Effect of Soy Bean Meal and CO-4 Grasses on Milk Production of Milking Cows in Mid Lactation Period

A.S. Kodithuwakku[1], N.M.N. Nambapana[1], K.K.T.N. Ranaweera[1] and R.M.S. Gunathilaka[2]

[1]*Department of Animal Science, Uva wellassa University, Badulla, Sri Lanka*
[2]*Pelwatte Dairy Industry Ltd, Private Mail Bag, Buttala, Sri Lanka*

Dairy industry in Sri Lanka is the main sub sector of livestock development at present. Milk yield per cow and the cost of feed to produce milk have greatest influence for profitability of a dairy operation. This study was conducted to determine the effect of soy bean meal (SBM) and CO-4 grasses on milk production of milking cows (3-5 years old) in mid lactation period. A total of twelve dairy cows were randomly assigned into three dietary treatments. Each treatment comprised two blocks according to stage of lactation and two cows were included in each block. Mid lactation stage milking cows were selected to three dietary treatments and each treatment comprised with 4 replicates. The control group (T_0) of milking cows was fed concentrate (existing) feed and CO-3 grasses. The cows in T_1 treatment were treated with concentrate feed enriched with SBM and CO-3 grasses and cows in T_2 treatment were fed concentrate feed enriched with SBM and CO-4 grasses. Morning and evening milk yields were measured and milk quality (fat and SNF) was checked weekly. All the collected data were analyzed using repeated measures ANOVA and t-paired test. There were no significant differences in average milk yield of cows between T_0 and T_1, however the average milk yield of cows in T_2 has increased significantly ($p<0.05$). The highest fat value (4.7%) and SNF value (9.37) were recorded from the milk collected from cows in T_2. In conclusion, the dietary supplementation of SBM and CO-4 grasses included diet had better effects on milk yield and quality of the milk.

Keywords: Soy bean meal, CO-4, Milk yield, Milk quality