

[CONTAINER LABEL]  
Group 11 Insecticide

**VectoBac\* 600L**  
**Biological Insecticide**

Aqueous Suspension

COMMERCIAL

**GUARANTEE:**

*Bacillus thuringiensis* subspecies *israelensis*, Serotype H-14, strain AM 65-52, 600 International Toxic Units (ITU) per milligram (0.6 Billion ITU/L).

REGISTRATION NO. 19455 PEST CONTROL PRODUCTS ACT

READ THE LABEL AND BROCHURE BEFORE USING  
KEEP OUT OF REACH OF UNAUTHORIZED PERSONNEL  
POTENTIAL SENSITIZER  
CAUTION EYE IRRITANT

Net Contents:

Lot No.:                                      Date                                      of Manufacture:

Registrant:	Canadian	Agent:
Valent BioSciences Corporation		Valent Canada, Inc.
870 Technology Way	6-130	Research Lane
Libertyville, Illinois 60048, USA		Guelph, Ontario N1G 5G3
1-800-323-9597		

**PRECAUTIONS:**

KEEP OUT OF REACH OF UNAUTHORIZED PERSONNEL.  
MAY CAUSE SENSITIZATION. CAUTION EYE IRRITANT

DO NOT apply directly to treated, finished drinking water reservoirs or drinking water receptacles when the water is intended for human consumption.

Avoid contact with skin, eyes, and clothing. Avoid breathing dust/spray mist. Wear a long sleeved shirt, long pants, waterproof gloves, shoes and socks, eye goggles and NIOSH-approved respirator with any N-95, R-95, or P-95 filter for biological products when handling.

mixing/loading or applying the product and during all clean-up/repair activities. Applicators may remove gloves, eye goggles and respirators if the design and delivery of the application apparatus reduces exposure to a negligible level (e.g. backpack sprayer with application wands that apply product directly over water surface). Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

If this pest control product is to be used on a commodity that may be exported to the US and you require information on acceptable residue levels in the US, visit CropLife Canada's web site at: [www.croplife.ca](http://www.croplife.ca).

<b>FIRST AID</b>	
If on skin or clothing	Rinse skin immediately with plenty of water. Remove contaminated clothing and wash separately before reuse. If irritation occurs and persists or is severe, seek medical attention.
If in eyes	Hold eye open and rinse slowly and gently with water. Remove contact lenses, if present, then continue rinsing eye. If irritation occurs and persists or is severe, seek medical attention.
If inhaled	Move person to fresh air, apply respiration if needed and seek medical attention.
If swallowed	Rinse mouth and throat with copious amounts of water. DO NOT induce vomiting. Promptly contact a physician or poison control centre. DO NOT give anything by mouth to an unconscious person.
General	Seek medical attention if irritation or signs of toxicity occur and persist or is severe. Take container, label or product name and Pest Control Product Registration Number with you when seeking medical attention.

**TOXICOLOGICAL INFORMATION:**

Treat symptomatically.

**STORAGE**

In order to ensure microbial purity and potency, VectoBac 600L Biological Insecticide should be stored in the original container between 0°C and 15°C and used within 6 months of the date of manufacture.

**DISPOSAL:**

Do not reuse this container for any purpose. This is a recyclable container, and is to be disposed of at a container collection site. Contact your local distributor/dealer or municipality for the location of the nearest collection site. Before taking the container to the collection site: Triple- or pressure-rinse the empty container. Add the rinsings to the spray mixture in the tank. Make the empty, rinsed container unsuitable for further use. If there is no container collection site in your area, dispose of the container in accordance with provincial requirements. For information on disposal of unused, unwanted product, contact the manufacturer or the provincial regulatory agency. Contact the manufacturer and the provincial regulatory agency in case of a spill, and for clean-up of spills.

**NOTICE TO USER:** This pest control product is to be used only in accordance with the directions on the label. It is an offence under the *Pest Control Products Act* to use this product in a way that is inconsistent with the directions on the label. The user assumes the risk to persons or property that arises from any such use of this product.

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**DIRECTIONS FOR USE**

DO NOT allow spray mixture to stand in the tank for more than 18 hours

**Fungus Gnats:**

**Fungus Gnat Habitat**

Greenhouse vegetables and herbal bedding plants\*

**Rate/Dosage**

1200-2400 ITU

**Methods Suggested Range Rate**

Light to moderate infestation:  
2-4 L per 1000 L applied as a soil drench.

Heavy infestation:

Greenhouse ornamental plantings\*\*

4-8 L per 1000 L applied as a soil drench

\*Apply weekly as a soil drench when pest monitoring indicates the need.

\*\*Apply VectoBac 600L Biological Insecticide with adequate water by soil drench to sufficiently wet the soil surface above and under benches where larvae are found. Areas under benches should be treated at high rates as this is one of the primary breeding areas. Reapply as needed. In situations where all life forms (eggs, larvae, pupae, and adults) are present, such as with existing infestations, make one (1) weekly application at the suggested rate range for heavy infestation. Regular follow-up applications using the suggested light infestation rates will establish a long term maintenance program.

Do not apply soil drenches to plants under stress or follow application with excessive amounts of water. For best results, apply drenches near end of irrigation period. Diluted mixtures of VectoBac 600L Biological Insecticide must be used within 24 hours of mixing.

VectoBac 600 L Biological Insecticide is a larvicide and will not control adult gnats, therefore applications must be timed for a stage of development when larvae are present in the soil.

Fungus gnat larvae generally respond to VectoBac 600L Biological Insecticide treatment within 24 hours following application.

VectoBac 600L Biological Insecticide is not known to be phytotoxic to ornamental plant species at the recommended rates. However, since all ornamental plant species have not been evaluated, sensitivity to VectoBac 600L Biological Insecticide should be checked on several plants prior to wide scale usage.

#### **RESISTANCE MANAGEMENT RECOMMENDATIONS:**

For resistance management, please note that VectoBac 600L Biological Insecticide contains a Group 11 insecticide. Any insect population may contain individuals naturally resistant to VectoBac 600L Biological Insecticide and other Group 11 insecticides. The resistant individuals may dominate the insect population if this group of insecticides are used repeatedly in the same site. Other resistance mechanisms that are not linked to site of action but are specific for individual chemicals, such as enhanced metabolism, may also exist. The following appropriate resistance management strategies should be followed to delay insecticide resistance:

- Where possible, rotate the use of VectoBac 600L Biological Insecticide or other Group 11 insecticides with different groups that control the same pests in a site.
- Insecticide use should be based on an Integrated Pest Management program that includes scouting, record keeping, and considers cultural, biological and other chemical control practices.
- Monitor treated pest populations for resistance development.
- Contact your local extension specialist or certified crop advisors for any additional pesticide resistance management and/or integrated pest management recommendations for the specific site and pest problems in your area.
- For further information or to report suspected resistance, contact Valent BioSciences Corporation at 1-800-323-9597.

**Monitor:** Monitor efficacy of VectoBac 600L Biological Insecticide and other Group 11 insecticides used against the targeted pest(s) and record other factors that may influence insecticide performance and /or pest development.

**Reporting:** If a Group 11 target site insecticide, such as VectoBac 600L Biological Insecticide, appears to be less or no longer effective against a pest that it previously controlled or suppressed, contact a Valent BioSciences Corporation representative at 1-800-323-9597 or at [www.valentbiosciences.com](http://www.valentbiosciences.com) to assist in determining the cause of reduced performance.

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