



United States
Environmental Protection Agency
 Washington, DC 20460
NOTIFICATION

Registration
 Amendment
 Other

OPP Identifier Number
239623

Application for Pesticide - Section I

1. Company/Product Number 58998-2	2. EPA Product Manager J Anderson	3. Proposed Classification <input checked="" type="checkbox"/> None <input type="checkbox"/> Restricted
4. Company/Product (Name) Biocot Flowable Concentrate	PM# 18	
5. Name and Address of Applicant (Include ZIP Code) Novo Nordisk A/S Novo Alle 2800 Bagsvaerd <input type="checkbox"/> Check if this is a new address	6. Expedited Review. In accordance with FIFRA Section 3(c)(3) (b)(i), my product is similar or identical in composition and labeling to: EPA Reg. No. _____ Product Name _____	

Section - II

<input type="checkbox"/> Amendment - Explain below.	<input type="checkbox"/> Final printed labels in response to Agency letter dated _____
<input type="checkbox"/> Resubmission in response to Agency letter dated _____	<input type="checkbox"/> "Me Too" Application.
<input checked="" type="checkbox"/> Notification - Explain below.	<input type="checkbox"/> Other - Explain below.

Explanation: Use additional page(s) if necessary. (For section I and Section II.)
 Notification to revise REI to 4hrs as allowed by Policy Statement on Worker Protection Standard; Reduced Restricted Entry Intervals for Certain Pesticides, Effective May 3, 1995
 Notification under PR Notice 95-3

Section - III

1. Material This Product Will Be Packaged In:				2. Type of Container	
Child-Resistant Packaging <input type="checkbox"/> Yes* <input type="checkbox"/> No	Unit Packaging <input type="checkbox"/> Yes <input type="checkbox"/> No	Water Soluble Packaging <input type="checkbox"/> Yes <input type="checkbox"/> No	Metal Plastic Glass Paper Other (Specify) _____		
* Certification must be submitted		If "Yes" Unit Packaging wgt. No. per container	If "Yes" Package wgt. No. per container		
3. Location of Net Contents Information <input type="checkbox"/> Label <input type="checkbox"/> Container		4. Size(s) Retail Container		5. Location of Label Directions <input type="checkbox"/> On Label <input type="checkbox"/> On Labeling accompanying product	
6. Manner in Which Label is Affixed to Product <input type="checkbox"/> Lithograph <input type="checkbox"/> Paper glued <input type="checkbox"/> Stenciled			<input type="checkbox"/> Other _____		

Section - IV

1. Contact Point (Complete items directly below for identification of individual to be contacted, if necessary, to process this application.)		
Name Carmen M. Sanchez Lopez, Ph.D.	Title Regional Manager Regulatory Affairs	Telephone No. (Include Area Code) 916-757-4738
Certification I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.		6. Date Application Received (Stamped)
2. Signature <i>Carmen M. Lopez</i>	3. Title Regional Manager Regulatory Affairs	
4. Typed Name Carmen M. Sanchez Lopez, Ph.D.	5. Date <i>Sept. 12, 1995</i>	

KEEP OUT OF REACH OF CHILDREN
CAUTION

ACTIVE INGREDIENT: *Bacillus thuringiensis* Berliner subspecies *kurstaki*, 8,000 International Units (IU)/mg of product (equivalent to 32 billion IU/GAL.).....1.6%
INERT INGREDIENTS.....98.4%

PRECAUTIONARY STATEMENTS:

HAZARDS TO HUMANS AND DOMESTIC ANIMALS: Avoid contact with skin, eyes, or clothing.

USER SAFETY RECOMMENDATIONS:

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

PERSONAL PROTECTIVE EQUIPMENT: Applicators and other handlers must wear: Long-sleeved shirt and long pants, waterproof gloves, shoes plus socks. 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.

ENVIRONMENTAL HAZARDS: Do not contaminate water when disposing of equipment washwaters.

