

## **CONTROLLING CHINCH BUGS IN TURFGRASS**

Chinch bugs are sucking insects that feed on plant sap at the base of the grass leaves, stems and crown. They concentrate in limited areas and work outward from these centers of infestation, destroying the grass as they advance. The damage produced by the chinch bug will show up in non-shaded areas of the lawn as brown patches of dead grass. Sometimes entire lawns are killed except for certain types of weeds.

Hairy chinch bug's average life cycle is 50 days. There are usually at least two broods depending on the length of the season. The adult bugs winter in dry grass and other debris that offers protection. Newly hatched bugs are wingless and yellow in color turning to a bright red a few days after hatching. Shortly before changing to the adult form they develop their characteristic brownish-black color. Adult chinch bugs are only 3/16-inch long. Their wings are folded over their backs in the form of an X. Although there are several species known, the hairy chinch bug is the one which causes serious injury to turf in the Capital District and elsewhere in the eastern states.

### ***Determining Chinch Bug Injury***

Is it drought, or is it chinch bug? This is a difficult question to answer, since the damage looks similar. A simple process to determine whether the brown spots in your lawn are chinch bug damage is called "flotation." Cut a 6 inch square piece of browning turf from the lawn, and sink it into a bucket of water. If chinch bugs are present, they will float to the surface in a few minutes. Another method involves inspecting a square foot piece of turf. Turn the turf upside down over a piece of white paper and scratch the grass roughly so that any insects in the turf fall onto the paper. If chinch bugs are present, they can easily be seen on the white paper. Remember, all other insects in that turf will be on the paper so you must be able to differentiate chinch bugs from other insects.

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### ***Cultural Management***

Keeping your lawn in good shape can minimize chinch bug damage, but even a healthy lawn can be attacked. Some perennial ryegrass and fine fescue varieties contain a naturally-occurring fungus called an "endophyte" which makes the grass resistant to chinch bug damage. If your lawn has been seriously injured by chinch bugs and needs to be re-seeded, consider using these varieties in order to reduce future problems. Grass seed containing endophytic varieties should be clearly marked on the label.

### ***Chemical Insect Management***

Lawns do not usually need to be treated preventatively for chinch bugs, and a small population is not of great concern. However, it is important to investigate a possible infestation promptly, and in order to avoid widespread death of the lawn. Water the lawn before treating in order to move the bugs closer to the surface, and follow any other instructions on the label. Products labeled for use for chinch bugs include acephate, \*bifenthrin, carbaryl, \*chlorpyrifos, \*cyfluthrin, \*lambda-cyhalothrin, deltamethrin, imidacloprid, and permethrin.

\*Some or all formulations of these products are restricted-use materials in New York State. They may be purchased and used only by a Certified Pesticide Applicator.

Adapted from "Controlling Chinch Bugs," Home Horticulture Facts publication, revised March 1988.

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This publication contains pesticide recommendations. Changes in pesticide regulations occur constantly and human errors are still possible. Some materials mentioned may no longer be available and some uses may no longer be legal. All pesticides distributed, sold or applied in New York State must be registered with the New York State Department of Environmental Conservation (DEC). Questions concerning the legality and/or registration status for pesticide use in New York State should be directed to the appropriate Cornell Cooperative Extension specialist or your regional DEC office.

**Read the label before applying any pesticide.**