

For use in controlling Whitefly, Aphids, Thrips, Psyllids, and Mealybugs, Leafhoppers, Weevils, Plant Bugs, Borers and Leaf-feeding Insects in Field, Agronomic, Vegetable and Orchard Crops; Grasshoppers, Mormon Crickets, Locusts and Beetles in Rangeland, Improved Pastures and Agronomic Crops; Whitefly, Aphids, Thrips, Psyllids and Mealybugs in Vegetables and Ornamentals grown in Indoor/Outdoor Nursery, Greenhouse, and Shadehouse.

Inert Ingredients: 89.1% \*Based on the weight estimate of  $4.78 \times 10^{-12}$  grams per spore. Mycotrol O contains  $2 \times 10^{10}$  viable spores per gram of active ingredient.

# KEEP OUT OF THE REACH OF CHILDREN

Store between 40°F and 85°F

# CAUTION

**SHAKE WELL** 

See additional precautionary statements and first aid statements in attached booklet.



#### LAVERLAM INTERNATIONAL CORPORATION

117 S. Parkmont; P.O. Box 4109-Butte, MT 59702; Ph: (406)782-2386; Fax: (406) 782-9912 EPA Registration Number 82074-3 EPA Establishment Number 65626-MT-02 Edition:

Net Contents: ☐1 Quart ☐1 Gallon ☐2 Gallon Lot No .:

**Expiration Date:** 



Si Usted no entiende la etiqueta, busque a alguien para que se la explique a Usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

# PRECAUTIONARY STATEMENTS

# HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION: Causes moderate eve irritation. Harmful if swallowed, inhaled, or absorbed through the skin. Avoid contact with eyes, skin 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. Remove contaminated clothing and wash clothing before reuse.

FIRST AID		
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.	
	Call poison control center or doctor for treatment advice.	
If	Call poison control center or doctor immediately for	
swallowed	treatment advice.	
	Have person sip a glass of water if able to swallow.	
	Do not induce vomiting unless told to do so by the poison	
	control center or doctor.	
	Do not give anything by mouth to an unconscious person.	
If inhaled	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 on skin	Take off contaminated clothing.	
or clothing	• Rinse skin immediately with plenty of water for 15 – 20	
	minutes.	
	Call a poison control center or doctor for treatment advice.	
HOW I THE MINISTER		

## 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.

## PERSONAL PROTECTIVE EOUIPMENT (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Waterproof gloves
- Shoes plus socks

Mixers/loaders and applicators must wear a dust/mist filtering respirator meeting NIOSH standards of at least N-95, R-95 or P-95. 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 RECOMMENTATIONS

#### 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. 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 by cleaning of equipment or disposal of equipment wash waters or rinsate. Do not discharge into lakes, streams, ponds, or public waterways.

## **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.

For use in controlling Whitefly, Aphids, Thrips, Psyllids, Mealybugs, Leafhoppers, Weevils, Plant Bugs, Borers and Leaf-feeding Insects in Field, Agronomic, Vegetable and Orchard Crops; Grasshoppers, Mormon Crickets, Locusts and Beetles in Rangeland, Improved Pastures and Agronomic Crops; Whitefly, Aphids, Thrips, Psyllids and Mealybugs in Vegetables and Ornamentals grown in Indoor/Outdoor Nursery, Greenhouse and Shadehouse. 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 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 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
- Waterproof gloves
- Shoes plus socks
- Dust/mist filtering respirator meeting NIOSH standards of at least N-95, R-95 or P-95.

# NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses 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.

Edition 080<del>226</del>

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.

Keep unprotected persons out of treated areas until sprays have dried.

#### **GENERAL INFORMATION**

Mycotrol O contains live spores of the naturally occurring fungus, *Beauveria bassiana* Strain GHA. 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

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 O 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 O with other control methods.

