

# Black beetle (*Heteronychus arator*)

## Introduction

Black beetle (BB) is a pest in the upper North Island, on light, free draining soils. Numbers vary widely from year to year, with root feeding larvae capable of severe summer pasture damage, and adults able to significantly damage establishing grass in autumn.

## Identification

BB are only found in warm areas, including northland, the Northern Waikato, and coastal districts of Auckland, Bay of Plenty, Gisborne and northern Taranaki. As they live on and in the soil, they are mainly found in free draining, sandy, light ash or loam soils, and do not like heavy clays or peats.



Adult beetles grow to 15 mm long, & are chestnut coloured when newly emerged, turning black after a day or two.

Adult beetles can damage autumn sown new pasture, particularly if it is direct drilled. They chew through the base of emerging ryegrass plants, just above ground level, killing them. This leads to patchy ryegrass establishment.

Larvae feed on plant roots during December - March and can cause patchy ryegrass death and plant pulling. Damage is most apparent in dry summers when larval numbers are above 40/m<sup>2</sup>.

## Prevention and management

### Establishing ryegrass

If there is a high risk of BB adult attack, often on soils with a BB history, then using treated seed is recommended, such as *Agricote Grass*, *GaUCHO*® or *Poncho*®.

For perennial or long rotation ryegrass, *Standard* endophyte gives some resistance to BB during establishment, but less than treated seed.

### Established permanent pasture

Ryegrass with *Standard* endophyte, *Plus NEA2*, or *AR37* all have good resistance to BB. *Plus AR1* endophyte has a low level of resistance. Endophytes reduce adult feeding, egg laying, and hence larval damage, but do not directly affect larvae.

However, no endophyte gives complete resistance, and in previous BB outbreaks ryegrass with *Standard* endophyte was still killed in problem areas.

Other grasses, particularly paspalum, are a good food source for BB adults.



Larvae are larger than grass grub with more prominent spiracles (breathing pores - orange spots) down their sides.