HOME AND GARDEN COLUMN

CHINCH BUGS

The hot weather and lack of rain creates the perfect environment for the most detrimental pest of St. Augustine lawns - chinch bugs. Chinch bugs (*Blissus insularis*) are tiny insects that cause millions of dollars in damage per year, as homeowners seek to combat chinch bug outbreaks by applying insecticides and replacing damaged grass. Weekly inspections of the lawn now through fall are critical in order to reduce and eliminate chinch bug damage. Early detection and proper cultural practices can diminish severe attacks.

Turfgrass damage

Adult chinch bugs are only about 1/5 inch long and black, with white patches on the wings, which form an 'X' pattern. The young chinch bugs (nymphs) are a bit smaller and red, with a white band across their back. These pesky pests suck the juices from the grass blades creating yellowish to brownish patches in the lawn. Symptoms will usually first appear in dryer locations of the lawn, such as in sunny areas or along the edges of the lawn near sidewalks and driveways.

Cultural practices can significantly influence the lawn’s vulnerability to chinch bugs. The susceptibility is increased during times of rapid succulent growth, which is a result of frequent or high applications of water-soluble fertilizer. This type of growth acts like an attractant to the chinch bugs. Minimum amounts of slow-release fertilizer instead will help to reduce the succulent growth.

Improper mowing and excessive watering and fertilizing can cause the St. Augustine lawn to develop a thick, spongy mat of live and dead roots and shoots that have collected above the soil surface, called thatch. Thatch is the ideal habitat for chinch bugs. It reduces the effectiveness of insecticides by not allowing them to reach their target, therefore not eliminating the problem pests.

Thatch can be avoided by proper mowing practices. These include mowing the grass frequently so that no more than one-third of the leaf blade is removed, keeping it 3-4 inches high, and mowing with a sharp blade. Not only will the correct mowing practices keep the lawn looking good, they will also make the grass more tolerant to pests.
There are a number of ways to monitor for chinch bugs. The easiest method is to part the grass at the margin of the yellowish areas in the lawn and examine the soil surface. If the chinch bugs are heavy in numbers, they can be seen scattering through the grass. It is necessary to make several examinations where symptoms occur.

If the chinch bugs are not visible and are still suspected, their presence can also be confirmed by using the "coffee can method". This method consists of taking a large metal can with both ends cut out and placing it in the ground about 2-3 inches deep at the margin of the yellowish areas. Fill the can with water. If chinch bugs exist, they will float to the surface of the water within five minutes. It is necessary to repeat this process at a number of places in the lawn.

Another way to monitor for chinch bugs is to use a soap mixture. Mix 1½ fluid ounces of dishwashing detergent or liquid soap with 2 gallons of water. Using a sprinkling can, douse a 4 square foot area with the solution. If the chinch bugs are present, they will appear on the surface of the grass and be easily detected. Repeat this procedure 3-4 times in different places where the pests are suspected.

It is important to remember that chinch bugs and other insects are only one of many reasons why the lawn turns yellow or brown. Other causes include nutritional deficiencies, diseases, nematodes, or dry weather. Make sure that the problem is correctly identified before treating it. The unnecessary use of pesticides can cause extensive damage to the lawn, waste time and money, and will not solve the initial problem.

For more information on chinch bugs in the St. Augustine lawn or for answers to other gardening questions, contact the Osceola County Master Gardeners Monday thru Friday from 10am to 2pm. Call (321) 697-3000.

Looking to design or re-design your landscape? A free class entitled "Basic Landscape Design", conducted by University of Florida/IFAS faculty, will be given on May 20th at the St. Cloud Civic Center. Please call (321) 697-3015 to register and for more information.

(Images are from the "Turfgrass Insects Sheet 1" by D.E. Short and J.L. Castner of the Department of Entomology and Nematology of the UF/IFAS)