


PM-210

Reg # 53871-9

1210

Please read Instructions on reverse before completing form. EPA Form Approved. OMB No. 2070-0060. Approval expires 11-30-93

(A) 	United States Environmental Protection Agency Office of Pesticide Programs (H7505C) Washington, DC 20460	<input type="checkbox"/> Registration <input type="checkbox"/> Amendment <input checked="" type="checkbox"/> Other	OPP Identifier Number 152980
	Application for Pesticide:		

Section I

1. Company/Product Number 53871-9	2. EPA Product Manager Ms. S. Bacchus	3. Proposed Classification <input checked="" type="checkbox"/> None <input type="checkbox"/> Restricted
4. Company/Product (Name) Fermone Naturalis L-225	PM# Biopest Division	
5. Name and Address of Applicant (Include ZIP Code) Troy Biosciences, Inc. 2620 N. 37th Drive Phoenix, Arizona 85009 <input type="checkbox"/> Check if this is a new address	6. Expedited Review. In accordance with FIFRA Section 3(c)(3) (b)(i), my product is similar or identical in composition and labeling to: EPA Reg. No. _____ Product Name _____	

Section II

<input type="checkbox"/> Amendment - Explain below	Final printed labels in response to Agency letter dated MAR 22 1996 "Me Too" Application. Other - explain below.
<input type="checkbox"/> Resubmission in response to Agency letter dated _____	
<input checked="" type="checkbox"/> Notification - Explain below.	

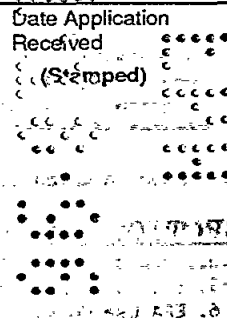
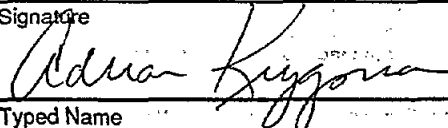
Explanation: Use additional page(s) if necessary. (For section I and Section II.)

Notification of: 1). Active Ingredient Clarification
 2). Clarification of Lawn and Turf Usage Directions
 3). Addition of Lawn and Turf Pests
 As Per PR Notice 95-2.

Section III

1. Material This Product Will Be Packaged In:				2. Type of Container	
Child-Resistant Packaging <input type="checkbox"/> Yes* <input type="checkbox"/> No	Unit Packaging <input type="checkbox"/> Yes <input type="checkbox"/> No	Water Soluble Packaging <input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Metal <input type="checkbox"/> Plastic <input type="checkbox"/> Glass <input type="checkbox"/> Paper <input type="checkbox"/> Other (Specify) _____		
* Certification must be submitted.					
If "Yes," Unit Package wgt.		No. per container	If "Yes," Package wgt.		No. per container
3. Location of Net Contents Information <input type="checkbox"/> Label <input type="checkbox"/> Container		4. Size(s) of Retail Container		5. Location of Label Directions <input type="checkbox"/> On Label <input type="checkbox"/> On Labeling accompanying product	
6. Manner in Which Label is Affixed To Product <input type="checkbox"/> Lithograph <input type="checkbox"/> Paper glued <input type="checkbox"/> Stenciled		<input type="checkbox"/> Other (_____)			

Section IV

1. Contact Point (Complete items directly below for identification of individual to be contacted, if necessary, to process this application.)		
Name Adrian Krygsman	Title Director, Product Registration	Telephone No. (Include Area Code) 201-884-4300
Certification I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.		6. Date Application Received ((Stamped)) 
2. Signature 	3. Title Director, Product Registration	
4. Typed Name Adrian Krygsman	5. Date January 10, 1996	

27 10

FERMONE NATURALIS-L 225

Biological Insecticide for Use on Indoor (Including Greenhouses) and Outdoor
Ornamental Plantings, Plantscapes, Turf, Trees, Shrubs, Flower and Foliage Cuttings
Recommended for Commercial and Home and Garden Use

EPA REG. NO. 53871- 9
EPA EST. NO. 53871-AZ-1

ACTIVE INGREDIENTS:

Beauveria bassiana ~~FW-II~~ 7.16%
(2.3×10^7 viable spores per milliliter of product)

Inert Ingredients..... 92.84%
Total: 100.00%

KEEP OUT OF REACH OF CHILDREN

CAUTION

SHAKE WELL BEFORE USING!

