



Cereal Rust Report

Season 2010

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Recent Rust Developments in Eastern Australia First Report of Wheat Stripe Rust in 2010

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Several rust samples have been received over recent weeks, indicating that the beginning of the cereal cropping season in 2010 in eastern Australia is favouring both crop establishment and rust development. The reports detailed below serve to remind growers and advisors that crop surveillance will be important during the winter months in order to be well prepared for any anticipated disease control contingencies in late winter-early spring. There have been no reports of cereal rusts from Western Australia in the current season to date.

Wheat Stripe Rust

The first samples confirming the presence of stripe rust in the current season were received from quite widely separated locations in central NSW in early June. Both crops were sown early for grazing opportunities, and this may help reduce inoculum loads and the subsequent spread of the disease. Stripe rust specimens from Marombi wheat, sampled from a crop near Cargo, and Endeavour triticale growing near Crookwell, were received within a day of each other. The distinctly separated locations suggest that the pathogen survived independently over the 2009-10 summer period.

It may be expected that the triticale sample will yield the 'Jackie' pathotype, whereas Marombi is expected to carry the 'WA Yr17' pathotype. These possibilities will be confirmed once data becomes available.

A note of caution in regard to Marombi. This variety is highly vulnerable to stripe rust, leaf rust and Wheat Streak Mosaic Virus. In situations where early dual infection of rust and WSMV has occurred, recovery

after grazing can be expected to be very poor and growers are advised to seek advice on available options (silage, baling, green manure, herbicide) – *ie*, well infected crops do not satisfactorily recover from grazing!

Wheat Stem Rust

In addition to samples from Glen Innes in New South Wales from a summer triticale nursery (received mid-April), the Mallee in South Australia and the Wimmera in Victoria (both received in mid-May), a further sample of stem rust was received from Longerenong (Wimmera, Victoria) in early June. These recordings serve to highlight a continuing potential for the development of stem rust in the Wimmera and Mallee regions of Victoria and South Australia, respectively.

Wheat Leaf Rust

Further leaf rust samples were received in early June, again from widely separated locations: Mackellar (Delegate, southern New South Wales; Lake Bolac, southern Victoria); Marombi (Cootamundra, southern NSW); Sunzell (Berrigan, southern NSW); Wedgetail

(Jerilderie, southern New South Wales). The widespread occurrence of leaf rust early in the growing season is of interest, given the very low levels of this disease in eastern Australia since 2005.

Oat Crown Rust

Like leaf rust of wheat, levels of crown rust of oats in eastern Australia have been very low since 2005. In contrast, 24 samples received since the beginning of April, from oat crops in southern and Northern New South Wales and Queensland, indicate that the disease is widespread and may become problematic in 2010. Four samples processed to date have been identified as pathotypes 0001-0; 0307-1,4,5,6,10,12 +Gwydir; and 0007-4,6,8,10.

Phalaris Leaf Rust

Taxonomic evidence suggests that the leaf rust infecting Phalaris pastures in autumn throughout southern NSW is a crown rust pathogen, *Puccinia coronata*. This pathogen is a complex species group, with specialisation to several hosts including oats and ryegrass. The six samples received to date have not yielded cereal infecting rust isolates and so clearly the pathogen present is distinct from the crown rust pathogen infecting oats.

GENERAL ENQUIRIES

Plant Breeding Institute
Private Bag 4011,
Narellan NSW 2567

107 Cobbitty Road
Cobbitty NSW 2570
T 02-9351 8800 (Reception)
F 02-9351 8875

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.



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