

Novel Mode of Action Insecticide for Diamondback Moth (DBM) Larvae





20 years of Lepidopteran pest management



World's largest NPV factory in the USA and Baculovirus Research Center



Strong commitment to provide field technical assistance



Wide network of research partners





## **NOVEL AND HIGHLY SELECTIVE MODE OF ACTION**Effective Insecticide for the Control of **Diamondback Moth**

TARGET PESTS: Plutella xylostella – AKA Diamondback Moth (DBM)

**ACTIVE INGREDIENT (A.I.):** Autographa californica Multiple Nucleopolyhedrovirus

FORMULATION: Suspension concentrate (SC) RATE: 2.4floz/acre

NOVEL MODE OF ACTION: GROUP 31 INSECTICIDE Lepigen® will control DBM larvae resistant to chemical insecticides. A unique set of baculovirus proteins (PIF complex) promotes generalized cell infection and ultimately, death. Infected larvae release billions of viral particles after death, leading to continued secondary infection cycles and long persistence in treated fields. Best results when applied multiple times during the crop cycle and in mixture with other insecticides, especially under high DBM pressure situations.



Thorough crop coverage is essential, as the A.I. in Lepigen® must be ingested by larvae to be effective. Lepigen® is most effective when applied to small larvae at very early infestation levels.

Instar	Age (Days)	Size Category	Length (inches)	Actual Size	Lepigen timing
1st	Varies by Climate	Very Small	1/8"		**
2nd		Small	1/4"		**
3rd		Medium (small)	¹/ <sub>3"</sub>	-	×
4th		Medium (large)	1/2"	and the same of th	×

<sup>\*</sup> Do not use Lepigen® as a curative treatment. In this situation, alternative control methods should be considered. Sprays should be conducted at least weekly until harvest for maximum effectiveness.

## WHAT TO EXPECT AFTER APPLICATION:

Up to 3 days after application: Lepigen effectively targets very small DBM larvae (1st and 2nd instars). Infected small larvae feed very little, become increasingly lethargic, and are much more vulnerable to predation and environmental stress (i.e., dehydration).

4-6 days after application: At this stage, infected larvae are quite sick, stop feeding, and develop a dark brown color. Their skin bursts open, releasing billions of viral particles onto the environment. These viral particles are effectively dispersed by wind, rain, and predators and can infect other healthy DBM larvae.



Best results when applied multiple times during crop cycle and in mixture with other insecticides under high DBM pressure situations.



COMPATIBILITY: Lepigen® is compatible as a tank mix partner with insecticides, fungicides, herbicides, and fertilizers. Ensure tank mix solution pH is ≤8 prior to adding Lepigen®.

CAUTION: Spray solution pH above 8 may damage the virus and reduce performance of Lepigen®

Transplant 8 Leaves 20 Leaves Cupping Early Heading Mature