

PM 18 58998-18 P2 18 16

|   |                      |                  |
|---|----------------------|------------------|
| US ENVIRONMENTAL PROTECTION AGENCY<br>OFFICE OF PESTICIDES PROGRAMS<br>REGISTRATION DIVISION (75-767)<br>WASHINGTON, DC 20460 | EPA REGISTRATION NO. | DATE OF ISSUANCE |
|   | 58998-18             | 2/18/93          |
|   | TERM OF ISSUANCE     |                  |
| CONDITIONAL   |                      |                  |
| NAME OF PESTICIDE PRODUCT   |                      |                  |
| Biobit® HPWP  |                      |                  |

NOTICE OF PESTICIDE:  REGISTRATION  
 REREГИSTRATION  
 (Under the Federal Insecticide, Fungicide,  
 and Rodenticide Act, as amended)

NAME AND ADDRESS OF REGISTRANT (Include ZIP code)

Novo Nordisk A/S  
 c/o Ms. Janet M. Overholt  
 Novo Nordisk Bioindustrials, Inc.  
 33 Turner Road  
 Danbury, Ct. 06813

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. EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby Registered/Reregistered under the Federal Insecticide, Fungicide, and Rodenticide Act.

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

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 cancel the registration of a pesticide 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.

This product is conditionally registered in accordance with FIFRA sec. 3(c)(7)(A) provided that you:

1. Submit and/or cite all data required for registration/reregistration of your product under FIFRA sec. 3(c)(5) or FIFRA section 4 when the Agency requires all registrants of similar products to submit such data.
2. Submit a primary dermal irritation study and an acute dermal toxicity study, per Subdivision F of the Pesticide Assessment Guidelines, within 8 months of the date of this notice of registration.
3. Submit a storage stability study which analyzes lepidopteran active toxin  $\alpha$  as well as  $\beta$ -exotoxin presence as per Table C of the 1988 Bacillus thuringiensis Registration Standard within 15 months.
4. Submit five (5) copies of your final printed labeling before you release the product for shipment.

If these conditions are not complied with, the registration will be subject to cancellation 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.

ATTACHMENT IS APPLICABLE

SIGNATURE OF APPROVING OFFICIAL: \_\_\_\_\_ DATE: 2/18/93

**BEST AVAILABLE COPY**

HIGH POTENCY WETTABLE POWDER  
FOR THE CONTROL OF LEPIDOPTEROUS LARVAE

ACTIVE INGREDIENT BY WEIGHT

|   |             |
|---|-------------|
| <u>Bacillus thuringiensis</u> Berliner subspecies <u>kurstaki</u> |             |
| Lepidopteran Active Toxin.....                                    | 6.4%        |
| Inert Ingredients.....  | 93.6%       |
| <b>TOTAL.....</b>   | <b>100%</b> |

POTENCY: 32,000 International Units (IU) per mg of product equivalent to 14.5 Billion IU per pound of product. 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 in Eyes: Flush with plenty of water. Call a physician if eye irritation persists.  
on Skin: Flush skin with plenty of soap and water. Get medical attention if irritation persists.

PRECAUTIONARY STATEMENTS  
HAZARDS TO HUMANS AND DOMESTIC ANIMALS

May cause eye injury irritation.  
Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling.

ENVIRONMENTAL HAZARDS

Do not contaminate water when disposing of equipment washwaters.

BEST AVAILABLE COPY

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 through any type of irrigation system.  
Refer to the Directions For Use Booklet attached to this container for further directions.

EPA Reg. No.: 58998-18

EPA Est. No.: 58998-DN-002

**ACCEPTED**  
FEB 18 1993  
Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No. 58998-18

**STORAGE AND DISPOSAL**

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

**Storage:** Store in a cool, dry place. Keep containers tightly closed when not in use. Store in temperatures above freezing and below 90 degrees F.

**Pesticide Disposal:** Pesticide waste resulting from the use of this product may be disposed of on site or at an approved waste disposal facility in accordance with federal and local regulations.

**Container Disposal:** Completely empty bag into application equipment then dispose of empty bag in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

**HOME GARDEN USE DISPOSAL INSTRUCTIONS**

**Pesticide Disposal:** Securely wrap original container in several layers of newspaper and discard in trash.

**Container Disposal:** Do not reuse bag. Discard bag in trash.

**NOTICE OF WARRANTY**

NOVO NORDISK MAKES NO WARRANTY OF MERCHANTABILITY, FITNESS FOR ANY PURPOSE, OR OTHERWISE, EXPRESS OR IMPLIED, concerning this product or its uses which extend beyond the use of the product under normal conditions in accord with the statements made on this label.

