



Crop Pathology

SARDI

SOUTH AUSTRALIAN
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INSTITUTE

Crop Watch



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Inspect crops now for rust

Cool damp weather conditions over the past week are likely to have increased the risk of infection and growth of stripe rust in crops and reduced the degree of expression of adult plant resistance, particularly in Wyalkatchem.

A large hotspot of stripe rust was found in a crop of Correll near Thomas Plains on northern Yorke Peninsula and the crop was sprayed with fungicide on Wednesday 26th. The infection had spread to plants away from the hotspot.

A nearby crop of Gladius contained much less infection than the Correll crop, with only small stripes with characteristics of a resistance reaction.

This infection should serve as a warning that growers should inspect crops of all varieties for stripe rust including Correll, Yitpi and Frame.

At this stage we cannot be sure the Correll infection is due to a change in the rust population. And because Correll has adult plant resistance the normal seedling tests will not provide the information needed to determine whether or not the rust attacking it is a new pathotype. If this proves to be the case more work – and time - will be needed to assess its effect on other varieties.

Barley leaf rust has been spreading rapidly and is now likely to be present in most crops on Yorke Peninsula and lower Eyre Peninsula.

Boron toxicity symptoms have been appearing in many barley crops. The dark brown blotching caused by this condition can be confused with net blotches. Leaves with net blotch generally have fewer larger blotches scattered across the leaf. Boron toxicity is usually characterised by many smaller spots, particularly along leaf margins and leaf tips.

Pulses

Chickpea diseases - Ascochyta blight and Botrytis grey mould

Ascochyta blight has been detected in one crop of Almaz chickpeas on upper Yorke Peninsula. Almaz is MR-MS for this disease and requires control strategies to prevent disease spread and yield loss. Strategies include seed treatment and foliar fungicides.

All chickpea cultivars should be treated with P-Pickel T before sowing to prevent ascochyta infection transferring from seed to the new crop.

Research conducted by Rohan Kimber of SARDI has shown that epidemics of ascochyta blight in chickpeas can start

from an extremely low level of seed infection. The lack of widespread epidemics in previous years is not a guarantee of uninfected seed, hence the need for P-Pickel T.

Almaz, and other MR-MS cultivars, require fungicide sprays with chlorothalonil or mancozeb prior to flowering and at podding to prevent high yield loss. Chickpea cultivars with resistance to ascochyta blight, such as Genesis090, require podding sprays because the pods and seeds are susceptible in these lines.

Many chickpea crops were sown early this year and have developed bulky canopies. Combined with current rainy weather conditions and conducive temperatures (i.e. days above 18°C and nights above eight to 10°C) **Botrytis grey mould (BGM)** can develop quickly in these crops, especially in the susceptible variety Genesis090. If humid conditions continue, crops with bulky canopies may need fungicide sprays to protect flowers and pods, the most susceptible parts of chickpea plants.

Carbendazim products have good efficacy against this disease and chlorothalonil sprays planned for ascochyta blight will also help reduce the rate of disease spread.

Don't be bitten by Botrytis

Growers are reminded that the frequent rain events experienced in late August provide ideal conditions for the Botrytis diseases - chocolate spot of faba bean and BGM of lentil, chickpea and vetch.

With more showers forecast, high humidity levels in crops will be maintained. Growers must be vigilant in controlling any build up of BGM in susceptible varieties during this time. Monitor crops for signs of the disease, particularly on senescing leaves in the lower canopy and on flowers, and respond by using effective fungicides that must be applied earlier rather than later for best results. Preventative action is best practice.

If high moisture levels are retained during warmer temperatures of September, this group of fungal diseases will escalate rapidly.

Crop Watch is an electronic newsletter service provided by SARDI.

If you would like to receive this newsletter please send your email address to Jon Lamb, Jon Lamb Communications jlcom@chariot.net.au - titled "Crop Watch request".

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COMMUNICATIONS



FEEDBACK WELCOME

The SARDI Pathology team invites you to contribute to this publication by reporting local observations or commenting on items in the newsletter.

Comments should go to:

Hugh Wallwork (cereals)

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Jenny Davidson (pulses and oilseeds)

davidson.jenny@saugov.sa.gov.au

*with a copy to **Jon Lamb Communications**
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Unless specifically requested otherwise the name and location and/or company of the reporter may be included with published comments.

Reports, particularly of early sightings of rusts or where diagnosis is not certain, would have added value if accompanied by a paper-packed sample.

Please do not send samples in plastic bags.