

Wheat Variety Evaluation – West Dalwallinu

Aim: To compare new and existing wheat variety yields within the grain testing area Agzone 2.

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Company: Landmark - AWB



Farmer: Rob Harris

Location: Dalwallinu West Rd, Dalwallinu

Background: With the expansion of the number of breeding programs accessing WA and delivering new varieties to the market, coupled with the susceptibility of many of the existing cultivars to Stripe Rust there is a continual need for regional field evaluation to identify new variety production advantages.

Trial Details:

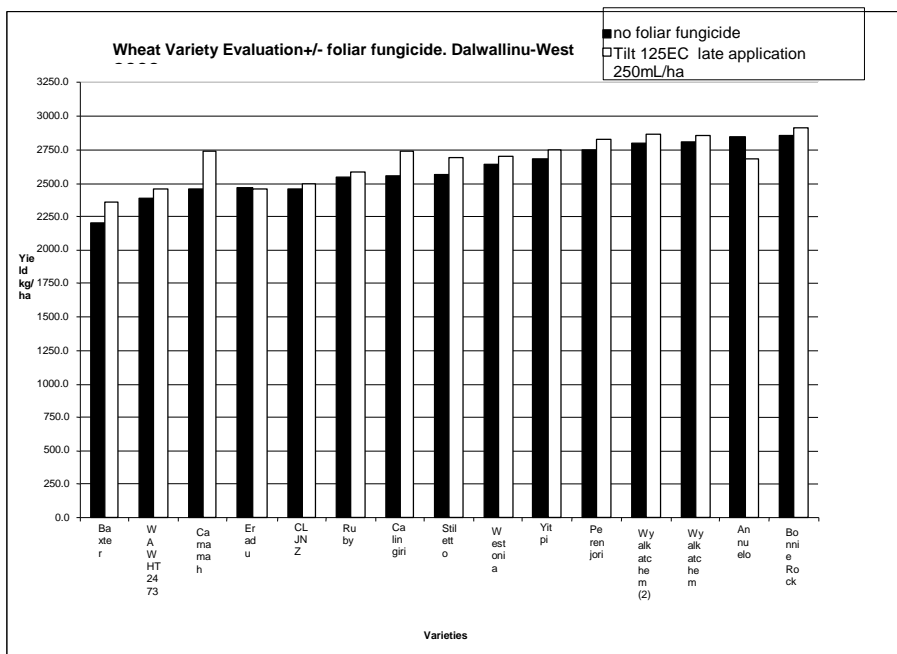
Plot size and replication	20m x 1.4m, 3 replicate. Triple bank, each bank split to 10m with plus and minus fungicide application.
Soil type	Brown sandy loam
Sowing date	22 nd May 2003
Conditions at sowing	Worked prior to seeding, moisture surface to depth
Machinery	Landmark –AWB R&D cone seeder, 7 inch spacing knifepoint and press wheel
Seeding rate	75 kg/ha
Fertiliser	CSBP Agstar 85 kg/ha mid rib banded & Urea 80 kg/ha top-dressed and incorporated by sowing
Herbicides, Insecticides & Fungicides	Pre- sow 22 nd May 2003: Spray seed 1.2 L/ha, Triflur X (480)1.2 L/ha & Logran B Power 50 g/ha Post-sow 2 nd July 2003: Broadside 750 mL/ha 27 th August 2003: Tilt 125EC 250 mL/ha applied to rear 10 metres of each 20m plot
Paddock History	2002 = Pasture, 2001 = Wheat, 2000 = Wheat

Results: Grain protein and test weight analysis were not available at the time these results were tabled and therefore only the yield comparison can be evaluated. There was no disease evident at the time of fungicide application however a late, low to medium level of Septoria infestation was observed.

The foliar fungicide application, although it was applied late and growth stage was variable (early booting to early-mid head emergence) due to varietal differences in maturity, does show a positive response trend however not significant within the bounds of each variety. No seed dressing or in-furrow fungicides were applied or used.

Table 1: Grain yield and % of control (Carnamah no foliar)

Treatment number	Variety and foliar application	% of control	Yield kg/ha
1	Wyalkatchem	114%	2807.56
2	Annuelo	116%	2847.45
3	Baxter	89%	2198.27
4	Bonnie Rock	116%	2853.27
5	Calingiri	104%	2557.76
6	Carnamah (control)	100%	2460.20
7	CL JNZ	100%	2450.11
8	Eradu	100%	2465.10
9	Perenjori	112%	2747.77
10	Stiletto	104%	2563.79
11	Westonia	107%	2640.26
12	Yitpi	109%	2674.11
13	WAWHT 2473	97%	2387.43
14	Wyalkatchem (2)	114%	2798.99
15	Ruby	104%	2551.62
16	Wyalkatchem + foliar (Z53)	116%	2858.11
17	Annuelo + foliar (Z49)	109%	2679.20
18	Baxter + foliar (Z49)	96%	2357.85
19	Bonnie Rock + foliar (Z57)	118%	2912.69
20	Calingiri + foliar (Z45)	111%	2734.99
21	Carnamah + foliar (Z53)	111%	2733.58
22	CL JNZ + foliar (Z49)	101%	2489.73
23	Eradu + foliar (Z59)	100%	2456.53
24	Perenjori + foliar (Z47)	115%	2822.28
25	Stiletto + foliar (Z45)	109%	2687.05
26	Westonia + foliar (Z59)	110%	2701.37
27	Yitpi + foliar (Z43)	112%	2749.36
28	WAWHT 2473 + foliar (Z49)	100%	2449.40
29	Wyalkatchem (2) + foliar (Z53)	116%	2864.75
30	Ruby + foliar (Z49)	105%	2588.47

**Summary:**

- Top 3 hard wheats - EGA Bonnie Rock, Annuelo & Wyalkatchem.
- Top noodle wheat – Calingiri.

- The foliar fungicide was applied after the optimum application window (flag leaf emergence), even though there was no disease evident at the time of application.