Mostly low levels of powdery mildew reported this week

Wheat powdery mildew

- Dalwallinu
- Danjinning
- Geraldton
- Kulinbah
- Morawa
- Moningar
- Nukarni
- Wyola
- Yorkrakine

There have been reports of low levels of powdery mildew in many wheat crops this week. Matt Willis (Elders) has found low levels of the disease in tillering Calingiri wheat at Wyola and Yorkrakine as well as booting Calingiri at Moningan, while Ciara Beard (DAFWA) has received reports of powdery mildew in some crops in the Morawa area. Last week she found the disease just starting in nil treatment trial plots she inspected at Geraldton and Dalwallinu. Her trial at Geraldton is investigating early fungicide treatments such as seed dressings and in-furrow compared to Z31 growth stage foliar spray for disease control. This week she has found the disease has progressed quickly up the canopy in nil treatment plots and is also starting to show in all plots including those treated with fungicide at seeding. Ty Henning (TekAg) has reported a Mace wheat crop at stem elongation with less than 10% powdery mildew in Kulinbah as well as an early sown Mace crop at milk stage with widespread infection in Danjinning. Geoff Thomas (DAFWA) has reported seeing low levels of powdery mildew in Zen wheat (Z31/32) at Nukarni.
Wyalkatchem wheat from trial at Wooree, near Geraldton, with powdery mildew infection, 20th July.

It appears the recent cold weather has slowed disease progression in some areas but growers need to be vigilant as the weather warms up (15–22°C) if the humidity is high, as the disease can quickly move up the canopy and it is crucial to control before it becomes severe and develops in upper canopy and heads.

For more information on diagnosing and managing powdery mildew in wheat refer to DAFWA's:

- Powdery mildew in barley and wheat article PestFax Issue 12
- Diagnosing powdery mildew in cereals page
- Powdery mildew in wheat YouTube video.

For more information contact Ciara Beard, Plant Pathologist, Geraldton on +61 (0)8 9956 8504 or Geoff Thomas, Plant Pathologist, South Perth on +61 (0)8 9368 3262.

Barley powdery mildew in some areas

- Dalwallinu
- Lower Great Southern
- West Kendenup
- Woolocutty

Joe Delaney (Elders) has found low levels of barley powdery mildew on tillering Mundah barley plants that are stressed from waterlogging in Dalwallinu. Blakely Paynter (DAFWA) also reports finding a scattered infection of the disease in tillering Baudin while inspecting crops at Woolocutty. Kith Jayasena (DAFWA) reports Baudin barley at Z25 with powdery mildew at west Kendenup. This is the first crop with the disease he has seen in the region this year. He has spore traps at nine sites in the lower Great Southern and has been detecting powdery mildew spores in them since 22 June.
Joe Delaney (Elders) provided this photo of the powdery mildew infection in Mundah barley affecting stressed plants in Dalwallinu.

As with wheat powdery mildew growers need to be vigilant if mild, humid conditions of 15-22°C and over 70% humidity persist.

For additional details visit the DAFWA pages:

- Powdery mildew in barley article in PestFax Issue 11
- Diagnosing powdery mildew in cereals
- Management of barley powdery mildew in 2016 - fungicide resistance.
- Registered foliar fungicides for cereals in Western Australia

For more information contact Geoff Thomas, Plant Pathologist, South Perth on +61 (0)8 9368 3262 or Kith Jayasena, Plant Pathologist, Albany on +61 (0)8 9892 8477.

Net blotch in susceptible barley varieties

- Hyden
- Tambellup

Blakely Paynter (DAFWA) has found all susceptible varieties of barley in national variety trials at Hyden with spot-type net blotch infection. He reports inspecting plots of tillering GrangeR barley with between 30-60% infection levels. Kith Jayasena (DAFWA) reports both spot-type and net-type net blotch in Flinders barley in Tambellup.

