

Advanced Wheat Variety Comparisons 1997

Neil Vallance, VIDA, Mallee Research Station, Walpeup

Aim: The Victorian Wheat Breeding Program aims to develop, evaluate, and release improved wheat cultivars to the farming community. Pending new varieties should be high yielding, resistant to major diseases such as Cereal Cyst Nematode (CCN) and stripe rust, grain quality must also meet the requirements of the various market end uses.

Comments on sites and season: The advanced wheat experiment located at the 1997 Birchip Cropping site was one of 11 similar experiments located throughout the Mallee. The adverse Mallee climate with unpredictable rainfall patterns was highlighted in 1997 with many areas suffering severe moisture stress during the growing season. Yields across the Mallee were extremely variable with the variety trials being no exception. Yields ranged from 0.20 t/ha for some varieties at Merrinee and Walpeup to well over 3.0 t/ha at Hopetoun and Manangatang.

Results: Table 1. Advanced wheat variety comparison, Birchip 1997

Cultivar	Birchip - Yield (t/ha)	Mallee average (t/ha)
Meering	2.65	2.24
Goldmark	2.45	2.23
Goroke	2.62	2.19
Janz	2.49	2.30
Frame	2.83	2.31
Krichauff	2.68	2.34
Silverstar	2.58	2.28
Rosella	2.23	2.02
Ouyen	2.89	2.32
Diamondbird	2.40	2.12
Worrakatta	2.63	2.32
Yallaroi	2.58	1.74
Yanac	2.47	2.05
VK 237	2.86	2.39
VK 712	2.77	2.37
VI 184	2.57	2.30
Significant difference:	P<0.05, LSD=0.24	

Discussion: The Mallee average was determined from a total of 10 sites located across the Mallee. There were 11 sites sown but the severe dry conditions resulted in the Merrinee trial not being included in the averages due to site variability above the acceptable level. A number of crossbred varieties are showing particularly good adaptation to the Mallee, with high yields and disease resistance notable attributes. *Frame* withstood the rigours of 1997 well, by demonstrating lower levels of grain screenings compared to other varieties in certain areas of the Mallee. *Goldmark* and *Silverstar* also performed very well, although screenings were abnormally high for all varieties including *Silverstar* at some sites.