



## Ruminant response to non-live probiotic microorganism extracts

Gore, 2008

### Introduction

Donaghys RumenZyme Plus (RZP) is an advanced liquid probiotic extract formulation for use in sheep, cattle and deer. It works by activating beneficial rumen microbes, promoting rumen development and boosting Vitamin B12 levels in order to improve microbial function and enhance digestion and feed conversion.

### Materials and Methods

The trial took place on a dryland sheep farm in Southland. 210 white-faced ram lambs were weaned onto grass pasture on 18 December 2007. 70 lambs were administered 4 ml/head of RZP as a treatment (yellow tags), 70 were administered 4 ml/head of water as a control (white tags) and 70 were administered a probiotic with live microbes (ProLamb) at the same dose rate (blue tags). Lambs were weighed at drenching and 24 days later.

Data was collated and sorted in Microsoft Excel. An analysis of covariance (ANCOVA) with starting weight as covariate was performed in *R* statistical analysis program to test for the difference in means between flocks.

### Results

Lambs treated with a single dose of RZP gained extra LW relative to control and ProLamb treated animals, however this difference was not statistically significant ( $P < 0.05$ ) (Table 1).

Table 1: LWG of lambs.

	Control	RZP	ProLamb	Difference (RZP-Control)
<b>LWG (g/day)</b>	179	180	0	1
<b>95% CI for difference</b>				± 19
<b>P value</b>				0.957

There was no statistical difference in LWG between the different treatments.