

Coconut leafminer (060)

Summary

- Narrow distribution. Philippines, Indonesia, Oceania. Coconuts, betel nut, sago palm, and a number of ornamental and wild palms. Occasional serious outbreaks occur.
- The youngest 3-4 leaves are attacked first: adults make narrow feeding furrows in leaflets, and larvae mine them. Nursery attacks occur.
- Outbreaks every 10-15 years, perhaps due to droughts. During outbreaks, leaflets destroyed, young nuts fall, flower production ceases, setting back production by 2 years; some palms may die.
- Natural enemies: several parasitoid wasps, and ants are reported to be imported.
- Cultural control: hand picking and pruning infested fronds suggested, but unlikely to be practical.
- Chemical control: PDPs in nurseries, e.g., chilli, derris, pyrethrum; or synthetic pyrethroids, but these will kill natural enemies.

Common Name

Coconut leafminer, coconut leaf hispid

Scientific Name

Promecothea species. Several species are recorded from Oceania. *Promecothea caerulipennis* has a wide distribution among Pacific island countries. *Promecothea opacicollis* has been identified as the species in Solomon Islands.

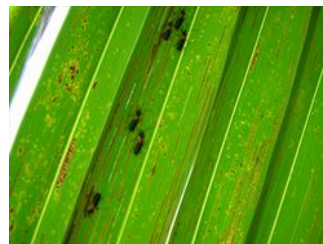


Photo 1. Adult coconut leafminer, *Promecothea* species. Note the fine lines where the insects have fed.



Photo 2. Large areas of decay on coconut leaflets after the leaves have been attacked by the coconut leafminer, *Promecothea* species.



Photo 4. Extensive leaf decay in a



Photo 5. Single coconut palm to show the extensive leaf damage when attacked by the coconut leafminer, *Promecothea* species.



Photo 3. Adult Fiji coconut hispid, *Promecothea caerulipennis*.

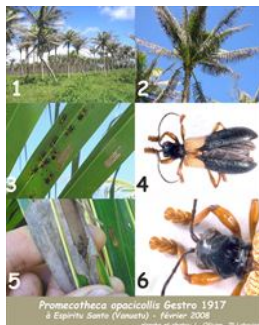


Photo 6. A poster showing symptoms caused by the coconut leafminer, *Promecothea* species, and its biology.

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¹Information from Swaine G (1971) *Agricultural Zoology in Fiji*. Her Majesty's Stationery Office, London; and Howard FW *et al.* (2001) *Insects on palms*. CABI Publishing, UK; and from Atumurava F *et al.* Coconut leaf miner technical versus social analysis survey report (21-25 June 2010), Lata, Temotu Province, Solomon Islands; CABI (2019) *Promecotheca papuana*. Crop Protection Compendium. (<https://www.cabi.org/cpc/datasheet/44535>). Photos 1&2,4-6 Jean-Pierre Labouisse, CIRAD, Montpellier, France. Photo 3 Henderson RC, Crosby TK (2012) Fiji Coconut Hispid (*Promecotheca caeruleipennis*): PaDIL - (<http://www.padil.gov.au>).

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