

MASTER LABEL
VECTOBAC® WDG
BIOLOGICAL LARVICIDE

Active Ingredient:

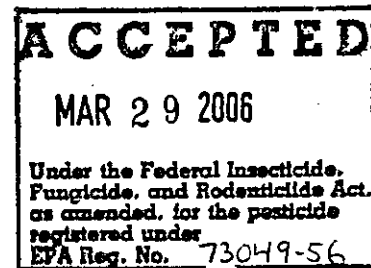
Bacillus thuringiensis subsp. *israelensis* strain AM 65-52 fermentation solids, spores,
and insecticidal toxins.....37.4%
Other Ingredients.....62.6%
Total.....100.0%
[Potency: 3000 International toxic units (ITU) per mg]. Equivalent to 1.36 billion ITU/lb.

The percent active ingredient does not indicate product performance and potency measurements are not Federally standardized.

KEEP OUT OF REACH OF CHILDREN
CAUTION

Valent BioSciences Corporation
870 Technology Way
Libertyville, IL 60048

EPA Reg. No. 73049-56
EPA Est. No.



Net Contents:

FIRST AID	
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 by mouth to mouth, if possible. • Call a poison control center or doctor for further treatment advice
If in eyes	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advise.
HOT LINE NUMBER	
Have the product container label with you when calling a poison control center or doctor or going for treatment. You may also contact 1-877-315-9819 (24 hours) for emergency medical treatment and or transportation emergency information. For all other information, call 1-800-323-9597.	

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION

Harmful if inhaled. Avoid breathing dust. Remove contaminated clothing and wash before reuse. Causes moderate eye irritation. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling.

Personal Protective Equipment

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants.
- Water proof gloves
- Shoes plus socks

Mixer/loaders and applicators not in enclosed cabs or aircraft must wear a dust/mist filtering respirator meeting NIOSH standards of at least N-95, R-95, or P-95. Repeated exposure to high concentrations of microbial proteins can cause allergic sensitization.

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

User Safety Recommendations

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco products or using the toilet.
- Remove clothing/PPE 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

Do not apply directly to treated finished drinking water reservoirs or drinking water receptacles when water is intended for human consumption.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the worker 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 the 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 4 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:

- Coveralls
- Waterproof gloves
- Shoes plus socks

STORAGE AND DISPOSAL

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

Storage: Store in cool [59-86°F (15-30°C)], dry place.

Pesticide Disposal: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

Container Disposal: Triple rinse (or equivalent). Then puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

AGRICULTURAL USE SITE DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

Chemigation

Do not apply this product through any type of irrigation system.

APPLICATION DIRECTIONS

For control of mushroom fly larvae.

Mushroom Flies (Sciaridae)

Conventional *Agaricus bisporus* mushrooms

For the control of the larval stage of Sciarid mushroom flies when mixed into, or applied to mushroom casing. Gnatrol DG should be thoroughly mixed into the mushroom casing material with a mechanical mixer until granules are evenly dispersed throughout all of the material or applied in a suspended solution mixed with water. Typically casing soils should be formulated prior to use and brought to the appropriate moisture content prior to the addition of the Gnatrol DG. Use sufficient water and/or proper application and mixing equipment to obtain good distribution of Gnatrol DG throughout the growth medium.

If the casing material is steamed, pasteurized or fumigated, the addition of Gnatrol DG should occur after this practice.

Watering-in Gnatrol DG: Follow normal watering practices after casing. The Gnatrol DG will solubilize and disperse throughout the casing and compost during the routine water management process.

For the control of the larval stage of Sciarid mushroom flies when mixed into mushroom compost at spawning/supplementation: Gnatrol DG should be thoroughly mixed into compost during spawning and supplementation. Gnatrol DG can be mixed with supplement or spawn using a mechanical mixer just before application to beds or trays. Gnatrol DG can be mixed directly with supplement or mixed with up to 6 lbs. of gypsum/1000 sq. ft. for mixing with spawn or supplement.

SUGGESTED RATE RANGE:

- Casing Application - Use 1.5 – 3.0 lbs./1000 sq. ft. of bed.
- Compost Application - Use 2.5 - 3.0 lbs./1000 sq. ft of bed.

Use higher rates when pest pressure is heavy.

Gnatrol DG has not been tested for mycotoxicity on all strains of common commercial mushrooms (*Agaricus*). Since strains may vary in their sensitivity, this product should be tested on a section of bed prior to whole house treatment.

5/10

NOTICE TO USER

Seller makes no warranty, express or implied, of merchantability, fitness or otherwise concerning use of this product other than as indicated on the label. User assumes all risks of use, storage or handling not in strict accordance with accompanying directions.

©2006

6/10

Sub Label 1

Vectobac® WDG Biological Larvicide

Public Health Labeling for Mosquito Control

(Non Worker Protection Standard)

7/10

VECTOBAC® WDG
BIOLOGICAL LARVICIDE

Active Ingredient:

Bacillus thuringiensis subsp. *israelensis* strain AM 65-52

solids, spores, and insecticidal toxins.....	37.4%
Other Ingredients.....	62.6%
Total.....	100.0%

[Potency: 3000 International toxic units (ITU) per mg]. Equivalent to 1.36 billion ITU/lb.

