



grubHALT!® Bt

FOR LAWN PESTS

Biological Insecticide Granule Controls Annual White Grubs in Turf and Ornamentals

Active Ingredient:

Bacillus thuringiensis subsp. *galleriae*,
Strain SDS-502 fermentation solids,
spores and insecticidal toxins*9.0%

Other Ingredients91.0%

Total 100.0%

*Contains a minimum of 1×10^9 CFU per gram

**KEEP OUT OF REACH OF CHILDREN
CAUTION**

See back panel for additional precautionary statements,
directions for use, and storage and disposal. ►

EPA Reg. No.: 88347-2-56872
EPA Est. No.: 089287-KS-002(E) / 69208-MO-3(R)

Net Weight: 2.6 granular lbs.
#61029

Manufactured for:
Gardens Alive!®, Inc.
706 W Cumberland St.
Lewisburg, OH 45338
513-354-1482

www.GardensAlive.com

grubHALT!® is a trademark of Phyllom BioProducts Corporation



**PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS**

CAUTION

Harmful if absorbed through the skin, inhaled or swallowed. Avoid contact with skin, eyes or clothing and breathing dust. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before use.

FIRST AID	
If on skin or clothing:	<ul style="list-style-type: none">• Take off contaminated clothing.• Rinse skin immediately with plenty of water for 15-20 minutes.• Call a poison control center or doctor for treatment advice.
If inhaled:	<ul style="list-style-type: none">• Move person to fresh air.• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible.• Call a poison control center or doctor for treatment advice.
If swallowed:	<ul style="list-style-type: none">• Call a poison control center or doctor immediately for treatment advice.• Have a person sip a glass of water if able to swallow.• Do not induce vomiting unless told to by a poison control center or doctor.• Do not give anything by mouth to an unconscious person.
HOTLINE NUMBER	
Have the product container or label with you when calling a poison control center or doctor, or when going for treatment. For emergency information concerning this product, call the National Pesticide Information Center (NPIC) at 1-800-858-7378, Monday through Friday, 8 am to 12 pm, Pacific Time (NPIC Web site: www.npic.orst.edu). During other times, call your poison control center at 1-800-222-1222.	

ENVIRONMENTAL HAZARDS

For terrestrial uses: Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters or rinsate.

No manual application can be made within 300 feet of any threatened or endangered Lepidoptera or Coleoptera.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the State or Tribal agency responsible for pesticide regulation.

Read the entire label before use.

NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard (WPS) for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses. Keep children and pets out of treated areas until dusts have settled.

grubHALT!® Bt for Lawn Pests is for control of annual white grubs in landscape and recreational turf grasses and ornamental plants and to prevent their damage. Use sites include golf courses, residential lawns, commercial grounds (e.g., office and shopping complexes and airports), parks, schools, playgrounds, athletic fields, day care facilities, pet care facilities, cemeteries, sod farms, interior landscapes, greenhouses, nurseries, fields, and other turf grass-covered or landscape ornamental-planted areas.

PRODUCT USE INFORMATION

grubHALT!® Bt for Lawn Pests is a broad-spectrum biological insecticide. When applied at label rates, it is active against annual white grubs of the Asiatic garden beetle (*Maladera castanea*), European chafer (*Rhizotrogus majalis*), green June beetle (*Cotinis nitida*), Japanese beetle (*Popillia japonica*), May or June beetle (*Phyllophaga* sp.), northern masked chafer (*Cyclocephala borealis*), oriental beetle (*Anomala orientalis*), and southern masked chafer (*Cyclocephala lurida*). Rainfall or irrigation causes the active ingredient of grubHALT!® Bt for Lawn Pests, *Bacillus thuringiensis* (Bt) subspecies *galleriae* strain SDS-502 to be released from the granule. Once released, Bt subspecies *galleriae* strain SDS-502 is carried into the soil and root zone of turf and ornamentals. In the soil, grubHALT!® Bt for Lawn Pests will control annual white grubs upon ingestion of Bt subspecies *galleriae* strain SDS-502. Insect mortality varies with larval size (instar), grub species, and dose of active ingredient consumed.