# PRE-HARVEST INTERVAL

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

# INSECTS FOR WHICH MYCOTROL O MAY BE USED

**ORTHOPTERA** Grasshoppers, Locusts, Mole Crickets Mormon Crickets

WHITEFLY Banded-winged Whitefly, Citrus Blackfly, Citrus Whitefly, Giant Whitefly, Greenhouse Whitefly, Silverleaf Whitefly, Sweet Potato Whitefly (aka Tobacco Whitefly)

APHIDS Bean Aphid, Cabbage Aphid, Cowpea Aphid, Green Peach Aphid, Greenbug, Hop Aphid, Melon/Cotton Aphid, Pea Aphid, Potato Aphid, Rose Aphid, Russian Wheat Aphid, Spotted Alfalfa Aphid

**THRIPS** Greenhouse Thrips, Cuban Laurel Thrips, Pear Thrips, Potato/Onion Thrips, *Thrips palmi*, Western Flower Thrips

**PSYLLIDS** Pear Psylla, Tomato/Potato Psylla

<u>MEALYBUGS</u> Citrus Mealybug, Buffalo Grass Mealybug, Grape Mealybug, Longtailed Mealybug

<u>LEAFHOPPERS AND PLANT HOPPERS</u> Grape Leafhopper, Leafhoppers, Planthoppers, Potato Leafhopper, Variegated Grape Leafhopper, Virginia Creeper Leafhopper

STEM-BORING LEPIDOPTERA Cranberry Girdler, European Corn Borer, Lesser Cornstalk Borer, Rice Stem Borer, Southwestern Corn Borer, Sugar Cane Borer

**FOLIAGE-FEEDING LEPIDOPTERA** Cabbage Looper, Diamondback Moth, Imported Cabbage Worm

<u>LEAF-FEEDING BEETLES</u> Bean Leaf Beetle, Cereal Leaf Beetle, Colorado Potato Beetle, Corn Rootworm, Cucumber Beetles, Elm Leaf Beetle, Flea Beetle

**SCARAB BEETLES** Atenius, Green June Beetle, White Grubs

<u>PLANT BUGS (HETEROPTERA)</u> Chinch Bugs, Fleahoppers, Lace Bugs, Lygus Bug, Seed Bugs, Stink Bugs, Tarnished Plant Bug

<u>WEEVILS</u> Alfalfa Weevil, Apple Curculio, Billbugs, Black Vine Weevil, Citrus Root Weevil, Cotton Boll Weevil, Fuller Rose Weevil, Pecan Weevil, Pepper Weevil, Plum Curculio, Root Weevil, Rose Curculio, Strawberry Root Weevil, Sweet Potato Weevil, Vegetable Weevil

# CROPS ON WHICH MYCOTROL O MAY BE USED

**VEGETABLES** acerola, arracacha, arrowroot, artichoke, arugula, asparagus, atermoya, avocado, balsam pear, bamboo shoots, beans (all varieties), beet, blackeyed peas, bokchoy, 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 longbeans, Chinese mustard, Chinese spinach, Chinese waxgourd, chufa, cilantro, citron melon, collards, corn salad, crenshaw melon, cress, cucumber, 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, Oriental broccoli, Oriental cabbage, Oriental gai lon, Oriental longbeans, Oriental mustard, Oriental spinach, Oriental waxgourd, 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, tumeric, turnip, watermelon, yam, zucchini

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, figs, 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, sour cherry, strawberry, sweet cherry, tangelo, tangerine, youngberry

TREE NUTS almond, beech nut, Brazil nut, butternut, cashew, chestnut, chinquapin, filbert, hickory nut, macadamia nut, pecan, pistachios, walnut

AGRONOMIC CROPS alfalfa, barley, buckwheat, clover, coffee, corn (field, sweet, pop, silage, seed, corn grown for meal/flour), cotton, flax, hay, hops, jojoba, millet, oats, oil seed rape (canola), peanuts, potato, rice, rye, safflower, sorghum, soybeans, sugarbeets, sugarcane, sunflower, sweet corn, sweet potato, tea, teosinte, tobacco, triticale, wheat, wild rice

