



# Crop Pathology

SARDI  
  
SOUTH AUSTRALIAN  
RESEARCH AND  
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INSTITUTE

## Crop Watch



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### **Pulse crops**

#### **Frost affected pulse crops**

Yellowing in many pulse crops (lentils, vetch, field peas) from frost damage has been reported across South Australia, including the Mallee, Mid North and Upper Eyre Peninsula. Symptoms are easily confused with herbicide damage or other abiotic stresses. Photographs are on CropWatch Facebook page.

#### **Bacterial blight in field peas**

Severe bacterial blight in field peas has been reported in the Mid and Upper North and Upper Eyre Peninsula, no doubt enhanced by the frost, which provides a means for the bacteria to infect plant cells. Photographs of infected crops are on CropWatch Facebook page.

Classic bacterial blight presents as fan shaped lesions at the base of the leaf where it is attached to the stem, and spreads up and down the stem. Infection can start in one patch in a paddock and then spread over a wide area. Unfortunately there is nothing that can be done to protect the crop or help it recover. The main recommendation is to stay out of the crop to prevent the disease being spread further on tyres or on boots. Infected crops should be the last pea crops to be harvested. This is to prevent the trash from infecting pea grain of non-infected crops. No grain should be kept from infected crops as there is a high chance of seed infection. If a crop has only got a small area infected then it is possible to harvest a clean area for seed.

When planning to sow pea crops, growers need to consider that if a paddock is frost prone, it is best to sow field peas into a fallow rather than retaining the stubble. This is because the stubble increases the risk of frost, which in turn increases the risk of bacterial blight. The preferred field pea varieties to grow in frost prone areas are PBA Oura or PBA Percy, which are less susceptible to bacterial blight than other varieties.

Further information on bacterial blight is available at <http://www.dpi.nsw.gov.au/content/agriculture/broadacre/pests-diseases/winter-crops-lupins-chickpeas-other-pulses/bacterial-blight-peas>

#### **First sign of Botrytis grey mould (BGM) in lentils**

BGM has been reported in early sown lentils sown into narrow rows. This has produced heavy canopies which promote this disease. All lentil crops in South Australia should have been treated with a canopy closure fungicide spray by now and follow up sprays should be determined by seasonal conditions. Long periods of wet conditions are conducive to this disease while drier conditions will stop its spread. Ongoing disease monitoring is recommended.

#### **Reminder of Ascochyta blight in chickpea**

Growers are reminded that all chickpea crops require fungicide sprays to protect against ascochyta blight with the recent breakdown in resistance in many varieties. Fungicides should be applied ahead of rain events, and will protect crops for 2-3 weeks. All crops will also require a spray during podding to protect the pods and seeds.

# Cereals

The warmer weather is allowing leaf rust in wheat and barley to develop and spread more rapidly. A crop of Compass in the Mallee near Sherlock was found to be severely infected with barley leaf rust carrying the new virulence last week. This means that barley crops across the state should be closely monitored from now on as infection is likely to move rapidly in the more susceptible varieties. In wheat the leaf rust is still mostly at low levels although a report from the West Coast suggests that infection in warmer areas has started to become more serious. Again unprotected wheat crops should be monitored more carefully from now on.

Stripe rust has been found (finally!) on the Northern Yorke Peninsula. Three hotspots varying in size from 1-3 utes have been observed in Mace crops at Kulpara, Cunliffe and Balgowan. All three crops had been untreated prior to the infection being observed.

The warmer weather should also see the net blotches becoming more obvious in untreated barley crops.

A shortage of some fungicides means that options for spraying are more limited than we would like. Growers/advisors need to bear this in mind when planning ahead.

Many crops are showing some symptoms of the wheat curl mite and wheat streak mosaic virus (WSMV). This is a carryover from the widespread infection of crops in autumn. The mites are likely to keep multiplying as spring brings warmer weather. Obvious symptoms will be leaf rolling and with some heads having problems emerging from the boot. Yellowing and streaking of leaves will be evident where the WSMV is present.

*Crop Watch is an electronic newsletter service provided by SARDI.*

*If you would like to receive this newsletter please send your email address to Dalia at DK Communications [dvkam@iprimus.com.au](mailto:dvkam@iprimus.com.au) - titled 'Crop Watch request'.*



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## **FEEDBACK WELCOME**

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

*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.*

*Send samples to*

*Field Crop Pathology, SARDI  
GPO Box 397, Adelaide SA 5001*

*Rust samples can also be sent direct to*

*Australian Cereal Rust Survey  
Plant Breeding Institute  
Private Bag 4011, Narellan NSW 2567*

*Comments should go to:*

**Hugh Wallwork** (cereals)  
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