



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

APR 8 1994

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OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

Subject: Label Amendment Submission of 07/19/93 Response to PR Notice 93-7
EPA Reg. No. 264-458
MOCAP BRAND EC NEMATOCIDE-INSECTICIDE

Dear Registrant:

The labeling cited above and submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, is accepted subject to the comments reflected on the enclosed sheet. A copy of your proposed labeling stamped "ACCEPTED WITH COMMENTS" is enclosed.

WHAT THIS ACCEPTANCE MEANS:

Based on your certification, the Agency has accepted the labeling changes that are necessary to comply with the Worker Protection Standard (WPS) labeling requirements of 40 CFR part 156, subpart K, described in PR Notices 93-7 and 93-11. Any other labeling changes submitted in connection with this amendment application but not directly related to compliance with the WPS have not been reviewed or accepted by the Agency. If you wish to make such changes, you must submit a separate amendment application proposing them. If your product is currently suspended, the acceptance of this labeling amendment does not affect the suspension in any way.

WHAT YOU NEED TO DO NEXT:

By the next label printing make all the specified changes to your labeling. Send to EPA one (1) copy of the final printed labeling:

- BEFORE selling or distributing any product bearing the final printed labeling
- AND
- WITHIN one year from date of this acceptance.



Recycled/Recyclable
Printed with Soy/Canola Ink on paper that
contains at least 50% recycled fiber

2 7/14

Page 2

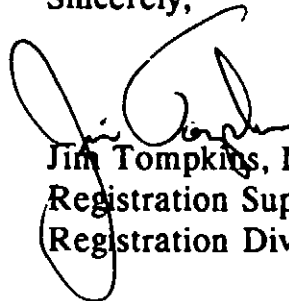
Submit the final printed labeling via the U.S. Postal Service to:

Document Processing Desk (FIN-LABEL)
Office of Pesticide Programs (7505C)
U.S. Environmental Protection Agency
401 M Street, SW
Washington, D.C. 20460-0001

Hand or courier deliveries of final printed labeling may be made to:

Document Processing Desk (FIN-LABEL)
Office of Pesticide Programs
Room 266A, Crystal Mall 2
1921 Jefferson Davis Highway
Arlington, VA 22202

Sincerely,



Jim Tompkins, Deputy Chief
Registration Support Branch
Registration Division (7505W)

Attachment

3 7 14

Patricia Kwiatkowski
Rhone Poulenc

Comments for: EPA REG. NO. 264-458
MOCAP Brand EC Nematicide-Insecticide

The following specific comments pertain to your WPS labeling submission concerning the product cited above:

The chemical resistant protective suit or your proposed label should be changed to "coveralls worn over long-sleeved shirt and long pants". If you decide to retain the chemical-resistant suit, you will have to include label requirements for a heat stress management program. Add a chemical-resistant apron for mixing/loading and cleaning equipment.

4 9 14

RESTRICTED USE PESTICIDE

ACUTE DERMAL TOXICITY

For retail sale to and use only by Certified Applicators or persons under the direct supervision of a Certified Applicator, and only for those uses covered by the Certified Applicator's certification.

MOCAP[®] EC Nematicide-Insecticide

ACTIVE INGREDIENTS:

Ethoprop: (O-Ethyl S, S-Dipropyl Phosphorodithioate)69.6%

INERT INGREDIENTS30.4%

(Contains 6 pounds active ingredient per gallon)

EPA Reg. No. 264-458

EPA Est. No.



KEEP OUT OF REACH OF CHILDREN
DANGER POISON
PELIGRO



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.)

For **MEDICAL** And **TRANSPORTATION** Emergencies **ONLY** Call 24 Hours A Day 1-800-334-7577
For **PRODUCT USE** Information Call 1-800-334-9745

STATEMENT OF PRACTICAL TREATMENT

Ethoprop is an organophosphate.

IF SWALLOWED: Call a physician or Poison Control Center. Drink 1 to 2 glasses of water and induce vomiting by touching back of throat with finger. Contains petroleum distillates. Avoid aspiration to lungs.

IF INHALED: Remove to fresh air and apply artificial respiration if needed.

IF ON SKIN: Remove all contaminated clothing and wash skin with soap and water.

IF IN EYES: Flush with plenty of water for at least 15 minutes. Call a physician immediately.

NOTE TO PHYSICIAN

This product is a cholinesterase inhibitor. Severe symptoms and signs include diarrhea, pinpoint and non-reactive pupils, respiratory difficulty pulmonary edema, cyanosis, loss of sphincter control, convulsions, and coma.

