

Comparison of durum varieties

Sarah Noack, Hart Field-Site Group

Key findings

- The average grain yield for all durum varieties was 3.07 t/ha, with only 0.34 t/ha between all seven varieties trialed.
- Test weight values were high and only two varieties (Hyperno and Yawa) exceeded the minimum 5% screenings level at Hart in 2015.

Why do the trial?

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

How was it done?

Plot size	1.75 m x 10 m	Fertiliser	DAP (18:20) + Zn 2% @ 100 kg/ha
Seeding date	6 th May 2015		UAN (42:0) @ 87 L/ha, 8 th July UAN (42:0) @ 43 L/ha, 11 th Aug

The trial was a randomised complete block design with 3 replicates and 7 varieties. Fungicides and herbicides were applied as necessary to keep the crop canopy free of disease and weeds.

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

Results and discussion

Durum grain yields ranged from 2.88 t/ha to 3.22 t/ha, with a site average yield of 3.07 t/ha (Table 1). The highest yielding varieties were DBA-Aurora, Yawa, Tjilkuri and Caparoi. Grain protein levels were not high enough for DR1 (>13%), however all varieties were higher than 11.5% required for DR2 delivery.

All varieties were above the minimum test weight value of 76 kg/hL. Similar to 2014, Caparoi had the highest test weight followed by Tamaroi. Screening levels across the trial were low and the only varieties to exceed 5% screenings were Hyperno and Yawa.

Table 1. Grain yield (t/ha), protein (%), test weight (kg/hL) and screenings (%) for durum varieties at Hart, 2015.

Variety	Grain yield t/ha	% of site average	Protein %	% of site average	Test Weight kg/hL	% of site average	Screenings %	% of site average
Caparoi	3.03	99	12.2	103	79.7	102	1.8	46
Tamaroi	2.88	94	11.8	100	78.9	101	2.1	55
Saintly	2.98	97	11.9	101	77.9	100	2.3	58
Hyperno	3.01	98	11.8	100	76.9	98	7.5	195
DBA-Aurora	3.22	105	11.4	97	77.4	99	2.7	69
Tjilkuri	3.11	102	12.2	103	77.9	100	3.9	101
Yawa	3.22	105	11.5	97	77.9	100	6.8	176
Site Average	3.07	100	11.8	100	78.1	100	3.9	100
LSD (P≤0.05)	0.21		0.4		1.2		1.2	