Bug-Wise

No. 3
February 20, 2006 Office: 1-662-325-2085

Insect Identification: Got a bug or spider you'd like to get identified and get information on how to control it? Insect identification samples are processed free of charge at the Insect Diagnostic Lab here at Mississippi State. **Send samples to: Insect ID, Dept. of Entomology, Box 9775, Mississippi State, MS 39762-9775.**

The quality of the identification and control recommendation depends on the condition of the sample and the detail of the supporting information that is submitted with the sample. We sometimes get samples that were simply stuck in a plastic bag, put in an envelope, and mailed. These usually get so broken or smashed in the mail that they are impossible to identify. Take time to package the sample properly.

- Soft-bodied insects like caterpillars, aphids, etc must be placed in alcohol (preferably ethyl alcohol, but isopropyl will work) in a small leak proof container. Then pack the container with padding in a crush-proof box. This is also the best way to send most other insects, including hard-bodied insects like beetles, crickets, etc.

- Hard-bodied insects like beetles can be wrapped in paper towels and placed inside a small, crush-proof container so that they cannot move around (shipping in alcohol is better, but this method usually works). Dead insects that can jostle around in their shipping container usually arrive without legs and antennae, which are very important in insect identification.

We also get samples that consist only of the insect, with no information on where, or why, it was collected. It is much more difficult to identify insects when the host is not know, and even when we can identify the critter, we can't provide control information without knowing the details of the situation. Is this a homeowner or commercial situation? Who is submitting the sample and when did they collect it? Is this pest on a food crop or a non-food crop? Is this pest problem indoors or outdoors? Was this the only one or were there large numbers? What kind of damage were they doing?

When possible, insect samples should be accompanied by Form 205, Plant Disease Diagnostics and Insect Identification Form. If you do not have this form available, just enclose a brief note providing these details: who, what, when, where, and why. Having this information makes it much easier for us to identify the sample and provide useful control recommendations.

Common Insect Pests of Mississippi Trees and Shrubs: Mississippi gardeners grow hundreds of different trees and shrubs and there are many different insect pests that can potentially attack each one. But, some plants are more pest-prone than others and some insect pests are more common than others. The following table lists the insect pests most commonly encountered on some of our most popular trees and shrubs. Use this list as a preliminary trouble-shooting aid. More often than not, the pest that is causing the problem will be on this list, but always keep in mind that there are many other potential pests that are not listed.

Blake Layton, PhD
Extension Urban Entomology Specialist

Common Insect Pests of Popular Ornamental Trees and Shrubs in Mississippi

Plant	Insect	Scouting
Arborvitae	Bagworm	Check for small larvae in May and June. Early detection and treatment can help prevent damage. Spring egg hatch often begins about the same time that crape myrtles begin to leaf out.
Azalea	Azalea Lace Bug	Check for adults, spiny nymphs, or shiny fecal droppings on undersides of leaves. Stippling or bleaching of leaves indicates infestation.
	Azalea Caterpillar	Check for clusters of small yellow and red striped caterpillars skeletonizing leaves in late spring through mid summer. Treat promptly to avoid defoliation by larger caterpillars.
	Azalea Bark Scale	Check for large white scales at crotches of twigs and branches.
	Azalea leafminer	Check for mines, leaf tying, and tattered defoliation of leaves at tips of branches.
Boxwoods	Spider mites	Be alert for stippling, yellowing, or bleaching of leaves. Use a hand lens to check for presence of mites.
	Boxwood leafminer	Leaves appear yellow to rust-colored. Closer examination reveals mines containing small yellow to orange-colored larvae.
Bradford Pear	Asian Ambrosia Beetle	Curved, toothpick-sized columns of tightly packed frass extruding from the trunk of the tree are signs of attack by Asian ambrosia beetle. This beetle also attacks many other species of hardwood trees.
	Fall webworm	These caterpillars produce large unsightly webs that enclose the leaves at the end of a branch. They are most abundant beginning in late summer.
Camellia	Tea Scale	Check for yellowing leaves and presence of scales on undersides of leaves. First generation crawler hatch often coincides with blooming of Chinese wisteria and tulip poplar.
	Southern red mite	Found on undersides of leaves. Causes leaves to turn gray or brown and fall off. More common in cool spring and fall.
	Camellia bud mite	Scales of flower buds turn brown and bud fails to develop properly or produces distorted blooms. Mites are too small to be seen without significant magnification.
Canna	Lesser canna leaf roller	Infested leaves fail to unroll properly and are damaged by larvae feeding inside the leaf roll. Activity begins shortly after canna leaves emerge in the spring.
Crape Myrtle	Crape myrtle aphid	Check for aphids on undersides of leaves. Be alert for accumulations of honeydew or sooty mold. More common on older, 'indica-type' varieties.
	Flea beetle	Be alert for small blue-green metallic beetles feeding on leaves during mid-summer.
	Asian Ambrosia Beetle	Curved, toothpick-sized columns of tightly packed frass extruding from the trunk of the tree are signs of attack by Asian ambrosia beetle. Also attacks many other species of hardwood trees.
Dogwood	Dogwood Borer	Loose, scaly bark is often the first sign of bore infestation.
Elms	Elm Leaf Beetle	Skeletonizing defoliation of leaves is often the first sign of infestation. Check for adults and larvae feeding on leaves.
Euonymus	Euonymus Scale	Check for scale on leaves and twigs. Occurs year round. Hatching of first generation crawlers often coincides with blooming of dogwoods and Oregon grape holly.

