



Crop Pathology

SARDI

SOUTH AUSTRALIAN
RESEARCH AND
DEVELOPMENT
INSTITUTE

Crop Watch



10 August 2009

Volume 6, Number 2

Crop Watch is distributed for SARDI through Jon Lamb Communications.

Stripe rust

Hotspots of stripe rust have been found in several paddocks of Wyalkatchem around Balaklava and Dublin and in crops of Kukri and Marombi wheat near Roseworthy.

Given that the rust has probably blown in from northern NSW it is unlikely to be confined to the Mid North. This is supported by several sightings of stripe rust last week in the Victorian Mallee.

It is therefore strongly recommended that crops and particularly susceptible varieties should be monitored closely around the State.

It is not yet known for certain which pathotype (strain) is present in South Australia but Marombi, a dual purpose grain/grazing winter wheat variety mainly targeted for NSW slopes, has the Yr17 (VPM) resistance gene suggesting that the WA Yr17 pathotype of rust is present at Roseworthy. This is different from last season when the WA pathotype without Yr17 virulence predominated. Also 19 out of 67 samples received from NSW and QLD in Sydney before last week came from varieties carrying the Yr17 resistance. The only confirmed identifications of samples in Sydney have been the "Jackie" strain which shows virulence on a range of triticale varieties including Jackie. Both strains may therefore be present in SA. Tests are underway on samples from Balaklava.

This season's outbreak is later than last year's but still early enough to cause significant damage to susceptible varieties and spraying is recommended for these varieties where infection is observed in the crop or in nearby paddocks.

Spraying is also recommended in crops of varieties rated MR-MS or MS that are still at early growth stages.

More advanced crops of MR-MS or MS varieties are likely to be reasonably protected by partial adult plant resistance and spraying may be of less benefit in such situations.

Leaf rust in barley

Hotspots of severe leaf rust have been observed in a barley crop south of Maitland. The crop of Keel was sown early into a paddock with the alternate host Star of Bethlehem which was also carrying the rust and which would have been the source of infection for the barley.

The Star of Bethlehem, a white bulbous weed, can take infection from the black teliospores of leaf rust produced on barley straw and this provides a means for the rust to survive from one season to the next without requiring a green bridge. No similar alternate host is known for stripe rust. The barbery bush is an alternate host for wheat stem rust.

Very low levels of leaf rust have also been spotted in scattered crops from Kadina to Curramulka on the Yorke Peninsula.

Oat rust which has been very quiet the past two seasons has been observed in hot spots in a crop between Streaky

Bay and Wirrulla. It is not certain whether this is stem or leaf rust at this stage but leaf rust has been observed on wild oats around Lock.

Net form net blotch has been observed in many barley crops and particularly where they have been sown into barley stubbles. Of most concern are reports from Ed Hunt that Maritime is showing similar levels of NFNB to Keel in several crops on the Lower Eyre Peninsula. The worst situation is around Tumby Bay where coastal humidity may be making the disease more severe. These reports suggest that there may have been a further change in the NFNB pathogen population to the change in 2007 that made Keel more susceptible. Ed reports that Schooner, Sloop SA and Flagship are still looking okay. These reports will be followed up by pathogen testing in SARDI to confirm and investigate the changes.

Again growers are urged to check their crops for this pathogen since it can be very damaging on susceptible varieties. Fungicides are much more effective as a protectant than as an eradicant and so early use of a registered product is recommended.

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".



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)

wallwork.hugh@saugov.sa.gov.au,

Jenny Davidson (pulses and oilseeds)

davidson.jenny@saugov.sa.gov.au

*with a copy to **Jon Lamb Communications**
jlcom@chariot.net.au*

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.