

FIELD GUARDIAN®

Biological Insecticide for Soil Insect Pests

ACTIVE INGREDIENTS:

<i>Beneficial Nematodes</i>	
<i>Steinernema carpocapsae</i>	50%
<i>Heterorhabditis bacteriophora</i>	50%
Total.....	100%

Each bottle contains 240 million nematodes

CAUTION
KEEP OUT OF THE REACH OF
CHILDREN
FOR AGRICULTURAL USE ONLY
KEEP REFRIGERATED
DO NOT FREEZE

FIELD GUARDIAN is exempt from the United States Environmental Protection Agency (EPA) Requirements of Registration (FIFRA, Section 25 (b)(1).

PRECAUTIONARY STATEMENTS

Avoid breathing spray mist. Avoid contact with skin or eyes. If contact occurs, immediately flush eyes or skin with water.

GENERAL INFORMATION

The active ingredients in FIELD GUARDIAN are a combination of naturally occurring insect parasitic nematodes that search out, enter, and kills the insect pests in the soil. FIELD GUARDIAN carries beneficial bacteria that are released only once the nematode has entered an insect host. The bacteria will rapidly spread throughout the insect. Pest insect mortality usually occurs within 24 - 48 hours of penetration. These bacteria will preserve the pest insect carcass and enable the nematodes to feed, reproduce and multiply within the pest insect carcass. Depending upon temperature and moisture levels, another generation of FIELD GUARDIAN may emerge from the insect carcass within 2 - 3 weeks, thus providing continuous control of insect pests for several months. FIELD GUARDIAN is only active against insect pests. They will NOT kill harmful nematodes that may be in the soil. They are safe for people, plants and animals.

FIELD GUARDIAN is supplied as a pure concentrate and is ready for immediate use. For best results follow irrigation and application recommendations carefully. Once applied to a properly irrigated field, FIELD GUARDIAN can survive for 2 months or more before finding an insect host.

DIRECTIONS FOR USE

Please read all instructions before applying FIELD GUARDIAN.

RECOMMENDED RATES

Light, Sandy Soils: Apply evenly over 10 acres resulting in an application of more than 500 nematodes per square foot.

Heavy, Clay Soils: Apply evenly over 7 acres resulting in an application of more than 750 nematodes per square foot.

APPLICATION RECOMMENDATIONS

1. Irrigate for 15 - 30 minutes immediately prior to FIELD GUARDIAN application to cool irrigation equipment and surrounding soil surface to temperatures below 85° F.
2. **In the Spring:** Apply when soil temperatures are above 35° F.
In the Fall: Apply when soil temperatures are above 55° F.
3. FIELD GUARDIAN is compatible with most pesticides and fertilizers. Refer to the compatibility table for specific products that are not compatible.
4. A nematicide should NOT be applied within 14 days before or after application of FIELD GUARDIAN.
5. Use cool water (50 - 80° F) to dilute and apply FIELD GUARDIAN.
6. Triple rinse FIELD GUARDIAN into feeder tank.
7. Agitate FIELD GUARDIAN in feeder tank during mixing and application.
8. Prepare spraying equipment by removing or replacing screens that are U.S. mesh size 50 or smaller.

MIXING AND DILUTION

1. Pour the contents of the bottle into tank water under active agitation. Rinse the bottle several times.
2. Water temperatures should be between 50 - 80° F.
3. Tank agitation must be active during filling and application to ensure complete and even dispersion of the product.
4. Pump pressures should not exceed 300 PSI.
5. The FIELD GUARDIAN suspension may be held in the agitated tank for up to 24 hours. Keep tank cool (under 80° F.).

APPLICATION PROCEDURES

Chemigation

- a. FIELD GUARDIAN can be applied through fertilizer injection systems; wheel-line, in-line, fixed-line or other sprinkler type systems.
- b. Irrigate for 15 - 30 minutes immediately prior to starting FIELD GUARDIAN injection to cool irrigation equipment and soil surfaces.
- c. Add FIELD GUARDIAN to a clean feeder tank. Suspension must be continuously agitated during injection to prevent FIELD GUARDIAN from settling. Calibrate the injection pump to deliver the concentrate over a one-hour period or longer for uniform coverage.
- d. After injection, rinse feeder tank with clean water and inject into system.
- e. Follow post-application irrigation instructions.

