

Blackheaded Pasture Cockchafer in Turf

In Brief

Scientific Name: *Aphodius tasmaniae*

Order: Coleoptera

Common Names: Blackheaded Pasture Cockchafer, Tasmanian Grass Grub



Image 1. Courtesy of www.biodiversitysnapshots.net.au

Origin and Distribution in Australia

The Blackheaded Pasture Cockchafer is a native insect of South Eastern Australia. It is mainly a pest of cool season grasses and is found in areas that experience an average annual rainfall of around 480mm.

Identification

Adult beetles are dark brown to black in colour and are about 10-11mm in length. They have long slender legs that can help to identify them against other similar species. The Blackheaded Pasture Cockchafer larvae are white to grey in colour with soft bodies that curl into a C shape when exposed. Fully grown larvae are 15-20mm in length.

Life Cycle and Growth Habit

The Blackheaded Pasture Cockchafer has a one year life cycle. In January the adults emerge from the pupal stage and fly around on mild evenings often attracted to light. The females are drawn to sparse, open pastures where they burrow down about 100mm and lay two to three dozen eggs. The eggs are yellow and oval shaped and about 1mm in diameter. After 18 to 21 days they hatch into small grey larvae that are 5-8mm in length.

The larvae feed on humus in the soil until autumn, when they tunnel to the surface and begin to emerge at night to feed on vegetation. They feed this way causing visible damage to crops and turf until early spring when they enter a non-active pupal stage before emerging as adults in summer.

Nature of Damage

Generally no visible damage is observed in the early stages of larval growth. It is not until the autumn rains that larvae respond to new foliar growth in the turf that they begin to feed on living vegetation. During this stage they come out at night to collect fresh leaves which they drag into their tunnel for later consumption.

They can be noticed by small mounds of soil around their tunnel entrances. Often the damaged area will spread outwards as feeding increases, leaving behind broadleaved and tap-rooted plants in the bare areas.

The time of maximum damage is in late autumn and early winter when turf growth begins to slow down due to cold weather. In this time the plants growth cannot keep up with the now mature larvae's feeding habits.

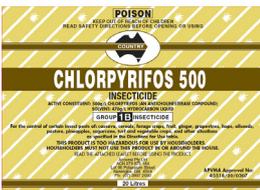
Control

Natural control sometimes occurs during wet winters when soils become saturated and the larvae drown. Hot dry summers can result in surface feeding larvae desiccating the following season. Maintaining dense turf coverage through summer can reduce the amount of females that choose to use the surface for egg-laying.

As the larvae are surface feeders, chemical control is an option.

The grubs tend not to feed during dry or hot weather, or in cold and frosty conditions. It is best to apply a registered pesticide when rain or heavy dew is expected (allowing enough time for pesticide to dry), or immediately after rain – avoiding surface run-off.

Key Control Options for the Blackheaded Pasture Cockchafer

Pack	Insecticide	Active Ingredient & Mode of Action Group	Description	Rate
	Country Chlorpyrifos 500	500g/L Chlorpyrifos 1B	Containing the well known active ingredient Chlorpyrifos, this product offers a low cost, effective control of the Blackheaded Pasture Cockchafer.	900mL/ha
	DuPont Acelepryn	200g/L Chlorantraniliprole 28	Provides excellent control of all pest beetle larvae. Excellent residual activity (up to 6 months) on Coleoptera pests. Excellent safety profile for users and the environment.	750mL/Ha