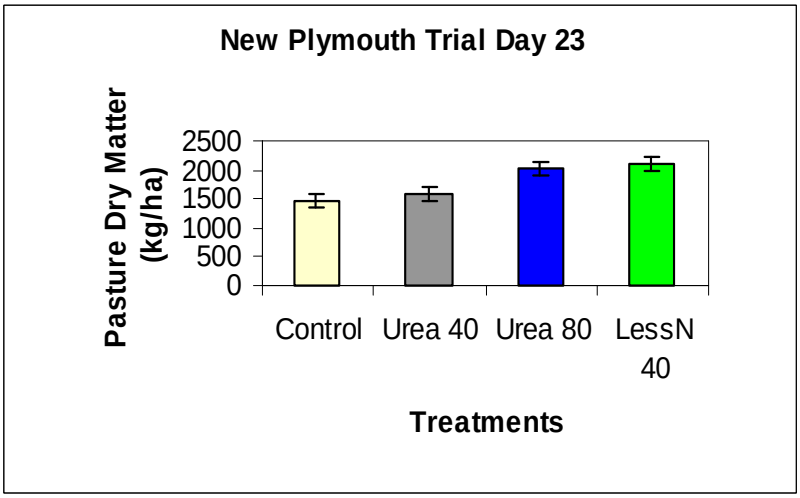
New Plymouth

The trial was on a New Plymouth area dairy farm. It was started on 11 November 2008 and finished on 4 December 2008. The trial area was non-irrigated ryegrass-clover based pasture under normal dairying conditions. Hay was harvested from the selected trial paddock prior to commencement of the trial. Residual pasture dry matter base line was recorded on 11 November (soil temperature 19^{0}C) and pasture growth was assessed on Day 23 (22.5^{0}C) by pasture probe and lawn mower cut.

LessN 40 performed similarly to Urea 80 at Day 23 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.

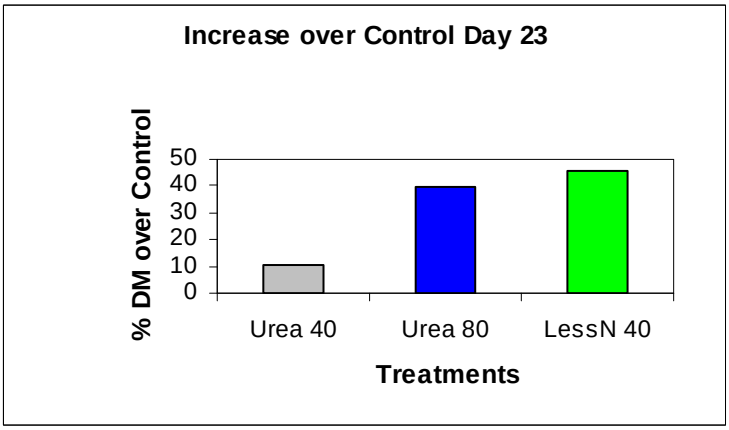
Table and Graph of Pasture Dry Matter Production (kg/ha) Day 23

Treatment	DM Rotation *
Control	1452[a]
Urea 40	1604[a]
Urea 80	2024[b]
LessN 40	2118[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 23



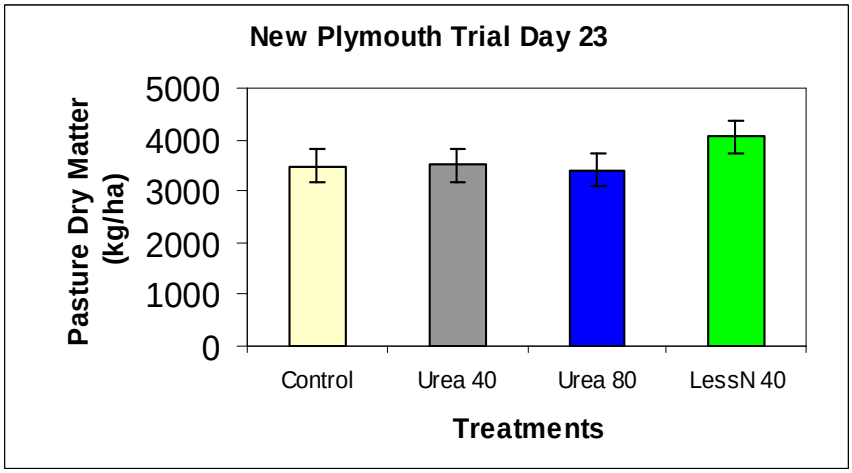
Mower dry matter yield

Two strips per plot were cut using a rotary mower in the middle of each plot. The cut material was weighed green and a sub-sample was removed to calculate dry matter percent. This sub-sample was weighed green, dried and weighed again. The total area per plot mowed varied from 4.5 to 8 square metres and was calculated for each plot.

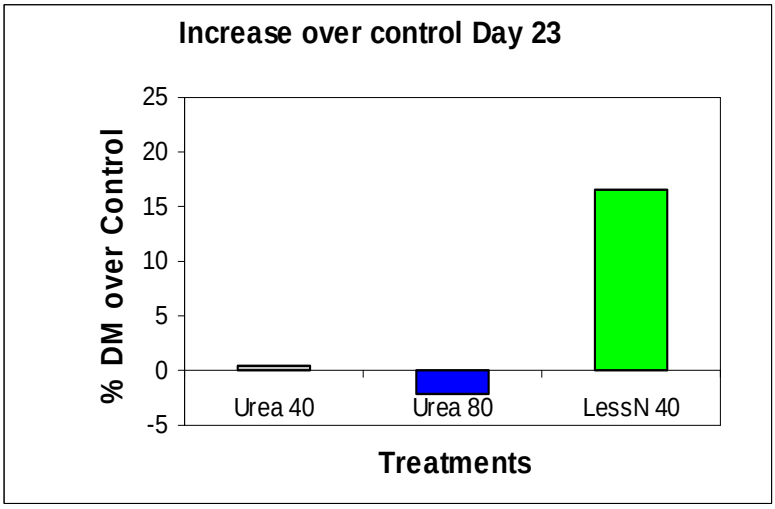
The table gives the values of mower harvested total dry matter on Day 23. Urea 80 caused similar mower dry matter yield to Urea 40 and Control treatments. Mower dry matter yield of LessN40 treatment was also similar to control and U40 treatment. The p value of mower dry matter cut was 0.143 indicating no reliable statistical differences between treatments.

Table and Graph of Mower Pasture Dry Matter Production (kg/ha) Day 23

Treatment	DM
Control	3484
Urea 40	3500
Urea 80	3409
LessN 40	4058



Graph of the Increase over Control (%) Day 23



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Soil test report (pre treatment application)

Analysis		Level Found	Medium Range	Low / Medium / High
pH		6.2	5.8 - 6.3	
Olsen P	(mg/L)	39	20 - 30	
Potassium	(me/100g)	0.86	0.50 - 0.80	
Calcium	(me/100g)	16.9	6.0 - 12.0	
Magnesium	(me/100g)	3.20	1.00 - 3.00	
Sodium	(me/100g)	0.31	0.20 - 0.50	
CEC	(me/100g)	35	12 - 25	
Base Saturation	(%)	62	50 - 85	
Volume Weight	(g/mL)	0.68	0.60 - 1.00	
Sulphate-S	(mg/kg)	20	7 - 15	
Available N (15cm Depth)	(kg/ha)	266	150 - 250	

Base Saturation	K 2.5	Ca 49	Mg 9.3	Na 0.9
MAF Units	K 12	Ca 14	Mg 49	Na 10
Anaerobically Mineralisable N	260 ug/g			