

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

MAY 12 1995

Jeff Pinkham, Ph.D.  
ECOSCIENCE Corporation  
One Innovation Drive  
Worcester, MA 01605

SUBJECT: EPA Reg. No. 64296-4  
Tolerance Petition #4H5704  
Additional Use Sites

Dear Dr. Pinkham:

The petition (4H5704) submitted for an exemption from the requirement of a tolerance for residues of products of the microbial pest control agent *Metarhizium anisopliae* Strain ESC 1 in or on all processed food and animal feed when applied as an insecticide to structures has been reviewed and is acceptable. This tolerance exemption will be published in the Federal Register as a Final Rule.

Addition of the following sites may be added to the label:

"restaurants, food service and food manufacturing facilities, food and feed processing facilities"

A stamped copy of the label is enclosed for your records. Submit five (5) copies of the final labeling upon printing.

Sincerely,

*Janet L. Andersen*

Janet L. Andersen, Acting director  
Biopesticides and Pollution Prevention  
Division 7501W

CONCURRENCES

SYMBOL	7501W	7501W					
SURNAME	Hollis	DGreenway					
DATE	5/12/95	5/12/95					

# BIO-BLAST™ BIOLOGICAL TERMITICIDE

ACCEPTED  
with COMMENTS  
in EPA Letter Dated  
**MAY 12 1995**  
Under the Federal Insecticide,  
Fungicide, and Rodenticide Act  
as amended, for the pesticide  
registered under EPA Reg. No.  
64296-4

- Biological termite control agent.
- Odorless.
- Vaporless.
- Non-staining.
- Infected termites can pass the agent to others, through Horizontal Transfer™.
- Ideal for integrated termite management programs.

**ACTIVE INGREDIENT:**  
*Metarhizium anisopliae*, Strain ESC 1 . . . . . 50%  
**INERT INGREDIENTS:** . . . . . 50%  
 100%

Note: Contains a minimum of 4 x 10<sup>9</sup> viable conidia per gram of formulated product.

## KEEP OUT OF REACH OF CHILDREN

### WARNING

#### PRECAUTIONARY STATEMENTS

**Hazards to Humans and Domestic Animals:** Avoid breathing dust. Avoid contact with skin, eyes and clothing. May cause eye injury. Do not get in eyes or clothing. When mixing or loading wear protective eyewear (goggles, face shield or safety glasses) and a dust/mist mask (MSHA/NIOSH approval number prefix TC-21C). Wash thoroughly with soap and water after handling, remove contaminated clothing and wash before re-use.

**Environmental Hazards:** Do not contaminate water when disposing of equipment washwaters or rinsate.

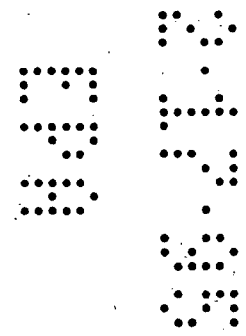
#### STATEMENT OF PRACTICAL TREATMENT

**If in eyes:** Flush with plenty of water. Get medical attention if irritation persists.

EPA Reg. No.: 64296-4  
EPA Establishment No.: 64296-MA-003  
US Patent Pending

Net Weight:

EcoScience Corporation  
377 Plantation Street, Worcester MA 01605



### STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal. **Storage:** Store in original containers only, near or below room temperature (< 25°C, 77°F). Avoid excessive heat during storage or transportation. **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:** Wrap empty foil pouch and preservative packets and put in trash. Do not reuse empty pouch.