In no case shall the seller be liable for consequential, or indirect damages resulting from the use or handling of this product. All such risks shall be assumed by the buyer.

Novo Nordisk holds U.S. registrations for the active ingredient. Biobit HPWP is manufactured by Novo Nordisk.

Biobit is the Registered Trademark of Novo Nordisk.

Manufactured For:  
Novo Nordisk  
33 Turner Road  
Danbury, CT 06813-1907

NET CONTENTS \_\_\_\_\_ Pounds

45/16

**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 through any type of irrigation system.

**Re-entry**

Do not enter treated area without protective clothing until sprays have dried.

Because certain states may require more restrictive reentry intervals for various crops treated with this product, consult your State Department of Agriculture for further information.

Do not apply this product in such a manner as to directly or through drift expose workers or other persons. The area being treated must be vacated by unprotected persons.

Written or oral warnings must be given to workers who are expected to be in a treated area or in an area about to be treated with this product. Oral warnings must include the following information:

Inform workers of area of fields that must not be entered without appropriate protective clothing until sprays have dried. In case of accidental exposure, wash thoroughly with soap and water. If in eyes, flush with plenty of water. Get medical attention if eye irritation persists.

When oral warnings are given, warnings shall be given in a language customarily understood by workers. Written warnings must include the following information:

CAUTION: Area treated with Biobit HPWP on (date of application). Do not enter without appropriate protective clothing until sprays have dried. In case of accidental exposure, wash thoroughly with soap and water. If in eyes, flush with plenty of water. Get medical attention if eye irritation persists.

**APPLICATION**

Biobit HPWP may be applied by ground or aerial equipment with quantities of water sufficient to provide thorough coverage of plant parts to be protected. The amount of water needed per acre will depend upon crop size, weather, spray equipment, and local experience.

**MIXING**

Fill spray or mixing tank half full of water. Begin agitation and pour Biobit HPWP into water while maintaining continuous agitation. Add other spray material (if any) and balance of water. Agitate as necessary to maintain suspension. Do not allow diluted mixture to remain in the tank for more than 48 hours.

The use of a spreader-sticker is recommended for hard to wet crops such as cole crops or to improve weather-fastness of the spray deposits. Combinations with commonly used spray tank adjuvants are generally not deleterious to Biobit HPWP if the mix is used promptly. Before mixing in the spray tank, it is advisable to test physical compatibility by mixing all components in a small container in proportionate quantities.

For smaller spray volumes mix the proper number of teaspoons of Biobit HPWP from the following chart to attain the desired rates:

| <u>If the rate is:</u> | <u>Add this amount per gallon of mix:</u> |
|------------------------|---|
| 0.5 lb/acre            | 1 teaspoons                               |
| 1.0 lb/acre            | 2 teaspoons                               |
| 2.0 lb/acre            | 4 teaspoons                               |

**BEST AVAILABLE COPY**

The above rate calculations assume that the final mix will be applied to 100% off on the target crop and that thorough coverage will be obtained.

**SPRAY VOLUMES**

**Aerial Application:** Use recommended amount of Biobit HPWP in a minimum of 5 gallons of water per acre. Apply early morning or evening when air is calm.

**Ground Application:** Use recommended amount of Biobit HPWP in a minimum of 20 gallons of water per acre.

**Ground applications to trees and vines:** Apply specific dosage per acre of Biobit HPWP in a minimum of 100 gallons of water per acre for dilute applications. Wet foliage thoroughly with spray but not to the point of excessive runoff. For mist blowers, use recommended amount of Biobit HPWP (per acre rate) in a minimum of 20 gallons of water per acre.

**GENERAL USE INSTRUCTIONS**

Biobit HPWP is a highly selective biological insecticide specific for the control of lepidopterous larvae. Biobit HPWP must be ingested by the larvae to be effective. For consistent control, apply at first sign of newly hatched larvae (1st and 2nd instar larvae). Susceptible larvae that ingest Biobit HPWP cease feeding within a few hours and die within 2-5 days.

For maximum effectiveness the following is recommended:

Monitor fields to detect early infestations.

