

HAVE YOU SEEN CATERPILLARS OF THE AUSTRALIAN PASTURE TUNNEL MOTH?

We would like to know where in New Zealand this tunnelling pasture pest is. You can help by checking for the caterpillars when you are out in the field, or next time you are inspecting soil samples.

Background

Caterpillars of a species of Australian pasture tunnel moth were found on a property in the Waikato. The full extent of the population is unknown. The genus has been confirmed as *Philobota*, however, the species is still unknown.

The caterpillars live in silk-lined tunnels under pasture, and come out in the evening to feed. The tunnels protrude above the ground to form a “chimney” (tunnel). The caterpillars cut off live pieces of foliage and drag them back in to their tunnels to feed on later. The caterpillars actively feed over winter and pupate in spring.

We would like to know if you have seen caterpillars of the Australian pasture tunnel moth.

Dense colonies have occasionally been reported in Australia as causing local defoliation of pasture but we don't know what effect they may have in New Zealand.



Larva of Porina moth

Larva of Australian pasture tunnel moth

Comparison between larvae of the similar native porina moth and Australian pasture tunnel moth

What can I do?

MAFBNZ is seeking information on the distribution of this species. Please keep a look out for caterpillars associated with tunnels or “chimneys” during any pasture surveys you do. The caterpillars and “chimneys” are very small and may be hard to see.

IF YOU THINK YOU HAVE SEEN THESE CATERPILLARS, “CHIMNEYS” OR OTHER UNUSUAL LARVAE PLEASE COLLECT SAMPLES AND CONTACT MAF BIOSECURITY NEW ZEALAND ON 0800 80 99 66.

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What does it look like?

Australian pasture tunnel moth caterpillars are slender, grey in colour with a black head. They can grow up to 35mm long and 3mm thick.

Australian pasture tunnel moth caterpillars can be confused with the common porina moth caterpillars as they both construct vertical tunnels. Only Australian pasture tunnel moth caterpillars have tunnels constructed of fragments of vegetation and with the entrance raised above the ground to form a chimney.

Native porina moth caterpillars also grow much larger, between 50 to 60mm long, and 5 to 7mm thick, and often regurgitate droplets of brown fluid when disturbed.

You are unlikely to see any sign of the Australian pasture tunnel moth when walking over your pasture. To find the caterpillars you will need to closely inspect pasture "chimneys", and dig up some soil.

Australian pasture tunnel moth (*Philobota* sp.)

Photo: T Oliver, PHEL Tamaki



Photo of female moth, males may look different. Adults will be hard to detect due to their small size, approximately 10 mm in length.

Photo: IDC – MAFBNZ



An isolated tunnel removed from the soil.

Photo: IDC – MAFBNZ



Size of fully developed larva; 30 to 35mm long, and 2 to 3mm thick.

Photo: IDC – MAFBNZ



"Chimneys"; silk-lined vertical tunnel protruding above the soil surface to form a "chimney", including fragments of grass and other vegetation.

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