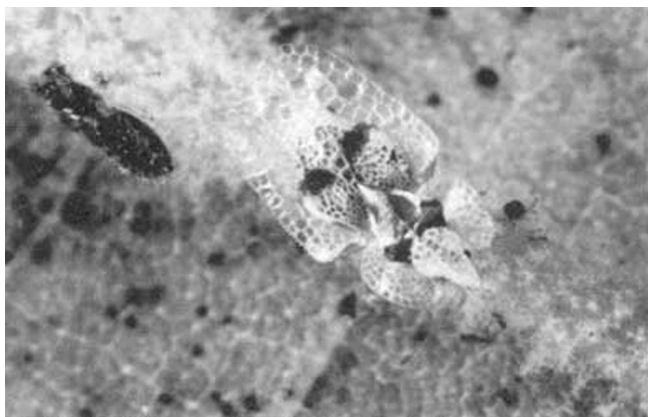






## Life History

The sycamore lace bug feeds on the undersides of leaves, causing desiccation of tissue, first near the veins, and subsequently affecting the entire leaf, which may drop prematurely. The most detailed life history information on sycamore lace bug can be found in Wade (1917). According to Wade's (1917) observations in Oklahoma, mating pairs of sycamore lace bugs initiate colonies by laying eggs along leaf veins, especially near the forks. One to several pairs occupy a newly colonized leaf. A single female can lay at least 284 eggs. d'Aguilar et al. (1977) counted 350 eggs from one female. Wade (1917) observed five immature instars. Nymphs stay close together at first, only moving to new leaves after they reach the fourth instar. One life cycle is completed in 43 to 45 days under summer conditions in Oklahoma, and several generations per year occur in the South. Sycamore lace bugs overwinter as adults, either under loose bark of the trees, or in nearby cracks and crevices. They are extremely cold tolerant, withstanding temperatures as low as -10°F. According to Wade (1917), the flying wings of adults are very delicate, and thus, these insects rarely fly very far; however, Maceljski (1986) writes that adults "are very mobile and are good fliers. Supported by wind they can fly over many kilometres." Both authors surmise that the majority of long distance distribution occurs as a result of human activity.



**Figure 3.** Nymph (upper right) and adult (center) of the sycamore lace bug, *Corythucha ciliata* (Say). Credits: Division of Plant Industry

## Hosts

The major host of the sycamore lace bug is the American sycamore tree, *P. occidentalis*. Other *Platanus* spp. also may be affected (Wade 1917). Several other host plants are listed in the literature, including *Broussonetia papyrifera* (L.) Vent., *Carya ovata* (Mill.) K. Koch, *Chamaedaphne* sp., and *Fraxinus* sp. (Drake and Ruhoff 1965). The vast majority of Florida Department of Agriculture and Consumer Services, Division of Plant Industry (DPI) records for sycamore lace bugs list *P. occidentalis* as the host. There are no DPI host records for sycamore lace bug on *Broussonetia*, *Carya*, *Chamaedaphne*, or *Fraxinus*; however, there is one collection of a colony, including immatures, from *Quercus laurifolia* Michx. A single collection of both adults and nymphs from *Liquidambar styraciflua* L. also contained sycamore lace bug. Single DPI records of sycamore lace bugs from *Euphorbia pulcherrima* Willd. ex Klotzsch, *Castanea* sp. and *Vaccinium* sp. could not be verified.

## Management

There are several North American parasites and pathogenic fungi that attack sycamore lace bugs, but these seldom reduce populations enough to prevent significant damage to sycamore trees in Florida's urban areas. Although a wide variety of insecticides and associated methods of application (e.g., foliar sprays, trunk injections, soil treatments) are available for use against sycamore lace bugs, these are costly, and efficacy is often marginal. Additionally, there are problems associated with large scale use of insecticides in urban areas. Most of the time in Florida, applications of pesticides on sycamores are unnecessary and unwarranted. Despite the spectacular appearance of severe damage, the practical impact of occasional late- season defoliation on otherwise healthy sycamore trees is principally only aesthetic in nature.

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