# NemaShield<sup>®</sup> HB

# **Biological Control for White Grubs, Cutworms and Leatherjackets**

Control root feeding grubs and larvae with an application of NemaShield HB. The beneficial nematodes, *Heterorhabditis bacteriophora*, will actively seek out the grubs and larvae to infect them. Feeding subsides and the host will die within a few days.

# **NemaShield HB Benefits**

- Exempt from EPA regulations; 0-hour REI
- · Fast, effective biological control
- · Easy and user friendly to apply

# NemaShield HB Targets

#### White Grubs

- Japanese Beetle
- Northern Masked Chafer
- May/June Beetles
- Southern Masked Chafer

#### Cutworms

- Black Cutworm
- Bronzed Cutworm
- Variegated Cutworm

#### **Root Weevils**

- Black Vine Weevil
- Strawberry Root Weevil
- Citrus Root Weevil

#### Leatherjackets/ European Crane Fly

#### **Mode of Action**

- The nematodes in NemaShield HB actively search for insect larvae and enter through natural openings.
- As the nematodes feed on the host body, they excrete a specific bacteria, that is toxic to larvae.
- The bacteria multiply very rapidly and convert the host tissue into products that the nematodes use as a food source.
- · Larvae die within a few days, host turns orange-red to red-brown.
- Next generation of nematodes leave the old host and actively seek out new ones.

To find out more about the BioWorks family of products, please contact us at 800-877-9443 or visit www.bioworksinc.com.

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Nerrialuues (neterumaut	ana basile/loginoraj
□ 50 mil. active units of inse Heterorhabditis bacterio	□ 500 mil. act-killing nematodes, ophora, on an inert carrier.
REFRIGERAT	TE AT 38°F (4°C) within 4 weeks of receiving.
For details on storage a	and use refer to directions.
AZ.	SPARALOLE - ECONOMICAL - PROVEN
BioWorks*	BioWorks, Inc. 100 Rawson Rd. #205 Victor, NY 14564 800.877.9443

Sizes: 50 Million and 500 Million Count Packets



Japanese beetle larva infected with *H.bacteriophora.* Photo Credit: Eugene Fuzy.



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#### How You Grow Matters™

# NemaShield<sup>®</sup> HB

# **Pre-Application**

- Scout for early detection.
- Adequate soil moisture must be present and maintained for 2 weeks to aid nematode mobility.
- Soil temperature of 50-80°F (74°F optimum) is necessary for nematode activity.
- DO NOT FREEZE. Unopened products are to be refrigerated and used prior to the expiration date on the container. Expiration date on the box is month/day/year format (mm/dd/yy).
- To avoid blockages, all screens should be removed and the spray nozzle opening should be at least 1mm (1,000 microns).
- Maximum sprayer pressure is 150 psi.
- Nematodes are very sensitive to UV light. DO NOT apply in direct sunlight; apply on a cloudy day or late in the afternoon.

# Application

- · Prepare and apply out of direct sunlight.
- Empty contents of package into a bucket containing about 1 gallon of cool (60°-75°F) water, then stir.
- Let the entire solution soak for 5 minutes. Stir again thoroughly, then transfer the contents into the spray tank and fill to desired level.
- To avoid blockages, all screens should be removed and the spray nozzle opening should be at least 1 mm (1,000 microns).
- Maximum sprayer pressure is 150 psi.
- Continuous agitation is necessary to prevent the nematodes from settling out.
- Evenly spread the solution over the ground area to be treated.
- Moderately water-in after application to move the nematodes off the foliage and into the ground. Avoid washing the nematodes through the soil.
- Keep the soil moist (not saturated) for the following 2 weeks.

# Package Size & Application Rate Recommendations

- 50 million package of nematodes treats up to 2,000 sq. ft. under low to moderate infestation (500 million package size also available).
- 1 billion nematodes per acre recommended under low to moderate infestation.
- 2 billion nematodes per acre recommended under moderate to higher infestations.

# Compatibility

• Not compatible with many oganophosphates or carbamates.





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Please refer to product labels for complete application details. Additional technical information is available from either our website: www.bioworksinc.com, or your BioWorks sales representative. Always read and follow label directions.

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