

RESEARCH LABORATORY TECHNICAL REPORT

Lacebugs

By The Bartlett Lab Staff
Directed by Kelby Fite, PhD

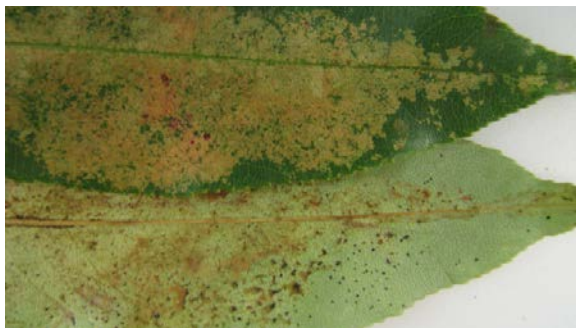
Lacebugs are common insect pests on many deciduous and evergreen landscape plants. Most lacebugs infesting woody landscape plants are in the genera *Corythuca* spp. or *Stephanitis* spp. Common host plants include azalea, sycamore, andromeda (*Pieris*), oak, hawthorn, hackberry, Rhododendron, crabapple,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

Figure 1: Adult lacebug



Lacebugs can be divided into two groups; those that attack evergreens and those that attack deciduous plants. Lacebugs 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 lacebug species and geographic location.

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



Lacebugs 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 will be covered with shiny brown specks of feces, which is thought to help protect eggs and adults from predators.

Lacebugs can be managed through an integrated approach using cultural, biological and chemical treatments. Certain landscape species including azalea, Rhododendron and *Pieris* are more resistant to lacebugs when planted in partial to full shade. Green lacewings can be released to supplement naturally occurring beneficials to suppress lacebug outbreaks. Several options exist for chemical treatment of lacebugs and organic and naturally occurring products are available. Please contact your Bartlett Arborist Representative for more detailed information on how to manage this pest in your landscape.