



01-3263/R10-50-0685

**WETTABLE POWDER
BIOLOGICAL INSECTICIDE**

Active Ingredient:

Bacillus thuringiensis, var. kurstaki,
16,000 International Units of Potency per mg.
(7.26 billion International Units per pound) 3.2%
Inert Ingredients 96.8%

KEEP OUT OF REACH OF CHILDREN

CAUTION

E.P.A. Registration No. 275-18
E.P.A. Est No 33762-1A-1

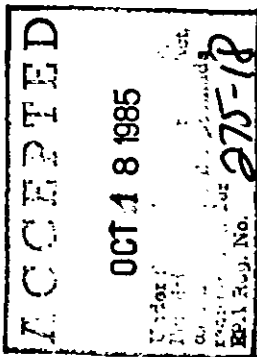
STORAGE AND DISPOSAL
See container label.

BENEFICIAL INSECTS

Honeybees foraging treated areas are not harmed by DIPEL use.

DIPEL does not interrupt the activities of beneficial and predacious arthropods in pest management programs.

Days to harvest: There are no restrictions on applying DIPEL up to the time of harvest.



Sites: DIPEL may be used for any labeled pest in both field and greenhouse uses.

For Smaller Spray Volumes: Rate is	Use This Amount Per Gallon
1/4 lb/acre or 100 gals.	1/2 tsp
1/2 lb/acre or 100 gals.	1 tsp
1 lb/acre or 100 gals.	2 tps
2 lb/acre or 100 gals.	4 tps

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

DIPEL is a highly selective insecticide for use against listed caterpillars (larvae) of lepidopterous insects. Close scouting and early attention to infestations is highly recommended. Larvae must eat deposits of DIPEL to be affected. Always follow these directions:

- Treat when larvae are young (early instars) before the crop is extensively damaged.
- Larvae must be actively feeding on treated, exposed plant parts.
- Thorough spray coverage is needed to provide a uniform deposit of DIPEL at the site of larval feeding. For some crops directed drop nozzles by ground machine are required.
- Under heavy pest population pressure, use the higher label rates, shorten the spray interval, and/or raise gallonage to improve spray coverage.
- Repeat applications at an interval sufficient to maintain control, usually 3 to 14 days depending on plant growth rate, moth activity, rainfall after treating, and other factors. If attempting to control a pest with a single spray, make the treatment when egg hatch is essentially complete, but before extensive crop damage occurs.
- A spreader-sticker which has been approved for use on growing and harvested crops should be added for hard-to-wet crops such as cole crops, or to improve weather-fastness of the spray deposits.

After eating a lethal dose of DIPEL, larvae stop feeding within the hour, and will die within several days. Dying larvae move slowly, discolor, then shrivel, blacken and die.

DIPEL may be applied in conventional ground or aerial equipment with quantities of water sufficient to provide thorough coverage of infested plant parts. The amount of water needed per acre will depend on crop size, weather, spray equipment, and local experience. Unless otherwise indicated, use at least 2 gallons of water by air; except in the far west, 5 to 10 gallons is the usual minimum. Add water to the spray or mixing tank at the level that provides maximum agitation. With the agitator running, slowly sprinkle in the DIPEL. Continue agitation. Then add other spray materials (if any). Add the balance of the water and agitate until mixed. Maintain the suspension while loading and spraying. Do not mix more DIPEL than can be used in a 12-hour period.

APPLICATION RATE

Crop	Pest	oz./Acre	
Cole Crops and Vegetables including Leafy, Root, Stalk, and Seed and Pod Types (Peas, Beans, Lentils, etc. dry or succulent), Potatoes, Cucurbits	Loopers	1/2 to 1	
	Hornworms	1/2 to 1/2	
	Imported Cabbageworm	1/2 to 1/2	
	Diamondback Moth	1/2 to 1/2	
	Green Cloverworm	1/4 to 1/2	
	Webworm	1/2 to 1	
	Armyworms*	1 to 2	
	*DIPEL may be used to suppress small armyworms (1st and 2nd instar) when populations are light and full coverage ground sprays are applied		
	Tomatoes, Peppers, Eggplant	Loopers	1/2 to 1
		Hornworms	1/2 to 1/2
Tomato Fruitworm* Variegated Cutworm Saltmarsh Caterpillars Armyworms**	Tomato Fruitworm*	1	
	Variegated Cutworm	1	
	Saltmarsh Caterpillars	1/2 to 1	
	Armyworms**	1 to 2	
	Ternates, Peppers, Eggplant	Loopers	1/2 to 1
		Hornworms	1/2 to 1/2

