

Taking all fungicide treatments, there was no statistically significant benefit from applying fungicide in this trial, however individual treatments have outperformed the untreated and in some cases these higher yielding treatments corresponded with the best observed disease control e.g. Opus 125ml/ha + Amistar 250 ml/ha applied at GS30-31 followed by a second spray at GS39-49.

The variable nature of the plots at this site make it difficult to draw significant conclusions, it is also difficult to explain why there was a negative effect from increasing rates of trifloxystrobin (Flint) at T1 (GS30-31) when there was a slightly positive effect at T2 (GS39-49).

## 4.2.2 BARLEY FOLIAR FUNGICIDE TRIALS - SOUTH AUSTRALIA (SARDI)

**Researcher:** Trent Potter (SARDI)

### Acknowledgements:

#### Cooperating farmers:

Peter Hannaford, Frances  
Lockie Sears, Conmurra  
Paul Longbottom, Mount Benson  
Agribusiness:  
Syngenta Australia

### Objective:

The aim of these trials was to assess both yield and grain quality responses to a number of foliar fungicide products.

### Key Outcomes:

In the absence of disease at all three sites, some fungicide treatments still gave a significant yield increase over the nil treatment.

### Results:

**Table 50: Barley Foliar Fungicide Trial Results - Frances**

Fungicide Product and timing	Application rate	Frances	
		Yield (t/ha)	% site mean
Amistar Xtra (39) + Triad (55)	800 ml/ha + 500 ml/ha	7.354	107
Tilt Xtra (39)	500 ml/ha	7.252	105
Amistar Xtra (39) + (55)	400 ml/ha + 400 ml/ha	7.224	105
Amistar Xtra (39)	800 ml/ha	7.201	105
Tilt (39) + (55)	250 ml/ha + 250 ml/ha	7.152	104
Tilt Xtra (39)	250 ml/ha	7.095	103
Amistar Xtra (39)	400 ml/ha	7.083	103
Amistar Xtra (39) + Triad (55)	400 ml/ha + 500 ml/ha	6.989	102
Tilt (55)	500 ml/ha	6.944	101
Triad (39) + (55)	500 ml/ha + 500 ml/ha	6.883	100
Triad (39)	1 l/ha	6.858	100
Folicur (55)	300 ml/ha	6.805	99
Folicur (39)	300 ml/ha	6.804	99
Triad (55)	1 l/ha	6.791	99
Tilt Xtra (39) + (55)	250 ml/ha + 250 ml/ha	6.776	99
Tilt (39)	250 ml/ha	6.578	96
Nil		6.493	94
Tilt (39)	500 ml/ha	5.528	80
<b>Site Mean (t/ha)</b>		<b>6.878</b>	
<b>CV %</b>		<b>6.170</b>	
<b>LSD (t/ha)</b>		<b>0.723</b>	



**Table 51: Barley Foliar Fungicide Trial Results - Conmurra**

Fungicide Product and timing	Application rate	Conmurra	
		Yield (t/ha)	% site mean
Amistar Xtra (33) + (39)	800 ml/ha + 800 ml/ha	5.315	112
Amistar Xtra (33) + (39)	400 ml/ha + 400 ml/ha	5.062	106
Amistar Xtra (39) + (55)	400 ml/ha + 400 ml/ha	5.033	106
Tilt (39) + (55)	250 ml/ha + 250 ml/ha	5.001	105
Amistar Xtra (39)	800 ml/ha	4.915	103
Tilt Xtra (39)	250 ml/ha	4.913	103
Amistar Xtra (39)	400 ml/ha	4.840	102
Tilt (55)	500 ml/ha	4.828	101
Tilt Xtra (39)	500 ml/ha	4.800	101
Tilt Xtra (39) + (55)	250 ml/ha + 250 ml/ha	4.726	99
Tilt (39)	250 ml/ha	4.703	99
Amistar Xtra (33)	400 ml/ha	4.702	99
Amistar Xtra (33)	800 ml/ha	4.677	98
Nil		4.669	98
Folicur (39)	300 ml/ha	4.655	98
Triad (39) + (55)	500 ml/ha + 500 ml/ha	4.647	97
Tilt (39)	500 ml/ha	4.626	97
Triad (39)	1 l/ha	4.616	97
Triad (39)	500 ml/ha	4.610	97
Triad (55)	1 l/ha	4.439	93
Folicur (55)	300 ml/ha	4.364	92
Site Mean (t/ha)		4.769	
CV %		6.910	
LSD (t/ha)		0.503	

