

Trial #	12
Location	Greta Valley
Province	North Canterbury
Farm Type	Beef and Sheep
Product Trial	FPF v/s Granular
Date	1996 - 1997

Introduction: Comparison of FPF and granular fertiliser was assessed based on dry matter produced and to test the affect of different amounts of Limeflour. Eight different treatments were applied to 2m x 2m plots. These were replicated 4 times. Fertiliser was applied on the 12 August 1996. A stock evaluation trial was also run concurrently to assess the difference in weaning weights achieved with the respective fertiliser systems. Soil samples were taken in June 1996. These formed the basis of the fertiliser recommendations made by Soil Testing Services.

The granular fertiliser mix was:

30% Potash Sulphur Superphosphate	350kg/ha
Copper Sulphate	4kg/ha
Zinc Sulphate	4kg/ha
Cobalt Sulphate	100grams/ha

The FPF mix was:

DAP	40%
Elemental Sulphur	10%
Sulphate of Potash	10%
Magnesium Sulphate	10%
Limeflour	25%
Trace elements	2.5kg/ha

Treatments:

	Cost(/Ha applied)
1. Control	\$0.0
2. GMM – Granular mineral mix	\$45.30
3. SSP125 – Sulphur Superphosphate at 125kg/ha	\$25.66
4. SSP250 – Sulphur Superphosphate at 250kg/ha	\$51.82
5. FPF50 – 50kg/ha	\$64.40
6. FPF35/15 – 35kg/ha + 15kg/ha Limeflour	\$60.53
7. FPF50/25 – 50kg/ha + 25kg/ha Limeflour	\$80.91
8. FPF100/50 – 100kg/ha + 50kg/ha Limeflour	\$132.96

Results:

Total Dry Matter Production (kg/ha) Aug 96-Sep 97			
Treatment	Dry Matter	Extra DM %	Cost
Control	11213	0.0 ^c	0c
GMM	11600	3.4 ^b	12c
SSP125	11045	Nil ^c	n/a
SSP250	11416	1.8 ^b	26c
FPF50	11928	6.4 ^a	8c
FPF35/15	11919	6.3 ^a	9c
FPF50/25	11433	2.0 ^b	37c
FPF100/50	12159	8.4 ^a	14c
Extra Dry Matter - % increase in dry matter compared to Control			
Cost - cents/extra kg of dry matter grown over Control			
The letters a,b & c are used to show the statistically significant differences between the treatments.			
Two treatments with the same letter were not found to be statistically different from each other.			
Those treatments with different letters were statistically different at a 95% confidence level (2 way ANOVA)			

Overall, the FPF treatments performed best in terms of dry matter produced. The cost differences with regard to growing the extra dry matter were dramatic.