*Apply weekly in a preventive program.
**DIPEL may be used to suppress small worms (1st and 2nd instar) when populations are light and full coverage ground sprays are applied

sprays are applied

Cucurbits: Melons, Squash, Cucumbers, etc.	Roundworm Complex*	1/2 to 1 1 to 2
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*Apply weekly in a preventive program.

Tobacco	Tobacco Budworm Hornworms Loopers	1/2 to 1 1/2 to 1/2 1/2 to 1
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DIPEL may be tank mixed with sucker control products at recommended rates. Follow the application directions on the sucker control labels. Observe all label precautions for all products used

Safflower, Sugar beets, Mints	Loopers Saltmarsh Caterpillar	1/2 to 1 1/2 to 1
Soybeans, Sunflowers, Peanuts	Loopers	1/2 to 1
	Green Cloverworm	1/2 to 1/2
	Velvetbean Caterpillar	1/2 to 1/2
	Podworm*	1/2 to 1

*DIPEL suppresses podworms under pest management conditions

Alfalfa, Pastures, Hay, Small Grains and Forage Crops	Loopers Alfalfa Caterpillar European Skipper (Essex Skipper)	1/2 to 1 1/2 to 1/2 1/2 to 1/2
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Rangeland	Range Caterpillar	1/2 to 1/2
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Use a minimum of 1/2 to 1 gallon water per acre

Cotton	Tobacco Budworm*	1/2 to 1
	Cotton Bollworm*	1/2 to 1
	Loopers**	1/2 to 1

*Use to suppress light to moderate populations of newly hatched worms in pest management conditions. Use under close scouting when beneficial insects are active or building. Repeat treatments at 4 to 5-day intervals as long as necessary and results are acceptable. If 15% or more terminate have eggs, add 1/4 lb AI chlordaneform (Galecron® or Fundal®) per acre to 1/4 lb DIPEL. Increase chlordaneform to 1/2 lb AI if needed

Once beneficial insects are no longer a factor, DIPEL (at 1/2 to 1 lb/acre) may be tank mixed with methomyl (Lannate® or Nudrin®) at 225 to 675 lbs. AI per acre to control light to moderate infestations of early instar larvae. Observe any rate, frequency, or soil load label restrictions for methomyl in your area. Methomyl will likely cause reddening of cotton foliage. Discontinue this tank mix if reddening becomes excessive

Before using any tank mix, read the product labels for all environmental and usage cautions. Chlordaneform is restricted to aerial application and to states where registered

**Full plant coverage needed.

*The mixture of AI with chlordaneform for inhibiting the growth of lepidopterous larvae on plants is covered by Abbott US patent 3,937,813

Turf	Sod Webworm	2 to 4
Crop	Pest	lbs./100 Gals.
Flowers and Ornamentals (ground only)	Loopers	1/2 to 1
	Tobacco Budworm	1/2 to 1
	Omnivorous	1/2 to 1
	Loopers	1/2 to 1
	Omnivorous Leafroller	1/2 to 1
	Diamondback Moth	1/2 to 1/2
	Armyworms*	1 to 2
	Ella Moth (Hornworm)	1/2 to 1/2
	to Moth	1/2 to 1
	Cleander Moth	1/2 to 1

*DIPEL may be used to suppress small armyworms (1st and 2nd instar) when populations are light and full coverage ground sprays are applied