The percent active ingredient does not indicate product performance and potency measurements are not Federally standardized.

KEEP OUT OF REACH OF CHILDREN

CAUTION

Valent BioSciences Corporation
870 Technology Way
Libertyville, IL 60048

EPA Reg. No. 73049-56
EPA Est. No.

Net Contents:

FIRST AID	
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 by mouth to mouth, if possible. • Call a poison control center or doctor for further treatment advice
If in eyes	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after then first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advise.
HOT LINE NUMBER	
Have the product container label with you when calling a poison control center or doctor or going for treatment. You may also contact 1-877-315-9819 for emergency medical treatment and/or transport emergency information. For all other information, call 1-800-323-9597.	

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

Harmful if inhaled. Avoid breathing dust. Remove contaminated clothing and wash before reuse. Causes moderate eye irritation. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling.

Personal Protective Equipment

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants.
- Water proof gloves
- Shoes plus socks

Mixer/loaders and applicators not in enclosed cabs or aircraft must wear a dust/mist filtering respirator meeting NIOSH standards of at least N-95, R-95 or P-95. Repeated exposure to high concentrations of microbial proteins can cause allergic sensitization.

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

User Safety Recommendations

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco products or using the toilet.
- Remove clothing/PPE 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

Do not apply directly to treated finished drinking water reservoirs or drinking water receptacles when water is intended for human consumption.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

Chemigation

Do not apply this product through any type of irrigation system.

STORAGE AND DISPOSAL

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

Storage: Store in cool [59-86°F (15-30°C)], dry place.

Pesticide Disposal: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

Container Disposal: Triple rinse (or equivalent). Then puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

APPLICATION DIRECTIONS

Do not apply when wind speed favors drift beyond the area of treatment.

Mosquito Habitat**Suggested Rate Range***

(Such as the following examples):

Irrigation ditches, roadside ditches, flood water,	1.75 - 7.0 oz/acre
standing pools, woodland pools, snow melt pools,	(50 - 200 g/acre)
pastures, catch basins, storm water retention areas,	(125 - 500 g/ha)
tidal water, salt marshes and rice fields.	

In addition, standing water containing mosquito larvae, in fields growing crops such as: Alfalfa, almonds, asparagus, corn, cotton, dates, grapes, peaches and walnuts, may be treated at the recommended rates.

When applying this product to standing water containing mosquito larvae in fields growing crops, 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.

Polluted water	7.0 - 14.0 oz/acre
(such as sewage lagoons, animal waste lagoons)	(200 - 400 g/acre)
	(0.5 - 1.0 kg/ha)

*Use higher rate range in polluted water and when late 3rd and early 4th instar larvae predominate, mosquito populations are high, water is heavily polluted, and/or algae are abundant.

10/10

SMALL QUANTITY DILUTION RATES

Gallons Spray Mixture/Acre
(Ounces Needed per Gallon of Spray)

VectoBac WDG

Rates in		Final concentration, ounces/gallon spray		
Ounces/Acre	Grams/A	10 Gal/A	25 Gal/A	50 Gal/A
1.75	50	0.175	0.07	0.04
3.5	100	0.35	0.14	0.07
7	200	0.7	0.28	0.14
14	400	1.4	0.565	0.28

GROUND AND AERIAL APPLICATION

VectoBac WDG may be applied using conventional ground or aerial application equipment with quantities of water sufficient to provide uniform coverage of the target area. For application, first add the VectoBac WDG to water to produce a final spray mixture.

The amount of water will depend on weather, spray equipment, and mosquito habitat characteristics. For application, fill the mix tank or plane hopper with the desired quantity of water. **Start the mechanical or manual agitation to provide moderate circulation of water before adding the VectoBac WDG.** Backpack and compressed air sprayers may be agitated by shaking after adding VectoBac WDG to the water in the sprayer. VectoBac WDG suspends readily in water and will stay suspended over normal application periods. Brief recirculation may be necessary if the spray mixture has sat for several hours or longer. Do not mix more VectoBac WDG than can be used in a 48 hour period. **AVOID CONTINUOUS AGITATION OF THE SPRAY MIXTURE DURING SPRAYING.**

For ground spraying, apply 1.75-14 oz/acre (50-400 g/acre; 123-988 g/ha) of VectoBac WDG in 5-100 gallons of water per acre (47-950 liters/ha) using hand-pump, airblast, mist blower, or other spray equipment.

For aerial application, apply 1.75-14 oz/acre (50-400 g/acre; 123-988 g/ha) of VectoBac WDG in 0.25-10 gallons of water per acre (2.4-93.5 liters/ha) through fixed wing or helicopter aircraft equipped with either conventional boom and nozzle systems or rotary atomizers to provide uniform coverage of the target area.

