

Gardening/Horticulture Newsletter May 2006

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LACE BUGS ON AZALEAS

If your azaleas are looking sick, the problem might be lace bugs. One of most commonly seen insect pests on azalea in Arkansas is the lace bug. They are small insects about 1/8 inch long and the adults have sculptured wings giving them a lacy appearance from which they get their common name. The immature stage is spiny and generally black in color.

Symptoms of damage are yellowish blotches on the upper leaf surface. Damage is similar to that caused by spider mites where the entire leaf turns yellow or bronze if damage is severe. Lace bugs always feed on the undersides of leaves. The lower leaf surface will be covered with shiny, black spots of excrement, egg fragments, and cast skins. The above mentioned black spots help identify what has caused the damage even if the insects are gone.

The Azalea Lace bug overwinters as eggs inserted into leaf veins or cemented to the leaves with a brown, crusty material. The nymphs hatch February and March and large numbers of adults are present by April and May. A second generation occurs in July and August.

Several natural enemies feed on lace bugs, but when populations get large it is necessary to use chemicals. A wide range of insecticides are available for controlling these pests. Some are taken up by the plant and transported throughout within the plant's sap, but other insecticides work when they directly contact the pest. When using contact insecticides, thoroughly cover the undersides of the leaves where lace bugs are found. Some chemicals cleared for homeowner use include Orthene, Cygon, malathion and imidacloprid. Check the label to see that the chemical can be used on azaleas. Two or three sprays at ten day intervals are needed for complete control when using contact sprays. Keep in mind that re-infestation can occur anytime, so check azaleas regularly all summer and take control measures immediately.

Pesticides should only be used as directed on the label, to protect people and the environment. Read and follow label directions carefully before you buy, mix, apply, store or dispose of a pesticide.

FERTILIZER – MORE ISN'T ALWAYS BETTER

More isn't always better, especially when it comes to fertilizing a garden. Overfeeding leads to excessive growth, poor flavor, poor fruiting and sometimes the death of the plant. It is recommended to soil test to determine the exact needs of your garden.

Because most garden fertilizer recommendations are based on 1,000 square feet (for example, garden dimensions of 10 feet x 100 feet, 20 feet x 50 feet, or 25 feet x 40 feet), it is suggested to first determine the size of your garden – the number of square feet it occupies. If your area is smaller than 1,000 square feet, divide the area by 1,000; multiply the decimal figure by the recommended fertilizer and/or lime rates.

For example, if your garden plot measures 16 feet x 24 feet, the area contains 384 square feet; 384 divided by 1,000 = 0.384; multiply 0.384 by the recommended fertilizer rate to determine the exact amount to apply.

Vegetable plants require many different nutrients for good growth and production, but nitrogen (N), phosphorus (P) and potassium (K) are the three nutrients of concern to gardeners. Calcium (Ca) and magnesium (mg) are supplied by limestone.

Over-fertilized plants may show the following symptoms – wilting, brown or yellow spots on the leaves or death. If plants are over-fertilized, water the soil thoroughly to leach excess salts and dilute the fertilizer. Leaching is the process of running ample amounts of water around the roots to drive the excess fertilizer deep into the soil past the root zone.

If plants are in containers, flush the soil three or four times with clean water. Make sure the water drains through the container.

Correct fertilizer damage on leaves by removing any burned-looking foliage. Cut it away with scissors as injured foliage cannot be revived. The plant will grow new leaves eventually. Rinse the plants with fresh water after fertilizing with fertilizers high in nitrogen if you get the fertilizer on the plants. By removing the excess fertilizer from the leaves, the foliage has fewer tendencies to burn. This is especially true in hot weather.

Gardeners should always follow label directions when fertilizing, that more is not always better and to pay attention to the type of plants in your garden. Generally, greens (mustard, collards, kale) require high rates of nitrogen and fruits (tomatoes, eggplant, peppers, melons) and roots (potatoes, carrots, turnips and radishes) require lower rates of nitrogen and higher rates of phosphorus and potassium. However, the only way to know what kind and how much fertilizer is to soil test.

BLACK KNOT ON CHERRY AND PLUM

Black knot of cherry and plum is a serious disease throughout the United States. The fungus affects fruit spurs, twigs, and branches. Infection typically occurs on the newest growth. Abnormal growth of bark and wood tissues produces small, light-brown swellings that eventually rupture as they enlarge. In late spring, the rapidly growing young knots have a soft texture that becomes covered with a velvety, olive-green growth of the fungus. In summer, the young knots turn darker and elongate. By fall, they become hard, brittle, rough and black. During the following growing season, the knots enlarge and gradually encircle the twig or branch. The cylindrical or spindle-shaped knots may vary from one-half inch to a foot or more in length and up to 2 inches in diameter. Girdling by the gall causes death of the twig or branch. Small twigs often die the first season they become infected.

The most important control measure is pruning out the infected twigs and destroying them, removing wild plums and cherries from adjacent fence rows, and fungicides (such as captan) applied from bud break to early summer.