## WHEN THE GROWING GETS TOUGH... That's when you really need a Gyr!l!

Gyr!l's Ag-Boss scarifier and the heavier duty Penetrator scarichisel have been designed and built to get both winter and summer crops out of the ground, even when planting deep, under the toughest conditions.

Suited to direct drilling, zero tillage, controlled traffic and raised bed systems, in addition to conventional farming practices, they have become the preferred planting system of many successful grain growers throughout the eastern and southern states.

So... If you're serious about cropping, now's the time to get yourself a Gyr!l and start reaping the rewards.

### JB SCOTT PTY LTD

166 Victoria St, North Geelong

Ph 03 5277 9366, Fax 03 5278 6268, Mob 0418 599 125



**GYRAL IMPLEMENTS PTY LTD**

285 McDougall Street (PO Box 6046) Toowoomba Qld 4350

Phone: 07 4634 3388 Fax: 07 4633 1634 Email: info@gyral.com.au

**SEE YOUR LOCAL DEALER**



**Table 52: Barley Foliar Fungicide Trial Results – Mount Benson**

Fungicide Product and timing	Application rate	Mount Benson	
		Yield (t/ha)	% site mean
Amistar Xtra (35)	800 ml/ha	2.751	110
Amistar Xtra (59)	800 ml/ha	2.742	110
Folicur (59)	300 ml/ha	2.583	103
Triad (59)	500 ml/ha	2.583	103
Amistar Xtra (35) + (59)	400 ml/ha + 400 ml/ha	2.542	102
Amistar Xtra (35)	400 ml/ha	2.535	101
Triad (59)	1 l/ha	2.525	101
Tilt Xtra (59)	1 l/ha	2.489	100
Tilt Xtra (59)	250 ml/ha	2.460	98
Amistar Xtra (59)	400 ml/ha	2.429	97
Tilt Xtra (59)	500 ml/ha	2.412	97
Tilt (59)	750 ml/ha	2.402	96
Nil		2.399	96
Tilt (59)	250 ml/ha	2.392	96
Tilt (59)	1 l/ha	2.390	96
Tilt (59)	500 ml/ha	2.365	95
Site Mean (t/ha)		2.500	
CV %		10.17	
LSD (t/ha)		0.337	

**Comments:****FRANCES**

Conditions during the growing season in the Frances district did not favour the development of leaf diseases in barley. However, three treatments produced higher yields than the nil treatment. These treatments were Amistar Xtra at GS39 (800 ml/ha) combined with Triad at GS55 (500 ml/ha), Tilt Xtra at GS39 (500 ml/ha), and Amistar Xtra at GS39 and GS55 (400 ml/ha at each date).

**CONMURRA**

Few visual symptoms of leaf diseases were evident at the Conmurra site in 2003. However, the Amistar Xtra applied at GS33 and GS39 at 800 ml/ha produced a significantly higher grain yield than the nil treatment.

**MOUNT BENSON**

There was little disease at Mt Benson but the Amistar Xtra treatments of 800 ml/ha applied at either GS35 or GS59 produced higher grain yields than the nil treatment.

In the absence of significant disease, yield increases were measured at all three sites, often with the strobilurin fungicide. This has been shown in other trials with the maintaining of green leaf area during grain fill. Further fungicide trials will be conducted in 2004.