



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

January 23, 2020

Ana R. Koster
Global Regulatory Affairs Manager
LAM International Corporation
117 South Parkmont St.
Butte, MT 59701

Subject: Non-PRIA (Pesticide Registration Improvement Act) Labeling Amendment – Update
Directions for Use and add Hemp
Product Name: Mycotrol ES
EPA Registration Number: 82074-1
Application Date: 09/20/2019
OPP Decision Number: 555691

Dear Ms. Koster,

The amended labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, is acceptable.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. You must submit one (1) copy of the final printed labeling before you release this product for shipment with the new labeling. In accordance with 40 CFR § 152.130(c), you may distribute or sell this product under the previously approved labeling for 18 months from the date of this letter. After 18 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. “To distribute or sell” is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR § 152.3.

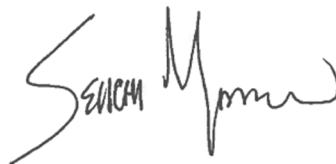
Should you wish to add/retain a reference to your company’s website on your label, then please be aware that the website becomes labeling under FIFRA and is subject to review by the U.S. Environmental Protection Agency (EPA). If the website is false or misleading, the product will be considered to be misbranded and sale or distribution of the product is unlawful under FIFRA section 12(a)(1)(E). 40 CFR § 156.10(a)(5) lists examples of statements the EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product’s label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the EPA find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA-approved registration, the website will be referred to the EPA’s Office of Enforcement and Compliance Assurance.

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Your release for shipment of this product constitutes acceptance of these terms. If these terms are not complied with, this registration will be subject to cancellation in accordance with FIFRA section 6.

If you have any questions, please contact Bibiana Oe by phone at (703) 347-8162 or via email at oe.bibiana@epa.gov

Sincerely,

A handwritten signature in black ink, appearing to read "SEICHI Murasaki". The signature is written in a cursive style with some capital letters.

Seichi Murasaki, Senior Regulatory Advisor
Microbial Pesticides Branch
Biopesticides and Pollution Prevention Division (7511P)
Office of Pesticide Programs

Enclosure: Stamped Label

MYCOTROL® ES

Emulsifiable Suspension Mycoinsecticide

{Alternate Brand Names: BotaniGard® ES, Mycotrol® ESO, BoteGHA™ ES}

{All of the following front panel bursts are optional; one or more may be used}

For Control of Whiteflies, Aphids, Thrips, Psyllids, Mealybugs, Leafhoppers, Weevils, Plant Bugs, Borers and Leaf-feeding Insects on Listed Food Crops, Forestry, and Orchard Crops

For Control of Grasshoppers, Mormon Crickets, Locusts and Beetles on Rangeland, Improved Pastures, and Listed Food Crops

For Control of Whiteflies, Aphids, Thrips, Psyllids, Weevils, and Mealybugs on Listed Food and Nonfood Crops Grown Outdoors, in Indoor/Outdoor Nurseries, Greenhouses, Shadehouses, Commercial Landscapes, and Interiorscapes, and on Turf

ACTIVE INGREDIENT:

Beauveria bassiana strain GHA..... 11.3%*

INERT INGREDIENTS: 88.7%**

Total: 100.0%

*Contains a minimum of 1×10^{13} viable spores per quart of product

**Contains petroleum distillates.

KEEP OUT OF REACH OF CHILDREN CAUTION

See [additional] [precautionary statements] [first aid statements] [and] [directions for use] [on [side][back][other] panel] {or} [in attached booklet].

[See [side][back][inside][other] panel for [additional] [first aid] [precautionary] statements] [and] [directions for use.]

[Refer to inside of label booklet for additional precautionary information and Directions for Use including First Aid and Storage and Disposal.]

Store between 40°F and 85°F

Shake Well

MANUFACTURED BY:

LAM INTERNATIONAL CORPORATION
117 South Parkmont; PO Box 4109
Butte, MT 59702



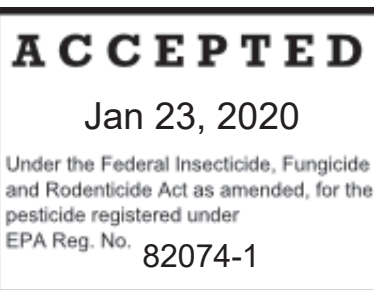
EPA Reg. No.: 82074-1

EPA Est. No.: _____

Lot Number: _____

Net Contents: _____

[Best If Used By: [insert date up to 1 yr from date of manufacture]]



