

Natter's Notes

Azalea lace bugs

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A heavily damaged azalea will have a "ghostly" appearance (Photo: J. Natter)

be so heavily damaged that leaves become nearly white (above photo). Rhododendrons often display numerous, rather coarse, chlorotic (yellow) stipples.

The adult lace bugs are ornate insects about 1/8-inch long and are difficult to spot on leaves because their lace-like wings are transparent. The nymphs are smaller still, dark-colored and spiny.

Managing azaleas lace bugs can be challenging, in part because they have several generations per year. Beyond that, it's awkward to treat densely-leaved plants. It's important to monitor for both nymphs and adults through the growing season. Then, if a product is applied, ensure that the spray reaches the



Rhododendron leaves with stippling damage on the top, fecal deposits on the underside; 2009-08 (Photo: Jean Natter)

undersides of the leaves where the lace bugs live, feed, and speckle the undersides of leaves with shiny spots of their tar-like excrement.

It's important to differentiate the rather coarse stippling caused by lace bugs from the much finer version caused by spider mites. Mites also feed from the leaf underside but the stippling topside is very fine and they won't deposit black fecal material on the reverse.

Stressed plants are the most common victims. Azaleas in full or part sun are said to be twice as likely to be affected by lace bugs as their shaded companions. To help relieve stress, thin out individual plants to increase air circulation within the plant. Further, adjust irrigation as needed for good health. A general guideline is to provide a deep irrigation every 3 or 4 weeks through the dry months. Then, too, consider moving or replacing any shrubs which are in the wrong environment.

Clients continue to ask about how they can manage azalea lace bugs on their azaleas and/or rhododendrons. Early damage is revealed as leaf stippling, with chlorotic (light-colored) patches. Later on, damaged areas may bronze, giving the leaves a burnt, silvery appearance.

Azalea lace bugs (*Stephanitis pyrioides*) were officially recognized in Oregon about six years ago as serious pests of both azaleas and rhododendrons, sometimes *Pieris*. In contrast to damage from the previously existing rhododendron lace bug (*S. rhododendri*) which attack only rhododendrons, azalea lace bugs seriously disfigure both azaleas and rhododendrons with their piercing-sucking mouthparts. Azaleas may



Three adult lace bugs and numerous fecal spots on the underside of rhododendron leaves; 2009-08 (Photo: J. Natter)



Azalea leaves with damage from azalea lace bugs; 2008-09 (Photo: J. Natter)

Among the possible predators are azalea plant bug, tree crickets, earwigs, green lacewings, minute pirate bugs, and spiders. Rather than purchase natural enemies, rely on those which occur naturally on the site. If predators are purchased, green lacewings are the best bet.

Another option is to replace the most seriously affected plants with azaleas shown to be resistant to lace bugs in university trials. "Encore Azalea cultivars found to be resistant included: Autumn Amethyst, Autumn Twist, Autumn Royalty, Autumn Sangria,

Autumn Cheer, and Autumn Rouge. Cultivars showing moderate resistance were Autumn Embers, Autumn

Bravo, Autumn Starlite, Autumn Ruby, and Autumn Princess."

http://www.nurserymanagementonline.com/Encore_azalea_resistant_to_lace_bugs.aspx

Among the active ingredients currently listed in the PNW Insect Management Handbook are azadirachtin (neem), horticultural oil, insecticidal soap, spinosad, and the systemic ally active imidacloprid. Gardeners should repeat applications at intervals stated on the label to achieve reasonable control. A gardener must be unwavering and persistent to gain the upper hand.

The best use of horticultural oils is to thoroughly coat the undersides of the leaves to suffocate the over-wintering eggs which are laid in the leaf tissue alongside the midribs. The other suggested materials are applied during the growing season.



Cast skin of an azalea lace bug nymph (photo: C. Groth)

To keep ahead of azalea lace bugs during the growing season, monitor the plants and treat as soon as the bugs are present. Hatch usually occurs in late April, early May. Sprayed products provide good control when they contact the insects. To accomplish that, timing and placement of the product is critical. One must apply the material where the lace bugs live – the undersides of the leaves.

In summary, successful management of azalea lace bugs requires the entire management package, cultural and chemical:

1. Correct any adverse environmental conditions.
2. Apply horticultural oil to the undersides of leaves to smother the over-wintering eggs.
3. During the growing season, apply appropriate products against the nymphs and adults on the undersides of the leaves in a timely manner, repeating as directed on the label.

Resources

- PNW Insect Management Handbook (hardcopy or online at <http://uspest.org/pnw/insects>) lists azalea lace bug in the Landscape chapter
- "Azalea lace bug" at Pacific Northwest Nursery IPM includes an illustrated fact sheet for home gardeners (http://oregonstate.edu/dept/nurspest/azalea_lace_bug.htm)
- "Azalea lace bug" http://entomology.ifas.ufl.edu/creatures/orn/shrubs/azalea_lace_bug.htm