

## 4.2.4 ASSESSING FUNGICIDES FOR CONTROLLING BARLEY FOLIAR DISEASE - LAKE BOLAC (LANDMARK)

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**Aim:** To compare the performance of a number of foliar fungicides in barley.

**Location:** Lake Bolac, Western District Victoria

**Crop type:** Gairdner barley

**Sowing date:** 11<sup>th</sup> June 2003

**Soil:** Clay loam with good moisture

**GSR:** 384mm

**Paddock history:**  
2002 - Clover pasture  
2001 - Grass pasture

**Trial information:**  
Three replicates of small plots 1.75m x 14m

### Results:

Table 55: Summary of Monitoring and Yield Data

Treatment /ha		Leaf rust 12/11 % leaf (top 3)	Leaf rust 24/11 % leaf (top 2)	Yield T/ha	% Untreated	Screenings	Protein
Applied Z40 23 <sup>rd</sup> Oct	Applied Z58 12 <sup>th</sup> Nov						
untreated		44	94	5.02	100	20	12.7
Triad 750ml		22	58	5.40	108	16	12.8
Tilt 250ml		9	61	5.32	106	12	13.0
Amistar Xtra 400ml		6	10	5.75	115	16	13.4
BASF exp. 375ml		34	59	5.15	103	14	13.1
Opus 250ml		13	29	5.09	101	10	12.4
Opus 500ml		6	6	5.19	103	8	12.8
Tilt turbo 250ml		6	16	5.71	114	5	11.9
Rovral 250ml		9	72	5.10	102	7	10.7
Tilt 150ml	Tilt 250ml	13	58	5.35	107	8	11.4
Opus 200ml	Opus 375ml	6	12	5.44	108	8	12.1
CV				5.24%			
LSD				0.456			

### Discussion:

This trial was infected with a reasonable level of leaf rust and all treatments yielded higher than the untreated. The Amistar Xtra and Tilt Turbo treatments both yielded significantly higher than the control. When considering grain quality, Tilt turbo was best overall with significantly lower screenings.

Opus 500ml and Opus x2 treatments were also among the most effective at reducing disease, especially keeping it out at the later stage. The 250ml rate of Opus did not seem to be enough and the experimental BASF product performed quite poorly.

There did not seem to be a benefit from the second application of either treatment, probably because it was applied too late.

There was only an average correlation between disease reduction and yield with both the early and the late application,  $R^2 = -0.53$  and  $R^2 = -0.58$  respectively.