{ } Symbolizes explanatory text to the reviewer
[] Indicates optional text

FIRST AID	
If in eyes	<ul style="list-style-type: none"> • 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 poison control center or doctor for treatment advice.
If on skin or clothing	<ul style="list-style-type: none"> • 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 inhaled	<ul style="list-style-type: none"> • Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. • Call a poison control center or doctor for further treatment advice.
If swallowed	<ul style="list-style-type: none"> • Immediately call a poison control center or doctor. • Do not induce vomiting unless told to do so by the poison control center or doctor. • Do not give any liquid to the person. • Do not give anything by mouth to an unconscious person.
HOT LINE NUMBER	
Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact 1-800-222-1222 for emergency medical treatment information.	
NOTE TO PHYSICIAN	
Contains petroleum distillate. Vomiting may cause aspiration pneumonia.	

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

CAUTION: Causes moderate eye irritation. Harmful if absorbed through the skin, inhaled or swallowed. Avoid contact with skin, eyes, or clothing. Avoid breathing spray mist. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Protective eyewear (goggles, face shield, or shielded safety glasses)
- Chemical-resistant gloves such as nitrile rubber or butyl rubber
- Shoes plus socks
- Mixers/loaders and applicators must wear a minimum of a NIOSH-approved particulate filtering facepiece respirator with any R or P filter; OR a NIOSH-approved elastomeric particulate respirator with any R or P filter; OR a NIOSH-approved powered air-purifying respirator with an HE filter. Repeated exposure to high concentrations of microbial proteins can cause allergic sensitization.

Follow manufacturer’s instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

USER SAFETY RECOMMENDATIONS

Users should:

- Remove clothing/PPE 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 product is potentially pathogenic to honey bees. Avoid applying to areas where honey bees are actively foraging or around bee hives. This product may be toxic to fish. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas.

For terrestrial uses: 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 when disposing of equipment washwater or rinsate.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. 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 State or Tribal agency responsible for pesticide regulation.

May be applied aerially. Suitable for use with ultra low-volume application equipment.

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) and restricted-entry interval. The requirements in this box apply only 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 4 hours unless wearing the appropriate personal protective equipment.

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
- Chemical-resistant gloves such as nitrile rubber butyl rubber
- Shoes plus socks
- Protective eyewear (goggles, face shield, or shielded safety glasses)

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 unprotected persons out of treated areas until sprays have dried.

PRODUCT INFORMATION

Mycotrol® ES contains live spores of the naturally-occurring fungus, *Beauveria bassiana* Strain GHA. This fungus is a naturally-occurring disease organism of corn borers and other insects. Spores are alive and may be harmed by storage at high temperatures or contact with water for more than 24 hours. See STORAGE AND DISPOSAL instructions on the container label.

MODE OF ACTION AND APPLICATION TIMING

Mycotrol® ES acts by contact. Fungal spores attach to the insect pest, germinate, and penetrate through the insect cuticle. The fungus then grows rapidly with the insect pest, causing mortality.

Begin treatment of crops at the first appearance of the insect pest. Typically, it takes 7-10 days after the first spray to see control. Application rates, frequency, spray coverage and insect numbers impact the speed at which acceptable control is achieved. Mycotrol® ES is most effective when used early, before high insect populations develop. Reapply as necessary under a pest management program that includes close scouting. Intense pest outbreaks may require combination of Mycotrol® ES with a compatible insecticide.

Beauveria bassiana occurs naturally in close association with corn plants where it infects corn borers. When Mycotrol® ES is applied to corn early in the season, the fungus persists in association with corn plants providing season long reduction in corn borer damage.

Contact LAM International Corporation or your distributor for specific information on compatible insecticides.

PRE-HARVEST INTERVAL

Pre-harvest interval for Mycotrol® ES is zero (0) days. Mycotrol® ES can be applied up to the day of harvest.