STATEMENT OF PRACTICAL TREATMENT

If Swallowed: Drink 1or 2 glasses of water, then induce vomiting by touching fingers to the back of the throat. Do not induce vomiting or give anything by mouth to an unconscious person. Consult a physician.

If Inhaled: Potential sensitizing agent. If inhaled, move to fresh air. In case of acute allergic reactions or respiratory irritation, consult a physician.

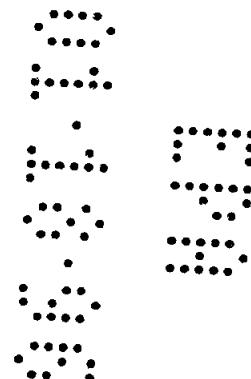
If on Skin: Remove contaminated clothing and wash affected areas with soap and water. Consult a physician if irritation persists.

If in Eyes: Flush eyes with copious amounts of water. If irritation persists, consult a physician.

Manufactured By:

TROY BIOSCIENCES INC.
2620 N. 37TH DRIVE
PHOENIX, AZ 85009

Net Contents:



**PRECAUTIONARY STATEMENTS
HAZARDOUS TO HUMANS AND DOMESTIC
ANIMALS**

This is a potential sensitizing agent via inhalation. Spray mist may cause respiratory irritation. Avoid breathing vapors. Avoid eye and skin contact.

PERSONAL PROTECTIVE EQUIPMENT:

Some materials that are chemical resistant to this product are listed below. If you want more options follow the instructions for category C on an EPA chemical resistance chart.

Applicators and other handlers (other than mixers and loaders) must wear:

- A. Long-sleeved shirt and long pants
 - B. Chemical resistant gloves
 - C. Mist filtering respirators with NIOSH/HSIA approval number prefix TCC-21C
 - D. Shoes plus socks must be worn
- Follow manufacturer's instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

PHYSICAL AND CHEMICAL HAZARDS

Do not use near heat or open flame

USER SAFETY RECOMMENDATIONS

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then clean thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

Do not apply when weather conditions favor drift from the target area. *Beauveria bassiana* is an insect specific fungus and exposure to non-target insects should be avoided. Avoid application to areas where honeybees are actively foraging or around beehives because this product is potentially pathogenic to honeybees. 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 by cleaning of equipment or disposal of equipment washwaters. Do not discharge into lakes, streams, ponds or public waterways.

STORAGE AND DISPOSAL

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

Storage: Store in a cool, dry place away from direct sunlight or heat. Optimum storage temperatures are 35°F (+2°C) to 80°F (27°C). Do not allow spray solution to stand more than 8 hours before reuse. Avoid contamination and loss of potency of opened containers by closing containers tightly after use.

Container Disposal: Do not reuse empty container. Rinse thoroughly before discarding in trash. Triple rinse (or equivalent), then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incinerate if allowed by state and local authorities, or by burning. If burned stay out of smoke.

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

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). The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard. 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 requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

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 involves contact with anything that has been treated, such as plants, soil, or water is:

- Coveralls
- Shoes plus socks

4 2 10
8

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling. For end use only.

GENERAL DIRECTIONS

Naturalis-L 225 works primarily through contact action, so good spray coverage is essential. Treat when pest populations are manageable and before extensive damage occurs. Because **Naturalis-L 225** contains an insect pathogen, time must be allowed to achieve pest population suppression. At least 3-5 applications are necessary before pests are adequately under control. Climatic conditions and pest pressures will determine pretreatment needs.

The addition of sticking agents, insecticidal soaps, emulsifiable oils, insecticides, or piperonyl butoxide may improve control of insects in extreme conditions of insect pressure. Do not tank mix with fungicides. Wait 48 hours after application before applying fungicides. Do not use screen nozzles finer than 25 mesh to avoid clogging. Slotted screens may be used. Small numbers of plants should be treated initially prior to application, to check on cultivar sensitivity.

Naturalis-L 225 is a unique biological product. Consult your local extension office, Pest Management consultant, or Troy BioSciences Inc. representative for guidance in selecting rates and timing schedules of application, as well as tank mix combinations, depending on your degree of infestation.

