

Advanced vetch variety evaluation

Craig Bell, Agriculture Victoria - Walpeup

SUMMARY

The new variety Morava was in the top five for grain yield at both the Walpeup and Birchip sites. The Ultima site had very poor yields primarily due to low rainfall. Blanchefleur also produced good yields as rust and chocolate spot remained at a low level. SA33248 yielded the best overall with 2.13 t/ha.

METHOD/RESULTS

Varieties were compared at each site in (8 row x 15m) plots replicated three times. The Birchip, Walpeup and Ultima trials were sown on June 10, May 27 and June 3 and harvested on December 2, October 27-November 4 and November 11, respectively. Average yields for each site are presented in Table 1.20.

Table 1.20 Average grain yield at Birchip, Walpeup and Ultima 1999.

Variety	Yield (t/ha)		
	Birchip	Walpeup	Ultima
Blanchefleur	2.00	1.43	0.52
Cummins	1.68	1.56	0.72
Languedoc	1.76	1.67	0.65
Morava	1.87	1.65	0.14
SA33115	1.57	1.59	0.88
SA33131	1.98	1.33	0.30
SA33133	1.48	1.21	0.14
SA33150	1.14	1.22	0.08
SA33224	1.73	1.65	0.55
SA33234	1.29	1.75	0.14
SA33248	2.13	1.65	0.29
SA33258	1.89	1.40	0.37
SA3354	1.19	1.41	0.12
SA33555	1.65	1.62	0.19
SA33585	1.65	1.65	0.38
SA33600	1.78	1.25	0.61
Mean	1.7	1.5	0.4
LSD (p=0.05)	0.40	0.59	0.24
CV(%)	14.6	23.5	37.8

INTERPRETATION

Of the three sites located across the Mallee, Birchip and Walpeup produced the highest yields. Birchip was the most rewarding site recording an average 1.67 t/ha followed by Walpeup at 1.5t/ha. The Ultima site was disappointing with a mean yield of 0.4 t/ha. The very low yields at Ultima were due to a lack of rainfall, with possible effects from herbicide damage and weed competition. The shorter growing season varieties made better use of the limited rainfall, producing the highest yields. Some late maturing varieties also produced high yields due to the benefit of late rain occurring. It is expected that Morava would out yield the older varieties in a year where rust and chocolate spot are present because of its resistance to these diseases. These diseases were not a significant problem in 1999.

COMMERCIAL PRACTICE

The results confirm the validity of recommending Morava for sowing in the Mallee. Blanchefleur produced satisfactory yields but its susceptibility to rust is a risk for producers. The performance of the new crossbreds indicates the likelihood of improved varieties being released in the near future. Data from the Ultima site should be treated with caution because of its very low yields and unacceptable site variation as indicated by a coefficient of variation (CV) of 37.8%. The results from this site should therefore be used only as a guide.