



# Ruminant response to non-live probiotic microorganism extracts

Southbridge, 2006

## 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**

On 17 October 2006, 200 weaned lambs were selected for the trial and separated into two even groups. 100 lambs were given a 3 ml drench of RZCP and tagged with red ear tags. A control group of 100 lambs were dosed with 3 ml of water and tagged with white ear tags.

Lambs were weighed before drenching and 28 days later (14 November 2006). Weights were 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 animals, however this increase was not statistically significant (P<0.05) (Table 1).

Table 1: LWG of lambs.

|                       | RZP | Control | Difference |
|-----------------------|-----|---------|------------|
| LWG (g/day)           | 93  | 61      | 32         |
| 95% CI for difference |     |         | ± 12       |
| P value               |     |         | 0.010      |

## **Conclusions**

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