



Southland Pro-Dairy trial

Southland, 2001

Introduction

This trial was conducted on a 90 hectare property in Edendale in Southland. 300 cows are run on the property with an effective stocking rate of 3.4 per hectare. The temperature regime is typical of the area with a strong seasonality of growth and a rainfall of around 965 mm (36").

Materials and Methods

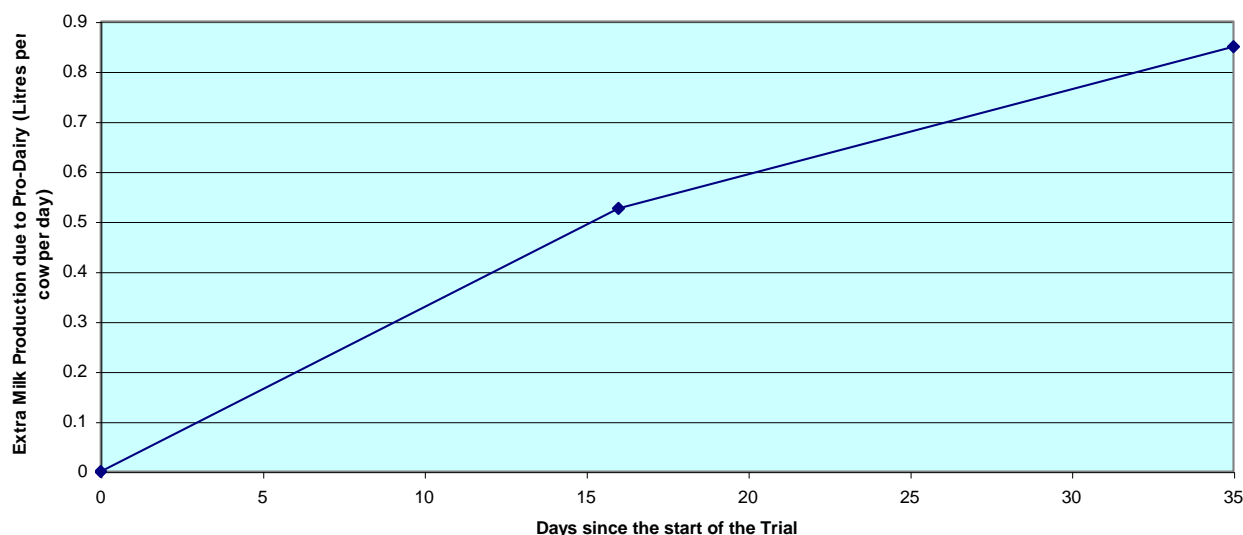
The protocol was to drench the entire herd with the exception of 30 control animals. The manager selected the control animals as being representative of the herd as a whole. The treated cows received 10mL per head per day via oral drench; the control group received no drench.

An initial herd test was taken on 30/10/01 and drenching with Pro-Dairy commenced the next day. Follow-up herd tests were done on 15/11/01 (day 16) and 4/12/01 (day 35) when the trial finished. The trial took place during the peak of production when cows are also encountering the stress of mating.

Results

Average milk volume for the whole herd at the start of the trial was 22.5L per cow per day. This increased to 22.7L per cow per day on day 16 and then dropped to 20.4L per cow per day on day 35. What is interesting is the way the relative yields were between groups. The chart below shows the increase in milk yield of the treated group relative to the control group. The net total increase in milk production at the end of the trial was 0.849L per cow per day ($p < 0.05$) relative to the control group (Figure 1). Total milksolids and total protein yield increased on day 35 by 77g ($p < 0.1$) and 35g ($p < 0.05$) per cow per day respectively in the treated group relative to the control (Figure 2).

Increased Total Milk Production due to Pro-dairy





Increased Production Due to the Use of ProDairy

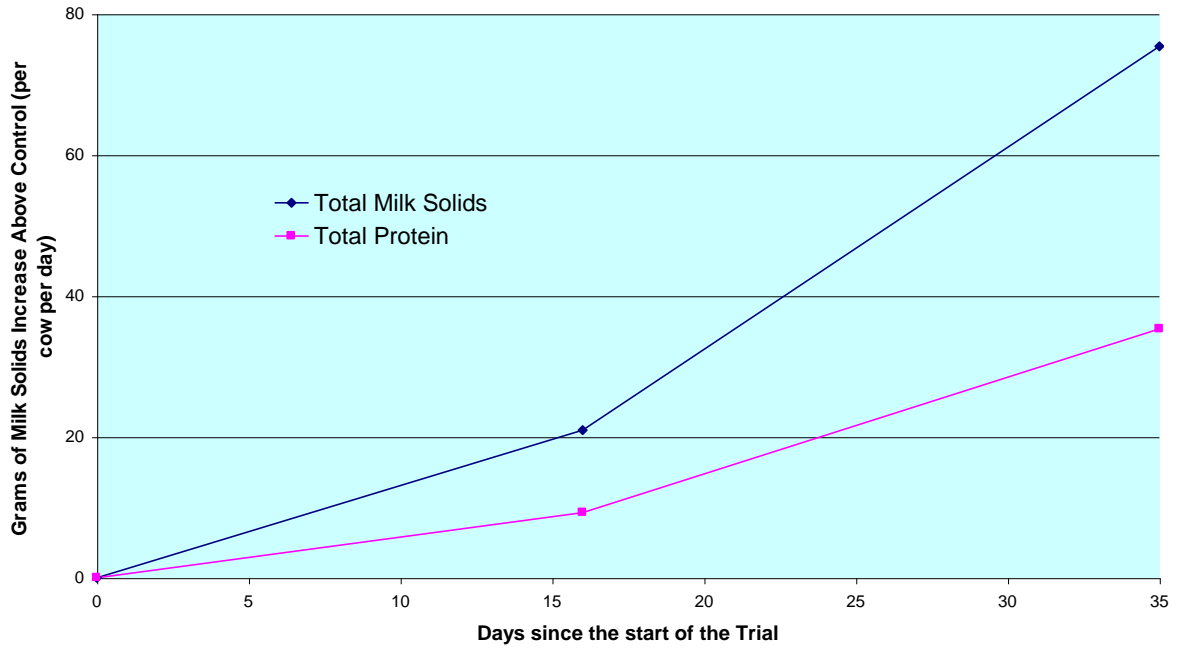


Figure 1: Increase in milk volume due to ProDairy