Support respiration as needed. Measures should include removal of secretions, maintenance of a patent airway, and if necessary, artificial ventilation.

If cyanosis is absent, give ATROPINE 2-4 mg intravenously (0.05 mg/kg for children). Repeat atropine at 5-10 minute intervals until atropinization occurs (dry, flushed skin, tachycardia, pupillary dilatation), and maintain for 48 hours.

If cyanotic, give initial atropine intramuscularly and start measures to improve ventilation.

Start 2-PAM (PROTOPAM, Ayerst) at the same time. Give 1-2 grams PROTOPAM (20-40 mg/kg for children) in 100cc saline over 15-30 minutes. If pulmonary edema is present, give intravenously slowly as a 5% solution in water over a period of at least 5 minutes.

A second dose may given after one hour if muscle weakness persists. Additional doses may be given cautiously for persistent muscle weakness. May be given by intramuscular or subcutaneous routes if intravenous administration is not feasible.

In case of skin contact, wash patient with soap and water followed by wash with 95% ethyl alcohol. Keep patient under constant observation for 24-36 hours. Symptoms may persist for one month.

The use of theophylline, morphine, barbiturates, phenothiazines, reserpine, and succinyl choline is contraindicated.

PRECAUTIONARY STATEMENTS

DANGER

HAZARD TO HUMANS AND DOMESTIC ANIMALS

Poisonous if swallowed, inhaled or absorbed through skin. Rapidly absorbed through skin. Do not get into eyes, on skin, or on clothing.

Do not breathe fumes or spray mist. Do not contaminate feed or food.

SYMPTOMS OF POISONING: Nausea, vomiting, abdominal cramps, diarrhea, excessive salivation, headache, dizziness, weakness blurring or dimness of vision, excessive tearing, loss of muscular coordination, slurring of speech, twitching of muscles (especially of tongue and eyelids), mental confusion, disorientation, drowsiness, difficulty in breathing (chest tightness), runny nose.

ACCEPTED
with COMMENTS
EPA Letter Dated

APR 28 1994

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

264-458

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FIRST AID

IF SWALLOWED: Give 1 or 2 glasses of water and induce vomiting by touching back of throat with finger. Do not induce vomiting or give anything by mouth to an unconscious person. Call a physician, Poison Control Center, or hospital emergency room.

If not breathing, give mouth to mouth artificial respiration.

IF INHALED: Remove to fresh air and apply artificial respiration if needed.

IN CASE OF SKIN CONTACT: Immediately remove all contaminated clothing, and wash skin with soap and water.

FOR EYES: Flush with plenty of water for at least 15 minutes. Call a physician immediately in all cases of suspected poisoning.

Persons providing first aid should prevent contamination of themselves.

PHYSICAL OR CHEMICAL HAZARDS

Do not use or store near heat or open flame.

Do not store in or around the home.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical resistant to this product are listed below. If you want more options, follow the instructions for category F on an EPA chemical resistance category selection chart.

Applicators and other handlers must wear a chemical-resistant protective suit, chemical-resistant gloves such as barrier laminate, butyl rubber (> 14 mils), nitrile rubber (> 14 mils) or viton (> 14 mils), chemical-resistant footwear plus socks, protective eyewear, chemical-resistant headgear for overhead exposure and a respirator with either an organic vapor-removing cartridge with a prefilter approved for pesticides (MSHA/NIOSH approval number prefix TC-23C), or a canister approved for pesticides (MSHA/NIOSH approval number prefix TC-14G).

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. 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.

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d) (4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

User Safety Recommendations

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

Remove clothing immediately if pesticide gets inside. Then wash body thoroughly and put on clean clothing.

ENVIRONMENTAL HAZARDS

This product is toxic to aquatic organisms (fish and invertebrates) and extremely toxic to birds. Cover or disc spill areas. Birds in treated areas may be killed. 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 wash waters.

Do not apply within 140 feet of inland freshwater habitats.

Along the Atlantic seaboard, do not apply with 800 feet of brackish water habitats.

Do not apply when weather conditions favor drift from areas treated. Apply this product only as specified on this label.

DIRECTIONS FOR USE

It is violation of Federal Law to use this product in a manner inconsistent with its labeling.
Read entire label before using this product.

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.

Do not apply in Long Island, New York.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Stand. d, 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 expectations pertaining to the statements on this label about personal protective equipment (PPE), notification to workers, and restricted-entry intervals. 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 48 hours.

The 48 hour REI is increased to 72 hours in outdoor areas where average rainfall is less than 25 inches a year.

