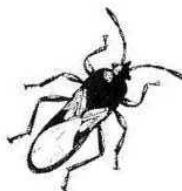


Bug-Wise

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Hurricane Damage Increases Potential for Problems with Chinch Bugs and Azalea Lace Bugs: Winds associated with Hurricane Katrina destroyed and damaged trees in landscapes through much of the state. Greatest damage occurred in the coastal area where St Augustine lawns are more common and azaleas are more abundant. Loss of trees results in increased sun exposure, and this, in turn, makes St. Augustine lawns more susceptible to chinch bugs and azaleas more susceptible to azalea lace bugs. Homeowners and landscape managers trying to repair or re-establish landscapes need to keep both of these pests in mind, and not just this year, but for many years to come. Following the loss of key shade trees, it's not uncommon for St. Augustine lawns that never before had problems with chinch bugs to suffer heavy damage. The same is true for lace bugs on azaleas that experience increased sun exposure. Also, it doesn't matter whether the tree loss is due to wind damage, disease, or some other cause. It's the increased sun exposure that triggers the increased potential for problems with these pests.

Chinch Bugs in St Augustine Lawns: Chinch bugs are important pests of St. Augustine lawns, but they are rarely a problem in other types of grasses. Obviously, this means that chinch bug problems will be more common in the southern portion of the state where St Augustine is more commonly grown. **Chinch bugs especially favor the more sunny areas of the lawn**, and damage will likely occur in these areas first. Chinch bugs have piercing/sucking mouthparts. While feeding they inject a toxin, and this toxin causes heavily infested areas to turn yellow, then brown, and eventually die. Because there are several diseases and other problems that can cause damaged areas in St. Augustine lawns, it is important to check for chinch bugs before treating. You can't cure take-all disease by spraying with an insecticide! Chinch bugs also tend to be more common, and more damaging, during prolonged dry periods, and the Coastal area has certainly experienced a dry spring.

Adult chinch bugs are about 1/5 of an inch long and are black with white wings that are folded in an 'X' over their back. Newly hatched nymphs are red with a light colored band across the back; older nymphs are black. Scout turf on sunny days by parting the stems and looking for the nymphs and adults in the crown region or running across the exposed soil. Another scouting method is to remove both ends of a gallon-sized can, press one end of the can two to three inches into the turf, and then fill the can approximately half-full with water. If chinch bugs are present, they will float to the top within a few minutes. When using this method it is important to check several sites, choosing areas where the yellow and green grass meet. If chinch bugs are identified as the cause of the problem, they can be controlled with the insecticides listed in the following table. Liquid sprays usually work better than granular treatments. If the infestation is heavy, a second application should be applied about two weeks after the first treatment. Many of the insecticides listed below are available in ready-to-use hose-end applicators. This is a convenient way for homeowners to apply chinch bug treatments.

Insecticides for Control of Chinch Bugs in Home Lawns

Insecticide	Brand Name *	Rate/1000 sq ft	Comments
carbaryl (22.5% liquid)	Sevin Concentrate Bug Killer	12 – 16 fl oz	Irrigate before application.
cyfluthrin (0.75% liquid)	Bayer PowerForce Multi- Insect Killer	6 fl oz	Irrigate before and after application
lambda-cyhalothrin (0.5% concentrate)	Triazicide Soil & Turf Insect Killer Concentrate	4 fl oz	Water lightly following application
permethrin (2.5% concentrate)	ProTech Sniper Yard & Garden Concentrate	6 fl oz	Water lightly following application
permethrin (38% concentrate)	Hi-Yield 38 Plus Turf, Termite & Ornamental Insect Concentrate	0.8 fl oz	Water lightly following application

This information is for initial planning purposes only. Always read and follow product label. Brand names listed here are examples only. Many insecticides are marketed under a number of different brand names. Other products containing the same active ingredient should provide equal performance, provided they are labeled for use in the site in question and are applied at equivalent rates.

Azalea Lace Bug: Lace bugs are the most common insect pests of azaleas, and populations are building now. Not every planting of azaleas will be heavily infested with lace bugs, but when heavy infestations do occur, they can cause extensive, unsightly damage. Both the nymphs and adults cause damage by feeding on the undersides of the leaves with their piercing-sucking mouthparts. Initially, leaves have a ‘stippled’ appearance due to the light-colored spots that appear on the upper surface of the leaves as a result of the bugs’ feeding. This leaf stippling is sometimes mistakenly attributed to spider mites, resulting in improper treatments. Careful examination of the undersides of the leaves will identify the true problem.

The adults are approximately 1/8 of an inch long and have lacy white wings with dark markings. Nymphs are smaller, dark-colored, and covered with spines. Cast skins of the nymphs accumulate on the undersides of leaves, along with the dark-colored, shellac-like excrement. This excrement remains on the leaves for a long time, and its presence can help diagnose damage caused by lace bugs, even when the bugs themselves are not present. **Azaleas growing in sunny locations are more likely to be heavily infested than those growing in filtered shade.**

Lace bugs overwinter as eggs and nymphs hatch in early spring. Plantings can experience heavy infestations by mid-April, but there are several generations per year, and populations will continue to build through the rest of the summer. Heavy infestations cause leaves to have a ‘bleached’ appearance and it can take quite a while for azaleas to fully recover from severe injury after the bugs are controlled. Consequently, it is a good idea to routinely check azaleas for lace bugs and initiate treatments if significant numbers are detected.

Treatments recommended to control lace bugs are listed in the following table. Refer to product labels for specific use rates. Systemic insecticides, such as imidacloprid, or acephate, are generally more effective than contact insecticides. Contact insecticides can be effective, but only if you get good spray coverage to the undersides of the leaves.

The imidacloprid soil drench is probably one of the easiest treatments for most homeowners to use, but it is also the most costly. The use rate is 3 fl. Oz. per foot of shrub height and the cost is around \$20 per quart. This is a good treatment to use preventively, especially on plantings that are susceptible to lace bugs because they are growing in full sun. Early spring is the best time to apply this treatment, but it can be used anytime in the growing season. Commercial applicators may use a product known as Merit, which also contains imidacloprid.

A foliar spray using acephate, or one of the contact insecticides, is a better choice for fast control of heavy infestations, but the imidacloprid drench provides longer residual control. For best control of heavy infestations you may need to use both types of treatments. Apply a foliar spray for quick control and follow-up with the imidacloprid drench treatment.

Insecticides Recommended for Control of Azalea Lace Bug in Home Landscapes

Active Ingredient	Brand Name (example)
imidacloprid	Bayer Advanced Garden, Tree & Shrub Insect Control (Drench) **
acephate + fenbutatin-oxide	Ortho Systemic Insect Killer
cyfluthrin + imidacloprid	Bayer Advanced Garden Rose & Flower Insect Killer
cyhalothrin	Spectracide, Triazicide Soil & Turf Insect Killer
permethrin	Hi-Yield 38 Plus, Turf, Termite & Ornamental Insect Control

This information is for initial planning purposes only. Always read and follow product label.

** This treatment is diluted in water and applied as a liquid drench to the root area of the plant. Rate is based on shrub height (3 fl oz of product per foot of height).

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