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## PestFax

Jul 2017

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### Canola sclerotinia update

- Avon Valley
- Northam
- South Stirlings



Andrew Reynolds (Elders) has tweeted about seeing sclerotinia ground infections and leaf infections in the advanced/wetter areas of some canola paddocks in the Avon Valley.



Crop protection officer Bec Swift (DPIRD) has found sclerotinia apothecia in a canola crop near Northam.

Farmer Reece Curwen has found sclerotinia leaf lesions in his flowering GT53 canola at South Stirlings. There was a nearby canola paddock infected with sclerotinia last year.

Plant pathologist Ravjit Khangura (DPIRD) says that the fewer sclerotinia reports received this season are due to less than ideal seasonal conditions for sclerotinia spore release and disease development in many canola growing regions across the grainbelt.

DPIRD research over the past few years has shown that as a rule of thumb more than 40mm of rainfall and more than 75% relative humidity (RH) in the three weeks before and after commencement of flowering are most conducive for the damaging levels of sclerotinia to occur in crops.

Canola bloom stages are also quite variable in different regions.

Some of the key risk factors of sclerotinia stem rot include; history of sclerotinia in the current canola and surrounding paddocks and conducive weather conditions around flowering.

Ravjit urges growers to check their rain gauge or weather data from the nearest department [weather stations](#) and the growth stage of their canola.

Several fungicide products that are made up of the actives prothioconazole + tebuconazole, procymidone, iprodione and more recently prothioconazole + bixafen are registered for the control of sclerotinia in canola. Fungicides need to be applied as per product label. More information can be found at the department's [Registered foliar fungicides for canola in Western Australia](#).

Based on the research conducted by DPIRD over the last few years, growers who have a history of sclerotinia infection in their current canola paddock need to consider;

- Applying a single foliar application at 30-50% bloom. Provided conditions are favourable for infection before and during flowering.
- Carrying out two spray applications is ideal when an extended season is experienced, but this is unlikely to be the case this season.
- Carrying out late spray applications (up to 60% flowering and beyond) is generally not expected to be economical this season, particularly in the Southern region.
- If growers notice ground infections they can apply a foliar fungicide immediately or wait until 20% bloom to prevent further new infections.

Before applying fungicides growers also need to consider the crop yield potential, costs of fungicide and application and canola price.

Further information can be found at the department's [Managing sclerotinia stem rot in canola](#) page and GRDC's [Managing sclerotinia in canola](#) YouTube video.

For more information contact [Ravjit Khangura](#), Research Officer, South Perth on +61 (0)8 9368 3374.

## Powdery mildew found in canola

- Cunderdin



Dan Taylor (DKT Rural Agencies) reports seeing powdery mildew in a hybrid canola (IH51) crop sown in late March near Cunderdin. The crop is at 30-50% bloom. The disease is affecting 10-30% of plants.



Powdery mildew can infect leaves, stems and pods of canola. Symptoms first appear on older leaves in the form of dirty white floury patches and all leaves become infected as the plants age. Severe infection of leaves causes premature defoliation. Patches can also appear on canola stems and pods. These patches enlarge and coalesce to cover the entire stem. Severely infected plants grow poorly and produce less number of pods. Infected pods remain smaller and produce less seeds and the seeds generally are shrivelled and are of poor quality.

Plant pathologist Ravjit Khangura (DPIRD) says that the fungus generally survives on volunteer host plants. The disease development is favoured by relatively dry conditions, moderate humidity (50-60%) and moderate temperatures (15-25°C). The disease is also favoured by high nitrogen fertilisation and dense canopy.

Powdery mildew in canola is usually considered to be of less economic importance in Australia unless the

infection progresses on to the pods. In France and India this disease is known to cause some yield losses in canola and mustard respectively.

Currently, no fungicides are registered for the control of powdery mildew in canola in Australia.

