UNIVERSITY OF ILLINOIS EXTENSION
HOME, YARD & GARDEN PEST NEWSLETTER
College of Agricultural, Consumer and Environmental Sciences, University of Illinois at Urbana-Champaign
Illinois Natural History Survey, Champaign

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2005 Greenhouse Management Workshop

It is time to consider attending the 2005 Illinois Greenhouse Management Workshop to be held on June 8, 2005. The workshop will be in the auditorium of the Chicago District Golf Association building (a very nice complex) located at 11855 Archer Avenue in Lemont, IL 60439, right across the street from Cog Hill Golf Club. For directions to the workshop location, call (630)685-2303. Registration for the workshop is $35 for Illinois Greenhouse Association (IGA) members and $50 for nonmembers.

This year's program will include topics on new pest-control materials, new plant varieties, pesticide application equipment and techniques, and biological control. The registration fee covers all handouts, lunch, and refreshments.

If you plan to attend the workshop, please fill out the registration form below and mail it along with a check made payable to the University of Illinois to the following address:

Raymond Cloyd
University of Illinois
384 National Soybean Research Laboratory
1101 West Peabody Drive
Urbana, IL 61801

For more information or if you have any questions, please feel free to call (217)244-7218. *(Raymond Cloyd)*

2005 Greenhouse Management Workshop Registration Form

Name:_____

Address:_____

_____

City:_____ State:_____ Zip Code:_____

Phone number:_____

Total check amount:_____

PLANT DISEASES

Opening Day

The University of Illinois Plant Clinic is back in business for 2005. The lab is seasonal and is open from May 2 through September 16 in 2005. Plant samples needing diagnosis, identification, or lab tests may be mailed or hand delivered to the Plant Clinic at 1401 W. St. Mary's Rd, Urbana, IL 61802. Hours are 8 a.m. to noon and 1 to 4:30 p.m. Monday through Friday. There is a fee for all plant samples, as outlined on the clinic's Web page at http://plantclinic.cropsci.uiuc.edu/.

The Plant Clinic is well-known as a disease diagnostic lab, but services also include weed ID, insect and insect injury ID, nematode assays, general diagnoses, ELISA tests, referrals to specialty labs, and management recommendations. Feel free to call with questions about clinic services, turn-around time, and fees at (217)333-0519. General plant-care questions should be directed to your local Extension office. A listing of Extension offices can be found at http://web.extension.uiuc.edu/cie2/offices/findoffice.cfm.

The Plant Clinic is prepared to handle some new potential pathogens in Illinois, including the possibilities of soybean rust and sudden oak death coming to our state. Entomologists can identify new insect problems such as the Asian longhorned beetle, emerald ash borer, and gypsy moths. The University of Illinois Plant Clinic is part of the National Plant Diagnostic Network (NPDN) and will have news on new pest problems as the season progresses. You can learn more about the NPDN at http://www.npdn.org. *(Nancy Pataky)*

Bits and Pieces

In general, landscape plants are looking very healthy. We had 2 weeks of warm, sunny, and relatively dry weather to start off the season. Before the recent cool, wet weather, I thought we might actually avoid **anthracnose** on trees this year. Anthracnose of shade trees requires cool, wet conditions in the 2 weeks following bud break. Succulent new plant growth is most susceptible. Older leaves and drier conditions later in the season usually retard repeating cycles of infection.

Although many of the buds on sycamores, oaks, maples, and ash trees susceptible to anthracnose opened in the recent warm, dry weather, they may not have escaped infection. Reports of ash anthracnose and sycamore anthracnose are coming from areas that saw more moisture in recent cool spells.

As a reminder, fungicides are not recommended for anthracnose of shade trees. Help the tree produce a new flush of foliage by providing water in periods of drought. Leaves that emerge in warmer temperatures are far less likely to be infected. Anthracnose causes water-soaked spots, leaf lesions from dark green to brown or black, and possibly some stem cankers on ash, oak, maple, and sycamore. Other trees are susceptible to varying degrees, but the trees listed are those on which we traditionally see anthracnose in Illinois. Dogwood anthracnose is much more severe but occurs later in the season. Look for dogwood anthracnose in June.

Rust galls of **cedar-apple rust** are now swollen with spores in central Illinois. Spores are most likely moving from cedars to their alternate hosts as this article goes to press. Keep this in mind if you are fighting cedar-apple, cedar-hawthorn, or cedar-quince rusts. This is the time to protect susceptible crabapples, hawthorn, and apples. To learn more about cedar-apple and related rusts, consult *Report on Plant Disease,* no. 802, "Rust Diseases of Apple, Crabapple, and Hawthorn." This report is available in University of Illinois Extension offices and on the Web at http://www.ag.uiuc.edu/%7Evista/horticul.htm. Chemical options for sprays are available in the *2005 Commercial Landscape & Turfgrass Pest Management Handbook* or the *Home, Yard, and Garden Pest Guide*.