Apply Biobit HPWP when eggs start hatching and larvae are small (early instars) and before significant crop damage occurs. Larvae must be actively feeding to be affected.

Repeat applications every 3 to 14 days to maintain control and protect new plant growth. Factors affecting spray interval include rate of plant growth, weather conditions, and reinfestation. Monitor populations of pests and beneficials to determine proper timing of applications.

Under conditions of heavy pest pressures or when large worms are present use the higher rate, shorten the application interval, and/or improve spray coverage to enhance control. When these conditions are present a contact insecticide should be used to enhance control.

Through coverage is essential for optimum performance. Ground applicators equipped with directed drop nozzles can improve coverage.

**PREHARVEST INTERVAL**

Biobit HPWP may be applied up to and on the day of harvest.

**APPLICATION RATES:**

**BEST AVAILABLE COPY**

| CROP GROUP          |   | Pests                            | Rate (lbs./acre) | Special Instructions |
|---------------------|---|----------------------------------|------------------|----------------------|
| FORAGE, FODDER, HAY |   |                                  |                  |                      |
|                     | Crop  |                                  |                  |                      |
|                     | Alfalfa (Hay & Seed) and Other Non-grass Animal Feeds,  | Alfalfa Caterpillar Loopers      | 0.25-1.0         |                      |
|                     |   | Armyworm                         | 0.5-2.0          | *                    |
|                     | Grasses Grown For Feed (pasture, ranges, hay or silage) | European Skipper (Essex Skipper) | 0.5-1.0          |                      |



| <b>CROP GROUP</b>      |  |                 |  |
|------------------------|--|-----------------|--|
| <b>OTHER FRUITS</b>    |  |                 |  |
| <b>Bananas</b>         | <b>Banana Skipper</b>  | <b>0.5-1.0</b>  |  |
| <b>Tropical Fruits</b> | <b>Hornworms<br/>Leafrollers<br/>Loopers<br/>Omnivorous Leafroller</b>                   | <b>0.5-2.0</b>  |  |
| <b>Kiwi</b>            | <b>Omnivorous Leafroller</b>   | <b>0.5-2.0</b>  |  |
| <b>Pineapple</b>       | <b>Gummosos-Batrachedra<br/>commosae (Hodges)<br/>Thecla-Thecla basilides<br/>(Geyr)</b> | <b>0.25-0.5</b> |  |
| <b>Melons</b>          | <b>(see Vegetable Crops, Curcubits)</b>  |                 |  |

| CROP GROUPS               |  |  |                  |                      |
|---------------------------|--|--|------------------|----------------------|
| VEGETABLES AND COLE CROPS |  |  |                  |                      |
|                           | Crop   | Pests  | Rate (lbs./acre) | Special Instructions |
|                           | Root & Tuber Vegetables, and leaves of Root and Tuber vegetables such as Bee', Carrot, Horseradish, Radish, Potato Sweet Potato, Turnip and Turnip Greens, Sugarbeets, | Imported Cabbageworm<br>Green Cloverworm   | 0.25-1.0         |                      |
|                           |  | -----<br>Hornworms   | 0.125-1.0        |                      |
|                           |  | -----<br>Cutworms<br>Loopers<br>Webworms<br>Saltmarsh Caterpillar<br>Omnivorous Leafroller | 0.5-1.0          |                      |
|                           |  | -----<br>Armyworm  | 0.5-2.0          | *                    |
|                           |  | -----<br>Diamondback Moth  | 0.25-2.0         |                      |
|                           |  | -----<br>European Corn Borer   | 1.0-1.5          |                      |
|                           |  | -----<br>Alfalfa Caterpillar   | 0.125- 0.25      |                      |
|                           | Bulb Vegetables such as: Garlic, Leeks, Onions, Shallot  | Saltmarsh Caterpillar<br>Omnivorous Leafroller<br>Webworms<br>Cutworms                     | 0.5-1.0          |                      |
|                           |  | -----<br>Hornworms   | 0.125-1.0        |                      |
|                           |  | -----<br>Imported Cabbageworm<br>Green Cloverworm<br>Loopers                               | 0.25-1.0         |                      |
|                           |  | -----<br>Armyworm  | 0.5-2.0          | *                    |
|                           |  | -----<br>Diamondback Moth  | 0.25-2.0         |                      |
|                           |  | -----<br>European Corn Borer   | 1.0-1.5          |                      |
|                           |  | -----<br>Helicoverpa (Heliothis) sp  | 1.0              | Suppression Only **  |