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Biological Insecticide for Soil Insect Pests (continued..)

Subsurface Application

- FIELD GUARDIAN can be soil-applied using shank, cultivator or spoke-wheel applicator.
- Apply FIELD GUARDIAN in 30 - 100 gallons of water per acre.
- Shank: Apply as a trickle behind each shank at a 2 - 4 inch depth followed by a press wheel to cover opening.
- Cultivator: Apply as a spray immediately in front of a rolling cultivator. Incorporate to a 2 - 4 inch depth.
- Spoke-wheel: Double spoke-wheels should be placed 6 - 8 inches apart and centered on the hill. Inject at a 2 - 4 inch depth.

Ground Spraying - All Surface Spraying Equipment

- Apply FIELD GUARDIAN with a minimum of 100 gallons of water per acre.
- Soil should be moist before beginning application.
- Soil temperature should be between 35 - 85° F.
- Follow post-application irrigation instructions.

IRRIGATION REQUIREMENTS

- Prior to application, ensure that soil is thoroughly moistened to the full depth of the root zone.
- Surface Application: Following application of FIELD GUARDIAN, immediately irrigate with 1/4 - 1/2 inch of water.
- Subsurface Application: Irrigate field no later than 3 days following application.
- For maximum FIELD GUARDIAN performance, maintain adequate soil moisture for 21 days.

FIELD GUARDIAN COMPATIBILITY TABLE

FIELD GUARDIAN may be used simultaneously with registered pesticides and fertilizers, except for the following:

SCHEDULE	CHEMICAL NAME	TRADE NAME(S)
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Do NOT use within one week before/after FIELD GUARDIAN application	INSECTICIDES	
	chlorpyrifos	Lorsban®
	methomyl	Lannate®

Do NOT use within two weeks before/after FIELD GUARDIAN application	NEMATICIDES	
	oxamyl (any nematicide)	Vydate®

Lorsban® trademark of DowElanco Lannate®, Vydate®, trademarks of DuPont

STORAGE AND DISPOSAL

Storage: Store FIELD GUARDIAN under refrigeration (35 - 45° F.) for up to 30 days. Always protect from direct sunlight. DO NOT FREEZE. Do not store diluted, agitated product beyond 24 hours.

Disposal: Product container waste resulting from the use of this product, or unused, outdated product, may be disposed of on-site or at any approved waste disposal facility in accordance with federal, state and local regulations.

CONDITIONS OF SALE AND WARRANTY

The **Directions for Use** of this product are based upon tests believed to be reliable. As the use of FIELD GUARDIAN is beyond the control of Hydro-Gardens or the seller, no guarantee express or implied, is made to the effects of such or the results to be obtained if not used in accordance with directions or established safe practice.

Follow directions carefully. Timing and method of application, weather and other environmental conditions, mixture with other chemicals not specifically recommended and other influencing factors in the use of this product are beyond the control of the Seller and are assumed by Buyer at their own risk.

Hydro-Gardens warrants that this product conforms to the description on the label and is reasonably fit for the purposes referred to in the Directions for Use subject to the inherent risks referred to above. **Hydro-Gardens MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS OR MERCHANTABILITY OR ANY OTHER EXPRESS OR IMPLIED WARRANTY. BUYER'S SOLE REMEDY SHALL BE LIMITED TO, AT Hydro-Gardens' OPTION, EITHER REPLACEMENT OF DEFECTIVE PRODUCT OR FULL REFUND.** Hydro-Gardens neither assumes nor authorizes any person to assume for it any obligation or liability other than those expressly set forth herein.

In no case shall Hydro-Gardens or the Seller be liable for consequential, special, or indirect damages resulting from the use or handling of this product. Hydro-Gardens and the Seller offer this product, and the Buyer and User accept it, subject to the foregoing Conditions of Sale and Warranty, which may be varied only by agreement in writing signed by a duly authorized representative of Hydro-Gardens

QUESTIONS

For questions concerning FIELD GUARDIAN, consult your local dealer or contact the producer at:

Hydro-Gardens

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