LIM LABORATORIES, INC.

EnCapcide

BIOLOGICAL INSECTICIDE

FLOWABLE CONCENTRATE

For Control of Insect Pests of Vegetables

Fruit and Field Crops

ACCEPTED APR 04 1994 Uniter the Federal Insecticide. Fungicide. and Rodenicide Act. on amended. for the particide registered under EFA Beg. No. 66

ACTIVE INGREDIENT:

1

Bacillus thuringiensis subspecies <u>kurstaki</u> strain BMP-123 Potency of 3,100 International Units per milligram 0.6%

INERT INGREDIENTS:___99.4%

TOTAL 100.00%

*Equivalent to 12 Billion International Units per Gallon

Potency units should not be used to adjust use rates beyond those specified in the Directions for Use Section.

KEEP OUT OF REACH OF CHILDREN

CAUTION

STATEMENTS OF PRACTICAL TREATMENT

If on skin: Wash with plenty of soap an water. Get medical attention.

If inhaled: Remove victim to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. Get medical attention.

If in Eyes: Flush eyes with plenty of water. Call a physician if irritation persists.

Lim Laboratories, Inc. Crop Protection & Pest Control Products 409 E. Main Street Richmond, VA 23219

EPA REGISTRATION No. 66296-4 EPA ESTABLISHMENT No. 66296-VA-001

NET CONTENTS <u>1 quart, 1 qallon, 2.5 qallons, 5 qallons,</u> <u>55 qallons</u> :

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS & DOMESTIC ANIMALS CAUTION

Harmful if inhaled or absorbed through the skin. Causes moderate eye irritation. Avoid breathing dust (vapor or spray mist). Avoid contact with skin, eyes or clothing.

Personal Protective Equipment: Applicators and other handlers must wear: Long-sleeved shirt and long pants

Waterproof gloves Shoes and socks

Follow manufacturer's instructions for cleaning and 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.
- Remove clothing immediately if ppesticide gets inside. Then wash thoroughly and put on clean clothing.

ENVIRONMENTAL HAZARDS

Do not contaminate water when disposing of equipment washwaters

DIRECTIONS FOR USE

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

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, 40CFR 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 protection equipment (PPE) and restricted-entry interval (REI). The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

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.

Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 12 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 socks and shoes

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

EnCapcide is a biological insecticide for the control of lepidopterous larvae (see Recommended Application Rates section).

EnCapcide may be applied for control of any labeled pest in both field and greenhouse uses.

EnCapcide attacks the larval gut and must be ingested by the insect to be effective.

MIXING

Always mix **EnCapcide** thoroughly before use by shaking or stirring. If using spray adjuvants, add the recommended amounts of the adjuvants to 3/4 volume of the required spray before filling tank. Mix thoroughly. Then add the recommended amount of **EnCapcide**.: Be sure to maintain agitation. Finally, add the balance of water and agitate until mixed. Be sure to maintain agitation while loading and spraying to prevent the formulation from settling.

When possible, apply early morning or evening in calm air conditions.

Do not allow dilute sprays to remain in the tank for more than 12 hours. Loss of activity of **EnCapcide** may result.

GROUND APPLICATION

Unless otherwise stated, use recommended amount of **EnCapcide** in a minimum of 20 gallons of water per acre depending on type of crop and requirements of state regulations.

AERIAL APPLICATION

Use recommended amount of **EnCapcide** in at least 5 gallons of water per acre. Applications at higher water volumes have demonstrated improved control of targeted pests. Apply early morning or evening when air is calm.

GENERAL USE INSTRUCTIONS

For most consistent control apply at first sign of newly hatched worms (1st and 2nd instar larvae).

Reapply as necessary under a pest management program that includes close scouting.

For heavy worm infestations use the higher **EnCapcide** rate. During situations of dense foliage and/or rapid growth, increasing water carrier volumes will provide better crop coverage and improve **EnCapcide** performance.

The pH of the spray solution should be held within a range of 5.2 to 6.8. Use a buffering agent when spray water has a pH exceeding 7.5.