EXCEPTION: If the product is soil injected or soil incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

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 a chemical-resistant protective suit, chemical-resistant gloves, such as barrier laminate, butyl rubber (> 14 mils), nitrile rubber (> 14 mils), or viton (> 14 mils), chemical-resistant footwear plus socks, protective eyewear and chemical-resistant headgear for overhead exposure.

Notify workers of the application by warning them orally and by posting warning signs at entrances to treated areas.

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STORAGE AND DISPOSAL

STORAGE

Do not contaminate water, food, or feed by storage or disposal. Do not store in or around the home.

PESTICIDE DISPOSAL

Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

CONTAINER DISPOSAL

Triple rinse or equivalent. Then dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

EQUIPMENT

MOCAP® EC spray mixture may effect some plastic materials after prolonged use. Spray tubing hoses and gaskets should be inspected frequently, particularly black-colored materials. Replace any material which is softened or swollen. Polyethylene, polypropylene, nylon, and teflon materials are recommended. Polyvinyl chloride (PVC) material is not recommended.

MIXING: Add the recommended amount of MOCAP® EC to the water in the spray tank and mix well. Use enough water in the sprayer to thoroughly and evenly cover the area to be treated. Agitate frequently during use.

INCORPORATION INFORMATION

MOCAP® EC Nematicide-Insecticide can be incorporated with a rotary tiller, rotary hoe, spring-tooth harrow, by double-discing or with other equipment for mixing the chemical with the soil to the depth recommended. Follow any specific incorporating directions given under the crop heading.

If moisture is applied immediately after application to carry the treatment into the soil, only shallow incorporation (1/4 to 1/2 inch) with mechanical equipment such as drag chains is required.

SPECIFIC REQUIREMENTS FOR DRIP IRRIGATION SYSTEMS

Apply this product only through: sprinkler systems including: center pivot, lateral move, end tow, side (wheel) roll, traveler, big gun, solid set, or hand move; or drip (trickie) irrigation systems. Do not apply this product through any other type of irrigation system.

Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform 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.

Wear personal protective equipment as defined in the PPE section for applicators and other handlers when making adjustments or repairs on the chemigation system when MOCAP® EC is in the irrigation water.

POSTING OF AREAS TO BE CHEMIGATED IS REQUIRED WHEN:

1. Any part of a treated area is within 300 feet of sensitive areas such as residential areas, labor camps, businesses, day care centers, hospitals, in-patient clinics, nursing homes or any public areas such as schools, parks, playgrounds, or other public facilities.
2. When the chemigated area is open to the public such as golf courses or retail greenhouses.

Posting must conform to the following requirements: Treated areas shall be posted with signs at all usual points of entry and along likely routes of approach from the listed sensitive areas. When there are no usual points of entry, signs must be posted in the corners of the treated areas and in any other location affording maximum visibility to sensitive areas. The printed side of the sign should face away from the treated area towards the sensitive area. The signs shall be printed in English. Signs must be posted prior to application and must remain posted until foliage has dried and soil surface water has disappeared. Signs may remain in place indefinitely as long as they are composed of materials to prevent deterioration and maintain legibility for the duration of the posting period.

All words shall consist of letters at least 2 1/2 inches tall, and all letters and the symbol shall be a color which sharply contrasts with their immediate background. At the top of the sign shall be the words KEEP OUT, followed by an octagonal stop sign symbol at least 8 inches in diameter containing the word STOP. Below the symbol shall be the words PESTICIDES IN IRRIGATION WATER.

This sign is in addition to any sign posted to comply with the Worker Protection Standard.

EQUIPMENT AND OPERATIONS REQUIREMENTS:

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 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.

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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.

The chemical injection tank should be cleaned before application to remove all fertilizer, pesticide and other foreign matter. The MOCAP® EC water mixture in the injection tank should be under constant agitation. Carefully calibrate the system before and during application. The drip irrigation system should provide uniform water flow and should have no leaks.

For sprinkler irrigation systems, MOCAP® EC or the MOCAP® EC water mixture should be injected continuously during water application in 7,000 to 28,000 gallons of water per acre.

