



Effect of ProDairy on Milk Production

Feilding, 2001

Introduction

A field trial was undertaken at the Feilding Agricultural High School demonstration dairy unit in Feilding to evaluate the effects on production of Donaghys probiotic extract ProDairy.

Materials and Methods

The trial cows were split into two homogenous groups of 24 individuals based on herd test data from 30/9/01. One group (the treated group) received 7mL of ProDairy per cow each day by oral drench. The control group was not treated with any oral drench products. Due to the large age range within the herd, which was run together as a single mixed age herd, there was a huge range in the production potential. Trial cows were Friesians with some American Holstein influence.

An initial herd test was done on 30/09/01 and trial treatments commenced immediately thereafter. A mid point herd test was conducted on 14/10/01 and a final herd test was conducted on the day that treatment stopped on 28/10/01.

The data for one of the cows from the treated group was omitted from analysis as it only included data from each morning milking and thus biased results in favour of the ProDairy treated group.

Results

Pro-Dairy had the following statistically significant ($p < 0.1$) effects (Table 1 and Figure 1):

Table 1: Effect of ProDairy on milk production.

Test	Day 28	
Total Milk Solids (kg)	+ 0.103	+ 6.2%

Due to the heterogeneity of the milk parameters within the herd, the only parameter that could be statistically proven to have increased was the kilograms of extra milk solids produced per cow (Figure 2), despite the fact that milk volume, milk fat and milk protein appeared to have increased (but could not be proven statistically).

The apparent two-week lag time is atypical of ProDairy and may be related to the absolute drop in production due to inclement weather between days 10 and 16 of the trial.



Figure 1: Effect of ProDairy on milk solid production.

Effect of ProDairy on Milk Solid Yield

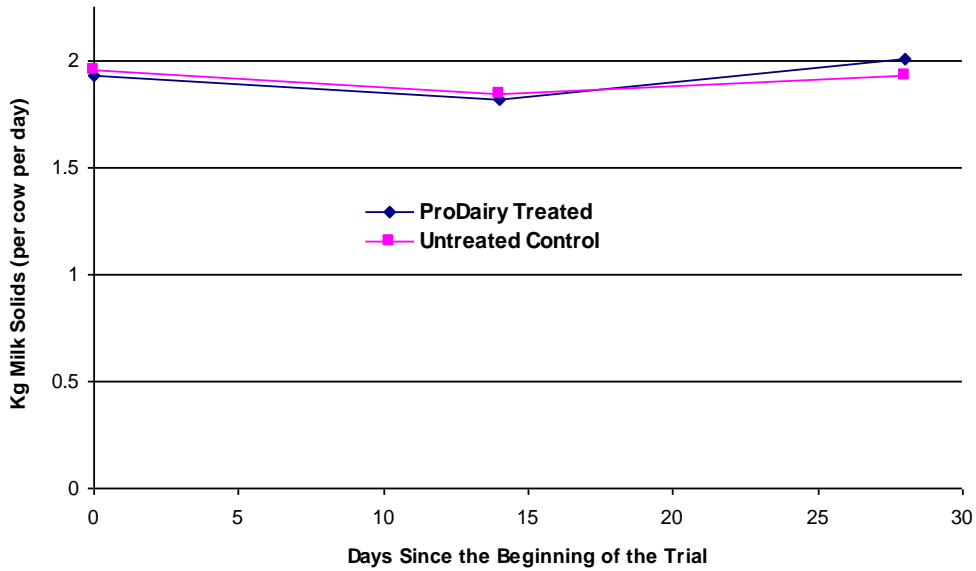
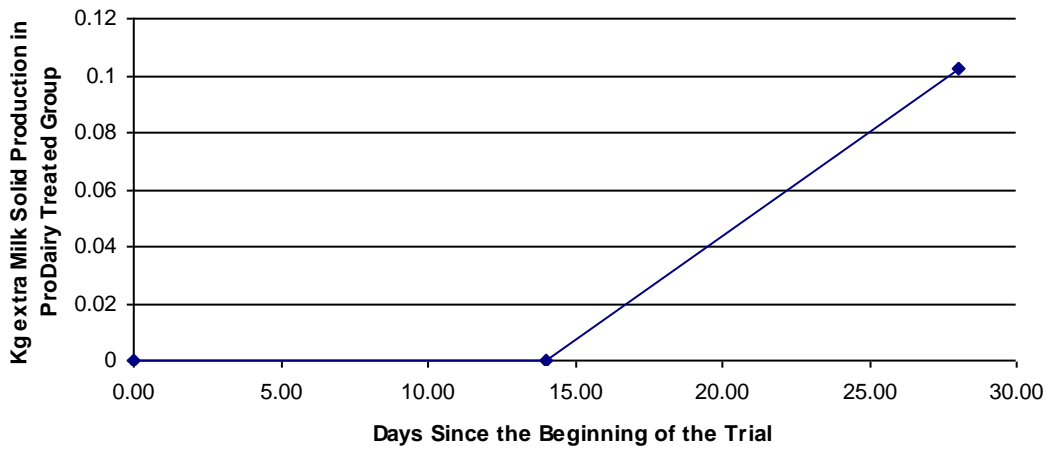


Figure 2: Increase in milk solid production on ProDairy treated cows.

Increase in Milk Solid Production



Conclusion

The results of this trial confirm earlier results from the Taupo and Southland region of the positive financial and yield benefits of using ProDairy.