

JUL 8 2004

Dana M. Thomas  
WHITMIRE Micro-Gen RESEARCH LABORATORIES, INC.  
3568 Tree Court Industrial Blvd.  
St. Louis, MO 63122-6682

Subject: Additional Uses and Use Directions For:  
Whitmire PT 170 X-Clude  
EPA Registration No. 499-233  
Application dated August 4, 2003

Dear Ms. Thomas:

The proposed amendment to the registration of the product cited above under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended revising the label by adding additional uses and directions for use is acceptable subject to the comments listed below:

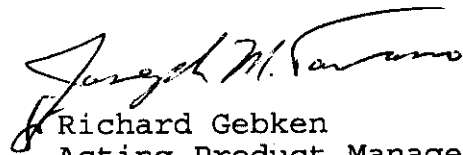
1) The directions for use with a foam additive must be amended to include the ratio for the foam. A dry foam, about 20-25:1 is suggested in order to provide adequate coverage and expansion without significant wetting to interior wall surfaces.

2) Amend the For Use Outdoors section to exclude outdoor use in irrigation or sprinkler systems, clod ULV foggers, thermal foggers, and handheld misters/foggers. The outdoor application of this product should be restricted to surface application by backpack, hydraulic sprayers and compressed air sprayers. Refer to the enclosed Efficacy review for details.

A stamped copy of the revised draft label is enclosed for your files. Submit two copies of the corrected finished label before the product is released for shipment under this revised label.

If you have any questions please contact Joseph Tavano at  
(703) 305-6411.

Sincerely,



Richard Gebken  
Acting Product Manager 10  
Insecticide Branch  
Registration Division (7505C)



**ACCEPTED**  
**with COMMENTS**  
**In EPA Letter Dated:**  
JUL 8 2004

Under the Federal Insecticide,  
Fungicide, and Rodenticide Act,  
as amended, for the pesticide  
registered under EPA Reg. No.  
499-233

WHITMIRE PT<sup>®</sup> 170

# X-CLUDE<sup>™</sup>

MICROENCAPSULATED TIMED RELEASE PYRETHRUM

Liquid Concentrate

**ACTIVE INGREDIENTS:**

Pyrethrins	1.1%
Piperonyl Butoxide, Technical*	2.2%
N-octyl Bicycloheptene Dicarboximide	3.7%

**OTHER INGREDIENTS:** 93.0%

\* Equivalent to 1.76% (butylcarbitol)(6-propyl-piperonyl) ether and 0.44% related compounds. **TOTAL: 100.0%**

**KEEP OUT OF REACH OF CHILDREN**  
**CAUTION**

See supplemental label for additional Precautionary Statements.

EPA Reg. No. 499-233 • EPA Est. No. 499-MO-1

**NET CONTENTS: 2 Quarts**



**WHITMIRE MICRO-GEN**  
RESEARCH LABORATORIES, INC.  
800-777-8570

**FOR USE OUTDOORS**

Do not apply this product through any type of irrigation system.

**FLYING INSECTS:** Treat outside surfaces of screens, doors, window frames, or wherever insects may enter indoors. Also treat surfaces around light fixtures on porches, in garages, and other places insects light or congregate.

**MOSQUITOES, FLIES AND GNATS:** To control these pests in open areas near homes, buildings and in campgrounds, use in mechanical, electrical, fogging or misting equipment or apply as a wet spray. Treat shrubbery and vegetation and others areas where these pests may rest. Shrubby and vegetation around stagnant pools, marshy areas, ponds and shorelines may be treated. Treatment of vegetation in water from land is also permitted by allowing wind to move product into vegetation, but application of this product directly to any body of water is prohibited.

**CRAWLING INSECTS:** For treatment of localized infestations of these insects in outdoor areas which are landscaped, planted, mulched or unmaintained, treat infested areas. For ants, wet hills and runways. Repeat applications as infestation warrants and as reinfestations occur. Apply X-Clude to cracks and crevices where insects may enter premises. Areas to be treated include, but are not limited to, weep holes, under siding, wall voids, soffits, around attic vents, cracks and crevices, openings around windows, doors and pipes. Treatment of infested fences and tree holes is permitted.