APPLICATION

SHAKE WELL BEFORE USING!

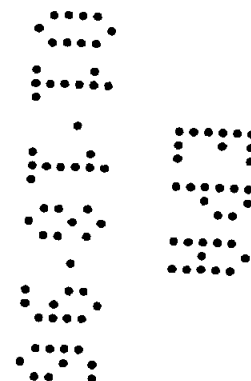
Mix recommended quantity with water. Triple rinse container shaking each time, and empty contents into a partially filled spray tank free of fungicide residues. Complete filling the tank and mix well. Spray immediately. For commercial and ornamental use, **Naturalis-L 225** is applied as a foliar spray at a rate of 0.30 (8.9 mls) to 1.00 (29.6 mls) oz./gallon of water for pest control. Normal greenhouse application volumes are 100 gallons/20,000 square feet. Insure complete coverage of upper and lower leaf surfaces using best possible coverage techniques. For home and garden use, 1.5 teaspoons per quart of water should be used. For commercial and home lawn and turf use **Naturalis** is applied at a rate of 1.0 (29.6 mls.) to 3.0 (88.7 mls.) per 1000 square feet. Apply at the onset of infestation and every 3-5 days as long as the insect population is above the desired threshold or until plant maturity.



5910

RECOMMENDED APPLICATION RATES PER CULTIVAR

CROP	PEST	(NATURALIS-L 225) IN WATER TO MAKE	SPECIFIC DIRECTIONS
Foliage, flowering plants, woody and herbaceous ornamentals, conifers (including Christmas trees and non-food bedding plants).	Aphids Thrips Mites White Flies Leaf-feeding caterpillars Lygus bugs Beetles-flea, cucumber Elm leaf Leaf Hoppers	100 Gallons: 30-100 fl. ozs. (887-2957 mls.) 1 Gallon: 0.30-1.0 fl. ozs. (8.9 mls.-29.6 mls. or 2-4 teaspoons/quart)	Use sufficient water to cover the foliage. Use lower rates for light to moderate pressure, higher rates for heavy infestation. Use of IPM strategies incorporating sticking agents, insecticides, insecticidal soaps, emulsifiable oils and piperonyl butoxide may be used when insect pressure is heavy.
Commercial & residential woody and herbaceous ornamentals	Strawberry root weevils Obscure root weevils Blackvine root weevils		
Lawns	Mole crickets, Chinch bugs, and webworms, armyworms, grasshoppers, billbugs , spittlebugs, Bermudagrass, mites, fire ants, ants, millipedes, sowbugs, chiggers, white grubs of: annual white grub, black turf, grass, ataenius, european chafer, green June beetle, Japanese beetle, Northern masked chafer,	1 Gallon: 1.0-3.0 fl. ozs. (29.6 mls-88.7 mls.)	
Indoor (Including green- houses) and outdoor ornamental plantings, plantscapes, trees, shrubs, flower and foliage cuttings.	Psyllids		



6910
8

Notice: It is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness, or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of Troy BioSciences Inc. or seller. All such risks shall be assumed by buyer or user.

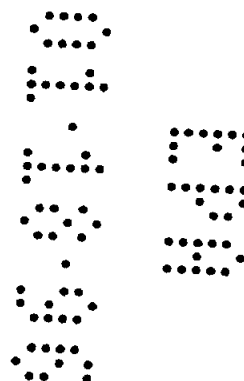
Troy BioSciences Inc. warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, under normal use conditions, subject to the risks described above. Troy BioSciences makes no other express or implied warranty of fitness or of merchantability or any other express or implied warranty.

In no event shall Troy BioSciences Inc. or seller be liable for any incidental, consequential or special damages resulting from the use or handling of this product. The exclusive remedy of the user or buyer, and the exclusive liability of Troy BioSciences Inc. or seller for any and all such claims, losses, injuries or damages (including claims based on breach of warranty, contract, negligence, tort, strict liability or otherwise) resulting from the use or handling of this product, shall be the return of the purchase price of the product or, at the election of Troy BioSciences Inc. or seller, the replacement of the product.