INSECTS FOR WHICH MYCOTROL® ES MAY BE USED				
(*Not for use in California)				
ACARI				
		Two-spotted spider mite*		
APHIDS				
Bean aphid	Cabbage aphid	Cotton aphid	Cowpea aphid	Green peach aphid
Greenbug	Hop aphid	Melon aphid	Pea aphid	Potato aphid
Rose aphid	Russian wheat aphid	Spotted alfalfa aphid		
FOLIAGE-FEEDING LEPIDOPTERA				
Cabbage looper	Diamondback moth	Fall armyworm*	Imported cabbage worm	
LEAF-FEEDING BEETLES				
Bean leaf beetle	Cereal leaf beetle	Colorado potato beetle	Corn rootworm	Cucumber beetles
Elm leaf beetle	Flea beetles			
LEAFHOPPERS AND PLANTHOPPERS				
Grape leafhopper	Leafhoppers	Planthoppers	Potato leafhopper	Rice delphacid*
Variegated grape leafhopper	Virginia creeper leafhopper			
MEALYBUGS				
Buffalo grass mealybug	Citrus cocci*	Citrus mealybug	Grape mealybug	Longtailed mealybug
ORTHOPTERA				
Grasshoppers	Locusts	Mole crickets	Mormon crickets	
PLANT BUGS (HETEROPTERA)				
Chinch bugs	Fleahoppers	Lace bugs	Lygus bugs	Seed bugs
Stink bugs	Tarnished plant bug			
PSYLLIDS				
	Pear psylla	Potato psylla	Tomato psylla	
SCARAB BEETLES				
	Ataenius	Green June beetle	White grubs	
STEM-BORING LEPIDOPTERA				
European corn borer	Lesser cornstalk borer	Rice stem borer	Southwestern corn borer	Sugarcane borer
THRIPS				
Cuban laurel thrips	Greenhouse thrips	Onion thrips	Pear thrips	Potato thrips
<i>Thrips palmi</i>	Western flower thrips			

WEEVILS				
Alfalfa weevil	Apple curculio	Billbugs	Black vine weevil	Citrus root weevil
Coffee berry borer*	Cotton boll weevil	Fuller rose weevil	Palm weevil*	Pecan weevil
Pepper weevil	Plantain weevil*	Plum curculio	Root weevil	Rose curculio
Strawberry root weevil	Sweet potato weevil	Vegetable weevil		
WHITEFLY				
Banded-winged whitefly	Cassava whitefly*	Citrus blackfly	Citrus whitefly	Giant whitefly
Greenhouse whitefly	Silverleaf whitefly	Sweet potato whitefly	Tobacco whitefly	

CROPS ON WHICH MYCOTROL® ES MAY BE USED				
FOOD CROPS				
FRUITS AND BERRIES				
Apple	Apricot	Avocado	Banana	Blackberry
Blueberry	Boysenberry	Calamondin	Carob	Cherimoya
Cherry (sweet/sour)	Chironja	Citrus citron	Citrus hybrids	Coffee
Crabapple	Cranberry	Currant	Dates	Dewberry
Durian	Elderberry	Fejoa	Fig (fruiting)	Gooseberry
Grape (table, raisin, wine)	Grapefruit	Guava	Huckleberry	Kiwi
Kumquat	Lemon	Lime	Loganberry	Loquat
Lychee	Mandarin	Mango	Marionberry	Nectarine
Olallie berry	Olives (all varieties)	Orange	Oriental pear	Papaya
Passion fruit	Peach	Pear	Persimmon	Pineapple
Plum	Pomegranate	Prune	Pummelo	Quihuna
Quince	Raspberry	Strawberry	Tangelo	Tangerine
Youngberry				
GRAIN, ROOT & TUBER, AND OTHER CROPS				
Alfalfa	Barley	Buckwheat	Canola	Clover
Corn, field	Corn, sweet	Corn, pop	Corn, silage	Corn, seed
Cotton	Flax	Hay	Hemp	Hops
Jojoba	Millet	Oats	Peanut	Potato
Rape	Rice	Rye	Safflower	Sorghum
Soybeans	Sugar beets	Sugarcane	Sunflower	Sweet potato
Tea (black/green)	Teosinte	Triticale	Wheat	Wild rice

