

1. PaDIL Species Factsheet



Scientific Name:

Chilo auricilius Dudgeon 1905
(Lepidoptera:Crambidae)

Common Name

Gold-fringed Rice Borer

Live link: <http://www.padil.gov.au:80/pests-and-diseases/Pest/Main/142264>

Image Library

Australian Biosecurity

Live link: <http://www.padil.gov.au:80/pests-and-diseases/>

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Museum Victoria

<http://museumvictoria.com.au/>



CRC National Plant Biosecurity

<http://www.crcplantbiosecurity.com.au/>



Plant Health Australia

<http://www.planthealthaustralia.com.au/>



Department of Agriculture, Fisheries and Forestry

<http://www.daff.gov.au/>



Department of Agriculture and Food, Western Australia

<http://www.agric.wa.gov.au/>

2. Species Information

2.1. Details

Specimen Contact: DAFF Biosecurity - daff.gov.au

Author: S. Anderson & L. Tran-Nguyen

Citation: S. Anderson & L. Tran-Nguyen (2012) Gold-fringed Rice Borer (*Chilo auricilius*) Updated on 2/24/2012

Available online: PaDIL - <http://www.padil.gov.au>

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2.2. URL

Live link: <http://www.padil.gov.au:80/pests-and-diseases/Pest/Main/142264>

2.3. Facets

Commodity Overview: Field Crops and Pastures

Commodity Type: Grains, Grasses, Sugarcane, Rice

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

Group: Moths

Status: Exotic species - absent from Australia

2.4. Other Names

Chilo auricilia Dudgeon 1905:405

Chilo popescurorji Bleszynski 1963

Chilotraea auricilia (Dudgeon) Kapur 1950

Diatraea auricilia (Dudgeon) Fletcher 1928

Gold-fringed borer

Gold-fringed moth

Gold-fringed rice borer

Gold-fringed rice stem borer

Rice stalk borer

Sugarcane stalk borer

2.5. Diagnostic Notes

Identification is currently undergoing peer review as part of the National Diagnostic Protocols by SPHDS.

Egg oval, dorsoventrally flattened, scale like and creamy-white appearance when first laid, arranged in 2-5 parallel rows (Chaudhary & Sharma 1986), eggs turn black after a number of days (Shenhmar & Singh 1997).

Larva new larvae creamy-white, approximately 1mm long and have a black flattened head, last instar larvae are about 25-30 mm long with five violet stripes running the length of the body, brown head, crochets multiordinal arranged in complete circles, open spiracles, grey rimmed oval outline (Butani 1956; Shenhmar & Singh 1997).

Pupa range in size from 10-15 mm long depending on sex with the females being larger; dark brown; transverse ridge present above eyes (hornlike); abdominal ring segments incomplete, spines extend to spiracles on 5, 6 and 7 segments; spines absent on anal area but have 2 pointy projections (Chaudhary & Sharma 1986).

Adult

C. auricilius can be easily confused with C. polychrysus by adult and larval morphology.

Chilo auricilius terminal dots large; subterminal line row of metallic scales close to apical margin; median line metallic; discal dot visible; fringe shining golden; hindwing light brown (Barrion et al 1990).

Chilo polychrysus terminal dots indistinct; subterminal line white with few silvery scales; median line distinct, oblique & pale yellow brown; discal dot highly reduced; fringe slightly glossy; hindwing whitish to dirty cream.

Chilo auricilius ocellus present; face prognathous, smooth or with small point; labial palpus 3 to 4 times as long as diameter of eye; forewing: 8-13 mm long with a maximum width of 3-4 mm, R1 confluent with Sc, base colour is yellow, occasionally brown, variable irrorated with brown scales, discal dot present, subterminal line close to termen, signified by a row of metallic scales, median line is the same colour as the subterminal line, few small silvery specks in the middle to the wing, terminal dots large, fringe shiny golden; hind wing light brownish.

Colouration and pattern of the forewing is inconsistent and in some species the fore wing is also most unicolouration yellow; sometimes the silvery specks are irregularly arranged, while in other specimens they have formed two parallel transverse lines.

Genitalia

pars basalis absent; saccus large; juxta plate with 2 symmetrical arms ending before basal costal angle of valva; aedeagus with distinct sub apical conical projection; ventral arm long with a notched apex; bulbous basal projection small; cornutus absent.

ostial pouch slightly demarcated from ductus bursae, medium to heavily sclerotized; signum absent (Bleszynski 1970).

As fresh specimens become available, dissection images will be updated.

Coming soon - PBT link with DNA barcoding for Chilo auricilius.

2.6. References

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3. Diagnostic Images



TBA
Aedeagus: S. Anderson DAFF Biosecurity



TBA
Antennae: S. Anderson DAFF Biosecurity



S. Eyres P056464
Borer damage: S. Eyres Department of Agriculture Western Australia



TBA
C. auricilius female: S. Anderson DAFF Biosecurity



Larva causing stalk damage
C. auricilius larva: N. Sallam DAFF Biosecurity



TBA
C. auricilius male: S. Anderson DAFF Biosecurity



N. Sallam
Dead heart damage: N. Sallam DAFF
Biosecurity



TBA
Female genitalia: S. Anderson DAFF
Biosecurity



TBA
Male genitalia: S. Anderson DAFF
Biosecurity



TBA
Male genitalia: S. Anderson DAFF
Biosecurity

Results Generated:

Tuesday, February 19, 2019
