



Crymax®

BIOINSECTICIDE

Crymax® WDG water dispersible granule bioinsecticide is a biological insecticide for the control of lepidopteran pests.

Active Ingredient:

<i>Bacillus thuringiensis</i> subspecies <i>kurstaki</i> strain EG7841 solids, spores and Lepidopteran active toxins*	40.0%
Other Ingredients:	60.0%
Total	100.0%

*The percent active ingredient does not indicate product performance and potency measurements are not federally standardized.

**KEEP OUT OF REACH OF CHILDREN
CAUTION**

Manufactured by
Certis USA, L.L.C.
9145 Guilford Road, Suite 175
Columbia, MD 21046

CERTIS

Net Contents:
5 U.S. Pound Bag
LOT NO: _____

EPA Reg. No. 70051-86
EPA Est. No. 62171-MS-001

FIRST AID

If in eyes: Hold eyes 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 further treatment advice.
Hot Line Number: 1-800-255-3924

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION: Causes moderate eye irritation. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling.

Personal Protective Equipment (PPE):

Applicators and other handlers must wear:

- Long sleeved shirt and long pants
- 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.

User Safety Recommendations

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

Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothes

Follow the manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

ENVIRONMENTAL HAZARDS

Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark.

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 ft. of any threatened or endangered Lepidoptera.

Do not contaminate water when disposing of equipment washwaters.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. 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. 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 intervals. The requirements in this section 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, protective eyewear, shoes plus socks.

Preharvest Interval: CRYMAX may be applied to the crops listed in the APPLICATION RATE TABLE at any time, up to and on the day of harvest.

Mode of Action: After consuming a lethal dose of CRYMAX, larvae will cease to feed, but may remain alive on foliage for several days before disappearing. Immediately after ingestion of CRYMAX, larvae begin to move slowly, become discolored, shrivel and blacken prior to death.

MIXING INSTRUCTIONS

CRYMAX may be applied with conventional ground, aerial or hand held application equipment with quantities of water sufficient to provide thorough coverage of infested plants. Do not apply this product through any type of irrigation system. To obtain a suitable mixture with water, add enough water to allow maximum agitation. With agitator running, slowly add in the CRYMAX. Continue agitation. Add remainder of water and other spray materials and agitate until mixed. Maintain suspension while loading and spraying. Do not mix more CRYMAX than can be used in a 24-hour period. Rinse and flush spray equipment thoroughly following each use. Do not contaminate water when disposing of equipment washwaters.

In order to make proper decisions on application rates to be used, follow the recommendations in the APPLICATION RATE TABLE.

APPLICATION INSTRUCTIONS

Aerial Application

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

CRYMAX is a biological insecticide for use against the lepidopteran larvae listed in the APPLICATION RATE TABLE. Larvae must consume deposits of CRYMAX to be affected. Always follow these directions:

- Make applications when larvae are still small (early instars <1/2" in length) and actively feeding on foliage or other plant parts.
- Make applications before noticeable foliar damage occurs.
- Thorough spray coverage is essential for good insect control.
- For ground applications, directed drop nozzles should be used for certain vegetable crops. For orchard applications, a spray volume of 100 gallons per acre and treatment of each orchard row is recommended.
- Do not use screens smaller than 50 mesh.
- For ground applications, use a minimum spray volume of 20 gallons per acre. For aerial applications, use a spray volume of at least 5 gallons per acre. (See cotton and soybeans for special instructions.)
- When insect infestations are heavy, use the higher label rates, shorten the spray interval, and/or use larger total spray volume to improve spray coverage.
- Applications should be repeated at an interval sufficient to maintain control, depending upon plant growth, insect pressure and weather conditions after spraying.
- Local conditions may affect the use of CRYMAX. Consult your State Agricultural Extension Specialist for specific recommendations related to local crop protection problems.
- Spray water/spray tank solutions should not exceed pH 8.0. If necessary, buffer water to near neutral pH.

HAND HELD EQUIPMENT

When using hand held equipment, mix 2 teaspoons per gallon of water or 1-1/2 pounds per 100 gallons of spray solution. Spray to wet, but not to runoff.

TANK MIX

CRYMAX may be tank mixed with contact pesticides. Combinations of CRYMAX with commonly used insecticides, fungicides, or other spray tank adjuvants are generally not deleterious to performance. It is advisable to test physical compatibility by mixing all components in a small container in proportionate quantities prior to mixing in spray tank. This product cannot be mixed with any product containing a label prohibition against such mixing. No label dosage rate should be exceeded. Application must be made in accordance with the more restrictive of label limitation and precautions.

For improved durability of spray deposits, a spreader/sticker approved for use on growing crops may be used for hard-to-wet crops such as cole crops.