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.

STATEMENTS OF PRACTICAL TREATMENT:

If on Skin: Wash with plenty of soap and water. Get medical attention.

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

DIRECTIONS FOR USE FOR AGRICULTURAL APPLICATIONS:

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.

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

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 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 exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. 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 4 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, shoes plus socks.

STORAGE AND DISPOSAL:

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

Storage: Store in a cool 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: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

GENERAL USE INSTRUCTIONS: BIOCOT is a biological insecticide for the control of lepidopterous larvae. BIOCOT 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 BIOCOT cease feeding within a few hours and die within 2-5 days.

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

For maximum effectiveness the following is recommended: Monitor fields to detect early infestations.

Apply BIOCOT 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 re-infestation. 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. This product can be mixed and used with other pesticides only in accordance with the most restrictive of label limitations and precautions. This product cannot be mixed with any product containing a label prohibition against such mixing. No label dosage rates may be exceeded.

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

APPLICATION: BIOCOT 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 BIOCOT 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 approved for use on growing crops is recommended for hard to wet crops or to improve weather-fastness of the spray deposits. Combinations with commonly used spray tank adjuvants are generally not deleterious to BIOCOT 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.

BEST COPY AVAILABLE

EPA Registration No. 58998-2

EPA Est. No. 58998-DN 002

80RC895

MANUFACTURED FOR:

Novo Nordisk

33 Turner Road, Danbury, Connecticut 06813-1907

NET CONTENT

(U.S. GALLONS)



SPRAY VOLUMES:

Ground Application: Use recommended amount of BIOCOT in ground 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 conditions, spray equipment used and local experience.

Aerial Application: Use recommended amount of BIOCOT in aerial equipment undiluted or with quantities of water sufficient to provide thorough coverage of plant parts to be protected. In the western U.S. 5-10 gallons per acre is the normal minimum; in the eastern regions a minimum of 2-3 gallons is normally used. The minimum amount of water needed per acre will depend upon crop size, weather conditions, spray equipment used and local experience.

Crop	Pests	Rate (pts/acre)	Special Instruction
Cotton	Loopers	2.0-3.5	
	Armyworms	2.0-7.0	1)
	Cotton Bollworm Tobacco Budworm	1.0-7.0	2)
Soybeans	Loopers	1.0-3.5	
	Podworms	2.0-3.5	
	Green Cloverworm Saltmarsh Caterpillar Soybean Loopers Velvetbean Caterpillar		
	Armyworms	2.0-7.0	1)
	Cutworms	2.0-5.5	
Peanuts	Loopers Green Cloverworm Velvetbean Caterpillar Podworms	2.0-3.5	
	<i>Heliothis</i> spp.	3.5	3)

SPECIAL INSTRUCTIONS

This product can be mixed and used with other pesticides only in accordance with the most restrictive of label limitations and precautions. This product cannot be mixed with any product containing a label prohibition against such mixing. No label dosage rates may be exceeded.

1) BIOCOT 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.

2) For early season management of *Heliothis/Helicoverpa* species, initiate applications at pinhead square stage when eggs are present. For best results, application should be timed to coincide with egg hatch. Continue applications on 5 day intervals. Addition of an ovicide may be beneficial. Preservation of beneficial insects should be considered in selecting an ovicide. Applications of Biocot may continue throughout the season. As the larval population increases through the season, increase rates of Biocot, and tank mix with other larvicides for increased control. When the crop canopy is dense and larvae are feeding in the lower canopy, aerial application of Biocot may not provide adequate deposit for acceptable control.

3) 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 insecticides will aid in control.

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. BIOCOT is manufactured by Novo Nordisk.

PM-18

58998-2

11075

4518

Please read instructions on reverse before completing form.

