

The Andersons

GrubOut[®] DG

0.2% INSECTICIDE

For systemic insect control in turfgrass, residential lawns, golf courses, sod farms, commercial and residential landscape plants, ornamental trees, shrubs, parks, recreational areas, athletic fields and ornamental fruit and nut trees and vegetable plants in greenhouses, nurseries and interior landscapes.

- Controls early nymph stages of mole crickets
- Ideal for white grub control
- Ideal for control of listed subsurface pests
- Contains GrubOut[®] Insecticide, contains the active ingredient imidacloprid
- Patented Dispersing Granule Formula

Active Ingredients	
ImidaclopridT	0.2%
Other Ingredients.....	99.8%
Total	100.0%

TCAS No. 138261-41-3
EPA Reg. No. 9198-244
EPA Est. No. 9198-OH-1M, 9198-OH-2B, 9198-AL-001A
Underlined letter is first letter used in run code on bag

KEEP OUT OF REACH OF CHILDREN

CAUTION

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

Causes moderate eye irritation. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling, and before eating, drinking, chewing gum, using tobacco or using the toilet.

FIRST AID	
If in eyes	<ul style="list-style-type: none">• Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contacts, if present, after the first 5 minutes, then continue rinsing.• Call a poison control center or doctor for treatment advice.
Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact 1-800-757-8951 for emergency medical treatment information.	
Note to Physician: No specific antidote is available. Treat patient symptomatically.	

Personal Protective Equipment (PPE):

WPS Uses: The following Personal Protective Equipment requirements apply to uses covered under the Worker Protection Standard (40CFR Part 170), i.e. sod farm uses:

Applicators and other handlers must wear:

- Protective eye wear
- Long sleeved shirt and long pants
- Chemical resistant-gloves made of any waterproof material such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, natural rubber, polyethylene, polyvinylchloride (PVC) or viton. If you want more options, follow the instructions for category A on an EPA chemical-resistance category selection chart.
- Shoes and socks

Non-WPS Uses: The following Personal Protective Equipment requirements apply to uses other than those covered by the WPS:

Applicators and other handlers must wear:

- Long sleeved shirt and long pants
- Chemical resistant-gloves made of any waterproof material such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, natural rubber, polyethylene, polyvinylchloride (PVC) or viton. If you want more options, follow the instructions for category A on an EPA chemical-resistance category selection chart.
- Shoes and socks

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

Engineering controls statement:

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

User Safety Recommendations
Users should: <ul style="list-style-type: none">• Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet• Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.• Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

This pesticide is highly toxic to aquatic invertebrates. Do not apply directly to water or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or when disposing of equipment washwaters.

This chemical demonstrates the properties and characteristics associated with chemicals detected in groundwater. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

READ ALL DIRECTIONS PRIOR TO APPLICATION OF THE PRODUCT

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 agency responsible for pesticide regulation.

RESTRICTIONS FOR ALL USES

Do not graze treated areas or use clippings from treated areas for feed or forage.

Do not apply to soils which are water-logged or saturated. This condition will not allow the penetration of water into the root zone of the plants.

Do not over-irrigate or allow excessive runoff to occur following an application of this product.

On plants with a production cycle of less than one year, application is not to exceed a frequency of more than once each 16 weeks for a particular plant. On stock plants and woody crops with a production cycle of greater than one year, application may not exceed once a year.

Rotational Plant Back Intervals

Treated areas may be replanted with any crop specified on an imidacloprid label, or with any crop for which a tolerance exists for the active ingredient immediately, except for cereals (including buckwheat, millet, oats, rye, triticale and rice) and safflower which have a 30-day plant back interval.

For crops not listed on an imidacloprid label, or for crops for which no tolerance for the active ingredient has been established, a 12 month plant-back interval must be observed.

AGRICULTURAL USE REQUIREMENTS
Use this product only in accordance with its labeling and with the Workers Protection Standard 40 CFR part 170. This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.
Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 12 hours.
PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water is: <ul style="list-style-type: none">• Coveralls• Chemical-resistant gloves made of any waterproof material• Shoes plus socks• Protective eye wear

NON-AGRICULTURAL USE REQUIREMENTS
The requirements in this box apply to use of this product that are not within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR part 170). The Worker Protection Standard applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses. Do not allow people (other than applicator) or pets on treatment area during application. Do not enter treatment areas until spray has dried or dusts have settled.

APPLICATION TO TURFGRASS

Product Use Information

This product controls listed subsurface feeding and insect pests on turfgrass, lawns (both residential and commercial), sod farms, golf courses, grounds or lawns of office complexes, shopping centers, multi-family and residential apartment complexes, airports, cemeteries, parks, picnic areas, playgrounds, schools, athletic fields, military and other institutions. It works systemically and will move upward within the plant. Each dry applied granule will disperse into thousands of particles with irrigation or rainfall, facilitating movement of the product to the roots of the plant, allowing the plant to absorb the active ingredient.

