# FACULTY OF AGRICULTURE AND ENVIRONMENT



PLANT BREEDING INSTITUTE

# Cereal Rust Report

2013

VOLUME 11 ISSUE 2 4<sup>th</sup> September

# Rust development so far for 2013

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So far this season samples of several cereal rust diseases have been received including: stem rust, leaf rust and stripe rust of wheat; crown rust and stem rust of oats and leaf rust of barley. Where known, details of current pathotypes and localities are provided below.

### Wheat stripe rust

Wheat stripe rust has been reported from Queensland, New South Wales and South Australia. Whereas in 2012 the epidemic started in southern New South Wales, the 2013 wheat stripe rust epidemic started in northern New South Wales and Queensland. The first confirmed stripe rust sample was received on the 31st July from Narrabri in northern New South Wales. Until the end of August a total of 20 wheat stripe rust samples had been received. The majority of samples have been from Queensland or northern New South Wales from a range of wheats. The evidence so far indicates that, as for previous years, 134 E16 A+ 17+ is the dominant wheat stripe rust pathotype. Samples have also been received from Bellata, Condobolin and Boggabri in southern New South Wales and one sample of stripe rust has been received from Paskeville in South Australia.

### Wheat stem rust

Wheat stem rust has been reported from both the northern and western growing regions. The only samples of stem rust from natural infections received to date were from a barley crop near Armidale in mid-July from northern New South Wales (not yet processed), and from a wheat sample from Grass Patch in the Esperance region of Western Australia in

August, pathotyped as 34-1,2,7 +Sr38. Samples of stem rust from inoculated trials in Queensland (Gatton) and WA (Carnarvon) have also been received.

#### Wheat leaf rust

Wheat leaf rust has been reported from both the northern and western growing regions. Wheat leaf rust samples were received from the Inverell district in northern NSW on the 6<sup>th</sup> August. The first sample was designated as pathotype 10-1,3,9,10,12. Since then six further samples have been received from the Inverell district. One sample has also been received from Narrabri in northern New South Wales and two from Carnarvon in Western Australia (not yet processed).

## **Barley leaf rust**

To date, barley leaf rust samples have been received from Western Australia, Queensland and South Australia. The first sample was received in late May from Sterlings in WA and was determined to be pathotype 5453 P-. During June samples were received from Gnowellen, Kojonup and Wellstead in southern Western Australia. All samples were determined to be either 5453 P- or 5453 P+. Other samples from WA were received in late August from

Kellerberrin and Grass Patch. One sample was received from Warwick, Queensland in early August and one sample has been received from Port Clinton, South Australia in late August.

#### Oat crown rust

Oat crown rust samples have been received from both wild and cultivated oats including samples from Queensland, northern New South Wales and Western Australia. The first samples were received on the 12<sup>th</sup> April from cultivated oats near Guyra in northern NSW. These samples were determined to be pathotypes 0001-0 and 4473-4,6,10 +Bettong +Barcoo. A sample from wild oats collected near Mt Tabor in Queensland was received on the 17<sup>th</sup> June and determined to be pathotype 0001-0. A sample from cultivated oats near Cambooya, Queensland was determined to be pathotype 0307-1,4,5,6,10,12 +Warrego +Nugene.

Since then, 17 samples from wild and cultivated oats have been received from Queensland from Lagoon Pocket as well as the Toowoomba and Warwick districts. One sample from wild oats was received from South Stirling in Western Australia in late August.

#### Oat stem rust

Oat stem rust samples have been received from Western Australia, Queensland and northern New South Wales. The first sample was received on the 24<sup>th</sup> June from Gibson in the Esperance region of Western Australia. It was determined to be pathotype 41-1,3. Two samples from wild oats were received in early August from Hedington Hill and Hirstglen, Queensland and in mid-August from Graman in northern New South Wales.

#### **GENERAL ENQUIRIES**

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# **RUSTED PLANT SAMPLES**

can be mailed in paper envelopes; do not use plastic wrapping or plastic lined packages. Direct samples to:

Australian Cereal Rust Survey Plant Breeding Institute Private Bag 4011, Narellan NSW 2567 The Australian Cereal Rust Control Program is supported by growers through the Grains Research & Development Corporation.