{ } Symbolizes explanatory text to the reviewer
[] Indicates optional text

HERBS AND SPICES				
Allspice	Anise	Balm	Basil	Caraway
Borage	Burnet	Chamomile	Caperbud	Cardamom
Catnip	Celery seed	Chervil	Chicory	Chives
Cilantro	Cinnamon	Clary	Coriander	Costmary
Cumin	Curry leaf	Dill	Fennel	Fenugreek
Ginseng	Horehound	Hyssop	Mace	Marjoram
Mint	Mustard	Nasturtium	Nutmeg	Oregano
Paprika	Pennyroyal	Pepper (black/white)	Peppermint	Rosemary
Rue	Sage	Saffron	Savory	Sesame
Spearmint	Sweet bay leaf	Tansy	Tarragon	Thyme
Wintergreen	Woodruff	Wormwood		
TREE NUTS				
Almond	Beech nut	Brazil nut	Butternut	Cashew
Chestnut	Chinquapin	Filbert	Hickory nut	Macadamia nut
Pecan	Pistachio	Walnut		
VEGETABLES				
Acerola	Arracacha	Arrowroot	Artichoke	Arugula
Asparagus	Atermoya	Balsam pear	Bamboo shoots	Beans (all varieties)
Beet	Black-eyed peas	Bok choy	Broccoli	Broccoli raab
Brussels sprouts	Burdock	Cabbage	Cantaloupe	Carambols
Carrots	Casaba melons	Cassava	Catjang	Cauliflower
Celeriac	Celery	Celtuce	Chayote	Chervil
Chickpeas	Chicory	Chinese broccoli	Chinese cabbage	Chinese gai lon
Chinese long beans	Chinese mustard	Chinese spinach	Chinese wax gourd	Chrysanthemum (edible)
Chufa	Cilantro	Citron melon	Collards	Corn salad
Crenshaw melon	Cress	Cucumber	Dandelion	Dasheen
Daikon	Dock	Edamame	Eggplant	Endive
Escarole	Fennel	Garlic	Gherkin	Ginger
Golden pershaw melon	Gourds (edible)	Groundcherry	Guar	Honey balls
Honeydew melon	Horseradish	Kale	Kohlrabi	Leek
Lentils	Leren	Lettuce	Mango melon	Muskmelon hybrids/varieties
Mustard greens	New Zealand spinach	Okra	Onion	Orach
Parsley	Parsnip	Peas (all varieties)	Pepinos	Pepper (all varieties)
Persian melon	Pimento (all varieties)	Pineapple melon	Potato	Pumpkin
Purslane	Radish	Radicchio	Rambutan	Rape greens
Rapini	Rhubarb	Rutabaga	Salsify	Shallot

Snake melon	Soybeans	Spinach	Squash (summer/winter)	Sugar beet
Sweet potato	Swiss chard	Tanier	Tomatillo	Tomatoes
Turmeric	Turnip	Watermelon	Yam	Zucchini
NONFOOD CROPS				
ORNAMENTALS (including flowers, flowering and foliage plants, bedding plants, groundcovers, shrubs, vines, evergreens, and trees)				
African lily	African violet	Ageratum	Alyssum	Anthurium
Arborvitae	Ash	Asparagus sprengeri	Aster	Atlas cedar
Azalea	Bald cypress	Balsam fir	Bamboo	Barberry
Beech	Begonia	Birch	Boston fern	Bougainvillea
Boxwood	Bridal veil	Cacti	Caladium	Calceolaria
Calendula	Calla lily	Camella	Camellias	Carissa
Carnation	Ceanothus	Celosia	Chenille plant	Cherro
Christmas cactus	Chrysanthemum	Cineraria	Cleyera	Coleus
Cordyline	Corylus avellana	Cotoneaster	Cottonwood	Crabapple
Crepe myrtle	Crossandra	Croton	Cyclamen	Cypress
Daffodil	Dahlia	Daisy	Delphinium	Deodar cedar
Dichondra	Dieffenbachia	Dogwood	Douglas fir	Dracaena
Dumb cane	Dusty Miller	Elm	Eucalyptus	Ferns
Ficus	Fig (nonfruiting)	Firethorn	Fittonia	Floss flower
Foliage plants	Forsythia	Freesia	Fuchsia	Gardenia
Geranium	Gerbera	Gerber daisy	Gladiolus	Gloxinia
Grape	Gynura	Gypsophila	Hackberry	Hawthorn
Hedera	Hemlock	Hibiscus	Hickory	Holly
Honeysuckle	Hop bush	Horse chestnut	Hyacinth	Hydrangea
Iceplant	Imitari	Impatiens	India hawthorn	Iris
Ivy	Japanese aucuba	Japanese barberry	Japanese boxwood	Japanese spindle tree
Japanese yew	Juniper	Kalanchoe	Lantana	Larch
Larkspur	Laurel	Leasianthus	Leatherleaf fern	Linden
Lilac	Lily	Lithodora	Lobelia	Loquat
Magnolia	Mandevilla	Maple	Marigold	Mediterranean fan palm
Mesembryanthemum	Mimosa	Monster	Mother-in-law plant	Mountain laurel
Myrtle	Nandina	Narcissus	Oak	Oleander
Olive	Orchid	Ornamental kale	Pachysandra	Palms
Pansy	Parasol pine	Pelargonium	Peony	Petunia
Philodendron	Phlox	Photinia	Piggyback plant	Pine
Pink	Pittosporum	Planetree	Podocarpus	Poinsettia
Poplar	Pothos ivy	Prayer plant	Primrose	Privet
Pteris fern	Pyracantha	Rhododendron	Rose	Rubber plant
Salvia	Scabiosa	Schefflera	Schlumbergera	Sedum

