

Wheat CVT

Aim: To evaluate and compare the genetic potential of a range of new and soon to be released local and interstate wheat varieties in the Wubin region.

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Company: Agritech Crop Research



Farmer: Keith Carter
Location: Liebe Main Trial site, Jibberding Hall Rd, Wubin

Background: In recent years a number of wheat varieties from a range of public and private institutions have been and are about to be introduced into farming systems across Australia. Often varieties are released to growers due to commercial pressures, or from grower demand as a result of poor performance of existing varieties. Some varieties are released with only limited information on key aspects such as quality, harvestability, disease resistance and profitability.

Variety adoption is often reliant on grower experimentation to determine their regional suitability. With increased varieties becoming available, growers do not have the time or capacity to fully test all new lines. The role of Agritech Crop Research is to independently evaluate in small plot trials, new and soon to be released wheat varieties that have possible application across a wide range of WA soil types and environmental conditions.

Variety evaluation for the 2003 season was severely interrupted due to the discovery of the Wheat Streak Mosaic Virus. As a result many eastern state wheat varieties destined for evaluation in the GRDC funded variety trials were quarantined. As a stopgap measure we replaced all the quarantined lines with varieties from our Old Wheat trials. This has resulted in the very first varieties released in WA competing with the latest releases from the various breeding programs. Much of the material is for general interest and nostalgia. There are a few lines of new and innovative material that may benefit growers in the region.

Trial Details:

Plot size and replication	2.2m x 20m
Soil type	Duplex Sand / Sandy Loam
Sowing date	15 th May
Conditions at sowing	Marginal moisture
Machinery	Knife Point Minimum Till with press wheels (Morris Gumbo boots)
Sowing rate	75 kg/ha
Seeding Depth	3 cm
Row spacing	22 cm
Paddock History	2002 = Failed lupins, 2001 = Wheat, 2000 = Pasture

Trial Inputs:

Date	Treatment	Rate		Notes
15 th May 2003	Agstar CZM	100	kg/ha	Banded
15 th May 2003	Glyphosate	1.5	L/ha	IBS
15 th May 2003	Logran	35	g/ha	IBS
15 th May 2003	Chlorpyrifos	1	L/ha	IBS
15 th May 2003	Trifluralin	1.5	L/ha	IBS
3 rd July 2003	Urea	80	kg/ha	Top dressed post em
15 th July 2003	Giant	1.2	L/ha	Post emergent
15 th July 2003	Achieve	380	g/ha	Post emergent
15 th July 2003	Supercharge	0.75	% v/v	Post emergent

NB: Additional variety information is continually updated and can be accessed on the Agritech website www.agritech.com.au.

Results:

Trt No.	Variety	Yield (t/ha)		Trt No.	Variety	Yield (t/ha)
14	Yitpi	2.36		18	Carnamah	1.66
27	EGA Blanco	2.28		36	Gamenya	1.65
4	Braewood	2.20		5	GBAShenton	1.56
32	Tammin	2.20		10	Sunlin	1.54
29	WAWHT2193	2.12		24	Petrie	1.52
37	Nyabing	2.10		15	Lang	1.50
19	Calingiri	2.08		9	Nabawa	1.50
20	Camm	2.08		8	Mitre	1.49
6	GBARuby	2.04		3	Baxter	1.43
22	Stiletto	1.99		17	Lorikeet	1.40
23	Bonnie Rock	1.93		30	Combat	1.37
25	WAWHT2525A	1.87		11	Gresley	1.33
13	Wyalkatchem	1.86		7	Florence	1.31
31	Arrino	1.80		28	Castle Rock	1.29
26	WAWHT2499	1.79		33	Penny	1.26
35	Darkan	1.77		12	Gabo	1.26
34	Warimba	1.76		2	Babbler	1.23
38	Falcon	1.76		39	Insignia	1.01
21	Chara	1.69		1	Federation	0.92
16	Drysdale	1.66				

Economic Analysis: Income \$/ha includes premiums and freight

Variety	Yield t/ha	Yield % of Wyalkatchem	Protein %	Screenings %	Weight kg/hl	Payment Grade	Income \$/ha
Yitpi	2.363	127%	11.0	2.6%	80.72	APW	\$495.64
Braewood	2.203	119%	11.8	6.6%	82.18	APW	\$456.02
WAWHT2193	2.121	114%	11.5	2.0%	82.88	APW	\$452.83
EGA Blanco	2.278	123%	11.1	9.3%	81.82	APW	\$448.20
Camm	2.081	112%	11.9	3.5%	81.20	APW	\$444.81
Calingiri	2.083	112%	11.6	3.4%	79.48	ASWN	\$432.22
GBA099 Ruby	2.043	110%	11.2	3.4%	84.50	APW	\$425.97
Stiletto	1.987	107%	11.8	3.4%	82.28	APW	\$424.72
Nyabing	2.102	113%	12.0	3.4%	81.30	ASW	\$419.35
WAWHT2525A	1.869	101%	12.8	3.6%	78.60	AH	\$416.79
Bonnie Rock	1.929	104%	12.2	4.7%	83.08	AH	\$410.88
Wyalkatchem	1.856	100%	12.2	1.5%	82.00	APW	\$403.68
WAWHT2499	1.794	97%	11.7	4.7%	80.82	AH	\$374.05
Arrino	1.797	97%	12.3	2.5%	80.48	ASW	\$362.54
Drysdale	1.658	89%	12.5	7.7%	81.26	AH	\$347.77
Carnamah	1.656	89%	12.2	5.7%	78.34	AH	\$347.35
Chara	1.694	91%	11.6	9.6%	78.86	APH	\$334.14
Sunlin	1.543	83%	12.1	4.5%	76.20	AH	\$328.66
GBA246 Shenton	1.562	84%	11.3	4.0%	82.00	APW	\$327.24
Petrie	1.520	82%	12.3	9.8%	81.68	AH	\$312.74
Baxter	1.426	77%	12.4	7.9%	78.16	APH	\$299.10
Castle Rock	1.288	69%	13.6	8.5%	76.76	APW	\$267.26
Lorikeet	1.397	75%	14.5	9.3%	78.98	ASW	\$262.29
Penny	1.264	68%	11.6	2.3%	74.96	ASW	\$251.22
Lang	1.503	81%	14.8	15.9%	75.16	FEED	\$237.85
Mitre	1.492	80%	11.8	15.2%	72.66	FEED	\$236.11
Combat	1.368	74%	13.1	11.4%	79.56	FEED	\$216.49
Babbler	1.225	66%	13.7	17.7%	76.92	FEED	\$192.63

Technically Reviewed by: Ashley Bacon*Cereal Research Results*