

No. 1 • April 14, 1999

First Issue of the Year

Welcome to the *Home, Yard, and Garden Pest Newsletter* for 1999. Throughout the growing season, we will strive to provide you with information about current disease, insect pest, and weed problems on trees, shrubs, turf, flowers, greenhouse plants, and other ornamental landscape plants. We'll also try to predict the problems that are likely to occur. Articles will be written primarily for the professional ornamental horticulturist.

Our schedule will start out with two biweekly issues followed by weekly issues throughout the spring and summer into mid-August. From mid-August through September, issues will be published biweekly. We will finish out the season with monthly issues in late October and November.

Although we try to keep abreast of pest activity occurring throughout the state, we can't be everywhere at once. We are always interested in reports of pest activity that you are seeing in the state. If you wish to report activity, contact persons and telephone numbers can be found at the end of each issue of the newsletter. Call Nancy Pataky with disease information, Tom Voigt with turf weed information, Dave Williams with ornamental weed information, and Phil Nixon with insect pest information. If you have information about more than one type of pest, contact Phil Nixon, the newsletter coordinator, and he will distribute the information to the proper person. For more information about a pest mentioned in the newsletter, or to take issue with the author's views, please contact the author of the article. That person's name will appear in parentheses at the end of the article; again, telephone numbers can be found at the end of the newsletter. (Phil Nixon)

Pest Management Handbook Available

The *Illinois Commercial Landscape & Turfgrass Pest Management Handbook, 1998-1999* is still available for \$10, plus shipping and handling. This publication, intended for the professional, gives control recom-

mendations for insect pests, diseases, and weeds. You can purchase a copy by phoning (217) 333-2007. Updates to this publication for 1999 are available at the *Home, Yard, and Garden Pest Newsletter* Web site at <http://www.ag.uiuc.edu/cespubs/hyg/>. If you would like to receive updates by mail, phone (217) 333-2007. (Phil Nixon)

Web Site Free for Two Issues

The *Home, Yard, and Garden Pest Newsletter* Web site at <http://www.ag.uiuc.edu/cespubs/hyg/> will have free access for the first two issues of 1999. This will allow you to see how the Web site works and to browse through last year's issues. Later issues of the newsletter will only be available with the proper password, obtained with your Web site subscription. (Phil Nixon)

INSECTS

Dormant Oil

Dormant oil sprays for control of insect and mite pests can still be applied to trees that have not broken bud. Many species of trees in northern Illinois are still dormant, but almost all trees in southern Illinois are actively putting out leaves. Spraying trees with dormant oil after bud break will still control these pests, but it may kill the young leaves or cause leaf edges to turn black.

Dormant oil sprays can effectively control such scales as lecanium, cottony maple, euonymous, and obscure; and honeylocust mite can also be controlled with a dormant oil spray. These sprays have little control on oystershell scale, though, and only moderate control on pine needle scale because oystershell scale overwinters primarily as eggs and pine needle scale overwinters partially as eggs.

Apply a dormant oil spray when the temperature will stay above freezing for 24 hours after you spray. Obey label directions. Japanese and sugar maple will be damaged by oil sprays, and oil will take the blue sheen off Colorado blue spruce. (Phil Nixon)

Cankerworms

Crabapples, honey locust, elms, oak, linden, beech, and other trees that appear to be leafing out late or unevenly may have cankerworm infestations. These loopers, or inchworms, are slender green to brown caterpillars that grow to about 1 inch long. A reduced number of prolegs on the abdomen causes the caterpillars to move in a looping motion. Eggs hatch at bud break, and the caterpillars eat the expanding leaves of the host. Check for cankerworms by striking the tree branch. Caterpillars will fall off the leaves and be suspended by silk threads.

Control cankerworm caterpillars with *Bacillus thuringiensis kurstaki* (Dipel, Thuricide) or another labeled chemical insecticide. Cankerworms are less obvious than they once were. Before the Dutch elm disease epidemic, when American elms lined the streets, outbreaks of these caterpillars would be very noticeable because they would strip these trees of all foliage in the spring.