DIPEL for Fruits, Nuts, Trees, Ornamentals

Crop	Pest	Pounds/Acre	
Grapes, Small Fruits, Cane and Bush Berries	Grapeleaf Skeletonizer (ground only)	$\frac{1}{2}$ to 1	
	Grape Leafhopper	$\frac{1}{2}$ to $\frac{3}{4}$	
	Acheta Sphinx Moth (Hornworm)	$\frac{1}{2}$ to $\frac{3}{4}$	
	Saltmarsh Caterpillar (ground only)	1	
	Omnivorous Leafroller (ground only)	$\frac{1}{2}$ to 1	
	Loopers	$\frac{1}{2}$ to 1	
		Pounds/100 Gallons* (Ground Equipment)	Pounds/Acre (Aerial** Application)
Stone Fruits, Nut Trees, Pomegranates	Redhumped Caterpillar	$\frac{1}{4}$ to $\frac{1}{2}$	$\frac{1}{2}$ to 1
	Tent Caterpillars	$\frac{1}{4}$ to $\frac{1}{2}$	$\frac{1}{2}$ to 1
	Omnivorous Leafroller	$\frac{1}{2}$ to 1	—
	Fall Webworm	$\frac{1}{4}$ to $\frac{1}{2}$	$\frac{1}{2}$
	Walnut Caterpillar	$\frac{1}{2}$ to 1	$\frac{1}{2}$ to 1
	Cankerworms	$\frac{1}{4}$ to $\frac{1}{2}$	$\frac{1}{2}$ to 1
Pome Fruits ¹	Cankerworms	$\frac{1}{4}$ to $\frac{1}{2}$	$\frac{1}{2}$ to 1
	Gypsy Moth	$\frac{1}{2}$ to 1	1
	Variegated Leafroller	$\frac{1}{2}$ to 1	—
	Redbanded Leafroller	$\frac{1}{2}$ to 1	—
	Tufted Apple Budmoth	$\frac{1}{2}$ to 1	—
	Tent Caterpillars	$\frac{1}{4}$ to $\frac{1}{2}$	$\frac{1}{2}$ to 1
Citrus ²	Fruitree Leafroller	$\frac{1}{2}$ to 1	—
	Orangedog	$\frac{1}{4}$ to $\frac{1}{2}$	—
Tropical Fruits ³	Hornworm	$\frac{1}{2}$ to 1	—
	Leafrollers	$\frac{1}{2}$ to 1	—
	Omnivorous Looper	$\frac{1}{2}$ to 1	—
	Loopers	$\frac{1}{2}$ to 1	—
Forest, Shade, Sugar Maple Trees and Ornamentals	Gypsy Moth	$\frac{1}{2}$ to 1	1
	Bagworm	$\frac{1}{2}$ to 1	$\frac{1}{2}$ to 1
	Redhumped Caterpillar	$\frac{1}{4}$ to $\frac{1}{2}$	$\frac{1}{4}$ to $\frac{1}{2}$
	Spring & Fall Cankerworm	$\frac{1}{4}$ to $\frac{1}{2}$	$\frac{1}{4}$ to $\frac{1}{2}$
	Fall Webworm	$\frac{1}{2}$	$\frac{1}{2}$
	Elm Spanworm	$\frac{1}{2}$ to 1	$\frac{1}{2}$ to 1
	Tent Caterpillars	$\frac{1}{4}$ to $\frac{1}{2}$	$\frac{1}{2}$
	California Oakworm	$\frac{1}{4}$ to $\frac{1}{2}$	$\frac{1}{4}$ to $\frac{1}{2}$
	Pine Butterfly	1	1
	Spruce Budworms ⁴	1	1
	Saddle Prominent Caterpillar	$\frac{1}{2}$ to 1	—
	Douglas Fir Tussock Moth	1	1
	Western Tussock Moth	$\frac{1}{2}$ to 1	—
	Fruitree Leafroller	$\frac{1}{2}$ to 1	—
	Blackheaded Budworm	1	—
	Minosa Webworm	$\frac{1}{2}$ to 1	—
	Jack Pine Budworm	$\frac{1}{2}$ to 1	$\frac{1}{2}$ to 1
	Saddleback Caterpillar	$\frac{1}{2}$ to 1	—

*Rate for hydraulic sprayer. For mist blowers, mix the applicable amount (lbs.) in 10 gallons of water.

