

RED POSTMAN BUTTERFLY

Heliconius erato cyrbia

July 2019



The introduction of the red postman butterfly.

A population of red postman butterfly obtained from Ecuador was released onto Rarotonga in 2016 to control red passionfruit (*Passiflora rubra*), a vine which does not produce edible fruits and is invasive in native habitats and crops in the southern Cook Islands.



The red postman butterflies are now common.

How effective is the red postman butterfly?

The red postman butterfly keeps red passionfruit more or less stripped of leaves and rare in many parts of the Neotropics. In Rarotonga, it has become an abundant butterfly and is believed to be having a significant impact on red passionfruit, particularly in partially shaded thickets, where defoliation is greatest.

Will the butterfly larvae attack other trees?

Red postman butterfly caterpillars pose no threat to native plant species. Female butterflies occasionally lay eggs on edible passionfruit *Passiflora edulis*. Mature edible passionfruit plants (with lobed leaves) are toxic to red postman butterfly caterpillars, which soon die, so feeding damage is trivial. Some larval development can occur on young seedlings when the leaves are still oval.

How can I find the butterfly larvae?

The adult butterflies are easily recognized by their striking black and red coloration. They can be seen all year round collecting pollen and nectar from a range of different flowers but the damaging caterpillars are found only on red passionfruit vine. The eggs are small, yellow and conical in shape and are usually laid near the tips of red passionfruit stems.



The spiky orange and black larvae on a red passionfruit vine stem.

How do the butterflies disperse?

The adult butterflies are strong fliers and can find new host plants over a wide area without assistance.

How do I move the butterflies to a new site?

The butterfly is found throughout Rarotonga and was recently seen on Mangaia, perhaps as a result of natural dispersal. It could potentially be released on other islands where red passionfruit is present such as Atiu, Mauke and Mitiaro, following appropriate approvals.

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