



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 an irrigated property in Kirwee, Mid-Canterbury. On 7 December 2007, 210 white-faced mixed sex lambs were weaned off their hogget mothers. On 17 December 2007, 70 lambs were administered a 4ml dose of RZCP, 70 were dosed with 4 ml of water as a control and 70 treated with ProLamb, a non-commmercialised product containing live lactic acid bacteria as well as the non-live fermentation products.

Lambs were weighed three weeks (7 January) and six weeks (28 January) after treatment providing a trial length of 43 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 gained extra LW relative to control and ProLamb treated animals, however this was not statistically significant (P<0.05), (Table 1).

Table 1: LWG of lambs.

	Control	RZP	ProLamb	Difference (RZP-Control)
LWG (g/day)	157	162	-2	5
95% CI for difference				± 11
P value				0.691

Conclusions

These results support the hypothesis that a single dose of RZP will increase LWG in lambs post-weaning.