APPLICATION RATE TABLE

I. VEGETABLE AND COLE CROPS		
Crop such as:		Insect Pest
Artichokes	Kohlrabi	Alfalfa looper
Arugala	Leeks	Armyworm*
Asparagus	Lentils	Artichoke plume moth
Beans	Lettuce (Head, Leaf, Romaine)	Beet armyworm*
Beets	Malanga	Cabbage budworm
Bok Choy	Melons (Cantaloupe, Crenshaw, Honeydew, Muskmelon, Watermelon, etc.)	Cabbage looper
Broccoli	Napa	Celery leaf-tier
Brussels sprouts	Okra	Corn earworm
Cabbage	Onions	Cross-striped cabbageworm
Cardoni	Parsley	Diamondback moth**
Carrots	Parsnips	European corn borer
Cauliflower	Peas	Green cloverworm
Celeriac	Peppers	Imported cabbageworm
Celery	Potatoes	Melonworm
Chick peas	Pumpkins	Omnivorous leafroller
Chicory	Radishes	Pickleworm
Chinese cabbage	Rutabaga	Rindworm complex
Collards	Salsify	Saltmarsh caterpillar
Cucumber	Shallots	Soybean looper
Cucurbits	Soybean foliage	Tobacco budworm
Dry bulb onions	Spinach	Tomato fruitworm
Eggplants	Squash	Tomato hornworm
Escarole	Sugar Beets	Tomato pinworm
Endive	Sweet potatoes	Velvetbean caterpillar
Garlic	Swiss Chard	Yellowstriped armyworm*
Green onions	Tomatoes	
Greens: Beets, China, Dandelion, Mustard, Turnip	Turnips	
Horseradish		
Kale		
Rate/Acre: 0.5-2.0 pounds		
* Recommended rate is 1.0-1.5 pounds/acre unless tank-mixed with contact insecticide.		
** CRYMAX will control Bt resistant and susceptible diamondback moth.		

II. HERBS AND SPICES	
Crop such as:	Insect Pest
Basil	Alfalfa looper
Chives	Armyworm
Cilantro	Diamondback moth
Dill	European corn borer
Oregano	Green cloverworm
Peppermint	Imported cabbageworm
Thyme	Loopers
	Saltmarsh caterpillar
Rate/Acre: 0.5-2.0 pounds	

III. PASTURE AND HAY CROPS	
Crop such as:	Insect Pest
Alfalfa (hay & seed)	Alfalfa caterpillar
Pasture (grasses & hay)	Armyworm
Silage	Beet Armyworm*
	European skipper
	Loopers*
	Webworm
	Yellowstriped armyworm*
Rate/Acre: 0.5-2.0 pounds	
* Product should be applied when early instar larvae first appear. If infestation persists, make a second application 7-10 days later. Combination of CRYMAX with contact insecticide is recommended for control of 4 th and 5 th instar larvae.	

IV. FRUIT, NUT AND VINE CROPS		
Crop such as:	Insect Pest	
Pome and Stone Fruit Trees:		
Apples	Cankerworm (Spring and Fall)	Oriental fruit moth
Apricots	Cherry fruitworm	Pandemis leafroller
Cherries	Eastern tent caterpillar	Peach twig borer
Nectarines	Fall webworm	Redbanded leafroller
Peaches	Fruittree leafroller	Redhumped caterpillar
		Tortrix moth (Orange and Garden)
Pears	Green fruitworm	
Plums	Gypsy moth	Tufted apple budmoth
Prunes	Navel orangeworm	Variigated leafroller
Quince	Obliquebanded leafroller	Walnut caterpillar
	Omnivorous leafroller	Western tent caterpillar
Nut Trees:		
Almonds	Citrus cutworm	Omnivorous leafroller
Chestnuts	Filbert leafroller	Pecan nut casebearer
Filberts	Filbert webworm	Peach twig borer
Pecans	Fruittree leafroller	Redhumped caterpillar
Pistachios	Hickory shuckworm	Roughskinned cutworm

Walnuts	Navel orangeworm	Western tent caterpillar
	Obliquebanded leafroller	
Citrus	Amorbia	Omnivorous leafroller
	Citrus cutworm	Orangedog
	Fruittree leafroller	
Small Fruit and Berries:		
Blackberries	Achema sphinx moth	Gypsy moth
Blueberries	Armyworms	Loopers
Boysenberries	Blackheaded fireworm	Obliquebanded leafroller
Cranberries	Blueberry leafroller	Omnivorous looper
Currants	Cranberry girdler	Tobacco budworm
Longanberries	Fruittree leafroller	
Raspberries	Grape berry moth	
Strawberries		
Grapes:	Grape berry moth	Omnivorous leafroller
	Cherry fruitworm	Orange tortrix
	Grape leafroller	Saltmarsh caterpillar
	Grapeleaf skeletonizer	Yellowstriped armyworm
	Green fruitworm	
Tropical and Other Fruit:		
Avocados	Amorbia	Omnivorous leafroller
	Loopers	Omnivorous looper
	Orange tortrix	Spanworm
Bananas	Banana skipper	
Kiwi	Omnivorous leafroller	
Persimmons, Pomegranate	Citrus cutworm	Omnivorous leafroller
	Fall webworm	Redhumped caterpillar
	Filbert webworm	Tent caterpillar
Pineapple	Gummosos-Batrachedra comosae	Thecla-Thecla basilides
Tropical fruits	Hornworms	Loopers
	Leafrollers	Omnivorous leafroller
Rate/Acre: 0.5-2.0 pounds		