For application on hard-to-wet crops such as cole crops or under heavy dew or rainy conditions, a spreader/sticker approved for use on growing crops should be added to the tank mix to improve coverage and weathering properties.

| VEGETABLE CROPS CROP | INSECT | RATE QTS./ACRE | ADDITIONAL INSTRUCTIONS |
|---------------------------------|-------------------------|-------------------|---|
| Artichokes | Artichoke Plume Moth | 2 | Apply in a minimum of 100 gal. of water per |
| | Armyworm Loopers | 2 2 | acre with a spray interval of 10 days or less |
| Asparagus | Armyworm | 1-2 | Repeat as necessary |
| Beans (Green, Lima, Munq) | | | to maintain control |
| Broccoli | Diamondback Moth | 1 | |
| Brussel Sprouts | Green Cloverworm | 1/2-1 | |
| Cabbage | Hornworms | 1/2-1 | |
| Cardoon | HOTHWOTHS | 1/2 1 | |
| Carrots | Imported | | |
| Cauliflower | Cabbageworm | 1/2-1 | |
| Celeriac | Loopers | 3/4-1 1/2 | |
| Celery | | -,, - | |
| Chick Peas | | | |
| Chinese Broccoli | | | |
| Chinese Cabbage | Salt Marsh | 1-2 | |
| Collards | Caterpillar | | |
| Cucumbers | - | | |
| Dry Bulb Onions | | | |
| Eggplants | European Corn | 1-2 | |
| Garlic | Borer | | |
| Green Onions | | | |
| Greens (Dandelion, | | | |
| Turnip, Mustard, | | | |
| Beet, China) | | | |
| Herbs (Basil), | | | |
| Cilantro, Dill, | | | |
| Oregano, Thyme, e | tc.) | | |
| Horseradish | | | |
| Kale Kohl Rabi | | | |
| Leeks | | | |
| Lettuce (Endive, | | | |
| Romaine, Head | | | |
| Lettuce, Escarole | | | |
| Butter Crunch, | | | • |
| Leaf, etc.) | | | ••• |
| | | | · · |

VEGETABLE CROPS

CROP

INSECT

RATE QTS./ACRE ADDITIONAL INSTRUCTIONS

Melons (Cantaloupe, Crenshaw, Honeydew, Muskmelon, Watermelon, etc.) Okra Onions **Parsley** Parsnips Peas **Peppers Potatoes** Pumpkins Radishes Rutabaga Salsify Spinach Squash (Summer and Winter) Sweet Corn Sweet Potatoes Swiss Chard Table Beets Tomatoes Turnip Root Watercress Yams

| FRUIT, NUT, & VINE | - | RATE | ADDITIONAL INSTRUCTIONS |
|--------------------|--------------------------------|--------------|---|
| CROP | INSECT | QTS./ACRE | INSTRUCTIONS |
| Apples and Pears | Fruittree Leafroller | 1-2 | Apply when newly hatched larvae appear |
| | Gypsy Moth Redbanded | 1-2 | and Lefore leaves are rolled. Continue |
| | Leafroller Tufted Apple | 1-2 | applying as a part of the normal cover spray |
| | Budmoth Variegated | 1-2 | <pre>program until pest is adequately controlled.</pre> |
| | Leafroller Omnivorous | 1-2 | |
| | Leafroller Tent Caterpillar | 1-2 1-2 | Apply when caterpillars are actively feeding. (2nd-4th) instars). |
| Avocados | Loopers Orange Tortrix | 2 1-2 | Apply as necessary to maintain control. |
| | Omnivorous Leafroller | 1-2 | Begin treatment as soon as possible after hatching and before larvae are protected by leaf folds. |
| | Amorbia | 2 | Suppression only. |
| Bananas | Banana Skipper | 1-2 | Hawaii only. Use calibrated ground equipment with adequate water to apply to point of runoff. |
| Citrus | Citrus Cutworm Fruittree | 1-2 | Use 50-600 gallons of water per acre when |
| | Leafroller Orangedog | 1-2 1/2-1 | using ground equipment and 10 gallons of water minimum per acre by air. |
| | Amorbia | 2 | Suppression only. |

| CROP | INSECT | RATE QTS./ACRE | ADDITIONAL INSTRUCTIONS |
|------------------------------------|--|-------------------|--|
| Blueberries | Blueberry | 1-2 | Apply by ground |
| Caneberries Currants Kiwi | Leafroller Cherry Fluitworm Fruittree Leadfroller | 1/2-1 | equipment only. Begin treatment as soon as possible after hatching. For |
| | Gypsy Moth | 1-2 | leafrollers, apply |
| | Green Fruitworm | 1/2-1 | before larvae are |
| | Loopers | 3/4-1 1/2 | protected by leaf |
| | Orange Tortrix Omnivorous | 1-2 | folds. |
| | Leafroller | 1-2 | |
| Grapes | Grape Leaffolder Grapeleaf | 1-2 | Apply by ground equipment in up to |
| | Skeletonizers Omnivorous | 1-2 | 200 gallons total spray per acre to |
| | Leafroller | 1-2 | obtain thorough |
| | Orange Tortrix Saltmarsh | 1-2 | coverage of leaf surfaces. Start |
| | Caterpillar | 1-2 | treating as soon as possible after hatching and before larvae are protected by leaf folds. |
| Almonds | Fall Webworm | 1-2 | For leafrollers, |
| Apricots | Filbert Webworm | 1-2 | start treating as |
| Cherries | Omnivorous | | soon as possible |
| Filberts | Leafroller | 1-2 | after hatching and |
| Nectarines | Citrus Cutworm | 1-2 | before larvae are |
| Peaches | Redhumped | 1-2 | protected by leaf |
| Pecans Persimmons | Caterpiller | 1-2 | folds. |
| Plums Pomegranate | Tent Caterpillar | 1-2 | Apply when caterpillars are actively feeding |
| Prunes Walnuts | | | (2nd to 4th instar). |
| Melons (Also see Vegetables) | Rindworm Complex | 1-2 | Apply at first sign of hatch before larvae enter fruit. Repeat as necessary to maintain control. |

| FRUIT, NUT, & VINE CROPS | | RATE | ADDITIONAL |
|--------------------------|---|------------------------------|---|
| CROP | INSECT | QTS./ACRE | INSTRUCTIONS |
| Strawberries | Armyworm Gypsy Moth Looper Roughskinned Cutworm | 2 1-2 3/4-1 1/2 1-2 | Apply as necessary maintain control. 20 gallons water minimum /acre when using ground equipment and 5 gallons water minimum per acre by aircraft. |

FIELD CROPS

| CROP | INSECT | RATE QTS./ACRE | ADDITIONAL INSTRUCTIONS |
|---|---|-----------------------------|---|
| Alfalfa (Hay and Seed) Sudan Grass Hay Crops & Other Forage Crops | Alfalfa Caterpillar Armyworm Loopers | 1/2-1 1 1/2-2 1-1 1/2 | Under conditions of rapid plant growth rapidly increasing armyworm populations (10 worms or greater per 180 degree sweep) use the highest rate. Against heterogenous worm populations, where 4th and 5th instars are present, and continuous egg laying, applications may provide variable control. |
| Small Grains | Armyworm | 1 1/2-2 | Apply as necessary to maintain control. |
| Hops | Loopers Omnivorous Leaftier | 3/4-1 1/2 1-2 | Apply as necessary to maintain control |
| | Spotted Cutworm Oblique Banded Leafroller | 1-2 | Begin treatment as soon as possible after hatching and before larvae are protected by leaf folds. |

FIELD CROPS

| CROP | INSECT | RATE QTS./ACRE | ADDITIONAL INSTRUCTIONS |
|-------------------------------------|----------------------------------|-------------------|---|
| Cano la | Armyworm Diamondback | 1-2 | Apply as necessary to maintain control. |
| | Moth | 1 | |
| Field Corn Pop Corn Seed Corn | Armyworm | 1 1/2-2 | Make initial Application when economically damaging populations exist. Repeat as necessary to maintain control. Applications must be made to early instars prior to entering the ear or plant. |
| | Southwestern Corn Borer | 2 | Aids in control. |
| | European Corn Borer | 2 | |
| Jojoba | Looper (Anacamptodes spp.) | 1-2 | Apply in minimum 50 gal. of water per acre by ground equipment or a minimum of 10 gal. of water by aerial equipment. Thorough coverage foliage is essential and dictates the minimum spray volumes necessary. |

FIELD CROPS

| CROP | INSECT | RATE QTS./ACRE | ADDITIONAL INSTRUCTIONS |
|-------------------------|---------------------------|-------------------|---|
| Dry Beans and Peas | Armyworms Green | 1-2 | Apply as necessary to maintain control. |
| Lentils Mint | Cloverworm | 1/2-1 | |
| Peanuts | Loopers | 3/4-1 1/2 | |
| Rice Safflower | Salt Marsh Caterpillar | 1-2 | |
| Soybeans Sugar Beets | Velvetbean Caterpillar | 1/2-1 | |
| Sunflower | Heliothis spp. | 2 | Suppression only |
| | Cutworm | 1-2 | • |
| Tobacco | Looper | 3/4-1 1/2 | Apply as necessary |
| | Tobacco Hornworm | 1/2-1 | to maintain control. |
| | Tobacco Budworm | 2 | Suppression only |

COTTON - Except Arizona and California

| TIMING | INSECT | RATE QTS./ACRE | ADDITIONAL INSTRUCTIONS |
|--------|--------------------------------|-------------------|--|
| Early | Bollworm Tobacco Budworm | 1-2 | For early season management of Heliothis species. Initiate applications when 50% of plants are at pinhead square cotton stage, independent of Heliothis egg and larval counts, or at 1st egg lay, whichever occurs earlier. Continue applications on 5-day spray interval. |

| COTTON | | RATE | ADDITIONAL |
|-------------------------|---------------------------------------|------------|--|
| TIMING | INSECT | QTS./ACRE | INSTRUCTIONS |
| Early and Mid-Season | Armyworm Cotton Leaf Perforator | 2 | Repeat as necessary throughout season to maintain control. |
| | Cotton Leafworm Loopers | 1-2 1-2 | If egg laying frequency indicates |
| | Saltmarsh Caterpillar | 1-2 | future moderate to heavy worm populations, time application spray to coincide with the 2nd instar larvae. During periods of high temperatures, worms will progress through 1st and 3rd instars very rapidly and early application timing is necessary for control. |
| | | | To be effective, EnCapcide spray must be deposited at the larval feeding site. When plant cover is dense and worms are feeding in the lower 2/3 portion of the plant, aerial application of EnCapcide may not provide adequate control. |
| | Bollworm Tobacco Budworm | 1-2 | For the suppression of light to moderate infestations, apply at first sign of egg laying or newly hatched worms (1st instar larvae). |

SHADE TREES, ORNAMENTALS (Including Roses)

| RATE QTS./ACRE | ADDITIONAL INSTRUCTIONS |
|---------------------------------------|---|
| 1/2-1 | Apply when leaf |
| • | expansion reaches |
| 1-2 | infestation warrants. If eggs hatch over a long period of time, or if reinfestation occurs, spray about 14 days after first applications. |
| 1-2 | Apply when most larvae are 3rd-4th instar. Also consider the opening of the bud cap to ensure foliage exposure. |
| 1/2-1 | |
| • | |
| | Ammlu often eggs |
| | Apply after eggs have hatched and |
| · · · · · · · · · · · · · · · · · · · | early instar |
| · · · · · · · · · · · · · · · · · · · | larvae are feeding |
| 1/4-3/4 | on exposed |
| 1/4-1/2 | foliage. |
| | 1/2-1 1/2-1 1/2-1 1-2 1-2 1/2-1 1/2-1 1/2-1 1/2-1 1/2-1 1/2-1 1/2-1 1/2-1 1/2-1 1/2-1 1/2-1 1/2-1 |

TURF AND GRASS SEED PRODUCTION

| Tropical Sodwebworm | 2 | Repeat as necessary |
|---------------------|---|----------------------|
| Armyworm | 2 | throughout season to |
| Sodwebworm | 2 | maintain control. |

STORAGE AND

DISPOSAL

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

STORAGE

Store in original container in a cool, dry place inaccessible to children and pets and away from heat and direct sunlight. Protect from freezing. Storage at temperature above 90° F may impair effectiveness.

DISPOSAL

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

CONTAINER DISPOSAL

Glass Containers: Triple rinse container. Then dispose of in a

sanitary landfill or by other approved State and

local procedures.

Metal Containers: Triple rinse container. Then offer for recycling

or reconditioning, or puncture and dispose of in a

sanitary landfill, or by other procedures approved

by State and local authorities.

Plastic Containers: Triple rinse container. Then offer for recycling

or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by State and legal suppositions by burning If

by State and local authorities, by burning. If

burned, stay out of smoke.

WARRANTY

Lim warrants that its **EnCapcide** contains the ingredients listed on this label. I im makes no other warranties, expressed or implied. Including without limitation, any warranty of merchantability or fitness for a particular purpose.