# Kansas State University Extension Entomology Newsletter

For Agribusinesses, Applicators, Consultants, Extension Personnel & Homeowners

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### September 29, 2023 No.16

#### Lace Bugs

## Lace Bugs

Lace bugs are present throughout Kansas feeding on a variety of plants in landscapes and gardens. In general, lace bugs are not really a major insect pest because they do not directly harm plants. Nonetheless, extensive populations of lace bugs may reduce the aesthetic appearance of certain plant types. Lace bugs feed on a widerange of trees and shrubs, including: azalea, basswood, cotoneaster, hawthorn, linden, oak, rhododendron, and sycamore. Herbaceous plants susceptible to lace bugs include: aster, chrysanthemum, and scabiosa. The major plant-feeding lace bug species include *Stephanitis* spp., and *Corythucha* spp. *Stephanitis* spp. mainly feed on broad-leaved evergreens. *Corythucha* spp. including the sycamore lace bug, *Corythucha ciliata*, feed on deciduous trees and shrubs.

Lace bugs feed on leaf undersides using their piercing-sucking mouthparts to withdraw plant fluids from individual leaf cells. Lace bug feeding causes leaves to appear stippled and/or bleached (Figure 1). Lace bugs feed in the same manner as the twospotted spider mite, *Tetranychus urticae*, as both withdraw chlorophyll (green pigment) from



Figure 1. Plant damage associated with lace bugs (Raymond Cloyd, KSU)



Figure 2. Lace bug nymph molting skins and excrement on leaf underside (Cloyd, KSU)

plant cells. The damage caused by lace bugs is similar to spider mites and leafhoppers; however, lace bugs leave black, tar-spot-like droplets of excrement or fecal matter on leaf undersides (Figure 2). The presence of black excrement or

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fecal matter distinguishes lace bugs from spider mites and/or leafhoppers. Extensive lace bug populations and subsequent feeding may reduce plant vigor although any direct effects of feeding are dependent on plant age and size (especially young or newly transplanted trees and shrubs).

Adult lace bugs possess lacy, clear, shiny wings that are held flat over the body (Figure 3). They are 1/8 to 1/4 of an inch (3 to 8 mm) long and move sideways when disturbed. Female lace bugs lay between 20 to 50 eggs on the undersides of leaves. Eggs are black and shaped like a wine flask (Figure 4) and placed alongside leaf veins. Shiny, black nymphs with spines around the periphery of the body emerge (eclose) from the eggs. Nymphs undergo five instar stages before reaching adulthood. Shed skins on leaf undersides are evidence that nymphs have transitioned into adults. The life cycle, from egg to adult, generally takes about 30 days to complete. There may be up to three generations per year although the number of generations is contingent on temperature. Stephanitis spp. overwinters as eggs on leaf undersides and Corythucha spp. overwinters as adults in bark crevices and branch crotches. Adult activity starts in the spring when leaves unfold.

Lace bug populations are more abundant on plants such as rhododendron and azalea exposed to full sun rather than on plants in shady locations. The



Figure 3. Lace bug adult (Cloyd, KSU)



Figure 4. Lace bug eggs (Cloyd, KSU)

management of lace bugs, in general, is not necessary because lace bugs are susceptible to many beneficial insects including predators, such as, green lacewings. A high-pressure water spray will quickly dislodge lace bugs from plants. If need be contact insecticides registered for use against lace bugs can be applied to protect plants from subsequent

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plant damage. Read the label to make sure lace bugs are listed. Thorough coverage of leaf undersides is important to maximize the effectiveness of spray applications because the undersides of leaves are where all the life stages (eggs, nymphs, and adults) of lace bugs are located.

## Raymond Cloyd – Horticultural Entomology/Integrated Pest Management

HOME

### Sincerely,

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Need an insect identified? Visit the Insect Diagnostics Program Website



# Department of Entomology

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