**PERIMETER TREATMENT:** To help prevent infestation of buildings, treat a band of soil 6 to 10 feet wide around and adjacent to the building. Also, treat the building foundation to a height of 2 to 3 feet where pests are active and may enter.

Keep children and pets off treated areas until spray has dried. Keep out of lawn and garden fish pools and other bodies of water.

**USE IN AND AROUND LIVESTOCK HOUSING**

**FOR FAST KNOCKDOWN OF FLYING INSECTS:** Remove food and cover all food and milking utensils. Close milk bulk tank lids to prevent contamination from spray and dead or falling insects.

Close all windows and doors. Using a mixture of 1 fl. oz. X-Clude per gallon of water solution, direct fog upward in all directions at the rate of 3 fl. oz. diluted product per 1,000 cubic feet of space. Ventilate the area after treatment is completed.

Do not apply to lactating or food animals. Do not contaminate milk, food or drinking water.

For residual control of house flies and stable flies in animal areas such as dog kennels, hog bars, rabbit hutches, dairy areas, milk-rooms, calf hutches, calving pens and parlors: Treat normal fly resting areas such as ceilings, screens, upper corners of the area, around windows and doors, light fixtures and other surfaces known to attract flies. Apply as a coarse wet spray using a mixture of 2 fl. oz. of X-Clude per gallon of water. Apply at a rate of 1 gallon diluted product per 1,000 sq. ft. of surface. For best results initiate treatments at the beginning of the fly season and repeat weekly during periods of heavy fly activity.

**FOR FLEA CONTROL:** Treat animal areas such as dog kennels and runs. Apply as a coarse wet spray using a mixture of 2 fl. oz. of X-Clude per gallon of water. Apply at a rate of one gallon diluted product per 1,000 sq. ft. of surface.

**FOR TREATMENT OF NON-LACTATING AND NON-FOOD ANIMALS (horses):** Use 2 fl. oz. of X-Clude per gallon of water (use 4 fl. oz. for quick knock-down and longer residual control) and apply as a low pressure spray. Lightly mist animals thoroughly, but do not treat to runoff. Do not spray directly toward the face or eyes. Application may be repeated daily.

**STORAGE AND DISPOSAL**

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

**STORAGE:** Store in original container. Keep away from children. Do not store below 32°F. If exposed to temperatures below 32°F, thaw completely and mix well before using.

**PESTICIDE DISPOSAL:** Pesticide spray mixture or rinse water that cannot be used according to label directions must be disposed of according to applicable Federal, state or local procedures.

**CONTAINER DISPOSAL:** Triple rinse container then offer for recycling or reconditioning or dispose of in a sanitary landfill or by incineration if allowed by state and local authorities.

**WHITMIRE PT® 170**  
**X-CLUDE®**

**MICROENCAPSULATED TIMED RELEASE PYRETHRUM**

(ALTERNATE BRAND NAME: Prescription Treatment brand MICROCARE CS Controlled Release Pyrethrum)

**LIQUID CONCENTRATE**

**ACTIVE INGREDIENTS:**

Pyrethrins .....	1.1%
Piperonyl Butoxide, Technical* .....	2.2%
N-octyl Bicycloheptene Dicarboximide .....	3.7%

**OTHER INGREDIENTS:**

.....	93.0%
* Equivalent to 1.76% (butylcarbitol) (6-propylpiperonyl) ether and 0.44% related compounds.	
<b>TOTAL: 100.0%</b>	

**KEEP OUT OF REACH OF CHILDREN**  
**CAUTION**

**FIRST AID**

**IF ON SKIN OR CLOTHING:** Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

**IF IN EYES:** Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-225-3320 for emergency medical treatment information.

See page 2 for additional Precautionary Statements.

EPA Reg. No. 499-233 • EPA Est. No. 499-MO-1

A PRESCRIPTION TREATMENT® brand Insecticide from:

Whitmire Micro-Gen Research Laboratories, Inc.

3568 Tree Court, Industrial Blvd.

St. Louis, MO 63122-6682

www.wmmg.com

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**WHITMIRE MICRO-GEN**  
RESEARCH LABORATORIES INC.  
800-777-8570

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## PRECAUTIONARY STATEMENTS

### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**CAUTION:** Harmful if absorbed through skin. Causes moderate eye damage. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling.

