PestFacts WA

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Hard to spot, harder to stop: Canola weevils

- Munglinup
- Dumbleyung

An Agworld user recently reported extensive damage by in a canola crop by vegetable weevils at Munglinup, and an agronomist has found desiantha weevils causing extensive damage to germinating canola at Dumbleyung. The agronomist noted that the paddock at Dumbleyung was previously cropped with wheat and barley and while it had been sprayed for desiantha weevil in the previous season, it is thought that egg laying had most likely already occurred after sprays were applied.

Weevils are notoriously difficult to detect in an establishing crop, and the first sign of their presence may be unexplained chewing damage. This can look like:

- crescent shaped notches on cotyledons and leaf edges
- lopped cotyledons, ringbarking around stems
- seedlings eaten to ground level
- visible bare patches and areas of low surviving plant densities.

If pests aren't visible, setting a simple pitfall trap for 24 hours near damaged seedlings can be a convenient way to catch the culprit. Alternatively, lifting stubble, clods of dirt or digging around the base of chewed plants may reveal hidden weevils. For more

information on how to set up a pitfall trap, see the 2024 PestFacts WA Issue 3 article Using pitfall traps to detect pests**,** and the department's How to monitor for early season pests YouTube video.

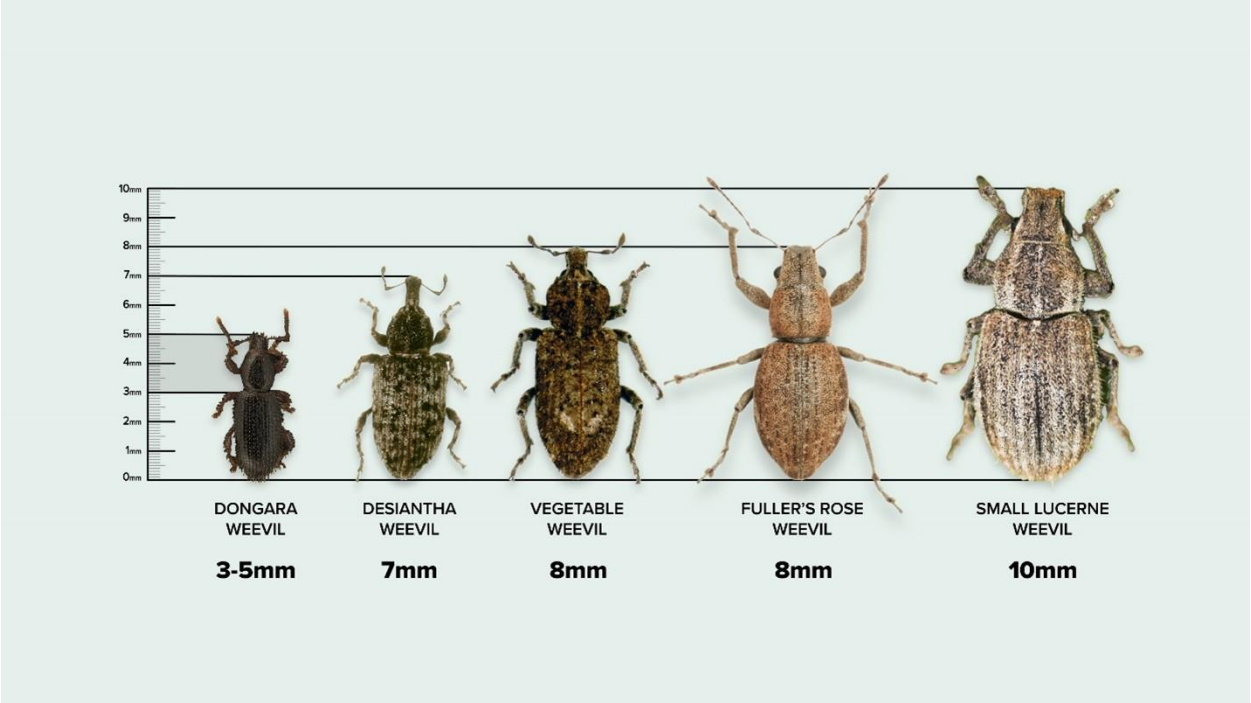
A simple pitfall trap, consisting of a plastic drinking cup, left for 24 hours to trap hidden pests. Photo courtesy of DPIRD.

Know your paddock history and monitor early

Pest weevil outbreaks often recur within the same areas of paddock. Most weevils are flightless, have 1 generation per year, and survive over summer as adults in nearby refuges, including weeds.

