

Diamondback Moth on Brassica

Recognize the problem

Young diamondback moths are pale green caterpillars. They feed by eating the lower side of the leaf leaving a see-through hole mostly referred to as a 'window'. They are small compared to other caterpillars. The adult moths have 3 diamond shapes on their wings hence the name of the pest. The females lay small yellow eggs on the leaves. These hatch into green caterpillars with no markings. When fully grown, the caterpillars grow inside a whitish silk cocoon attached to leaves or stems.

They are most serious when they damage the crowns or growing points of young plants. This injury can severely stunt growth, keeping the plant small.

Background

The numbers of caterpillars can increase rapidly during dry weather and decrease in rainy conditions. Overhead irrigation and heavy rains tend to wash off young caterpillars. Large numbers in the field, if uncontrolled, can destroy the crop.

Management

Non-chemical control

- Conserve natural enemies such as parasitoids, ground beetles, true bugs, syrphid fly larvae and spiders, which can eat or kill the diamondback moth. Supply flowering plants to serve as a food source for adult syrphids. Avoid spraying pesticides when there are enough natural enemies in the field to reduce caterpillar numbers.
- Interplanting Brassica crops with tomato or pepper can repel the diamondback moth.
- Monitor the crop with yellow sticky traps or pheromone traps to discover the pest early for easy control.
- Planting during the rainy season and use of overhead irrigation can help control the larvae.
- Use biological pesticides like *Bacillus thuringiensis* (Bt) and *Beauveria bassiana*.

Chemical control

- Use chemicals such as Indoxacarb, Lufenuron, and Methoxyfenozide.

Diamondback moth caterpillar.
(Photo by Kengap Horticulture)



Diamondback moth adult. (Photo by Russ Ottens, University of Georgia, Bugwood.org)



When using a pesticide, always wear protective clothing and follow the instructions on the product label, such as dosage, timing of application, and pre-harvest interval.

Scientific name(s) > *Plutella xylostella*

The recommendations in this factsheet are relevant to: many countries where this pest or problem is present



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