Rupanyup barley demonstration

Method

Seven varieties were sown at 65kg/ha in the nearest neighbour design with Schooner as the control. 40kg/ha of MAP was applied at sowing. No further fertiliser was applied.

Chemical

1L/ha Roundup PowerMax[®] and 308ml/ha Estercide 800[®] (March 29)

5g/ha Ally®, 750ml/ha Tigrex® and 70ml/ha Lontrel® (August 8)

Results

Disease observations at this site revealed moderate levels of leaf rust present (up to 30% on leaf 3) with the greatest pressure in Quasar and Baudin. Spot form of net blotch levels were negligible (<5% on leaf 3).

Table 1 Barley yield and quality, Rupanyup South.

Location

Paul Oxbrow

Florences Rd, Rupanyup Sth.

Growing Season Rainfall

Ave: 300mm 2003: 275mm

Soil

Type: Black self-mulching clay

pH (H₂0): 8

Sowing Date

June 3, 2003

Paddock History

2002: Barley 2001: Lentils 2000: Wheat

Variety	Yield (t/ha)	Protein (%)	Retention (%)	Screenings (%)	Test weight (kg/hL)	Grade
VB 0021	4.7	8.8	82.7	1.5	66.9	F1
Gairdner	4.6	9.2	87.1	1.4	70.3	Malt 1
Quasar	4.5	9.2	56.5	3.1	70.6	F1
Baudin	4.4	8.1	75.6	1.9	70.9	F1
Sloop Vic	4.1	9.9	44.5	3.9	72.1	F1
Galaxy	4.0	10.2	67.7	1.8	71.5	Malt 2
*Schooner	3.9	9.8	75.7	1.5	71.2	Malt 1
LSD (5%)	0.3	NS	13.5	0.85	NS	
CV %	1.8	-	-	-	-	

^{*} Control variety

Interpretation

- VB 0021, Gairdner, Quasar and Baudin yielded the highest at this site however quality analysis shows that, of these high yielding varieties, only Gairdner achieved malt quality - VB 0021 and Baudin had a low protein content (<9.0%), while Quasar had low retention (<70%).
- This result for Gairdner is surprising given the number of crops in the district that did not make malt quality due to low retention or low protein.
- Of the three lowest yielding varieties: Sloop Vic, Galaxy and Schooner, only Schooner had quality parameters acceptable for Malt 1 quality.
- There was no yield advantage at this site from the boron tolerance present in Sloop Vic. To gain the greatest potential from Sloop Vic it should be sown in areas with medium rainfall where boron is suspected to be affecting yield.