

Cabbage diamondback moth (020)

Summary

- Worldwide distribution. Members of the cabbage (brassica) family, e.g., head cabbage, Chinese cabbage, radish, cauliflower and broccoli; *Amaranthus* and watercress. An important pest.
- Eggs, yellow, small, laid singly. Young larvae mine leaves; larger ones leave waxy windows and holes. If touched, larger ones wiggle backwards, and fall down on silk threads.
- Natural enemies: wasp parasitoids, especially *Cotesia* (see **Fact Sheet no. 287**) and *Diadegma* (see **Fact Sheet no. 285**).
- Cultural control: inspect nurseries and crops regularly; remove larvae; use trap crops, e.g., mustards or Chinese cabbage (Bok Choy), but destroy trap crop before eggs hatch.
- Chemical control: in household plots, PDPs (chillies, neem, derris, pyrethrum to safeguard natural enemies); in commercial plots, grow under nets; use Bt (*Bacillus thuringiensis*) sprays against caterpillars when young. Avoid pyrethroids and organophosphates.

Common Name

Diamondback moth

Scientific Name

Plutella xylostella



Photo 1. Young caterpillars of diamondback moth, *Plutella xylostella*, eat from the underside of the leaf to the top layer of wax.



Photo 2. Holes in a cabbage leaf caused by larvae of diamondback moth, *Plutella xylostella*.



Photo 3. Holes in the leaves of cabbage seedlings caused by larvae of diamondback moth, *Plutella xylostella*.



Photo 4. Pupae of diamondback moth, *Plutella xylostella*, surrounded by their net-like cocoons on the underside of a Chinese cabbage leaf.



Photo 5. Adult diamondback moth, *Plutella xylostella*, showing the characteristic wing patterns.



Photo 6. Adult diamondback moth, *Plutella xylostella*.

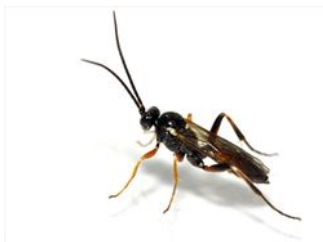


Photo 7. Adult *Cotesia vestalis*.



Photo 8. *Cotesia vestalis* inside its silken cocoon, close to the remains of a dead diamondback moth larva.



Photo 9. Adult *Diadegma semiclausum* laying egg in larva of diamondback moth, *Plutella xylostella*.



Photo 10. Pupa of diamondback moth, *Plutella xylostella*, parasitised by *Diadegma semiclausum*.

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Information from CABI (2019) *Plutella xylostella* (diamondback moth). Crop Protection Compendium; and from Walker K (2007) diamondback moth (*Plutella xylostella*): PaDIL - <http://www.padil.gov.au>; and Diamondback moth (2021) AgricultureVictoria, Australia. (<https://agriculture.vic.gov.au/biosecurity/pest-insects-and-mites/priority-pest-insects-and-mites/diamondback-moth/>); and Diamondback moth *Plutella xylostella*. Cesar Australia and South Australian Research and Development Institute. (<https://cesaraustralia.com/pestnotes/caterpillars/diamondback-moth/>); and Diamondback moth: cabbage in Indonesia and Western Australia (2020) Agriculture and Food. Department of Primary Industries and Regional Development. Government of Western Australia. (<https://www.agric.wa.gov.au/broccoli/diamondback-moth-cabbage-pest-indonesia-and-western-australia>); and from Mike Furlong (pers. comm.), University of Queensland, Australia. Photos 1&2 Graham Walker, Plant and Food Research, Auckland, New Zealand. Photo 4 Richard Markham, ACIAR, Canberra. Photo 4 Jack Kelly Clark, US Statewide IPM Project. Photos 5,7-9) Mike Furlong, University of Queensland, Australia. Photo 6 Mani Mua, SPC, Sigatoka Research Station, Fiji.

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