**For aerial application, use in one to ten gallons of water depending on type and density of trees. For best results, spray systems which deliver droplet size of 200 microns should be used.

¹Use 400-450 gallons/acre to suppress listed pests in pest management programs.

²Use 100 to 400 gallons/acre.

³Use at least 200 gallons/acre.

⁴Use against populations below 35 larvae per 18-inch branch tip. Use a minimum of $\frac{1}{2}$ gallon/acre by air.

DIPEL FOR STORED AGRICULTURAL COMMODITIES

For the Control of Tobacco Moth on Fire-Cured Tobacco

Apply 0.4 ounce (approximately 5 teaspoonsful) of DIPEL in one quart of water per 100 pounds of tobacco as a fine mist spray. Avoid overwetting. Tobacco should have just enough moisture to be handled without shattering at the time of application.

Tobacco to be Stored up to Twelve Months.

Spray loose leaves as the tobacco is being banded from the curing barn. For tobacco on sticks, treat both sides of leaves.

Stored Tobacco.

For tobacco which is to be carried over, reband or restack sticks, fluff up tobacco and spray loose leaves.

For tobacco that has been stored over three weeks, apply at first signs of infestation, promptly open bundles, spray loose leaves, then bundle.

Treatment of Storage Barns.

If tobacco has been treated, or is going to be treated, treatment of the floors and walls may be made to aid in control. Sweep out the area, especially cracks and corners, and all of the loose tobacco pieces in which the moth might breed. Make a spray mixture containing 1 oz. DIPEL per 2½ gallons of water. Apply this at a rate of $\frac{1}{2}$ gallon per 1000 sq. ft. of surface area. Be sure to spray into cracks and between floorboards.

STORED GRAINS, SOYBEANS, SUNFLOWER SEED, PEANUTS, CROP SEED, POPCORN¹ and BIRDSEED²

Pest	Rate
Indian Meal Moth,	$\frac{1}{4}$ lb/100 bu (undiluted and diluted)*

*As a surface treatment, apply 1 lb DIPEL in 10 gal of water per 500 sq. ft. of grain surface area, max into top 4 inches.

¹For all States except California.

For the control and prevention of these pests, apply DIPEL in a constantly agitated water suspension to the top four inch surface layer of grain in the bin. Use a sprinkler can or sprayer to apply the dosage into the grain stream as the last (top) four inch layer is augered into the bin. Max 1/10 lb DIPEL per gallon of water. Apply 0.6 pint of this mixture per bushel as grain is augered into storage. Or, sprinkle the dosage onto the surface of the grain in the bin and mix thoroughly with a scoop or rake to the depth of four inches. More thorough coverage may be achieved by dividing the recommended dosage into three applications and mixing the grain between applications.

For the protection of bagged grain including popcorn, apply the dosage to the entire grain mass and mix thoroughly prior to bagging.

Treatments can be applied to the stored grain at any time, but, for best results, make application immediately after harvest before moth activity occurs. In areas where late fall harvested grain is not subject to infestation because of low temperatures, application can be delayed until late winter or early spring before moth activity begins. Control for a full storage season should normally be expected, however, repeat application if infestation recurs.

This treatment controls the moth larvae. If an infestation is present when the grain is treated, moth emergence may continue for several days. If immediate control of severe infestations is desired, grain should be fumigated prior to application of this treatment. DIPEL will not control weevils or other beetles.

DIPEL is exempt from tolerance restrictions and the treated grain can be used at any time after treatment for any use.

NOTICE TO USER

Seller makes no warranty, express or implied, of merchantability fitness or otherwise concerning use of this product other than as indicated on the label. User assumes all risks of use, storage or handling not in strict accordance with accompanying directions.

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