Lace bugs

Several species
Order Hemiptera, Family Tingidae; lace bugs
Native and introduced pests

Host plants: White and bur oak, hackberry, basswood, chokecherry, Juneberry, hawthorn, cotoneaster, azealea, rhododendron, Japanese andromeda, sycamore, and many other deciduous species

Description: Adult lace bugs are flat insects, approximately 3 mm long, white to light brown, with brown or black markings. Their wings are highly sculptured, giving them a lace-like appearance. Nymphs are usually black with long spines.

Life history: Black eggs are laid in clusters on the underside of leaves. Nymphs feed gregariously for three weeks. There are one to three generations a year in the Midwest.

Overwintering: Eggs or adults.

Damage symptoms: Lace bugs feeding on the under surface of leaves cause white to yellow stippling on upper leaf surfaces. In severe infestations, leaves turn first yellow then brown, and dieback may occur. Oaks can be injured by heavy feeding over several years, but rarely are killed. However, smaller shrubs may be more severely affected.

Monitoring: Eggs hatch of hawthorn lacebug when crabapple or Eastern redbud are in full bloom in early May. (Herms). Eggs hatch of azalea lacebug when Japanese flowering crab or Eastern Redbud bloom in the beginning of May (Herms). In May look for black eggs on the underside of leaves. Look for nymphal stippling on leaves beginning in June and continuing through August, and for yellowing or browning of foliage.

Chemical control: Shrubs or small trees in sunny, dry sites may need protection. Spray oil or contact insecticide on the underside of leaves when bugs are numerous, normally in July to August. Alternatively, imidacloprid may be applied to the soil in early spring to control heavy populations.

Biological control: Spiders and pirate bugs are common predators of lace bugs, but should not be relied on for complete control.

Plant mortality risk: Medium

Biorational pesticides: azadirachtin, horticultural oil, insecticidal soap, pyrethrins

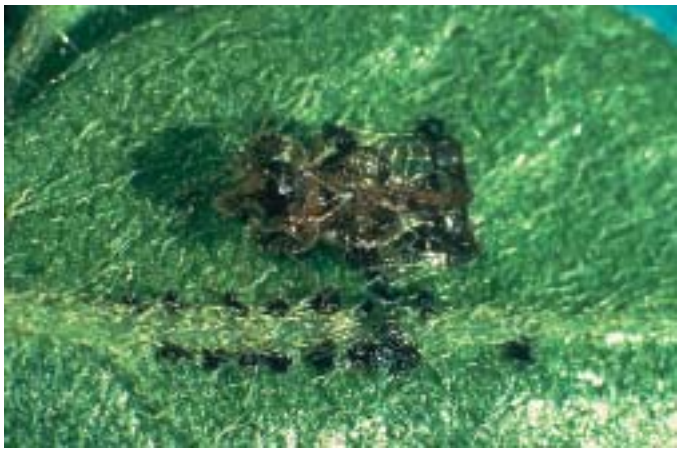
Conventional pesticides: acephate, bifenthrin, carbaryl, chlorpyrifos (nursery only), cyfluthrin, deltamethrin, fluvalinate, imidacloprid, lambda-cyhalothrin, malathion, permethrin

Sycamore lace bug adults. (162)
Photo: James Solomon, USDA Forest Service, The Bugwood Network, University of Georgia

Sycamore lace bug adults with nymphs and fecal spots. (159)
Photo: John Davidson

Oak lace bug adult with eggs. (160)
Photo: John Davidson

Lace bugs (continued)



Hawthorn lace bug adult guarding eggs inserted along leaf midrib. (161)
Photo: John Davidson

Hawthorn lace bug adult with eggs on cotoneaster. (162)
Photo: James Solomon, USDA Forest Service, The Bugwood Network, University of Georgia