



The  
University  
of Sydney

# PBI

Plant Breeding Institute  
Cereal Rust Laboratory

Volume 5  
Issue 2  
6 September 2007

## Cereal Rust Report Season 2007

### Stripe Rust Situation Statement August 2007

**Colin Wellings**

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 first stripe rust sample received in 2007 (Jackie Triticale, Bingara NSW, late July) has been determined as the original WA pathotype, *ie* 134 E16 A+.

Following the earlier stripe rust alert in Cereal Rust Report, Season 2007 (Vol 5, Number 1, 2 August 2007), further samples have been received that provide some insight into the extent and potential for epidemic conditions in 2007. However the unseasonable dry conditions in the eastern states in July and August may have a greater influence on epidemic potential, since diminished sub-soil moisture levels are already beginning to limit yield potential. The possibility of crop failure is now being countenanced in the western districts of NSW.

The map (Figure 1) and Table 1 indicate samples received and confirmed as stripe rust at the PBI Cereal Rust Laboratory for the month of August.

Points of interest:

1. An unexpectedly high number of stripe rust affected samples of triticale have been received, in particular cultivar Jackie. The reason for this remains unclear, although the following possibilities are likely:

- Jackie was often sown early as an opportunity to provide grazing prior to stock removal for recovery and grain production. These fields were vulnerable to early infection over a longer period and so the opportunity for inoculum increase may explain the heavier than expected rust symptoms.

- The second possibility is that the pathogen has adapted to triticale through the development of a new pathotype. This possibility is being explored with experiments currently underway.

2. Early sown grazing/winter wheats, such as EGA Wedgetail and Wylah, have also shown early rust symptoms. However, stripe rust symptom developments on these wheats are consistent with expectations from previous seasons.

3. A number of samples have been received from Yr17 carrying wheats such as Sunstate, Ventura and Carinya. The levels of symptom development on these samples have been variable, although the likelihood that certain of these may carry the new Yr17 pathotype is a clear possibility. Please note that there is at present no confirmed information to support this contention.

4. There has been a greater number of samples received from the central west and north west regions of NSW, suggesting that stripe rust may have survived in these areas over summer. Favourable conditions during crop establishment in these areas in May-June may have also been a factor in encouraging early rust development.

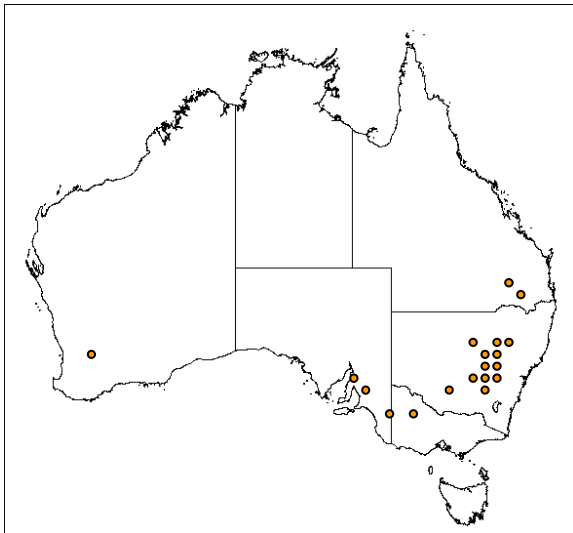


Figure 1. Locations of confirmed stripe rust samples in August 2007

Table 1. Confirmed stripe rust samples received at the Cereal Rust Laboratory in August 2007

Date	Location	Host	Notes
9 Aug	Baradine, NSW	Wylah	
17 Aug	Cowra, NSW	Wheat	Phenology trial
21 Aug	Forbes, NSW	Sunstate	
21 Aug	Crystal Brook, SA	Krichauff	
21 Aug	Forbes, NSW	Currawong	
22 Aug	Eugowra, NSW	Jackie	Triticale
22 Aug	Parkes, NSW	Jackie	Triticale
27 Aug	Condobolin, NSW	Wylah	
27 Aug	Dubbo, NSW	Wedgetail	
27 Aug	Parkes, NSW	Chara	
27 Aug	Narrabri, NSW	Wheat	Breeders trial
27 Aug	Ouyen, VIC	Speedie Wyalkatchem	Triticale
28 Aug	Gurley, NSW	Leichardt Clearfield Janz	
28 Aug	Clare, SA	H45	
28 Aug	Cumnock, NSW	Wheat	
29 Aug	Murrayville, VIC	Yitpi	
29 Aug	Cowra, NSW	Wheat	
29 Aug	Cumnock, NSW	Triticale	
30 Aug	Canowindra, NSW	Jackie	Triticale
30 Aug	Temora, NSW	Janz	
30 Aug	Cowra, NSW	Wedgetail	
30 Aug	Wongarbon, NSW	Wylah	
30 Aug	Condamine, QLD	Hartog	
30 Aug	Warwick, QLD	H45	
30 Aug	Cunderdin, WA	Calingiri	
30 Aug	Grenfell, NSW	Wylah	
30 Aug	Griffith, NSW	Wylah	
30 Aug	Cowra, NSW	Wheat	
30 Aug	Canowindra, NSW	Jackie	Triticale
30 Aug	Cowra, NSW	wheat	
31 Aug	Cootamundra, NSW	Ventura	
31 Aug	Bellata, NSW	Sunco Lang	
31 Aug	Parkes, NSW	Carinya	
31 Aug	Wagga Wagga, NSW	Wheat	

**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.

