Durum (cv. Wollaroi) comparison to Janz in the Forbes district

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Background: Small areas of Durum wheat have been grown in the Forbes district over the last few years. Wollaroi has been the most common variety used. Yallaroi has yielded better than Wollaroi in trials at Gunning Gap over the last 2 years. However, Yallaroi's grain quality is inferior to Wollaroi. This paper reports on trial results comparing the performance of Wollaroi and Janz in the Forbes district in 1999.

Methods: Wollaroi vs Janz comparison trials were established at the following sites;

| Location | Paddock History | Sow Date | Sow Rate kg/ha | Fertiliser kg/ha | Herbicide L/ha |
|----------------|--------------------|-----------------------|----------------|---------------------|---------------------------|
| Wirrinya | Canola | 18 th June | 50 | 85 MAP 100 Urea | 1.5 Bromoxynil |
| Gunning Gap | Clover | 8 th June | 60 | 70 DAP | 1.5 Tristar |
| Mulyandry | Clover | 23 rd June | 60 | 110MAP 200 Urea | 1.0 Barrel 1.5 Tristar |

Results and Discussion: The 1999 results highlight that Janz generally out yields Wollaroi (see following tables). This is also supported by the findings of other trials. The results also highlight that Wollaroi usually produces a higher protein than Janz, when sown at the same date. This may be due to Wollaroi's shorter maturity. Both the Wollaroi and Janz samples from Mulyandry were stained with black point. It is likely that both of these samples would have been downgraded. Research from Queensland indicates Wollaroi is generally not as susceptible to black point as some of the bread wheat varieties like Janz (F. Ellison unpublished). However, the durum wheat grades have lower tolerances to black point. For example the No. 1 durum grade (DR1) receival standards for black tip are set at a maximum of 3%, while the PH receival standards for black tip are set at a maximum of 5% (source AWB). The Gunning Gap samples were tested for black point, with test results indicating both varieties were acceptable for their respective premium grades. The Wirrinya samples were not tested for black point.

Variety performance - Wirrinva

| Variety | Grain Yield t/ha | Protein % | Screenings % | Test weight kg/HL |
|----------|------------------|--------------|-----------------|-------------------|
| Wollaroi | 2.46 | 14.8 | 3.4 | 80.4 |
| Janz | 2.81 | 13.5 | 3.2 | 81.9 |
| Average | 2.63 | 14.1 | 3.3 | 81.1 |
| 5% LSD | 0.18 | 0.4 | 0.3 | 0.5 |
| Co. Var. | 10.1 | 4.1 | 15.0 | 0.8 |

Variety performance - Gunning Gap

| variety performance Camming Cap | | | | | |
|---------------------------------|---------------------|-----------|--------------|-------------------|--|
| Variety | Grain Yield t/ha | Protein % | Screenings % | Test weight kg/HL | |
| Wollaroi | 2.93 | 14.7 | 3.0 | Not tested | |
| Janz | 2.56 | 13.3 | 2.2 | | |
| Average | 2.75 | 14.0 | 2.6 | | |

Variety performance - Mulyandry

| variety performance - wuryandry | | | | | |
|---------------------------------|------------------|-----------|-----------------|-------------------|--|
| Variety | Grain Yield t/ha | Protein % | Screenings % | Test weight kg/HL | |
| Wollaroi | 3.23 | 14.2 | 3.0 | 78.0 | |
| Janz | 2.89 | 12.6 | 4.6 | 80.5 | |
| Average | 3.06 | 13.4 | 3.8 | 79.3 | |

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