



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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## WINTER PROGRAMS

Each year, we try to list educational opportunities that can be utilized over the winter. Following are some that may be useful to you. (*Phil Nixon*)

### **The Fundamentals of Greenhouse Plant Nutrition**

February 18, 2003, 9 a.m. to 12 p.m, Chicago Botanic Garden, 1000 Lake Cook Road, Glencoe, IL 60022

This class will discuss how to maintain healthy plants in greenhouse production and related systems. Topics include managing macro- and micronutrients; the influence of water quality, pH, and alkalinity on plant growth; how to properly select fertilizers; and ways to avoid nutrient deficiencies and toxicities. The instructor is Raymond A. Cloyd, assistant professor, Extension specialist in ornamental entomology/Integrated Pest Management, University of Illinois.

For information, contact the Chicago Botanic Garden at (847)835-8261 or access the Web site at [www.chicagobotanic.org/continuinged](http://www.chicagobotanic.org/continuinged).

### **Spanish Grounds Maintenance Workshop**

April 1 and 2, 2003, tentatively in DuPage County, Illinois

Topics include diseases of needle evergreens, diseases of deciduous trees, planting and care of roses, pruning of shrubs and hedges, needle evergreen insects, and deciduous tree and shrub insects.

The cost is \$40 per person per day, or \$75 for both dates. The fee includes Hispanic lunch, coffee/pop at morning break, and all handouts (in Spanish when available). Contact Jim Schuster at (708)352-0109.

### **2002 North Central Turfgrass Exposition (NCTE)**

December 3 to 5, 2002, Pheasant Run Resort in St. Charles, Illinois

This annual event, hosted by the Illinois Turfgrass Foundation, features turf and landscape educational sessions and workshops taught by university experts from Illinois, Indiana, Michigan, and Georgia, as well as by professional turf and landscape managers. Forty thousand square feet of trade show is open to registrants on Tuesday and Wednesday in the Pheasant Run MegaCenter.

For registration information, contact Jack Lagershausen, executive director, Illinois Turfgrass Foundation, Suite 102, 1000 E. Woodfield Rd., Schaumburg, IL 60173-5921; telephone, (847)706-6750; fax, (847)706-6751; e-mail, [jlagers@aol.com](mailto:jlagers@aol.com).

### **Southern Illinois Grounds Maintenance School and Trade Show**

February 25 and 26, 2003, Gateway Convention Center, Collinsville, Illinois

A comprehensive program covering turf and other landscape maintenance, including plant selection, pest management, and landscape design. It features sessions taught in Spanish on February 25 and a trade show.

Admission is \$55 for both days and \$40 for one day in advance; the admission charge at the door is higher. Advance registration is due by February 11 and includes lunch, breaks, proceedings, trade show, and education program. Lunch is not included in late or walk-in registration. For registration, contact Madison-St. Clair Extension Unit, P.O. Box 427, 900 Hillsboro Ave., Edwardsville, IL 62025; telephone, (618)692-7700. For program questions, call Ron Cornwell, (618)692-9434.

### **Fruit and Vegetable Programs**

#### **7th Illinois-Iowa Fruit and Vegetable Growers Conference**

November 7, 2002, 1 to 5 p.m., Davenport River Center, 136 E. 3rd Street, Davenport, IA (563-326-8500)

Topics include raspberry varieties, nonchemical controls for apple pests, disease-resistant apples, maintenance of fruit quality, grape cultivars, new fruit insecticides, squash vine borer control, maintenance of vegetable quality, training systems for tomatoes, sweet corn hybrids, tomato weed control, and fruit rot control in pumpkins.

Registration is \$25.00 for the first person from a family or company, \$20.00 for the second person, and \$15.00 each for any additional persons. To receive a brochure, call the Johnson County Extension Office, Iowa City, IA, (319)337-2145; or Martha Smith at the University of Illinois Macomb Extension Center, (309)836-2363.

### Additional Schools

Horseradish Growers School, January 29 and 30, 2003, Collinsville Holiday Inn

Tree Fruit School, specific times and locations to be announced: February 4, 2003, Centralia, IL; February 5, 2003, Cobden, IL.; February 6, 2003, Hardin, IL.

2003 Southern Illinois Vegetable School, February 12, 2003, Mt. Vernon Holiday Inn, Mt. Vernon, IL.

Small Fruit and Strawberry School, March 4 and 5, 2003, Mt. Vernon Holiday Inn, Mt. Vernon, IL.

For information on these schools, call Richard Wienzierl, (217)333-6651.

