

Providing Leadership in Environmental Entomology

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LACE BUGS

Lace bugs are very small insects, about 1/8 inch long, that cause considerable damage to the foliage of ornamental shrubs and trees. Adults are characterized by sculptured wings and hood giving them a lacy appearance from which they derive their common name (Fig. 1). Most adults have some dark markings on the wings and hood although some are nearly transparent. The immature stage or nymphs are spiny and generally black.



Figure 1 Lace bug adults on underside of leaf. Note the brown excrement drops.

Most lace bugs are quite host-specific. Our most common lace bugs and their hosts are: Azalea Lace Bug, primarily a pest of azaleas; Rhododendron Lace Bug, found on rhododendron, mountain laurel, and azalea; Hawthorn Lace Bug, a pest of cotoneaster, hawthorn, quince, and pyracantha; Sycamore Lace Bug, found primarily on sycamores, but occasionally on ash, hickory, and mulberry as well.

Symptoms of damage are chlorotic or yellowish blotches on the upper leaf surface (Fig. 2.). Severe damage can cause the entire leaf surface to take on a yellow or bronze coloration. The damage is similar to that caused by spider mites. A sure way to differentiate the two pests is to look at the underside of the leaves. Lace bugs always feed on the underside of the leaf. The lower leaf surface will be covered with shiny, black spots of excrement, egg fragments, and cast skins.

These diagnostic signs will be present even if the insects have left the leaf. Heavy populations can severely weaken a tree or shrub making it more susceptible to other problems.



Figure 2 Symptoms of lace bug feeding on azalea. Brown, "fly-speck" deposits will be found on the underside of the leaf.

All four lace bugs have at least two generations in South Carolina. The Azalea and Rhododendron Lace Bugs overwinter as eggs inserted into leaf veins or cemented to the leaves with a brown, crusty material. The nymphs hatch during February and March and many adults are present by April and May. The adults lay eggs and a second generation occurs in July and August. A complete generation takes from 35-45 days. Sycamore and Hawthorn Lace Bugs differ in that they overwinter as adults on the host in bark crevices, branch crotches, or other protected areas. In the spring, adults lay eggs on the young leaves. Again there are a spring and a late summer generation. During the late summer generation, especially, both nymphs and adults may be found together.

Lace bugs have several natural enemies that feed on them. These include lacewings, assassin bugs, spiders, and predaceous mites. However, when lace

bug populations get out of hand using chemical controls is necessary. Some cleared for homeowner use include imidacloprid (Bayer Advanced Garden Tree and Shrub Insect Control), carbaryl (Sevin), and malathion. Always READ THE LABEL CAREFULLY since some of these chemicals are not safe to use on all plants. Incorrect usage can severely damage the foliage or even kill the plant. Whenever spraying a shrub infested with lace bugs remember that they feed only on the underside of the leaves. This means that the spray must be directed to the underside of the leaves to achieve satisfactory control. A second application in 7-10 days may be needed to kill late hatching nymphs or adults that migrate to the shrub from adjacent areas.

Consult your local County Extension Agent for additional help.

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