

What is Killing my Grass?

by Kim Gabel, Environmental Horticulture Agent
UF/IFAS/Monroe County Extension Services

In the Keys, St. Augustinegrass is a popular turf grass. A common pest problem that occurs throughout our warm weather is the Southern chinch bug. They live in the thatch (spongy layer of dead and living shoots and roots) and suck fluids from the grass. This causes the grass to turn yellow and die. As the insects tend to feed in groups, dead patches of grass appear and seem to get larger as the chinch bugs population spread through the grass.

Detecting Chinch Bugs

A flotation technique can be used to detect infestations. Cut both ends out of a metal can and push one end 2 - 3 inches into the soil on green or yellowing grass (not dead grass). Slowly fill with water and count the number of chinch bugs that float to the top within five minutes. Keep the water level above the grass surface. If nothing emerges in the first area, examine at least three or four other areas.

Cultural Control

How you fertilize, water, take care of your thatch, and mow your lawn may increase Chinch Bug populations on your turf. Below are practices you can implement to lower Chinch Bug infestations:

It is best to use a slow-release nitrogen fertilizer instead of frequent applications of water soluble inorganic fertilizer that creates rapid lawn growth and attracts Chinch Bugs. Water your lawn when the grass blades start to fold inwards, by applying $\frac{3}{4}$ inch of water. Do not irrigate again until wilting begins to occur. Remove excessive thatch because that is the preferred Chinch Bug habitat. Follow proper mowing heights for St. Augustinegrass of 3 - 4 inches and only remove $\frac{1}{3}$ of the blade per mowing event.

Biological Control

Learn about the insects that are common natural enemies of the Chinch Bug such as big-eyed bugs and the predatory earwig. These insects help to suppress the

Chinch Bug population as long as you don't spray any unnecessary insecticide that would harm them.

Chemical Control

If 20 to 25 Chinch Bugs per square foot are detected, an insecticide application may be necessary. Spot treat when infestations are first noticed and damage is minimal. However, the entire area should be treated if damage is widespread. Treat dead and dying St. Augustinegrass and a 5-foot buffer area around the damage. Inspect two to three times at biweekly intervals to determine if the infestation has been controlled. Since most insecticides do not kill the eggs, repeated applications may be needed to gain control.

Currently, active ingredients found in pesticide products for homeowner turfgrass use are Bifenthrin, Cyfluthrin, Lambda-cyhalothrin, Neem Oil, and Permethrin. All directions and the insecticide label should be read and understood before a product is used, particularly the dosage rates, application procedures, and precautions. Immediate irrigation following treatment may be necessary.

The information in this article was adapted from "Southern Chinch Bug Management on St. Augustinegrass" by Cara Congdon and Eileen Buss and is available online at <http://edis.ifas.ufl.edu>.