**BEST AVAILABLE COPY**



| Crop  | Pests  | Rate<br>(lbs./acre) | Special<br>Instructions |
|---|--|---------------------|-------------------------|
| Leafy vegetables, such as:<br><br>Celery, Lettuce (Head and Leaf), Parsley, Endive, Spinach, Kale | Imported Cabbageworm<br>Green Cloverworm<br>Loopers  | 0.25-1.0            |                         |
|   | Hornworms  | 0.125-1.0           |                         |
|   | Cutworm, Webworms  | 0.5-1.0             |                         |
|   | Diamondback Moth   | 0.25-2.0            |                         |
|   | Saltmarsh Caterpillar<br>Omnivorous Leafroller   | 0.5-1.0             |                         |
|   | Armyworm   | 0.5-2.0             | *                       |
|   | European Corn Borer  | 1.0-1.5             |                         |
| Legume and foliage of Legume vegetables, such as Beans, Lentils, Peas,<br><br>Soybeans            | Loopers  | 0.25-1.0            |                         |
|   | Hornworms  | 0.125-0.5           |                         |
|   | Podworms<br>Imported Cabbageworm<br>Green Cloverworm<br>Saltmarsh Caterpillar<br>Soybean Loopers | 0.5-1.0             |                         |
|   | Armyworm   | 0.5-2.0             | *                       |
|   | Diamondback Moth<br>Velvetbean Caterpillar   | 0.25-2.0            |                         |
|   | European Corn Borer  | 1.0-1.5             |                         |
|   | Cutworm  | 0.5-1.5             |                         |

| Crop  | Pests  | Rate<br>(lbs./acre) | Special<br>Instructions |
|---|--|---------------------|-------------------------|
| <b>Fruiting Vegetables</b><br><br>such as:<br>Eggplant,<br>Peppers,<br>Tomatoes   | Imported Cabbageworm<br>Green Cloverworm   | 0.25-0.5            |                         |
|   | -----<br>Diamondback Moth  | 0.25-2.0            | -----                   |
|   | -----<br>Hornworms   | 0.125-1.0           | -----                   |
|   | -----<br>Tomato Fruitworm(Heliothis)<br>Variegated Cutworm<br>Saltmarsh Caterpillar<br>Loopers | 0.5-1.0             | -----                   |
|   | -----<br>Armyworm  | 0.5-2.0             | -----<br>*              |
|   | -----<br>European Corn Borer   | 1.0-1.5             | -----                   |
| <b>Brassica (cole) vegetables</b><br>such as:<br>Broccoli,<br>Brussels sprouts,<br>Cabbage,<br>Cauliflower,<br>Collards,<br>Kohlrabi, | Diamondback Moth   | 0.25-2.0            | -----                   |
|   | -----<br>Hornworms   | 0.125-1.0           | -----                   |
|   | -----<br>Webworms<br>Loopers<br>Cutworms<br>Saltmarsh Caterpillar<br>Omnivorous leafroller     | 0.5-1.0             | -----                   |
|   | -----<br>Imported Cabbageworm<br>Green Cloverworm  | 0.25-1.0            | -----                   |
|   | -----<br>Armyworms   | 0.5-2.0             | -----<br>*              |
|   | -----<br>European Corn Borer   | 1.0-1.5             | -----                   |
| <b>Cucurbit vegetables</b><br>such as:<br>Cucumbers,<br><br>Melons,<br>Pumpkins,<br>Squash,<br>Watermelon                             | Imported Cabbageworm<br>Green Cloverworm<br>Loopers  | 0.25-1.0            | -----                   |
|   | -----<br>Diamondback Moth  | 0.25-2.0            | -----                   |
|   | -----<br>Saltmarsh Caterpillar<br>Melonworm<br>Pickleworm<br>Rindworm complex                  | 0.25-1.0            | -----                   |
|   | -----<br>Armyworm  | 0.5-2.0             | -----<br>*              |
|   | -----<br>European Corn Borer   | 1.0-1.5             | -----                   |
|   | -----<br>Hornworms   | 0.125-0.5           | -----                   |

