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Cereal Rust Report Season 2005

Wheat rust situation August 2005

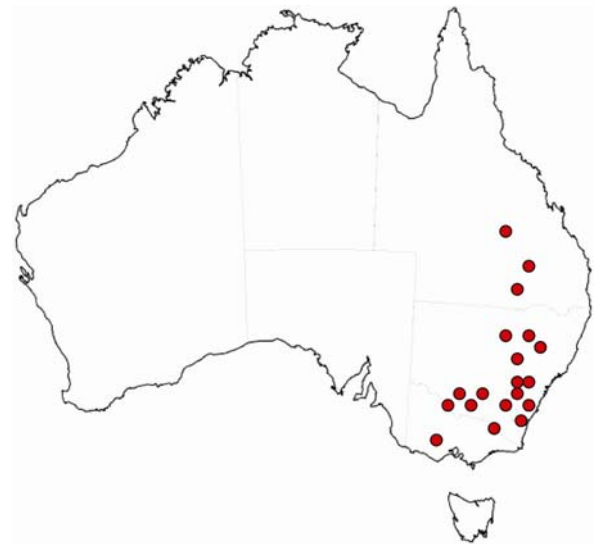
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Stripe rust

The first sample was received from Tarcutta (east of Wagga Wagga) in early June, and several more arrived at the Rust Lab in late June-early July from central NSW (Grenfell, Cowra). By mid July, further samples were received from northern NSW (Coolah, Coonabarabran, Gunnedah). By the end of July, stripe rust was confirmed from southern NSW (Wagga Wagga, Finley, Deniliquin) and southern Victoria (Lake Bolac). During August, samples were received from the same regions, and extended north to the western Darling Downs (St George, Chinchilla), and west to Swan Hill (Victoria). A notable record was a sample of stripe rust received from Bauhinia (Central Queensland) which is approximately 100km northwest of Theodore - the previous northerly limit for stripe rust in eastern Australia. At the time of writing, reports of stripe rust have been received from South Australia (north east) but samples have not been received in the lab. There have been no samples or reports from Western Australia. The map shows locations with confirmed stripe rust at the end of August.



Stripe rust samples received at PBI Rust Lab at the end of August, 2005

Pathotype determinations have, to date, yielded only the WA pathotype: 134 E16 A+. This pathotype dominated in 2004 and can be expected to reoccur in 2005.

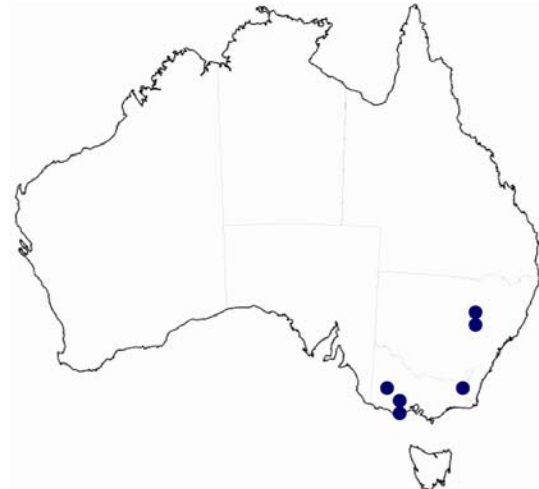
The widespread distribution of stripe rust in eastern Australia strongly suggests that the pathogen survived independently at many locations. Samples appear to have been most common from earlier sown crops of Wedgetail, Wylah and Chara. Late sown crops can be expected to be vulnerable to cross infection from more established fields. Given the relatively early beginning to the epidemic compared to last year, consideration will be given in many districts to tank mixing broad leaf herbicide with cheaper fungicide alternatives to provide protection in the crop establishment phase. However, it will be important to confirm disease diagnosis in relation to the expected variety's rust response before considering fungicide options.

Leaf rust

The first sample came from early sown MacKellar and Tennant at Cooma (southern highlands, NSW) in May. Samples from MacKellar were also received from southern Victoria in late July. The MacKellar leaf rust pathotype appears to be very unusual, and likely to be an exotic introduction from overseas. The impact of this pathotype in commercial agriculture is difficult to predict, and with this in view an isolated disease nursery has been established to determine responses of current wheats.

Leaf rust samples have also been collected from several crops of Marombi in northern NSW (Dunedoo, Liverpool Plains) in July and August. It is likely that these will yield the *Lr37* virulent pathotype, although tests have not been completed

The map shows the distribution of leaf rust at the end of August.



Leaf rust samples received at PBI Rust Lab at the end of August, 2005

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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.