### DIRECTIONS FOR USE

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

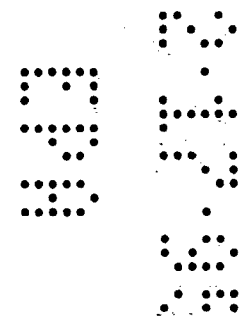
#### GENERAL DIRECTIONS:

Bio-Blast™ is an innovative, biological termiticide for the control of existing termite infestations in structures and their immediate surroundings, and for residual protection of treated wood. Bio-Blast™ is an important part of a comprehensive program of integrated pest management and can be used to complement soil treatments and mechanical alterations for the control of termites. Bio-Blast™ is targeted for use against the following termite species:

- Subterranean - *Reticulitermes* spp., *Heterotermes* spp., *Coptotermes formosanus*
- Dampwood - *Zootermopsis* spp., *Prorhinotermes simplex*
- Drywood - *Cryptotermes* spp., *Kaloterme* spp., *Incisitermes* spp., *Marginitermes* spp.
- Powderpost - *Cryptotermes* spp.

Areas of use include, but are not limited to, residential dwellings, apartment buildings, commercial stores, offices, institutions, industrial buildings, warehouses, commercial establishments, hotels, restaurants, food service and food manufacturing facilities, food and feed processing facilities, computer and electronic equipment facilities, greenhouses and schools. In living areas, make applications in such a manner as to avoid deposits on exposed surfaces or introduction of the material into the air.

Use of this product in food service, manufacturing and processing establishments should be confined to time periods when the plant is not in operation. Food should be removed or covered during treatment. All food processing surfaces in treatment area should be covered during application or thoroughly cleaned after treatment. After treatment in food processing plants, wash equipment, utensils, benches, shelving, etc. in area of treatment with an effective cleaning compound and rinse with potable water.



**MIXING DIRECTIONS:**

For all treatments use a 0.5% active ingredient concentration of Bio-Blast™. To prepare a 0.5% dilution, mix entire contents of 1 foil packet (19 grams) in sufficient water (½ quart or ½ liter) to make a slurry. Pour the slurry into a clean sprayer and add water to ½ gallon (1.8 liters). Agitate for 30 seconds to ensure proper mixing and suspension of the wettable powder. Spray infested areas with a sufficient amount of spray to thoroughly penetrate and cover the area to the point of wetness, but avoid runoff. Do not use strainers finer than 50 mesh. Mix only the amount of diluted spray required for each application. A mixed suspension of Bio-Blast™ will remain effective for up to 8 hours. Agitate sprayer before applying to re-suspend any particles that may have settled out.

**Important** - Use a clean sprayer for application. Contamination of equipment with insecticides, fungicides or borate termiticides may interfere with the action of the biological control agent in Bio-Blast™. Start with a new or clean sprayer, hoses, injection tools and mixing equipment. Identifying equipment as dedicated to Bio-Blast™ is recommended and will help prevent contamination. Do not tank mix with other pesticides. Bio-Blast™ must not be formulated into other end-use products.

Each foil pouch contains preservative packets. Do not add the packets to spray tank; discard with empty foil pouch.

**APPLICATION DIRECTIONS:**

Caution should be taken to avoid puncturing and injection into heat pipes, ducts, water and sewer lines and electrical conduits. Do not apply into heating or air conditioning duct work. To avoid electric shock, do not apply into electrical fixtures, sockets or switches.

Termites in Structures

Before applying Bio-Blast™, it is important to take the time to identify foraging areas of the termite infestation. Pay particular attention to infested wall voids, spaces between wooden members, under sill plates, door and window frames, baseboards, wood trim or any area being attacked or subject to attack. Carefully read the Specialized Termite Application section which describes treatment situations and techniques (nest cartons, mud shelter tubes, insulation) that may be encountered in structures. The effectiveness of this product is greatly enhanced if the spray is applied to as many foraging termites as possible. These treated termites will return to the colony and spread the biological active ingredient to others.

