

Malay (rose) apple leafminer (371)

Common Name

Malay (or rose) apple leafminer; there is no accepted common name for this leafminer blotch moth.

Scientific Name

Acrocercops patellata. It is a moth of the Gracillariidae.

Distribution

Unknown. It is recorded from Papua province (Irian Jaya), Indonesia, and Fiji. Possibly, in Papua New Guinea and Solomon Islands.

Hosts

Malay (or rose) apple. It is also called rose apple, mountain apple, water apple. The scientific name of the host is *Syzygium malaccense*.

Symptoms & Life Cycle

The larvae do the damage, mining along the major veins, extending over the entire leaf surface in severe attacks (Photos 1&2). The leaves become thin and eventually shrivel and die.

The adult moth is about 3 mm long, with a wingspan of 6 mm (Photo 3). It has four, distinctive, white, semicircular spots with black borders on each forewing, against a brown background. The central two spots are much larger than those on either side. Hindwings are brownish and fringed. The top of the head and abdomen are also white. Antennae are longer than the body. Pupae are brown and occur in crevices on the leaf (Photos 4&5).

Spread is on the wing, and via the trade in nursery plants.

Impact

Severe damage occurs to individual leaves, but the number of leaves damaged on any one tree appears to be low. For this reason, it is very unlikely that fruit yields are affected by the damage. Plants in the nursery may be more seriously impacted, limiting growth.

Detection & inspection

Look for the characteristic white spots on the forewings of the moth, the long antennae and the fringed hindwings.

Management

CULTURAL CONTROL

It is unlikely that the leafminer causes sufficient damage on mature trees to warrant control. However, should it become severe on young trees in a nursery then squash the larvae in their tunnels with finger and thumb or, if numbers are too large to squash, removed the infested leaves with mines as soon as they are seen and burn them.

CHEMICAL CONTROL

If cultural control measures are not sufficient to manage outbreaks in nurseries, spray with imidacloprid (or another nicotinoid), or use a contact product, such as a synthetic pyrethroid. Imidacloprid has the advantage of being systemic.



Photo 1. Damage to leaf surface of Malay apple, caused by the leaf miner, *Acrocercops patellata*. Note, on the right side of the leaf the damage is between the veins



Photo 2. Damage to leaf surface of Malay apple, caused by the leaf miner, *Acrocercops patellata*.



Photo 3. Adult moth of the leafminer, *Acrocercops patellata*, showing distinctive colour of the forewings.



Photo 4. Pupa of the Malay apple leafminer, *Acrocercops patellata*.

When using a pesticide, always wear protective clothing and follow the instructions on the product label, such as dosage, timing of application, and pre-harvest interval. Recommendations will vary with the crop and system of cultivation. Expert advice on the most appropriate pesticide to use should always be sought from local agricultural authorities.



Photo 5. Pupa of the Malay apple leafminer, *Acrocercops patellata*, with moth emerging.

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Information from van Haren MM (undated) The leaf blotch miner moths (Lepidoptera: Gracillariidae: Gracillariinae) of Papua Indonesia. (<https://www.papua-insects.nl/insect%20orders/Lepidoptera/Gracillariidae/Acrocercops/Acrocercops%20patellata.htm>).

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