US ENVIRONMENTAL PROT OFFICE OF PESTICIDES PROGRAMS REGISTRATION DIVISION (75 787)

WASHINGTON, DC 20480

NOTICE OF PESTICIDE: 130 REGISTRATION

Under the Federal Investigate Fungicide. and Rodenticide Actions amended)

TERM OF ISSUANCE

Conditional Rogistration HAME OF PERTICION PRODUC

MV2 RIOGS, ECTIONS

53219-3

NAME AND ADDRESS OF REGISTRANT (Include 715 code)

r Mesogem Corporation. 5451 Oborlin Drive San Diego, California 92121

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101/398725

DATE OF ISSUANCE

June 17, 1991

NOTE: Changes in labeling formula differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above U.S. FPA registration number.

On the basis of information formshed by the registrant, the above named proticule is hereby Registered Reregistered under the Federal Innecticule, Fungicule, and Rodenticide Act.

A copy of the labeling accepted in connection with this Registration/Reregistration is returned berewith.

Registration is in no way to be construed as an indorsement or approval of this product by this Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or called the registration of a peaticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

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(2) Additional Continued to the Association of the property January 30, 1922 The second of the second rate by the distribution will be occur on July 36, 1367

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BEST AVAILABLE COPY

ATTACHMENT IS APPLICABLE

LIRE OF APPROVING OFFICIAL ol I

EPA Far 8570-4 (Rev. 6.74)

PREVIOUS EDITION MAY BE USED UNTIL SUPPLY IS ERHAUSTED.

You must submit the data /information listed below, conducted in accordance with the test guidelines and procedures agreed to as per the Pre-Acceptance letter sent to you, to which you responded on June 4, 1991, agreeing to provide the following:

PRODUCT CHEMISTRY/MANUFACTURING PROCESS

1. Information to clarify those characteristics used to code the bacterium as Ps fluorescens.

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- 2. The viability sampling to be used as a check on homogeneity must incorporate 10 one liter samples instead of one sample.
- 3. Information to demonstrate that more detailed records are kept. The enrichment report sheets must include pH, actual colony counts per plate, the appearance (e.g. turbidity) of any enrichment broth, and a more complete description of contaminants.
- 4. A statistical analysis of the revised sampling techniques must be submitted.
- 5. An interim report on the results of monitoring the production batches must be submitted within 3 months of this registration. In addition, the Agency must be notified anytime the living recombinant is confirm in the monitoring process.
- 6. Data on the results of use of the B. t. gene probe must be submitted along with the data on the specificity and sensitivity of the hybridization process.
- 7. Submit quality control/assurance protocols and procedures as they relate to the final pH and other fixative concentrations along with validation that all cells will be equally exposed to these components during the killing/ tixation procedure.

ADMINISTRATIVE COMMENTS

You must submit/cite all data or other information required for registration/ reregistration of your product under FIFRA section 3 (c) (5) when similar products are required to submit such data.

Submit product information (pounds or gallons produced) for this product each fiscal year that this product is conditionally registered, in accordance with FIFRA section 29. The fiscal year begins October 1 and ends September 30. The product information must be submitted no later than November 15, following the end of the preceding year.

This information should be submitted to:

U.S. Environmental Protection Agency
Registration Support and Emergency Response Branch
Registration Division (H7505C)
Crystal Mall Bldg. # 2, Room 716 G
1921 Jefferson Davis Highway
Arligton, VA 22202

You should note that if you fail to satisfy any of the conditions imposed on this CONDITIONAL REGISTRATION will expire automatically on July 30, 1992. Sale and distribution of the subject product after July 30, 1992, will be illegal.

SIMULTANEOUS REPORTING TO THE OFFICE OF COMPLIANCE MONITERING (OCM)

OCM will be monitoring the data being generated in response to this Registration Notice. Therefore, if you respond by:

- Committing to develop and/or submitting data;
- Requesting a minor chemical exemption
- Presenting arguments that a requirement is not applicable;
- Submitting protocols or modifications to them;
- Or final reports, you must send a copy of the supporting information (not copies of the actual data) to:

Laboratory Data Integrity Assurance Division Office of Compliance Monitering (EN-342) 401 M Street SW. Washington, DC. 20460

You must make the following label change (s) before you release the product for shipment:

- a. Add the phrase "EPA Registration No. 53219-3
- b. Make sure that the typesizes on your labeling are consistent (see labeling comments and sample enclosures)

You will submit five (5) copies of your final printed labeling before you release the product for shipment. Refer to the A-79 enclosure for further description of final printed labeling.

If these conditions are not complied with, the registration will be subject to cancellation (as per your agreement, aid) in accordance with FIFRA sec. 6(e). Your release for shipment of the product constitutes acceptance of these conditions.

A stamped copy of the label is enclosed for your records.

Phil Hutton

Product Manager (18)

Insecticide-Rodenticide Branch Registration Division (H7505C)

MVP

BIOINSECTICIDE

AQUEOUS FLOWABLE BASED ON THE CELLCAP™ ENCAPSULATION SYSTEM

For control of certain caterpillar pests on vegetables, fruits and field crops

ACTIVE INGREDIENT

Delta endotoxin of Bacillus thuringiensis variety kurstaki encapsulated in killed Pseudomonas fluorescens
INERT INGREDIENTS
TOTAL

One gallon of this product contains 0.9 lbs of delta endotoxin of Bacillus thuringiensis variety kurstaki encapsulated in killed Pseudomonas fluorescens

KEEP OUT OF REACH OF CHILDREN

CAUTION

Avoid contact with eyes, skin and clothing. Wash thoroughly after handling.