APPLICATION TO TURF GRASS

Sites of Application: grubHALT!® Bt for Lawn Pests can be used for applications to landscape and recreational turf grasses found in, on and/or adjacent to golf courses (e.g., greens, tees, collars, roughs and fairways), residential lawns, commercial grounds (e.g., office and shopping complexes and airports), parks, schools, playgrounds, athletic fields, day care facilities, pet care facilities, cemeteries, sod farms, and other turf grass-covered areas.

grubHALT!® Bt for Lawn Pests is not phytotoxic and can be used on all turf grass species.

Restriction: Do not apply more than 110 oz of grubHALT!® Bt for Lawn Pests per 1,000 sq ft of turf grass per year (equivalent to 300 pounds of grubHALT!® Bt for Lawn Pests per acre of turf grass per year)

Application Methods: Apply grubHALT!® Bt for Lawn Pests as a broadcast application to turf grass for control of targeted insect pests and to prevent their damage to turf grasses. With calibrated granular equipment, uniformly broadcast grubHALT!® Bt for Lawn Pests over the area being treated. Maintain adequate soil moisture before and after application for optimum control of insect pests and healthy turf grass growth. Excessively wet or dry conditions may impact the performance of grubHALT!® Bt for Lawn Pests against annual white grubs. grubHALT!® Bt for Lawn Pests must move to the site of insect pest infestation, such as in the root zone of the host plant. Sprinkler irrigation of about 0.5 in or moderate rainfall shortly after application improves performance for all applications by moving grubHALT!® Bt for Lawn Pests into the root zone where annual white grubs feed. Do not mow the turf until the treated area has been irrigated or moderate rainfall has occurred so that the granules are not removed from the treated area.

Spreader Settings for grubHALT!® Bt for Lawn Pests: Spreader settings are influenced by factors such as speed, equipment wear, and condition of the spreader, but mainly by the type or brand of spreader. Use the adjustment chart provided with the kind of spreader used as a guide in establishing accurate calibration of your spreader and to properly apply grubHALT!® Bt for Lawn Pests at label rates. Spreaders may also be calibrated by collecting deposited granules on a plastic sheet and comparing the amount of grubHALT!® Bt for Lawn Pests applied on a given area with spreader adjustment settings.

Application Timing: grubHALT!® Bt for Lawn Pests is effective when applied at label rates (see table directly below) to control annual white grubs and prevent their damage to turf. To control annual white grubs, apply grubHALT!® Bt for Lawn Pests when target insects are present. For optimum annual white grub control, apply grubHALT!® Bt for Lawn Pests from peak adult flight through peak egg hatch of the primary insect species being targeted. For specific information about developmental stages of the target insect pest, associated damage, and action thresholds to properly time applications, consult with your State Cooperative Extension Service.

Insect Pests	Application Timing of grubHALT!® Bt for Lawn Pests to Turf Grass	Application Rate of grubHALT!® Bt for Lawn Pests to Turf Grass
Larvae (annual white grubs of): Asiatic garden beetle (<i>Maladera castanea</i>) European chafer (<i>Rhizotrogus majalis</i>) Green June beetle (<i>Cotinis nitida</i>) Japanese beetle (<i>Popillia japonica</i>) May or June beetle (<i>Phyllophaga sp.</i>) Northern masked chafer (<i>Cyclocephala borealis</i>) Oriental beetle (<i>Anomala orientalis</i>) Southern masked chafer (<i>Cyclocephala lurida</i>)	Apply when insects of the insect species being targeted are present. For optimum control, apply from peak adult flight to peak egg hatch of the primary insect species being targeted. Additional applications may be made no earlier than 7 days after the preceding application as long as the annual maximum restriction on grubHALT!® Bt for Lawn Pests used (i.e., 110 oz per 1,000 sq ft (equivalent to 300 pounds per acre) is not exceeded.	Apply 37 to 55 oz of grubHALT!® Bt for Lawn Pests per 1,000 sq ft of turf grass (equivalent to 100 to 150 pounds of grubHALT!® Bt for Lawn Pests per acre of turf grass).

Note: For turf grass with heavy thatch (more than 0.75 in), use the higher rates within the specified rate range.

APPLICATION TO LANDSCAPE ORNAMENTAL PLANTS

Sites of Application: grubHALT!® Bt for Lawn Pests can be used for applications to landscape ornamental plants found in, on, and/or adjacent to residential plantings, commercial grounds (e.g., office and shopping complexes and airports), parks, schools, playgrounds, athletic fields, day care facilities, pet care facilities, cemeteries, and other landscape ornamental-planted areas.

grubHALT!® Bt for Lawn Pests is not phytotoxic and can be used on all ornamental species.

