

Vetch Variety Evaluation for the Victorian Mallee 1998.

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The aim of this trial was to evaluate vetch varieties for grain yield, dry matter and disease resistance.

Summary

Blanchefleur was the best yielding commercially released variety.

Background

The field performance of vetch varieties are evaluated as part of the national vetch breeding program based at South Australia Research and Development Institute. VIDA Mallee Research Station manages three sites in the Victorian Mallee at Walpeup (M.R.S.), Birchip (BCG) and Ultima.

Results

Summary of vetch results at the Birchip Cropping Group site: (percentage of Blanchefleur). (Table 1.12) Sowing rate: 40-60 kg/ha, Sowing Date: 15/5/98

Table 1.12 Vetch variety, establishment, dry matter production and yield results

Variety	Maturity	Establishment 19/6/98 (Plant/m ²)	Dry Matter 24/9/98 (%)	Grain Yield 9/12/98 (%)	Grain Weight (g/100)
Blanchefleur	Medium	32	100	100	5.70
Cummins	Early	26	169	44	4.80
Languedoc	Early	20	165	63	5.30
Morava	Late	32	116	95	6.80
33258	Early	17	99	62	5.55
33248	Late	18	102	85	5.65
33232	Medium	23	139	75	7.00
33224	Early	32	110	106	5.80
33165	Early	28	121	55	5.10
33158	Early	38	164	76	5.50
33133	Late	18	147	71	6.40
33115	Early	27	152	39	5.00
33104	Late	11	78	64	6.70
33103	Late	30	158	75	6.50
3323	Late	20	106	80	6.45
3300	Early	26	122	56	5.40
Mean (%)			128	72	
CV (%)			24	19	

Dry matter: 1.35 t/ha = 100%

Grain yield: 0.82 t/ha = 100%

Generally at Birchip the earlier maturing varieties produced poor seed yields but had the greatest dry matter production. Crossbred line 33224 had the highest grain yield at Birchip. It yielded well at all Mallee sites and in comparison to Blanchefleur, grain yield averaged 96% and dry matter production 93%.

At Walpeup the earlier maturity varieties yielded best, ranging from 188% (33258) to 34% (3323) of Blanchefleur. Blanchefleur yielded 0.96 t/ha and Morava 0.54 t/ha.

The Ultima site was the most even site for grain yield with the range being from 106% (33248) to 64% (3323) percent of Blanchefleur. Blanchefleur yielded 0.67 t/ha and Morava 0.65 t/ha.

At the Birchip Cropping Group Northern Satellite site at Sea Lake, a small trial with 3 replicates was conducted to assess the performance of Morava. Grain yield results were Languedoc 1.53 t/ha, Blanchefleur 1.19 t/ha and Morava 0.74 t/ha.

Cowpea aphids were seen at all sites. Rust was not present at any site.