Monitoring emerging canola crops in May-June for early weevil damage is critical to help prevent crop losses, especially in moisture stressed crops.

Identifying common and damaging weevils



Weevils of grain crops. Photo courtesy of GRDC.

Adult weevils have an extended snout, or rostrum, on their head, and weevil larvae have no legs, distinguishing them from other soil-dwelling beetle larvae and caterpillars.

Vegetable weevil. Photo courtesy of Andrew Weeks (Cesar Australia).

Vegetable weevils typically feed on canola near paddock edges or where capeweed was abundant the previous year.

Desiantha (spotted vegetable) weevil. Photo courtesy of DPIRD.

Desiantha weevils are more common in the southern agricultural region, especially in sandy duplex soils or sand over gravel soils. Chewing damage from adult desiantha weevils can be scattered across a canola crop, particularly if the paddock was previously in wheat.

Small lucerne weevil. Photo courtesy of DPIRD.

Small lucerne weevils are more prevalent in the southern coastal agricultural region and can be a chewing pest of germinating canola crops following long term pasture.

Dongara weevil adult. Photo courtesy of DPIRD.

Dongara weevils can be a significant establishment pest of canola and coriander crops sown in heavy clay soils near Dongara, Mingenew and Three Springs. These weevils are smaller and darker than other weevils that commonly damage canola.

For more information on weevil identification visit the Department's Identifying weevils and Diagnosing weevils in canola pages, and GRDC's Crop Weevils: The Back Pocket Guide. To read about weevil activity last season visit 2024 PestFacts WA Issue 2 article Weevils are damaging moisture stressed canola**.** To read more about the Department's recent research on Dongara weevils see the 2024 PestFacts WA Issue 1 article Mid-West canola growers should monitor for Dongara weevil**.**

Managing weevils in establishing crops

Weevils hide during the day under leaf litter, in cracks and crevices in the soil and in other places with cover. This means that they may not get exposure to applications of insecticides at registered rates. It is good practice to apply treatments in the late afternoon, as weevils are nocturnally active. Use a high volume of water when spraying for weevils. After spraying, check for new damage in crops or for live weevils before seeding. Reseed bare areas with high rates of treated seed.

To kill the vegetable weevil higher rates of insecticides need to be applied than for most pests of canola. Border sprays may help with vegetable weevils that attack the edge of the crop. Insecticides registered for vegetable weevil control are likely to control other weevil species, such as small lucerne weevils and desiantha weevils. However, Dongara weevils have survived high-end rates of insecticides used for other weevils.

The current treatment for desiantha weevil larvae in cereals is to sow with seed treated with chlorpyrifos. However, as of September 2024, chlorpyrifos products are no longer registered for use on cereal crops in Australia. A 12-month transition phase is currently in place allowing chlorpyrifos products already in the supply chain or on farm to be used

according to their existing labels. Desiantha weevil numbers can be reduced by effective control of host weeds in the previous season and of the green bridge following summer rainfall. Recent DPIRD research has shown desiantha weevil can complete their lifecycle on cape weed, cud weed and sorrell.

For insecticide recommendations on managing vegetable and desiantha weevils in canola, refer to DPIRD's 2025 autumn winter insecticide spray guide.

Further Information

Report weevil crop damage via the PestFacts WA Reporter app where you can also request a free identification by our entomologists.

For more information contact Research Scientists Svetlana Micic in Albany on +61 8 9892 8591, Andrew Phillips in Geraldton on +61 08 9956 8567 and Christiaan Valentine in Northam on +61 8 9690 2197.

Article authors: Bec Severtson (DPIRD Northam) and Svetlana Micic (DPIRD Albany).

Warm weather is favouring caterpillars

Warmer than average temperatures and recent rainfall in southern areas have provided favourable conditions for pest moths, like weed web moth and cabbage centre grubs, to build up in weeds and volunteer crops, putting emerging crops at risk from caterpillar damage.

Look out for these species actively feeding on young plants:

- brown pasture looper
- cutworm
- webworm
- weed web moth
- cabbage centre grub
- pasture day moth.

Diagnostic information about these pests can be found in the 2024 PestFacts WA Issue 2 article Caterpillar pests - how to recognise them in your crop. Caterpillars can often be differentiated by their size, feeding behaviour and host preference.