HERBS, SPICES AND EDIBLE FLOWERS allspice, anise, balm, basil, borage, burnet, caper buds, caraway, cardamom, carnations, catnip, celery seed, chamomile, chervil, chicory, chives, chrysanthemum, cilantro/coriander, cinnamon, clary, coriander, costmary, cumin, curry leaf, dandelion, dill, fennel, fenugreek, ginseng, gladiolus, horehound, hyssop, mace, marigolds, marjoram, mint, mustard, nasturtium, nutmeg, oregano, pansies, paprika, pennyroyal, pepper (black/white), peppermint, rosemary, roses, rue, sage, saffron, savory, sesame, spearmint, sweet bay leaf, tansy, tarragon, thyme, violets, wintergreen, woodruff, wormwood

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, 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, honey suckle, hop bush, horsechesnut, 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, monstera, 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, photina, 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, schlumbegera, 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,

Edition 080226

yew, yucca, zinnia

#### MIXING AND APPLICATION

SHAKE WELL BEFORE USING. Apply Mycotrol O using hand-held, ground and/or aerial spray equipment, low-volume application equipment and chemigation (follow specific directions for chemigation in this booklet). Mycotrol O contains emulsifiers and mixes readily in water. Mix well by 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 O to suspend spores then with agitator running, slowly add desired quantity of Mycotrol O to spray tank. Add remainder of desired amount of water. Continue agitation throughout loading and spraying. Triple rinse empty Mycotrol O container with water and add rinse water to spray tank. For best results, continue agitation during spraying. Do not mix more Mycotrol O than needed for that day. Do not mix Mycotrol O the day before application. Performance may suffer if spores are left overnight or longer in the spray tank.

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

# DOSAGE RATE FOR FIELD, AGRONOMIC AND VEGETABLE CROPS; RANGELAND AND IMPROVED PASTURES

## **Ground Application**

Typically apply ½ quart to 1 quart Mycotrol O/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 O up to a maximum of 3 quarts per acre for extreme insect pressure or dense foliage.

# **Aerial Application**

Apply ½ quart to 1 quart Mycotrol O per 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 O 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 (3<sup>rd</sup> to 4<sup>th</sup>) and aids in the management of resistant populations. For additional information, contact Laverlam International Corporation.

# Typical Application Rates/Acre

Diamondback moth	½ quart to 1 quart of Mycotrol O/acre
Imported cabbage worm	1/2 quart to 1 quart of Mycotrol O/acre
Cabbage looper	1 quart of Mycotrol O/acre

## **Leaf-Feeding Beetles**

For use against Colorado potato beetle; Mycotrol O 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 improves control and aids in the management of resistant populations. For additional information, contact Laverlam International Corporation.

## Typical Application Rates/Acre

# DOSAGE RATE FOR GREENHOUSE, SHADEHOUSE, INDOOR/OUTDOOR NURSERY

**High volume sprays:** Apply at a rate of up to 2 quarts of Mycotrol O per 100 gallons of spray volume in high volume sprays (2 tsp. or 0.33 fluid ounces of Mycotrol O 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**.

# Typical Application Rates/100 Gallons of Spray Volume

**Low volume sprays:** Apply at a rate equivalent to area coverage of high volume spray. This would normally be ½ quart to 2 quarts of Mycotrol O 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.** 

 ${\bf Contact\ your\ dealer\ or\ Laverlam\ International\ Corporation\ for\ specific\ recommendations.}$ 

# DOSAGE RATE FOR SOIL APPLICATIONS IN ORCHARDS AND CONTAINER ORNAMENTALS

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

Do not apply to water-saturated soil. Apply Mycotrol O 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 O into soil.