**APPLICATORS AND OTHER HANDLERS MUST WEAR:** Long-sleeved shirt and long pants, waterproof gloves, shoes plus socks. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergents and hot water. Keep and wash PPE separately from other laundry.

### USER SAFETY RECOMMENDATIONS

#### Users should:

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

### ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish and birds. Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Keep out of lakes, streams and ponds. Do not contaminate water when disposing of equipment washwaters.

### PHYSICAL OR CHEMICAL HAZARDS

Do not spray where electrical short circuits might result, such as wall outlets, conduits, motors, switches, etc. Do not spray directly into any electronic equipment, such as radio, televisions, computers, telephones, etc.

## DIRECTIONS FOR USE

IT IS A VIOLATION OF FEDERAL LAW TO USE THIS PRODUCT IN A MANNER INCONSISTENT WITH ITS LABELING.

### HOW TO MIX X-CLUDE®

Shake container well. Fill spray tank half full with water. Add the appropriate amount of X-Clude concentrate. Add remaining water to spray tank and mix well. Agitate material while using. Use 50 mesh screen in sprayer.

### APPLICATION INSTRUCTIONS

**HOSE-END SPRAYERS:** Add water to the selected mark for the number of diluted gallons desired. Add the amount of X-Clude selected from the dilution instructions to obtain the desired dilution. Shake sprayer to disperse the X-Clude and shake occasionally during use to maintain dispersion.

**COMPRESSED AIR SPRAYERS:** For surface applications, apply as a coarse wet spray. Apply at rate of 1 gallon diluted product per 1,000 sq. ft. of surface. For crack and crevice application, make one second injections every 12 inches. In long running cracks, move injector tip at rate of one linear foot per one second.

**MECHANICAL AND ELECTRICAL FOGGING OR MISTING EQUIPMENT (PEST CONTROL ONLY):** Close room or warehouse and shut off ventilation. Use a spraying device such as Whitmore Micro-Gen ULV equipment that produces a fine spray. Using a mixture of 1 fl. oz. X-Clude per gallon solution, treat at the rate of 3 fl. oz. diluted product per 1,000 cubic feet of

space. Direct treatment toward ceiling and upper walls of areas as well as behind and under obstructions. Food should be covered or removed during treatment. Food contact surfaces should be covered during treatment or thoroughly cleaned before using. Do not apply while food processing is under way. Leave room closed for at least 1 hour after application. Do not remain in treated areas. Ventilate prior to re-entry. Use only clean equipment. Clean equipment after each use with water.

**VOID / CRACK & CREVICE® APPLICATION:** To treat insects harbored in voids and in cracks and crevices, use equipment designed for void applications. Follow the manufacturer's recommendations for proper equipment set up and operating pressures. Place the tip of the applicator at or into the crack or crevice to be treated. Apply product in short bursts while keeping tip in position. Allow the air stream to push insecticide deep into voids. Application should be made in such a manner to limit dripping and run-off on structural surfaces and plants. Ventilate thoroughly before occupants are allowed to re-enter.

## HORTICULTURAL USE

**KILLS:** Aphids, Armyworms, Bees, Beetles, Bugs (Boxelder, Lace and Plant), Caterpillars (Cabbage Worms, Rose Slugs, Hornworms), Centipedes, Clover Mites, Colorado Potato Beetles, Crickets, Cucumber Beetles, Earwigs, Firebrats, Flea Beetles, Flies, Fruitworm, Fungus Gnats, Fungus Gnat Larvae, Grasshoppers, Japanese Beetles, Leafhoppers, Leafminers, Leafrollers, Loopers, Mealy bugs, Millipedes, Mosquitoes, Psylla, Rose Aphids, Rose Chafers, Scale Insects, Scorpions, Sowbugs, Spiders, Spider Mites, Stink Bugs, Tarnished Plant Bugs, Thrips, Wasps, Watermelon Beetles, Yellow Jackets and Whiteflies.

**FOR USE IN:** Florists, Garden Centers, Greenhouses, Hobby Greenhouses, Interiorscapes, Landscapes, Mushroom Houses and Nurseries.

Treat upper and lower foliage surfaces of plants uniformly.