If caterpillars are small and hard to distinguish you can request an identification by using the PestFacts WA Reporter app. Your reports will also contribute to the interactive PestFacts WA service which issue warnings of pest outbreaks.

Weed web moth and cabbage centre grub

- Northam

Weed web moth caterpillar with feeding damage on wild radish weed leaf, and the beginnings of silken webs. These caterpillars move rapidly when disturbed, have a dark head and dark spots along their body. Photo courtesy of DPIRD.

Cabbage centre grubs feeding on the centre growing point of roadside volunteer canola. Webbing can be seen between leaf tissue. Photo courtesy of DPIRD.

In Northam, Research Scientist Amber Balfour-Cunningham (DPIRD) has found cabbage centre grubs and weed web moth larvae persisting in wild radish and volunteer canola into autumn. Usually considered minor establishment pests, these warm weather caterpillars disappear as the weather cools. However, in warmer than average years high population numbers can build up and cause economic damage to canola crops.

Research Scientist Andrew Phillips (DPIRD) has suggested that if warm conditions continue in the northern regions there might be widespread damage in moisture stressed seedling canola crops from outbreaks of weed web moth and cabbage centre grub, as was experienced in May 2024. These pests were also problematic in the central agricultural regions in 2020, as reported in the 2020 PestFacts WA (formerly PestFax) Issue 2 article Caterpillars continue to cause concern.

Weed web moth (*Achyra affinitalis*) and cabbage centre grubs (*Hellula hydralis*) are both native species that produce webbing and belong to the same family of moths (Crambidae). Their larvae are similar in size and appearance but can be distinguished by their feeding damage. Cabbage centre grubs tunnel into growing points of canola plants and other brassicas, and tunnel between the leaf surfaces creating white blisters. Weed web moth are foliage feeders and can skeletonise leaves of a wider range of broad leaf hosts, including canola, lupins and lucerne.

Managing caterpillars and considering beneficials

Growers are advised to monitor their paddocks for caterpillar activity and only spray if caterpillars are present, actively feeding on the crop, and the crop is unable to outgrow the feeding damage. Under good growing conditions crops are likely to outgrow damage.

For insecticide information growers and consultants can refer to DPIRD's 2025 autumn winter insecticide guide.

Insecticides are registered for most caterpillar pests. Cabbage centre grubs may be referred to as centre grub on product labels.

Weed web moth and cabbage centre grubs can be difficult to control using contact insecticides as they produce webbing between leaves that creates a protective layer. Difficulty with control has occurred in the past.

Growers should consider insecticide options that are soft on predator insects if spraying. Visit the department's Know what beneficials look like in your crop page for more information on beneficial insects.

For details on insecticide toxicity to beneficial insects, refer to Cesar Australia's Beneficials Chemical Toxicity Table.

Further Information

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Article input: Amber Balfour-Cunningham (DPIRD Northam).

Slugs

- Katanning
- Kojonup
- Frankland

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

Low numbers of slugs have been observed on seedling canola around Katanning, Kojonup and Frankland, in areas where high stubble levels have provided more shelter for slugs over summer.

Identification of pest slugs

Two types of slug species are considered pests of broadacre crops, the black keeled slug (*Milax gagates*) and species of *Deroceras*, 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 in paddocks which have been burnt. The reticulated slug does not burrow and is less likely to survive in paddocks that have been burnt.

For more information on slug identification visit DPIRD's Identification and control of pest slugs and snails for broadacre crops in WA page and GRDC's Slugs in crop: The back pocket guide.

How to check crops and manage slugs

To monitor slug activity in crops, check plants for signs of damage. Night-time checks are recommended, as slugs are most active after dark and are easier to spot on humid, dewy nights when temperatures exceed 10°C. Slugs typically reappear in the same areas of the paddock where they were present in spring. If you're not yet finding slugs in the same parts of paddocks where they were seen in spring, it could be due to insufficient rainfall triggering slug movement. Ongoing monitoring is advised.

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. For more information see DPIRD's suggested snail and slug threshold numbers in broadacre crops.

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. For registered insecticide recommendations, refer to DPIRD's 2025 autumn winter insecticide guide.

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 on slug monitoring and baiting visit:

- DPIRD's Identification and control of pest slugs and snails for broadacre crops in WA page
- GRDC's Slug control fact sheet: Successful crop protection from slugs
- GRDC's Slugs in crop: The back pocket guide.