# APPLICATION FREQUENCY

Apply Mycotrol O 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 O which can be applied in one season.

## PLANT SAFETY

Mycotrol O has shown plant safety but has not been tested on all plant varieties or in all tank mixes. Test Mycotrol O on a small number of plants to check for potential damage before applying to larger number of plants.

# TANK MIX COMPATIBILITY

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

<u>Compatibility with Chemical Insecticides</u> Mycotrol O is compatible with most organic insecticides and spray adjuvants. However, some insecticide formulations can kill the fungal spores, the active ingredient in Mycotrol O. If you are going to use Mycotrol O in combination with other pesticides, contact your dealer or Laverlam International Corporation for specific information. In all cases, pesticides must be used in accordance with their labels.

<u>Compatibility with Fungicides</u> Mycotrol O is <u>not</u> compatible in tank mix with fungicides. Contact Laverlam International or your dealer for specific recommendations on using Mycotrol O with fungicides.

# CHEMIGATION

Apply Mycotrol O 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. Do not use in systems having smaller than 40-mesh screens.

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

rt of Mycotrol O/100 gals. spray volume public water systems are in place.

of Mycotrol O/100 gallons spray volume public water systems are in place.

Edition 080226

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

For best results, time Mycotrol O chemigation with the end of the irrigation water application. Time injection duration to apply Mycotrol O 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 O in 1/4 to 1/2 inches of water per acre.

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

Supply tank agitation is necessary if Mycotrol O is diluted in water before injection into irrigation system. Tank agitation is not necessary if Mycotrol O 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 just also contain a functional, normally closed, solenoidoperated 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 ½ quart to 3 quarts of Mycotrol O per acre for most drip or microjet chemigation. For difficult to control soil pests, especially citrus root weevil (Diaprepes abbreviatus), Mycotrol O may need to be applied at up to 8 fluid ounces per 1,000 square feet.

Apply Mycotrol O 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 O is diluted in water before injection into irrigation system. Supply tank agitation is not necessary if Mycotrol O 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, solenoidoperated 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, reducedpressure 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, solenoidoperated 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 O is diluted in water before injection into irrigation system. Spray tank agitation is not necessary if Mycotrol O 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 O chemigation with the end of irrigation water application. Time injection duration to apply Mycotrol O 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 O continuously for the duration of irrigation water application. Apply sufficient volume of water to carry Mycotrol O 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

- 1. The distance of the outer most nozzles on the boom must not exceed 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.

  Edition 080226

  4

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 ¾ 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 and disposal.

## PESTICIDE STORAGE

Store in a cool, dry place. Avoid storage below freezing temperatures or above 85°F. Mycotrol O 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.

## CONDITIONS OF SALE

Mycotrol O 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.



For use in controlling Whitefly, Aphids, Thrips, Psyllids, and Mealybugs, Leafhoppers, Weevils, Plant Bugs, Borers and Leaf-feeding Insects in Field, Agronomic, Vegetable and Orchard Crops; Grasshoppers, Mormon Crickets, Locusts and Beetles in Rangeland, Improved Pastures and Agronomic Crops; Whitefly, Aphids, Thrips, Psyllids and Mealybugs in Vegetables and Ornamentals grown in Indoor/Outdoor Nursery, Greenhouse, and Shadehouse.

## KEEP OUT OF THE REACH OF CHILDREN

Store between 40°F and 85°F

CAUTION

SHAKE WELL

See additional precautionary statements and first aid statements in attached booklet.



## LAVERLAM INTERNATIONAL CORPORATION

117 S. Parkmont; P.O. Box 4109-Butte, MT 59702; Ph: (406)782-2386; Fax: (406) 782-9912
 EPA Registration Number 82074-3 EPA Establishment Number 65626-MT-02
 Edition:

Net Contents: ☐1 Quart ☐1 Gallon ☐2 Gallon Lot No.:

OMRI

**Expiration Date:** 

Edition 080226 5