Bio-Blast™ may be applied with a crack and crevice tool, as a coarse fan spray or by injection into infested wood. When injecting, a backslash guard on the treatment tool is recommended.

f) For the control of termites in accessible, localized areas of infested wood, apply a 0.5% dilution into galleries and voids in damaged wood and surrounding areas where wood is vulnerable. These sites include galleries and voids in sill plates, piers, girders, subfloors, floor joists, door and window frames, wood trim and any infested area which is exposed to access by termites from the soil or other points of entry. Spray a sufficient amount of the dilution to penetrate and thoroughly wet the area, but avoid runoff. Repeat treatments as necessary to maintain control.

**APPLICATION DIRECTIONS, CONT.**

Applications may be made to infestations which are difficult to reach or inaccessible by drilling holes approximately 8 to 10 inches apart and injecting a 0.5% dilution into the damaged wood or void spaces. Multiple holes may be drilled into the infested or vulnerable areas; however, treating one hole before the next is drilled will increase penetration of Bio-Blast™ into the target area. Inject a sufficient amount to spray to penetrate or cover the treatment area, approximately 10 - 15 seconds or to the point of runoff, if visible. Once the application has dissipated into the target area, a repeat application may be made to enhance penetration and coverage. Repeat treatments as necessary to maintain control.

**Specialized Termite Applications**

Termites in trees, stumps, utility poles, fencing, decking materials, construction materials, sign posts and other similar elements may be treated by drilling holes approximately 8 to 10 inches apart into the interior of the infested areas. Horizontal holes approximately 4 to 10 inches apart may also be drilled in a circular fashion around stumps, trees, utility poles and other similar sites. Inject a sufficient amount of a 0.5% dilution to thoroughly penetrate and cover the target area, but avoid runoff.

Termite carton nests in trees, structures or other areas may be injected with a 0.5% dilution using a pointed injection tool. Multiple injection points of varying depths may be necessary. To enhance product performance, do not remove carton nest material until termite activity has ceased.

Termites in mud shelter tubes may be treated by injection or with a coarse fan spray of the 0.5% dilution. Tubes should be injected or sprayed to runoff and with sufficient pressure to break open the tubes. Apply enough dilution to thoroughly penetrate this foraging area. Do not apply to crawl spaces of plenum-style houses.

Polystyrene and cellulose insulation may be treated by drilling to locate the interior infested cavities and injecting a 0.5% dilution just prior to the point of runoff.

**WARRANTY STATEMENT**

EcoScience's recommendations for the use of this product are based upon tests believed to be reliable. The use of this product is beyond the control of the manufacturer; no guarantee, express or implied, is made as to the effects of such or the results to be obtained if not used in accordance with directions or established safe practices. The buyer must assume all responsibilities, including injury or damage, resulting from its misuse as such or in combination with other materials. ECOSCIENCE CORPORATION'S LIABILITY FOR ANY MALFUNCTION OR NON-FUNCTION OF THIS PRODUCT SHALL BE LIMITED TO THE ACTUAL COST OF REPLACEMENT OF THE PRODUCT, AND SHALL NOT, IN ANY EVENT, EXCEED THE ORIGINAL PURCHASE PRICE THEREOF. ECOSCIENCE CORPORATION SHALL, UNDER NO CIRCUMSTANCES, BE LIABLE FOR INCIDENTAL, REMOTE OR CONSEQUENTIAL DAMAGES RESULTING FROM ANY DEFECTS OR ALLEGED DEFECTS IN THIS PRODUCT, EXCEPT TO THE EXTENT THAT AN ALLOWANCE FOR INCIDENTAL DAMAGES IS MANDATED BY APPLICABLE LAW. ECOSCIENCE CORPORATION SHALL HAVE NO LIABILITY FOR ANY CLAIM RESULTING FROM THE MISUSE OF THIS PRODUCT OR ANY USE OTHER THAN THAT FOR WHICH IT WAS SPECIFICALLY DESIGNED. No agent of EcoScience Corporation is authorized to make any warranties beyond those contained herein.

If you have any questions or comments about Bio-Blast™ Biological Termiticide, please call us toll-free at (800) 998-2467, Monday - Friday, 9am to 5pm EST.

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