

Comparison of barley varieties

Key findings

- The average yield for all barley varieties at Hart was 0.92t/ha ranging from Hindmarsh (1.33t/ha) to Oxford (0.23t/ha)

Why do the trial?

To compare the performance of new barley varieties and lines against the current industry standards.

How was it done?

Plot size 1.5m x 10m **Fertiliser** DAP @ 75kg/ha + 2% Zn

Seeding date 29th May 2008

The trial was a randomised complete block design with 3 replicates and 21 varieties.

All plots were assessed for grain yield, protein, test weight, screenings with a 2.2mm screen and retention with a 2.5mm screen.

Results

The feed varieties Hindmarsh (1.33t/ha) and Fleet (1.14t/ha) and the malting varieties Schooner (1.17t/ha) and SloopSA (1.20t/ha) were the highest yielding barley varieties (Table 1).

Grain protein ranged between 13.7% (Keel) and 18.8% (WI3930).

All varieties produced screenings above 50% and test weight below 64kg/hL. Maritime had by far the lowest screenings of the feed varieties at 58%.

Retention for all varieties (greater than 2.5mm) was less than 3%.

Table 1: Grain yield (t/ha), protein (%), test weight (kg/hL) and screenings (<2.2mm) for barley varieties at Hart in 2008.

Quality	Variety	Grain Yield (t/ha)		Protein (%)		Test weight (kg/hL)		Screenings (%)	
		% of SloopSA	% of SloopSA	% of SloopSA	% of SloopSA	% of SloopSA	% of SloopSA		
Feed	Barque	1.05	87	16.0	100	62.0	102	70	77
	Capstan	0.96	80	16.9	106	56.5	93	92	100
	Fleet	1.14	95	15.5	97	57.4	94	85	93
	Hannan (WA2321)	0.83	69	16.0	100	52.5	86	94	103
	Hindmarsh	1.33	110	15.4	97	55.8	92	96	105
	Keel	1.03	86	13.7	86	48.7	80	95	104
	Lockyer (WA2288)	0.93	77	16.3	103	54.9	90	94	103
	Maritime	0.90	75	15.3	96	58.2	96	58	63
	Roe (WA2310)	1.13	94	16.1	101	58.2	96	91	99
	Yarra	0.97	81	16.4	103	52.3	86	92	100
	Baudin	0.76	63	15.3	96	50.1	82	97	106
	Buloke	0.79	66	14.9	93	57.1	94	91	99
	Malting	Commander (WI3416)	0.91	76	15.3	96	59.2	97	80
Flagship		1.11	93	15.3	96	60.1	99	97	106
Gairdner		0.49	41	16.3	103	58.0	95	87	96
Oxford		0.23	19	15.2	95	*	*	53	58
Schooner		1.17	97	16.3	103	64.0	105	87	95
SloopSA		1.20	100	15.9	100	60.9	100	92	100
Vlamingh		0.65	54	17.5	110	54.5	89	90	99
Hull-less	WI3930	1.11	92	18.8	118	61.2	101	99	108
Yet to be classified	WI4262	0.64	53	17.2	108	61.5	101	74	80
Site Mean		0.92	77	16.0	100	57.2	94	86	94
LSD (0.05)		0.20	17	0.9	5	1.8	3	9	10