Troy BioSciences and seller offer this product, and user accept it, subject to the foregoing limitations or warranty and limitation of liability, which may not be modified by any oral or written agreement.

Naturalis®-L is a registered trademark of Troy BioSciences Inc.

ntlornlb
1/4/96



7 y 10

FERMONE NATURALIS-L 225

Biological Insecticide for Use on Indoor (Including Greenhouses) and Outdoor
Ornamental Plantings, Plantscapes, Turf, Trees, Shrubs, Flower and Foliage Cuttings
Recommended for Commercial and Home and Garden Use

EPA REG. NO. 53871- 9
EPA EST. NO. 53871-AZ-1

ACTIVE INGREDIENTS:

Beauveria bassiana7.16%
(2.3×10^7 viable spores per milliliter of product)

Inert Ingredients.....92.84%
Total: 100.00%

KEEP OUT OF REACH OF CHILDREN

CAUTION

SHAKE WELL BEFORE USING!

STATEMENT OF PRACTICAL TREATMENT

If Swallowed: Drink 1or 2 glasses of water, then induce vomiting by touching fingers to the back of the throat. Do not induce vomiting or give anything by mouth to an unconscious person. Consult a physician.

If Inhaled: Potential sensitizing agent. If inhaled, move to fresh air. In case of acute allergic reactions or respiratory irritation, consult a physician.

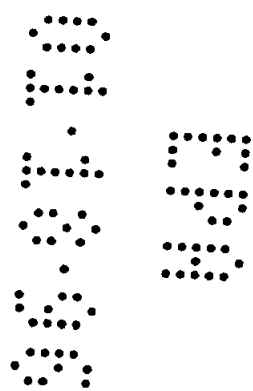
If on Skin: Remove contaminated clothing and wash affected areas with soap and water. Consult a physician if irritation persists.

If in Eyes: Flush eyes with copious amounts of water. If irritation persists, consult a physician.

Manufactured By:

TROY BIOSCIENCES INC.
2620 N. 37TH DRIVE
PHOENIX, AZ 85009

Net Contents:



**PRECAUTIONARY STATEMENTS
HAZARDOUS TO HUMANS AND DOMESTIC
ANIMALS**

This is a potential sensitizing agent via inhalation. Spray mist may cause respiratory irritation. Avoid breathing vapors. Avoid eye and skin contact.

PERSONAL PROTECTIVE EQUIPMENT:

Some materials that are chemical resistant to this product are listed below. If you want more options follow the instructions for category C on an EPA chemical resistance chart.

Applicators and other handlers (other than mixers and loaders) must wear:

- A. Long-sleeved shirt and long pants
- B. Chemical resistant gloves
- C. Mist filtering respirators with NIOSH/MSHA approval number prefix TCC-21C
- D. Shoes plus socks must be worn

Follow manufacturer's instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

PHYSICAL AND CHEMICAL HAZARDS

Do not use near heat or open flame

USER SAFETY RECOMMENDATIONS

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then clean thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

Do not apply when weather conditions favor drift from the target area. *Beauveria bassiana* is an insect specific fungus and exposure to non-target insects should be avoided. Avoid application to areas where honeybees are actively foraging or around beehives because this product is potentially pathogenic to honeybees. 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 by cleaning of equipment or disposal of equipment washwaters. Do not discharge into lakes, streams, ponds or public waterways.

STORAGE AND DISPOSAL

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

Storage: Store in a cool, dry place away from direct sunlight or heat. Optimum storage temperatures are 35°F (+2°C) to 80°F (27°C). Do not allow spray solution to stand more than 8 hours before reuse. Avoid contamination and loss of potency of opened containers by closing containers tightly after use.

Container Disposal: Do not reuse empty container. Rinse thoroughly before discarding in trash. Triple rinse (or equivalent), then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incinerate if allowed by state and local authorities, or by burning. If burned stay out of smoke.

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

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). The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard. 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 requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

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 involves contact with anything that has been treated, such as plants, soil, or water is:

- Coveralls
- Shoes plus socks

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling. For end use only.

