



Grubs in your lawn

Timing of grub applications depends upon the mode of action of the control agent. Understanding the life cycle of the Japanese beetle helps to determine the method of treatment. Grubs are the larval form of an adult beetle. Japanese beetle grubs are 80% of the grub problems in lawns, but other beetle grubs destroy turf. Recent research shows billbugs are becoming an increasing problem.

Japanese beetle grub

In summer, Japanese beetles mate and females lay eggs in the soil. They seek well maintained, cultivated grass with an easy access point. (The adults are mobile, so adult grub damage on ornamental plants does not necessarily equate to a grub problem in the same lawn.) The eggs hatch into voracious feeding machines (grubs) in August, and grub damage is apparent in September/October. Grub damage is classically identified by pulling on the dead grass. If grubs are the problem, it will peel back like a carpet. In fall, grubs should be visible.

As soil temperatures cool, the grubs dig deep into the soil to overwinter. In spring, they return to the surface, but do not feed as aggressively as the newly hatched larvae. After metamorphosis, the new adult beetle emerges and they cycle begins anew.

Traditional SPRING chemical grub control products usually contain pyrethroids, organophosphates chloronicotinyls, and/or carbonates. Pesticides in those chemical classes disrupt nervous system activity, resulting in spasms, paralysis, and death. When applied to the lawn, they soak into the soil and are either ingested or absorbed through the skin of the grubs. Spring grub treatments are usually reactive in nature, meaning damage has been observed and the pest needs to be controlled.

Organic/biological grub control is achieved using naturally occurring predatory/parasitic nematodes and is most often used in FALL. Nematodes are microscopic in size; they are beneficial and do not damage plants. They are completely benign to humans and animals. Their job in life is to find a grub, burrow into it, multiply and move on, killing the grub in the process. They should be applied in August, when grubs are still small and easy to kill.



Predatory nematode, enlarged



Adult Japanese beetle

This is considered a preventative treatment. The idea is to infuse the soil with millions more predators than are naturally there. By eliminating the grubs while immature, we can prevent turf loss and disrupt the beetle's life cycle. This, minimizes beetle damage to ornamental plants next spring.

Info: courtesy of Child's Play Organic Lawn Care, South Bend, Indiana

www.childsplayorganiclawns.com/

St. Joseph County Parks, Indiana