

Leaf Rust in Barley 2011 Individual Trial Results



Trial: RH1116

Location: "Gunnamatta", ~5 km east of Yallaroi Hall, NSW

Planting date: 18/5/2011

Plot size: 12 x 4m on 33cm row spacings

Trial design: Randomised complete block with four replicates

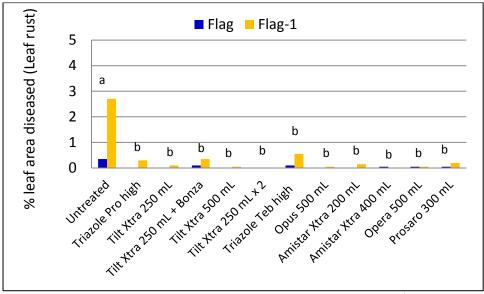
Spray parameters: AIXR110015 at 70 L/ha (300 kPa and 10.3 km/hr)

Variety: Grout(1)

		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) <1%	Present

Leaf rust comments:

At Timing 1, leaf rust could be found in the commercial paddock but was not detected in the trial area. Leaf rust was found in the Untreated at trace levels on the 5^{th} of September. Disease levels increased most rapidly in the Untreated at the end of September with levels on Flag-1 increasing from ~1% on the 21^{st} of September to ~2.7% on the 4^{th} of October. The graph below shows the level of leaf rust diseased leaf area on the 4^{th} of October (41DAT1, 19DAT2).



Letters of comparison are for the mean of the top 2 leaves on the 4^{th} of October, p=0.05. Treatments sharing the same letter are not significantly different

Key messages – leaf rust disease severity:

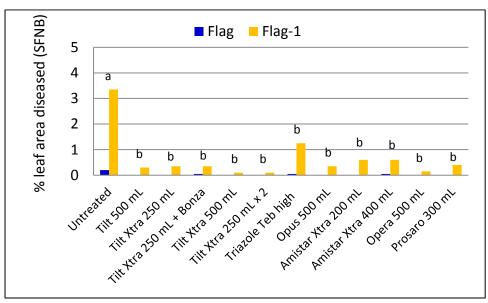
- Disease levels were very low and slow to develop with good suppression from all fungicides
- Timing 1 applications were made ~3 weeks prior to 'more rapid' disease build-up
- The most effective treatment was two applications of Tilt Xtra 250 mL with the second application during the early stages of disease build-up



Leaf Rust in Barley 2011 Individual Trial Results



<u>Spot form net blotch</u> (*Pyrenophora teres* f *sp maculata*) was also found at very low levels. The graph below shows the level of SFNB diseased leaf area on the 4th of October (41DAT1, 19DAT2).

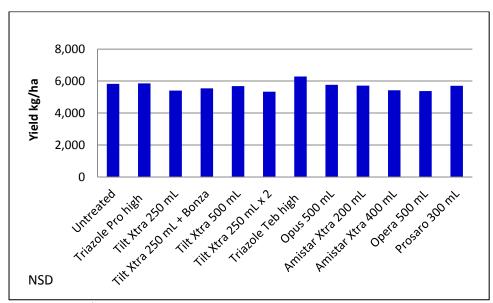


Letters of comparison are for mean of the top 2 leaves, p=0.05. Treatments sharing the same letter are not significantly different

Key messages – SFNB disease severity:

- SFNB levels very low with significant suppression from all fungicides
- All fungicides provided similar SFNB suppression on Flag-1 on the 4th of October
- Triazole Teb at the high label rate resulted in significantly poorer suppression of SFNB than other fungicides on Flag-2 on the 21st of September (data not presented)

Yield:



Harvested 24th of October, cv 12%