



Pacific Pests, Pathogens & Weeds - Fact Sheets

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Tahitian chestnut moth (359)



Photo 1. Fruit of Tahitian chestnut, *Inocarpus fagiferus*, with holes bored by the larvae of *Cryptophlebia pallimfimbriata*.



Photo 2. Larva of *Cryptophlebia pallimfimbriata* tunnelling into a Tahitian chestnut fruit, *Inocarpus fagiferus*.



Photo 3. Larva of *Cryptophlebia pallimfimbriata*, tunnelling in a fruit of Tahitian chestnut, *Inocarpus fagiferus*.



Photo 4. Adult Tahitian chestnut moth, *Cryptophlebia pallimfimbriata* (Cook Islands).



Photo 5. Adult Tahitian chestnut moth, *Cryptophlebia pallimfimbriata* (Fiji).

Common Name

Tahitian chestnut fruit borer.

Scientific Name

Cryptophlebia pallimfimbriata. It is a moth of the Tortricidae

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Distribution

Asia, Africa, Oceania. It is recorded from Australia (Queensland), Cook Islands, Fiji, French Polynesia, Vanuatu.

Hosts

Tahitian chestnut, *Inocarpus fagiferus* (it is called *ivi* in Fiji). Other hosts are pods of *Bauhinia*, and *Acacia*, and avocado.

Symptoms & Life Cycle

The larvae do the damage by boring into the fruits of *Inocarpus* while still on the tree, and make them unfit for eating (Photo 1). Infestation is often obvious with holes in the fruit and dark pellets of excreta protruding through the tunnel openings.

The larvae are about 15 mm long when mature, with light grey bodies and eight dark brown spots on each segment (Photos 2&3). The head and the plate covering the first segment behind the head are brown. The pupae are about the same length, brown with a row of stout spines on the top surface. They develop inside the fruit.

The adult moth is about 12 mm long, brown, with a yellowish patch at the tip of the forewing, surrounded by a curved dark brown line (Photos 4&5).

Impact

Swaine (1971)¹ records this as a serious pest of *ivi* fruits in Fiji. There, and in many other Pacific island countries the cooked seed kernels are eaten for their high protein and carbohydrate. However, infestations are unlikely to be important as the fruit has declined in popularity. Previously, it filled a gap ('time-hungry') between harvests of major food crop staples. Today, with a monetary economy operating in most countries, collecting fruit from the wild has given way to purchasing food stuffs from stores.

Detection & inspection

Look for fruit with holes in them, split them open to see the tunnels and find the life stages of the moth. In particular, look for light grey larvae with distinctive eight spots on each segment.

Management

NATURAL ENEMIES

None have been reported.

CULTURAL CONTROL

Ideally, infested fruit should be removed as soon as they fall, but this is unlikely to make a difference as the trees grow wild.

CHEMICAL CONTROL

Not an appropriate control measure. The trees are large and wild, and the larvae are protected inside the fruit.

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¹Information from Swaine G (1971) *Agricultural Zoology in Fiji*. Her Majesty's Stationery Office. London; and from Wikipedia *Cryptophlebia pallifimbriana*. (https://en.wikipedia.org/wiki/Cryptophlebia_pallifimbriana). Photo 3&4 Gerald McCormack, Cook Islands Biodiversity & Natural Heritage. (<http://cookislands.bishopmuseum.org>).

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