



Lake Taupo 2

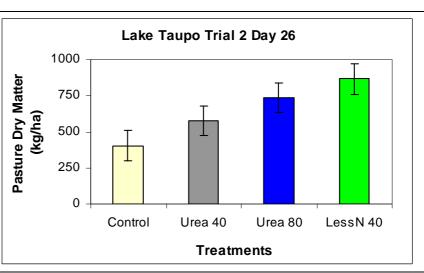
The trial was on a Lake Taupo non irrigated farm with pumice soil. The trial area was ryegrass-clover based pasture. Residual pasture dry matter base line was recorded on 22 March 2009 and pasture growth was assessed on 17 April 2009 (soil temperature 14°C).

LessN 40 caused statistically significantly greater pasture growth than the Urea 40 treatment. Urea 80 and LessN 40 produced statistically similar pasture dry matter yield but Urea 80 pasture dry matter was not significantly higher compared to the Urea 40 treatment. Control and Urea 40 treatments produced similar dry matter yield.

Pasture growth was slow in the control and nitrogen response rates were reasonably low (around 9 kg DM / kg N) in all treatments except the LessN treatment (around 25 kg DM / kg N). The growth rates and nitrogen response were higher than in the Lake Taupo 1 trial and pasture growth was apparently not as moisture stressed as that trial.

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

DM *
404 ^a
577 ^a
738 ^{ab}
865 ^b

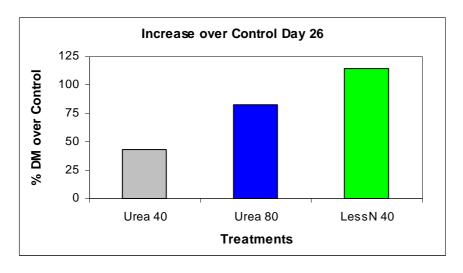


^{*} Treatments that share the same letter are not statistically significantly different from each other (95% confidence level).





Graph of the Increase over Control (%) Day 26



Soil test report (pre treatment application)

According to the soil test, pasture growth was unlikely to be limited at this stage by phosphorus or sulphur levels. The soil pH was rather high which may be related to recent or somewhat high lime application; this may have impacted on the availability of some metal trace elements but probably not to the extent of significantly limiting actual pasture growth. Magnesium level was somewhat marginal but this is unlikely to be significantly limiting at this time of year. The available N level showed as reasonable but still with some scope for nitrogen response.

Analysis		Level Found	Medium Range	Low	Medium	High
pН		6.8	5.8 - 6.3			
Olsen P	(mg/L)	32	20 - 30			
Potassium	(me/100g)	0.52	0.50 - 0.80			
Calcium	(me/100g)	22.5	6.0 - 12.0			
Magnesium	(me/100g)	0.93	1.00 - 3.00			
Sodium	(me/100g)	0.20	0.20 - 0.50			
CEC	(me/100g)	24	12 - 25			
Base Saturation	(%)	100	50 - 85	1		
Volume Weight	(g/mL)	0.59	0.60 - 1.00			
Sulphate-S	(mg/kg)	12	7 - 15			
Available N (15cm	Depth) (kg/ha)	163	150 - 250			
Base Saturation		K 2.2 Ca 93	Mg 3.8 Na	a 0.8		
MAF Units		K 6 Ca 17	Mg 12 Na	a 5		
Anaerobically Mine	ralisable N	184 ug/g				