

# The Leaf Tying Moth

## *(Hypocosmia pyrochoma)*

The leaf tying Moth was found to be a voracious feeder on the Cat's Claw Creeper Vine (CCV) in the rearing facilities and was released in some areas in 2007. Until recent years it was assumed to be an unsuccessful release as it was believed the moth did not survive the winters.

The Greater Mary Association (GMA) with support from the Mary River Catchment Coordinating Committee (MRCCC) has for a few years been releasing CCV bio controls in the Munna Ck catchment area.

During inspections of the Jewel Beetle and Tingid releases in the Munna Ck area in May 2015 some leaves "tied" or webbed together were observed in CCV and they turned out to be the work of the leaf tying moths' larvae.

Three infestations have been found, two on Eel Ck and one on Munna Ck in the Boompa area.

Biosecurity QLD is aware of infestations in the area but we have been unable to determine if any are the same as the ones we have found. I would expect that there are many more infestations than the ones we have found in this area and we have prepared this handout to help with identification of other infestations.



Leaf tying moth adult (Biosecurity QLD)

## Life Cycle

Adults of the leaf tying moths are brownish orange in colour with white markings on the forewings.

They start laying eggs two days after emergence.

Eggs are laid on the underside of the leaves and in crevices up the stems. They are pale yellow to green in colour, and darken as they mature.

The larvae have six instars and the larval stage lasts an average of 27 days. The first instar larvae are pale grey with a dark head capsule, turning dark brown with orange/brown markings as they mature toward the prepupal stage.

Larvae pupate in the soil and emerge as adults after a pupation period of approximately 28 days. The pupae may undergo diapause from autumn to spring<sup>1</sup>

This diapause has been a problem with Gympie Landcare's original attempts to produce moths in the past.<sup>2</sup>



Leaf tying moth; typical webbed leaves after they have dried out (J Hansen)

<sup>1</sup> Biological control of cat's claw creeper: the potential of the leaf-tying pyralid moth E Snow et al

<sup>2</sup> E Rider GDLG – personal communication

## The Current Situation

GMA volunteers Ross Smith and Bill Wilkinson were able to collect a small number of larvae late in the recent summer and managed to establish them in the GMA tunnel house at Tiaro.

They found it a fairly steep learning curve with not many sources of advice. They devised methods of collection and culture and hope to have a few moths by spring.

## What to look for

None of the GMA volunteers have ever seen a moth; they are nocturnal and therefore unlikely to be seen whilst visiting the infested areas and collecting larvae.

Look for the webbing of leaves which are tied together with spider like web and are often rolled into “tubes”.

Freshly skeletonised leaves are still greenish but soon turn brown.

The larvae hide in these tubes and are quite hard to locate as they are quite active and elusive particularly as they get to full size (approx. 17-20mm).

The larvae pupate in the soil into a small brown cocoon about 6mm long and 3mm wide.



Early larval stage - enlarged



Late larval stage - enlarged



Larval feeding damage to a Cat's Claw leaf



Leaf tying moth larval damage on the left, jewel beetle leaf mining damage with JB disk on the top right