**BEST AVAILABLE COPY**

| <b>CROP GROUP</b>       |  |  |                             |                                 |       |
|-------------------------|--|--|-----------------------------|---------------------------------|-------|
| <b>OTHER VEGETABLES</b> |  |  |                             |                                 |       |
|                         | <b>Crop</b>                                      | <b>Pests</b>                                     | <b>Rate<br/>(lbs./acre)</b> | <b>Special<br/>Instructions</b> |       |
|                         | <b>Artichokes</b>                                | <b>Artichoke Plume Moth</b>                      | 0.5-1.25                    |                                 |       |
|                         |  | -----  | -----                       | -----                           |       |
|                         |  | <b>Armyworm</b>                                  | 0.5-1.5                     | *                               |       |
|                         |  | -----  | -----                       | -----                           | ----- |
|                         |  | <b>Loopers</b>                                   | 0.25-1.25                   |                                 |       |
|                         | <b>Asparagus</b>                                 | <b>Armyworms</b>                                 | 0.5-2.0                     | *                               |       |
|                         |  | -----  | -----                       | -----                           |       |
|                         |  | <b>Diamondback Moth</b>                          | 0.25-2.0                    |                                 |       |
|                         |  | -----  | -----                       | -----                           |       |
|                         |  | <b>Green Cloverworm<br/>Imported Cabbageworm</b> | 0.25-0.5                    |                                 |       |
|                         |  | -----  | -----                       | -----                           |       |
|                         |  | <b>Loopers</b>                                   | 0.25-1.0                    |                                 |       |
|                         | <b>Malanga</b>                                   | <b>Armyworms</b>                                 | 0.5-2.0                     | *                               |       |
|                         |  | -----  | -----                       | -----                           |       |
|                         |  | <b>Saltmarsh Caterpillar</b>                     | 0.5-1.0                     |                                 |       |
| <b>Watercress</b>       | <b>Loopers<br/>Diamondback Moth</b>              | 0.25-2.0   |                             |                                 |       |
|                         | -----  | -----  | -----                       |                                 |       |
|                         | <b>Armyworms</b>                                 | 0.5-2.0  | *                           |                                 |       |
|                         | -----  | -----  | -----                       |                                 |       |
|                         | <b>Green Cloverworm<br/>Imported Cabbageworm</b> | 0.25-0.5   |                             |                                 |       |
|                         | -----  | -----  | -----                       |                                 |       |
|                         | <b>Saltmarsh Caterpillar</b>                     | 0.5-1.0  |                             |                                 |       |
|                         | -----  | -----  | -----                       |                                 |       |
|                         | <b>European Corn Borer</b>                       | 1.0-1.25   |                             |                                 |       |
|                         | -----  | -----  | -----                       |                                 |       |
|                         | <b>Sweet Corn</b>                                | (see Other Crops, Corn)                          |                             |                                 |       |

| CROP GROUP  |  |          |       |
|---|--|----------|-------|
| HERBS, SPICES, MINTS                                    |  |          |       |
| such as Basil,<br>Dill, Oregano,<br>Peppermint,<br>Tyme | Loopers                                  | 0.25-1.0 |       |
|   | -----                                    | -----    |       |
|   | Diamondback Moth                         | 0.5-2.0  |       |
|   | -----                                    | -----    |       |
|   | Green Cloverworm<br>Imported Cabbageworm | 0.25-0.5 |       |
| -----   | -----                                    | -----    |       |
|   | Armyworm                                 | 0.5-2.0  | *     |
| -----   | -----                                    | -----    | ----- |
|   | European Corn Borer                      | 1.0-1.5  |       |

| CROP GROUP  |           |  |                     |                         |
|-------------|-----------|--|---------------------|-------------------------|
| OTHER CROPS |           |  |                     |                         |
|             | Crop      | Pests  | Rate<br>(lbs./acre) | Special<br>Instructions |
| )           | Avocadoes | Loopers  | 1.0-1.25            |                         |
|             |           | -----  | -----               |                         |
|             |           | Orange Tortrix<br>Omnivorous Leafroller<br>Omnivorous Looper<br>Spanworm | 0.5-2.0             |                         |
|             |           | -----  | -----               |                         |
|             |           | Amorbia  | 0.5-2.0             | Suppression<br>Only **  |
| )           | Rice      | Armyworms  | 0.5-1.5             | *                       |
|             |           | -----  | -----               | -----                   |
|             |           | Loopers<br>Saltmarsh Caterpillar,  | 0.5-1.0             |                         |
|             |           | -----  | -----               |                         |
|             |           | Cutworm  | 0.5-1.5             |                         |
| -----       | -----     | -----  |                     |                         |
|             |           | Green Cloverworm,<br>VelvetBean Caterpillar                              | 0.25-0.5            |                         |
| -----       | -----     | -----  | -----               |                         |
|             |           | Helicoverpa (Heliothis) spp  | 1.0                 | Suppression<br>Only: ** |