Form Approved. OMB No. 2070-0060. Approval expires 2-28-95



United States
Environmental Protection Agency
Washington, DC 20460
NOTIFICATION

Registration
 Amendment
 Other

OPP Identifier Number
239630

Application for Pesticide - Section I

1. Company/Product Number 58998-2	2. EPA Product Manager J. Anderson	3. Proposed Classification <input checked="" type="checkbox"/> None <input type="checkbox"/> Restricted
4. Company/Product (Name) Biobit Flowable Concentrate	PM# 18	
5. Name and Address of Applicant (Include ZIP Code) Novo Nordisk A/S Novo Alle 2800 Bagsvaerd <input type="checkbox"/> Check if this is a new address	6. Expedited Review. In accordance with FIFRA Section 3(c)(3) (b)(i), my product is similar or identical in composition and labeling to: EPA Reg. No. _____ Product Name _____	

Section - II

<input type="checkbox"/> Amendment - Explain below.	<input type="checkbox"/> Final printed labels in response to Agency letter dated _____
<input type="checkbox"/> Resubmission in response to Agency letter dated _____	<input type="checkbox"/> "Me Too" Application.
<input checked="" type="checkbox"/> Notification - Explain below.	<input type="checkbox"/> Other - Explain below.

Explanation: Use additional page(s) if necessary. (For section I and Section II.)

Notification to revise REI to 4hrs as allowed by Policy Statement on Worker Protection Standard; Reduced Restricted Entry Intervals for Certain Pesticides, Effective May 3, 1995. Notification under PR Notice 95-3

Section - III

1. Material This Product Will Be Packaged In:				2. Type of Container	
Child-Resistant Packaging <input type="checkbox"/> Yes* <input type="checkbox"/> No	Unit Packaging <input type="checkbox"/> Yes <input type="checkbox"/> No	Water Soluble Packaging <input type="checkbox"/> Yes <input type="checkbox"/> No	Metal Plastic Glass Paper Other (Specify) _____		
* Certification must be submitted		If "Yes" Unit Packaging wgt. No. per container	If "Yes" Package wgt. No. per container		
3. Location of Net Contents Information <input type="checkbox"/> Label <input type="checkbox"/> Container		4. Size(s) Retail Container		5. Location of Label Directions <input type="checkbox"/> On Label <input type="checkbox"/> On Labeling accompanying product	
6. Manner in Which Labels Affixed to Product <input type="checkbox"/> Lithograph <input type="checkbox"/> Paper glued <input type="checkbox"/> Stenciled			<input type="checkbox"/> Other _____		

Section - IV

1. Contact Point (Complete items directly below for identification of individual to be contacted, if necessary, to process this application.)		
Name Carmen M. Sanchez Lopez, Ph.D.	Title Regional Manager, Regulatory Affairs	Telephone No. (Include Area Code) 916-757-4738
Certification I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.		6. Date Application Received (Stamped)
2. Signature 	3. Title Regional Manager, Regulatory Affairs	
4. Typed Name Carmen M. Sanchez Lopez, Ph.D.	5. Date Sept. 12, 1995	

**KEEP OUT OF REACH OF CHILDREN
CAUTION**

Novo

ACTIVE INGREDIENT

Bacillus thuringiensis Berliner subspecies *kurstaki*, 8,000 International Units (IU)/mg of product (equivalent to 32 billion IU/GAL).....1.6%
Inert Ingredients.....98.4%

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS
Avoid contact with skin, eyes, or clothing.

USER SAFETY RECOMMENDATIONS

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

PERSONAL PROTECTIVE EQUIPMENT

Applicators and other handlers must wear: Long-sleeved shirt and long pants, waterproof gloves, shoes plus socks. 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.

ENVIRONMENTAL HAZARDS

Do not contaminate water when disposing of equipment washwaters.

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.

STATEMENTS OF PRACTICAL TREATMENT

If on Skin: Wash with plenty of soap and water. Get medical attention.

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

DIRECTIONS FOR USE FOR AGRICULTURAL APPLICATIONS:

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.

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

Directions For Use, Cont.

