

1.4 Landmark Oat and Fungicide Interaction Trial

Location or Trial: Yalla Y Poora Research Site 2006

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Background: Oats are traditionally grown throughout south west Victoria for feeding to stock if quality attributes are not met for the milling markets. Little or no research has been undertaken to evaluate benefits of foliar fungicide treatments when compared to the traditional, do nothing regime, to increase the potential of premium returns for this crop.

Objectives: To determine the least cost foliar fungicide application method to maximise the potential of achieving milling grade oats for south west Victoria.

Growing Season Rainfall (Apr – Nov): 269mm and total 392mm

Trial Design: The randomised trial comprised of 10 treatments, including a control, over four repetitions.

Sowing Date: 9/6/06

Sowing Rate: a target of 200 plants/m²

Trial Inputs:

- Sprayseed @ 2L/ha (9/6/06)
- Seed Treatment: Hombre @ 400mls/100kg seed.
- Post emergence weed control: Tigrex @ 500mls/ha on 28/7/06
- Fertiliser: MAP fertiliser at 100kg/ha at sowing (9/6/06)
 - liquid Easy N applied at 50L/ha + 150L/ha water using drizzle nozzles (20/9/06 – growth stage 32)
- Fungicides were applied according at two timings: Growth Stage 31-32 (1st and 2nd node detectable) on 12/9/06 and Growth Stage 39-49 (flag leaf emerged and booting) on 3/10/06.

Treatment List:

- 1 Tilt @ Growth Stage 32, 250mls/ha
- 2 Tilt @ Growth Stage 39, 250mls/ha
- 3 Tilt @ Growth Stage 32 & 39, both applications 250mls/ha

- 4 Tilt Xtra @ Growth Stage 39, 250mls/ha
- 5 Folicur @ Growth Stage 39, 145mls/ha
- 6 Opus @ Growth Stage 39, 125mls/ha
- 7 Opus @ Growth Stage 39, 250mls/ha
- 8 Triad @ Growth Stage 39, 200g/ha
- 9 Amistar Xtra @ Growth Stage 39, 400mls/ha
- 10 Untreated

Harvest Date: 25/1/07

Trial Results: There were no significant yield differences between the treatments with an average of 1.37 t/ha. There were similar results for the test weights of all treatments but there was a significant difference between the highest – 400mls/ha Amistar Xtra at GS 39 – and the lowest – 250mls Tilt at GS 32.

Trial Observations: The later seeding date and dry season did contribute to little variation in the trial. Variations that did occur seemed more based on soil type differences. The application of Easy N did seem to burn the flag leaf (Picture 1) post application, possibly allowing for infection of ‘red leather leaf’ disease. Fungicides had little effect in managing this problem.

Picture 1: Visual Affects of Liquid N the Oat crop