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INSECTS CONTROLLED/SUPPRESSED

	Bananas & Plantain	Field corn & Sweet corn	White (Irish) Potato	Sweet Potato	Sugarcane	Tobacco
CORN ROOT WORM						
(<i>Diabrotica virgifera virgifera</i>)		C				
(<i>Diabrotica longicornis barberi</i>)		C				
(<i>Diabrotica undecimpunctata howardi</i>)		C				
WIREWORMS						
(<i>Conoderus</i> spp.)						C
(<i>Conoderus vespertinus</i>)		C		C		
(<i>Conoderus falli</i>)		C				
(<i>Melanotus</i> spp.)		C		C		
(<i>Melanotus communis</i>)			C		C	
(<i>Limonius dubitan</i>)		C				
(<i>Limonius canus</i>)			C			
(<i>Limonius californicus</i>)			C			
(<i>Aeolus melius</i>)		C				
(<i>Ctenicera</i> spp.)		C				
(<i>Ctenicera pruinina</i>)		C	C			
(<i>Eleodes</i> spp.)			C			
BLACK CUTWORM						
(<i>Agrotis ipsilon</i>)		C*				
SANDHILL CUTWORM						
(<i>Euxoa detersa</i>)		C*				
WHITE GRUBS						
(<i>Phyllophaga crinita</i>)		S			C	
(<i>Phyllophaga ephilida</i>)		S		C		
BANDED CUCUMBER BEETLE						
(<i>Diabrotica balteata</i>)				C		
FLEA BEETLE LARVAE						
(<i>Chaetocnema confinis</i>)				C		
(<i>Systema blanda</i>)				C		
BANANA ROOT BORER						
(<i>Cosmopolites sordidus</i>)	C					

C-----Control
 S-----Suppression

*NOTE: Under heavy infestations of cutworms, enough cutworms may survive to cause some crop damage. If this occurs, it may be necessary to apply a rescue treatment with another registered pesticide to control the surviving worm.

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NEMATODES CONTROLLED/SUPPRESSED

	Bananas & Plantain	Cabbage	Field corn & Sweet corn	Cucumbers	Peanuts (planting)	Pineapple	White (Irish) Potato	Sweet Potato	Snap beans & Lima beans	Sugarcane	Tobacco
BURROWING NEMATODES (<i>Radopholus similis</i>)	C										
DAGGER NEMATODES (<i>Xiphinema</i> spp.)			C								
CYST NEMATODES (<i>Heterodera glycines</i>) (<i>Heterodera cruciferae</i>) (<i>Heterodera schachtii</i>)		C C									
LESION NEMATODES (<i>Pratylenchus</i> spp.)	C	C	C	C	C		C		C	C	C
ROOT-KNOT NEMATODES (<i>Meloidogyne</i> spp.) (<i>Meloidogyne hapla</i>) (<i>Meloidogyne incognita</i>) (<i>Meloidogyne arenaria</i>) (<i>Meloidogyne javanica</i>) (<i>Meloidogyne chitwoodi</i>)	C		C C	C C	C		C C	C C	C	C	C C
LANCE NEMATODES (<i>Hoplotaimus</i> spp.) (<i>Hoplotaimus tylenchiformis</i>) (<i>Hoplotaimus columbus</i>)		S	C	S C					S		
SPIRAL NEMATODES (<i>Helicotylenchus</i> spp.) (<i>Rotylenchus</i> spp.)	C		C C	C			C	C	C		
STING NEMATODES (<i>Belonolaimus</i> spp.) (<i>Belonolaimus longicaudatus</i>)			C	C	C		C		C		
RING NEMATODES (<i>Criconebella</i> spp.) (<i>Criconebella ornata</i>)			C	C	C		C		C	C	
RENIFORM NEMATODES (<i>Rotylenchulus reniformis</i>)						C		C			
STUNT NEMATODES (<i>Tylenchorhynchus</i> spp.) (<i>Tylenchorhynchus claytoni</i>) (<i>Tylenchorhynchus maritimi</i>)			C	C	C		C	C	C	C	C
STUBBY-ROOT NEMATODES (<i>Paratrichodorus</i> spp.) (<i>Trichodorus christiei</i>)		C	C	C	C		C	C		C	

C-----Control
S-----Suppression

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BANANA AND PLANTAIN

FOR NEMATODE AND BANANA ROOT BORER (COSMOPOLITES SORDIDUS) CONTROL

Apply 8 ml of MOCAP® EC in a radius of 3/4 meter around each producing stem. Before application, remove ground litter from area to be treated. For best results, make application just before irrigation or a rainy period. If application is made during a dry period, mix MOCAP® EC into the top 2 cm of soil with a rake. Repeat application in 6 months.

BEAN (SNAP AND LIMA)

FOR NEMATODE AND GARDEN SYMPHYLAN (SCUTIGERELLA IMMACULATA) CONTROL

ROW TREATMENT: Apply 1 1/3 to 2 quarts of MOCAP® EC per acre (36 inch row spacing) or 2.0 to 4.4 fluid ounces per 1,000 linear feet of row in a band 12 to 15 inches wide on the row at planting. Mix with the top 2 to 4 inches of soil. Use the higher rate in fields where nematode infestations have been especially severe. Do not use as a seed furrow treatment or allow spray to contact the seed.

