

BARITONE™

Bio-Insecticide

- **Biological Larvicide**
- **Wettable Powder**
- **For Liquid Spray Applications**

ACTIVE INGREDIENT:

Bacillus thuringiensis subspecies *kurstaki* Strain BMP 123 solids, spores and insecticidal toxins* 40.00%

OTHER INGREDIENTS: 60.00%

TOTAL: 100.00%

* Equivalent to 32,000 Cabbage Looper Units per milligram (or 14.52 Billion Cabbage Looper Units per pound). Potency units should not be used to adjust rates beyond those specified in the Directions for Use Section. Note: The percent active ingredient does not indicate product performance and potency measurements are not federally standardized.

**KEEP OUT OF REACH OF CHILDREN
CAUTION**

FIRST AID	
If on skin or clothing	<ul style="list-style-type: none">• Take off contaminated clothing.• Rinse skin immediately with plenty of water for 15 – 20 minutes.• Call a poison control center or doctor for treatment advice.
If inhaled	<ul style="list-style-type: none">• 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 center or doctor for treatment advice.
If in eyes	<ul style="list-style-type: none">• 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 center or doctor for treatment advice.
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.	

EPA Reg. No.: 62637-5-69592

EPA Establishment No.: 44616-MO-01

Manufactured for:

AgraQuest, Inc.
1540 Drew Avenue
Davis, CA 95618

Net Contents: 6 Lbs.

US0026-B-001

AQ1678-001

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS - CAUTION: Harmful if inhaled or absorbed through skin. Avoid contact with skin, eyes or clothing. Avoid breathing spray mist. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

PERSONAL PROTECTIVE EQUIPMENT (PPE): Applicators and other handlers who handle this pesticide for any use covered by the Worker Protection Standard (40 CFR Part 170) – in general, agricultural plant uses – must wear: long-sleeved shirt and long pants, waterproof gloves, and shoes plus socks. Mixers / loaders and applicators must wear a dust / mist filtering respirator meeting NIOSH standards of at least N-95, R-95, or P-95. Repeated exposure to high concentrations of microbial proteins can cause allergic sensitization. Follow manufacturer's instructions for cleaning and maintaining PPE. If there are 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. Users should remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Users should remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS: Do not contaminate water when disposing of equipment washwaters. This product must not be applied aerially within ¼ mile of any habitats of endangered species or threatened Lepidoptera. No manual application can be made within 300 feet of any threatened or endangered Lepidoptera.

DIRECTIONS FOR USE

It is a violation of Federal law to apply 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 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.

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 intervals (REI). The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

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

Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment and weather-related factors determines the potential for spray drift. The applicator and the grower are responsible for considering all of these factors when making decisions.

BARITONE Bio-Insecticide is a microbial larvicide for use against the listed lepidopterous insects. Close scouting and early attention to insect infestations are recommended. BARITONE Bio-Insecticide must be ingested to be effective. The following directions should always be followed:

1. Larvae must be actively feeding on exposed plant parts.
2. Applications must be made when larvae are in early instars before extensive crop damage occurs. For the control of mixed insect populations or overlapping generations, use BARITONE Bio-Insecticide in combination with another approved insecticide.
3. Thorough spray coverage with BARITONE Bio-Insecticide is required for consistent control. Spray nozzles and volume applied will vary depending on crop and pest. Under heavy pressure, higher rates, increased gallonage, and shorter spray intervals will improve crop coverage and pest control.
4. Repeat applications at 3-14 day intervals to maintain control. This will depend on weather, plant growth rate, and insect activity.
5. In applications on hard to wet crops such as cole crops, addition of a spreader sticker approved for use on growing and harvested crops will improve coverage and weathering properties.
6. Unless otherwise indicated use at least two (2) gallons of water per acre except in California where five (5) to ten (10) gallons are typically used.
7. Apply BARITONE Bio-Insecticide as a pre and post harvest treatment to raw agricultural commodities.
8. Do not apply this product through any kind of irrigation system.

Apply BARITONE Bio-Insecticide in conventional aerial and ground equipment with sufficient water to provide thorough coverage. Add an approved spreader/stickers to the mix tank after BARITONE Bio-Insecticide has been mixed with the appropriate amount of water.

APPLICATION RATE

Crop	Pest	Pounds/Acre
Vegetables and commercial crops of the following groups:	Loopers	1/2 to 1
	Hornworms	1/2 to 1
Root and Tuber	Imported Cabbageworms	1/2 to 1
Leaves of Root and Tuber	Diamondback Moth	1/2 to 1 1/2
Bulb	Green Cloverworm	1/2 to 1
Leafy	Webworms	1/2 to 1
Brassica (Cole Leafy)	Armyworms*	1/2 to 1
Legume	Saltmarsh Caterpillar	1/2 to 1
Foliage of Legume	Heliothis (Helicoverpa) spp.**	1/2 to 1
Fruiting	Cutworms	1/2 to 1
Cucurbit (melons, squash, cucumbers, etc.)	Pickleworm	1/2 to 1
	Melonworm	1/2 to 1
	Rindworm Complex**	1/2 to 1 1/2

* Apply BARITONE Bio-Insecticide to suppress 1st and 2nd Instar armyworm larvae when populations are light and full coverage ground applications are used.