Agricultural Use Requirements: Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. Refer to supplemental labeling under "Agricultural Use Requirements" in the Directions For Use section for information about this standard.

Refer to the Directions For Use Booklet attached to this container for further directions.

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°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: Triple rinse (or equivalent). Then offer for recycling or reconditioning or puncture and dispose of in a sanitary landfill or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

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 is manufactured by Novo Nordisk.

EPA Registration No. 58998-2
EPA Est. No. 58998-DN 002
EPA Est. No.

MANUFACTURED FOR:
Novo Nordisk
33 Turner Road, Danbury, Connecticut 06813 1907

NET CONTENTS
U S Gallons

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.

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, 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 exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. 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 4 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, shoes plus socks.

APPLICATION

Biobit 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 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 approved for use on growing crops 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, 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.

7-18

SPRAY VOLUMES

Ground Application: Use recommended amount of Biobit in ground 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 conditions, spray equipment used and local experience.

Aerial Application: Use recommended amount of Biobit in aerial equipment undiluted or with quantities of water sufficient to provide thorough coverage of plant parts to be protected. In the western U.S. 5-10 gallons per acre is the normal minimum; in the eastern regions a minimum of 2-3 gallons is normally used. The minimum amount of water needed per acre will depend upon crop size, weather conditions, spray equipment used and local experience.

GENERAL USE INSTRUCTIONS

Biobit is a biological insecticide for the control of lepidopterous larvae. Biobit 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 cease feeding within a few hours and die within 2-5 days.

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

For maximum effectiveness the following is recommended:

Monitor fields to detect early infestations.

Apply Biobit 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. This product can be mixed and used with other pesticides only in accordance with the most restrictive of label limitations and precautions. This product cannot be mixed with any product containing a label prohibition against such mixing. No label dosage rates may be exceeded.

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

8-0-18

APPLICATION RATES:

CROP GROUP				
FORAGE, FODDER, HAY				
	Crop	Pests	Rate (pts./acre)	Special Instructions
	Alfalfa (Hay & Seed) and Other Non-grass Animal Feeds, Grasses Grown For Feed (pasture, ranges, hay or silage)	Alfalfa Caterpillar Loopers	1.0-3.5	
		Armyworms	2.0-7.0	*
		European Skipper (Essex Skipper)	2.0-3.5	

CROP GROUP				
FRUITS & NUTS				
	Crop	Pests	Rate (pts./acre)	Special Instructions
	Pome and Stone Fruit Trees such as: Apples, Pears, Quince, Apricots, Cherries, Nectarines, Peaches, Plums, Prunes. Nut Trees such as: Almonds, Filbert, Chestnuts, Walnuts, Pecans.	Citrus Cutworm Navel Orangeworm Redhumped Caterpillar Tent Caterpillars Omnivorous Leafroller Tortrix Moths Cankerworms Peach Twig Borer Fruittree Leafroller Gypsy Moth Tufted Apple Budmoth Fall Webworm Variegated Leafroller Redbanded Leafroller Walnut Caterpillar Codling Moth Cutworms Filbert Leafroller Oblique Banded Leafroller	2.0-7.0	
		Filbert Webworm	2.0-3.5	
		Roughskinned Cutworm	1.0-2.0	

	<u>Crop</u>	<u>Pests</u>	<u>Rate (pts./acre)</u>	<u>Special Instructions</u>
	Citrus	Orangedog	1.0-3.5	
		Fruittree Leafroller Citrus Cutworm	2.0-7.0	
		Amorbia	3.5-5.5	** See Below
	Small Fruit and Berries such as: Blackberries, Blueberries, Currants, Raspberries, Strawberries, Cranberries. Grapes	Gypsy Moth Blueberry Leafroller Loopers Fruittree Leafroller Grape Berry Moth Oblique Banded Leafroller Achema Sphinx Moth (Hornworm)	2.0-3.5	
		Armyworms	2.0-7.0	*
		Tobacco Budworm	7.0	**See Below
		Cherry Fruitworm Green Fruitworm	1.0-2.0	
		Grape Leaffolder Grapeleaf Skeletonizer Omnivorous Leafroller Orange Tortrix Saltmarsh Caterpillar	2.0-4.5	

