

Comparison of durum varieties

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Key findings

- The grain yield results were very good, averaging 3.72 t/ha for the trial compared to average wheat and barley trial grain yields of 4.07 t/ha and 5.03 t/ha, respectively.
- Test weight values were higher than previous years and screenings levels low.

Why do the trial?

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

How was it done?

Plot size	1.4m x 10m	Fertiliser	DAP (18:20) + Zn 2% @ 60kg/ha
Seeding date	18 th May 2013		UAN (42:0) @ 75 L/ha, 11 th July UAN (42:0) @ 70 L/ha, 29 th August

The trial was a randomised complete block design with 3 replicates and 7 varieties.

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

Results and Discussion

Saintly was the highest yielding durum variety at Hart in 2013 (3.91 t/ha), along with Tjilkuri at (3.76 t/ha). All other varieties in the trial produced statistically similar yields with an average of 3.72 t/ha (Table 1). The only durum variety to have significantly lower yield compared to all other varieties was Hyperno, 3.54 t/ha.

Across all durum varieties protein ranged from 11.4% (Saintly) to 12.6% (Hyperno), and the average across all varieties was 12.1% (Table 1).

Test weight values for durum varieties at Hart over the past three years have been variable, ranging from 51.6 kg/hL in 2012 to 74.0 kg/hL in 2010. In 2013 the site average test weight was 76.0 kg/hL with Caparoi, Saintly and Tamaroi above the test weight minimum of 76 kg/hL.

Screenings ranged from 2.4% (Caparoi) to 11.7% (Hyperno) with a trial average of 6.4%. Durum varieties below 5% screenings were Caparoi, Saintly and Tamaroi.

Table 1. Grain yield (t/ha), protein (%), test weight (kg/hL), and screenings (%) for durum varieties at Hart, 2013.

Variety	Grain yield (t/ha)	% of site average	Protein (%)	% of site average	Test weight (kg/hL)	% of site average	Screenings (%)	% of site average
Caparoi	3.72	100	12.4	103	78.8	104	2.4	37
Hyperno	3.54	95	12.6	104	74.2	98	11.7	182
Saintly	3.91	105	11.4	100	78.3	103	3.2	49
Tamaroi	3.73	100	11.7	97	78.1	103	3.7	58
Tjilkuri	3.76	101	11.8	98	73.5	97	6.7	104
WID802	3.71	100	12.1	100	74.1	98	6.9	107
Yawa	3.71	100	12.1	100	74.7	98	9.8	163
Site Average	3.72	100	12.1	100	76.0	100	6.4	100
LSD (P≤0.05)	0.16		0.68		3.90		0.65	