Shrub verbena	Shrubby cinquefoil	Smoke tree	Snapdragon	Spathiphyllum
Spruce	Stock	Sweet gum	Sweet pea	Sweet William
Sycamore	Syngonium	Taxus	Texas sage	Tulip
Tulip tree	Verbena	Viburnum	Vinca	Virginia creeper
Walnut	Wandering Jew	Willow	Yew	Yucca
Zinnia				
FORESTRY (including)				
	Trees and conifers	Tree and forest seedlings	Woody ornamentals	
TURF (including lawn and sod turf grasses)				
Bermuda grass	Blue grass	Fescue	St. Augustine grass	Zoysia grass

MIXING AND APPLICATION

SHAKE WELL BEFORE USING. Apply Mycotrol® ES using hand-held, ground and/or aerial spray equipment; low-volume application equipment and chemigation (**follow specific directions for chemigation [in this booklet]**). Mycotrol® ES contains emulsifiers and mixes readily in water. Mix well by external mixing, in-tank mixing, or pump circulation to form an emulsion. To mix, fill spray tank with half the desired amount of water and start agitation. Shake Mycotrol® ES to suspend spores then with agitator running, slowly add desired quantity of Mycotrol® ES to spray tank. Add remainder of desired amount of water. Continue agitation throughout loading and spraying. Triple rinse empty Mycotrol® ES container with water and add rinse water to spray tank. For best results, continue agitation during spraying. Do not mix more Mycotrol® ES than needed for that day. Do not mix Mycotrol® ES the day before application. Spores will die if left overnight or longer in the spray tank.

Contact your dealer or LAM International Corporation for instructions about specific crops, insects, and spray equipment.

APPLICATION FREQUENCY

Apply Mycotrol® ES at 5 – 10 day intervals. High insect populations, especially whitefly and aphids, may require application at 2-5 day intervals. Repeat applications for as long as pest pressure persists. There is no limit on the number of applications or total amount of Mycotrol® ES which can be applied in one season.

PHYTOTOXICITY

Mycotrol® ES has shown plant safety but has not been tested on all plant varieties or in all tank mixes. Use caution when making applications to open blooms, especially on varieties known to be sensitive. Test Mycotrol® ES on a small number of plants to check for potential damage before applying to larger number of plants. **Do not apply on poinsettias after bract formation.**

TANK MIX COMPATIBILITY

Mycotrol® ES is physically and biologically compatible with a wide range of insecticides and spray adjuvants. It is compatible with some fungicides in tank mixtures. Fungicides may kill the spores. Do not exceed label dosage rates. Observe the most restrictive of the labeling limitations and precautions of all products used in mixtures.

Adjuvants: Mycotrol® ES is designed for application without additional wetting agents and spreaders. If adjuvants are needed for some other reason, contact your dealer or LAM International Corporation for specific instructions. Some wetting agents and spreaders kill the spores, the active ingredient in Mycotrol® ES, or contribute to poor mixing and spray problems.

Compatibility With Chemical Insecticides: Mycotrol® ES is compatible with most chemical insecticides. However, some insecticide formulations can kill the fungal spores, the active ingredient in Mycotrol® ES. If you are going to use Mycotrol® ES in combination with other pesticides, contact your dealer or LAM International Corporation for specific information. In all cases, pesticides must be used in accordance with their labels.

Compatibility With Fungicides: Mycotrol® ES is compatible in tank mix with some fungicides. Contact LAM International or your dealer for specific instructions on using Mycotrol® ES with fungicides.

TO CONTROL LABELLED INSECTS ON FOOD AND NONFOOD CROPS, GROWN IN GREENHOUSES AND SHADEHOUSES, INDOOR/OUTDOOR NURSERY PLANTS, LANDSCAPES (INCLUDING TURF, SOD, AND ORNAMENTAL PLANTS), AND INTERIORSCAPES

High volume sprays: Apply at a rate of up to 3 quarts of Mycotrol® ES per 100 gallons of spray volume in high volume sprays (2-6 tsp. or 0.33 - 1.00 fluid ounces of Mycotrol® ES per gallon of spray volume). Mix well by external mixing, in-tank mixing, or pump circulation to form emulsion. **SPRAY TO WET, BUT AVOID RUNOFF.**

Application Rates (Product/100 Gallons of Spray Volume)

Whitefly, Mealybugs, Aphids ½ – 1 qt
Thrips.....1 – 2 qt
Other labeled insects.....½ – 2 qt (depending on insect population and foliage density)

Low volume sprays: Apply at a rate equivalent to area coverage of high volume spray. This would normally be ½ – 2 qt of Mycotrol® ES for 5,000 to 20,000 square feet. Follow spray equipment manufacturer's instructions for final spray volume to obtain adequate coverage. **DO NOT APPLY THROUGH A THERMAL PULSE FOGGER.**

Contact your dealer or LAM International Corporation for specific instructions.

