

M-Trak[®]

BIOINSECTICIDE

AQUEOUS FLOWABLE BASED ON THE CELLCAP[®] ENCAPSULATION SYSTEM

For control of larvae of Colorado potato beetle,
elm leaf beetle and other selected leaf beetles.

For control of lesser mealworm in poultry houses.

ACTIVE INGREDIENT

Delta endotoxin of *Bacillus thuringiensis* variety
san diego encapsulated in killed *Pseudomonas*
fluorescens 10%

INERT INGREDIENTS 90%

TOTAL

..... 100%

One gallon of this product contains 0.9 lbs of delta
endotoxin of *Bacillus thuringiensis* variety *san*
diego encapsulated in killed *Pseudomonas*
fluorescens.

Net Contents: 2½ gallons

KEEP OUT OF REACH OF CHILDREN

CAUTION

Statement of Practical Treatment

Avoid contact with eyes, skin and clothing. See
side panel for additional precautionary
statements.

EPA Registration No. 53219-2

EPA Est. No. 37429-GA-2, 53219-WI-1

Superscript corresponds to first number of lot number
stamped on container.

M-Trak and CellCap are registered trademarks
of Mycogen Corporation.

The CellCap encapsulation system is protected
by U.S. patent nos. 4,695,462 and 4,695,455.



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ACCEPTED

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Under the Federal Insecticide, Fungicide, and
Rodenticide Act, as amended, for the
pesticide registered under
EPA Reg. No. 53219-2

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M-Trak

BIOINSECTICIDE

GENERAL INFORMATION

Insects Controlled: This product is active against small (first and second instar) larvae of the Colorado potato beetle. Use other labeled products for control of large larvae and adults of the Colorado potato beetle. This product also controls larvae (all sizes) of cottonwood leaf beetle, elm leaf beetle, elm calligrapha and imported willow leaf beetle.

This product also controls lesser mealworm larvae (darkling beetles), including those resistant to synthetic chemical pesticides.

Mode of Action: This product must be eaten by targeted insects to be effective. After eating foliage, or spilled poultry feed and litter, that has been sprayed with this product, insects immediately stop feeding. Death usually occurs 1 to 5 days later.

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 agency responsible for pesticide regulation.

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.

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.

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.

The Worker Protection Standards do not apply when using this product to control lesser mealworm in poultry facilities.

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Recommended Rates and Timing - For the control of colorado potato beetle, and larvae (all sizes) of cottonwood leaf beetle, elm leaf beetle, elm calligrapha and imported willow leaf beetle.

Crop	Pest	Infestation / Rate	Timing
eggplant potatoes tomatoes	Colorado potato beetle* larvae	light: 1 1/2 qts/acre normal: 2-3 qts/acre heavy: 3-4 qts/acre	When 30% to 40% of egg masses hatch or when first or second instar** larvae (<1/4" long) predominate
shade and ornamental trees	Larvae of cottonwood leaf, elm leaf and imported willow leaf beetles and elm calligrapha	light to normal: 2 qts/100 gallons **** heavy to severe: up to 4 qts/100 gallons****	When larvae are observed and majority of egg masses have hatched***

* Repeat applications will be needed to control later hatching larvae. Repeat applications should be made at a maximum interval of seven days between treatments.

** Use other labeled products for control of large larvae (third or fourth instar) and adults.

*** Repeat applications as necessary to control newly hatched larvae of second and third generation.

**** For mist blower applications apply four to five gallons of this product per 100 gallons of spray solution.

This product may be used up to and including the day of harvest. The addition of high-quality spreader-sticker to the spray solution is recommended to improve spray retention and deposition. Follow the manufacturer's label directions for proper use of the spreader-sticker. For application to small areas with hand-held equipment, use 1 1/2 to 3 oz. (3 to 6 tablespoons) of this product per gallon of water.