FOR NEMATODE AND GARDEN SYMPHYLAN (SCUTIGERELLA IMMACULATA) CONTROL

BROADCAST TREATMENT: Apply 1 to 1 1/3 gallons of MOCAP® EC per acre from 3 days before planting to at-planting time. Mix with the top 2 to 4 inches of soil right after application. Use the higher rate in fields where nematode infestations have been especially severe.

NOTE: Beans grown in treated soil may remain green longer than other beans and mature 1 to 2 weeks later.

CABBAGE

FOR NEMATODE AND GARDEN SYMPHYLAN (SCUTIGERELLA IMMACULATA) CONTROL

ROW TREATMENT: Apply 1 1/3 quarts of MOCAP® EC per acre (36 inch row spacing) or 2.9 fluid ounces per 1,000 linear feet of row in a band 15 inches wide on the row at-planting. Mix with the top 2 to 4 inches of soil. Do not use as a seed furrow treatment or allow spray to contact the seed.

FOR NEMATODE AND GARDEN SYMPHYLAN (SCUTIGERELLA IMMACULATA) CONTROL

BROADCAST TREATMENT: Apply 3 1/3 quarts of MOCAP® EC per acre from 1 week before planting to at-planting time. Mix with the top 2 to 4 inches of soil right after application.

CITRUS SEEDLINGS

FOR NEMATODE CONTROL

BARE ROOT DIP TREATMENT: Mix 1/2 pint (1 cupful) of MOCAP® EC with 50 gallons of water* (or 2 teaspoonfuls with 2 gallons of water). Dip the washed roots of citrus seedlings in the mixture so that only the roots are covered. Allow the roots to soak for 30 minutes then remove for planting.

(*MOCAP® EC concentration is 900 parts per million in this mixture.)



TREATED PLANTS SHOULD BE TAGGED: "WARNING: Wear chemical-resistant gloves when handling treated plants."

FOR NEMATODE CONTROL

PCT DRENCH TREATMENT: Mix 1/2 pint (1 cupful) of MOCAP® EC with 50 gallons of water (or 5 teaspoonfuls with 5 gallons of water). Pour enough of the mixture into each pot to completely drench the soil (about 1/2 pint for a 6 inch pot; 1 pint for an 8 inch pot).

CORN (FIELD AND SWEET)

FOR CONTROL OF CORN ROOTWORMS, WIREWORMS, CUTWORMS, GARDEN SYMPHYLAN (SCUTIGERELLA IMMACULATA), AND SUPPRESSION OF WHITE GRUBS:

ROW TREATMENT: Apply 1 2/3 ounces per 1,000 feet of row or 2/3 quarts MOCAP® EC per acre (40 inch row spacing) at planting. Apply the spray in a 6 to 7-inch band on the row over a closed seed furrow. Mix the spray with the top 1/2 inch of soil with drag chains, spring-tooth incorporators, or similar equipment.

FOR CUTWORM CONTROL

BROADCAST TREATMENT: Apply 2 quarts of MOCAP® EC per acre from 3 days before planting to at-planting time. Mix with the top 2 inches of soil right after application.

FOR NEMATODE CONTROL

ROW TREATMENT: Apply 1 to 1 1/3 quarts of MOCAP® EC per acre (40 inch row spacing) or 2.4 to 3.3 fluid ounces per 1,000 linear feet of row in a band 12 to 15 inches wide on the row at planting. Mix with the top 2 to 4 inches of soil right after application.

FOR NEMATODE CONTROL

BROADCAST TREATMENT: Apply 1 gallon of MOCAP® EC per acre from 3 days before planting to at-planting time. Mix with the top 2 to 4 inches of soil right after application.

The treatments for nematode control will also control corn rootworms, wireworms, cutworms, garden symphylan (*Scutigerella immaculata*) and suppress white grubs.

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CUCUMBERS

FOR NEMATODE CONTROL

ROW TREATMENT: Apply 1 1/3 quarts of MOCAP® EC per acre (7 foot row spacing) or 6.8 fluid ounces per 1,000 linear feet of row in a band 12 to 15 inches wide on the row at or just before planting. Prepare bed and knock off top to provide a level area for treatment. Mix with the top 2 to 4 inches of soil right after application. Do not use as a seed furrow treatment or allow spray to contact the seed.

ORNAMENTAL PLANTS

NOTE: (Aglaonema, Azalea, Boxwood, Bromeliads, Cacti, Caladium, Camellia, Cape Jasmine, Fern, Gardenia, Holly, Philodendron, Pothos, Sansevieria and Yew).