GENERAL DIRECTIONS

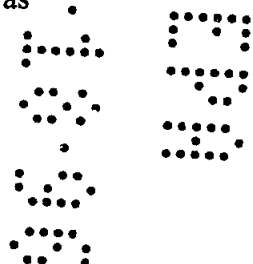
Naturalis-L 225 works primarily through contact action, so good spray coverage is essential. Treat when pest populations are manageable and before extensive damage occurs. Because **Naturalis-L 225** contains an insect pathogen, time must be allowed to achieve pest population suppression. At least 3-5 applications are necessary before pests are adequately under control. Climatic conditions and pest pressures will determine pretreatment needs.

The addition of sticking agents, insecticidal soaps, emulsifiable oils, insecticides, or piperonyl butoxide may improve control of insects in extreme conditions of insect pressure. Do not tank mix with fungicides. Wait 48 hours after application before applying fungicides. Do not use screen nozzles finer than 25 mesh to avoid clogging. Slotted screens may be used. Small numbers of plants should be treated initially prior to application, to check on cultivar sensitivity.

Naturalis-L 225 is a unique biological product. Consult your local extension office, Pest Management consultant, or Troy BioSciences Inc. representative for guidance in selecting rates and timing schedules of application, as well as tank mix combinations, depending on your degree of infestation.

APPLICATION SHAKE WELL BEFORE USING!

Mix recommended quantity with water. Triple rinse container shaking each time, and empty contents into a partially filled spray tank free of fungicide residues. Complete filling the tank and mix well. Spray immediately. For commercial and ornamental use, **Naturalis-L 225** is applied as a foliar spray at a rate of 0.30 (8.9 mls) to 1.00 (29.6 mls) oz./gallon of water for pest control. Normal greenhouse application volumes are 100 gallons/20,000 square feet. Insure complete coverage of upper and lower leaf surfaces using best possible coverage techniques. For home and garden use, 1.5 teaspoons per quart of water should be used. Apply at the onset of infestation and every 3-5 days as long as the insect population is above the desired threshold or until plant maturity.



10910

RECOMMENDED APPLICATION RATES PER CULTIVAR

CROP	PEST	(NATURALIS-L 225) IN WATER TO MAKE	SPECIFIC DIRECTIONS
Foliage, flowering plants, woody and herbaceous ornamentals, conifers (including Christmas trees and non-food bedding plants).	Aphids Thrips Mites WhiteFlies Leaf-feeding caterpillars Lygus bugs Beetles-flea, cucumber Elm leaf Leaf Hoppers	100 Gallons: 30-100 fl. ozs. (887-2957 mls.) 1 Gallon: 0.30-1.0 fl. ozs. (8.9 mls.-29.6 mls. or 2-4 teaspoons/quart)	Use sufficient water to cover the foliage. Use lower rates for light to moderate pressure, higher rates for heavy infestation. Use of IPM strategies incorporating sticking agents, insecticides, insecticidal soaps, emulsifiable oils and piperonyl butoxide may be used when insect pressure is heavy.
Commercial & residential woody and herbaceous ornamentals	Strawberry root weevils Obscure root weevils Blackvine root weevils		
Lawns	Mole crickets, Chinch bugs, grasshoppers,		
Indoor (Including green- houses) and outdoor ornamental plantings, plantscapes, trees, shrubs, flower and foliage cuttings.	Psyllids		

Notice: It is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness, or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of Troy BioSciences Inc. or seller. All such risks shall be assumed by buyer or user.

Troy BioSciences Inc. warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, under normal use conditions, subject to the risks described above. Troy BioSciences makes no other express or implied warranty of fitness or of merchantability or any other express or implied warranty.

In no event shall Troy BioSciences Inc. or seller be liable for any incidental, consequential or special damages resulting from the use or handling of this product. The exclusive remedy of the user or buyer, and the exclusive liability of Troy BioSciences Inc. or seller for any and all such claims, losses, injuries or damages (including claims based on breach of warranty, contract, negligence, tort, strict liability or otherwise) resulting from the use or handling of this product, shall be the return of the purchase price of the product or, at the election of Troy BioSciences Inc. or seller, the replacement of the product.

Troy BioSciences and seller offer this product, and user accept it, subject to the foregoing limitations or warranty and limitation of liability, which may not be modified by any oral or written agreement.

Naturalis®-L is a registered trademark of Troy BioSciences Inc.

ntlornlb
1/4/96