## PLANT DISEASES

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### Bacterial Scorch Update

Bacterial scorch (BLS) is a disease that slowly spreads within a tree, branch by branch, until the tree dies. Scorch symptoms from this disease are similar to environmental scorch, with several exceptions. With BLS, often there is a slight yellow margin between the brown (scorched) tissue and the green tissue of infected leaves. The disease causes branch-by-branch scorching rather than a more uniform pattern seen with environmental scorch. In addition, BLS usually appears in July or August, while environmental scorch usually shows in the spring or early summer. Of course, these times vary with the weather and other stress. Trees infected with BLS produce green leaves the next spring; but by the following July or August, scorching returns. Each year, the symptoms spread a bit, ending in tree death in 3 to 6 years. Environmental scorch does not kill trees.

In issue 13 of this newsletter, we reported BLS on pin and shingle oaks. It has since been confirmed on bur oak in the state. At a recent meeting of diagnosticians, I learned that Kentucky plant-disease specialists have confirmed BLS on many other species in their state. This seemed pertinent to us because of geographical proximity. Kentucky reports BLS on pin, red, scarlet, bur, white, willow, and shingle oaks; silver, sugar, and red maples; sweetgum, sycamore, planetree, hackberry, American elm, and red mulberry. If you have seen progressive scorching on these trees, consider BLS as a possibility. Details on sampling and testing procedures, as well as management options, are provided in issue 13. Fortunately, BLS appears to spread slowly and may not move from oak to oak. Still, this disease is one to know if you work in tree care. (*Nancy Pataky*)

### Daylily Rust in Illinois

Daylily rust, caused by *Puccinia hemerocallidis*, was first reported in the United States in 2000; it is thought to have been brought on plants from Costa Rica. The disease quickly spread in 2001, appearing in most of the eastern half of the United States. It drew much publicity that year. The disease was discussed in issues 15 and 20 of the 2001 newsletter. Symptoms include various spots and streaks on foliage, from pale yellow to brown. Within these spots and streaks, you find rust pustules on either the upper or lower leaf surface. Spores are yellow-orange to reddish brown and wipe off when rubbed. You can see these easily with a hand lens.

According to the scientific literature, this rust fungus has multiple hosts. The uredial/telial stages of the fungus are reported on daylily and hosta. Fortunately, the rust has not been found on hosta in the United States. The aecial host reported in scientific literature is *Patrinia*, but that host has not been reported in the United States either. The fungal stage found on daylily is the repeating stage: It can repeatedly re-infect daylily without an alternate host.

The good news is that daylily rust has not shown an ability to overwinter in Illinois. There really are some advantages to our cold winters! One of the first reporters of daylily rust is Jean Williams-Woodward, a Georgia plant pathologist. She said that rust did not overwinter and return after the winter of 2001 even in her Georgia gardens.

If you manage to bring daylily rust to your garden in Illinois, it quickly spreads to other daylilies by wind and air currents. Spores need only 4 hours of nearly 100% humidity and moderate temperatures to germinate, so infection is rapid. Still, the fungus dies in the winter, and it does not kill your plants. Keep these facts in mind when choosing management options.

Most Illinois daylily rust cases we have seen were bought with mail-order plants. Williams-Woodward suggests treating mail-order plants as follows. Remove all leaves except the central bud. Soak the plant for 10 minutes in 10% Clorox before planting. As an extra precaution, isolate new plants until new leaves emerge free of rust. You can also stop planting susceptible cultivars. Research on varietal resistance is under way. A study in Arkansas is described at <http://daylilies.uaex.edu/>.

If you choose to use fungicides, there are many choices. Chemical options are available to protect new leaves from infection, but a strict spray program of 7 to 14 days all summer is needed to keep the

disease at bay. Homeowners often see success with chlorothalonil and mancozeb, which are protectant-contact chemicals. At least two systemic products packaged for homeowners work against rusts—propaconazole (Fertilome Systemic) or myclobutanil (Immunox). Commercial growers usually use systemic products such as myclobutanil (Systhane), triadimefon (Bayleton, Strike), propaconazole (Banner Maxx), azoxystrobin (Heritage), and flutolanil (Contrast, Prostar). Refer to issue 20, 2001, for details on chemical concerns. (*Nancy Pataky*)

### What Is Sudden Oak Death?

Sudden oak death (SOD) is a fungal disease that causes a rapid decline and death of oaks. The name is a bit misleading because it also occurs on other tree and shrub species, 17 in all. Symptoms vary from leaf spots to twig blight to trunk cankers. Roots do not show symptoms.

The causal fungus of SOD is *Phytophthora ramorum*. At present, the disease has been identified only in ten California counties and one Oregon county. Oaks affected are tan oak, coast live oak, and California black oak, none of which grows in Illinois. Research has shown that red and pin oaks are susceptible when artificially inoculated. In addition, some other plants grown in Illinois can serve as hosts, including rhododendron, azalea, and Douglas-fir. Obviously, there is great concern that the disease might move on these plants to other areas of the country.

SOD causes rapid decline of oaks, usually resulting in death in 1 to 3 years. On oak, the disease causes a bleeding canker on the stems or trunk. These cankers ooze a black or reddish fluid. The wood under them has black zone lines evident when bark is removed. Once crown dieback begins, the leaves turn brown in a few weeks.