FOR NEMATODE CONTROL

BARE ROOT AND TUBER DIP TREATMENT: Mix 1/2 pint (1 cupful) of MOCAP® EC with 50 gallons of water* (or 2 teaspoonfuls with 2 gallons of water). Dip the washed roots of plants in the mixture so that only the roots are covered. Allow the roots to soak for 30 minutes then remove for planting. For Leatherleaf Fern, mix 1/4 pint (1/2 cupful) with 100 gallons of water (or 1 teaspoonful with 4 gallons of water), and dip washed roots for 15 minutes.

(*MOCAP® EC concentration is 900 parts per million in this mixture.)

* Treated plants should be tagged: **WARNING: Wear chemical-resistant gloves when handling treated plants.**

FOR NEMATODE CONTROL

POT DRENCH TREATMENT: Mix 1/4 pint (1/2 cupful) of MOCAP® EC with 50 gallons of water (or 1 teaspoonful with 2 gallons of water). Pour enough of the mixture into each pot to completely drench the soil (about 1/2 pint for 6 inch pot; 1 pint for an 8 inch pot). If the mixture contacts foliage wash it off immediately with fresh water to avoid foliage injury. For Leatherleaf Fern, mix 1/8 pint (1/4 cupful) with 50 gallons of water (or 1 teaspoonful with 4 gallons of water). Apply after harvesting and following directions above.

FOR NEMATODE CONTROL

BED AND BENCH TREATMENT: Mix 1/2 to 1 pint (1 to 2 cupfuls) of MOCAP® EC with enough water to completely cover 1,000 sq. feet of bed or bench area (or 2 to 4 tablespoonfuls for 100 sq. feet). Wash the mixture off contacted foliage immediately to avoid foliage injury. After treatment apply enough water to soak the treatment 4 to 6 inches into the soil. For Leatherleaf Fern, use 1/3 pint (2/3 cupful) for 1,000 sq. feet (or 2 teaspoonfuls for 100 sq. feet). Apply after harvesting, and follow with enough water to soak the treatment 4 to 6 inches into the soil.

FOR NEMATODE CONTROL

FIELD NURSERY STOCK TREATMENT: Mix 1/2 pint (1 cupful) of MOCAP® EC with 100 gallons of water (or 2 1/2 teaspoonfuls with 5 gallons of water). Apply 1 gallon of mixture to the soil in a square yard area around each plant. Wash the mixture off contacted foliage immediately to avoid injury. After treatment, apply enough additional water to wet the soil to a depth of 6 to 12 inches, depending upon depth of the roots.

NOTE: If plants other than those mentioned on this label require treatment, only a few should be treated until its effects can be determined. Some plants or varieties may show temporary growth retardation after treatment.

PEANUT

FOR NEMATODE CONTROL

ROW TREATMENT: Use 1 1/3 to 2 2/3 quarts of MOCAP® EC per acre (36 inch row spacing) or 2.9 to 5.9 fluid ounces per 1,000 linear feet of row. Apply in a band 12 inches wide on the row at planting and mix with the top 2 to 4 inches of soil. Use the higher rates of MOCAP® EC for control of peanut root-knot nematode (*M. arenaria*), and in fields where nematode infestations have been especially severe. Do not use as a seed furrow treatment or allow spray to contact the seed.

FOR NEMATODE CONTROL

BROADCAST TREATMENT: Apply 3 to 4 quarts of MOCAP® EC per acre from 1 week before planting to at-planting time. Mix with the top 2 to 4 inches of soil right after application. Use the higher rates of MOCAP® EC for control of peanut root-knot nematode (*M. arenaria*), and in fields where nematode infestations have been especially severe.

PINEAPPLE (Hawaii Only)

POSTPLANT APPLICATION THROUGH DRIP IRRIGATION SYSTEM

MOCAP® EC may be applied to pineapple through drip irrigation systems. All lines should be placed under plastic sheeting or all lines should be placed at least 4 inches below the soil so that there is no surface pooling of water.

Plant Crop

Apply 1 to 2 gallons of MOCAP® EC Nematicide Insecticide per acre through drip irrigation immediately after planting. Dilute MOCAP® EC in 50 to 100 gallons of water before injection. Apply additional treatments every 2 months. Do not treat within 120 days before harvest.

Do not apply more than 16 gallons of MOCAP® EC per acre per plant crop.

RATOON CROP

Apply 1 to 2 gallons of MOCAP® EC per acre through drip irrigation. Dilute MOCAP® EC in 50 to 100 gallons of water before injection. The first application may begin immediately after crop harvest. Apply additional treatment every 2 months. Do not treat within 120 days before harvest.

