

DEVELOPMENT OF A NEW GRAIN LEGUME FOR S.E. AUSTRALIA, NARBON BEAN (*Vicia narbonensis*)

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Trial Details:

Site location: Kinnabulla, 20 km north west of Birchip. One of twelve sites sown nationally in five sites.

Soil conditions at sowing: Moist mulch and seed bed

Soil analysis:

Avail. soil water (mm in top 100 cm)	Nitrate N (kg/ha)	Organic Carbon (%) 0-10 cm)	P (ppm 0-10 cm) (Colwell)	K (ppm 0-10 cm)	E.C. micro-siem/m	pH (CaCl ₂)	pH (water)
138	63	0.68	7	304	490	8.5	9.6

Sowing date: 20/6/94

Sowing rate: 100 kg/ha

Harvest dates: 14th and 24/11/94

Insect Control: Endosulfan @ 1.01L/ha on the 27/6/94, applied post sowing pre-emergent

Weed control: Bladex @ 4.01L/ha sprayed on the 27/6/94

Fertilisers: Mallee Mix No2 @ 106 kg/ha

General comments: Some Narbon Bean lines were still emerging one month after sowing. During the growth period August through to October the Narbon Beans were growing under severe water stress. Considering the seasonal rainfall for the site, the grain yields were very pleasing.

Grain yield results:

Variety	Dundale (peas)	ATC 60105	ATC 60099	ATC 60107	ATC 60111	ATC 60112	ATC 60114	ATC 60116	ATC 60119	ATC 60121
Yield t/ha	1.39	0.98	1.22	1.5	0.87	0.97	1.00	1.22	0.98	1.5
Variety	ATC 60122	ATC 60131	ATC 60142	ATC 60165	ATC 60174	ATC 60178	ATC 60182	ATC 60196	N 9027	N 9301
Yield t/ha	0.84	0.77	1.29	1.44	1.17	1.023	0.78	1.07	0.8	1.33

L.S.D. (P=0.05) 0.44 t/ha (if the yield between two varieties is less than 0.44t/ha then the difference in yield between the two varieties is not significant).

cv. 19.8%