Growers and consultants are urged to keep reporting with the [PestFax Reporter app](#) if they see powdery mildew in their canola as this will help in determining its distribution and formulating control tactics in the future.

For more information contact [Ravjit Khangura](#), Research Officer, South Perth on +61 (0)8 9368 3374.

## Leaf rust and powdery mildew are infecting wheat crops

### Wheat leaf rust

- Cascade
- Coomalbidgup
- Grass Patch
- Beaumont
- Condingup



Plant pathologist Andrea Hills (DPIRD) has been receiving reports of wheat leaf rust (WLR) in Mace, Scepter and Trojan in an area encompassing Cascade, Coomalbidgup, eastern Grass Patch, Beaumont and Condingup. The wheat crops are currently at stem elongation and rust levels are low. All infected crops will receive a flag leaf fungicide.

WLR has not been seen a lot in recent times but with WLR currently being found in crops that have not reached flag leaf emergence this indicates that it may be more dangerous this season. Plus with warmer temperatures likely to be starting in the coming weeks, it is important that crops are monitored for the presence of rusts, as managing these diseases at low levels in crop is far more effective than once they are well established.

Monitoring priorities include susceptible varieties and those crops in areas where regrowth wheat has been allowed to perpetuate and mature. Remember to look into the bottom of the canopy and stems for the presence of stem rust. The optimal temperature range for leaf rust development and spread in wheat is 15-25°C, while for

stem rust it is 20-35°C.

In WA Mace is rated moderately susceptible (MS#) to WLR. Scepter and Trojan are rated moderately resistant (MR#) to WLR. All three varieties are rated with # indicating they are likely to be more susceptible to the newer 104 leaf rust pathotype, which first appeared in WA in late 2015. To find out the susceptibility of other wheat varieties visit the department's latest [wheat disease ratings](#) page.

It is important to note that with recent leaf rust incursions from eastern Australia (the 76 pathotype in 2013 and the new 104 pathotype in 2015) variety ratings have changed in recent years as the resistance of a variety can be dependent on the pathotype affecting the crop. Both pathotypes are present across the state and the 104 pathotype was confirmed to be present in an infected crop in Esperance in late 2016. For more information see the department's [Implications of the known wheat leaf rust pathotypes in WA](#).

In eastern Australia, where both these pathotypes are established, Mace and Scepter are rated as moderately susceptible to susceptible (MSS) and Trojan as moderately resistant to moderately susceptible (MRMS). Some other common varieties that show a susceptible response to leaf rust in eastern Australia include; Calingiri, Corack, Emu Rock, Envoy, Grenade CL Plus, Harper, Hydra, Justica CL Plus, King Rock, LRPB Arrow, Ninja, Tungsten, Wyalkatchem, Yitpi and Zen.

Partially resistant (MRMS) varieties are susceptible at young crop stages and gradually increase in resistance as the crop develops during late stem elongation, expressing maximum adult plant resistance around heading/flowering. Varieties usually develop rust slowly unless they become infected early. Varieties with resistance (MR-R) should be resistant at all plant stages from seedling to adult (MR-R) but as mentioned above it depends on what leaf rust pathotype is present and the varieties marked with # on current wheat variety ratings indicates there is a risk of susceptibility if certain new leaf rust pathotypes, such as 104, are present.

The presence of the two pathotypes highlights the value in submitting samples to the [Australian cereal rust survey](#). While results are not used for in-crop decision making, they keep industry informed of the bigger picture in pathotype changes and dominance. Rust samples can be mailed to the University of Sydney, Private Bag 4011, Narellan, NSW 2567 for pathotype testing.

In more susceptible varieties where leaf rust is present, it is important to halt the progression of disease as rapid rusting can cause significant yield loss and promote epidemic development which increases the risk of pathogen mutation. If rust is spreading through the crop it may be helpful to apply a foliar fungicide registered for leaf rust control at late tillering to stem extension, during post emergence weed control, to minimise leaf rust damage and limit further spread into other parts of the region.

