

Safe Methods for Grub Control



Grubs are the larvae of Japanese beetles, chafers, June beetles, scarab beetles, etc. They can be destructive to lawns by chewing off roots close to the soil's surface. Be sure to **identify grubs** as the source of your lawn problem before treatment, as other factors such as drought, disease, excessive fertilizer, poor soil or even another pest may be the cause of your lawn's brown spots. Beetles/grubs prefer wet weather and therefore are less of a problem during hot, dry summers.

As always, the best cure is preventing the problem by creating a habitat not amenable to grubs/beetles.

- Mowing your **lawn at least 2 inches in height** discourages egg laying.
- **Aeration of your lawn** encourages deep root growth, thereby decreasing grub damage.
- Do not water frequently and/or lightly during the summer months as this will actually attract beetles. **Less watering** also encourages roots to grow deeper into the soil, another benefit.

However, if you do have significant lawn damage caused by grubs you have several organic options which are safe for bees and other pollinators.

Recommended:

- 1) A bio-insecticides called **GrubGONE** (*Btg* or *Bacillis thuringiensis gallerias*) has been available since 2018. This product is effective for **all types of grubs**. Best time to apply is in the fall. Check local outlets, or online at www.GreenEarthAgAndTurf.com, www.Growitnaturally.com, or with the manufacturer, Phyllom BioProducts.

NOTE: Do not confuse GrubGONE with GrubEx, a Scott's product which contains chlorantraniliprole. See reverse side for details about this chemical.

- 2) **BeetleGONE** is the wettable powder version of the GrubGONE granular. BeetleGONE is effective against a wide array of destructive adult beetles and chafers. Safe for pollinators. Available at same outlets as GrubGONE.

Not recommended:

- 1) **Nematodes**, are microscopic, worm-like microorganisms that kill most soil-dwelling insects at their larval or grub stage. Success is dependent on proper moisture conditions being maintained. However, **recent studies link their use to risk to bumblebees**
- 2) **Neonicotinoids**: clothianidin, imidacloprid and thiamethoxam. These chemicals pose **risks to bees and other pollinators** as well as having other negative side effects.
- 3) **Chlorantraniliprole (Acelepryn or Grub-Ex): Toxic to aquatic invertebrates and toxic to butterflies and moths.** Studies have verified high toxicity to larval stages, meaning that if they consume treated foliage, they can be significantly harmed or killed.
- 4) **Other chemicals to avoid**: Cyantraniliprole (toxic to bees), Bifenthrin, permethrin, carbaryl, cyfluthrin, deltamethrin, lambda-cyhalothrin, and trichlorfon.

Sources for more information:

- Green Earth Ag & Turf (www.greeneearthagandturf.com)
- Phyllom BioProducts (www.phyllombioproducts.com/turf.html)
- www.beyondpesticides.org/resources/managesafe/choose-a-pest?pestid=17