

# RESEARCH LABORATORY TECHNICAL REPORT

## Lace Bugs

By The Bartlett Lab Staff  
Directed by Kelby Fite, PhD

Lace bugs are common insect pests on many deciduous and evergreen landscape plants. Most lace bugs infesting woody landscape plants are in the genera *Corythuca* spp. or *Stephanitis* spp. Common host plants include azalea, sycamore, andromeda (*Pieris*), oak, hawthorn, hackberry, Rhododendron, crabapple, cherry and serviceberry (*Amelanchier*). Most lace bugs, such as the azalea lace bug or the sycamore lace bug, are limited to the host genera suggested by the common name while others attack a variety of related genera. Adult lace bugs are light colored with dark brown or black markings, somewhat square in shape, and with wings that appear lacy or similar to a stained-glass window (Figure 1). Nymphs are typically black and may have spines along their backs or sides.

Lace bugs can be divided into two groups--those that attack evergreens and those that attack deciduous plants. Lace bugs found on deciduous plants overwinter as adults on stems and under bark, while those that attack evergreen plants overwinter as eggs on the bottom of leaves, usually along the mid-vein. There are usually multiple generations per year, depending on the lace bug species and geographic location.

**Figure 2: Typical chlorotic stippling on top surface and brown feces on bottom surface caused by lace bug infestation**



**Figure 1: Adult lace bug**



Lace bugs cause damage by inserting their stylet (sucking mouthpart) into leaf tissue and extracting chlorophyll and other nutrients. Nymphs and adults feed on the lower leaf surface, but the damage typically shows as yellow or white flecking on the upper surface. Damage begins as discrete flecking or stippling, and eventually progresses to the discoloration of the entire leaf, followed by browning and defoliation (Figure 2). The bottom of infested leaves becomes covered with shiny brown specks of feces, which may help protect eggs and adults from predators.

Lace bugs can be managed through an integrated approach using cultural, biological and targeted treatments. Certain landscape species including azalea, Rhododendron and *Pieris* are more resistant to lace bugs when planted in partial to full shade. Green lacewings can be released to supplement naturally occurring beneficials to suppress lace bug outbreaks. Several product options for managing lace bugs are available. Please contact your Bartlett Arborist Representative for more detailed information on how to manage this pest in your landscape.