

Crop Alert

Protecting your crops against disease

Watch out for foliar diseases in spring

Conditions are ripe for foliar diseases this spring. Fifteen wet days during July and twelve in August have provided ideal conditions (leaf wetness and high humidity) for fungal infections in all crops.

Wheat diseases

Yellow leaf spot is common in susceptible wheat crops sown into infected wheat stubbles (Figure 1). Rain and dew will provide conditions favourable (leaf wetness of 6 to 48 hours) for the movement of the disease up the plant. Should these conditions occur it will be important to protect the top three leaves from infection using foliar fungicides. Fungicide applications for yellow leaf spot will also help protect crops from stripe rust.

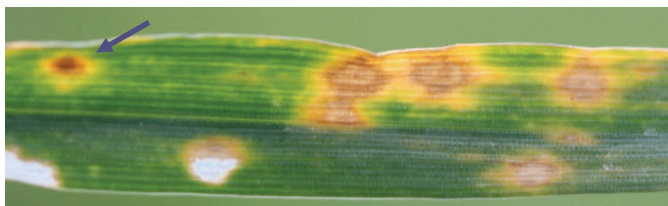


Figure 1. Yellow leaf spot symptoms. Look for a dark tan spot at the centre of the yellow spot, as the disease develops (see arrow).

Stripe rust has been reported on crops growing in central and western Victoria. With rising temperatures, reports of stripe rust are likely to become widespread during the next two weeks. Therefore, it is time to start monitoring crops for stripe rust with a view to implementing rust management plans.

Stem rust of wheat has been found on volunteer wheat growing at Walpeup which serves as a reminder that there has been some carry over of this disease. Stem rust has the potential to become widespread in susceptible wheat varieties again this season, if there is above average spring rain. Stem rust is favoured by warm (15-30°C) and humid conditions. It likely that stem rust it will be observed in crops from mid spring.

Septoria blotch has been detected in wheat crops growing in the south west and may be a problem if spring is wetter than normal. leaf rust has not been observed in wheat crops.

Barley diseases

Scald, and the net form and the spot form of net blotch (Figure 2) have all been detected in susceptible barley crops. They will need to be managed in many cases.

Scald symptoms are starting to appear in susceptible barley varieties, and could become severe with the onset of warmer weather. Scald is an aggressive disease that must be managed.

The net form of net blotch can cause 30 per cent yield loss in susceptible varieties. This disease is harder to manage with fungicides than scald, and it is important that the disease is treated early in its development. The varieties to watch include Baudin, Commander, Bass and Fairview.

Symptoms of the spot form have been severe this season, and control may be needed in the worst affected crops. Spot form has less effect on yield compared to other diseases, but it does affect grain quality in some seasons.

As a guide, control of scald, the net and the spot forms of net blotch can be achieved by applying the appropriate foliar fungicide between GS31 (stem elongation) and GS39 (flag emergence). A second application may be necessary where symptoms persist

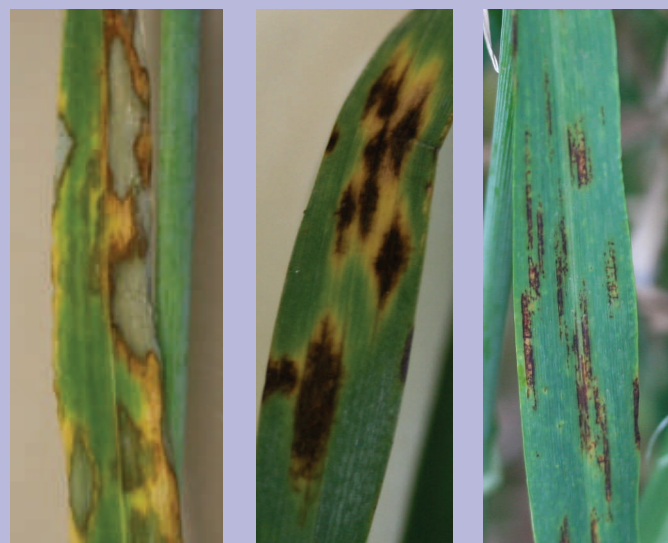


Figure 1. Comparison between scald, the spot form and the net form of net blotch.