Toward the end of May, mature caterpillars will drop down on silk strands to the soil to pupate. There are two species of cankerworm. The fall cankerworm emerges as a moth in November and December to lay eggs, while the spring cankerworm emerges to lay eggs in late February and early March. The males are usually the earliest and last moths to be seen. The females are wingless, grayish, 1-inch long insects that climb the host tree to lay their eggs. Both species of cankerworms are present as caterpillars in the spring. (Phil Nixon)

Scouting Report

Spruce spider mites and related mites that feed on spruce, pine, arborvitae, juniper, and other needled evergreens are active in early spring. Check for infestations by firmly striking a branch. The mites will drop onto a piece of white paper held below the branch, and the tiny greenish mites will then be easily seen. Reddish mites that are found are likely to be predatory mites that are eating the pest mites. Control spruce spider mites with two or three weekly sprays of dicofol (Kelthane), insecticidal soap, bifenthrin (Talstar) or dimethoate (Cygon) according to the label.

Zimmerman pine moth can be controlled at this time of year with a spray of chlorpyrifos (Dursban) or dimethoate (Cygon). The caterpillars wander around on the bark surface in the spring where they are susceptible to insecticides.

Ash plant bug can also be controlled at this time of year with applications of acephate (Orthene), bifen-

thrin (Talstar), cyfluthrin (Tempo), and insecticidal soap.

Eastern tent caterpillar will be hatching as leaves come out on crabapples, hawthorns, mountain ash, and other related trees. Look for 1- to 2-inch-wide silk tents in twig crotches. These tents can be pruned out or removed by hand at night or only on cloudy or rainy days when all of the caterpillars will be in the webbing. If sprays are needed, *Bacillus thuringiensis kurstaki* is recommended to avoid killing bees coming to the blooms of flowering trees.

Juniper webworm activity is being reported by The Morton Arboretum. Brownish masses of foliage should be inspected closely for silk webbing and caterpillars. *Bacillus thuringiensis kurstaki* and other chemical insecticides are effective at this time in preventing more severe damage later in the spring. (Phil Nixon and The Morton Arboretum)

PLANT DISEASES

Plant Clinic Opens May 3rd

It is difficult to find an innovative way to announce the annual opening of the University of Illinois Plant Clinic. May 3rd marks the 24th year of operation, and I have been here for 22 of them. Many of you are not familiar with the clinic and its operation, although others use the system regularly. Regardless of your experience, please bring all of the information that follows to the attention of office staff, field staff, educators, master gardeners, or anyone who has contact with our clients. Sending in appropriate samples the first time around can save valuable time and effort for you and the clinic staff.

The Plant Clinic is a seasonal service offered by University of Illinois Extension, available May 3rd through mid-September. The clinic handles plant and insect identification; diagnosis of disease, insect, weed, and chemical injury; and nematode assays. We also provide help with nutrient-related problems, as well as recommendations involving all diagnoses. The clearinghouse concept for plant problems has been in existence at the University of Illinois since 1976 when the clinic opened. Although this multidisciplinary venture is managed through the Crop Sciences Department, operation relies on input from both research and Extension components in many departments. Specialists in agronomy, botany, entomology, horticulture, mycology, plant pathology, soils, soil fertility, and weed sciences are consulted as they are needed, but they do not have offices at the clinic.

Although field crops generally comprise about 55% of the clinic samples, we process a large number of woody and nonwoody ornamental plants (35–40% of the number of samples), and a smaller number of fruits, vegetables, and turf. An average year generates approximately 2,600 samples. The clinic will attempt to help with any plant problem, but the main limitation with specialty plants is locating a campus-based expert to provide help.

Is the clinic a service you should use? That depends on what you have tried to do to get an answer to your problem. Hopefully, you have tried to work through your local Extension office, agricultural consultant, chemical representative, seed dealer, or others involved in the problem. Our lab is most helpful in providing specific tests, laboratory backup, or an unbiased opinion based on plant samples and facts. If you choose to use the Plant Clinic, remember the adage, “Garbage in, garbage out.” In that regard, try to provide a complete sample as well as photos and facts concerning symptom development over time, cultural practices, chemicals used (including rates), fertility practices, weather in your area, soil type, and other pertinent information. Specimen data forms to guide you through this information retrieval are available at Extension offices or by calling the clinic at (217) 333-0519.

The Plant Clinic is located on the South Farms of the University of Illinois. The address is 1401 West St. Mary’s Road, Urbana, IL 61802. There is a fee for samples to help cover costs. The fees have not changed since the early 1980s and will have to be increased in 1999. Details will be available in the next newsletter.

