Marnoo barley demonstration

Method

Six varieties were sown at 65kg/ha in the nearest neighbour design with Gairdner as the control. 65kg/ha of MAP was applied at sowing and 70kg/ha urea was top-dressed on August 19.

Chemical

1L/ha Roundup $CT^{\text{(B)}}$, 500ml/ha Estercide 800^(B) and 75ml/ha Striker^(B) (June 8)

3g/ha Ally[®], 300ml/ha LVE MCPA[®] and 30g/ha Lontrel[®] (August 1)

Results

Disease observations during the season showed very low levels of both spot form of net blotch and leaf rust at this site.

| Variety | Yield (t/ha) | Protein (%) | Retention (%) | Screenings (%) | Test weight (kg/hL) | Grade |
|-----------|-----------------|----------------|------------------|-------------------|------------------------|-------|
| Quasar | 4.0 | 11.3 | 66.6 | 2.4 | 66.5 | Malt2 |
| Baudin | 3.8 | 12.1 | 64.6 | 4.3 | 64.3 | F1 |
| *Gairdner | 3.7 | 11.5 | 50.8 | 4.7 | 64.4 | F1 |
| WI 3408 | 3.7 | 13.5 | 62.5 | 3.4 | 65.1 | F1 |
| WI3586 | 3.5 | 12.0 | 39.4 | 5.9 | 64.8 | F1 |
| VB 0021 | 3.3 | 12.3 | 56.3 | 4.1 | 61.7 | F2 |
| LSD (5%) | NS | 0.9 | 10.3 | NS | NS | |
| CV% | 3.6 | - | - | - | - | |

Table 1 Barley yield and quality, Marnoo

Location

John Newall Wimmera Highway, Marnoo

Growing Season Rainfall Ave: 300mm

2003: 242mm Soil

Type: clay loam pH (H₂0): 7.5

Sowing Date June 10, 2003

Paddock History

2002: Faba beans 2001: Barley 2000: Canola

* Control variety

Interpretation

- There were no significant differences between the varieties for yield with all yielding close to the district average for this season.
- The potential Schooner replacement variety WI 3408 had higher protein than all other varieties and was too high to make malt standards.
- This site was harvested late (January 6, 2004) and produced low test weights. Generally low test weights result from frost or moisture stress although in this instance, rainfall before harvest caused changes in grain size that may have contributed. Low test weights were also observed at the Minyip site, which was also harvested after rain (January 3, 2004).
- While all varieties had low retention and would not have made Malt 1 as a result of this measure alone, WI 3586 had significantly lower retention than all other varieties. This line was expected to be a replacement for Gairdner with improved grain size.
- All varieties had acceptable screenings levels despite low retention.