

3.1.2 BARLEY FUNGICIDE TRIALS (FRANCES, CONMURRA & MT BENSON, SOUTH AUSTRALIA)

2001 Grain Quality Results:

In 2001 barley yields increased at three sites (Frances, Conmurra and Mt Benson) in response to the application of foliar fungicide products. Grain quality data was not available at the time of the publication trial results last year.

Table 10: The Effect of Fungicide Application on Barley Grain Quality for Mt Benson Trial Site (2001)

Treatment	Rate	Application Time	Yield (t/ha)	Grain weight (g/1000 grains)	Screenings (% grain under 2.5mm screen)
Nil			2.051	35.2	51.5
Folicur (early)	290ml/ha	13.08.01	2.215	38.2	41.6
Folicur (late)	290ml/ha	09.10.01	2.320	41.9	28.3
Folicur (strategic)	290ml/ha	13.08.01 + 13.10.01	3.197	44.1	22.2
Tilt (early)	500ml/ha	13.08.01	2.530	37.7	41.0
Tilt (late)	500ml/ha	09.10.01	2.352	41.9	23.6
Tilt (strategic)	500ml/ha	13.08.01 + 13.10.01	3.001	44.0	24.9
Triad (early)	1L/ha	13.08.01	2.266	36.9	46.0
Triad (late)	1L/ha	09.10.01	2.367	41.7	29.5
Triad (strategic)	1L/ha	13.08.01 + 13.10.01	3.001	43.7	24.5

The treatments that are highlighted in the above table indicate those treatments that met malting quality grade requirements. That is, the late and strategic applications of all three fungicide products produced malting quality grade barley.

2002 Trial Results:

Foliar fungicides trials for the management barley leaf diseases were again conducted at Frances, Conmurra and Mt Benson.

Conditions during the growing season in the Frances district did not favour the development of leaf diseases in barley.

As a result yields did not respond to the application of fungicide products.

The major leaf disease at the Mt Benson site was Leaf Rust. The yield results are presented below. Please note grain quality data was not available at the time of printing.

Product	Application Rate	Yield (t/ha)
Nil		5.074
Folicur	150ml/ha	5.237
Folicur	300ml/ha	5.610
Folicur	600ml/ha	5.300
Tilt	250ml/ha	5.347
Tilt	500ml/ha	5.477
Tilt	1L/ha	5.700
Triad	500ml/ha	5.116
Triad	1L/ha	5.081
Triad	2L/ha	5.040

No significant yield responses were measured where a half rate of the fungicide products were applied. Significant yield increases were achieved with the standard label rates of both the Folicur (300ml/ha) and Tilt (500ml/ha) products. The double recommended label rates of Folicur and Triad did not significantly increase yields. However, the double label rate of Tilt, ie. 1L/ha did significantly increase yields. The application of Triad at all three rates did not improve yield.

The trial described above was also conducted at the Conmurra trial site. Leaf diseases were not evident in 2001 at the Conmurra site. No significant yield responses measured for this trial.

A second barley fungicide trial was conducted to compare Gairdner yield responses to the application of a strobilurin fungicide product called Amistar.

In this trial the barley yield was increased by 0.87t/ha with the application of this strobilurin product.

Product	Application Rate	Yield (t/ha)
Nil		3.946
Amistar	160g/ha	4.811