Barley Variety Trial 2015

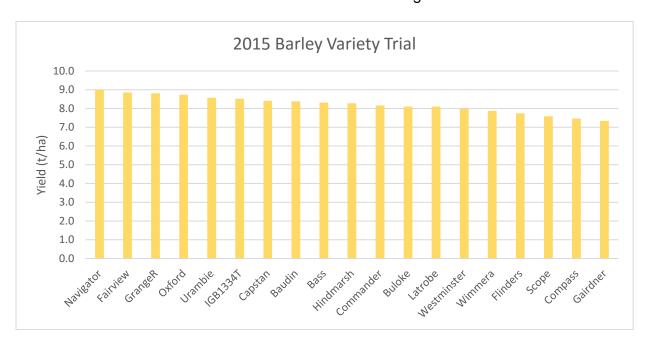
Sown on May 6th into moist soil following pre-irrigation in April, the trial got away to a reasonable start. Sowing rates varied from 91 to 115 kg/ha depending on seed size, targeting an establishment of 175 plants/m². Emergence was consistent across the trial and plant counts indicated establishment was slightly below target at 163 pl/m².

100 kg N/ha was applied in two topdressings in June and August to bring the total N budget to 240 kg N/ha, enough for a 7 t/ha crop. This budget was based on the deep N soil test taken in April prior to pre-irrigation as per our usual practice, as well as an estimate of mineralisation through the season of 60 kg N/ha.

The trial received a fungicide (propiconazole@ 250 ml/ha) in mid-July as there was some spot form of net blotch present as a recent rain. Little foliar disease was observed later in the season.

First spring irrigation was on September 6th, the second on September 18th. And the third on October 2nd. The trial did receive a fourth irrigation on October 16th, which was probably unnecessary, but as the trial was in the same bay as the fabas and was unavoidable.

The trial was harvested on November 20th and averaged 8.22 t/ha.



The Least Significant Difference (LSD) for the trial was 0.67 t/ha.

Of note is the new Imi-tolerant barley IGB1334T, recently named Spartacus CL. Yield was good and lodged less than Scope.

Lodging was reduced this season, despite the wind and frequent irrigation. The table below shows the lodging scores, where a "0" means the variety stood straight up with no lodging, and a "9" would represent the variety lying flat on the ground.

Variety	Yield	Protein	Screen	Retention	Test Wt	Lodging	Height
	t/ha	%	%	%	kg/hl	Score	(cm)
Navigator	8.99	9.8	1.8%	93.4%	66.6	0	65
Fairview	8.85	10.7	2.3%	88.2%	71.6	0	80
GrangeR	8.81	10.6	1.4%	94.8%	71.2	0	85
Oxford	8.73	9.3	4.7%	80.7%	66.6	0	65
Urambie	8.57	10.9	6.5%	72.7%	69.8	2	75
Spartacus CL	8.52	11.1	3.9%	83.7%	68.6	0	70
Capstan	8.41	10.2	6.6%	66.8%	64.0	1	65
Baudin	8.38	10.7	1.8%	92.0%	69.1	0	75
Bass	8.31	11.3	0.6%	97.4%	71.0	1	80
Hindmarsh	8.28	11.5	4.1%	84.5%	68.2	1	75
Commander	8.16	10.6	4.3%	83.5%	70.0	5	80
Buloke	8.10	10.9	2.4%	86.1%	70.1	2	85
Latrobe	8.10	11.1	3.9%	85.1%	69.2	0	70
Westminster	7.99	10.4	1.1%	94.5%	69.4	1	85
Wimmera	7.87	11.5	3.9%	85.2%	68.5	1	80
Flinders	7.74	10.7	0.6%	96.3%	71.2	0	70
Scope CL	7.59	10.8	1.8%	88.5%	67.3	2	80
Compass	7.46	9.9	0.7%	96.9%	70.5	4	80
Gairdner	7.34	11.0	4.9%	83.8%	66.6	2	85

p <0.001 lsd 0.67 cv% 5.90

Barley	2010	2011	2012	2013	2014	2015	Average	ICP
Oxford	120%		123%	114%	109%	107%	115%	108%
Urambie		100%	101%		114%	105%	105%	
Westminster		123%	114%	104%	103%	98%	108%	
Fairview					102%	108%	105%	104%
Granger				98%	107%	108%	104%	
Hindmarsh	100%	115%	115%	96%	103%	101%	102%	96%
Capstan	95%				98%	103%	100%	104%
Commander	100%	100%	100%	100%	100%	100%	100%	100%
Bass				100%	105%	102%	99%	96%
LaTrobe						99%	99%	
Gairdner	78%	117%	111%		90%	90%	97%	87%
Baudin	95%	106%		99%	100%	103%	96%	94%
Wimmera					103%	96%	96%	96%
Navigator					93%	110%	96%	92%
Buloke	97%	107%		90%	90%	99%	93%	90%
Compass					94%	91%	93%	
Scope					87%	93%	90%	
Commander t/ha	7.34	6.38	7.92	8.23	6.35	8.16	6.94	7.17

The above table summarises the performance of the varieties compared to Commander from the trials conducted at Kerang, as well as from the Irrigated Cereals Project (ICP) that was across a number of sites in the Murray and Murrumbidgee Valleys over 4 years.