Do not apply more than 10 gallons of MOCAP® EC per acre to each ratoon crop.

SEE SPECIFIC REQUIREMENTS FOR DRIP IRRIGATION SYSTEMS IN EARLIER PORTION OF LABEL FOR GENERAL USE AND POSTING REQUIREMENTS.

Use the following sample calculations for MOCAP® EC Nematicide Insecticide applied through drip irrigation systems:

1. Acres Watered By System: 25 acres
2. MOCAP® EC Application Rate Per Acre: 1 to 2 gallons of MOCAP® EC per acre
3. Diluent Rate Per Acre: 50 gallons of water for each gallon of MOCAP® EC per acre
4. Total Gallons of Material To Be Injected Per Acre:
 - 51 gallons for use rate of 1 gallon of MOCAP® EC per acre
 - 102 gallons for use rate of 2 gallons of MOCAP® EC per acre
5. Total Gallons Of Material To Be Injected For Whole Field:
 - 1,275 gallons for use rate of 1 gallon of MOCAP® EC per acre
 - 2,550 gallons for use rate of 2 gallons of MOCAP® EC per acre
6. Hours Of Irrigation To Apply 6,000 Gallons Of Water Per Acre: 4 hours
7. Hours Of Irrigation To Inject MOCAP® EC Water Mixture Into The System: 3 hours
8. Injection Rate Per Hour: 425 gallons to be injected per hour for use rate of 1 gallon of MOCAP® EC per acre.
850 gallons to be injected per hour for use rate of 2 gallons of MOCAP® EC per acre.
9. Conversion of Gallons Of Material To Be Injected Per Hour Into Fluid Ounces Per Minute In Order To Calibrate And Adjust The Injector Pump:
 - 906.5 fluid ounces to be injected per minute for use rate of 1 gallon of MOCAP® EC per acre
 - 1,813.1 fluid ounces to be injected per minute for use rate of 2 gallons of MOCAP® EC per acre.

POTATOES

FOR WIREWORM AND GARDEN SYMPHYLAN (SCUTIGERELLA IMMACULATA) CONTROL

Row Treatment: Apply 2 quarts of MOCAP® EC per acre or 4.4 fluid ounces per 1,000 linear feet of row in a band 12 inches wide on the row at planting. Mix with the top 2 to 4 inches of soil.

The following broadcast treatment is recommended for fields where wireworm injury has been (or is suspected to be) especially severe (i.e., potatoes planted following sod, pasture or new ground).

FOR WIREWORM AND GARDEN SYMPHYLAN (SCUTIGERELLA IMMACULATA) CONTROL

Broadcast Treatment: Apply 2 2/3 to 4 quarts of MOCAP® EC per acre. Mix treatment with the top 2 to 4 inches of soil right after application.

FOR CONTROL OF GARDEN SYMPHYLAN (SCUTIGERELLA IMMACULATA) AND LESION, SPIRAL, STING, RING, STUNT, AND STUBBY ROOT NEMATODES AND SUPPRESSION OF NORTHERN ROOT-KNOT AND SOUTHERN ROOT-KNOT NEMATODES:

Row treatment: Apply 2 quarts of MOCAP® EC per acre (36-inch row spacing) or 4.4 fluid ounces per 1,000 linear feet of row in a band 12 inches wide on the row at planting. Mix with the top 2 to 4 inches of soil.

FOR CONTROL OF GARDEN SYMPHYLAN (SCUTIGERELLA IMMACULATA) AND NORTHERN ROOT-KNOT, SOUTHERN ROOT-KNOT, LESION, SPIRAL, STING, RING, STUNT, AND STUBBY-ROOT NEMATODES AND SUPPRESSION OF COLUMBIA ROOT-KNOT NEMATODES

Broadcast Treatment: Apply 1 to 2 gallons of MOCAP® EC per acre. Apply by ground application as close to planting as possible but not earlier than 2 weeks before planting or apply before potato emergence. Mix with the top 2 to 4 inches of soil right after application if applied before planting. If applied after planting, apply 1/4 to 1/2 inch water to incorporate in soil. Uniformity of application is important for best results.

NOTE: For best suppression of Columbia root-knot nematodes, it is recommended that MOCAP® EC be applied following fall or spring application of a registered fumigant nematicide.

Do not exceed a maximum of 12 lbs. active ingredient per acre per season on potatoes.