|   | Crop                                 | Pests  | Rate<br>(lbs./acre)  | Special<br>Instructions                   |
|---|--------------------------------------|--|--|---|
|   | Cotton (Except<br>CA & AZ)           | Loopers<br>-----<br>Armyworm<br>-----<br>Cotton bollworm<br>Tobacco budworm  | 0.5-1.0<br>-----<br>0.5-2.0<br>-----<br>0.25-2.0                     | *<br>-----<br>see below                   |
| <p><b>Special Instructions:</b> For early season management of <i>Helicoverpa</i> species. Initiate applications when 50% of plants are at pinhead square cotton stage independent of <i>Heliothis</i> egg and larval counts or at first egg lay, whichever occurs earlier. Continue applications on a five day spray interval up to the pyrethroid spray window.</p>   |                                      |  |  |   |
|   | Cotton (CA &<br>AZ)                  | Armyworm<br>-----<br>Cotton Leaf Perforator<br>Cotton Leafworm<br>Saltmarsh Caterpillar<br>-----<br>Loopers<br>-----<br>Cotton Bollworm<br>Tobacco Budworm | 0.5-2.0<br>-----<br>0.5-1.0<br>-----<br>0.5-1.0<br>-----<br>0.5-2.0  | *<br>-----<br>See Below                   |
| <p><b>Special Instructions:</b> Repeat as necessary throughout the season to maintain control. If egg laying frequency indicates future moderate to heavy larval populations, time application spray to coincide with the second instar larvae. During periods of high temperatures larvae will progress through first to third instars very rapidly and early application timing is necessary for control. When plant cover is dense and larvae are feeding in the lower 2/3 portion of the plant, aerial application of Biobit HPWP may not provide adequate control.</p> |                                      |  |  |   |
|   | Canola/Rape<br>Seed                  | Armyworm<br>-----<br>Diamondback Moth<br>-----<br>Looper<br>-----<br>Helicoverpa ( <i>Heliothis</i> )  | 0.5-2.0<br>-----<br>0.25-2.0<br>-----<br>0.5-1.0<br>-----<br>0.5-2.0 | *<br>-----<br>-----<br>-----              |
|   | Corn<br><br>Field, Sweet,<br>Popcorn | Armyworms<br>-----<br>European Corn Borer<br>(whorl Stage Only)<br>-----<br>Southwestern Corn Borer  | 0.5-2.0<br>-----<br>0.5-2.0<br>-----<br>1.0-1.5                      | *<br>-----<br>-----<br>Aids in<br>Control |

**BEST AVAILABLE COPY**

|  | Crop                       | Pests   | Rate<br>(lbs./acre) | Special<br>Instructions |
|--|----------------------------|---|---------------------|-------------------------|
|  | Hops                       | Armyworm  | 0.5-2.0             | *                       |
|  |                            | Loopers   | 0.25-1.0            |                         |
|  |                            | Omnivorous Leaf-tier<br>Spotted Cutworm<br>Oblique Banded Leafroller                                  | 0.5-1.0             |                         |
|  |                            |   |                     |                         |
|  | Jojoba                     | Looper (Anacamptodes spp.)  | 0.5-1.0             |                         |
|  | Peanuts                    | Green Cloverworm<br>Loopers<br>Velvetbean Caterpillar<br>Podworms                                     | 0.5-1.0             |                         |
|  |                            | Helicoverpa (Heliothis) spp   | 1.0                 | Suppression<br>Only **  |
|  | Persimmons,<br>Pomegranate | Fall Webworm<br>Filbert Webworm<br>Omnivorous Leafroller<br>Redhumped Caterpillar<br>Tent Caterpillar | 0.5-1.0             |                         |
|  |                            | Citrus Cutworm  | 0.5-1.25            |                         |
|  | Safflower                  | Armyworm  | 0.5-2.0             | *                       |
|  |                            | Loopers<br>Saltmarsh Caterpillar  | 0.5-1.0             |                         |
|  | Sorghum                    | Headworm  | 0.5-1.0             |                         |
|  | Soybeans                   | (see Vegetable Crops,<br>Legumes)   |                     |                         |
|  | Sunflowers                 | Headmoth<br>Loopers   | 0.5-1.0             |                         |
|  | Small Grains               | Armyworms   | 0.5-2.0             | *                       |
|  |                            | Loopers   | 0.5-1.0             |                         |
|  | Tobacco                    | Tobacco Hornworm  | 0.125-0.5           |                         |
|  |                            | Looper  | 0.25-1.0            |                         |
|  |                            | Tobacco Budworm   | 2.0                 | Suppression<br>Only **  |