Restriction: Do not apply more than 110 oz of grubHALT!® Bt for Lawn Pests per 1,000 sq ft of landscape ornamental plants per year (equivalent to 300 pounds of grubHALT!® Bt for Lawn Pests per acre of landscape ornamental plants per year).

Application Methods: Apply grubHALT!® Bt for Lawn Pests as a broadcast application to soil for control of targeted insect pests and to prevent damage to ornamental plants. With calibrated granular equipment, uniformly broadcast grubHALT!® Bt for Lawn Pests over the soil in the area being treated. Use the adjustment chart provided with the kind of spreader used as a guide in establishing accurate calibration of your spreader and to properly apply grubHALT!® Bt for Lawn Pests at label rates. Maintain adequate soil moisture before and after application for optimum control of insect pests and healthy ornamental plant growth. Excessively wet or dry conditions may impact the performance of grubHALT!® Bt for Lawn Pests against annual white grubs. grubHALT!® Bt for Lawn Pests must move to the site of insect pest infestation, such as in the root zone of the host plant. Sprinkler irrigation of about 0.5 in or moderate rainfall shortly after application improves performance for all applications by moving grubHALT!® Bt for Lawn Pests into the root zone where annual white grubs feed.

Application Timing: grubHALT!® Bt for Lawn Pests is effective when applied at label rates (see table directly below) to control annual white grubs and prevent their damage to ornamental plants. To control annual white grubs, apply grubHALT!® Bt for Lawn pests when target insects are present. For optimum annual white grub control, apply grubHALT!® Bt for Lawn Pests from peak adult flight through peak egg hatch of the primary insect species being targeted. For specific information about developmental stages of the target insect pest, associated damage, and action thresholds to properly time applications, consult with your State Cooperative Extension Service.

Insect Pests	Application Timing of grubHALT!® Bt for Lawn Pests to Landscape Ornamental Plants	Application Rate of grubHALT!® Bt for Lawn Pests to Landscape Ornamental Plants
Larvae (annual white grubs of): Asiatic garden beetle (<i>Maladera castanea</i>) European chafer (<i>Rhizotrogus majalis</i>) Green June beetle (<i>Cotinis nitida</i>) Japanese beetle (<i>Popillia japonica</i>) May or June beetle (<i>Phyllophaga sp.</i>) Northern masked chafer (<i>Cyclocephala borealis</i>) Oriental beetle (<i>Anomala orientalis</i>) Southern masked chafer (<i>Cyclocephala lurida</i>)	Apply when insects of the insect species being targeted are present. For optimum control, apply from peak adult flight to peak egg hatch of the primary insect species being targeted. Additional applications may be made no earlier than 7 days after the preceding application as long as the annual maximum restriction on grubHALT!® Bt for Lawn Pests used (i.e., 110 oz per 1,000 sq ft (equivalent to 300 pounds per acre)) is not exceeded.	Apply 37 to 55 oz of grubHALT!® Bt for Lawn Pests per 1,000 sq ft of landscape ornamental plants (equivalent to 100 to 150 pounds of grubHALT!® Bt for Lawn Pests per acre of landscape ornamental plants).

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

PESTICIDE STORAGE	Store in a cool, dry place inaccessible to children.
PESTICIDE DISPOSAL	Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.
CONTAINER HANDLING	Nonrefillable container. Do not reuse or refill this container. Completely empty bag into application equipment. Then, offer for recycling if available, dispose of empty bag in a sanitary landfill or by incineration or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

WARRANTY AND LIMITATION OF DAMAGES

Gardens Alive!® Inc. warrants that the material contained in this package conforms to the description on this label and is reasonably fit for the purposes referred to in the directions for use. Timing and method of application, weather, watering practices, nature of the soil, the insect problem, condition of the crop, incompatibility with other chemicals not specifically recommended, and other influencing factors in the use of this product are beyond the control of the seller. To the extent consistent with applicable law, buyer assumes all risks of use, storage, or handling of this material not in accordance with the directions on this label. To the extent consistent with applicable law, Gardens Alive!® Inc. makes no other express or implied warranty of the fitness or merchantability of this product.