Advanced Vetch Variety evaluation

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SUMMARY

Apart from the two early varieties Languedoc and SA-33600 yields were mostly down on last year. The Birchip and Ultima sites were particularly poor with Birchip's average down 50% on the 1999 season. There were few differences between the varieties at Birchip or Ultima. At Walpeup Languedoc and SA-33600 produced the best yield of 2.33 t/ha with Morava disappointing with an average of 0.92 t/ha.

The aim of this trial was to evaluate improved vetch varieties for the Victorian Mallee.

METHOD

Varieties were compared at each site in 8 row plots replicated 3 times. The Birchip, Walpeup and Ultima trials were sown on 19/5/2000, 9/5/2000 and 16/5/2000 respectively and harvested on the 29/11/2000, 10/11/2000 and 22/11/2000.

RESULTS

Individual site yields and means yields across sites are presented in the table below as well as data analysed across the three sites.

	MEAN YIELD t/ha			Mean Yield
VARIETY	BIRCHIP	WALPEUP	ULTIMA	Across sites
Blanchefleur	0.97	1.59	1.33	1.30
Cummins	0.97	1.93	1.04	1.32
Languedoc	0.93	2.33	1.04	1.53
Morava	0.85	1.01	0.91	0.92
SA-33133	0.66	1.06	1.31	1.01
SA-33212	1.13	0.90	1.21	1.08
SA-33223	0.69	1.30	1.31	1.10
SA-33224	1.23	1.44	1.12	1.26
SA-33233	0.75	1.09	1.16	1.00
SA-3324	0.81	1.06	1.35	1.07
SA-3354	0.68	0.90	1.32	0.96
SA-33579	0.91	1.23	1.19	1.11
SA-33587	0.91	1.16	1.66	1.24
SA-33600	0.79	2.33	1.40	1.51
SA-33603	0.89	1.11	1.23	1.08
SA-33777	0.77	0.78	1.21	0.92
MEAN	0.87	1.33	1.24	1.15
LSD(p=0.05)	0.34	0.22	0.54	0.43
CV%	15.6	7.3	4.1	18.9

* Figures expressed as met data.

INTERPRETATION

Of the three sites located throughout the Mallee, Walpeup and Ultima produced the highest yields. Walpeup was the most rewarding site recording an average of 1.33 t/ha with Ultima's yields being 1.24 t/ha. The Birchip site yielded poorly compared to the other trials averaging 0.87 t/ha. Early maturing varieties produced the highest yields. The mid maturing varieties performed the best at Birchip.

COMMERCIAL PRACTICE

These results show that the typical early high yielding varieties can produce the greatest yields. Morava and SA-33777, both Ascochyta and rust resistant didn't produce high grain yields but in years where rust is present yield substantially higher than non-resistant varieties. Dry matter results from Walpeup showed that Morava had good dry matter production. When rust is present the yield of resistant varieties is not retarded like the non resistant varieties. Birchip's yield potential was reduced from soil compaction after sowing which lead to lower than optimal plant numbers. Yield was then retarded by moisture stress during the important flowering stage.