Wonwondah wheat demonstration

Method

13 varieties were sown at 80kg/ha in the nearest neighbour design with Mitre as the control. 60kg/ha of MAP was applied at sowing and 50kg/ha urea was topdressed on August 27 and October 1.

Chemical

1L/ha Roundup CT[®] and 20g/ha Affinity[®] (June 5) 20g/ha Glean[®] (July 19) 1L/ha Triad[®] (October 16)

Results

Disease inspections in early October and early November revealed very low stripe rust levels at this site (<5%) for all varieties except H45. The H45 plot contained stripe rust hotspots and had a 15% flag leaf infection in early November.

Table 1: Wheat yield and quality, Wonwondah.

Location

Peter Velthuis

North East Wonwondah Rd,

Wonwondah.

Growing Season Rainfall

Ave: 380mm 2003: 346mm

Soil

Type: Red gravely clay loam

pH (H₂0): 6.5

Sowing Date

June 6, 2003

Paddock History

2002: Canola 2001: Pasture 2000: Pasture

					Pool ESR		Cash	
Variety	Yield (t/ha)	Protein (%)	Screenings (%)	Test weight (kg/hL)	Varietal grade	Price (\$/t)	Bin grade	Price (\$/t)
Yitpi	7.2	12.3	3.0	79.1	AH	207	H2	189
Chara	7.0	11.5	2.1	79.7	AH	203	H2	186
Goroke	7.0	12.0	2.2	78.7	APW	205	APW2	186
*Mitre	7.0	11.3	2.7	79.3	AH	204	H2	187
Silverstar	6.9	10.9	4.1	78.9	AH	200	APW2	183
Annuello	6.7	12.1	2.7	80.2	AH	211	H2	194
H45	6.7	11.6	2.1	79.6	APW	208	APW2	191
Babbler	6.5	12.0	1.3	79.8	APW	212	APW2	193
AGHW 003	6.5	10.6	4.0	79.9	+	+	+	+
Wedgetail	6.3	12.1	2.7	73.6	APW	209	APW2	190
Wylah	6.3	13.4	1.9	77.7	APW	211	APW2	187
Goldmark	6.2	11.7	2.4	77.6	AH	207	H2	190
Lorikeet	6.1	13.4	3.2	78.5	ASW	194	ASW1	150
LSD (5%)	0.6	1.7	1.5	NS				
ĊV %	3.3	_	-	-				

^{*} Control variety. Results, including prices and grades, are average for control plots.

Note: grades and prices determined by AWB's Golden Rewards, assuming delivery to Marmalake on January 20, 2004 @ 10.5% moisture.

Interpretation

- Yields at this site were high, ranging from 6.1-7.2t/ha. There was a large spread in protein across the varieties (10.6-13.4) and screenings were below 5% for all varieties.
- The high stripe rust pressure observed in H45 in November did not have a significant impact on the yield or screenings in this variety.
- This district has high yield potential and the site has been managed to achieve this potential with strategic topdressing and fungicide applications. Under these circumstances, varieties

⁺ No grading for this new variety

- suited to the med-high rainfall zones of the Wimmera, such as Mitre, Chara and Goroke (depending on soil type), will perform well.
- H45 is now rated very susceptible (1) to stripe rust and should not be grown in this district, as disease will be difficult to control.
- Yitpi is probably better suited to the northern Wimmera due to the risk of stem rust infection in this higher rainfall zone south of Horsham.
- With the exception of Silverstar, the quality results for all varieties allowed receival into their maximum grade. Yitpi gave the greatest returns per hectare despite a greater price per tonne for Babbler.