AERIAL APPLICATION

Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment-and-weather-related factors determine the potential for spray drift. The applicator and the treatment coordinator are responsible for considering all of these factors when making decisions.

11/16

Rinse and flush spray equipment thoroughly following each use.

NOTICE TO USER

Seller makes no warranty, express or implied, of merchantability, fitness or otherwise concerning use of this product other than as indicated on the label. User assumes all risks of use, storage or handling not in strict accordance with accompanying directions.

©2006

12/16

Sub Label 2

Gnatrol® DG Biological Larvicide

**Agricultural Use Direction for control of
Sciarid Mushroom Flies in mushroom houses**

13/16

GNATROL® DG
BIOLOGICAL LARVICIDE

Active Ingredient:

Bacillus thuringiensis subsp. *israelensis* strain AM 65-52
 solids, spores, and insecticidal toxins.....37.4%
 Other Ingredients.....62.6%
 Total.....100.0%
 [Potency: 3000 International toxic units (ITU) per mg]. Equivalent to 1.36 billion ITU/lb.

The percent active ingredient does not indicate product performance and potency measurements are not Federally standardized.

**KEEP OUT OF REACH OF CHILDREN
CAUTION**

Valent BioSciences Corporation
870 Technology Way
Libertyville, IL 60048

EPA Reg. No. 73049-56
EPA Est. No.

Net Contents:

FIRST AID	
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 by mouth to mouth, if possible. • Call a poison control center or doctor for further treatment advice
If in eyes	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after then first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advise.
HOT LINE NUMBER	
Have the product container label with you when calling a poison control center or doctor or going for treatment. You may also contact 1-877-315-9819 (24 hours) for emergency medical treatment and/or transportation emergency information. For all other information, call 1-800-323-9597.	

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

Harmful if inhaled. Avoid breathing dust. Remove contaminated clothing and wash before reuse. Causes moderate eye irritation. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling.

Personal Protective Equipment

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants.
- Water proof gloves
- Shoes plus socks

Mixer/loaders and applicators not in enclosed cabs or aircraft must wear a dust/mist filtering respirator meeting NIOSH standards of at least N-95, R-95, or P-95. Repeated exposure to high concentrations of microbial proteins can cause allergic sensitization.

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

User Safety Recommendations

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco products or using the toilet.
- Remove clothing/PPE 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

Do not apply directly to treated finished drinking water reservoirs or drinking water receptacles when water is intended for human consumption.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the worker 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.

15/16

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 the 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 4 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:

- Coveralls
- Waterproof gloves
- Shoes plus socks

STORAGE AND DISPOSAL

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

Storage: Store in cool [59-86°F (15-30°C)], dry place.

Pesticide Disposal: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

Container Disposal: Triple rinse (or equivalent). Then puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

AGRICULTURAL USE SITE DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

Chemigation

Do not apply this product through any type of irrigation system.

APPLICATION DIRECTIONS

For control of mushroom fly larvae.

Mushroom Flies (Sciaridae)

Conventional *Agaricus bisporus* mushrooms

16/16

For the control of the larval stage of Sciarid mushroom flies when mixed into, or applied to mushroom casing. Gnatrol DG should be thoroughly mixed into the mushroom casing material with a mechanical mixer until granules are evenly dispersed throughout all of the material or applied in a suspended solution mixed with water. Typically casing soils should be formulated prior to use and brought to the appropriate moisture content prior to the addition of the Gnatrol DG. Use sufficient water and/or proper application and mixing equipment to obtain good distribution of Gnatrol DG throughout the growth medium.

If the casing material is steamed, pasteurized or fumigated, the addition of Gnatrol DG should occur after this practice.

Watering-in Gnatrol DG: Follow normal watering practices after casing. The Gnatrol DG will solubilize and disperse throughout the casing and compost during the routine water management process.

For the control of the larval stage of Sciarid mushroom flies when mixed into mushroom compost at spawning/supplementation: Gnatrol DG should be thoroughly mixed into compost during spawning and supplementation. Gnatrol DG can be mixed with supplement or spawn using a mechanical mixer just before application to beds or trays. Gnatrol DG can be mixed directly with supplement or mixed with up to 6 lbs. of gypsum/1000 sq. ft. for mixing with spawn or supplement.

SUGGESTED RATE RANGE:

Casing Application - Use 1.5 – 3.0 lbs./1000 sq. ft. of bed.

Compost Application - Use 2.5 – 3.0 lbs./1000 sq. ft. of bed.

Use higher rates when pest pressure is heavy.

Gnatrol DG has not been tested for mycotoxicity on all strains of common commercial mushrooms (*Agaricus*). Since strains may vary in their sensitivity, this product should be tested on a section of bed prior to whole house treatment.

NOTICE TO USER

Seller makes no warranty, express or implied, of merchantability, fitness or otherwise concerning use of this product other than as indicated on the label. User assumes all risks of use, storage or handling not in strict accordance with accompanying directions.

©2006