ANTHRACNOSE ON MAPLE TREES

Maple anthracnose is a common fungal infection in years with cool wet conditions at the time new leaves are emerging in the spring. Anthracnose is usually most noticeable in the bottom leaves of the tree but may become widespread in favorable weather. Black lesions on or next to the veins are diagnostic and there is often leaf curl and distortion of the newest leaves. Severe infection can result in extensive leaf drop. Healthy trees will put on new leaves by early summer and are not seriously threatened by this disease. Therefore, the best control for anthracnose is to maintain good tree health. Trees suffering from anthracnose should be fertilized in the spring and kept well watered throughout the season to reduce stress. Sanitation also is very important in minimizing infection the following year. This is because the fungus over-winters within fallen leaves and twigs. In the spring, splashing rain carries the spores to newly emerging leaves and the infection cycle starts over. All fallen leaves and twigs should therefore be raked up and destroyed. Fungicide applications may be made to trees with a history of severe defoliation early in the spring when buds first begin to open although this may be difficult depending on the size of the tree. Spraying is of no benefit once the tree has leafed out and is showing symptoms.

RUST ON ORNAMENTALS

Herbaceous ornamentals have been coming into the Lonoke plant disease clinic with rust. Hollyhocks are a favorite cottage garden plant that is prone to hollyhock rust. Hollyhock rust rarely kills the plant, but severe infections cause yellowing and early leaf-fall. The fungus attacks all green parts of the plant in the early spring or autumn. The disease first appears as lemon-yellow to orange pustules on the underside of the lowest leaves. The pustules resemble small blisters that turn reddish-brown with age. The rust can spread quickly to stems and other leaves.

Another common rust seen in the spring is jack-in-the-pulpit rust. It attacks the underside of the leaves causing yellowing and early leaf drop. Control of both types of rust involves removing infected leaves and destroying them at the first sign of infection. When plants are finished blooming flower stalks should be cut down and destroyed. Good sanitation is necessary as rust spores over-winter on the ground in plant debris. Fungicides listed for ornamentals give good control if applied early as a protectant, however you should always read and follow label directions to make sure the product is approved for use on a particular ornamental plant and especially read all caution statements.

SLIME MOLDS

During the spring and summer, Cooperative Extension Service get numerous reports about a "nasty" substance growing in spots in the yard. Sometimes these spots are jelly-like, but later turn dry and powdery on the blades of the grass.

Often they are bluish gray or similar colors, but may be orange, yellow or other colors as well. They may erupt overnight, and are especially common in wetter areas or after extensive periods of rain or overhead irrigation. These patches are formed by slime molds, a microscopic organism that feeds on bacteria and swarms around looking for them in grass and decaying organic matter. Once the swarms of slime mold cells have eaten enough bacteria, they congregate into many small "slugs" which crawl up onto grass blades and form a stalk with spores on top. The spores are then spread around by splashing water, wind or mechanical movement (mowers, walking). Slime molds are a natural part of the environment and are not harmful. If unsightly, you can simply wash them away with a garden hose or brush them off with a broom.

FIRE BLIGHT

Fire blight is a common and destructive bacterial disease of pome fruit trees and related plants. Pears are extremely susceptible, but apples, quince, crabapple and pyracantha are also attacked. Infections can destroy limbs and in severe cases the entire tree or shrub. The disease appears in the spring as soon as the plant begins active growth. A light tan bacterial ooze seeps from twig and branch cankers formed by infection the previous season. Bacteria from these previous cankers are moved by insects, rain, etc. to flowers which become infected. As the infection moves into and down the stem, they turn black and wilt, forming a "shepherd's" crook. Blackened leaves and stems cling to branches the rest of the season unless carefully pruned out. Pruning is the most important control measure and diseased branches should be cut 10-12" below visible signs of disease, carefully carried away from susceptible trees and destroyed. Pruners should be dipped in 10% bleach solution or 70% alcohol solution between each cut to prevent spreading the infections further. Trees with a history of fire blight can be sprayed the following spring at bud break with streptomycin (Ag Strep, Ag Streptomycin, Streptrol, etc) or oxytetracycline (Mycoshield) to attempt to prevent or reduce the disease – however success may vary greatly depending on the susceptibility of the tree, the weather, spray coverage and timing. Copper fungicides have been reported to have some effect but you should read all warning and cautions on these products before trying. Remember to read and follow all label directions before using.

EARLY BLIGHT OF TOMATO

The plant disease lab in Lonoke is starting to receive samples of tomato with early leaf symptoms of early blight, caused by the fungus *Alternaria solani*. This is a very destructive disease of tomatoes each year in Arkansas, and will cause many of the leaves to drop as well as spots on stems and fruit at times. Many commonly grown tomato varieties are susceptible to the disease, so fungicides such as Daconil or mancozeb may be your only option. You must catch the disease early and keep the fungicide on all leaves consistently to do the best job of control. Lesions of early blight on leaves form characteristic "target spots" and may be surrounded by yellow regions as the infection develops.

MELLOW YELLOW (*Spiraea thunbergii* 'Ogon')

Deciduous spring-blooming shrubs have enjoyed a comeback in gardens during the past decade.