**FOR USE INDOORS AND OUTDOORS ON, BUT NOT LIMITED TO:** African Violets, Agapanthus, Ageratum, Aluminum Plant, Alyssum, Arrowhead, Aster, Azalea, Begonia, Bird's-Nest Fern, Blue Spruce, Boston Fern, Bottlebrush, Cactus, Calendula, Camellia, Carnation, Celosia Jewel Box, Chrysanthemum, Cockscomb, Coleus, Cotoneaster, Crape Myrtle, Croton, Dahlia, Daisy, Dianthus, Dogwood, Dusty Miller, Dwarf Lilac, Escallonia, Eucalyptus, Flat Topped Sedum, Floss Flower, Friendship Plant, Gardenia, Gazania, Geranium, Gold-dust, Honeysuckle, Hydrangea, Ilex, Impatiens, Ivy, Jadeplant (Crassula), Japanese Aralia, Juniper, Leucothoe, Lilac, Malus, Maranta, Marigold, Mock-Orange, Mugho Pine, Nandina, Oleander, Orchid, Ornamental Evergreens, Osmanthus, Pachysandra, Periwinkle, Petunia, Pfitzer Juniper, Phoradendron, Pineapple Gauze, Pittosporum, Podocarpus, Primrose, Privet, Pyracantha, Raphiolepis, Rhododendron, Rose, Salvia, Sansevieria, Scarlet Sage, Snake Plant, Snapdragon, Soft Maple, Spider Plant, Star-Jasmine, Straw-flower, Swedish Ivy, Sweet Pea, Tahitian Bridal Veil, Velvetplant (Gynura), Verbena, Vinca, Wandering Jew, Wax Plant, Zinnia.

**DO NOT USE ON:** Cyclamen, Nasturtium or Brilliant Diamond Poinsettias. Do not treat vegetable gardens.

### AGRICULTURAL USE REQUIREMENTS

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 any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

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, 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 enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.

**PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:** coveralls, waterproof gloves, and shoes plus socks.

### DILUTION RATES (HORTICULTURAL USE)

**HEAVY INFESTATION:** 2 fl. oz. X-Clude per gallon of water.

**PREVENTIVE AND MAINTENANCE:** 0.5 fl. oz. X-Clude.

## PLANT SAFETY INFORMATION

This product has demonstrated excellent plant safety; however, all varieties of the plants listed have not been tested. When treating large numbers of plants of a single variety, treat a few plants and observe for phytotoxicity prior to full scale application.

Direct treatment to some open blooms may cause petal drop.

## PEST CONTROL

**KILLS AND REPELS:** Angoumois Grain Moths, Ants, Bedbugs, Bees, Boxelder Bugs, Caddflies, Carpet Beetles, Carpenter Ants, Centipedes, Cigarette Beetles, Clover Mites, Cockroaches, Confused Flour Beetles, Crickets, Dermestid Beetles, Dried Fruit Beetles, Drugstore Beetles, Earwigs, Firebrats, Fleas, Flies (Horn Flies, House Flies and Stable Flies), Fungus Gnats, Fungus Gnat Larvae, Gnats, Grain Mites, Indian Meal Moths, Mealworms, Mealybugs, Mediterranean Flour Moths, Millipedes, Mosquitoes, Moths, Red Flour Beetles, Saw-toothed Grain Beetles, Scorpions, Silverfish, Sowbugs, Spiders, Ticks, Trogoderma, Wasps, Weevils (Granary Weevils and Rice Weevils) and Yellow Jackets.

**FOR USE IN:** Airplanes<sup>1</sup>, Bakeries, Beverage Plants, Cafeteria, Canneries, Dairies, Flour Mills, Food Processing Plants, Food Storage Areas, Grain Mills, Hog Operations, Homes, Horse Barns, Hospitals and Nursing Homes (except patient rooms while occupied), Industrial Installations, Kennels, Landscapes, Loafing sheds, Meat Packing Plants, Milk Rooms, Milling Parlors, Motels, Office Buildings, Poultry Operations, Rail Cars, Residences, Restaurants, Schools, Ships, Stables, Supermarkets, Truck Trailers, Warehouses and Zoos.

