



RED CLOVER CASEBEARER MOTH

The red clover casebearer moth, *Coleophora deauratella*, has recently been found in two separate regions – across several suburbs of Auckland and in red clover crops in Canterbury.

It is not known whether this pest is present in other parts of New Zealand and it is possible it has been in the country for some time. Based on the lifecycle of this moth and the stages detected in surveillance, it would appear that this species has been here since at least spring 2015. It is not currently known how or precisely when the moth entered New Zealand.

Red clover is its main host plant and this is widely spread throughout New Zealand in pastures, roadsides, lawns, and waste areas, as well as in seed crops. The red clover casebearer moth could therefore be expected to find suitable habitat throughout the country.

Its potential effect on clover seed production is uncertain. It has been recorded as a severe pest of red clover seed production in Canada, and an infrequent pest in Europe. However New Zealand has two other similar casebearer species and these are successfully controlled in New Zealand clover crops using existing biological and chemical control methods.



Red clover casebearer moth *Coleophora deauratella*



Casebearing larva on red clover leaflet (case is 6–7mm long)

ABOUT THE RED CLOVER CASEBEARER MOTH

This moth is native to Europe and Asia Minor, and has been present in North America since the 1960s. It is not known how this moth arrived in New Zealand, but imported clover seed, machinery or hay are all possibilities.

It prefers red clover, but has also been found on other clover species that grow in New Zealand, including white clover. These insects do not damage foliage of the red clover plants.

Adult moths typically appear in spring and summer. The adult moths lay eggs on the red clover flower head. Damage is caused by the larvae which hatch and feed on the developing seeds in the florets over summer. Multiple larvae may be present in a single flower head. Damage can be seen as holes that are bored through the sides of the florets, and chewed seed and droppings inside the florets. Older larvae construct a 'case' around themselves using dried floret petals and continue to feed on seed inside the florets. They may move between flower heads.

The moths spend winter as mature larvae, typically near the soil surface or in leaf litter. These larvae then form a pupa and emerge as adults the following spring/summer. The adult moths are approximately 8mm long.

Red clover casebearer moths are very similar to two other species of clover casebearer moths already well established in New Zealand. All three species are similar in size and appearance, making visual identification difficult. Dissection or molecular techniques are usually required to confirm identity.

ADVICE FOR ARABLE FARMERS ABOUT THE RED CLOVER CASEBEARER MOTH

The Foundation for Arable Research (FAR) has information about controls including suitable insecticides and when to apply them.

There are a number of wasp parasitoids already present in New Zealand that will attack clover casebearer moths. Some of these were specifically introduced to control the related species which damage white clover. It is not yet known if these parasitoids will attack the red clover casebearer.

FOUNDATION FOR ARABLE RESEARCH:

<https://www.far.org.nz/>

Ph 03-345-5783



Advanced damage – many florets damaged and obvious frass (droppings) – to an older red clover flower head (browning off of petals).



Earlier stages of damage – hole bored in floret by non-casebearing larva – in a younger red clover flower head (some petals still coloured)

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