Application Timing

Treat prior to or during the egg laying activity and before the eggs hatch. Applications made prior to the pest infestation followed by adequate irrigation will result in the best control. Determine the need and timing of application by local site monitoring, prior history of pest infestation, current adult trappings or other methods. The regional differences in pest species pressure, timing for optimal control, pest monitoring methods and other particulars for your location will vary, so consult your cooperative extension service for details. To find your local extension agent, visit www.csrees.usda.gov.

Application Directions

Apply uniformly over the treatment area with either a broadcast or drop type spreader. Do not use spreaders which will apply product in narrow, concentrated bands. Apply only the specified amount in the following table. Calibrate the spreader before use and check periodically to ensure the equipment is working properly. Do not use overlaps that will increase rates above those specified. Failure to follow the Directions for Use and all precautions may result in turf injury or poor pest control.

Irrigate if there has not been rainfall within 24 hours after application with enough water to thoroughly wet the underlying soil; this washes the active ingredient down below the turf and thatch, and it encourages the subsurface pests to move upward in the soil profile where they will come in contact with the active ingredient. For best pest control and turf culture, minimize thatch buildup to no more than 0.5 in., using mechanical removal methods as needed.

Recent research has shown that well-maintained turf is an effective environmental buffer that prevents pollutants from entering our natural water bodies. To help protect these natural resources, do not apply product to sidewalks, driveways, roadways, and other impervious surfaces which are adjacent to storm drains. Sweep any misplaced granules back onto the area you are treating immediately after application, since storm drains often empty directly to nearby waterways.

Application Rates - Turfgrass

Pest	Amount of Product
White Grub Larvae, such as: Annual bluegrass weevil, (<i>hyperodes</i> spp.) Aphodius, (<i>Aphodius</i> spp.) Asiatic garden beetle, (<i>Maladers castanea</i>) Billbugs, (<i>Sphenophorus</i> spp.) Black turfgrass atanius, (<i>Ataenius spretulus</i>) European chafer, (<i>Rhizotroqus majalis</i>) Japanese beetle, (<i>Popillia japonica</i>) May or June beetles, (<i>Phyllophaga</i> spp.) Northern & Southern masked chafers, (<i>Cyclocephala borealis</i> , <i>C. immaculata</i> , and/or <i>C. lurida</i>) Oriental beetle, (<i>Anomala orientalis</i>)	125 – 200 lbs/acre or 3.0 – 4.5 lbs/1,000 sq. ft.
Crane Fly, such as European species, (<i>Tipula</i> spp.)	125 – 200 lbs/acre or 3.0 – 4.5 lbs/1,000 sq. ft.
Mole crickets, (<i>Scapteriscus</i> spp.)	200 lbs/acre or 4.5 lbs/1,000 sq. ft.

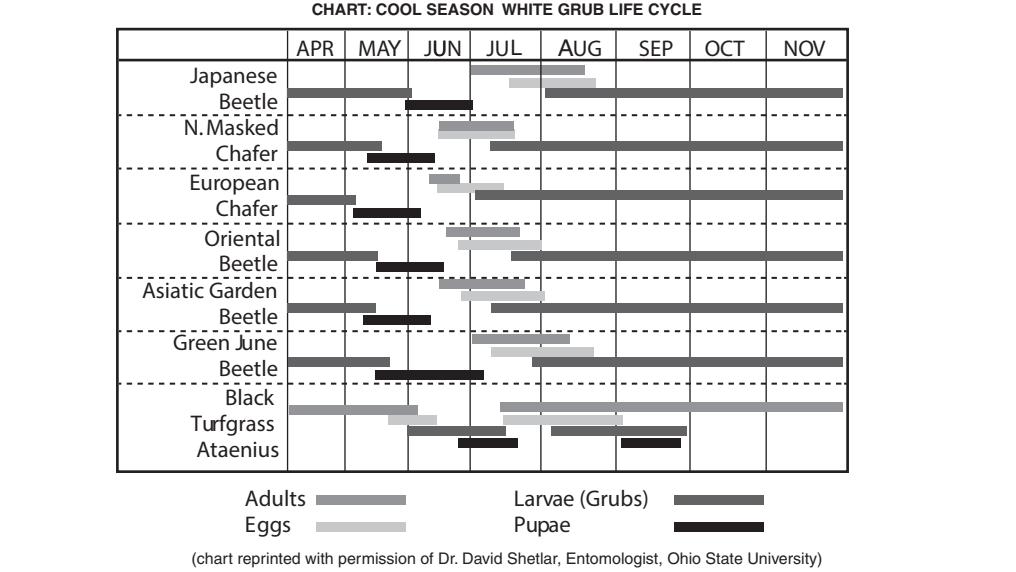
Restrictions

- Do not apply more than 200 lbs. of product per acre (0.4 lb. active ingredient per acre) per year.
- Do not apply to vegetable gardens.
- Do not apply to saturated soils or waterlogged areas. The product cannot penetrate into the root zone of the plant in these conditions.
- Do not mow turf until after the treatment area has received adequate irrigation or rainfall.