CROP GROUP

OTHER FRUITS

	<u>Crop</u>	<u>Pests</u>	<u>Rate (pts./acre)</u>	<u>Special Instructions</u>
	Bananas	Banana Skipper	2.0-3.5	
	Tropical Fruits	Hornworms Leafrollers Loopers Omnivorous Looper	2.0-7.0	
	Kiwi	Omnivorous Leafroller	2.0-7.0	

Crop	Pests	Rate (pts./acre)	Special Instructions
Pineapple	Gummosis-Batrachedra commosae (Hodges) Thecla-Thecla basilides (Geyr)	1.0-2.0	
Melons	(See Vegetable Crops, Cucurbits)		

CROP GROUPS			
VEGETABLES AND COLE CROPS			
Crop	Pests	Rate (pts./acre)	Special Instructions
Root & Tuber Vegetables, and leaves of Root and Tuber vegetables such as: Beets, Carrot, Horseradish, Radish, Potato, Sweet Potato, Turnip and Turnip Greens, Sugarbeets.	Imported Cabbageworm Green Cloverworm	1.0-3.5	
	----- Hornworms	0.50-3.5	
	----- Cutworms Loopers Webworms	2.0-3.5	
	----- Saltmarsh Caterpillar Omnivorous Leafroller		
	----- Armyworms	2.0-7.0	*
	----- Diamondback Moth	1.0-3.5	
	----- European Corn Borer	3.5-5.5	
	----- Alfalfa Caterpillar	0.50-1.0	

	Crop	Pests	Rate (pts./acre)	Special Instructions
	Legume and foliage of Legume vegetables, such as: Lentils, Peas, Beans	Loopers ----- Hornworms ----- Podworms Imported Cabbageworm Green Cloverworm Saltmarsh Caterpillar Soybean Loopers Velvetbean Caterpillar ----- Armyworms ----- Diamondback Moth ----- European Corn Borer ----- Cutworms	1.0-3.5 ----- 0.50-2.0 ----- 2.0-3.5 ----- 2.0-7.0 ----- 1.0-3.5 ----- 3.5-5.5 ----- 2.0-5.5	*
	Fruiting Vegetables such as: Eggplant, Peppers, Tomatoes.	Imported Cabbageworm Diamondback Moth Green Cloverworm ----- Hornworms ----- Tomato Fruitworm (<i>Heliothis</i>) Variegated Cutworm Saltmarsh Caterpillar Loopers ----- Armyworms ----- European Corn Borer	1.0-2.0 ----- 0.50-3.5 ----- 2.0-3.5 ----- 2.0-7.0 ----- 3.5-5.5	*
	Brassica (cole) vegetables such as: Broccoli, Brussels sprouts, Cabbage, Cauliflower, Collards, Kohlrabi.	Hornworms ----- Webworms Loopers Cutworms Saltmarsh Caterpillar Omnivorous leafroller ----- Diamondback Moth Imported Cabbageworm Green Cloverworm ----- Armyworms ----- European Corn Borer	0.50-3.5 ----- 2.0-3.5 ----- 1.0-3.5 ----- 2.0-7.0 ----- 3.5-5.5	*

Crop	Pests	Rate (pts./acre)	Special Instructions
Cucurbit vegetables such as: Cucumbers, Melons, Pumpkins, Squash, Watermelon.	Imported Cabbageworm	1.0-3.5	
	Green Cloverworm		
	Diamondback Moth		
	Loopers		
	Saltmarsh Caterpillar		
	Melonworm		
	Pickleworm		
	Rindworm complex		