V. FIELD CROPS		
Crop such as:	Insect Pest	
Canola/Rape Seed	Armyworm	Imported cabbageworm
Evening Primrose	Diamondback moth	Loopers
Meadow foam		
Corn	Armyworm	
(Field, Sweet, Popcorn, Seed)	European corn borer	

	Southwestern corn borer	
Cotton*	Beet armyworm**	Saltmarsh caterpillar
	Bollworm**	Soybean looper
	Cabbage looper	Tobacco budworm
	Cotton leaf perforator	Yellowstriped armyworm**
Hops	Armyworm	Omnivorous leaftier
	Loopers	Spotted cutworm
	Oblique banded leafroller	
Jojoba	Looper (<i>Anacamptodes</i> spp.)	
Peanuts	Green cloverworm	Podworms
	Loopers	Velvetbean caterpillar
Rice	Armyworm	Saltmarsh caterpillar
	Green cloverworm	Velvetbean caterpillar
	Loopers	
Safflower	Armyworm**	Saltmarsh caterpillar
	Loopers	
Small Grains (Barley, Oats, Rye, Wheat, etc.)	Armyworm**	
	Loopers	
Sorghum	European corn borer	Velvetbean caterpillar
	Saltmarsh caterpillar	
Soybeans	Green cloverworm	Velvetbean caterpillar
	Soybean looper	
Sunflowers	Banded sunflower moth	Loopers
	Beet armyworm**	Sunflower moth
	Headmoth	
Tobacco	Tobacco budworm	
	Tobacco hornworm	
	Loopers	

Rate/Acre: 0.5-2.0 pounds
 *Use CRYMAX at 0.25 lb/acre to control light to moderate populations of newly hatched tobacco budworm and bollworm in integrated pest management programs. Repeat treatments at four to five day intervals or as long as necessary until results are acceptable. Ovicides or synthetic pyrethroids can be combined with CRYMAX in accordance with the more restrictive of label limitations and precautions. No label dosage rates should be exceeded. This product cannot be mixed with any product containing a label prohibition against such mixing.
 **Combination of CRYMAX with a contact insecticide is recommended for infestations that include 4th and 5th instar larvae.

VI. COMMERCIAL FLOWERS AND ORNAMENTAL PLANTS

Crop such as:	Insect Pest	
Bedding plants	Armyworm	Loopers

Flowers (Greenhouse and Field)	Azalea moth	Oleander moth
Greenhouse Ornamentals	Beet armyworm	Omnivorous leafroller
Greenhouse Vegetables	Diamondback moth	Omnivorous looper
Container Stock	Ello moth (hornworm)	Tobacco budworm
	Florida fern caterpillar	
	lo moth	
Rate/Acre: 1.0-2.0 pounds		

VII. FOREST, SHADE TREE AND NURSERY STOCK		
Crop such as:	Insect Pest	
Forest	Bagworm	Pine butterfly
Shade trees	Blackheaded budworm	Redhumped caterpillar
Nursery trees	Browntail moth	Saddleback caterpillar
	California oakworm	Saddle prominent caterpillar
	Douglas fir tussock moth	Spring and Fall cankerworm
	Elm spanworm	Spruce budworm
	Fall webworm	Tent caterpillar
	Fruittree leafroller	Tortrix
	Greenstriped mapleworm	Western tussock moth
	Gypsy moth	
	Jack pine budworm	
	Mimosa webworm	
Rate/Acre: 0.5-2.0 pounds		

VIII. TURF		
Crop such as:	Insect Pest	
Turf	Armyworms	Tropical sod webworm
	Sod webworm	
Rate/Acre: 0.5-2.0 pounds		

STORAGE AND DISPOSAL

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

Pesticide Storage: Store in a cool, dry place inaccessible to children.

Pesticide Disposal: Do not contaminate water when disposing of equipment washwaters. Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

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.

WARRANTY

Certis USA, L.L.C. warrants that the material contained herein conforms to the description on the label and is reasonably fit for the purposes referred to in the directions for use. Timing and method of application, weather, watering practices, nature of soil, the insect problem, condition of the crop, incompatibility with other chemicals not specifically recommended, and other influencing factors in the use of this product are beyond the control of the seller. Buyer assumes all risks of use, storage or handling of this material not in strict accordance with directions given herein. **NO OTHER EXPRESS OR IMPLIED WARRANTY OF THE FITNESS OR MERCHANTABILITY IS MADE.**

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