Barley leaf rust has not been reported this season, but it could become an issue again this spring given the amount of self-sown barley that is growing in some areas. Monitor crops closely for leaf rust. Development of the disease is most rapid during warm (15-20°C) moist (rain or dew) weather. The disease will most likely be observed late in the spring.

Pulse diseases

Chickpeas: The season has been favourable for the development of ascochyta blight, and it is recommended that all chickpea varieties be actively monitored with a view to fungicide control if necessary. Botrytis grey mould is also likely to become an issue if seasonal conditions continue to favour this disease.

Lentils: Low levels of ascochyta blight have been detected in lentils. Continue to monitor lentils for ascochyta, and use a fungicide when required. If conditions remain favourable expect to see Botrytis grey mould. It is imperative that fungicides for Botrytis grey mould are applied before the canopy starts to close.

Faba beans: Cercospora, chocolate spot and rust have been detected early this season. Expect to see ascochyta in the coming weeks if conditions remain favourable. Early spraying of fungicides is warranted as these diseases can develop rapidly. Experience suggests that late sprays are not as effective. Rust in particular can develop rapidly when temperatures are over 20°C, cycling every 10 days. For information on permits and the registration status of the different fungicides used for disease control in faba beans see [Pulse Australia Crop Protection Products](#).

Canola

Anecdotal observations indicate that blackleg leaf lesion severity may be higher than normal this year.

Canola plants have two types of resistance, leaf lesion resistance and stem canker resistance. If canola plants have few leaf lesions it is unlikely that the disease will progress to the crown to cause significant stem canker (which causes the yield loss).

At this time of the year if a crop has severe leaf infection it does not mean that plants will definitely get stem canker. The plant canker resistance may stop the progression of the disease. There are many cultivars which are susceptible to leaf lesions, but have excellent resistance to stem canker. If a cultivar has a blackleg rating MR-MS or below and has severe leaf lesions it may warrant using a foliar fungicide. The label recommendation is to apply a fungicide between the 4 to 6 leaf crop stage.

Assess crops at windrowing to determine stem canker severity. If stem canker is severe follow the recommendations in the [Blackleg Management Guide Fact Sheet 2012](#).

Viruses

Reports of viruses in pulses and canola crops have been low so far this season. However, favourable spring conditions could see a build up of aphids, and the potential for spread of associated viruses.

Growers should be on the look out for aphids, as we move into spring. Spraying with insecticides may be necessary in some situations.

DPI Crop Disease Identification and Management Workshop

One day disease identification and management workshops will be presented by DPI's field crop pathology team. The main emphasis of the workshops will be on practical disease identification and advanced diagnostic techniques.

The workshops will cover the identification and management of cereal, pulse and oilseed diseases. Topics will include seed health, virus testing, new technologies and genetic solutions for disease control.

International barley pathologist Dr Kelly Turkington from Canada is the keynote speaker. Kelly will be presenting a talk on integrated disease management.

Workshops will be held at DPI Horsham on the 9th, 10th and 11th of October. Cost is \$190.00 or \$160 early bird before 10 September 2012. For registration contact administration at ORM rego@orm.com.au or telephone 03 5441 6176.

Crop Disease Application for Smartphones

DPI has recently released a Crop Disease Application for smart phones which allows users to identify crop diseases and compare disease ratings in the ute, office or paddock. Available for Apple and Android, please follow the link www.dpi.vic.gov.au/crop-disease-app for more information.



Further advice

[DPI Fact Sheets www.dpi.vic.gov.au/graindiseases](http://www.dpi.vic.gov.au/graindiseases)

[Blackleg Management Guide Fact Sheet 2012](#)

Contact/Services available from DPI

DPI Field Crop Pathology, Grains Innovation Park, 110 Natimuk Rd, Horsham 3400. Tel (03) 5362 2111, or the DPI Customer Service Centre 136 186.

Acknowledgements

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