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PBI

Plant Breeding Institute
Cereal Rust Laboratory

Cereal Rust Report
Season 2007

Rust Alert

Colin Wellings*, Robert Park and Harbans Bariana
The University of Sydney, Plant Breeding Institute
*(on secondment from NSW Department of Primary Industries)

Email: colinw@camden.usyd.edu.au
Ph: 02-9351 8826, Mobile: 0424 093 236

The 2007 winter cereal season has begun well across the majority of regions in eastern Australia (NSW, Victoria, South Australia) and WA (southern districts) with adequate autumn rainfall allowing timely sowing and in some cases replenishing sub-soil moisture reserves. Crop establishment has generally been above average in these areas although some localities have struggled with water logging. In contrast the central and northern areas of WA and parts of southern Queensland remained dry in the period ending 31 May, delaying sowing operations.

First Report of Wheat Stripe Rust

Two samples of stripe rust on wheat were received at PBI on 24th July. The sample from wheat (Condamine, Queensland) was scant, although the sample from triticale (Bingara, northern NSW) was more substantial. The samples have been transferred to susceptible wheats in order to establish cultures that will then be assessed for pathotype identity.

Although the pathotype of these samples has not been identified, it is expected that the northern location of these first reports will likely yield the dominant WA pathotype, 134 E16 A+. There have been no reports of stripe rust on the *Yr17* varieties as at the time of writing.

Field nurseries at PBI are currently in the early tillering stage. The new pathotype (134 E16 A+ Yr17+) is establishing in these nurseries and data on disease response will be distributed as soon as possible.

Other Rust Samples

A number of rusted grass samples have been received at the PBI Rust Laboratory in the period April to June 2007. The obvious concern from co-operators was the possibility that these grasses could be supporting inoculum build up of cereal rusts in the early phase of cereal crop establishment. Samples were accessioned and transferred to a range of susceptible cereal test varieties, including barley, oats, wheat and rye. In each case, no rust culture could be established, confirming that these grass rusts were not supporting cereal rust pathogens.

The grass samples that were collected and dispatched were largely from *Phalaris* spp and one *Fescue* sample. The rusts on these naturalized grasses were likely forms of *Puccinia coronata* although *P. brachypodii* was also a possible candidate. Wheat stem rust (*P. graminis tritici*) and wheat stripe rust (*P. striiformis tritici*) have in the past been recorded on *Phalaris* in Australia.

General enquiries:

Plant Breeding Institute
Private Bag 11
Camden NSW 2570

107 Cobbitty Road
Cobbitty NSW 2570

Ph: 02-9351 8800 (Reception)
Fax: 02-9351 8875

Cereal rust samples may be collected and posted in paper envelopes to the following address:

Australian Cereal Rust Survey
Plant Breeding Institute
Private Bag 11
Camden NSW 2570

The Australian Cereal Rust Control Program is supported by growers through the Grains Research & Development Corporation.

GRDC
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