Resources: The Dirt on Grubs

EXCERPTS FROM THE OMAFRA FACTSHEET

rubs, the term given to the larvae of scarab beetles, are frequently found feeding on the roots of turf and pasture grasses. Damage caused by white grubs initially resembles drought stress. As grub feeding continues, areas of fresh turf begin to wilt and turn brown. In areas where their numbers exceed five to 10 per one-tenth of a square metre (1 sq. ft.), dead patches of turf will result.

Turf that has been damaged by white grubs will lift away from the soil easily because the roots have been eaten and they no longer anchor the turf to the soil. Often, skunks and other small mammals will pull back the turf in search of a meal of grubs. The damage is usually more extensive than that caused by the grubs, but can be repaired by replacing the sod, tamping or rolling the surface, and watering the area.

In parts of Ontario, there are three species of white grubs which infest lawns—European chafer, June beetle, and Japanese beetle. The most common species is the European chafer which has come from Europe and has invaded much of the southern portion of the province. It occurs along Lake Erie and has spread to areas north of London and Kitchener and east of Toronto. Another species, also imported, is the Japanese beetle and it has become established in some areas of the Niagara Peninsula and the Hamilton-Wentworth region. Grubs of both species cause considerable damage to turfgrass, while the Japanese beetle adult is a serious pest of a large number of fruit and ornamental trees and shrubs. June beetles are native to North America, with ap-

proximately 152 species occurring in the Unites States and Canada. In Ontario, there are three principal species.

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 (3-4 mm long), but at maturity, they can reach a length ranging from 2 cm 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. A distinguishing feature among all three species is the pattern of spines occurring on the underside of the tip of the abdomen.

For more information on life history, cultural control, monitoring, and chemical management, access OMAFRA's FACTSHEET *Grubs in Lawns* on the internet at http://www.gov.on.ca/OMAFRA/english/crops/facts/97-023.html or telephone 1-888-466-2372 and request order #97-023. You might also check out OMAFRA's Turf Hotline at 1-888-290-4441, which is updated weekly on Friday mornings.

"My grandfather once told me there are two kinds of people: those who do the work and those who take the credit. He told me to try to be in the first group, there was less competition there."

- Indira Gandhi

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