

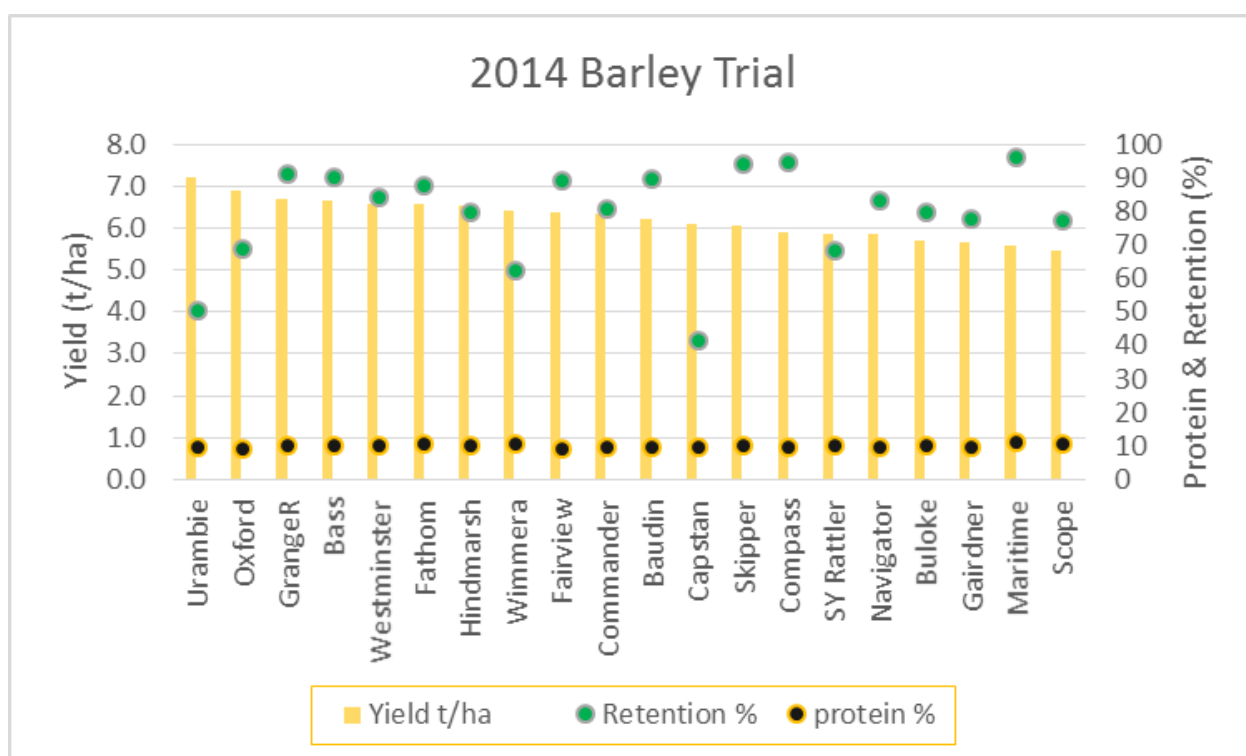
Barley Variety Trial 2014

Sown on May 1st into quite moist soil following pre-irrigation in April, the trial got away to a good start. Sowing rates varied from 76 to 110 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 on target.

80 kg N/ha was applied in two topdressings in June and July to bring the total N budget to 210 kg N/ha, enough for a 6.5 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. As the soil was quite wet through June and July, there was the potential for some N to be lost through denitrification. Protein levels were a little below the target, so N losses were not as bad as expected, especially compared to the wheat trial. Protein was generally in the 9.5 – 10.5 % range.

The trial received a fungicide (tebuconazole at 145 ml/ha) in late July as there was quite a lot of spot form of net blotch present as a result of the wet winter. Little disease was detected later in the season.

First spring irrigation was on August 25th, and the second on September 19th. The trial did receive a third irrigation on October 15th, which was probably unnecessary, but as the trial was in the same bay as the wheat trial it was unavoidable. The trial was harvested on November 14th and averaged 6.23 t/ha.



The Least Significant Difference (LSD) for the trial was 0.47 t/ha.

Lodging was more prevalent this season, not helped by windy conditions throughout the later part of the season, particularly around irrigation. The table below shows the

lodging scores, where a “9” means the variety stood straight up with no lodging, and a “0” would represent the variety lying flat on the ground.

Variety	Yield (t/ha)	Lodging	Height (cm)
Urambie	7.20	9	70
Oxford	6.88	8	70
GrangeR	6.69	8	70
Bass	6.65	9	70
Westminster	6.58	8	80
Fathom	6.57	7	75
Hindmarsh	6.52	7	70
Wimmera	6.40	7	75
Fairview	6.38	9	80
Commander	6.35	7	70
Baudin	6.21	9	60
Capstan	6.09	8	60
Skipper	6.07	6	70
Compass	5.91	7	90
SY Rattler	5.86	8	80
Navigator	5.85	9	70
Buloke	5.71	8	85
Gairdner	5.67	8	90
Maritime	5.57	8	70
Scope	5.45	9	75

p	<0.001
lsd	0.47
cv%	4.6

Barley	2008	2009	2010	2011	2012	2013	2014	Ave	ICP
Oxford			120%		123%	114%	108%	116%	108%
Westminster				124%	114%	104%	104%	112%	
Vlamingh	108%	115%	97%					107%	98%
Urambie				99%	109%		113%	107%	
Hindmarsh	96%	89%	100%	115%	115%	96%	103%	102%	96%
GrangeR						105%	98%	102%	
SY Rattler				118%		92%	97%	102%	
Commander	100%	100%	100%	100%	100%	100%	100%	100%	100%
Fleet	92%	87%	105%	114%				100%	93%
Capstan	117%	89%	95%				96%	99%	104%
Bass	89%					100%	105%	98%	96%
Gairdner	94%	98%	78%	117%	111%		89%	98%	87%
Wimmera		90%					101%	96%	96%
Fitzroy	82%	87%	105%	106%				95%	95%
Baudin	83%	89%	95%	106%		99%	98%	95%	94%
Buloke	76%	95%	97%	107%		90%	90%	93%	90%
Flagship	98%	92%	89%					93%	89%
Navigator	84%						92%	88%	92%
Scope							88%	88%	
Schooner	77%	78%	78%					78%	81%
Commander t/ha	6.31	4.79	7.34	6.38	7.92	8.23	6.35	6.76	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.