A century ago they were the mainstay of the landscape but gradually lost favor as gardeners began to rely more heavily on evergreens to provide year-round color. During this renaissance, spireas have really surged in popularity, with Ogon Thunberg spirea becoming some gardeners favorite.

Spiraea thunbergii 'Ogon' – also sold as Mellow Yellow spirea – is a 5- to 6-foot tall deciduous shrub with thin, twiggy branches that grows into a gracefully mounded, multi-stemmed shrub. The slender, willow-like leaves are up to 2 inches long.

In the spring, unfurling leaves take on a subtle chartreuse color that gradually changes to green as the summer heats up. Late in the fall, usually after Thanksgiving here in north Arkansas, it produces beautiful orange-yellow to plum colored fall foliage.

Of the spireas, this species is the earliest to bloom, usually flowering in the first half of March with forsythia. Spireas belong to the rose family and have the small, white, five-petaled blossoms characteristic of many members of that family. The blooms are about a quarter-inch across but borne in considerable profusion.

Though the species, often called "Baby's Breath Spirea," was introduced in the 1860's, Ogon is new, first introduced into the United States in 1993 by Pennsylvania plantsman Barry Yinger who found it at a garden center in downtown Tokyo. Yinger is one of the modern day breed of plant explorers who have introduced many plants into American gardens during the past decade.

Ogon spirea is a versatile shrub in the landscape. It can be mixed with evergreens where its' fine texture and beautiful chartreuse foliage brightens the drab greenery. But it's small enough to incorporate in the back of a perennial border where it can function as a harmonious part of the planting. It can also be used as a stand-alone specimen. The foliage color is very subtle and blends with almost any color combination.

Size control is easy by cutting the plant back in the spring as soon as flowers fade but before the plant fully leafs out. It tends to be a bit irregular growing but these wispy branches add to the soft textural feel of the shrub. Ogon spirea is best grown in full sun in average soil conditions. Once established it has excellent drought resistance.

NEW FACE, SAME GREAT INFORMATION

You may notice some differences next time you visit www.uaex.edu, the website for the University of Arkansas Cooperative Extension Service. We updated our Web site to make it more user-friendly. The main difference visitors will notice is how information is organized.

In the past, information was organized in a way that made sense to Extension employees, but not necessarily to our clients. Information is now organized with our clients in mind.

Also new to the site is a link for businesses and communities. Under this link, visitors will find information on community development, taxes, leadership development and volunteer organizations.

The changes to Extension's Web site are a result of listening to feedback from clients. Clients told us the information they wanted and how they wanted to find it.

More additions to the site are in the works. One new feature will be a link that allows visitors to e-mail news articles from the site to other people.

We've made some great updates to the site and plan to continue improving the site so our clients can easily find the information they've come to trust from Extension.

For more information on agriculture, horticulture, health, marriage, taxes and everything in between, visit www.uaex.edu.

MASTER GARDENERS ARE GRATIFIED TO VOLUNTEER HORTICULTURAL AID

Wave your garden tools in recognition of Master Gardener volunteers! Master Gardener volunteers are not paid with cash, but with the gratification they get from helping others – whether it's help with soil testing, planting, weed control or other horticulture needs of people in their communities.

The Master Gardener program began in 1972 in the state of Washington to address the need for more help in county Extension offices to assist with the horticulture program.

The Arkansas Master Gardener program was started in 1988 in Pulaski, Jefferson, Garland and Saline counties. Today, 55 Arkansas counties have Master Gardener programs.

Master Gardener volunteers come from all walks of life, but they have one thing in common – their love of gardening. They're always eager to help others with horticulture and gardening problems, and their enthusiasm is contagious.

The people in the program and their commitment make the program interesting. They have made a huge difference in our state and in our Master Gardener program.

Volunteers in Arkansas receive 40 hours of horticulture training, plus a manual. In return, they volunteer 40 hours of their time back to their county.

Arkansas has more than 2,500 active Master Gardener volunteers, and more than 700 volunteers were trained for the Master Gardener program last year.

Potential Master Gardeners are trained in topics such as ornamentals – shrubs, trees, perennials, annuals – pruning, vegetable gardening, home fruit production, lawn care, plant pathology, entomology, botany, soils, pesticides and more.

Each county trains at different times throughout the year. The training for Baxter and Marion Counties is in the fall. An application for membership is required before being enrolled in the classes.

The Arkansas Master Gardener convention will be held May 21-23 in Hot Springs. The convention is only open to Master Gardeners and is by pre-registration.

The Garland County Master Gardeners are expecting over 600 attendees to this year's state convention.

Next year, the international Master Gardener convention will be hosted by Arkansas in Little Rock May 2-5. Between 1,500 to 2,000 Master Gardeners from the U.S. and Canada are expected to attend.

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For more information on the Master Gardener program, or any of the other topics in this newsletter, contact the Baxter County Cooperative Extension office at 425-2335.

Sincerely,

Mark D. Keaton,
County Extension Agent-
Staff Chair

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