

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.

- 1) A newer bio-insecticides called **GrubGONE** (*Btg* or *Bacillus 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 Grub-Ex**, a Scott's product. Grub-Ex is a chemical, chlorantraniliprole, which is listed by Beyond Pesticides* as causing chronic health issues as well as posing risks to wildlife.

- 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.

- 3) **Milky spore** is a host specific (for **Japanese beetle grubs** only) bacterium that kills grubs within 7-21 days. It can have multi-year effects in warm climates but in New England the process is slowed down by cold winters. Best time to apply is mid-August to September.
- 4) A parasitic wasp called **Spring Tiphia**, present in every county in the state, has been reported by the University of Connecticut to be very effective at **control of Japanese beetle grubs**. They are frequently found on the nectar secreted by unopened **peony** flower buds. These wasps feed on aphids and can often be found on Norway Maples, Tulip Poplar, American Elm, Choke Cherry, American Pine trees as well as forsythia.

Products NOT recommended:

1. **Nematodes**, which can be purchased and watered into the lawn, are **not recommended** due to recent studies which have documented risks to bumblebees. In fact, an 80% mortality rate was observed at field recommended doses. [A new threat to bees? Entomopathogenic nematodes used in biological pest control cause rapid mortality in *Bombus terrestris* \[PeerJ\]](#)
2. **Do not use neonicotinoids:** clothianidin, imidacloprid and thiamethoxam. These chemicals pose risks to bees and other pollinators as well as having other negative side effects.
3. **Others chemicals to avoid:** Bifenthrin, permethrin, carbaryl, cyfluthrin, chlorantraniliprole, isofenphos, deltamethrin, lambda-cyhalothrin, trichlorfon. Beyond Pesticides lists all of these as posing human, wildlife, or environmental risks.

*Source: www.beyondpesticides.org/resources/managesafe/choose-a-pest?pestid=17

Other sources for more information:

- Green Earth Ag & Turf (www.greenearthagandturf.com)
- Phyllom BioProducts (www.phyllombioproducts.com/turf.html)