Distinctive brown circular lesions of spot-type net blotch
When managing net blotches in barley the crop should continue to be monitored for further development of the disease and in crops where disease continues to progress, an application of a registered fungicide leading up to stem extension can help reduce epidemic development.

It is important that samples of net blotch are sent for pathotype testing. Net blotch leaf samples should be mailed in paper envelopes to Jason Bradley, Plant Pathology, DAFWA, Locked Bag 4, Bentley Delivery Centre WA 6983.

For further information on symptoms and management of net blotches, see DAFWA's Diagnosing spot-type net blotch and Managing spot-type net blotch in continuous barley.

For more information on barley diseases contact Kithsiri Jayasena, Plant Pathologist, Albany on +61 (0)8 9892 8477 or Geoff Thomas, Plant Pathologist, South Perth on +61 (0)8 9368 3262.

Barley leaf rust in the south

- Esperance
- Pallinup
- Tambellup

Andrea Hills (DAFWA) reports Baudin barley at Z33/34 stage with leaf rust on the fourth leaf. As Baudin is rated very susceptible to leaf rust it will be sprayed with prothioconazole 210g/L + tebuconazole 210g/L at flag -1 emergence. Other barley varieties she inspected had rust at lower levels and will be monitored to see if the disease develops with warmer weather as the disease develops rapidly in moist conditions when temperatures are between 15-22°C. Kith Jayasena (DAFWA) has also found leaf rust in the Flinders barley at Tambellup in which he reported finding spot-type and net-type net blotch. He also reports barley leaf rust on Bass barley (Z33) at Pallinup which was initially treated with Hombre seed dressing. Kith comments that growers should spray any infections early because if the disease gets away it is difficult to manage.

More detailed information about barley leaf rust can be found at DAFWA's:

- More barley leaf rust reported article in PestFax Issue 12.
- Diagnosing barley leaf rust page
- Barley leaf rust YouTube video.

The Sydney University, Australian Cereal Rust Survey has pathotype analysis underway on samples received from early rusts in volunteers and crops, with results available for the earliest sample received, which was off volunteer Bass barley from Pallinup in March. This information can be found at Cereal rust situation, July 2016 with earlier issues found at Cereal rust reports.

For more information contact Kithsiri Jayasena, Plant Pathologist, Albany on +61 (0)8 9892 8477

Sclerotinia appearing in northern agricultural areas

- East Chapman
- Merredin
- Walkaway

Ciara Beard (DAFWA) reports finding sclerotinia in a 404 canola crop which was at 30% bloom in Walkaway. Symptoms appear as water soaked grey lesions on leaves and some leaves are broken and have fluffy white growth. Apothecia are still present at the site. The crop has now been sprayed to assist in preventing any further
infections. In a grower's 404 canola crop at east Chapman she has found stem infection starting with the crop at 60% bloom. Ciara has trials at both sites looking at different products for optimal disease control. In a separate trial at east Chapman which is at 50% bloom she has found leaf symptoms just starting.

Stem infection of sclerotinia in 404 canola at East Chapman reported by Ciara Beard (DAFWA).

Sclerotinia infection in Ciara Beard's trial plots.

Doug Abrecht (DAFWA) reports that sclerotinia was also identified the week of 21-28 June in Nuseed GT50 canola seeded on 5 April 2016 at Merredin Research Station. There was also evidence of a low level of blackleg lesions on the leaves. At the time 30% of the canola plants were flowering, some had pods 20-40mm long and the crop was 800-1000mm high. Sclerotinia infection was identified on leaves in the lower third of the canopy with some infections clearly related to petals which had dropped onto leaves. There was no evidence of infection in canola sown on 22 April (budding start of stem elongation) or 25 May (4-5 leaves) in the same trial. The infected crop was sprayed with 400mL/ha Prosaro in 100L/ha water on 5 July using a ute mounted boom spray with low drift nozzles. Inspections of the sprayed plots on 11 July and 18 July have revealed that the infection was no longer active.