	Armyworms	2.0-7.0	*

	European Corn Borer	3.5-5.5	

	Hornworms	0.50-2.0	

OTHER VEGETABLES

Crop	Pests	Rate (pts./acre)	Special Instructions
Artichokes	Artichoke Plume Moth	2.0-4.5	

	Armyworms	2.0-5.5	*

	Loopers	1.0-4.5	
Asparagus	Armyworms	2.0-7.0	*

	Diamondback Moth	1.0-2.0	
	Green Cloverworm		
	Imported Cabbageworm		

	Loopers	1.0-3.5	
Malanga	Armyworms	2.0-7.0	*

	Saltmarsh Caterpillar	2.0-3.5	
Watercress	Loopers	1.0-3.5	
	Diamondback Moth		

	Armyworms	2.0-7.0	*

	Green Cloverworm	1.0-2.0	
	Imported Cabbageworm		

	Saltmarsh Caterpillar	2.0-3.5	

	European Corn Borer	3.5-4.5	
Sweet Corn	(see Other Crops, Corn)		

CROP GROUP				
HERBS, SPICES, MINTS				
	Crop	Pests	Rate (pts./acre)	Special Instructions
	Such as: Basil, Dill, Oregano, Thyme, Peppermint.	Loopers	1.0-3.5	
		Diamondback Moth	1.0-2.0	
		Green Cloverworm		
		Imported Cabbageworm		
		Armyworms	2.0-7.0	*
		European Corn Borer	3.5-5.5	

OTHER CROPS				
	Crop	Pests	Rate (pts./acre)	Special Instructions
	Avocadoes	Loopers	3.5-4.5	
		Orange Tortrix	2.0-7.0	
		Omnivorous Leafroller		
		Omnivorous Looper		
		Spanworm		
		Amorbia	2.0-7.0	Suppression Only **
	Rice	Armyworms	2.0-5.5	*
		Loopers	2.0-3.5	
		Saltmarsh Caterpillar		
		Cutworms	2.0-5.5	
		Green Cloverworm	1.0-2.0	
		Velvetbean Caterpillar		
		<i>Heliothis</i> spp.	3.5	Suppression Only **

	Canola/Rape Seed	Armyworms	2.0-7.0	*
		Diamondback Moth	1.0-2.0	
		Loopers	2.0-3.5	
		<i>Heliothis</i> spp.	2.0-7.0	
	Corn Such as: Field, Sweet, Popcorn.	Armyworms	2.0-7.0	*
		European Corn Borer (Whorl Stage Only)	2.0-5.5	
		Southwestern Corn Borer	3.5-5.5	Aids in Control

Crop	Pests	Rate (pts./acre)	Special Instructions
Hops	Armyworms	2.0-7.0	*
	Loopers	1.0-3.5	
	Omnivorous Leaf-tier Spotted Cutworm Oblique Banded Leafroller	2.0-3.5	
Jojoba	Looper (<i>Anacamptodes</i> spp.)	2.0-3.5	
Persimmons, Pomegranate	Fall Webworm Filbert Webworm Omnivorous Leafroller Redhumped Caterpillar Tent Caterpillars	2.0-3.5	
	Citrus Cutworm	2.0-4.5	
Safflower	Armyworms	2.0-7.0	*
	Loopers Saltmarsh Caterpillar	2.0-3.5	
Sorghum	Headworm	2.0-3.5	
Sunflowers	Headmoth Loopers	2.0-3.5	
Small Grains	Armyworms	2.0-7.0	*
	Loopers	2.0-3.5	
Tobacco	Tobacco Hornworm	0.50-2.0	
	Loopers	1.0-3.5	
	Tobacco Budworm	3.5	Suppression Only **

Special Instructions

This product can be mixed and used with other pesticides only in accordance with the most restrictive of label limitations and precautions. This product cannot be mixed with any product containing a label prohibition against such mixing. No label dosage rates may be exceeded.

