



Lake Taupo 1

The trial was on a Lake Taupo non irrigated farm on pumice soil. The trial area was ryegrassclover based pasture. Residual pasture dry matter base line was recorded on 22 March 2009 and pasture growth was assessed on 17 April 2009 (soil temperature 15^oC).

LessN 40 performed similarly to Urea 80 at Day 26 post treatment application, and both these treatments caused statistically significantly greater pasture growth than Urea 40 and Control treatments. Urea 40 was not statistically significantly better than Control.

Pasture growth appeared to be limited by low soil moisture (there was only 10 mm of rain during the duration of the trial). Nitrogen response rates were also low. Urea 40 grew 2.0 kg DM / kg N while Urea 40 grew 7.2 and LessN 40 grew 14.6.



Table and Graph of Pasture Dry Matter Production (kg/ha) Day 26

* Treatments that share the same letter are not statistically

significantly different from each other (95% confidence level).





Graph of the Increase over Control (%) Day 26



Soil test report (pre treatment application)

As well as low soil moisture levels, pasture growth and response to nitrogen fertiliser may have been limited by low availability of potassium and magnesium. The low available nitrogen level indicates that had other limitations not been present, there might have been a more significant response to nitrogen application.

Analysis		Level Found	Medium Range	Low	Medium	High
pН		5.6	5.8 - 6.3		1	
Olsen P	(mg/L)	51	20 - 30		1 	
Potassium	(me/100g)	0.20	0.50 - 0.80			
Calcium	(me/100g)	5.5	6.0 - 12.0			
Magnesium	(me/100g)	0.35	1.00 - 3.00		1	
Sodium	(me/100g)	0.10	0.20 - 0.50		1	I I I I
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CEC	(me/100g)	18	12 - 25			I I I I
Base Saturation	(%)	34	50 - 85		1	I I I I
Volume Weight	(g/mL)	0.68	0.60 - 1.00			
5	(3)				1	
Sulphate-S	(ma/ka)	11	7 - 15			
ouipriato o	(1	
Available N (15cm Depth) (kg/ha)		112	150 - 250		1	
Base Saturation		K1.1 Ca 3	1 Mg 2.0 Na	a 0.5		
MAF Units		K3 Ca5	Mg5 Na	a 3		
Anaerobically Mineralisable N		110 ug/g				