

RIVERINE PLAINS INC – RESEARCH AT WORK

Triticale maximum yield experiment

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Key message:

- Triticale does not significantly respond to N, or fungicide in dry years.

Aim:

To assess the level of input required to maximise the yields of triticale grown after wheat.

Method:

A replicated experiment was established using differing levels of post emergent N and fungicide to assess yield. The variety sown was Kosciuszko.

Location: Balldale

Growing Season Rainfall:

Annual: 232 mm

GSR: 166 mm

Soil:

Type: Red Chromosol

pH (H₂O): 4.9

P (Colwell): 42 mg/kg

Deep Soil N: 82 kg/ha

Sowing Information:

Sowing date: 28/6/2006

Fertiliser: 90 kg/ha MAP

Row Spacing: 180 mm

Paddock History:

2006 – Wheat

2005 – Wheat

2004 – Canola

Plot Size: 1.5 m x 16 m

Replicates: 4

Results:

Table 2: Summary of Yield (t/ha) and Gross Margin (whole \$/ha) results for Triticale

Treatment Description	Yield (t/ha)	Gross Margin (\$/ha)
0 N ¹	0.67	66
20 N ¹	0.85	96
40 N ¹	0.97	148
60 N ¹	0.89	69
80 N ¹	0.79	21
100 N ¹	0.65	-41
120 N ¹	0.42	-128
Fungicide ² 0 N	0.69	64
Fungicide ² 20 N	0.94	117
Fungicide ² 40 N	1.05	164
Fungicide ² 60 N	0.72	13
Fungicide ² 80 N	0.60	-41
Fungicide ² 100 N	0.50	-92
Fungicide ² 120 N	0.41	-135
LSD (0.05)	0.23	84

1 – Rate of post emergent N applied at Z31.

2 – One application of 500 ml/ha of 125 g/L Triadimefon fungicide at Z30.

Observations and comments:

- Addition of 40 kg/ha of N significantly increased the yield of triticale.
- Addition of fungicide did not significantly increased yield.
- The most economic treatment (gross margin) was 40 kg/ha of N with or without fungicide.

Sponsors:

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