Cuttings Dip

Applications of Mycotrol® ES can be used as pre-plant dips for cuttings as noted below. To prepare dip solution, thoroughly mix ½ – 1 fl. oz. Mycotrol® ES per gallon of water (5 – 10 fl. oz. per 10 gallons water). Prepare only as much dip solution as can be used in one day. Do not use dip solution for more than one day. Spores in water for more than 24 hours will die. Dip a small number of plants in dip solution and observe for plant damage before using dip treatment. Do not use dips if there is any visible damage to test plants.

Unrooted Cuttings

Dip the unrooted cuttings in the Mycotrol® ES solution just long enough to wet all surfaces, then removing to a flat area and allow cuttings to dry. For water-sensitive varieties, cover to protect until dry. Then proceed with normal planting and misting.

Rooted Cuttings

Holding by the roots, briefly dip in the Mycotrol® ES solution just long enough to wet all surfaces, including leaves and stems. Once removed from the dip solution, cuttings can be potted, but allow plants to dry before watering.

TO CONTROL LABELLED INSECTS ON FOOD CROPS (EXCEPT CORN) GROWN OUTDOORS, RANGELAND, IMPROVED PASTURES, AND FORESTRY

Ground Application

Apply ¼ to 1 quart Mycotrol® ES/acre. Apply in sufficient water to thoroughly cover foliage infested with insects, typically 5 to 100 gallons of water per acre. Final spray volume may be up to 400 gallons per acre. Water volume depends on spray equipment, crop canopy and target pest.
SPRAY TO WET, BUT AVOID RUNOFF.

Apply Mycotrol® ES up to a maximum of 3 quarts per acre for extreme insect pressure or dense foliage.

Aerial Application

Apply ¼ – 1 quart Mycotrol® ES/acre. Apply in sufficient water to thoroughly cover foliage infested with insects. For best results, apply in 5 – 10 gallons water per acre. Do not apply in less than 2 gallons water per acre.

Leaf-Feeding Lepidoptera

For use against diamondback moth, imported cabbage worm and cabbage looper; Mycotrol® ES can be used alone or in a tank mix with *Bacillus thuringiensis* (vars. *kurstaki*, *aizawai*) to control these insects in accordance with the more restrictive of label limitations and precautions. Do not exceed label dosage rates. This product cannot be mixed with any product containing a label prohibition against such mixing. The tank mix provides control of later instars (3rd to 4th) and aids in the management of resistant populations. For additional information, contact LAM International Corporation.

Application Rates (Product/Acre)

Diamondback moth	½ – 1 qt
Imported cabbage worm	½ – 1 qt
Cabbage looper.....	1 qt

Leaf-Feeding Beetles

For use against Colorado potato beetle; Mycotrol® ES can be used alone or in a tank mix with *Bacillus thuringiensis* (vars. *tenebrionis*) to control Colorado potato beetle in accordance with the more restrictive of label limitations and precautions. Do not exceed label dosage rates. This product cannot be mixed with any product containing a label prohibition against such mixing. The tank mix provides control and aids in the management of resistant populations. For additional information, contact LAM International Corporation.

Application Rates (Product/Acre)

Colorado potato beetle	½ – 1 qt
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CORN

Dosage Rates for Corn

Apply 4 fluid ounces of Mycotrol® ES per acre (2 ½ gallons of Mycotrol® ES per 80 acres).

Application Timing for Corn

Apply to corn when plants are 12-16 inches high (V6-V8 stage). A single application is sufficient to establish *Beauveria bassiana* association with corn plants. A second application prior to second generation corn borer flight may further reduce damage from corn borers.

Ground Application for Corn

Apply with sufficient water to provide thorough coverage. Direct spray over row to obtain optimal coverage in whorl and leaf axils. The amount of water will depend on spray equipment, crop size, and local conditions. Generally, a minimum of 10 gallons spray volume per acre is necessary to obtain adequate coverage.

Aerial Application for Corn

Apply with sufficient water to provide thorough coverage. Use at least 2 gallons spray volume per acre; 5 – 10 gallons/acre will generally improve coverage.