See back panel for additional precautionary statements

EPA Registration No. 53219-3

EPA Establishment No. 37429-GA-1

MVP is a registered trademark of Mycogen Corporation

™ CellCap is a trademark of Mycogen Corporation.

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



MYCOGEN CORPORATION 5451 Oberlin Drive San Diego, CA 92121 1-800-745-7476 **Net Contents:**

ACCEPTED With COMMENTS In FIRA Leiter Detail:

JUN ? 7 1991

Pinetron and Reductions Act of Pinetron and Reduction Penticular Act of the Penticular Pinetron under EFA Box. No. 53219-3

insects Controlled: This product controls the listed caterpillar (e.g. "worm") pests, including those resistant to synthetic chemical pesticides.

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

Residual Activity: This product is based on the CellCap encapsulation system, which is reases the residual activity of the active ingredient by protecting it from rapid environmental breakdown.

Re-entry and Pre-harvest Restrictions: This product can be applied up to the day of harvest (zero days to harvest). Workers may re-enter the field immediately after use of this product.

Beneficial Insects: This product does not harm beneficial insects (honeybees, lacewings, parasitic wasps, ladybird beetles, predatory beetles and flies, etc.)

DIRECTIONS FOR USE

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

Recommended Rates and Timing

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

Light infestations (<1 larva/ 5 plants)	1-2 quarts per acre
Moderate to heavy infestations	2-3 quarts per acre
Extremely heavy infestations	3-4 quarts per acre

^{*}For serial applications, or if Heliothis species are present, the higher recommended rates should be used.

e contract

CROP

CATERPILLAR LARVAE CONTROLLED

Greenhouse and Field Grown Vegetable Crops

	والمراجع
Leafy vegetables: cole crops (including cabbage, broccoli, broccoli raab, bok choy, brussel sprouts, cauliflower, Chinese cabbage, collards, greens, horseradisti, kale, kohlrabi, mustard greens), watercress, and lettuce [head and leaf]	diamondback moth, cabbage looper, imported cabbageworm, cabbage webworm, cross striped cabbageworm, armyworms, artichoke plume moth*
Cucurbit crops: meions	armyworms, loopers, pickleworm, rindworm complex, melonworms
Legume crops: including peas, peanuts, soybeans	armyworms, cabbage looper, diamondback moth, green cloverworm, soybean looper, velvetbean caterpillar*
Solanaceous crops pepper, tomato	armyworms, cabbage looper, European com borer, hornworms, saltmarsh caterpillar*
Root Crops: horseradish, potatoes, radish, rutabaga, turnip	armyworms, diamondback moth, European com borer, loopers, saltmarsh caterpillar
Sweet corn	European com borer and southwestern com borer (1st and 2nd generation), armyworms, saltmarsh caterpillar*

Fruit Crops

pome fruits: apple	codling moth, leafrollers, tent caterpillar, tutted apple budmoth
citrus	citrus cutworm, leafrollers
small fruits and berries: blueberry, cranberry	armyworms, sphinx moth, loopers, leafrollers, saltmarsh caterpillar, orange tortrix*
grape	Western grapeleaf skeletonizer, grape berry moth, grape leaffolder, cabbage looper, omnivorous leafroller, saltmarsh caterpillar, armyworms

Field Crops

Com (field com, seed com, sweet com,	European corn borer and southwestern corn borer
popcorn)	(1st and 2nd generation)

Canola	diamondback moth, armyworms, loopers *
Cotton	armyworm, cabbage tooper*
Peanut, soybean	armyworms, cabbage looper, diamondback moth, green cloverworm, soybean looper, velvetbean caterpillar*
Tobacco	cabbage looper, hornworms, saltmarsh caterpillar*

^{*}This product may be used for early season control of *Heliothis* species (tobacco budworm, tomato fruitworm, cotton bollworm) and tomato pinworm larvae. Do not use this product for control of large *Heliothis* larvae ($>^{1}/4$ " long), or for control of *Heliothis* or pinworm larvae that are feeding inside the plant.

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 inside the plant.
- To determine optimal timing of first application, scout fields regularly for the appearance of eggs and newly hatched larvae. Make the first application as soon as larvae begin to hatch. Repeat applications as needed to maintain larval control.
- Larvae may tunnel or bore into buds, heads, stalks, or fruits as they
 mature. Once larvae are protected inside the plant, they will be
 difficult to control with this, or other foliar applied products.
- For control of tomato pinworm or *Heliothis* species, use this product for early season control only. Once older larvae begin to feed inside the plant, they will not be controlled by this product.
- Use other labeled products for control of large (>1/3" long) cabbage looper larvae.

Mixing and Application

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

- Thorough coverage of the foliage is NECESSARY for satisfactory performance of this product. All application techniques and equipment should result in uniform and complete coverage of all leaf surfaces on the plant. Control of target insects is achieved only when susceptible stages of the insect eat treated leaf surfaces. Skips, streaks or untreated foliage below the canopy surface will result in unsatisfactory performance.
- 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.
- If rain or irrigation occurs on day of application, reapply this product.
- 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.
- Use an approved spreader or spreader-sticker to improve coverage on hard to wet crops.

For Application to Small Areas (<1 acre)

- Use 1½ to 3 oz. (3 to 6 tablespoons) of this product per gallon of water. Time application as recommended above.
- Use sufficient volume of water to thoroughly wet upper and lower leaf surfaces.

PRECAUTIONARY STATEMENTS

CAUTION- Hazards to Humans and Domestic Animals Avoid contact with eyes, skin or clothing. Use protective gloves, goggles and dust mask when applying this product.

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.

For emergency medical information, call toll-free 1-800-228-5635

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 NANUFACTURER 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.

should be made at a maximum interval of seven days between treatments.