** Tobacco Budworm, Tomato Fruitworm, Corn Earworm. On tomatoes apply weekly in a preventative program.

*** Apply weekly in a preventative program.

Crop	Pest	Pounds/Acre
Sunflowers	Loopers	1/2 to 1
Peanuts	Green Cloverworms	1/2 to 1
Safflower	Velvetbean Caterpillar	1/2 to 1
Mint	Podworms*	1/2 to 1
Canola	Armyworms*	1/2 to 2
Rape	Diamondback Moth	1/2 to 1 1/2
Cereal Grains	Saltmarsh Caterpillar	1/2 to 1
Amaranth	Hornworms	1/4 to 1/2
Jojoba	(Helicoverpa) spp.**	1/2 to 2
Okra		
Pawpaw		
Lentils		

* Apply BARITONE Bio-Insecticide to suppress podworm and armyworms in an integrated pest management program.

** Suppression only.

Crop	Pest	Pounds/Acre
Artichokes	Armyworms	1/2 to 1
	Loopers	1/2 to 1 1/4
Cotton	Tobacco Budworm*	1/2 to 2
	Cotton Bollworm*	1/2 to 2
	Loopers	1/2 to 1
	Cotton Leaf Perforator	1/2 to 1
	Cotton Leafworm	1/2 to 1
	Saltmarsh Caterpillar	1/2 to 1
	Armyworms	1/2 to 2

* Use in conjunction with regular scouting in an integrated pest management program when beneficial insects are present. Apply against light to moderate populations of 1st and 2nd instar larvae. Repeat applications at 3 to 5 day intervals as required and as long as population suppression is satisfactory. For added control of budworms and bollworms, tank mix BARITONE Bio-Insecticide with an approved ovicide. Use of the resulting tank mix must be accordance with the most restrictive of label limitations and precautions.

Crop	Pest	Pounds/Acre
Tobacco	Tobacco Budworm	1/2 to 2
	Hornworm	1/4 to 1/2
	Loopers	1/2 to 1

Apply BARITONE Bio-Insecticide in conjunction with sucker control products at the recommended label rates. Observe label precautions for all products used. Apply BARITONE Bio-Insecticide as necessary to maintain control.

Crop	Pest	Pounds/Acre
Greenhouse	Loopers	1/4 to 1/2
Flowers	Tobacco Budworm	1/4 to 1/2
Ornamentals	Omnivorous Looper	1/4 to 1/2
Bedding Plants (Ground Only)	Omnivorous Leafroller	1/4 to 1/2
	Diamondback Moth	1/2 to 1
	Armyworms	1/2 to 2
	Ello Moth (Hornworm)	1/4 to 1/2
	Io Moth	1/4 to 1/2
	Oleander Moth	1/4 to 1/2
	Azalea Caterpillar	1/4 to 1/2

Crop	Pest	Pounds/Acre
Pastures, Cereal Grain, Forage, Fodder, Straw, Grass and nongrass commodities	Loopers	1/2 to 1
	Alfalfa Caterpillar	1/2 to 1
	European Skipper	1/2 to 1
	Armyworms	1/2 to 2
Rangeland	Rangeland Caterpillars*	1/4 to 1

* Apply in a minimum of 1/2 to 1.0 gallon per acre.

Crop	Pest	Pounds/Acre
Turf	Sod Webworm	1 to 2

Crop	Pest	Pounds/Acre	
		Ground*	Air**
Forest	Gypsy Moth	1/2 to 1	1/2 to 2
Shade Tree	Eastern Tent Caterpillar	1/4 to 1/2	1/4 to 1/2
Shrubs	Spruce Budworm	1/2 to 1 1/2	1/2 to 1 1/2
Ornamentals	Douglas Fir Tussock Moth	1/4 to 1	1/4 to 1
Sugar Maple Trees	Western Tussock Moth	1/4 to 1/2	1/4 to 1/2
	Browntail Moth	1/4 to 1/2	1/4 to 1/2
	Bagworm	1/8 to 1/4	1/8 to 1/4
	Spring and Fall Cankerworm	1/4 to 1/2	1/4 to 1/2
	Elm Spanworm	1/4 to 1/2	1/4 to 1/2
	Fall Webworm	1/4 to 1/2	1/4 to 1/2
	California Oakworm	1/4 to 1/2	1/4 to 1/2
	Redhumped Caterpillar	1/4 to 1/2	1/4 to 1/2
	Pine Butterfly	1/4 to 3/4	1/4 to 3/4
	Blackheaded Budworm	1/4 to 3/4	1/4 to 3/4
	Jack Pine Budworm	1/2 to 1	1/2 to 1
	Mimosa Webworm	1/4 to 1/2	-
	Saddle Prominent Caterpillar	1/4 to 1/2	1/4 to 1/2
	Saddleback Caterpillar	1/4 to 1/2	1/4 to 1/2
Fruittree Leafroller	1/4 to 1/2	-	
Forest Tent Caterpillars	1/4 to 3/4	1/4 to 3/4	

* Ground applications are made at the rate of 100 gallons per acre for hydraulic sprayers. For mist blowers mix the applicable amount in ten (10) gallons of water.

