Comparison of wheat varieties
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Key Findings
- Cobra and Cosmick were the highest yielding AH varieties at Hart in 2014 yielding 5.17 and 5.03 t/ha, respectively.
- Corack and Trojan were the highest yielding APW varieties at 5.48 and 5.17 t/ha, respectively.
- Test weight and screening levels across the trial averaged 83.0 kg/hL and 2.7%.
- Axe produced the highest wheat grain protein at 10.6%.

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 Fertiliser DAP (18:20) + Zn 2% @ 70 kg/ha
Seeding date 8th May 2014 UAN (46:0) @ 85 L/ha, 8th July
All plots were assessed for grain yield, protein, test weight and screenings with a 2.0 mm screen.

Results and discussion
Wheat grain yields at Hart in 2014 ranged from 3.94 t/ha for RAC1843 up to 5.48 t/ha for Corack (Table 1), with an average site yield of 4.80 t/ha. Varieties which yielded above 5.0 t/ha were Corack, Cobra, Trojan (LPB08-1799), Cosmick (IGW3423) and Mace.

Wheat grain protein levels ranged from 9.13% (Corack) to 13.73% (RAC1843). The lower yield and high protein content for RAC1843 can be attributed to frost damage which occurred in August 2014. RAC1843 is an early maturing variety (slightly earlier flowering than Axe) and usually better suited to later sowing dates.

All varieties except RAC1843 fell below the protein level of 11.5% required for Hard 2. However, a number of varieties were above 10.5% (Axe, Espada, Estoc and Gladius) for APW classification.

Screening levels at the site averaged 2.7% and all varieties fell below the maximum level of 5% for APW and Hard classification.

Grain test weights across the trial averaged 83.0 kg/hL and all varieties exceeded 76 kg/hL, the minimum required for maximum grade.
Table 1. Grain yield (t/ha), protein (%), test weight (kg/hL) and screenings (%) of wheat varieties at Hart in 2014.

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<tr>
<th>Quality</th>
<th>Variety</th>
<th>Grain yield t/ha</th>
<th>Protein % of site average</th>
<th>Protein %</th>
<th>Test weight kg/hL</th>
<th>Test weight % of site average</th>
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