



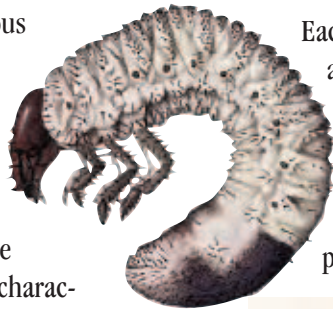
What's Bugging You?

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WHITE GRUBS

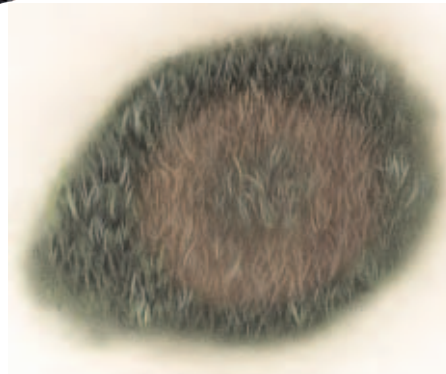
DESCRIPTION AND NATURE

White grubs, a serious and destructive lawn insect pest, are the larval stage of beetles and the most common varieties are Japanese and June beetles. White grubs are white with a characteristic "C" shaped body and are found in the soil feeding on lawn roots.



WHERE YOU WILL FIND GRUBS

Each year, grubs quietly cause damage to the lawns of unsuspecting homeowners. In fact, root injury from grub infestations can develop unnoticed until an average of eight to 10 grubs populate each square foot of turf.



LIFE CYCLE

The one-year life cycle of the white-grub begins with the adult beetle, which cause most of their damage during the summer. In June, the adult lays eggs in the soil and within two weeks, the white grubs emerge. They feed during the warm summer months and then overwinter deep in the soil. Early the following summer, the grubs move close to the soil surface and begin feeding again.

They can cause extensive damage in small numbers due to their voracious appetite. After a short feeding period during the third summer, the white grub pupates and turns into an adult. The adult beetle overwinters in soil and lays eggs the following summer, thus completing its life cycle. The beetle can be seen or heard flying against windows or lights on warm summer nights.

When beetles are numerous, the potential exists for white grubs to cause extensive damage throughout the following two summers.

DIAGNOSIS

To determine whether or not a lawn is infested with white grubs, examine the soil around the roots for grub populations. They are easy to find by lifting the sod in damaged areas and checking the root zone for the pest. If left untreated, grubs not only kill the root system, as adults they turn into beetles, which can damage a variety of plants, shrubs, and trees.



COUNTY EXTENSION TIPS

Extension specialists recommend a variety of chemical and non-chemical options for grub control.

Maintaining a turf height of three inches can help improve biological control by allowing the grass to tolerate grub damage while natural enemies such as ants and wasps thrive.

Short turf, however, is less able to replace roots consumed by grubs. Allowing the lawn to go dormant during dry summers also may help reduce egg-laying activity; however, faster solutions do exist.

Some experts recommend using a non-systemic insecticide that is easy on beneficial insects. Carbaryl, the active ingredient found in Sevin® Brand Insecticide, is non-systemic and is approved for use on a variety of sites, including lawns.

Carbaryl recently received re-registration from U.S. Environmental Protection Agency (EPA) and continues to be available for homeowners today.

Carbaryl is one of the most widely tested and researched insecticides on the market. More than 10,000 studies conducted to date prove it has the broadest spectrum of control compared to other leading brands.

Effective on grub populations in a new granular for lawns, toxicological studies also deem carbaryl the most effective and recommended insecticide for control of Japanese beetles.



FOOD FOR THOUGHT

In some regions, when the plantations are cut down, the plump white grubs are enjoyed for a meal and considered a delicacy. The larvae can be served whole and ripe and sautéed with other fine insects.



A GRUB STEAK

A wildlife photographer once told of his wild adventures while on assignment in tropical rain forests. One holiday



season he was on an expedition far from home and shared a meal with some natives.

As he contemplated the large white grubs main course, he thought sadly of

the typical American feast he was missing. One of the locals who had been traveling with him noticed his melancholy mood.

“I know what you are feeling,” the man sympathized. “The grubs in my village are better too.”

As with all insecticides, please read and follow the use instructions on the package. For more information about grubs and/or carbaryl, log onto www.gardentech.com.

For more information, please contact Gini Dietrich at (312) 884-5194 or e-mail gini.dietrich@armentdietrich.com.



Did you know that grubs...

- Can be used as fish bait?
- Gnaw on the roots of trees for breakfast, lunch, and dinner?
- Attract mammals, including skunks and raccoons that harm the grass?
- Harm uncared-for lawns more severely than cared-for lawns?
- Are more efficiently treated while they are toward the top of the lawn on the roots of the trees?
- At the larval stage, look like all beetle varieties? The only way to tell the difference between them is to look at their raster, or rear end.



Dead insect larvae fill a bowl at the National Zoo. They are used as food for some of the animals.