TO TREAT SOIL-DWELLING INSECTS ON TURF, ORCHARDS, AND CONTAINER ORNAMENTALS

For most soil applications, apply 2-8 fluid ounces of Mycotrol® ES per 1,000 square feet. For difficult to control soil pests, especially citrus root weevil (*Diaprepes abbreviatus*), apply Mycotrol® ES at the upper rate (8 fl. oz. of Mycotrol® ES per 1,000 square feet).

Do not apply to water-saturated soil. Apply Mycotrol® ES in enough water to ensure good coverage of treated area, at least one gallon of water per 1,000 square feet. Irrigate treated area after application to disperse Mycotrol® ES into soil.

CHEMIGATION

Apply Mycotrol® ES only through the following types of chemigation systems: overhead sprinkler systems including center pivot, lateral move, end tow, side (wheel) roll, traveler, big gun, solid set, or hand move; or drip (trickle and microjet) systems. Do not apply this product through any other type of irrigation system.

Apply Mycotrol® ES undiluted (neat) or diluted for injection flow rate and irrigation volume. For best results, use one part water to one part Mycotrol® ES. If Mycotrol® ES is diluted, supply tank must be agitated to thoroughly mix Mycotrol® ES in water. Add water to supply tank, start agitation, and then add Mycotrol® ES. Continue supply tank agitation during chemigation cycle to maintain uniform emulsion. Supply tank agitation is not necessary if Mycotrol® ES is used without dilution. Shake well to suspend spores before adding Mycotrol® ES to supply tank. Use contents of supply tank within one day.

Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from nonuniform distribution of treated water.

If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts.

Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place.

A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

Sprinkler Chemigation

Use ½ to 1 quart Mycotrol® ES per acre for most sprinkler chemigation applications. Apply up to 3 quarts of Mycotrol® ES per acre for high insect pressure or dense foliage. For corn, apply at a rate of 4 fluid ounces of Mycotrol® ES per acre.

For best results, time Mycotrol® ES chemigation with the end of the irrigation water application. Time injection duration to apply Mycotrol® ES in the minimum irrigation volume necessary to achieve uniform coverage immediately prior to shutting off irrigation water. Excessive irrigation during and after chemigation will wash active ingredient (spores) off foliage, reducing effectiveness.

With center pivot or other continuous move equipment, apply Mycotrol® ES in ¼ to ½ inches of water per acre.

With stationary sets, wheel lines, solid sets or hand move sprinklers, apply Mycotrol® ES during the last 20-30 minutes of the set.

Supply tank agitation is necessary if Mycotrol® ES is diluted in water before injection into irrigation system. Tank agitation is not necessary if Mycotrol® ES is used without dilution provided the product is shaken well to resuspend spores before adding the tank and those contents of tank are used the same day.

The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contaminated from backflow.

The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.

The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.

The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.

Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

Do not apply when wind speed favors drift beyond the area intended for treatment.

Drip (Trickle) and Microjet Chemigation

Use 1½ to 3 quarts of Mycotrol® ES per acre for most drip or microjet chemigation. For difficult to control pests, especially citrus root weevil (*Diaprepes abbreviatus*), apply Mycotrol® ES at up to 8 fl. oz. of Mycotrol® ES per 1,000 square feet.

Apply Mycotrol® ES continuously for the duration of irrigation water application to achieve uniform distribution and penetration of active ingredient (spores) in the soil.

Supply tank agitation is necessary if Mycotrol® ES is diluted in water before injection into irrigation system. Supply tank agitation is not necessary if Mycotrol® ES is used without dilution provided the product is shaken well to resuspend spores before adding to the supply tank and that contents of supply tank are used the same day.

The system must contain a function check valve, vacuum relief valve and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.

The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.

The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.

The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.

Systems must use a metering pump such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

Chemigation Systems Connected to Public Water Systems

Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.

Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone, backflow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.

The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.

The pesticide injection pipeline must contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected.

Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

Do not apply when wind speed favors drift beyond the area intended for treatment.

Supply tank agitation is necessary if Mycotrol® ES is diluted in water before injection into irrigation system. Spray tank agitation is not necessary if Mycotrol® ES is used without dilution

provided the product is resuspended before adding to the other spray tank and that content of spray tank are used the same day.

For best results in foliar applications by sprinkler, time Mycotrol® ES chemigation with the end of irrigation water application. Time injection duration to apply Mycotrol® ES in the minimum irrigation volume necessary to achieve uniform coverage immediately prior to shutting off irrigation water. Excessive overhead irrigation during and after chemigation will wash active ingredient (spores) off foliage, reducing effectiveness.

For best results in soil applications by drip trickle, apply Mycotrol® ES continuously for the duration of irrigation water application. Apply sufficient volume of water to carry Mycotrol® ES into proximity of the target pests.

