

4.9 AMSUL EVALUATION TRIAL 2001

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Sown: 11th July 2001

Location: SFS site Gnarwarre

Plant/Variety: Canola – “Oscar” @ 7kg/ha with
120kg/ha MAP NPKS 11:23:0:2

Background:

Gypsum with an approximate 15% sulphur and Urea with 46% nitrogen have traditionally been a popular means of applying these two important elements.

Tissue Analysis: Samples Taken 9th October 2001

Tissue Analysis Results:

All elements in adequate levels other than copper being marginal

Aim:

To identify if Amsul, NPKS 21:0:0:24 is a cost effective alternative to Urea and Gypsum as source of Nitrogen and Sulphate Sulphur.

Harvested: Wednesday 9th January 2002

Treatments: Five treatments, replicated nine times

	Application	Elements Applied:	Cost / Ha
1.	Control, 120kg MAPplus NPKS 11:23:0:2	NPKS N 13.2kg, P27.6kg, S 2.4kg	\$55.00
2.	Gypsum @ 2.5t/ha	NPKS S 375kg	\$100.00
3.	Urea @ 100kg/ ha	NPKS N 46kg	\$44.88
4.	Amsul @ 150kg /ha	NPKS N 31.5kg, S 36kg	\$34.48
5.	Gypsum @ 2.5t/ha, Urea@100kg/ha	NPKS N 46, S 375kg	\$144.88

2,3,4 and 5 all had the 120kg/ha MAP starter fertiliser as well as the control.

Cost of control, and control elements applied is not included in 2,3,4,5 treatment figures.

Results:

	Application	Yield kg/ha	Var to Control:	Oil %	Var to Control:
1.	Control,	1384kg	0	41.51	0
2.	Gypsum	1581kg	+197kg	42.10	+.59%
3.	Urea	1443kg	+ 59kg	42.73	+1.22%
4.	Amsul	1743kg	+359kg	42.61	+1.1%
5.	Gypsum and Urea	1527kg	+143kg	43.03	+1.52%

Conclusions:

- No visual difference amongst treatments until flowering
- Some variation in flowering due to previous years triticale trial stubble residue affected part of
- of rows of all treatments.
- Amsul yielded 359kg/ha more than the control, with 1.1% higher oil content.
- Amsul yielded 216kg/ha more than Gypsum/Urea combination, with .42% less oil content.
- Amsul yielded 162kg/ha more than the Gypsum treatment with .51% more oil.
- In this example, Amsul would have been a more cost effective means of applying Nitrogen and Sulphate form of Sulphur than Gypsum and Urea (conditioning effect of Gypsum over over over an extended period not factored into per hectare costs).
- LSD for yield was 188kg/ha
- LSD for oil was 0.4%