For more information on diagnosing and managing this disease refer to the department's [Diagnosing leaf rust of wheat](#) and [Managing stripe rust and leaf rust in wheat in Western Australia](#) pages.

## Wheat powdery mildew

- Grass Patch
- Coomalbidgup
- Esperance high to medium rainfall areas



Wheat powdery mildew has also been found on Scepter and Mace wheat in eastern Grass Patch, Coomalbidgup and other locations in the Esperance high to medium rainfall areas.

If wheat powdery mildew is present and increasing in the canopy and weather conditions are favourable (humid and mild), it is recommended growers intervene in susceptible varieties susceptible to stop disease reaching damaging levels and moving onto the flag leaf and head.

For more information refer to the department's [Managing powdery mildew in wheat](#).

For fungicide information refer to the department's [Registered foliar fungicides for cereals in Western Australia](#) page.

For more information contact [Kithsiri Jayasena](#), Plant Pathologist, Albany on +61 (0)8 9892 8477, [Geoff Thomas](#), Plant Pathologist, South Perth on +61 (0)8 9368 3262 or [Andrea Hills](#), Plant Pathologist, Esperance on +61 (0)8 9083 1144 or [Ciara Beard](#), Plant Pathologist, Geraldton on +61 (0)8 9956 8504.

## Aphids and diamondback moths are in canola

### Canola aphids

- Allanooka
- Wongan Hills
- Northam
- Corrigin
- Gorge Rock
- Wickepin

Peter Elliott-Lockhart (Elders) has reported finding cabbage and turnip aphids in a canola crop near Allanooka.

Ty Henning (Tek Ag) has been finding all three canola aphid species (cabbage, turnip and green peach aphids) in stem elongation to early flowering growth stage canola near Wongan Hills.

Crop protection officer Bec Swift (DPIRD) has found green peach aphids (GPA) in a canola crop near Northam.



Crop protection officer Kylie Chambers (DPIRD) has reported finding cabbage aphids in a canola crop near Corrigin.

A consultant has reported seeing mostly turnip aphids under the leaves and in the buds of smaller canola plants in a canola crop near Gorge Rock. The odd GPA was also seen amongst them.

Farmer Les Tyson has found turnip aphids in his Bonito canola crop near Wickepin. The crop is at early flowering.

Canola aphid reports have been regularly received by the PestFax team in recent weeks so refer to the [PestFax map](#) or previous PestFax newsletter issues for past canola aphids reports.

If you suspect there is GPA insecticide resistance on your property refer to the 2017 PestFax Issue 4 article [Green peach aphid control in canola: Are we running out of options?](#)

For more information on canola aphids refer to the department's Protecting WA Crops Issue 3 newsletter [Aphids – WA's insect problem children](#) and [Aphid management in canola crops](#) page.

## Diamondback moths

- Bruce Rock



Rod Butcher (Landmark) reports finding 15-30 diamondback moth (DBM) caterpillars in 10 sweeps of an insect sweep net in early flowering Bonito canola south of Bruce Rock.

Growers and consultants are advised to monitor for DBM, especially from August onwards, by doing at least four lots of 10 sweeps with an insect net at various locations in each crop.

For more information refer to the;

- department's 2017 PestFax Issue 13 article [Diamondback moths may be a problem this spring](#)
- department's [Diagnosing diamondback moth](#) page
- GRDC's [Diamondback moth](#) fact sheet.

For more information on aphids or DBM contact [Svetlana Micic](#), Research Officer, Albany on +61 (0)8 9892 8591 or [Dustin Severtson](#), Development Officer, South Perth on +61 (0)8 9368 3249.

