1. PaDIL Species Factsheet

Scientific Name:
Deanolis sublimbalis Snellen
(Lepidoptera: Crambidae: Odontinae)

Common Name
Red banded mango caterpillar
Live link: http://www.padil.gov.au:80/pests-and-diseases/Pest/Main/136263

Image Library
Australian Biosecurity

Partners for Australian Biosecurity image library

Museum Victoria

CRC National Plant Biosecurity

Plant Health Australia

Department of Agriculture, Fisheries and Forestry

Department of Agriculture and Food, Western Australia
2. Species Information

2.1. Details

Specimen Contact: DAFF Biosecurity Darwin - daff.gov.au

Author: Walker, K., S. Anderson & L. Tran-Nguyen


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2.2. URL

Live link: http://www.padil.gov.au:80/pests-and-diseases/Pest/Main/136263

2.3. Facets

Status: Exotic Species Occurrence in Australia

Group: Moths

Commodity Overview: Horticulture

Commodity Type: Mango

Distribution: South and South-East Asia, Australasian - Oceanian

2.4. Other Names

*Autocharis albizonalis* (Hampson, 1903)

*Deanolis sublimbalis* Snellen, 1899

*Noorda albizonalis* Hampson, 1903

*Red banded borer*

*Swinhoe transferred sublimbalis under Autocharis in 1894. Swinhoe 1894*

2.5. Diagnostic Notes

Eggs are laid on fruit surfaces and larvae bore through the skin to feed on the pulp and the seed. Fruit are attacked in various stages of development. Soon after the larvae enter the fruit, secondary infection by fruit fly, other pests and pathogens may occur, causing rotting and premature dropping of fruit. Larva create a hole in the side of the fruit from which sap drips and collects on the bottom of the fruit leaving a characteristic dark stain.

There are no published keys available to identify RBMC however; diagnosis is predominantly dependant on larval identification. If a brightly red and white banded caterpillar is found infesting mango fruit or on or near _Mangifera_ spp. then it is likely to be RBMC.

**Eggs** laid singly, in twos, irregular shapes which conform to the crevices laid in; ovoid; milky white when laid turn crimson after 2-3 days.

**Larvae** 1st instar cream with black head and 11 pink bands dorsally; instars 2 and 3 larger with the coloured bands darkening to a bright red.

**Pupae** 14 days; in ground in woven silk cocoon or in the bark on tree trunks.
**Adult** approximately 12mm long with white scales on vertex, a whitish line on lateral margins of pronotum and a transverse white band dorsally on 3rd abdominal segment; forewings white mixed with dark scales, giving a pale brown appearance overall, a brown band of varying thickness present along the termen, apex and tornus and a faint incomplete dark brown median line; hindwings white with a narrow dark brown band along the apical half of the termen, broad light brown longitudinal band across middle to wings; females usually larger than males; female abdomens taper, male abdomens have a rounded apex (Kuroko & Lewvanich 1993).

To date, there are no published genitalia descriptions for RBMC. I provide dissected male and female photographs for identification purposes.

**Coming soon - PBT link with DNA barcoding**

2.6. References


2.7. Web Links


3. Diagnostic Images

Quarantine Interception, Port Gerebu, D. Tenakani 25.vi.2004  
**Aedeagus:** S. Anderson DAFF Biosecurity

PNG reared from colony, W. Kroll 22.viii.2000  
**Antrum:** S. Anderson DAFF Biosecurity

PNG reared from colony, W. Kroll 22.viii.2000  
**Corpus bursae:** S. Anderson DAFF Biosecurity

**Dorsal View - Adult:** Amy Carmichael  
Queensland University of Technology  

Det: M. Schaeffer 1997 at ANIC  
**Female:** S. Anderson DAFF Biosecurity

PNG reared from colony, W. Kroll 22.viii.2000  
**Female genitalia:** S. Anderson DAFF Biosecurity
PNG reared from colony, W. Kroll
22.viii.2000
Female head: S. Anderson DAFF Biosecurity

PNG reared from colony, W. Kroll
22.viii.2000
Fore & hind wings: S. Anderson DAFF Biosecurity

Head Dorsal View - Adult: Amy Carmichael Queensland University of Technology

Head Dorsal View - Adult: Amy Carmichael Queensland University of Technology

DAFF Biosecurity Cairns collection
Larva: S. Anderson DAFF Biosecurity

Quarantine Interception, Port Gerebu, D. Tenakani 25.vi.2004
Male genitalia: S. Anderson DAFF Biosecurity
**Male genitalia:** S. Anderson DAFF Biosecurity

**Mid and Hind Legs:** Amy Carmichael Queensland University of Technology

**Ovipositor:** S. Anderson DAFF Biosecurity

**Pupa:** S. Anderson DAFF Biosecurity

**Tympanal organs:** S. Anderson DAFF Biosecurity

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Quarantine Interception, Port Gerebu, D. Tenakani 25.vi.2004


PNG reared from colony, W. Kroll 22.viii.2000

PNG reared from colony, W. Kroll 22.viii.2000

S. Eyres

**RBMC on mango:** S. Eyres (Imaging Consultant) Department of Agriculture WA

Quarantine Interception, Port Gerebu, D. Tenakani 25.vi.2004

**Tympanal organs:** S. Anderson DAFF Biosecurity
4. Other Images

- **Adult on sticky trap.** Photo by Lindsay Chandler, Cairns Queensland  
  **Adult on sticky trap**: Lindsay Chandler  
  Biosecurity Queensland

- **Caterpillar inside mango.** Photo by Lindsay Chandler, Cairns Queensland  
  **Caterpillar inside mango**: Lindsay Chandler  
  Biosecurity Queensland

- **Crawling caterpillar.** Photo by Lindsay Chandler, Cairns Queensland  
  **Crawling caterpillar**: Lindsay Chandler  
  Biosecurity Queensland
**Damage on tree.** Photo by Lindsay Chandler, Cairns Queensland

**Damage on tree:** Lindsay Chandler
Biosecurity Queensland

**Papua New Guinea, Rabaul, Nov 2004, G. Maynard**

**Damage signs:** Glynn Maynard Department of Agriculture, Fisheries and Forestry (DAFF)

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**Image showing various larval instar and colour banding.** Jane Royer
Queensland Department of Industries & Fisheries

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**Papua New Guinea, Rabaul, Nov 2004, G. Maynard**

**Larva:** Glynn Maynard Department of Agriculture, Fisheries and Forestry (DAFF)

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**Papua New Guinea, Rabaul, Nov 2004, G. Maynard**

**Larva:** Glynn Maynard Department of Agriculture, Fisheries and Forestry (DAFF)
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Papua New Guinea, Rabaul, Nov 2004, G. Maynard
**Larva:** Glynn Maynard Department of Agriculture, Fisheries and Forestry (DAFF)

Outside damage. Photo by Lindsay Chandler, Cairns Queensland
**Outside damage:** Lindsay Chandler
Biosecurity Queensland

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Thursday, February 13, 2020