* Armyworm Control: Biobit 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 added 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.

1604

Crop	Pests	Rate (pts./acre)	Special Instructions
Hops	Armyworms	2.0-7.0	*
	----- Loopers	----- 1.0-3.5	-----
	Omnivorous Leaf-tier Spotted Cutworm Oblique Banded Leafroller	2.0-3.5	
Jojoba	Looper (<i>Anacamptodes</i> spp.)	2.0-3.5	
Peanuts	Green Cloverworm Loopers Velvetbean Caterpillar Podworms	2.0-3.5	
	----- <i>Heliothis</i> spp.	----- 3.5	----- Suppression Only **
Persimmons, Pomegranate	Fall Webworm Filbert Webworm Omnivorous Leafroller Redhumped Caterpillar Tent Caterpillars	2.0-3.5	
	----- Citrus Cutworm	----- 2.0-4.5	
Safflower	Armyworms	2.0-7.0	*
	----- Loopers Saltmarsh Caterpillar	----- 2.0-3.5	-----
Sorghum	Headworm	2.0-3.5	
Soybeans	(see Vegetable Crops, Legumes)		
Sunflowers	Headmoth Loopers	2.0-3.5	
Small Grains	Armyworms	2.0-7.0	*
	----- Loopers	----- 2.0-3.5	-----
Tobacco	Tobacco Hornworm	0.50-2.0	
	----- Loopers	----- 1.0-3.5	-----
	Tobacco Budworm	3.5	Suppression Only **

CROP GROUP
FLOWERS BEDDING PLANTS, AND ORNAMENTALS

	<u>Crop</u>	<u>Pests</u>	<u>Rate (pts./acre)</u>	<u>Special Instructions</u>
	Ornamentals Flowers, Bedding Plants	Armyworms	2.0-7.0	*
		Azalea Moth Diamondback Moth Ello Moth (Hornworm) Io Moth Loopers Oleander Moth Omnivorous Leafroller Omnivorous Looper Tobacco Budworm	1.0-2.0	.

CROP GROUP
GREENHOUSE, AND OUTDOOR NURSERY CROPS

	<u>Crop</u>	<u>Pests</u>	<u>Rate (pts./acre)</u>	<u>Special Instructions</u>
	Such as: Flowers, Brassica, Fruiting Groups, Herbs, and Leafy	Armyworms <i>Heliothis</i> spp.	2.0-7.0	*
		Loopers	2.0-3.5	

CROP GROUP
TURF

	<u>Crop</u>	<u>Pests</u>	<u>Rate (pts./acre)</u>	<u>Special Instructions</u>
	Turf	Sod Webworm	3.5-7.0	
		Tropical Sod Webworm	3.5	
		Armyworms	3.5	*

CROP GROUP				
Forests, Shade Trees, Ornamentals, Shrubs, Sugar Maple Trees				
Crop	Pests	Rate (pts./acre)	Special Instructions	
Forests, Shade Trees, Ornamentals, Shrubs, Sugar Maple Trees, Seed Orchards, Ornamental Fruit, Nut & Citrus Trees	Elm Spanworm Gypsy Moth	2.0-10.0		
	Spruce Budworm Browntail Moth Douglas Fir Tussock Moth Coneworm Buckmoth	2.0-7.5		
	Tussock Moths Pine Butterfly Bagworm Leafrollers Tortrix Moths Mimosa Webworm Tent Caterpillars Jackpine Budworm Blackheaded Budworm Saddled Prominent Saddleback Caterpillars	1.5-4.0		
	Redhumped Caterpillar Spring Cankerworm Fall Cankerworm California Oakworm Fall Webworm	1.0-2.0		

Special Instructions

This product can be mixed and used with other pesticides only in accordance with the most restrictive of label limitations and precautions. This product cannot be mixed with any product containing a label prohibition against such mixing. No label dosage rates may be exceeded.

* Armyworm Control: Biobit 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 added 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.