

Leaf Rust in Barley 2011

Individual Trial Results



Trial:	RH1114			
Location:	"Graigue", ~15 km south west of North Star, NSW			
Planting date:	22/5/2011			
Plot size:	12 x 4m on 33cm row spacings			
Trial design:	Randomised complete block with four replicates			
Spray parameters:	AIXR110015 at 70 L/ha (300 kPa and 10.3 km/hr)			
Variety:	Grout			
		Crop stage	Leaf rust level	SFNB
Spray timing 1:	24/8/2011	~GS49 (awns visible)	Nil	Present
Spray timing 2:	15/9/2011	~GS59-65 (heads fully emerged) Nil	Present

Leaf rust comments:

At Timing 1, leaf rust could be found in the commercial paddock but was not detected in the trial area. There was still no leaf rust apparent on the 5th of September with disease levels also unchanged in the commercial paddock. No leaf rust was found in this trial at any assessment.

<u>Spot form net blotch</u> (*Pyrenophora teres* f *sp maculata*) was the only disease found in this trial. The graph below shows the level of SFNB diseased leaf area on the 20th of September (27DAT1, 5DAT2).



Letters of comparison are for the mean of the top 3 leaves, *p*=0.05.Treatments sharing the same letter are not significantly different

Key messages – SFNB disease severity:

- SFNB levels were very low with significant suppression from all fungicides
- Amistar Xtra 200 mL and Prosaro 300 mL provided the most effective suppression of SFNB with lowest levels of activity from the unregistered Triazole Teb at the high label rate



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Yield:



Harvested 24th of October, cv 6%

Grain quality:

Grain analysis showed no significant difference in test weight, protein, retention or screenings. Mean test weight 65 kg/hL, mean protein 9%, mean retention 97%, screenings <1%

Key messages – yield and grain quality:

- There was no significant impact from any fungicide treatment on yield
- There was no significant impact from any fungicide treatment on grain quality

Conclusion:

No leaf rust data was generated in this trial despite a low level being apparent in the surrounding commercial paddock in late August and the VS (very susceptible) rating of the variety Grout. Disease control data was generated on SFNB with the best performance from Amistar Xtra 200 mL and Prosaro. Triazole Teb does not have a SFNB label claim and at the high label rate it was the weakest fungicide on this disease. Considering the very low disease pressure, it was not surprising that there was no impact on yield or grain quality from any fungicide.

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