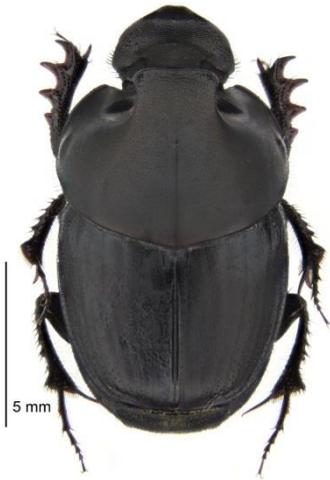


Onthophagus binodis



Size: up to 13 mm

Characteristic features: male with 'hump' across its shoulders. Female with hump reduced to a ridged line across the shoulders. Both sexes have a matt-black finish to their backs. New adults tend to look dark brown before the black pigmentation is fully developed and their shell becomes hard.

Origin: Native to South Africa.

Export Distribution: Australia, Canada, New Zealand. For use in the burial of pastoral dung, reducing surface-runoff and water pollution, and control of dung-breeding pests.

Expected distribution in New Zealand: North Island and South Island

Flight Activity: Day time

Seasonal Activity: Active from late spring to autumn. Fattened mature grubs will overwinter in the dung balls they have been developing in underground. If the soil temperature is not too cold, these will continue to develop slowly into new adults which will emerge when spring arrives. Adults that emerged from the soil in autumn will also overwinter in burrows underground. On mild days some adults will come to the surface to feed and top up their fat reserves for winter.

Dung preferences: Fresh firm to liquid cattle dung, also attracted to fresh sheep, horse, goat and alpaca dung.

Nesting behaviour: Adults build nesting galleries at the end of burrows approximately 20 cm below the dung pat. Galleries are packed with several dung masses or brood sausages each with one egg.

Life Cycle: Development from egg-adult takes 8-10 weeks depending on soil temperature. There are at least three generations a year.

Abundance: The number of dung beetles per farm depends on many criteria but most importantly the amount of fresh dung available, and dung quality. Chemical residues from livestock drenches can be detrimental but not critical to dung beetle population growth. Dung beetle friendly drenches are available. An integrated approach using dung beetles and drenches is recommended with an awareness of the side effects chemical residues in drenches can have on of dung beetles. For information on dung beetles, drenches and dung beetle management please refer to the NZ dung beetle project website: <http://dungbeetle.org.nz/>.