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Canola blackleg risk forecasts are online

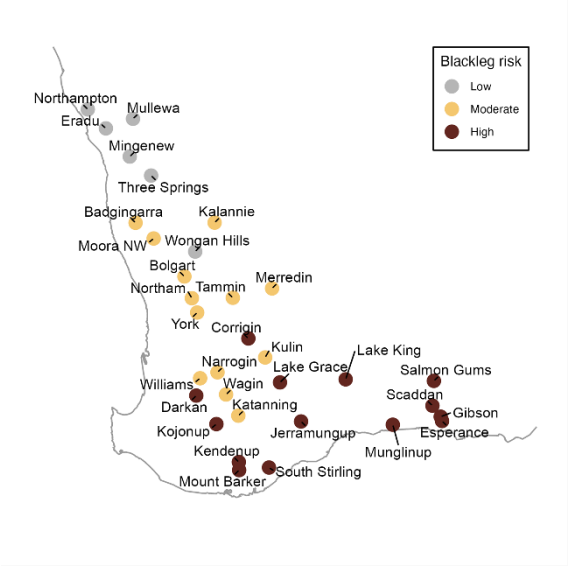

Image 1: Map showing the relative current risk of blackleg spore release coinciding with the seedling stage based upon Blackleg Sporacle model outputs for various locations in Western Australia, 28 April 2025. Map generated by: DPIRD blackleg forecast model.

DPIRD's blackleg spore maturity forecasts for Western Australia for the 2025 growing season have begun, and forecasts are available online. The latest forecast is current for crops sown up to 28 April 2025. This forecast will be updated weekly.

Blackleg crown canker can result in yield losses on susceptible canola varieties. The disease occurs when spores are released off the previous season's or 2-year-old canola stubble. When these spores land on canola plants in the seedling stage (4-6 leaves) this can result in crown canker forming. It is advised to avoid planting this year's canola crop into paddocks that were sown to canola in 2023 or 2024.

The forecasts show the expected risk of blackleg infection occurring during the 4-6 leaf stage, relative to the date of sowing. For crops sown in the mid-to-late April period, the risk of blackleg spore showers coinciding with the seedling susceptible stage are high for some areas in the Albany and Esperance areas. Growers in these areas should consider using the BlacklegCM decision support tool to determine if they should apply a foliar fungicide to their canola crops during the susceptible 4-6 leaf stage. BlacklegCM is available for download from the Apple App and Google Play stores. This app works on both phones and tablets. For more information refer to DPIRD's Blackleg CM page.

If you are using the BlacklegCM decision support tool you can manually enter the blackleg risk levels that relate to your sowing date and location into the app under the "Crop Circumstances – Spore maturity risk" section.

Further information

For more information, refer to DPIRD's Canola blackleg spore maturity forecast for Western Australia page to check the blackleg model forecast for your district.

For more information about blackleg in canola contact Senior Research Scientist Andrea Hills, Esperance on +61 8 9083 1144 or Principal Research Scientist Jean Galloway Northam on +61 8 9690 2172.

For more information about the blackleg risk forecast, or the BlacklegCM decision support tool, contact Principal Research Scientist Jean Galloway, Northam on +61 8 9690 2172.

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Slime mould

- Salmon Gums
- Scaddan

Slime mould on a canola seedling. Photo courtesy of James Bidstrup (Esperance Farm and General).

James Bidstrup (Esperance Farm and General) recently found slime mould on seedling canola near Salmon Gums.

Slime mould on wheat stubble. Photo courtesy of Quenten Knight (Agronomy Focus).

Slime mould on a canola plant. Photo courtesy of Quenten Knight (Agronomy Focus).

Quenten Knight (Agronomy Focus) has also recently observed slime mould on HyTTec Trophy canola at the cotyledon growth stage across paddocks near Scaddan. The canola was sown into wheat stubble, and slime mould is also present on the stubble.

Slime mould on stubble. Photo courtesy of DPIRD.

Slime moulds generally appear on decaying plant material as patches of watery or jelly-like slimy material. After a few days, the jelly-like material produces fruiting bodies are commonly ash grey, though in some instances they may be bright yellow, red or grey. These fruiting bodies usually occur in great numbers on the affected plant material and may cover an area of up to a square metre.

Warm wet weather combined with high nitrogen levels provide a good environment for the slime moulds.

The slime moulds should disappear if a couple of dry warm days are experienced and do not cause any damage to crops.

No control measures are required for slime moulds. If you have concerns about your livestock eating slime moulds, please contact your local veterinary officer.

Further information

For more information, refer to the Department's Slime moulds page.

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