Mixing and Application

- o Do not apply this product through any type of irrigation system/
- o UNIFORM AND THOROUGH SPRAY COVERAGE OF UPPER AND LOWER LEAF SURFACES IS REQUIRED.
- o Fill spray tank 3/4 full with water and add recommended amount of this product to tank. Mix thoroughly while adding remainder of water. Agitate as necessary to maintain suspension.
- o If rain or irrigation occurs on day of application, reapply this product.
- o *Potato, tomato, eggplant:* For conventional ground application, apply recommended amount of product in at least 20 gallons of water per acre. For best results, use volumes of 40 gpa or more, and pressure of 50 psi or more. For aerial application, apply recommended amount of product in at least 3 gallons of water per acre. For application with hand-held equipment, use sufficient volume of water to thoroughly wet upper and lower leaf surfaces.
- o *Elms, cottonwood, poplars, willows, zelkova:* Fill spray tank 3/4 full with water and add recommended amount of this product to tank. Mix thoroughly while adding remainder of water. Agitate as necessary to maintain suspension. When using high-pressure equipment, spray foliage to near run-off. Excessive run-off will not improve control and results in higher application costs. Mist blower applications will normally require 2 to 3 gallons of spray to cover a 50 foot tree.

Recommended Rates and Timing - For the control of lesser mealworm

Rates and frequency of applications will vary depending on level and type of larval infestation, and type of application equipment used.

Light infestations	1-4 quarts per 1000 sq ft.
Moderate to heavy infestations	4-6 quarts per 1000 sq ft.
Extremely heavy infestations	6-10 quarts per 1000 sq ft.

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Mixing

- FOR CONCENTRATE SPRAY: fill spray tank with recommended amount of product. Agitate as necessary to maintain suspension. Do not dilute with water.
- FOR DILUTE SPRAY: use recommended amount of product with 1 to 10 gallons of water to enhance coverage of target pests.

Application

- IN BROILER AND TURKEY HOUSES: ensure that birds are positioned away from the spray. It is not necessary to contact birds with this product for proper control of lesser mealworm. Thorough coverage of the litter underneath the feed and water lines is necessary for satisfactory performance of this product. A ten foot swath, 5 feet to either side of the feed and water lines, should be applied. All application techniques and equipment should result in uniform and complete coverage of all surfaces in the poultry house. Control of target insects is achieved only when susceptible stages of the insect eat treated litter/spilled feed surfaces. Skips, streaks or untreated areas below the feed or water lines will result in unsatisfactory performance.
- IN DEEP PIT LAYERS: birds do not have to be removed prior to application. However, it is not necessary to contact birds with this product for proper control of lesser mealworm. Thorough coverage of the lower two-thirds of the mounded manure rows (where the larvae are located) are necessary for satisfactory performance of this product.

Application Timing

- Always target newly hatched or small larvae with spray applications so that insects are controlled before they cause extensive feeding damage. Always make applications *before* older larvae begin feeding in the poultry house.
- Make the first application after the litter has been spread and when newly hatched or young larvae have been observed. Repeat applications as needed to maintain larval control.
- Larvae may tunnel into insulation as they mature. Once larvae are protected inside the insulation, they will be difficult to control with this, or other contact active products.
- Use other labeled products for control of adult beetles.

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PRECAUTIONARY STATEMENTS

CAUTION

Hazards to Humans and Domestic Animals: Avoid contact with eyes, skin or clothing.

Statement of Practical Treatment: If in eyes, flush with plenty of water. Get medical attention if irritation persists. Wash thoroughly with soap and water after handling.

Environmental Hazards: Keep out of lakes, ponds or streams. Do not contaminate aquatic systems by cleaning of equipment or disposal of wastes.

Personal Protective Equipment:

Applicators and other handlers must wear: long-sleeved shirt and long pants, waterproof gloves, and shoes plus socks.

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 wash hands before eating, drinking, chewing gum, using tobacco or using the toilet

STORAGE AND DISPOSAL

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

Storage: Keep container unopened until use. Store unused product in original container. This product should be stored at temperatures between 35°F and 90°F.

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

Container Disposal: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

LIMIT OF WARRANTY AND LIABILITY

This product conforms to the description on this label and is reasonably fit for the purpose set forth on this label when used according to the label directions and under the specified label conditions. THE MANUFACTURER DISCLAIMS ANY AND ALL OTHER EXPRESS OR IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSE. Buyer and all users assume all risks and responsibility for loss or damage if this product is used, stored, handled or applied under any condition not reasonably foreseeable or beyond the manufacturer's control, or not as explicitly set forth in this label. THE LIMIT OF THE MANUFACTURER'S LIABILITY SHALL BE THE PURCHASE PRICE FOR THE QUANTITY INVOLVED. IN NO EVENT SHALL THE MANUFACTURER BE LIABLE FOR SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES.