

**LOOPEX**  
**Suspension Concentrate Insecticidal Virus**

For Use in Greenhouse for the Control of Cabbage Looper Larvae (*Trichoplusia ni*)

COMMERCIAL

**READ THE LABEL BEFORE USING**  
**KEEP OUT OF REACH OF CHILDREN**

ACTIVE INGREDIENT: *Autographa californica* Nucleopolyhedrovirus FV11,  
minimum of  $5 \times 10^8$  polyhedral inclusion bodies (PIBs) / mL

**REGISTRATION NO. 31791 PEST CONTROL PRODUCTS ACT**

Net Contents: 200 mL - 4000 mL

CAUTION – EYE IRRITANT

POTENTIAL SENSITIZER



12 Fairway Drive Hanwell,  
New Brunswick, E3C 0M2  
Tel: 1-506-444-5690

Batch Number:  
Date of Manufacture:

## GENERAL DIRECTIONS FOR USE:

*Autographa californica* nucleopolyhedrovirus (AcMNPV) is a naturally occurring baculovirus within the genus *Alphabaculovirus*. It is infectious to cabbage looper larvae (*Trichoplusia ni*). To be effective, deposits of AcMNPV must be ingested by susceptible larvae. Thorough coverage of target foliage where larvae are feeding is essential. When ingested by the host larvae, the polyhedral inclusion bodies (PIBs) of AcMNPV dissolve in the larval midgut and release occlusion derived viral particles that initially infect midgut tissues in order to systematically infect and replicate in the nuclei of other tissues within the larvae. The infected larvae stop eating, become sluggish and die. Cabbage looper mortality occurs between 4 and 9 days after ingestion of AcMNPV, depending on ambient temperature.

Baculoviruses co-evolved with and have only been found in insects. Members of the genus *Alphabaculovirus* do not infect Hymenopteran pollinators and parasitoids or insect predators such as praying mantis and ladybird beetles. No member of the Baculoviridae family has been found in vertebrates or plants and AcMNPV does not replicate in mammalian cells. Baculoviruses do not affect or infect fish, wildlife, humans or beneficial organisms.

## CROPS:

For use on crop plants and plants grown for transplanting.

### **Cannabis (marihuana) produced commercially indoors**

**Fruiting Vegetables (Crop Group 8-09):** African eggplant, bell pepper, bush tomato, cocona, currant tomato, eggplant, garden huckleberry, goji berry, groundcherry, martynia, naranjilla, non-bell pepper, okra, pea eggplant, pepino, roselle, scarlet eggplant, sunberry, tomatillo, tomato, tree tomato, and cultivars, varieties and hybrids of these.

**Cucurbit Vegetables (Crop Group 9):** chayote (fruit), Chinese waxgourd (Chinese preserving melon), citron melon, cucumber, gherkin, gourd (edible, includes Chinese okra, cucuzza, hechima, hyotan), Momordica spp. (includes balsam apple, balsam pear, bitter melon, Chinese cucumber), muskmelon (includes cantaloupe, casaba, crenshaw melon, golden pershaw melon, honey balls, honeydew melon, mango melon, Persian melon, pineapple melon, Santa Claus melon, snake melon, true cantaloupe), pumpkin, summer squash (includes crookneck squash, scallop squash, straightneck squash, vegetable marrow, zucchini), watermelon, winter squash (includes acorn squash, butternut squash, calabaza, hubbard squash, spaghetti squash).

**Leafy Vegetables (Crop Group 4-13):** Abyssinian cabbage, arugula, bitter lettuce, blackjack, broccoli raab, cat's whiskers, cham-chwi, cham-na-mul, chervil (fresh leaves), Chinese amaranth, Chinese broccoli, Chinese cabbage (bok choy), Chinese violet, chipilin, cilantro (fresh leaves), collards, corn salad, cosmos, dandelion, dang-gwi, dillweed (fresh leaves), dock, dol-nam-mul, ebolo, endive, escarole, English primrose, fameflower, feather cockscomb, garden cress, garden purslane, garland chrysanthemum, good King Henry, Hanover salad, head lettuce, huauzontle, jute leaves, kale, Indian aster, leaf lettuce, leafy amaranth, maca, Malabar spinach, mizuna, mustard greens, New Zealand spinach, orach, parsley (fresh leaves), plantain (including buckhorn plantain and common plantain), radicchio (red chicory), radish leaves, rape greens, seakale cabbage, shepherd's purse, spinach, Swiss chard, tanieler spinach, tree spinach, turnip greens, upland cress, watercress, wild rocket, winter purslane, and cultivars, varieties and hybrids of these.

**Brassica Head and Stem Vegetables (Crop Group 5-13):** broccoli, Brussels sprouts, cabbage, Chinese cabbage (napa), cauliflower, and cultivars, varieties and hybrids of these.

