

PestFacts WA

Issue: 5 Date: June 2024

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Slugs are damaging seedling crops

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Image 1: Invasive field slug (Deroceras invadens) damaging a canola seedling. Photo courtesy of: David Stead (Anasazi Agronomy).

Slugs have been reported damaging a variety of crops in some areas after recent rain.

David Stead (Anasazi Agronomy) has reported slugs, likely to be the invasive field slug (*Deroceras invadens*), causing damage to a canola crop at east Beverley.

Garren Knell (ConsultAg) has reported extensive slug damage to canola and barley crops at West Dale. These paddocks have had repeated baiting and dead slugs could be seen along the furrows.

James Bee (Elders) has reported ryegrass and clover-based pasture being eaten by black keeled slugs at Manypeaks.

Identification of pest slugs

There are two types of slug species that are pests of broadacre crops, the black keeled slug (*Milax gagates*) and the *Deroceras* species, with the more common one being the reticulated slug (*Deroceras reticulatum*).

Other slug species can be present in the paddock, but they are not crop pests.

The black keeled slug is usually black with a prominent ridge down the back, whereas the reticulated slug is often light grey fawn with mottled markings. Black keeled slugs can burrow 20 cm or more below the surface and are readily able to survive paddocks which have been burnt. The reticulated slug does not burrow and is less likely to survive in paddocks that have been burnt.



Image 2: A black keeled slug (left) and reticulated slug (right). Photo courtesy of: DPIRD.

Like the reticulated slug, the invasive field slug (*Deroceras invadens*), also known as the Chestnut slug, does not burrow. This is an introduced species, likely to have been present in WA for the last 100 years and was previously misidentified as the brown field slug (*Deroceras panormitanum*). The spread of this invasive field slug in WA has been constrained by cold winter temperatures.

The invasive field slug can be differentiated from the reticulated slug by its brown colouration and its tail which usually slants vertically upwards. This species tends to be more common in paddocks when pastures are a common part of the rotation.

How to check crops and manage slugs

Crops can be checked for slug activity by observing plant damage and searching for signs of slugs at night. Irregular pieces chewed from leaves and shredded leaf edges are typical

of slug presence. Damage to canola and legume crops can be difficult to detect if seedlings are chewed down to the ground during emergence.

Slug numbers as low as 1 per square metre can be damaging to a germinating canola crop.

In emerged crops, baiting will have reduced effectiveness as there is a lot of green material that provides an alternative food source for the slugs. Baiting at the highest registered rate and ensuring even bait coverage will lead to a better chance of slugs encountering the baits and feeding on them. If feeding damage is still occurring and you can't see any baits remaining on the ground, then consider reapplying baits, especially if there is a future rain event of 10mm or more predicted.

Baiting will generally only kill 50% of a slug population at any one time, and then mainly the larger ones. Younger slugs may emerge in successive waves. Monitoring slug numbers will determine if there is a need for multiple bait applications, and baiting can be confined to areas of high slug density.

Few chemicals are registered in Australia for controlling slugs, and these are baits with the active ingredient metaldehyde and Iron EDTA.

Metaldehyde baiting must be stopped at least 2 months prior to harvest to ensure baits are broken down and do not become a contaminant of grain.

Further information

For more information contact Research Scientist <u>Svetlana Micic</u>, Albany on +61 (0)8 9892 8591.

Article author: Bec Severtson (DPIRD Northam).

Native budworm moth flights have started

Geraldton port zone



Image 3: An adult native budworm moth. Photo courtesy of: DPIRD.

Research Scientist Andrew Phillips (DPIRD) recently set up a number of native budworm moth traps in the Geraldton port zone to monitor for early native budworm moth flights into the northern cropping region.

Initial results from the last 2 weeks of trapping indicate that native budworm moth flights have begun this year for the Geraldton port zone and moths are likely to have commenced egg laying in crops. This is concerning because several years ago early native budworm moth flights resulted in caterpillars causing quite severe damage to young crops, in some cases stripping leaves from the plants.

Over the past 2 weeks, the following number of native budworm moths have been captured in traps: Carnamah (122 moths), Moonyoonooka (8), Nabawa East (7), Nangetty (42), and West Casuarinas (2).

While no budworm caterpillars were found at the trapping sites, high numbers of chrysodeixis looper caterpillars of varying sizes were present and causing damage to a canola crop at the Mullewa trap site. Although these looper caterpillars can be found in canola crops they usually only occur at low sub economic densities, so it is somewhat unusual to find them at levels requiring control action.

Check crops for native budworm caterpillars



Image 4: Native budworm caterpillars. Photo courtesy of: Amber Balfour-Cunningham (DPIRD).

While no budworm caterpillar activity has been reported at this stage, over the coming weeks farmers are encouraged to check lupin, canola and pulse crops for the presence of budworm caterpillars.

Native budworm moths lay white spherical eggs (0.5 mm) singly, mostly near the top of the plant. The eggs darken as they mature and tiny caterpillars hatch after about 7 days.

The small caterpillars will cause minor leaf damage that is not obvious, such as tiny holes chewed into leaves. So, they can initially go unnoticed if crops aren't being checked with a sweep-net. The young caterpillars feed on the leaves for about two weeks before they become large enough (5 mm long) to be noticed in the crop. However, as the caterpillars get larger, they can cause severe damage.

Management

Detailed information on this pest can be found at the department's Native budworm spraying threshold factsheet.

Pesticide options for the control of native budworm can be found in DPIRD's 2024 Winter Spring Insecticide Guide.

Do you want to host a native budworm trap this season?

At the end of July/beginning of August volunteer farmers, agronomists and some Department of Primary Industries and Regional Development (DPIRD) staff will commence weekly pheromone trapping for native budworm moths.

This trapping is part of a program to monitor the potential risk of native budworm caterpillars to pulse and canola crops.

Farmers or consultants who would like to have a trap on their property this season can contact DPIRD's Technical Officer <u>Alan Lord</u>, South Perth, on +61 (0)8 9368 3758 or +61 (0)409 689 468.

For more information refer to DPIRD's Native budworm moth trapping page.

Further information

For more information contact Technical Officer <u>Alan Lord</u> in South Perth on +61 (0)8 9368 3758 or +61 (0)409 689 468.

Article author: Alan Lord (DPIRD South Perth).

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