SPRAY DRIFT LABELING

The Agency has been working with the Spray Drift Task Force (made up of U.S. pesticide registrants), EPA Regional Offices, and State Lead Agencies for pesticide regulation to develop the best spray drift management practices. The Agency is now requiring the interim measures specified below for all products that can be applied by aircraft. Actions taken to reduce spray drift will help mitigate contamination of surface water, reduce risk to estuarine species, and reduce harm to nontarget crops and plants. The interim Spray Drift Labeling Requirements for aerial application are as follows:

Spray Drift for Aerial Application

Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment-and-weather-related factors determines the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions. The following drift management requirements must be followed to avoid off-target drift movement from aerial applications to agricultural field crops. These requirements do not apply to forestry applications, public health uses or to applications using dry formulations.

1. The distance of the outer most nozzles on the boom must not exceed $\frac{3}{4}$ the length of the wingspan or rotor.
2. Nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45 degrees.

Where states have more stringent regulations, they should be observed.

The applicator should be familiar with and take into account the information covered in the *Aerial Drift Reduction Advisory Information*.

Information on Droplet Size

The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. Applying larger droplets reduces drift potential, but will not prevent drift if applications are made improperly, or under unfavorable environmental conditions (see Wind, Temperature and Humidity, and Temperature Inversions).

Controlling Droplet Size

- Volume: Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.
- Pressure: Do not exceed the nozzle manufacturer's recommended pressures. For many nozzle types lower pressure produces larger droplets. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.

- Number of Nozzles: Use the minimum number of nozzles that provide uniform coverage.
- Nozzle Orientation: Orienting nozzles so that the spray is released parallel to the airstream produces larger droplets than other orientations and is the recommended practice. Significant deflection from the horizontal will reduce droplet size and increase drift potential.
- Nozzle Type: Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce the largest droplets and the lowest drift.

Boom Length

For some use patterns, reducing the effective boom length to less than $\frac{3}{4}$ of the wingspan or rotor length may further reduce drift without reducing swath width.

Application Height

Applications should not be made at a height greater than 10 feet above the top of the largest plants unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.

Swath Adjustment

When applications are made with a cross-wind, the swath will be displaced downwind. Therefore, on the up and downwind edges of the field, the applicator must compensate for this displacement by adjusting the path of the aircraft upwind. Swath adjustment distance should increase, with increasing drift potential (higher wind, smaller drops, etc.).

Wind

Drift potential is lowest between wind speeds of 2-10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given speed. Application should be avoided below 2 mph due to variable wind direction and high inversion potential. NOTE: Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect drift.

Temperature and Humidity

When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

Temperature Inversions

Applications should not occur during a temperature inversion because drift potential is high. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upwards and rapidly dissipates indicates good vertical air mixing.

Sensitive Areas

The pesticide should only be applied when the potential for drift to adjacent sensitive areas (e.g. residential areas, bodies of water, known habitat for threatened or endangered species, non-target crops) is minimal (e.g. when wind is blowing away from the sensitive areas).

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE

Store in a cool, dry place. Avoid storage below freezing temperatures or above 85°F. Mycotrol® ES stability decreases with time at elevated temperatures above 85°F. Tightly reclose the container of unused product. Do not contaminate unused product with water.

PESTICIDE DISPOSAL

To avoid wastes, use all material in this container by application according to label directions. If wastes cannot be avoided, offer remaining product to a waste disposal facility or pesticide disposal program (often such programs are run by state or local governments or by industry).

CONTAINER DISPOSAL

Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration. Do not burn, unless allowed by state and local ordinances.

WARRANTY AND DISCLAIMER

Mycotrol® ES conforms to the description set forth on this label and is reasonably fit for the purposes described herein when used according to the label directions and specified conditions. The manufacturer disclaims any and all other express or implied warranties of merchantability and fitness for particular purpose. Buyers and users shall assume all risk and responsibility for potential loss or damage if this product is used, stored, handled, or applied in a manner inconsistent with this labeling. To the extent permitted by law, manufacturer shall not be liable for more than the purchase price for the quantity involved including incidental, consequential or special damages.

Optional Label Text

{The following items may or may not appear on the final printed labeling}

- [Exclusively] distributed by: [name of distributor] [address of distributor] [company logo of distributor] {representative company logos include}



- {Images of crops where product may be used}



- **[Best If Used By:** [insert date up to 1 yr from date of manufacture]]
- {Alternate referral statements that are appropriate for different types of label configurations and/or packaging as outlined on page 1 of this draft label}