PestFacts WA

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- Kendenup

Elongated scald spots on barley leaves. Photo courtesy of DPIRD.

A Back Paddock app user has reported finding scald in barley (var. Combat) near Northampton.

Scald was also found in barley (var. Spartacus CL.) near Northam at the Muresk Institute in mid-July.

Hilary Wittwer (FarmWorks Narrogin) has reported finding scald on barley crops (var. Maximus) near Cuballing and Narrogin. The infections appeared as hotspots in patches the size of a ute. These crops were barley on barley plantings (var. Maximus).

James Lydon (Bayer) found scald on barley (var. Minotaur) in South Stirling and barley (var. Zena) at Katanning. He also found scale on barley (var. Combat) at Kendenup.

Scald has also been found on barley (var. Maximus) near Borden. The plants were at stem elongation.

Seasonal conditions are conducive for this fungal disease, so growers are encouraged to check their barley crops for scald, correctly diagnose it from other spots and effectively manage it.

Scald resistance rankings in commonly grown varieties range from Susceptible (e.g. Laperouse, Titan AX, Combat) to Moderately Resistant (e.g. Zena CL, Neo CL). However, it should be noted that pathotypes of the disease with new virulence can occur, and varieties may react as more susceptible than rankings suggest. A pathotype with virulence on Maximus CL, and Spartacus CL, is currently emerging in central and southern regions.

Biology and symptoms

Scald is caused by the fungal pathogen *Rhynchosporium graminicola* (previously known as *R. commune*). The fungus carries over from season to season on infected barley, wild grass residues, regrowth barley, or infected seed which acts as an initial source of infection. Early sown crops develop higher levels of scald, as they are often exposed to the heaviest release of spores from infected residues.

Scald symptoms first appear as oval bluish grey-green spots on leaves. The spots become elongated, often diamond shaped and bleached, with a distinctive brown margin. Lesions commonly merge to form necrotic areas, causing the entire leaf to wither and die.

Leaf damage from herbicides can sometimes be confused as barley scald infection.

The disease may be widespread across a paddock, arising from infested stubble, or it may start as hotspots and rapidly spread, particularly in dense crop areas where humidity is high in the canopy.

Management

A range of foliar fungicides are available that can provide effective control of scald. For further details, refer to DPIRD's Fungicides page.

Scald management can also be improved by selecting more resistant varieties, avoiding double-cropping, and avoiding sowing near last year's infected barley stubble. Using disease-free seed and applying seed or fungicides at sowing will also limit infection during the early growth stages.

More information

For further information on barley scald visit DPIRD's Barley leaf diseases and their management factsheet.

For more information on scald contact Principal Research Scientist Geoff Thomas in Perth on +61 8 9368 3262, Senior Research Scientists Kithsiri Jayasena in Albany on +61 8 9892 8477, or Andrea Hills in Esperance on +61 8 9083 1144.

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Article input: Kithsiri Jayasena (DPIRD Albany).

Barley loose smut update – unusual symptoms observed

- Williams
- Frankland
- Borden
- Kendenup
- Wittenoom Hills
- Gibson

Smut symptoms being expressed as streaking on the flag leaf (circled in black). Photo courtesy of DPIRD.

A small number of barley crops (var. Neo CL) are exhibiting unusual symptoms associated with barley loose smut. Before smut-infected heads emerge, the flag leaf develops white streaks along the length of the blade. This appears similar to Russian Wheat Aphid (RWA) feeding, but there will be no RWA present. The streaks then produce dark areas of spores. Later, a head emerges infected with loose smut. Giles McMeikan (Farmanco) has recently seen this in two barley crops (var. Neo CL) near Williams, and Senior Research Scientist Andrea Hills (Department of Primary Industries and Regional Development (DPIRD)) has observed it in 2 barley crops (var. Neo CL) at Wittenoom Hills and Gibson. Samples were sent to DPIRD's Diagnostics and Laboratory Services (DDLS) who confirmed it was barley loose smut.