Plant	Insect	Scouting
Gardenia	Gardenia Whitefly	Be alert for presence of honeydew or sooty mold. Clouds of small white fly-like adults fly out when foliage is disturbed. Scale-like immatures on undersides of leaves.
	Mealybugs	Concentrations of white cottony or powdery material in crotches of twigs and terminals may indicate mealybugs, Check for small oval, soft-bodied insects.
Hibiscus	Hibiscus sawfly	Be alert for first signs of defoliation. Check for small green larvae on undersides of leaves.
Holly	Tea Scale	Check for yellowing leaves and presence of scales on undersides of leaves. First generation crawler hatch often coincides with blooming of Chinese wisteria and tulip poplar.
	Holly leafminers	Causes winding or serpentine mines in leaves of holly.
Hosta	Slugs	Be alert for feeding injury on leaves, especially as leaves are emerging in spring.
Lantana	Lantana lace bug	Bleaching or browning of leaf margins may indicate infestation. Check for the spiny nymphs and small, elongate, gray-brown adults on undersides of leaves.
	Whiteflies	Be alert for presence of honeydew or sooty mold. Clouds of small white fly-like adults fly out when foliage is disturbed. Scale-like immatures on undersides of leaves.
Ligustrum	Whiteflies	Be alert for presence of honeydew or sooty mold. Clouds of small white fly-like adults fly out when foliage is disturbed. Scale-like immatures occur on undersides of leaves.
Magnolia	Magnolia wax scale	Especially common on deciduous magnolias. Honeydew and sooty mold are often the first signs of infestation. Check for scales on small twigs.
	Yellow poplar weevil	Primarily on Southern Magnolia. Larvae cause blotch shaped mines near tips of leaves. Adults feed on buds and tender young leaves causing holes and distorted leaves. Adult weevils begin emerging when eastern redbud and dogwood are blooming.
	False Oleander Scale	This armored scale occurs on the upper and lower surface of leaves and attacks many other plants. The females are brown and oval-shaped with a larger white covering extending from one end. Yellow, chlorotic spots appear at the feeding site.
Pecan	Pecan phylloxera	Pea to marble sized knotty galls form on terminals in the spring. Egg hatch coincides with bud break on pecan.
	Yellow aphids	Honeydew and sooty mold accumulate on lawn furniture and other items beneath trees, large numbers of small yellow aphids on undersides of leaves
	Black pecan aphids	This small black aphid causes angular shaped yellow spots on leaflets. Trees shed leaves prematurely.
	Fall Webworm	These caterpillars produce large, unsightly webs that encase the ends of entire branches.

Plant	Insect	Scouting
Pine	Pine tip moth	Infests pines under 15 feet. Check for larvae feeding in developing terminals. Activity begins in very early spring, and may be as early as mid-February in the southern portion of the state.
	Black Turpentine Beetle	Watch for popcorn-sized masses of resin, 'pitch tubes' on the lower trunk area of large pines. Attacks may occur from May through September.
	Red-headed pine sawfly	Red-headed caterpillar-like larvae chew needles of young pines.
	Pine tortoise scale	Black sooty mold on needles indicates infestation of scale or aphids. Check for presence of 'tortoise-shaped' adult scales.
Pyracantha	Lace bug	Check for adults, spiny nymphs, or shiny fecal droppings on undersides of leaves. Stippling or bleaching of leaves indicates infestation.
Roses	Aphids	Check for heavy infestations on leaves and stems, especially during spring and fall. Causes wilting of terminals.
	Flower Thrips	Large numbers of thrips may move to roses as wild hosts dry in spring. Often found at base of flower petals.
	Spider Mites	Found on undersides of leaves. Be alert for stippling of leaves or small webbing. Mites are more common in hot dry weather.