Comparison of durum varieties

Sarah Noack, Hart Field-Site Group

Key findings

- Grain yields for all durum varieties were good, averaging 4.23 t/ha compared to average wheat and barley trial grain yield of 4.80 t/ha and 4.74 t/ha, respectively.
- Test weight values were higher than previous years and screening levels low.

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	1.75 m x 10 m	DAP (18:20) + Zn 2% @ 70 kg/ha	
Seeding date	8 th May 2014		UAN (42:0) @ 85 L/ha, 8 th July
			UAN (42:0)

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

Durum grain yields ranged from 4.09 t/ha (Hyperno) to 4.53 t/ha (Yawa), with a site average yield of 4.23 t/ha (Table 1). Grain protein levels ranged from 9.4% to 10.6%, with a site average of 9.9%. There was no difference in grain yield or protein level for any varieties trialled in 2014.

All varieties were above the minimum test weight value of 76 kg/hL. Caparoi had the highest test weight followed by Saintly, Tamaroi, Hyperno and DBA-Aurora. Screening levels across all varieties were low ranging from 1.6% (Caparoi) to 5.6% (Yawa). All varieties except Yawa were below 5% screenings.

Table 1. Grain yield (t/ha), protein (%), test weight (kg/hL) and screenings (%) for durum varieties at Hart, 2014.

Variety	Grain yield	% of	Protein	% of	Test Weight	% of	Screenings	% of
	t/ha	site average	%	site average	kg/hL	site average	%	site average
Caparoi	4.22	100	10.6	107	83.8	102	1.6	51
DBA-Aurora (UAD0951096)	4.21	100	9.4	95	81.9	99	3.0	93
Hyperno	4.09	97	9.8	99	82.0	100	3.6	111
Saintly	4.11	97	9.4	95	83.1	101	2.6	81
Tamaroi	4.14	98	10.3	104	82.3	100	3.2	100
Tjilkuri	4.31	102	10.3	104	81.6	99	2.8	88
Yawa	4.53	107	9.5	95	81.7	99	5.6	175
Site Average	4.23	100	9.9	100	82.3	100	3.2	100
LSD (P≤0.05)	ns		ns		0.5		0.8	