General pruning note: Although the general recommendation is to prune trees and shrubs when dormant, many of us prune out any dead wood in trees and shrubs as it appears. In most cases, I would agree with this more practical schedule as long as conditions are dry. Now is a good time to remove dead wood because it is easy to find next to branches that are leafing out; and it is easy to get into a tree or shrub that is only beginning to leaf out. However, pruning in wet weather allows pathogens to survive and move on equipment. In addition, wetness allows the pathogen to remain alive or possibly germinate on the freshly cut wood. In areas where **oak wilt** is present, DO NOT prune oaks in the spring or early summer. Sap on fresh cuts attracts beetles that may be carrying the oak wilt fungus to your tree. Oaks should be pruned in late summer or the dormant season. Also keep in mind that pruning shrubs before they flower will remove this season's flowers, so you may need to choose between pruning convenience and additional flowers. *(Nancy Pataky)*

Sphaeropsis Blight of Pine

Sphaeropsis blight (formerly Diplodia blight) is common on Scotch, Austrian, and mugo pines in Illinois. It is rare on white pine. Infected trees may show branch tip dieback, with needles remaining attached throughout the season. Limbs of affected trees may have damaging, sappy cankers. Often, an infected branch dies beyond the site of the canker, resulting in a very unpleasant-looking tree. Severely infected trees may be confused with those killed by pine wilt.

Management of this disease is difficult. Most infection takes place in the spring, as new growth emerges. This tender growth is very susceptible to infection, especially in wet weather, until about mid-June. Infection is occurring now. We can suggest several methods to reduce Sphaeropsis blight. It helps to remove dead wood and needles to reduce the amount of the fungus in the area. To avoid increased spread of the disease, this should be done when the tissue is dry. It also helps to remove cones from the site. Cones on infected trees are usually covered with fruiting bodies of the fungus. These can be seen as small, pinhead-sized black bodies embedded in bud scales. Fruiting bodies contain spores that serve as inoculum for additional infection. The final point is that drought-stressed trees are more susceptible to canker infection. For that reason, we recommend watering infected trees in periods of extended drought. Supply an inch or more of water per week to pines in drought-stressed areas. Prune out dead branch tips and cankered wood in the next dry period. Remove it from the site.

There are chemical options available to control this disease. The recommendation is to try to use a systemic product and to apply it three times, following label directions. Usually this is as buds begin to expand, just before new needles emerge from the sheath, and 10 to 14 days later. Recent research on this disease has shown that even foliage without symptoms is often already infected. That research questions the use of chemicals that are intended to prevent infection. It is still strongly

recommended that you follow the cultural controls discussed above. In fact, cultural controls are more important than ever in managing Sphaeropsis blight. The use of chemicals may still be of benefit but should be used only in addition to cultural controls. Do not rely on chemical control alone. Choose a systemic product from those listed in the Illinois pest management handbooks and follow label directions precisely. A table at the end of disease chapters lists all chemicals mentioned in that chapter and provides information on chemical mobility. For details on this disease, consult *Report on Plant Disease,* no. 625, "Sphaeropsis Blight or Diplodia Tip Blight of Pines," available in University of Illinois Extension offices or on the Web at http://www.ag.uiuc.edu/%7Evista/horticul.htm. *(Nancy Pataky)*

INSECTS

Scouting Watch

European pine sawfly has hatched throughout Illinois. These caterpillar-like insects have black heads and medium and dark green stripes, and grow to about one inch. They feed in groups on Scotch, Austrian, and other pines. When disturbed, everyone in the group rears up anterior and posterior ends in unison and regurgitates fluid from their mouths. They feed on the second- and third-year needles, being full grown by the time that the new needles from the candles emerge. They feed on the outer needle layers, leaving a brown central core that dries, curls, and drops from the tree. Thus, damaged branches will be needleless except for clusters of first-year needles at the ends of the branches.

European pine sawfly can be controlled by pruning off infested branches or spraying with acephate (Orthene), azadirachtin (Neem), carbaryl (Sevin), spinosad (Conserve), or other labeled insecticides. Because these are the larvae of wasplike insects and not true caterpillars, *Bacillus thuringiensis 'kurstaki'* is not effective.

Taxus mealybug are present at this time as young nymphs, which are susceptible to sprays of imidacloprid (Merit), insecticidal soap, or summer oil. Apply the soap or oil three times at weekly intervals. If you apply Merit, repeat the spray after 2 weeks. Taxus mealybug appear as white, cottony insects at twig crotches and at the base of needles. They tend to be found in more humid locations deep in foliage masses of repeatedly sheared bushes in landscapes and in tightly grouped nursery plants. Be sure to use a high-pressure spray to penetrate the tight foliage and contact the insects with the insecticide.

