Trial 16

Vetch Variety Evaluation - 1997

VIDA Mallee Research Station Walpeup
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Aim: To evaluate improved vetches for cereal farming systems.

Results: During 1996 vetch was evaluated at three sites in the mallee, Birchip, Gowanford and Walpeup. All sites suffered from severe moisture stress and the effects of rust. The Gowanford ford site abandoned due to severe effects of frost. The Birchip site appeared to escape the affects of plant damage by frost but there was a dramatic effect to grain yield and plant resistance to rust as indicted in table 1. Crossbred lines were able to yield up to six times that obtained from susceptible cultivars (Blanchfleur and Langudoc). It was promising to see the new crossbred, now named Morava, exhibiting good rust tolerance. This variety is currently under going seed multiplication for release as a commercial cultivar in 1999. The disadvantage of Morava is that it is 5 to 12 days later than either Langudoc or Blanchfleur. On the bright side, Morava produces more grain and herbage yields than currently grown vetch cultivars. It is rust resistant, produces larger seeds and has good resistance to pod shattering.

Table 1 Vetch Variety Comparison 1996

Variety	Height + (cm) 15/10/96	Plant type # Score (0-5) 15/10/96	Dry matter (kg/ha) 20/9/96	Rust * Score (0-5) 20/9/96	Grain yield (kg/ha) 11/12/96
33258	53	3	2143	4	313
3308	80	4	3615	1	583
3322	75	4	4523	0	1320
3323	90	4	3938	0	1793
3324	80	5	4218	0	1910
Morava (3325)	83	5	4691	0	2033
33172	67	4	3872	3	1013
33115	53	4	2849	5	310
33194	55	4	2840	5	247
33158	75	3	3285	4	737
33101	100	4	4151	0	2027
33224	63	4	2816	5	480
Blanchfleur	71	4	3848	4	467
Langudoc	50	4	3736	5	293
Cummins	60	5	2248	5	240
33223	72	4	3588	4	480
lsd (0.05%)			753	NA	316
Cv %			8.4	6.8	21

Sowing date: 17/5/96
+ Length of plant tillers not height above ground
# Plant type at anthesis 1=very prostrate, 2=prostrate, 3=semi-prostrate, 4=erect, 5=very erect
* Rust 0=No rust present 5=severe rust
NA =Not applicable