

Planiceps canegrub

Plectris canegrub

Rhopaea canegrub

(*Antitrogus planiceps*)

(*Plectris aliena*)

(*Rhopaea magnicornis*)

Introduction

Planiceps and rhopaea canegrubs are native insects whilst plectris canegrub is an introduced species.

Rhopaea canegrubs can cause significant yield loss, and are found predominantly in the Rocky Point district in Queensland and in the Tweed Valley in NSW.

Planiceps canegrub usually occurs further south in the Harwood and Broadwater districts of NSW and is usually of minor pest importance.

Plectris canegrub is also usually of minor pest importance and seems restricted to NSW.

The three species each have soil type preferences:

Planiceps canegrub: loam soils.

Plectris canegrub: sandy soil.

Rhopaea canegrub: loam to clay-loam soils, especially those with high organic matter content.

Description

Adults of planiceps canegrubs are 18-21 mm long, tan to black and without scales (Photo 1). Planiceps larvae have a pear-shaped raster with 32-39 long thin hairs mostly in two rows each side, but continuing forward as single lines (Photo 2).



Photo 1: Adult of planiceps canegrub.

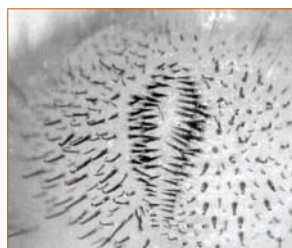


Photo 2: Raster of planiceps canegrub.

Adults of plectris canegrubs are relatively small, 10-15 mm long, and are pale yellow-brown (Photo 3). Plectris larvae have a vase-shaped raster with multiple rows of hairs each side of the naked central area (Photo 4).



Photo 3: Adult of plectris canegrub (image provided by Phillip Harpootlian, USA).



Photo 4: Raster of plectris canegrub.

Adults of rhopaea canegrub are 21-30 mm long, dark brown and coated with short, fine, semi-erect hairs (Photo 5). Rhopaea larvae have a raster with two parallel single rows of about 20 short hairs (Photo 6).

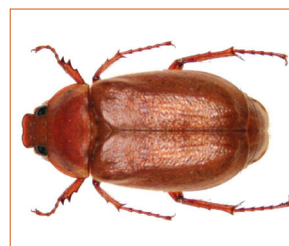


Photo 5: Adult of rhopaea canegrub.



Photo 6: Raster of rhopaea canegrub.

Biology

Rhopaea canegrubs can have either a one-year (Figure 1) or two-year lifecycle (Figure 2), depending on seasonal conditions. One-year lifecycles occur following a warm autumn, with larvae pupating during August and emerging

as adults in October-November. Following a cool autumn, a proportion of the population will feed through the following summer and complete a two-year lifecycle.

The lifecycles of planiceps and plectris cane-grubs are currently uncertain. Large (third-instar) larvae of planiceps have been observed in early summer, whilst third-instar larvae of plectris have been recorded during autumn-winter.

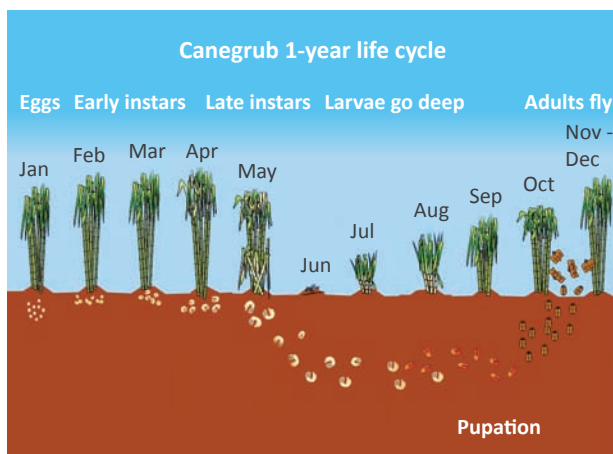


Figure 1: 1-year canegrub life cycle.

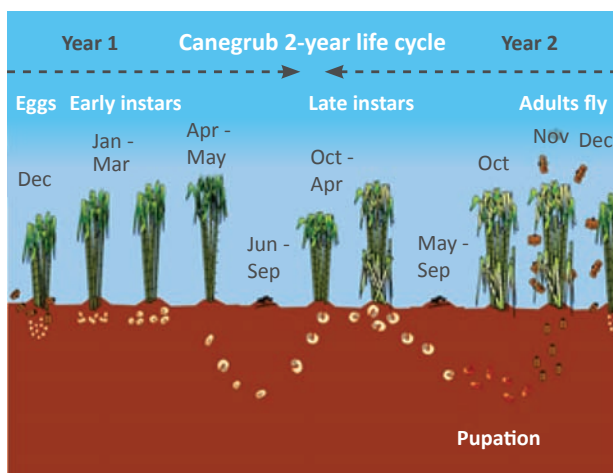


Figure 2: 2-year canegrub life cycle.

Damage

Feeding larvae prune sugarcane roots. Crop losses are mostly due to reduced water and nutrient uptake through the impaired root systems and, in severe infestations, stool death. Severe weed invasion accentuates loss. Stool-tipping may occur in autumn.

Most crop damage from rhopaea canegrub is usually visible around March, in semi-mature or mature cane, and caused by one-year cycle grubs. If two-year cycle grubs are present crop damage will usually be visible during spring and early summer.

Management

Registered controls and rates for control of plectris and rhopaea canegrubs		
Product (active constituent)	Single row - all row spacings	Length of control
Plant		
Confidor® Guard (imidacloprid)	11-16 mL/100 m of row	1 year
Nuprid® 700WG Senator® 700WG (imidacloprid)	5.5-8 g/100 m of row	1 year
suSCon® Blue (rhopaea only) (chlorpyrifos)	420 g/100 m of row	2 years
Ratoons		
Confidor® Guard (imidacloprid)	11-16 mL/100 m of row	1 year
Nuprid® 700WG Senator® 700WG (imidacloprid)	5.5-8 g/100 m of row	1 year
Couraze® Classic	11-16 mL/100 m of row	1 year

Product labels describe the correct methods of application.

Additional references

Samson P, Sallam N, Chandler K. 2013 *Pests of Australian sugarcane – field guide*. SRA.