

Pacific Pests, Pathogens & Weeds - Fact Sheets

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Poinciana looper moth (251)



Photo 1. Mature caterpillar of the poinciana looper, Perimcyma cruegeri, showing the green head, the lines along the side.



Photo 3. The same leaf as in Photo 2, showing the mature caterpillar of the poinciana looper, *Perimcyma cruegeri*, and the leaves drawn together to form a cocoon.



Photo 5. Defoliation of *Delonix regia* caused by caterpillars of the poinciana looper, *Perimcyma cruegeri*.



Photo 2. Mature caterpillar of the poinciana looper, *Perimcyma cruegeri*, and a cocoon at the end of the leaf made from drawing leaflets together with silken threads.



Photo 4. Mature caterpillar of the poinciana looper, *Perimcyma cruegeri*, showing green head, the white back and the silken threads of the cocoon.



Photo 6. Closer view of defoliation of *Delonix regia* caused by caterpillars of the poinciana looper, *Perimcyma cruegeri*. Many of the leaves have been completely stripped by the caterpillars.



Photo 7. Pupa, poinciana looper, Perimcyma cruegeri.



Photo 8. Adult, poinciana looper moth, Pericyma cruegeri.



Photo 9. Adult, poinciana looper moths, *Pericyma cruegeri*, side and top views.

Common Name

Poinciana looper moth

Scientific Name

Pericyma cruegeri

Distribution

Narrow. Southeast Asia, North America (Hawaii), Oceania. It is recorded from the Federated States of Micronesia, Guam, Northern Mariana Islands, Palau, Papua New Guinea, and Tonga.

Hosts

Poinciana, *Delonix regia*. The yellow poinciana, *Peltophorum pterocarpum, Acacia* and *Caesalpinia* are also hosts. It has also been recorded as feeding on *Cassia fistula* and *Leucaena leucocephala*.

Symptoms & Life Cycle

Eggs, which are yellowish to bluish green, and laid singly on the leaflets, hatch in 2-3 days. The caterpillars go through five stages. When young they feed together on the leaflets in small groups; later, they stay on their own. They grow up to 7 cm long. The body is green with white lines on the side; the top has a white band running the length of the body due to the merging of five white lines (Photos 1-4). The head is green, narrowing behind, like a 'neck' (Photo 4). The caterpillars only have two pairs of prolegs, and so they move like loopers. When disturbed they move wildly and the head curves backwards. Pupation occurs in cocoons made by binding leaflets with silken threads (Photos 2,3&4). After about 10 days, the adult emerges; it has mottled brown wings with black wavy lines; the wings are about 4 cm wide (Photos 8&9).

Impact

The caterpillars completely strip the leaflets from the compound leaves of *Delonix*, leaving only the central midribs of the leaflets (Photos 4&5). In severe attacks, entire trees are defoliated but, if healthy, they recover quickly.

However, in Guam reinfestation has occurred when the trees produced new foliage after the initial attack. Continual defoliation of this kind has resulted in trees with smaller leaves, dieback, lack of or erratic flowering, attacks by bark borers and general loss of vigour.

Detection & inspection

Look for long thin, green, caterpillars, up to 7 cm long, that strip the leaves of *Del*onix, and other hosts. Look for the distinctive large green head, and the wavy white lines along the sides and top of the body.

Management

At present, there is no practical method for the control for the poinciana looper.

QUARANTINE

In the early 1970s, the poinciana looper was introduced accidently to Hawaii and Guam, either as eggs or pupal stages on *Delonix regia* cuttings and seedlings, or females carrying eggs aboard military or civilian airplanes. It has also spread to Palau and Papua New Guinea.

NATURAL ENEMIES

Surveys in Guam reported low levles of parasitism, and the only predators were preying mantids and pentatomid bugs. Chickens attacked caterpillars that came onto the ground when trees were defoliated. A chalcid wasp (*Brachymeria lasus*) from Papua New Guinea) was released in Guam but without effect. In Fiji, three birds, the red vented bulbul, Vanikora broadbil and the Fiji white eye, are recorded

feeding on the larvae.

It is likely that weather rather than natural enemies is more important in controlling populations. Populations of the Poinciana looper caterpillars are high in wet seasons, and low in dry.

CHEMICAL CONTROL

Bt, Bacillus thuringiensis, is effective.

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Information (and Photos 1,4&9) from Thaman R, Dutt R (2019) The 2019 Fiji poinciana looper moth invasion: A call for action. PaCE-SD Technical Report 1. Pacific Centre for Environment and Sastainable Development. University of the South Pacific, Sava, Fiji. Photos 2,3,5&6 Stone Foliaki, Deputy Director and Head of Agricultural Research and Information Division, MAF, Tonga. Photo 7 Simione Tukidia, SPC, Fiji. Photos 8 BIO/CSIRO Photography Unit.

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