

See discussions, stats, and author profiles for this publication at: <https://www.researchgate.net/publication/309739478>

# Biological control of cat's claw creeper: the leaf mining jewel beetle *Hylaeogena jureceki*

Poster · October 2011

DOI: 10.13140/RG.2.2.26246.78407

---

CITATIONS

0

---

READS

41

4 authors, including:



[Dianne Bronwyn Jean Taylor](#)  
Queensland Government

16 PUBLICATIONS 52 CITATIONS

[SEE PROFILE](#)



[Kunjithapatham Dhileepan](#)  
Queensland Government

181 PUBLICATIONS 2,000 CITATIONS

[SEE PROFILE](#)

Some of the authors of this publication are also working on these related projects:



Biological control of bellyache bush (*Jatropha gossypifolia*) [View project](#)



War on Western Weeds initiative (Queensland Government) [View project](#)



# Biological control of cat's claw creeper

## The leaf mining jewel beetle, *Hylaeogena jureceki*



Dianne B.J. Taylor<sup>1</sup>, Mariaño Trevino<sup>1</sup>, Catherine Lockett<sup>1</sup>, K. Dhileepan<sup>1</sup>

<sup>1</sup>. Department of Employment, Economic Development and Innovation

### Background

- Cat's claw creeper (*Macfadyena unguis-cati*, Bignoniaceae) is a vigorous vine native to Central and South America.
- It is a major environmental weed in coastal and sub coastal areas of southern Queensland and northern New South Wales, particularly in rainforest and riparian communities.
- Conventional control methods are both difficult and expensive.
- Two agents, a leaf-sucking tingid (*Carvalhotingis visenda*) and a leaf-tying moth (*Hypocosmia pyrochroma*) have been released against cat's claw creeper so far.
- The leaf mining beetle, *Hylaeogena jureceki*, was identified as a potential biological control agent for cat's claw creeper and has been released in South Africa for this purpose.

### Lifecycle

- *Hylaeogena jureceki* is a highly damaging insect, with both larvae and adults feeding on leaves.
- Eggs are laid on the underside of leaves, along the outer edge.
- Larvae feed within the leaf from which they emerge.
- Fully grown larvae pupate in circular discs which may or may not remain attached to the leaf.
- Adults are 3 mm long. They chew leaves and can live for more than five months.
- The lifecycle from egg to adult takes 50-58 days.

### Host specificity studies

- Overall, 50 species from 11 families have been tested, with an emphasis on species closely related to cat's claw creeper:
  - 34 species from 11 families tested in Australia.
  - 21 species from 10 families tested in South Africa.
- Development is only possible only on cat's claw creeper.
- Approval for release is anticipated in late 2011.

### Planned releases

- Releases are planned to begin during the 2011/2012 summer period (subject to approval).
- Release sites should be large enough to support an insect colony and not subject to chemical or mechanical control.
- Community involvement through Landcare, catchment groups, schools (Weed Warriors) etc is being sought.

### More information

Department of Employment, Economic Development and Innovation

Name: K. Dhileepan

Phone: +61 7 3325 4449

Email: [kunjithapatham.dhileepan@deedi.qld.gov.au](mailto:kunjithapatham.dhileepan@deedi.qld.gov.au)

[www.biosecurity.qld.gov.au](http://www.biosecurity.qld.gov.au)

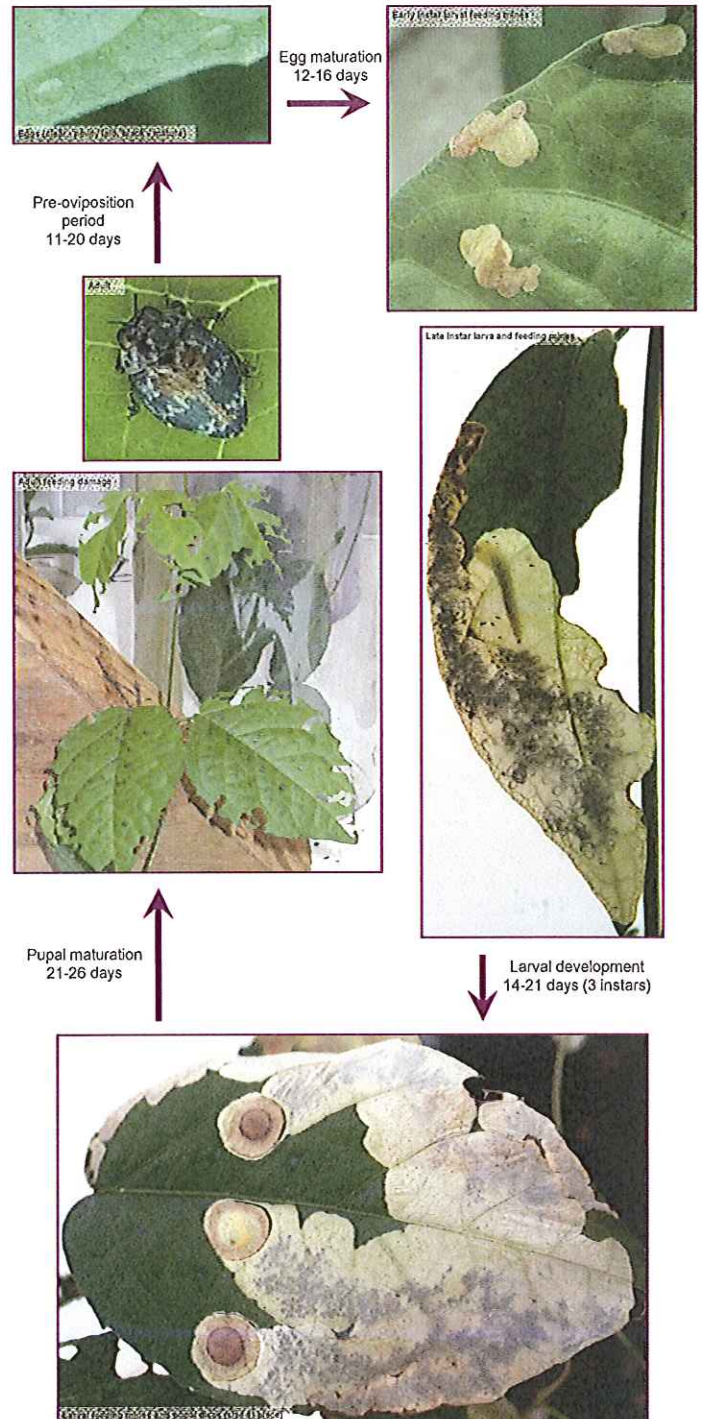


Figure 1. The lifecycle of leaf-mining jewel beetle, *Hylaeogena jureceki*.