Remember, the clinic does not open until May 3rd. If you send samples before that date, a fresh sample will likely be needed when the clinic opens.

If you have questions about the clinic, contact Nancy Pataky at patakyn@mail.aces.uiuc.edu. Before May 1st, I can be reached by telephone at (217) 333-2478. The Plant Clinic telephone number is (217) 333-0519. (*Nancy Pataky*)

Pine Tip Blight

Although there is not much evidence of plant disease on the Illinois landscapes now, that scenario will change with a few weeks of warm, wet weather. One problem that is evident now is a fungal disease of landscape pines called *Sphaeropsis* blight (*Diplodia* blight). We won’t see new infections until the new needles emerge and become infected, but last year’s infection is easy to spot.

Sphaeropsis affects mostly Scotch and Austrian pines. It infects buds and new needles, causing them to die each year. Needles turn brown, but spots and banding do not occur. The newest spring growth is most susceptible, and summer growth often escapes infection. This perennial tip blight causes dead tips on branches and the development of zigzag branch growth on pine species.

Sphaeropsis also causes a canker (a localized dead area) on stems. This canker is caused by a new pathotype of the same fungus that has developed or moved into central Illinois in the last several years (at least, that is when pathologists noticed it). This phase of the disease causes oozing sap on the stems where infection occurs. If the canker girdles the stem, all growth beyond that point dies. I have not seen the disease kill a tree, but it can make the tree very unsightly and certainly lowers tree vitality.

Although *Sphaeropsis* blight is most common on mature trees, it can sometimes infect nursery trees. Because shearing practices remove branch tips, the disease is manifested on small interior shoots, on older needles, or as cankers oozing sap on the trunk or major stems. It is extremely important to work with trees only when they are dry. Disinfect pruning tools regularly to prevent spread of the pathogen.

Report on Plant Disease No. 625 describes this disease in great detail. It is a difficult disease to manage. The first step is to prune out all dead wood when the foliage is dry. If you can do this before mid-April, you will reduce the fungal inoculum in the primary infection period. The second step is to rake and remove all fallen needles and cones. Because the fungus overwinters on the cones, remove cones from the tree, if at all possible. Water-stressed trees are thought to be more susceptible, so water the trees in periods of drought that last longer than two weeks. If the trees are large enough and budgets are tight enough, this may be all homeowners can do to manage the disease. There are fungicides that can be used as preventives, but three applications are required and they may have to be repeated annually. The first application is applied as buds first begin to open, and the second is applied when new growth (candles) are half-grown. The last application is made when needles are fully expanded. If you decide to use the sprays, all three applications are necessary. The fungicide will protect the new growth from infection. In central Illinois, the first application is usually made the last week in April or the first week in May. Registered fungicides are listed in the *Illinois Home-*

owners' Guide to Pest Management and the Illinois Commercial Landscape & Turfgrass Pest Management Handbook. (Nancy Pataky)

Cedar-Apple and Related Rusts

The tree rusts of concern to landscapers and homeowners in Illinois are cedar-apple, cedar hawthorn, and cedar-quince rusts. From their names, you can correctly assume that two hosts are necessary for the disease to occur. The chemical options for control center around protecting the apple, hawthorn, or crabapple hosts with a fungicide. If you have worked with these diseases in the past, you know that hawthorns are particularly troubled by cedar-quince rust, which causes stem galls on the hawthorn. Chemical options are listed in the *Illinois Homeowners' Guide to Pest Management* and the *Illinois Commercial Landscape & Turfgrass Pest Management Handbook*. Timing is the critical factor.

The cedar host (red cedar) develops galls over the winter. These galls are hard, brown, and about the size of buckeyes with cedar-apple rust, about the size of grapes with cedar-hawthorn rust, and merely roughened stem areas with cedar-quince rust. Chemical companies tell us to spray when the new growth appears and flower buds begin to open. An April 8th report from The Morton Arboretum in the Chicago area states that the galls of cedar-apple and cedar-

hawthorn rust are now showing the beginning of telial horns. Now is the time to spray the alternate hosts to protect against spore release from those galls. Hawthorns are generally slower to leaf and flower, so watch hawthorns closely for signs of bud break. Also refer to *Report on Plant Disease* No. 802, Cedar-Apple and Related Rusts. (Nancy Pataky)

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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