<sup>1</sup> Do not use in aircraft cabins.

### NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

Keep children and pets off treated areas until spray has dried. Do not use in patient rooms or in any rooms while occupied by the elderly or the infirm. After treatment ventilate room for two hours before returning patient to room.

### DILUTION RATES (PEST CONTROL)

**CLEAN OUT:** 6 fl. oz. X-Clude per gallon of water.

**MAINTENANCE:** 2 fl. oz. X-Clude per gallon of water.

**FOGGING, MISTING AND OUTDOOR:** 1 fl. oz. X-Clude per gallon of water.

## FOR USE INDOORS

Do not use in aircraft cabins.

**CRAWLING INSECTS:** Make spot treatment and/or Crack and Crevice injections into hiding places such as cracks and crevices, moist areas, openings around pipes and sinks, under refrigerators and marionettes. Treat floors, walls, under pallets, behind shelves and drawers. Apply directly on insects in these locations where possible.

**ANTS:** Treat trails, nests, and points of entry around doors, bookcases and storage areas. Apply directly on insects in these locations where possible.

**BEDBUGS:** Take bed apart. Treat joints and channels. If hollow, such as square or round tubing, see that the interior is treated. Treat mattresses, especially tufts, folds and edges. Also treat other areas where bedbugs may be harboring.

**CARPENTER ANTS:** Locate source of infestation. Inject 5-10 seconds of product into insect tunnels and cavities.

**CARPET BEETLES:** Make applications on and under edge of floor coverings, under carpets and furniture and in closets or other localities where these insects are found. Entire carpets may be treated.

**FLEAS:** Treat infested areas such as pet beds and resting areas and areas of floor and floor covering where these pests may be present. Replace old pet bedding with clean fresh bedding after treatment.

**TICKS:** Direct X-Clude toward pet beds and resting areas. Treat adjacent cracks and crevices such as behind baseboards and edges of carpet and floor covers. Treat higher cracks such as upper door jams and window framing, behind pictures and other areas where females may crawl to lay eggs.

**STORED PRODUCT PESTS:** Make spot and/or Crack and Crevice treatment to localized areas including shelves, cupboards, walls and floors where food products suspected of being infested are stored. Remove or cover food before treatment. This treatment is supplemental to good housekeeping, since it will have no effect on insects within packaging. Infested food packaging should be destroyed.

**FLYING INSECTS:** (For use only with Mechanical and Electrical Foggers or Misters) Close all windows and doors and direct treatment upward at a rate of 5-8 seconds per 1,000 cubic feet. Disperse in all locations. Keep area closed for at least 15 minutes. Do not remain in treated area. Treat normal fly resting areas such as ceilings, screens, upper corners of the area, around windows and doors, light fixtures and other surfaces known to attract flies. Apply as a coarse wet spray. Using a mixture of 2 fl. oz. X-Clude per gallon of water apply at the rate of 1 gallon diluted product per 1,000 square foot of surface. For best results initiate treatment at the beginning of the fly season and repeat weekly during periods of heavy fly activity.

**FOOD AREAS:** Do not apply directly to food. In commercial food handling facilities, cover or remove any food, utensils, food processing equipment during application. All food contact surfaces should be covered during treatment or thoroughly cleaned before using. When using this product as a ULV treatment in food areas, do not apply while food processing is under way. Except in Federally inspected meat and poultry plants, careful Crack and Crevice application for inspection purposes is permissible at all times. Use in edible product processing areas of Federally inspected meat and poultry plants is limited to Crack and Crevice treatment only. After space treatment in meat packing plants, bakeries, and other food processing plants, wash with an acceptable detergent solution and then rinse with potable water all equipment, benches, shelves, etc., where exposed food will be handled. Treat areas for receiving, storage, preparing, processing, packaging, edible waste storage and serving.

**FOAM APPLICATION USE DIRECTIONS:** X-Clude can be converted to a foam and the foam used to treat structural voids to control insect and arthropod pests in walls, under slabs or in other void areas. Mix end-use dilution of X-Clude with manufacturer's recommended volume of foaming agent. Use the recommended rate suspension converted to a foam to achieve the desired foam expansion ratios. Verify before treatment that the foaming agent is compatible with X-Clude.