



Pacific Pests, Pathogens & Weeds - Mini Fact Sheet Edition

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Cowpea leafminer (378)



Photo 1. Upper leaf surface of cowpea with snake-like mines and blotches damaged by cowpea leafminer, *Phodoryctis caerulea*.



Photo 2. Close-up of blotch caused by larva of cowpea leafminer, *Phodoryctis caerulea*.



Photo 3. Adult cowpea leafminers, *Phodoryctis caerulea*.



Photo 4. Adult cowpea leafminer, *Phodoryctis caerulea*, showing upright angle when at rest, and the fringed upturned trailing edges of the wings



Photo 5. Adult cowpea leafminer, *Phodoryctis caerulea*, showing long antennae, smoky forewings, and the fringed upturned trailing edges of the wings.

Summary

- Widespread within Asia. In Oceania, Fiji, Guam, Solomon Islands, and Tonga. Cowpea is the main host, and many other food, ground covers, and fodder legumes.
- Damage: larvae burrow through upper leaf surface making snake-like mines that end in a large blotch. Mature larva red, with brown head. Pupation on crop plants and weeds. Adult dirty-cream, smoky wings, antennae longer than body with turned up ends to wings. Body at steep angle at rest. Pupae survive on plant debris between crops, in soil or on weeds. Impact on cowpea in Fiji unknown.
- Cultural control: avoid overlapping crops; squash mines between finger and thumb or remove infested leaves; collect debris and burn after harvest.

- Chemical control: biorational i) insecticidal soap, white or horticultural oils; ii) botanicals (chillies, neem, derris, pyrethrum); iii) microbials (abamectin, spinosad). Avoid organophosphates and synthetic pyrethroids.

Common Name

Cowpea leafminer

Scientific Name

Phodoryctis caerulea. It was previously known as *Acrocercops caerulea*, and it has been recorded as *Phodoryctis centrometra* from Fiji. It is a moth of the Gracillariidae.

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Information from Swaine G (1971) *Agricultural Zoology in Fiji*. Her Majesty's Stationery Office. London; Photos 1-4 Mani Mua, SPC. Sgatoka Research Station, Fiji. Photo 5 Wikipedia. (https://en.wikipedia.org/wiki/Phodoryctis_caerulea).

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The mobile application is available from the Google Play Store and Apple iTunes.