SUGARCANE

FOR NEMATODE AND WIREWORM CONTROL

Furrow Treatment: Apply 1 1/3 to 2 2/3 quarts of MOCAP® EC per acre at-planting time (6 foot row spacing) or 5.0 to 11.8 fluid ounces per 1,000 linear feet of row at-planting. Apply evenly in a band 12 to 15 inches wide, centered over the seed pieces in the opened furrow immediately before closing. Mix with the soil with a disc hiller or other suitable equipment as the cane is covered. Use the higher rates in fields where nematode and/or wireworm infestations have been especially severe.

SWEET POTATO
FOR NEMATODE, WIREWORM, WHITE GRUB, BANDED CUCUMBER BEETLE AND FLEA BEETLE LARVAE (PALESTRIPED AND SWEET POTATO FLEA BEETLE) CONTROL

Row Treatment: Use 2 to 2 2/3 quarts of MOCAP® EC per acre or 5.1 to 6.9 fluid ounces per 1,000 linear feet of row (minimum 42 inch row spacing). Apply in a band 12 to 15 inches wide on the row 2 to 3 weeks before planting. Mix with the top 2 to 4 inches of soil right after application. Good results have been obtained by opening the row, applying MOCAP® EC in a 12 to 15 inch band on the row, bedding over and dragging. Use the higher rate in fields where nematode and/or insect infestations have been especially severe.

FOR NEMATODE, WIREWORM, WHITE GRUB, BANDED CUCUMBER BEETLE AND FLEA BEETLE LARVAE (PALESTRIPED AND SWEET POTATO FLEA BEETLE) CONTROL

Broadcast Treatment: Apply 1 to 1 1/3 gallons of MOCAP® EC per acre 2 to 3 weeks before planting. Mix with the top 2 to 4 inches of soil right after application. Use double gang disc harrow or other equipment which will do a good job of mixing the MOCAP® EC with the soil. Use the higher rate in fields where nematode and/or insect infestations have been especially severe.

TOBACCO
FOR NEMATODE AND WIREWORM CONTROL

Row Treatment: Apply 1 to 2 gallons of MOCAP® EC per acre (42 inch row spacing) or 10.3 to 20.6 fluid ounces per 1,000 linear feet of row. Apply after fertilizer has been listed or bedded. Make application in a band 18 to 24 inches wide on the row from one week before planting to at-planting time. Mix with the top 2 to 4 inches of soil right after application. Use the higher rates in fields where nematode injury to tobacco has been especially severe, or where the soil is sandy.

FOR NEMATODE AND WIREWORM CONTROL

Broadcast Treatment: Apply 1 to 2 gallons of MOCAP® EC per acre from one week before planting to at-planting time. Mix the MOCAP® EC with the top 2 to 4 inches of soil right after application. Use a double gang disc harrow or other equipment which will do a good job of mixing the MOCAP® EC with the soil. After mixing, apply fertilizer and for best results, shape a wide bed with a tractor equipped with 4 disc tillers and wide sweeps for running out the middles. Be sure that only the treated soil (top 2 to 4 inches) is used to make beds. Use higher rates in fields where nematode injury to tobacco has been especially severe, or where the soil is sandy.

FOR WIREWORM CONTROL

Broadcast Treatment: Apply 1 1/3 quarts of MOCAP® EC per acre from 2 weeks before planting to at-planting time. Mix with the top 2 to 4 inches of soil right after application. Use a disc harrow or other cultivating equipment that will do a good job of mixing the MOCAP® EC with the soil.

FOR FLEA BEETLE CONTROL

Add 1/2 gallon (4 pints) per acre of Di-Syston® 8 Liquid Systemic Insecticide to the spray tank containing the MOCAP® EC mixture for nematode and wireworm control (see above). Observe all precautions on the label. Do not make more than one field application per crop season regardless of the formulation of Di-Syston used.

Rhône-Poulenc does not recommend the use of MOCAP® on tobacco in Florida.

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LIMITED WARRANTY AND DISCLAIMER

The manufacturer warrants (a) that this product conforms to the chemical description on the label; (b) that this product is reasonably fit for the purposes set forth in the directions for use when it is used in accordance with such directions; and (c) that the directions, warnings, and other statements on this label are based upon responsible experts' evaluation of reasonable tests of effectiveness, of toxicity to laboratory animals and to plants, and residues on food crops, and upon reports of field experience. Tests have not been made on all varieties or in all states or under all conditions. THE MANUFACTURER NEITHER MAKES NOR INTENDS, NOR DOES IT AUTHORIZE ANY AGENT OR REPRESENTATIVE TO MAKE, ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, AND IT EXPRESSLY EXCLUDES AND DISCLAIMS ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

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MOCAP EC Nematicide-Insecticide (PENDING) Submitted 7/19/93.