## Native budworm moth trapping



Volunteer farmers and some DAFWA staff have commenced weekly pheromone trapping for native budworm moths this week as part of a program to monitor the potential risk of native budworm caterpillars to pulse and canola crops. Results for the first week of trapping will be available in next week's PestFax newsletter

A couple of moth trappers installed their traps a few weeks early and have reported the following catches in their



traps, indicating moths are already moving into the northern wheatbelt; Binu – (18 July: 21 moths, 25 July: 11 moths), Cadoux (25 July: 34 moths), Grass Patch NW (18 July: zero moths, 25 July: zero moths) and Grass Patch SW (18 July: zero moths, 25 July: zero moths).

For more information refer to the department's [Management and economic thresholds for native budworm](#) page.

For more information contact [Alan Lord](#), Technical Officer, South Perth on +61 (0)8 9368 3758.

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## All Page Links

- [1] <https://www.agric.wa.gov.au/sites/gateway/files/Sclerotinia%20ground%20infection%20Ravjit%20Khangura.jpg>
- [2] <https://www.agric.wa.gov.au/sites/gateway/files/Canola%20sclerotinia%20stem%20rot%20apothecia%20BSwift%2025July17.jpg>
- [3] <https://www.agric.wa.gov.au/weather-stations>
- [4] <https://www.agric.wa.gov.au/canola/registered-foliar-fungicides-canola-western-australia>
- [5] <https://www.agric.wa.gov.au/canola/managing-sclerotinia-stem-rot-canola>
- [6] <https://www.youtube.com/watch?v=QC0t5b5lJwo>
- [7] <mailto:ravjit.khangura@agric.wa.gov.au>
- [8] <https://www.agric.wa.gov.au/sites/gateway/files/Canola%20powdery%20mildew%20Dan%20Taylor%20DKT%2025July17.jpg>
- [9] <https://www.agric.wa.gov.au/sites/gateway/files/Canola%20powdery%20mildew%20Ravjit%20Khangura.png>
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- [12] <https://www.agric.wa.gov.au/grains-research-development/managing-stem-rust-wheat>
- [13] <https://www.agric.wa.gov.au/grains-research-development/wheat-disease-ratings>
- [14] <https://www.agric.wa.gov.au/grains-research-development/implications-known-wheat-leaf-rust-pathotypes-wa>
- [15] <http://rustbust.com.au/tips-for-busting-rust/samples/>
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- [18] <https://www.agric.wa.gov.au/sites/gateway/files/Wheat%20powdery%20mildew%20CBeard%20.jpg>
- [19] <https://www.agric.wa.gov.au/spring/managing-powdery-mildew-wheat>
- [20] <https://www.agric.wa.gov.au/barley/registered-foliar-fungicides-cereals-western-australia>
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- [22] <mailto:geoff.j.thomas@agric.wa.gov.au>
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- [28] <https://www.agric.wa.gov.au/newsletters/pwac/protecting-wa-crops-issue-3-june-2017>
- [29] <https://www.agric.wa.gov.au/pest-insects/aphid-management-canola-crops>
- [30] <https://www.agric.wa.gov.au/sites/gateway/files/DBM%20caterpillars%20Rod%20Butcher%20Landmark%2026July17.jpg>
- [31] [https://www.agric.wa.gov.au/newsletters/pestfax/pestfax-issue-13-july-2017?page=0%2C4#smartpaging\\_toc\\_p4\\_s0\\_h2](https://www.agric.wa.gov.au/newsletters/pestfax/pestfax-issue-13-july-2017?page=0%2C4#smartpaging_toc_p4_s0_h2)

[32] <https://www.agric.wa.gov.au/mycrop/diagnosing-diamondback-moth>

[33] <https://grdc.com.au/GRDC-FS-DBM>

[34] <mailto:svetlana.micic@agric.wa.gov.au>

[35] <mailto:dustin.severtson@agric.wa.gov.au>

[36] <https://www.agric.wa.gov.au/sites/gateway/files/Native%20budworm%20trap.jpg>

[37] <https://www.agric.wa.gov.au/grains/management-and-economic-thresholds-native-budworm>

[38] <mailto:alan.lord@agric.wa.gov.au>

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