviewing the host list referenced above. Then become

familiar with the symptoms that might appear on your plants. The image is borrowed from the California Mortality Task Force web site. The infected rhododendron leaves show leaf spots with diffuse margins, water-soaked appearance, and identical symptoms on the top and bottom of leaves. The resources listed above provide many images. Finally, if you have a plant that appears symptomatic and originated on the west coast in the last 1 to 3 years, talk to your nearest diagnostic lab for instructions on how to send a sample for testing--*Nancy Pataky*

Boxwood Problems Remain

Calls about boxwood problems started for me about two years ago. I continue to receive calls concerning boxwoods, and the problem is the same. Plants show areas of bronze foliage that eventually brown and die. Sometimes the bark on the stem falls off, especially near the soil line. Often the tissue is black under that loose bark. Roots in general appear healthy but we often find some black roots interspersed when we have a root system to inspect. Some plants die.

The major disease problems of boxwood include *Phytophthora* root and crown rot (*Phytophthora cinnamomi* and *P. parasitica*), Verticillium wilt (though actually rare), Root Knot and Lesion nematodes (*Meloidogyne* and *Pratylenchus* spp), Volutella leaf and stem blight (*Volutella buxi*), Macrophoma leaf spot (*Macrophoma* sp), and a condition called boxwood decline.

There are some insect and mite problems of boxwood to consider. Boxwood leafminer, boxwood psyllids, and spider mites may be found on boxwood in Illinois. None of these pests cause the symptoms described here.

When a complete boxwood sample is received, such as the one in the image, our lab has tested for Phytophthora (with ELISA), Verticillium (via cultures), nematodes (via soil extraction), Volutella and Macrophoma (incubation). The only pathogen we have found is Volutella. Since the literature mostly refers to this pathogen as a secondary invader, it does not appear to be the cause of the symptoms listed above.

At a recent meeting with North Central diagnosticians in the NPDN network, others reported seeing the problem as well. No one had a pathogen to blame.

Boxwood decline is a situation that has been associated with English boxwoods. The decline has been reported since the 1970s, and appears to be caused by a complex of stress factors. Reports of boxwood decline refer to it as a slow decline, over several years. The boxwood situations that I have seen have been very quick, often over one season. Still, there may be some connection. A fungus called *Paecilomyces buxi* has been associated with the English boxwood decline. Clinic staff will look more closely at boxwood roots for this fungus in 2010.

It appears that the main problem with many boxwoods is related to environmental stress and not a specific pathogen. This injury is much more

severe than winter burn or scorching. Entire stems have died. In some cases plants have died or injury is severe enough to warrant plant removal. Some plants show problems in wet areas, some in areas with little care, others in high maintenance areas. I do not know exactly what is happening. I have spoken with many horticulture and plant pathology specialists, growers, and retail folks about this problem. They all know it exists and would all like a quick fix. As far as I can determine there is no quick fix. Fungicides to control *Volutella* would not be expected to give long term control. If your client is demanding long term control, I would be careful not to promise anything. In such a case your best option might be to remove the plant. Investigate tops and roots to determine whether the problem started below ground or above ground. If this is a root rot situation, do not replant in the same area. Improve site stress where practical before replanting. If using boxwood, choose a boxwood species and cultivar that has been proven to be hardy in your area for many years.

An article on boxwood diseases by a plant pathologist at Virginia Tech can be found at this site, <http://pubs.ext.vt.edu/450/450-614/450-614.html>. The author addresses both *Phytophthora* root rot and English boxwood decline in that article. Images are included.

Another link to read is at http://www.clemson.edu/extension/hgic/pests/plant_pests/shrubs/hgic2052.html. This Clemson fact sheet addresses both disease and insect/mite problems of boxwood. --*Nancy Pataky*