So far, these unusual loose smut symptoms appear restricted to the variety Neo. Canadian growers and plant pathologists have reported that in susceptible barley varieties, loose smut can sometimes display these atypical symptoms.

A barley head infected with smut spores (as shown by the black arrow) emerging from a flag leaf showing visible streaking. Photo courtesy of Giles McMeikan (Farmanco).

Senior Research Scientist Dr Kithsiri Jayasena (DPIRD) has reported finding usual loose smut symptoms on barley (var. Neo CL) at Kendenup and in the Frankland area and on barley (var. Maximus CL) near Borden.

Loose smut on Maximus barley. Photo courtesy of DPIRD.

With some barley crops approaching head emergence, growers are urged to monitor barley crops with a susceptible rating for loose smut and to correctly diagnose loose smut symptoms so the disease can be managed next season. If you would like assistance with diagnosis, please submit photos via the PestFacts WA Reporter app.

Management

Infected seed is the primary source of the fungus that causes the disease, and highly contaminated seed should not be re-sown.

Research trials conducted by Dr Kithsiri Jayasena (DPIRD) has found label rates of a tebuconazole-based foliar fungicide product, applied at early head emergence can reduce embryo infection from seed-borne loose smut. For more information on this research refer to the 2020 GRDC Research Update paper A new approach to managing loose smut on barley.

More information

For more information about symptoms, and earlier reports of barley loose smut this season, refer to the 2025 PestFacts WA Issue 10 article Loose smut in barley.

For more information on barley loose smut refer to the department's Smuts and bunts of cereals and their management factsheet.

For more information contact DPIRD Senior Research Scientists Kithsiri Jayasena, Albany on +61 8 9892 8477, Andrea Hills, Esperance on +61 8 9083 1144; or Research Scientist Kylie Chambers, Northam on +61 8 9690 2151; or Principal Research Scientist Geoff Thomas, Perth on +61 8 9368 3262.

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Powdery mildew in barley and wheat update

Several cases of powdery mildew in barley and wheat have been reported to the PestFacts WA over the past month. Seasonal conditions have been conducive for this disease, so growers are encouraged to check their wheat and barley for symptoms.

Barley powdery mildew

- Cuballing
- Kwinana south zone
- Beaumont
- Gibson
- Esperance region

Hilary Wittwer (FarmWorks Narrogin) has found powdery mildew on barley (var. Maximus) near Cuballing.

Principal Research Scientist Geoff Thomas (DPIRD) has received reports and photos from agronomists of barley powdery mildew on barley crops (var. Maximus) across the Kwinana south zone.

Powdery mildew on barley (var. Combat). Photo courtesy of Quenten Knight (Agronomy Focus).

Quenten Knight (Agronomy Focus) has found powdery mildew on barley (var. Combat) at the stem elongation stage near Beaumont.

Senior Research Scientist Andrea Hills (DPIRD) has received reports of powdery mildew on barley (var. Combat) from agronomists in the Esperance region. Andrea has also observed powdery mildew on several barley varieties at the barley national variety trial (NVT) site at Gibson.

Wheat powdery mildew

- Dongara
- Morawa
- Borden
- Kendenup
- Jerdacuttup
- Munglinup
- Coomalbidgup
- Grass Patch
- Scaddan
- Neridup
- Wittenoom Hills

Powdery mildew pustules on wheat plants. Photo courtesy of DPIRD.

Wheat powdery mildew has been found in the northern grainbelt in wheat (var. Calibre) south of Morawa, and in wheat (var. unspecified) near Dongara.

It has also been detected in several wheat crops (var. Scepter and Tomahawk) at Borden, Kendenup and across the Esperance port zone, from Jerdacuttup to Grass Patch to Wittenoom Hills.

Wheat plant growth stages have ranged from stem elongation to flowering.

Management

To check the resistance ratings of barley and wheat varieties to powdery mildew, refer to the department's 2025 Crop Sowing Guide.