More detailed information on sclerotinia can be found at:

- Further updates on sclerotinia in canola article in PestFax issue 14
- Sclerotinia in canola update 2016 YouTube video
- Managing sclerotinia stem rot in canola page.

For more information contact Ravjit Khangura, Senior Plant Pathologist, South Perth +61 (0)8 9368 3374.

Some aphids and mites about

Russian wheat aphid update

The good news continues that Russian wheat aphid has not been found in Western Australia since the beginning of June, when it was first declared to be present in South Australia and Victoria. Growers and consultants are urged to continue to report cereal crops which have been inspected and where no aphids were found. Likewise, please report any aphids found especially those suspected to be Russian wheat aphids.

For more information on the Russian wheat aphid, including what to look for in crops and how to report, refer to DAFWA's Russian wheat aphid page and Recognising Russian wheat aphids in crops YouTube video.

Bluegreen aphids

- Manmanning

Tyronne Henning (TekAg) reports finding bluegreen aphids infesting 20-40% of a flowering bisurella crop in
Manmanning. The crop will be sprayed with 250mL/ha chlorpyriphos + 150mL/ha alphacypermethrin.

Over 20% of the bisurella crop was infested with bluegreen aphids Ty Henning (TekAg) reports.

For more information refer to Cesar Australia's Bluegreen aphid PestNote and the Bluegreen aphids article in PestFax issue 14.

Oat aphids

- Benjaberring
- Jenabillup
- Kirkdune
- Moora
- Tambellup

Low levels of oat aphids in a Benjaberring Mace wheat crop at stem elongation have been reported by Matt Willis (Elders). Jeremy Curry (DAFWA) has found Mace wheat at stem elongation in an agronomy trial at Jenabillup with 20-40% tillers infested with oat aphids, while Tyronne Henning (TekAg) has inspected a Calingiri wheat crop at the same growth stage in Kirkdune with under 10% oat aphid infestation. While inspecting trials at Moora and Tambellup, Geoff Thomas (DAFWA) has found very low levels of oat aphids.

Oat aphids vary in colour from olive-green to black and have a rust-red back on their rear end.

For information on spraying insecticides refer to the DAFWA's Insecticides for control of cereal aphids.

For further reading on cereal aphids refer to the DAFWA pages:

- Diagnosing cereal aphids
- Aphid feeding damage to cereal crops
Turnip aphids

Nalkain

Matt Willis (Elders) has inspected a Sturt canola crop at early flowering in Nalkain with up to 10% of flower spikes on the edge of the paddock having 5-6 turnip aphids per bud.

As spring temperatures warm up, aphid numbers can be expected to increase in crops. Regular monitoring will indicate if aphid numbers are increasing in your crop.

If more than 20% of plants are infested with colonies of turnip or cabbage aphids and aphid numbers are expected to increase, control measures should be considered to avoid yield losses. If spraying, consider options such as the aphicides pirimicarb or sulfoxaflor that are soft on the beneficial insects including parasitic wasps, hover flies, lacewings and ladybirds. For more information refer to DAFWA's Winter Spring Insecticide Guide 2016.

For more information on canola aphids and their management see the DAFWA pages:

- Aphids are in canola article in PestFax Issue 14
- Aphid management in canola crops
- Diagnosing canola aphids
- Aphids in crops YouTube video.

Blue oat mite

Southern Brook

While inspecting crops in Southern Brook Matt Willis (Elders) reports finding a few blue oat mite in a Mace wheat crop at stem elongation.

At this time of the season, crops are advanced and feeding damage caused by mite and lucerne flea are usually of no consequence. However, in some uncommon situations when they have built up to very high numbers, blue oat mite have been seen causing significant leaf surface damage to cereal crops.

More information on blue oat mite can be found at:

- Diagnosing blue oat mite
- Blue oat mites in PestFax Issue 14

For more information contact Dusty Severtson, Entomologist, South Perth on +61 (0)8 9368 3249 or Svetlana Micic, Entomologist, Albany on +61 (0)8 9892 8591.
Important disclaimer

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