



CROP PEST:

Azalea Lacebug

Stephanitis pyrioides

DESCRIPTION:

Azalea lacebugs are small, almost translucent, winged insects about 2mm long. They primarily cause damage to azalea leaves and can leave tell-tale signs and symptoms of damage. Since lacebugs have piercing-sucking mouthparts, they slice an opening into the leaf and suck up its juices. After feeding, they leave behind a yellowing stippling effect on the leaves that can sometimes be mistaken for spider mites, however, you will notice there is no webbing. If populations are large, the leaves will turn nearly white and prematurely drop from the plant. Lacebugs like to attack stressed plants first so, an azalea that is in a sunny droughty location is more likely to become infested than one in the shade and regularly watered.



Photo courtesy of Oregon State University

TARGET CROP:

Primarily Azaleas and Rhododendrons, however, Mountain Laurel is also known to be a common host as well as other trees and shrubs.

LIFE CYCLE:

Adult lacebugs lay their eggs in the leaves near the mid-leaf vein. Once eggs hatch nymphs begin feeding on leaf juices, chomping away for about 6 weeks until they mature into adults and repeat the cycle. There can be several generations of lace bugs per year.

BENEFICIAL INSECT CONTROL:

Orius insidiosus— aka pirate bugs, a generalist beetle predator that feeds on nymph stages of the lacebug. They are great fliers, which enables them to travel and seek out prey. They need a food source in order to establish a population, which can be achieved with adequate pollen, ephestia eggs, and/or by introducing a healthy banker plant system.

Introduction Rates and Release Information

Generally, one Orius per 10 square foot canopy will provide full coverage. Release the adults by gently shaking them onto individual plants or by opening the containers in the greenhouse and allowing the insects to disperse.

Chrysoperla rufilabris— aka green lacewings, a generalist predator that feed on lacebugs. Each larva can devour 200 or more pests and eggs a week for about 3 weeks. At that time, the larvae pupate and become adult lacewings, which emerge to lay eggs on the foliage. Adults can lay more than 200 eggs during their

lifetime. Since Azalea lacebugs lay their eggs on the underside of the leaf, the newly hatched larvae of lacewings can easily find their prey and begin feeding.

Introduction Rates and Release Information

Knowing how to apply green lacewings can be tricky since we provide so many different life-stage options. If using larvae, for a light infestation release 2 to 5 per 10 square feet, biweekly or as needed. For moderate infestation release 4 to 8 per 10 square feet biweekly or as needed. And for large infestations release 1 per 1 square foot biweekly or as needed. If using adults, divide rate by four. And, if you are applying eggs, multiply rate by five.

INSECTICIDE OPTIONS:

Horticultural oil sprays with an active ingredient of Neem oil are recommended for the azalea lacebug as well as Marrone product Venerate XC, which has Azalea lacebug listed as one of its target pests.

FURTHER CONSIDERATIONS:

Building biodiversity into the system by attracting naturally occurring predators can help tremendously. A variety of helpful “banker plants” include *Lobularia maritima* (sweet alyssum) and the Ornamental Pepper variety “Purple Flash” have both proven to be great banker plants to attract *Orius insidiosus*. They provide a food source while supporting their establishment in a crop. When choosing a *Lobularia spp.* variety, any hybrid variety can be used, however, the white and more fragrant varieties are often recommended and less expensive.

CULTURAL CONTROL TIPS:

Azalea Lacebugs thrive in hot and dry environments. With light infestations, using a hose to spray down plants can help keep populations from establishing as well as keeping plants watered and soil moist.