# Wheat fungicide experiment

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**Location:** Balldale
**Growing Season Rainfall:**
Annual: 232 mm
GSR: 166 mm
**Soil:**
Type: Red Chromosol
pH ($H_20$): 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

**Key messages:**

- Seed and fertilizer dressings and in-crop fungicides did not give a response in wheat in a drought year.
- Ventura and H45 yielded better than Diamondbird in 2006.

**Aim:**
To assess different fungicide timing and dressings for Stripe Rust control on the yield of a number of wheat varieties.

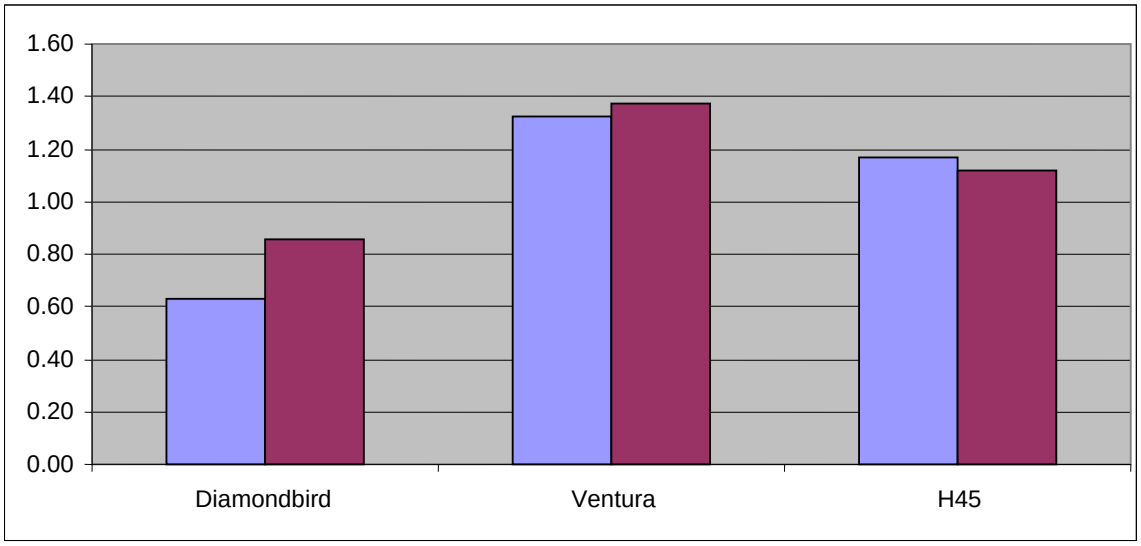
**Method:**
A replicated experiment was established comparing different fungicides and seed or fertilizer dressings for their ability to control Stripe Rust on a number of varieties.

**Results:**

**Table 5: Summary of Yield (t/ha) and Gross Margin ($/ha over 0N) results**

| Treatment | Yield (t/ha) | Gross Margin ($/ha over 0N) |
|---|---|---|
| Nil Seed Treatment, Nil Fungicide | 0.63 | 70 |
| Nil Seed Treatment, Fungicide[1] Z31 | 0.67 | 75 |
| Nil Seed Treatment, Fungicide[1] Z31 + Z39 | 0.63 | 25 |
| Nil Seed Treatment, Fungicide[1] Z39 | 0.79 | 110 |
| Nil Seed Treatment, Fungicide[1] Z45 | 0.78 | 96 |
| Jockey, Nil Fungicide | 0.61 | 57 |
| Jockey, Fungicide[1] Z31 | 0.79 | 100 |
| Jockey, Fungicide[1] Z31+Z39 | 0.83 | 99 |
| Jockey, Fungicide[1] Z39 | 0.79 | 102 |
| Jockey, Fungicide[1] Z45 | 0.77 | 88 |
| Impact, Nil Fungicide | 0.80 | 101 |
| Impact, Fungicide[1] Z31 | 0.75 | 84 |
| Impact, Fungicide[1] Z31 + Z39 | 0.68 | 48 |
| Impact, Fungicide[1] Z39 | 0.81 | 100 |
| Impact, Fungicide[1] Z45 | 0.80 | 85 |
| Impact(1.5)[2], Nil Fungicide | 0.86 | 111 |
| Impact(1.5)[2], Fungicide[1] Z31+Z39 | 0.64 | 30 |
| Impact(1.5)[2], Fungicide[1] Z39 | 0.79 | 93 |
| Triad, Nil Fungicide | 0.64 | 73 |
| Triad, Fungicide[1] Z31 | 0.73 | 93 |
| Triad, Fungicide[1] Z31 + Z39 | 0.79 | 97 |
| Triad, Fungicide[1] Z39 | 0.84 | 126 |
| Triad, Fungicide[1] Z45 | 0.73 | 84 |
| H45, Nil Fungicide | 1.17 | 226 |
| H45, Fungicide[1] Z31+Z39 | 1.12 | 190 |
| Ventura, Nil Fungicide | 1.33 | 269 |
| Ventura, Fungicide[1] Z31+Z39 | 1.37 | 272 |
| LSD (0.05) | 0.29 | |

1 – In crop application of Triadimefon applied at growth stage indicated. 2 – Impact applied at 1.5 x recommended rate. Variety is Diamondbird unless otherwise stated. Z – Zadock growth stage.




Blue hatched bar – No added fungicide. Red bar – With Triadimefon fungicide sprays at Z31 and Z39.

**Figure 9. Variety Yield (t/ha) Comparison**

**Observations and comments:**

- Fungicides gave little response in the drought conditions of 2006.
- The best yields were achieved by the varieties H45 and Ventura, which both yielded significantly more (60-75%) than Diamondbird.
- Ventura had the best Gross Margin, averaging about $150-180 /ha above Diamondbird.
- Protein and grain quality (not reported) was good (high protein and low screenings) and not significantly affected by applications of fungicide.

**Sponsors:**

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