

## Comparison of wheat varieties

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### Key findings

- Axe was the highest yielding wheat variety, at 1.13t/ha.
- Generally the early maturing varieties were higher yielding compared to the late maturing varieties.

### Why do the trial?

To compare the performance of new wheat 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**                29<sup>th</sup> May 2008

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

Plot edge rows were removed prior to harvest.

All plots were assessed for grain yield, protein, test weight and screenings with a 2.0 mm screen.

### Results

Axe was the highest yielding wheat variety at Hart in 2008 (1.13t/ha) and was also among the highest yielding varieties at Hart in 2007.

The APW varieties Espada and Wyalkatchem, and hard varieties Bullet, Peake and Young produced similar yields and were 20% below Axe (Table 1). 4 out of 5 of these varieties are either early or early-mid maturing varieties.

Across the trial grain protein ranged from 14.8% to 16.8%, the average was 15.7%.

None of the varieties tested produced a test weight above the required 74kg/hL for APW. Varieties which produced test weight below 67kg/hL (or 95% of Yitpi) were Pugsley, Barham, Axe, Bullet and Correll.

The lowest value for screenings was 9.5% for Espada wheat. Varieties that produced screenings above 30% included Bullet (51%) and Young (37%).

Table 1: Grain yield (t/ha), protein (%), test weight (kg/hL) and screenings (%) of wheat varieties at Hart in 2008.

Quality	Variety	Grain yield (t/ha)	% of Yitpi	Protein (%)	% of Yitpi	Test weight (kg/hL)	% of Yitpi	Screenings (%)	% of Yitpi	Maturity
APW	AGT Scythe	0.77	122	15.5	95	70.1	101	12	82	Early-Mid
	Espada (RAC1263)	0.85	135	15.4	95	69.3	99	9	64	Mid
	Frame	0.31	49	14.8	91	*	*	13	85	Mid-Late
	Guardian	0.58	92	15.1	93	72.3	104	17	118	Early
	Pugsley	0.43	68	15.3	94	66.4	95	14	93	Mid-Late
	Wyalkatchem	0.88	140	15.1	93	68.3	98	10	71	Early-Mid
ASW	GBA Ruby	0.80	127	16.8	104	68.0	97	23	155	Early-Mid
	Krichauff	0.67	107	15.7	97	68.1	98	20	133	Mid
Soft	Barham	0.74	118	16.3	101	65.6	94	21	140	Early-Mid
	Axe (RAC1192)	1.13	179	14.9	92	66.5	95	21	143	Early
Hard	Bullet	0.95	150	15.3	95	63.1	91	51	345	Early
	Catalina	0.81	129	16.0	99	69.8	100	20	136	Early-Mid
	Clearfield JNZ	0.46	73	15.2	94	*	*	12	83	Mid
	Correll	0.64	102	16.7	103	66.2	95	13	91	Mid
	Derrimut	0.75	118	15.9	98	71.6	103	23	155	Early-Mid
	Gladius (RAC1262)	0.80	127	16.0	98	69.4	100	11	75	Early-Mid
	Peake	0.88	140	15.7	97	68.1	98	26	180	Early
	Yitpi	0.63	100	16.2	100	69.7	100	15	100	Mid-Late
	Young	0.92	146	16.2	100	69.2	99	36	248	Early
	Yet to be classified	LRB04-0965	0.65	103	15.4	95	71.6	103	21	144
	WI25057	0.66	104	15.8	97	68.9	99	26	177	
	Site Mean	0.73	116	15.7	97	68.7	99	20	134	
	LSD (0.05)	0.13	20	0.6	3	3.2	5	6	40	