Japanese beetle soil application of imidacloprid (Merit) should be completed by the end of April to early May. Soil application of Merit takes up to 2 months to spread throughout trees and shrubs. With emergence of Japanese beetle adults occurring from late June in southern Illinois to early July in northern Illinois, that is only 2 months from now. Realize that with this application, some trees will still have beetles and damage, but the beetles on most of the trees will be controlled. *(Phil Nixon)*

Scurfy Scale

Now is time to be on the look out for the crawler stages of scurfy scale, *Chionaspis furfura,* that have emerged from eggs. This scale species is primarily a pest in nurseries but can also be found in ornamental plantings. Scurfy scale tends to attack plants in the rose family (Rosaceae), including cherry, crabapple, firethorn, hawthorn, mountain ash, peach, and quince. Other susceptible hosts include dogwood, elm, hickory, horsechestnut, maple, and willow. Scurfy scale is not one of the more common scales found in Illinois; however, there have been increased reports of infestations within the last couple of years.

Female scurfy scales are flat, thin, grayish white, 1/8-inch long, and rounded on one side, which makes them appear pear- or oystershell-shaped. Females can lay up to 80 eggs, which are reddish purple in color. The eggs are retained under the female covering after she dies. Scurfy scale overwinters in the egg stage. Eggs typically hatch in mid to late spring, depending on temperatures, into purple crawlers that move around on plants and eventually locate a suitable place to settle and feed. Scurfy scale can be abundant on bark, resembling flakes on the surface of skin, giving the plant a "scurfy" appearance (hence the common name). This scale tends to be located on the shady side of trees or in areas under the dense canopy of leaves. Scurfy scale is a hard scale, which means that no honeydew is produced during feeding. In Illinois, there are one to two generations per year.

Scurfy scale is best managed when the crawlers are active. Insecticides recommended for control include acephate (Orthene), bifenthrin (Talstar), cyfluthrin (Tempo), insecticidal soap, or a summer (horticultural) oil. This scale is susceptible to dormant oil sprays during the winter.

Scurfy scale (like many scales) is susceptible to parasitoids and predators (= natural enemies); and in sufficient numbers, these natural enemies may provide some level of control. The use of acephate, bifenthrin, cyfluthrin, or other persistent, broad-spectrum insecticides is harmful to natural enemies, which may impact their ability to provide control. Insecticides such as insecticidal soap and summer oil are less harmful to natural enemies. *(Raymond A. Cloyd)*

Gypsy Moth

Gypsy moth larvae are hatching in northeastern Illinois. By April 23 and 24, 30 to 50% of the egg masses had hatched in Addison and Geneva in DuPage County; but on April 27, eggs were just starting to hatch in McHenry County. Newly hatched gypsy moth larvae sit on or near the egg mass for a few days before dispersing into the tree canopy to start feeding on leaves; and at the above dates and locations, the caterpillars were still on and around the egg masses.

A complicating factor in treating for gypsy moth caterpillars at this time of year is that there needs to be enough leaf surface for the insecticide spray to impinge upon. Oaks, one of the preferred hosts of gypsy moth, tend to leaf out late in the spring, so one has to wait for enough leaf expansion to occur to make spraying practical. This typically occurs when bridal wreath spirea, *Spiraea x vanhouttei,* is in bloom, which will probably occur in 2 to 3 weeks in northern Illinois.

Recommended insecticides include *Bacillus thuringiensis 'kurstaki'* (Dipel, Thuricide), spinosad (Conserve), deflubenzuron (Dimilin), and tebufenozide (Mimic). *Btk* is a bacteria that produces encapsulated toxins that release only in the guts of caterpillars, making it very low to nontoxic to other insects and other animals. Spinosad is a group of toxins produced by a fungus that is very effective against caterpillars but with a very low toxicity to animals other than insects. Deflubenzuron and tebufenozide are insect-growth regulators, mimicking insect hormones that do not occur in most animals, making them low in toxicity to noninsect animals as well. All of these substances must to be ingested by the gypsy moth caterpillars to be effective, so good leaf coverage is essential.

You can keep up-to-date on gypsy moth in Illinois by visiting our University of Illinois Extension Gypsy Moth Website at http://www.urbanext.uiuc.edu/gypsymoth/default.cfm. Timely information about overall infestations in Illinois and other parts of the United States can be found at http://www.fs.fed.us/ne/morgantown/4557/gmoth/. *(Phil Nixon and Jim Cavanaugh, Illinois Department of Agriculture)*

Home, Yard, and Garden Pest Newsletter is prepared by Extension specialists from the University of Illinois at Urbana-Champaign and the Illinois Natural History Survey. Information for this newsletter is gathered with the help of staff members, Extension field staff, and others. Karel Jacobs and Donna Danielson of The Morton Arboretum also provide information and articles.

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