White grubs: Ideal timing for preventative applications are made is the time of peak adult flight activity as determined by local site monitoring, or as recommended by local cooperative extension agents. This is also the primary egg laying period, which will yield the best results.

Cool Season Turf Regions

The white grub life cycle chart for the cool season turf regions below illustrates application timing that will control many of the grub species when they are most vulnerable. During this period, adequate grub control can be obtained at 3.0 pounds per 1,000 sq. ft. in all but the most extreme situations (heavy thatch, heavy insect pressure) where the 4.5 lbs per 1,000 sq. ft. rate is necessary for adequate control.



Irrigate if there has not been rainfall within 24 hours after application with enough water to thoroughly wet the underlying soil. Use higher listed application rates in areas of heavy pressure and where thatch is present in excess of 0.5 in. thickness. Reduce thatch by mechanical means for best turf quality and better control of grub species.

Crane Fly (such as European species): Adults emerge from the soil to lay eggs from late August to mid-September. In areas with historic problems, an October treatment can be used to control this pest at this early, most vulnerable larval stage, which will avoid damage the following year. Otherwise, monitor turf areas in winter and early spring when there is a consistent warmer period, treating when the larvae are present. Discontinue monitoring and control measures in late April, because these pests pupate and stop feeding soon after that time.

Mole Crickets

Adults: Use this product in conjunction with a remedial insecticide to control adult or large nymph mole crickets.

Nymphs: Treat grass areas that receive intense adult mole cricket pressure in the spring 1 week before or no later than 2 weeks after peak egg hatch. Optimal control is achieved at this time because young nymphs are more susceptible to insecticides and they are located near the soil surface where the insecticide is most concentrated. Control of larger, more damaging nymphs later in the year may require more frequent applications to maintain acceptable control. Immediately after treatment, water in application up to 0.5 inches water. If the soil is moist, then it is important to irrigate before application to bring the mole crickets closer to the soil surface where contact with the insecticide will be maximized.

APPLICATIONS TO ORNAMENTAL TREES, SHRUBS, EVERGREENS, FLOWERS, FOLIAGE PLANTS AND GROUNDCOVERS

For use only in and around industrial and commercial buildings, residential areas, and state, national and private wooded and forested areas to control the following insect pests:

Adelgids (including hemlock woolly adelgid) Aphids Armored scales (suppression) (including Camellia, false oleander, Florida red, oystershell, tea and white peach scales) Bark beetles (suppression) Billbug larvae Catepillars (including Gypsy moth and fall webworm) Eucalyptus longhorned borer Flatheaded borers (including bronze birch borer and alder borer) Fungus Gnat larvae Japanese beetle adult Lace bugs Leaf beetles (including elm, viburnum and lily leaf beetles) Leafhoppers, planthoppers, sharpshooters (including glassy-winged sharpshooter) and spittlebugs	Leafminers (including Birch and Boxwood leafminers) Mealybugs Plant bugs Pine tip moth larvae Psyllids Root weevil larvae (including Black vine weevil larvae) Roundheaded borers (including Eucalyptus Longhorned borer) Royal palm bugs Sawfly larvae Soft scales (including lobate lac scales) Thrips (suppression) Vine weevil adult White grub larvae (such as Japanese beetle, Chafer, European Chafer, Oriental beetle, Asiatic Garden beetle) Whiteflies
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Use	Application Rate	Comments
Ornamental Trees	Apply 1.5 lbs. of product per 1-2 inches of cumulative trunk diameter (DBH) Diameter at Breast Height (DBH) is measured at 4.5 feet from the ground.	List borers - Application to ornamental trees that are already heavily infested may not save the tree, due to existing damage and stress. Apply listed amount of product evenly to the soil surface, under the canopy of the tree. Rainfall or irrigation will water product to tree root zone where product will be absorbed into the plant.
Shrubs	Apply 1.5 lbs. of product per 1-2 feet of cumulative shrub height	Before application, remove any weed barrier material that does not allow water permeability. Apply listed amount of product evenly within 1-2 feet of the base of the shrub. Brush or wash off granules from plant foliage to prevent plant injury.
Flowers and Groundcovers	Apply 4.5 lbs. of product per 1,000 sq. ft.	Can be applied before planting or to established plants. Apply product evenly over area to be treated and irrigate with 1/4 inch of water. Brush or wash off any granules from plant foliage to prevent plant injury.

Restrictions

- Do not apply more than 200 lbs. of product per acre (0.4 lb. active ingredient per acre) per year.
- Do not apply to vegetable gardens.
- Do not apply to saturated soils or waterlogged areas. The product cannot penetrate into the root zone of the plant in these conditions.