BEST AVAILABLE COPY

**CROP GROUP**  
**FLOWERS, BEDDING PLANTS, AND ORNAMENTALS**

| Crop                                 | Pests                 | Rate lbs./acre | Special Instructions |
|--------------------------------------|-----------------------|----------------|----------------------|
| Ornamentals, Flowers, Bedding plants | Diamondback Moth      | 0.5-2.0        | *                    |
|                                      | Armyworm              |                |                      |
|                                      | Azalea Moth           | 0.25-0.5       |                      |
|                                      | Ello Moth (Hornworm)  |                |                      |
|                                      | Io Moth               |                |                      |
|                                      | Loopers               |                |                      |
|                                      | Oleander Moth         |                |                      |
|                                      | Omnivorous Leafroller |                |                      |
|                                      | Omnivorous Looper     |                |                      |
|                                      | Tobacco Budworm       |                |                      |

**CROP GROUP**  
**GREENHOUSE, SHADE TREES, AND OUTDOOR NURSERY CROPS**

| Crop  | Pests     | Rate (lbs./acre) | Special Instructions |
|---|-----------|------------------|----------------------|
| Such as Brassica, Fruiting Groups, Herbs, and Leafy | Armyworms | 0.5-2.0          | *                    |
|   | Loopers   | 0.5-1.0          |                      |

**CROP GROUP**  
**TURF**

| Crop | Pests                | Rate (lbs./acre) | Special Instructions |
|------|----------------------|------------------|----------------------|
| Turf | Sod Webworm          | 1.0-2.0          |                      |
|      | Tropical Sod Webworm | 1.0              |                      |
|      | Armyworm             | 1.0              | *                    |

**CROP GROUP**

| Crop            | Pests  | Rate (lbs./acre) | Special Instructions |
|-----------------|--|------------------|----------------------|
| Home Garden Use | Biobit HPWP may be used for any labeled pest and crop using the rates, mixing, and general use instructions specified on this label. Thorough applications to spray runoff should be made. |                  |                      |

**BEST AVAILABLE COPY**

| CROP GROUP   |  |   |                  |                      |
|--|--|---|------------------|----------------------|
| Forests, Shade Trees, Ornamentals, Shrubs, Sugar Maple Trees |  |   |                  |                      |
|  | Crop   | Pests   | Rate (lbs./acre) | Special Instructions |
|  | Forests, Shade Trees, Ornamentals, Shrubs, Sugar Maple Trees | Gypsy Moth<br>Spruce Budworm<br>Browntail Moth  | 0.5-1.25         |                      |
|  |  | Tussock Moths<br>Pine Butterfly Bagworm<br>Leafrollers<br>Tortrix Moths<br>Mimosa Webworm<br>Tent Caterpillars<br>Jackpine Budworm<br>Blackheaded Budworm<br>Elm Spanworm<br>Saddled Prominent<br>Saddleback Caterpillars | 0.5-1.0          |                      |
|  |  | Redhumped Caterpillar<br>Spring Cankerworm<br>Fall Cankerworm<br>California Oakworm<br>Fall Webworm   | 0.25-0.5         |                      |

**Special Instructions**

\* Biobit HPWP may be used to control small armyworms (first and second instar) when populations are light and full coverage sprays are applied. Repeat treatment as necessary. If mature larvae or heavy populations are present, a contact insecticide should be used to enhance control.

\*\* Suppression Only. Use to aid in control of light to moderate populations of first and second instars in integrated pest management conditions. Repeat treatments at four to five day intervals. The use of additional ovicidal or larvicidal insecticide will aid in control.