Agricultural Extension Service
The University of Tennessee

SP 290-E

Insects

Azalea Lace Bug

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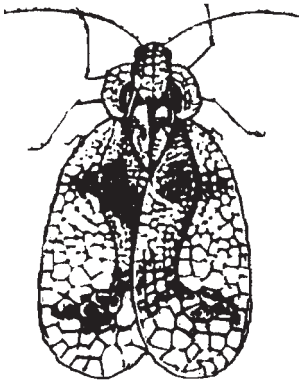
Since its introduction from Japan in the early 1900's, the azalea lace bug has become a destructive pest of azaleas. Although this bug prefers evergreen azalea varieties, it will infest deciduous varieties. Mountain laurel can also become infested.

The smooth, white egg of the lace bug, which measures approximately 0.4 mm by 0.8 mm, is flask shaped with the neck to one side. It is usually deposited in the underside tissue of a young leaf along the mid-rib or large vein. Each egg is inserted in the tissue with its neck slightly about the leaf surface.

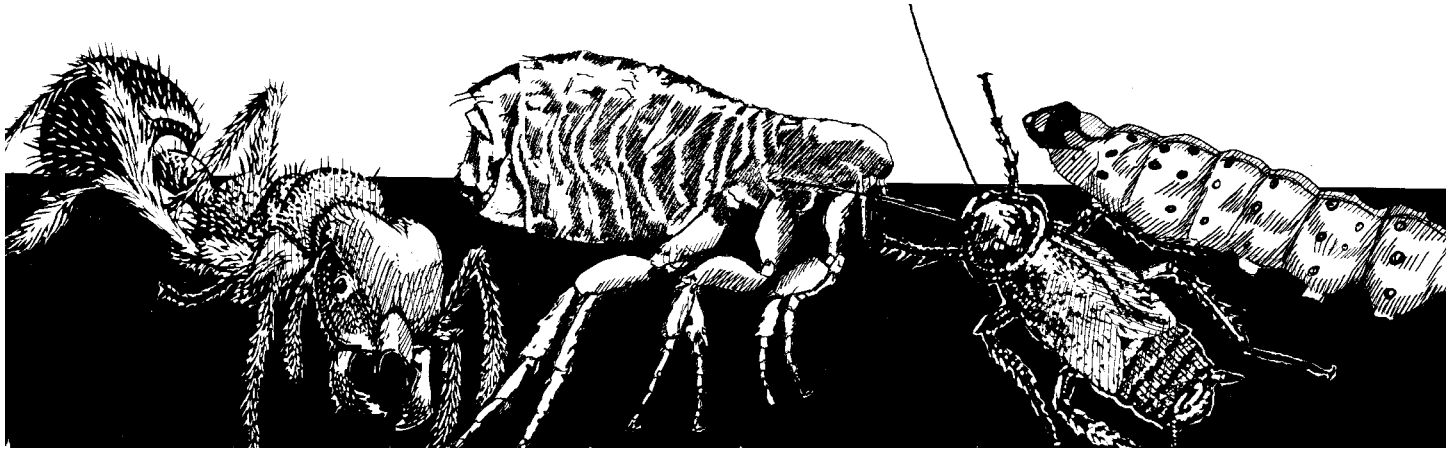
Female lace bugs lay groups of eggs on the underside of the leaves in September and October. These eggs overwinter and hatch during March and April. The populations build from spring through autumn with about four generations possible. A large population of lace bugs can be established during July, August and September. It is quite possible to find all stages of the lace bug together under a leaf during this time.

The adult lace bug is 1/8 inch long and 1/16 inch wide. It has lacy wings with brown and black markings and light brown legs and antennae. The young nymph lace bug is nearly colorless at hatching but soon turns black and spiny. It sheds its outer skin six times and ranges in size from 0.4 mm to 1.8 mm before becoming an adult.

Injury to the plants is caused by nymphs and adults as they extract sap from the under surfaces of the leaves. The damage appears as spotted discoloration or bleaching of the upper surfaces of the leaves. In severe infestations, the leaves become almost white, many of them drying completely and dropping off. The undersides of the leaves are also disfigured by the black, dry, shiny excrement and cast skins of the insects.



Adult azalea lace bug



Control Measures

Repeated applications of an insecticide are usually needed to effectively control lace bugs. The first application should be made as soon as nymphs appear in the spring, followed by a second application seven to 10 days later. Applications should be repeated at monthly intervals as needed.

Thorough coverage of the undersides of the leaves where the insects are found is essential if good control is to be expected. Select one of the insecticides listed below and follow the label directions. Chlorpyrifos is for use in commercial nurseries, not for residential use.

- acephate (Orthane Turf, Tree & Ornamental Spray [75% SP], Address T/O [75% SP]);
- chlorpyrifos (Dursban 50 W [50% WSP]);
- beta-cyfluthrin (Tempo SC Ultra [1 lb/gal SC]);
- cyfluthrin (Advanced Garden Lawn & Garden Multi-Insect Killer [0.75% EC], Decathlon 20 WP [20% WP], Tempo 20 WP [20% WP]);
- imidacloprid (Merit 75 WP [75% WP], Merit 2 [2 lb./gal.F], Merit 2.5 G [2.5%G], Marathon 60 WP [60% WP], Marathon II [2 lb./gal.F], Advanced Garden Tree and Shrub Insect Control[1.47% concentrate]);
- cyfluthrin plus imidacloprid (Advanced Garden Rose & Flower Insect Killer [0.72% cyfluthrin, 0.72% imidacloprid]);
- disulfoton plus 16-8-8 fertilizer (Advanced Garden 2-in-1 Systemic Azalea, Camellia & Rhododendron Care [1% G]);
- dimethoate (Dygon 400 [4 lb/gal EC], Dimethoate 2.67 EC [2.67 lb/gal EC]); OR
- horticultural oil (SunSpray Ultra-Fine Spray Oil [98% EC], Ultra-Fine Oil [98% EC]).

Marathon 60WP is for use only on greenhouse and nursery ornamental plants, using soil drenches or through an irrigation system. On stock plants and woody crops with a production cycle of greater than one year, application may not exceed once a year.

Merit 75 WP and Merit 2 can be used on turfgrass, landscape ornamentals and interior plantscapes. It can be applied to the foliage or even more effectively as a soil injection or soil drench. When using a soil injection or soil drench, make application 30 days prior to anticipated pest infestation. The addition of a nitrogen containing fertilizer, where applicable, into the solution will enhance the uptake of the active ingredient.

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SP290-E 1M 6/03(Rev) E12-4615-00-033-03