



Pacific Pests, Pathogens & Weeds - Mini Fact Sheet Edition

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Tomato green looper (333)



Photo 1. Larva of green looper, *Chrysodeixis eriosoma*.



Photo 2. Pupa of green looper, *Chrysodeixis eriosoma*, showing the silken cocoon.



Photo 3. Adult green looper caterpillar, *Chrysodeixis eriosoma*.



Photo 4. Adult green looper caterpillar, *Chrysodeixis eriosoma*, dorsal view.



Photo 5. Adult green looper caterpillar, *Chrysodeixis eriosoma*, ventral view.

Summary

- Worldwide distribution. On cabbage, cucumber, potato, daisy, legume plant families, and more. An important moth pest.
- Early larvae make "windows" in leaves; later larvae make holes or defoliate plants.
- Eggs laid on underside of leaves; larvae blue-green, with white lines along body, up to 40 mm long. Move by looping. Pupae in silken cocoons in soil or on leaves. Adults, dark grey-brown, with silvery patches on forewings and two white spots, wingspan 30-40 mm, and bunched hairs like horns on head.
- Natural enemies: parasitoids give good control, and nuclear polyhedrosis virus effective.
- Cultural control: inspect nurseries and crops regularly; remove larvae by hand; use trap crops, e.g., mustards or Chinese cabbage (Bok Choy), but destroy trap crop before insects hatch.
- Chemical control: in household plots, use PDPs (chillies, neem, derris, or pyrethrum); in commercial plots, grow under nets; use Bt (*Bacillus thuringiensis*) sprays against caterpillars when young.

Common Name

Green looper caterpillar, green garden looper. In Fiji, this has been called the green semi-looper. In this app it is called the "tomato green looper".

Scientific Name

Chrysodeixis eriosoma; the identification of this moth in the Pacific may have been confused with a similar moth, *Chrysodeixis chalcites*, which in Fiji is listed by Swaine (1971)¹ as *Plusia chalcites*. However, CABI (2014) lists no records of *Chrysodeixis chalcites* in the Pacific, and quotes (Zang 1994): "Literature referring to *C. chalcites* (= chalcytes) in southern or eastern Asia or Oceania actually refers to *C. eriosoma* (Zhang, 1994)". However, the SPC surveys of Federated States of Micronesia and Palau record *Chrysodeixis chalcites* in Palau and Northern Mariana Islands².

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¹Information from Swaine G (1971) *Agricultural Zoology in Fiji*. Her Majesty's Stationery Office. London; and CABI (2014) *Chrysodeixis eriosoma* (green looper caterpillar) Crop Protection Compendium. (www.cabi.org/cpc); and *Chrysodeixis eriosoma* (Doubleday) (1991) Crop Knowledge Master Department of Entomology, Honolulu, Hawaii. (<http://www.extento.hawaii.edu/kbase/crop/Type/chrysode.htm>), and from ²Nafis DM (1997) An insect survey of the Federated States of Micronesia and Palau. South Pacific Commission, New Caledonia. Photo 1 Courtesy of Don Herbison-Evans, Macleay Museum, University of Sydney. (<http://lepidoptera.butterflyhouse.com.au/plus/eriosom.html>). Photo 2 Merlin Crossley, UNSW, Sydney. Photo 3 *Chrysodeixis eriosoma*. Wikipedia. (https://en.wikipedia.org/wiki/Chrysodeixis_erosoma#Adult). Photos 4&5 MAF Plant Health & Environment Laboratory (2011) Green Garden Looper (*Chrysodeixis eriosoma*). PaDIL - (<http://www.padil.gov.au>).

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