**Stalk, Stem, and Leaf Petioles (Crop Group 22):** agave, aloe vera, asparagus, bamboo shoots, cardoon, celery, Chinese celery, Florence fennel (fresh leaves and stalk), fern (edible fiddlehead, including black lady fern, bracken fern, broad buckler fern, cinnamon fern, lady fern, leather fern, mother fern, ostrich fern, vegetable fern, zenmai fern), fuki, kohlrabi, palm hearts, prickly pear, rhubarb, sea kale, Texas prickly pear, udo, zuiki, and cultivars, varieties and hybrids of these.

**Herbs and Spices (Crop Group 19):** allspice, angelica, anise (seed), annatto, balm (lemon balm), basil, black caraway, borage, burnet, camomile, caper buds, caraway, cardamom, cassia bark, cassia buds, catnip, celery seed, chervil (dried), Chinese chive, chive, cinnamon, clary, clove buds, cilantro(leaf), coriander (cilantro seed), costmary, culantro (leaf), culantro (seed), cumin, curry (leaf), dill (dillweed), dill (seed), fennel, fenugreek, Florence fennel (seed), grains of paradise, horehound, hyssop, juniper berry, lavender, lemongrass, lovage (leaf), lovage (seed), mace, marigold, marjoram (includes sweet or annual marjoram, wild marjoram or oregano and pot marjoram), mustard (seed), nasturtium, nutmeg, parsley (dried), pennyroyal, pepper, poppy (seed), rosemary, rue, saffron, sage, savory, star anise, sweet bay (bay leaf), tansy, tarragon, thyme, vanilla, wintergreen, woodruff, wormwood.

**DIRECTIONS FOR USE:** Application timing should target small larvae and be applied using high volume spray systems (minimum 400 L/ha). **Loopex** can be applied up to and including the day of harvest and storage. Dilute between 50 and 200 mL of **Loopex** per 400 L of water and apply sufficient volume to ensure thorough coverage of the foliage.

To be effective, larvae must ingest foliage with deposits of **AcMNPV**. Uniform spray deposit coverage of the foliage is essential for optimum control.

**Application rate:**  $2.5 \times 10^{10}$  to  $1 \times 10^{11}$  PIBs/400 L of water

**Comments:** Repeat application every 7 to 14 days if monitoring indicates that it is necessary. **Loopex** can be applied up to and including the day of harvest and storage.

DO NOT allow effluent or runoff from greenhouses containing this product to enter lakes, streams, ponds or other waters.

As this product is not registered for the control of pests in aquatic systems, DO NOT use to control aquatic pests

DO NOT contaminate irrigation or drinking water supplies or aquatic habitats by cleaning of equipment or disposal of wastes.

DO NOT apply using aerial application equipment.

The pH of the solution should range between 5 and 8.

**PRODUCT PRECAUTIONS:**

Read and understand the entire label before opening this product. If you have questions call the manufacturer at 1-506-444-5690 or obtain technical advice from the distributor or your provincial agricultural representative.

**RESTRICTED ENTRY INTERVAL (REI):**

Do not allow worker entry into treated areas until mists have settled. If re-entry is required prior to settling of mists, workers must wear a long-sleeved shirt, long pants, shoes plus socks, waterproof gloves, eye goggles and a NIOSH approved mist filtering mask or respirator with any N-95, P-95 or R-95 filter.

**PRECAUTIONS:**

KEEP OUT OF REACH OF CHILDREN. Potential sensitizer. Avoid breathing spray mist. Avoid contact with skin, eyes or clothing. Wear a long-sleeved shirt, long pants, shoes plus socks, waterproof gloves, eye goggles and a NIOSH approved mist filtering mask or respirator with any N-95, P-95 or R-95 filter when handling, mixing/loading or applying the product and during all clean-up/repair activities. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

**FIRST AID:**

IF SWALLOWED - Call a poison control centre or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control centre or doctor. Do not give anything by mouth to an unconscious person.

IF ON SKIN OR CLOTHING - Take off contaminated clothing. Rinse skin immediately with plenty of water for 15–20 minutes. Call a poison control centre or doctor for treatment advice.

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 centre or doctor for further treatment advice.

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 eye. Call a poison control centre or doctor for treatment advice.

GENERAL – Seek medical attention immediately if irritation or signs of toxicity occur and persist or are severe. Take container, label or product name and Pest Control Product Registration Number with you when seeking medical attention.

**TOXICOLOGICAL INFORMATION:**

Treat symptomatically.

**STORAGE:** This product should be used within 24 months from the date of manufacture when stored at up to 5°C. Store container upright and keep tightly closed when not in use. Shake vigorously to resuspend contents immediately prior to addition in water.

**DISPOSAL:**

1. Triple- or pressure-rinse the empty container. Add the rinsings to the spray mixture in the tank.
2. Follow provincial instruction for any required additional cleaning of the container prior to its disposal.
3. Make the empty container unsuitable for further use.
4. Dispose of the container in accordance with provincial requirements.
5. For information on disposal of unused, unwanted product, contact the

manufacturer or the provincial regulatory agency. Contact the manufacturer and the provincial regulatory agency in case of a spill, and for clean-up of spills.

**NOTICE TO USER:** This pest control product is to be used only in accordance with the directions on the label. It is an offence under the PEST CONTROL PRODUCTS ACT to use this product in a way that is inconsistent with the directions on the label.