PestFacts WA

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Blackleg in canola

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An Agworld app user has reported finding low levels of blackleg stem canker in canola north of Dalyup.

Technical Officer Joel Kidd (DPIRD) also recently found a blackleg lesion on a canola plant in a trial near Cascade.

What is blackleg?

A canola seedling displaying blackleg infection with a pinched hypocotyl. Photo courtesy of DPIRD.

Blackleg, caused by the fungus *Leptosphaeria maculans*, is one of the most serious diseases of canola in Western Australia. Blackleg can cause significant damage by infecting the cotyledons, and the first leaves when plants are seedlings, leading ultimately to crown lesions or cankers later in the season.

Blackleg is primarily spread by ascospores on the wind which are released from canola residue after rain or heavy dew, with the heaviest spore fall out occurring within 500 metres of any canola residue. Each year, canola residue continues to produce blackleg spores at a diminishing rate until the stubble has completely broken down.

Stems from a susceptible canola variety, cut at desiccation, showing different levels of blackleg infection. Photo courtesy of DPIRD.

The overall risk of blackleg infection on a property will be determined by factors such as choice of variety resistance group (and frequency of variety use), paddock rotation, time of sowing, fungicide usage, distance from previous year's canola residues and stubble management.

To minimise the risk of blackleg infection, growers should consider:

- Sowing into paddocks that are out of canola rotation for more than three years.
- Avoiding sowing within 500m of last year's canola residues.
- Applying seed dressing or fertiliser applied fungicide.
- Applying a foliar seedling fungicide in case of high disease pressure. You can assess your risk level by referring to GRDC's Blackleg Management Guide 2025 Autumn Fact Sheet, and DPIRD's BlacklegCM decision support tool.

For more information, refer to DPIRD's Blackleg and its management in canola factsheet.

Managing blackleg infection

For blackleg stem canker, growers need to consider their varietal resistance levels before they apply a foliar spray at the 4-6 leaf stage as it may not be economical to spray varieties with high resistance levels.

DPIRD's BlacklegCM app helps you to manage blackleg crown canker disease in canola crops during seeding and the early vegetative phase. It accounts for some of the major factors that relate to risk of yield loss due to blackleg crown canker disease in your

paddocks. For more information refer to DPIRD's BlacklegCM page. The app can be downloaded from the Apple App and Google Play stores for use on phones and tablets.

For more information regarding canola variety resistance ratings and blackleg management, refer to GRDC's Blackleg Management Guide 2025 Autumn Fact Sheet, and DPIRD's Fungicides page.

Canola blackleg risk forecasts

DPIRD's blackleg spore maturity forecasts for Western Australia for the 2025 growing season are available online. Refer to DPIRD's Canola blackleg spore maturity forecast for Western Australia page to check the Blackleg Sporacle model forecast for your district.

More information

For more information about blackleg in canola contact Senior Research Scientist Andrea Hills, Esperance on +61 (0)8 9083 1144.

For more information about the blackleg risk forecast, or the BlacklegCM decision support tool, contact Principal Research Scientist Jean Galloway, Northam on +61 (0)8 9690 2172.

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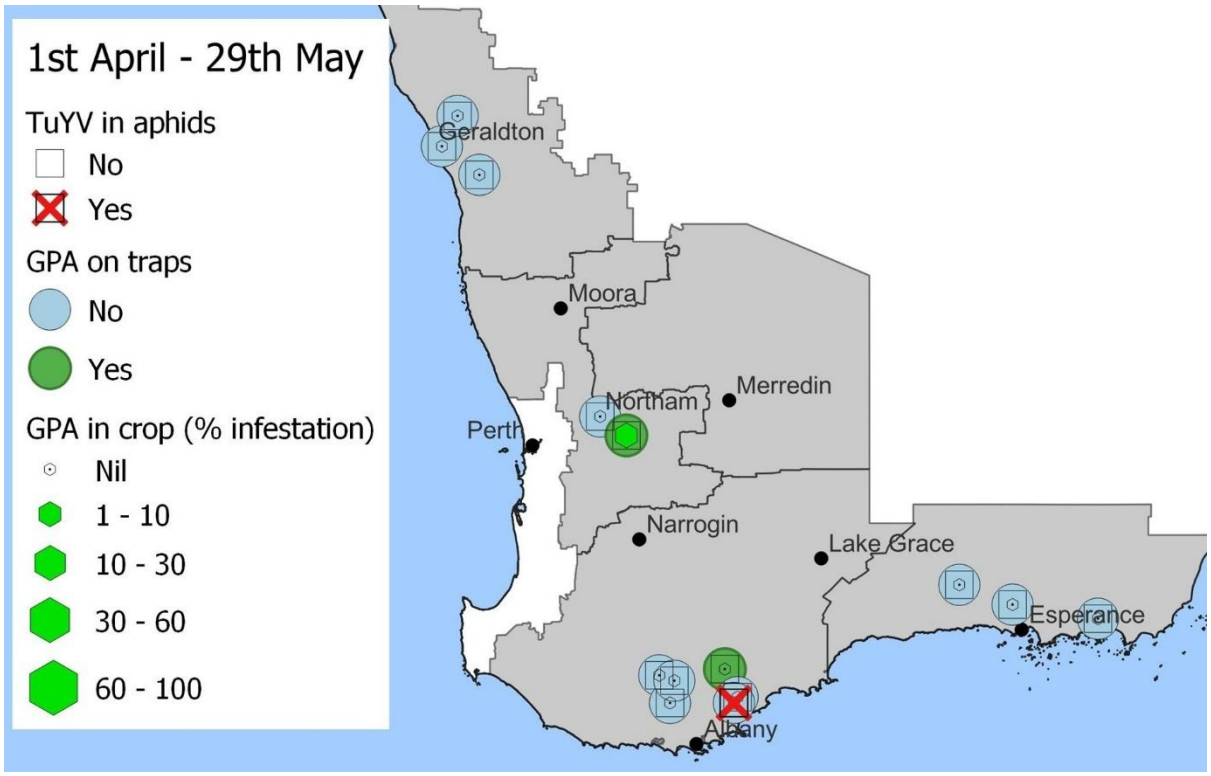
Green peach aphid and turnip yellows virus detected

