



Ruminant response to non-live probiotic microorganism extracts

Canterbury, 2008

Introduction

Donaghys Rumenzyme Plus (RZP) is a non-live product from the fermentation of probiotic lactic acid bacteria and yeasts. It works by activating beneficial rumen microbes and promoting rumen development in order to improve microbial function and enhance digestion and feed conversion.

Materials and Methods

The trial was conducted on a dryland North Canterbury property in the summer of 2007/2008. On 6 December 2007 210 unweaned white-faced mixed sex lambs were selected for the trial and separated into three even groups. 70 lambs were given a 4 ml drench of RZCP and tagged with yellow eartags. A control group of 70 lambs were dosed with 4 ml of water and tagged with white eartags. 70 lambs were also dosed with ProLamb, a non-commercialised product containing live lactic acid bacteria as well as the non-live fermentation products.

Lambs were weighed before drenching, four and a half weeks after drenching (10 January), seven weeks after drenching (7 February) and 12 weeks after drenching (28 February) providing a trial length of 82 days. 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 did not gain any extra LW relative to control and ProLamb treated animals ($P < 0.05$), (Table 1).

Table 1: LWG of lambs.

	Control	RZP	ProLamb	Difference (RZP-Control)
LWG (g/day)	30	27	2	-3
95% CI for difference				± 6
P value				0.569