** Use 1/2 to ten (10) gallons of water depending on the type and density of tree.

Crop	Pest	Pounds/Acre
Grapes	Loopers	1/2 to 1
Small Fruits	Grape Berry Moth*	1/2 to 1
Berries	Grapeleaf Skeletonizer*	1/2 to 1
Hops	Grape Leafroller	1/2 to 1
	Saltmarsh Caterpillar*	1/2 to 1
	Achema Sphinx Moth*	1/4 to 1/2
	Omnivorous Leafroller*	1/2 to 1
	Blueberry Leafroller	1/4 to 1
	Cherry Fruitworm	1/2 to 1/2
	Fruittree Leafroller	1/4 to 1
	Gypsy Moth	1/2 to 1
	Green Fruitworm	1/4 to 1/2
	Orange Tortrix	1/2 to 1
	Grape Leafroller	1/4 to 1
	Spotted Cutworm	1/2 to 1
	Armyworms**	1/2 to 2
	Tobacco Budworm	1/2 to 2

* Application by ground only.

** Apply BARITONE Bio-Insecticide to suppress 1st and 2nd instar armyworm larvae when populations are light and full coverage ground applications are used.

Crop	Pest	Pounds/Acre	
		Ground	Air
Stone Fruits	Tent Caterpillars	1/2 to 2	1/2 to 2
Nut Trees	Cankerworms	1/2 to 2	1/2 to 2
Pomegranates	Fall Webworm	1/2 to 2	1/2 to 2
	Walnut Caterpillar	1/2 to 2	1/2 to 2
	Redhumped Caterpillar	1/2 to 2	1/2 to 1
	Omnivorous Leafroller	1/2 to 2	-
	Citrus Cutworm	1/2 to 1	1/2 to 2
	Filbert Leafroller	1/2 to 2	1/2 to 2
	Filbert Webworm	1/2 to 2	1/2 to 2

Crop	Pest	Pounds/Acre	
		Ground	Air
Pome Fruits*	Gypsy Moth	1/2 to 2	1/2 to 2
	Cankerworms	1/2 to 2	1/2 to 2
	Tent Caterpillars	1/2 to 2	1/2 to 2
	Tufted Apple Budmoth	1/2 to 2	-
	Variegated Leafroller	1/2 to 2	-
	Redbanded Leafroller	1/2 to 1	-
Citrus**	Fruittree Leafroller	1/2 to 2	-

	Citrus Cutworm	1/2 to 2	1/2 to 1
	(Apply to light to moderate populations of newly hatched citrus cutworm larvae)		
	Orangedog	1/4 to 1	-
Avocado	Loopers	1/2 to 2	1/2 to 2
	Orange Tortix	1/2 to 2	1/2 to 2
	Omnivorous Looper	1/2 to 2	1/2 to 2
	Amorbia	2	-

Crop	Pest	Pounds/Acre	
		Ground	Air
Tropical Fruits***			
Papayas	Hornworm	1/2 to 2	
Mangoes	Leafrollers	1/2 to 2	-
Kiwi	Omnivorous Looper	1/2 to 2	-
Persimmons	Loopers	1/2 to 228	-
Pomegranates			
Bananas****	Banana Skipper	1/3 to 1	-

- * Apply BARITONE Bio-Insecticide in 50-500 gallons/acre for pest suppression in pest management programs..
- ** Apply in 100 to 400 gallons per acre.
- *** Apply at least 200 gallons per acre.
- **** Hawaii only. Ground equipment only. Apply to the point of runoff.

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal.
Storage: Store in a cool (59 – 86° F; 15 – 30° C), dry place.
Pesticide Disposal: Wastes resulting from use of this product may be disposed of on site or at an approved waste disposal facility.
Container Disposal: Triple rinse (or equivalent) then 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. Do not reuse container.

CONDITIONS FOR SALE AND WARRANTY

AgraQuest warrants to those persons lawfully purchasing this product that at the time of the first sale of this product by Seller that this product conformed to its description and was reasonably fit for the purposes stated on the label when used in accordance with Seller’s directions. Buyers and users of this product assume the risk of any use contrary to such directions. EXCEPT AS PROVIDED ELSEWHERE IN WRITING CONTAINING AN EXPRESS REFERENCE TO THIS WARRANTY AND LIMITATION OF DAMAGES, SELLER MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OR GUARANTY, INCLUDING ANY OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS OR OF MERCHANTABILITY AND NO AGENT OF SELLER IS AUTHORIZED TO DO SO.

Except to the extent prohibited by applicable law, AgraQuest offers this product with the following conditions: 1) buyers and users of this product assume the risk of any storage, handling or use contrary to AgraQuest's label and directions and 2) AgraQuest's liability shall in no case exceed the purchase price of the applicable AgraQuest product.

For emergencies such as leaks or spills, call the 24-hour toll-free CHEMTREC hotline at 1-800-424-9300.

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