- York
- Amelup
- South Stirlings

Winged and non-winged green peach aphids on canola. Photo courtesy of DPIRD.

Plant virology staff from the Department of Primary Industries and Regional Development (DPIRD) found green peach aphid (GPA) infesting less than 10% of a canola crop near York on 28 May 2025 (see map below). Turnip yellows virus (TuYV) was not detected in these aphids.

GPA were also captured in traps near Amelup in early May. TuYV was not detected in these aphids, and GPA has not yet been found in the crop at this site. During the same period, other aphid species, possibly cabbage or turnip aphids, were also caught in traps at South Stirlings and tested positive for TuYV. On 28 May, cabbage aphids were also found in the crop at this site. Cabbage aphid is not considered to be a vector of TuYV.



Findings from green peach aphid and turnip yellows virus monitoring sites, current to 29 May 2025. Map courtesy of DPIRD.

Cabbage aphids on a canola leaf at South Stirlings. Photo courtesy of DPIRD.

DPIRD staff will continue monitoring for aphid activity and TuYV using yellow sticky traps on the fence lines of canola paddocks in the Geraldton, Kwinana West, Albany and Esperance regions until August 2025. This trapping surveillance is funded by the Grains Research and Development Corporation (GRDC) project DAW2305-003RTX “Effective virus management in grains crops”.

Yellow sticky traps and a trap plant at a monitoring site. Photo courtesy of DPIRD.

The risk of TuYV infection is a high when GPA carrying TuYV are present, especially in the early phase of crop development (emergence to 7 leaf stage) when crops are most vulnerable to yield loss. Infection that occurs after stem elongation is unlikely to cause yield losses. Growers in areas where GPA have been detected should monitor their crops during these growth stages. The likelihood of virus infection will depend on the presence and proximity of a TuYV reservoir (weeds and volunteers) and environmental conditions – particularly temperature.

Potential symptoms of turnip yellows virus in canola include stunted plant growth and purpling or yellowing of the lower leaves, particularly on leaf margins. Photos courtesy of DPIRD.

Due to minimal autumn rainfall, late emergence of many crops in many areas this season will mean later maturation. Therefore, there is some risk that crops will still be in vulnerable

growth stages in late-winter/early-spring, at a time when GPA can become increasingly active, and virus may spread.

Management

The only management strategy available after sowing is to use foliar insecticides, which must be applied in the early stages of GPA infestation to be most effective. Routine monitoring from emergence to the 7 leaf stage, involving whole plant visual inspection, must be carried out to ensure a well-timed spray.

To do this, at least 10 plants from the crop must be pulled out and closely inspected for GPA, as TuYV can be transmitted by just one or two aphids. GPA are likely to be initially found near paddock boundaries. If GPA are found, growers are encouraged to contact Research Scientist Benjamin Congdon by emailing Benjamin.Congdon@dpird.wa.gov.au to organise free TuYV testing. The results will be shared with growers to help guide their management decisions.

If both GPA and TuYV are found, and infestation rate is still relatively low (e.g. less than 30% of plants infested), a foliar spray may be effective in preventing high levels of spread. Once widespread infection occurs, foliar insecticides are unlikely to provide any economic benefit in terms of reducing TuYV inflicted yield losses.

It is important to note that monitoring should occur regardless of whether insecticide seed treatments were applied, as these alone are unlikely to prevent TuYV spread.

For more TuYV management information refer to DPIRD's Turnip yellows virus and its management in canola factsheet.

Effective chemicals currently available in Australia for control of GPA are limited as GPA has evolved resistance to many insecticides. For more information see GRDC's Green peach aphid – best practice management guide and Aphid and insecticide resistance management in grain crops.

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

Further information

For more information about GPA, and earlier seasonal activity, refer to the 2025 PestFacts WA Issue 5 article No green peach aphid detected yet in DPIRD monitoring and Issue 1 article Enhancing aphid and virus control in canola: beyond seed treatments.

For further information contact Research Scientist Benjamin Congdon, in Perth via email at Benjamin.Congdon@dpird.wa.gov.au.

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