Because of the concern of movement of this disease out of California and Oregon, USDA began regulating the shipment of all host plants in February of 2002. The animal and plant health inspection service (APHIS) has surveys planned for some of the southeastern states (GA, SC, NC, TN, and VA) where the disease is most likely to take hold. These surveys are slated for the spring of 2003. Oklahoma plant pathologists have already initiated some nursery surveys and have not yet found the disease.

There is a tremendous amount of information available on this disease on the Internet. A good source to start with is the USDA "Sudden Oak Death Pest Alert," NA-PR-02-02, at [http://www.na.fs.fed.us/spfo/pubs/pest\\_al/sodeast/sodeast.htm](http://www.na.fs.fed.us/spfo/pubs/pest_al/sodeast/sodeast.htm). (*Nancy Pataky*)

## INSECTS

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### Cranberry Girdler—A Different Sod Webworm

We have had reports from Will County and southern Cook County of cranberry girdlers (*Chrysoteuchia topiaria*) causing damage to turf. There are many species of sod webworm that attack turfgrass, and most of them have similar life cycles that cause similar damage. They typically overwinter as larvae, live in silk tunnels in the thatch, come out at night to feed on grass blades by eating them off at the crown, and have several generations per year. Although the cranberry girdler is a sod webworm, its life cycle, damage, and control are more similar to that of white grubs. As the name implies, this insect is also a pest of cranberry, girdling the roots of cranberry, as well as some needled evergreens.

Cranberry girdler adults emerge from late June into August. They are similar in shape to other sod webworms, holding their wings close to the body. Their palps are long and protrude from the front of the head like a snout. However, their wings are brown and whitish, striped with silver V-shaped bands and three black dots near the tip. They are less than 1/2 inch long, with a wingspan of about 3/4 inch. While other sod webworm moths fly low over the turf, dropping eggs that fall to the soil, cranberry girdler moths land on grass blades to drop their eggs.

Eggs hatch into larvae that feed through the late summer into fall. The larvae are slender and dirty white in color, but without the spots characteristic of other sod webworms. Young larvae live in the thatch or alongside the crown of grass plants. Older larvae live in silk tunnels. They are about 3/4 inch long when fully mature. Unlike other sod webworms, the larvae feed on the roots of cool-season grasses, including Kentucky bluegrass, fine fescues, and bentgrass. As cold temperatures arrive, typically by November, they go dormant for the winter. In May, larvae that were not fully grown at the end of fall resume feeding. Later in the spring, both these larvae and those that were mature the preceding fall pupate, emerging as moths at about the same time.

Damage is caused as larvae tunnel into the grass crowns and feed on grass roots, stems, and leaves. Damage appears as small, roundish, brown areas of turf 1 to 3 feet in diameter. Brushing your hand across the turf frequently causes the grass blades to break off, and the turf easily can be pulled back, as with white grub damage.

Starlings, blackbirds, killdeer, and other insectivorous birds feeding on the larvae in the fall commonly

provide all the control that is needed. Large numbers of birds feeding on turf areas in the fall can be indications of either white grubs or various sod webworms, including cranberry girdler. If grubs are not numerous and turf damage is not evident, treatment is usually not needed—allow the birds to provide the control.

Chemical control is most effective when applied a couple of weeks after heavy moth activity in the summer; however, treatment in the fall should also be effective if bird-feeding is not sufficient to prevent obvious damage. Spring treatments are usually not very effective because much of the population has finished feeding, making those larvae less susceptible to insecticide. Trichlorfon (Dylox) or halofenozide (Mach 2) should provide control. Watering in the application improves control. (*Phil Nixon*)

### White Grubs

Japanese beetle and annual white grubs continue to actively feed throughout the state despite the falling temperatures. Japanese beetle grubs descend deeper into the soil when root-zone temperatures drop to 60°F. Masked chafer grubs remain in the root zone until the temperature drops to 50°F. If grub damage is occurring, pull back the turf to see if grubs are still present in the root zone.

Whether to treat this late in the growing season depends on several factors. If soil temperatures indicate that descent out of the root zone is imminent, feeding should cease soon. Increased irrigation may allow the turf to grow roots faster than the grubs eat them and continue to produce roots into the fall after

the grubs have descended. Although the same grubs come back up in the spring to feed, rainfall and a short grub-feeding period in the spring may allow the turf to tolerate feeding with little obvious injury. Alternatively, high grub numbers now will likely result in high numbers in the spring. A dry spring could easily result in damage that could be prevented now. In addition, warm late fall weather could allow the grubs to feed for several weeks yet. Decisions need to be made based on grub numbers, client attitudes, and other factors. Trichlorfon (Dylox) irrigated with at least 1/2 inch of water to carry the insecticide into the root zone is likely to be the most effective insecticide at this time of year. (*Phil Nixon*)

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*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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