Registered foliar fungicides can be used to control powdery mildew infection when necessary. For more information on registered fungicides refer to the department's Fungicides page.

Powdery mildew fungicide resistance

Wheat powdery mildew is at high risk of developing fungicide resistance. In WA, the first detections of mutations with the potential for Group 3 (DMI) fungicide resistance in wheat powdery mildew were in the Esperance region in 2024.

Growers and consultants that suspect fungicide resistance in powdery mildew is occurring in a crop can contact the Centre for Crop and Disease Management's (CCDM) fungicide resistance team by emailing frg@curtin.edu.au for further information on submission of samples for testing.

More information

To read about earlier reports of powdery mildew in wheat this season, refer to the 2025 PestFacts WA Issue 9 article Powdery mildew in wheat.

For more information on powdery mildew visit DPIRD's Powdery mildew and its management in wheat factsheet and Barley leaf diseases and their management factsheet.

For more information on fungicide resistance, refer to DPIRD's Managing barley powdery mildew in the face of fungicide resistance factsheet and the Grains Research and Development Corporation's (GRDC) Managing fungicide resistance: barley powdery mildew factsheet.

For more information on powdery mildew contact Principal Research Scientist Geoff Thomas in Perth on +61 8 9368 3262, Senior Research Scientists Kithsiri Jayasena in Albany on +61 8 9892 8477, or Andrea Hills in Esperance on +61 8 9083 1144.

Article author: Cindy Webster (DPIRD Narrogin), Geoff Thomas (DPIRD Perth) and Kithsiri Jayasena (DPIRD Albany).

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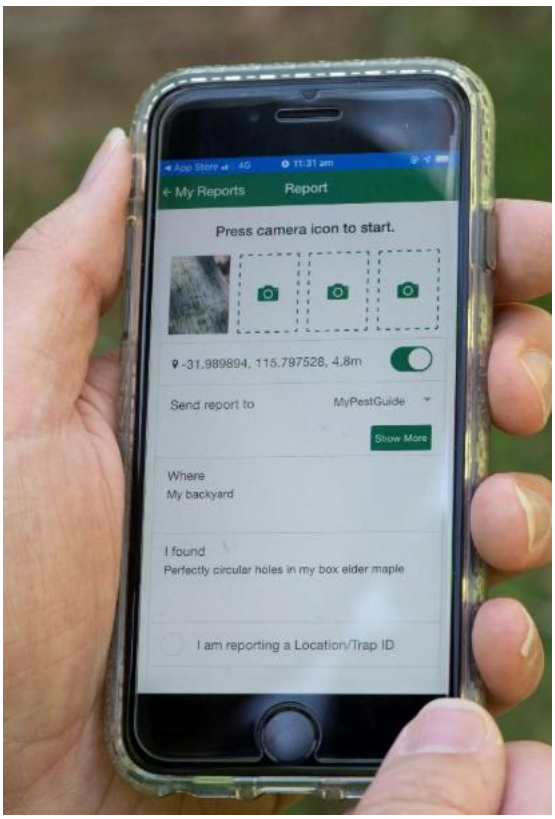
Biosecurity Blitz



The department's MyPestGuide Reporter app. Photo courtesy of DPIRD.

You are invited to join the department in raising awareness of the critical role of biosecurity in protecting our environment and agricultural industries. You can do this during National Biosecurity Week by signing up for DPIRD's own annual Biosecurity Blitz.

National Biosecurity Week, which is running from 25 to 31 August, aims to demystify biosecurity and promote good biosecurity practices and the collaborative efforts of government, industry and the community to protect our produce for our future. A range of resources and further information is available on the National Biosecurity Week website.

This year also marks DPIRD's 10th Biosecurity Blitz, running from 16 October to 16 November 2025. The annual event invites the community to help detect pests and diseases, supporting efforts to protect WA's farms, fisheries, food supply, and regional towns.

Learn more, or sign up, on DPIRD's Biosecurity Blitz page.

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Important Disclaimer

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