

Turf Pests – Master Gardeners of Ottawa-Carleton



Hairy Chinch Bug

Description:

Piercing mouth parts suck sap from the crown and stems of turfgrass.

A chinch bug is black with a white spot on its back between its wing pads. Adults have white wings folded over their backs, and are 4 mm in length. Nymphs are bright red with distinctive white bands across the back. As they mature, their colouring changes from orange to brown, and finally black. Nymphs do not have wings.

Often lawns are only partially damaged, but in severe cases, are damaged to such an extent that it must be entirely renovated.

Plants Affected:

They prefer bentgrasses but will attack many other lawn grasses like bluegrass and red fescues.

Evidence: There are several ways to confirm an infestation:

Chinch bugs give off an offensive odour when crushed. If your lawn has a noticeable odour when walked on, you could have a large infestation.

Spread the grass and check the soil surface for red nymphs or black adult chinch bugs. These bugs avoid the light and may hide in soil crevices.

Use the tin can method in cases where the bugs are not readily visible: Cut the bottom out of a coffee can or large juice can and force the can 5 cm (two inches) into the turf surface. Fill the can with soapy water, add more water if the level recedes. Wait five to 10 minutes. If you have chinch bugs, they will float to the top of the can. Try this in several parts of the lawn. Five to 10 chinch bugs per can indicates an infestation serious enough to damage turf.

Healthy turf should be able to tolerate a level of two or three bugs per can. Turf that is in poor condition or stressed by hot, dry weather may not tolerate even a low-level infestation.

In mid-August watch for straw brown patches of dead grass that may look like drought damage. Damage will probably be noticed first on south facing slopes, central areas of lawns, near hedges or trees.

Management:

Chinch bugs like poorly tended lawns with compacted soils, accumulations of thatch, and a lack of moisture or an excess of nitrogen. Maintaining your lawn properly will discourage infestations and improve tolerance to damage.

Some helpful practices include the following:

- Because chinch bugs thrive in hot dry conditions keep lawn moist, watering deeply particularly in spring when they lay their eggs and the young hatch.
- During the summer water the lawn thoroughly once a week to a depth of 6 to 8 cm (2.5 to 3.5 inches).
- When replanting grass, choose an insect-resistant, endophytic variety of tall fescue or rye grass. Endophytes are naturally occurring fungi that kill lawn pests, including chinch bugs.
- In spring aerate the lawn to reduce soil compaction.
- In fall remove thick layers of thatch.
- Do not over-fertilize. This encourages greater insect activity.
- Use water-insoluble or slow-release nitrogen fertilizers. One kg of nitrogen per 100 m² (approximately 2 lb per 1000 ft²) should be enough for most lawns.
- Do not cut the grass too short. A length of 6 to 7.5 cm (2.5 to 3 inches) will help avoid stressing the grass.
- Add agricultural limestone when the soil pH is below 6.5.
- Natural predators and parasites to keep chinch bug numbers under control: The big-eyed bug looks similar to the chinch bug, but has a wider body, larger head and large predominant eyes. Tiny wasp will live off of chinch bug eggs under favourable conditions, preventing them from hatching. These predators occur naturally or can be bought from a commercial insectary.



White Grubs – Larvae of Japanese Beetles, European Chafer, June bugs

Grubs of all species have soft, white, C-shaped bodies with tan or brown heads and six prominent, spiny legs. They are quite small when first hatched (3 to 4 mm long), but at maturity reach a length ranging from 2 cm (1 inch) for a Japanese beetle larvae to 4 cm for the June beetle grub. A healthy grub is milky white in colour, with the dark contents of its gut showing prominently through the cuticle at the hind end of the abdomen.

June beetle and European chafer adults are very similar in appearance. The European chafer is tan, the June beetle is dark brown and larger.

The Japanese beetle is striking in appearance with a metallic green head and thorax, bronze wing covers and six distinctive white tufts of hair along each side of its abdomen.

Plants Affected:

Lawns and gardens

Evidence:

Beetles overwinter as grubs and can be seen in grass and gardens eating grass roots when soil is warm. These grubs emerge as adults and eat a large variety of plants. Grass begins to lift up easily. Skunk or bird damage occurs as they search for grubs

Management:

- Apply parasitic nematodes to control these pests in late summer when grubs are still small enough to be vulnerable to the tiny nematodes and are still feeding near the soil surface. Follow instructions for application ensuring they are not exposed to UV light, soil is moist when applying and temperature is at least 15 degrees C.
- Practice proper turf maintenance including applying a natural fertilizer to strengthen grass roots and mowing at a higher level
- Provide adequate irrigation.
- Mow at a higher level