4.4 Lime Trial

Researchers

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Management

Sown on the 10th of June with a sowing rate designed to give an optimum plant density of 45 plants per square metre. It was sown with a grain legume mix of 0:18:0:10 Gold10 at a rate of 120 kg/ha

Aims

To investigate four different lime rates on two different faba bean varieties.

Site

Hamilton - Blackwood

Background

Acidic soils are a common problem throughout the Western Districts and while many growers are incorporating lime in their cropping phase, many are not. This trial was established in 1998 and sown to wheat with no significant response obtained between lime treatments. The same plots were resown in 1999 with Faba Beans to see if a response would be obtained in the second year.

	RESULTS		
Variety	Lime Rate (T/ha)	Yield (T/Ha)	
Ascot	Nil	4.13	
Ascot	1.0	4.03	
Ascot	2.5	4.27	
Ascot	3.5	3.87	
Fiesta VF	Nil	4.52	
Fiesta VF	1.0	4.94	
Fiesta VF	2.5	5.05	
Fiesta VF	3.5	4.84	
LSD (T/ha)		0.74	

DISCUSSION

No significant differences were obtained between any of the lime rates with the only differences being between varieties. This is the second year that this result has occurred at the site and it needs to be put into context. The soil pH is very low (4.7 in H_2O), but the aluminium levels are extremely low and this would probably have some bearing on the result. Further work needs to be done.