EFFECT OF FEEDING SOME BY-PRODUCTS ON THE PERFORMANCE OF DAIRY BUFFALO

By

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B.Sc. Agric. (Animal production) Ain Shams Univ., 1979
M.Sc. Agric. (Animal Nutrition) Ain Shams Univ. 1990

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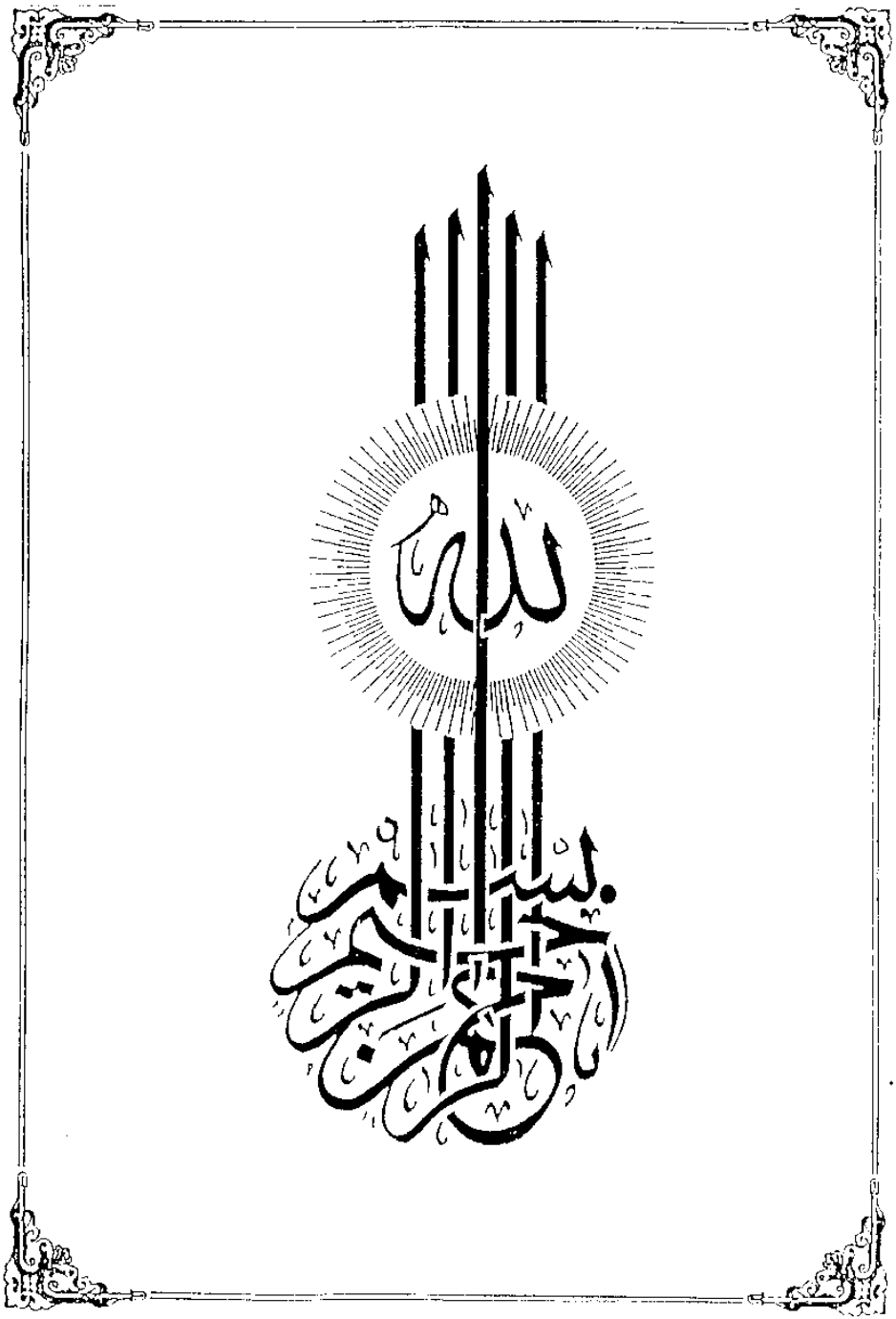

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ABSTRACT

Yahya Abd-El-Haleem Abd El-Rahman Maareck Effect of feeding some by-products on the performance of dairy buffalo-unpublished, Ph.D. of Science, University of Ain Shams, Faculty of Agriculture, Department of Animal Production, 1997.

An experiment was conducted to investigate the effect of replacing pelleted concentrate feed mixture of buffaloes rations by dried sugar beet pulp at 0, 25 and 50% level on productive performance. Eighteen lactating buffaloes were used in this study, which were divided into 3 similar groups. Then these groups were assigned randomly to one of three dietary treatments. Animals were introduced to treatments starting one week before the expected calving date and continued till the day 180 of lactation season. Total protein, albumin, globulin, A/G ratio, urea, GOT and GPT were determined in blood serum.

The effect of the nutritional treatments on milk yield , milk composition, colostrum compsition, feed efficiency as DM, SV to milk and reproductive performance were studied. The results could be summaryzed as the following:

1- There were no significant differences among treatments concerning average daily milk yield and daily fat-corrected-milk (4%) yield.

2- There were no significant differences among treatments concerning gross energy of colostrum on different days studied.

3- The group fed on 50% level of dried sugar beet pulp showed milk with highest value of gross energy followed by the group fed on 25% level of dried sugar beet pulp and finally the control. Differences among treatments were significant ($P<0.05$).

4- There were no significant differences among treatments concerning dry matter, starch value and net starch value rate of conversions to milk.

5- There were no significant differences among treatments concerning total solids, fat, solids-not-fat, total protein, ash and lactose contents of colostrum.

6- The group fed on 50% level of dried sugar beet pulp showed the highest value of milk total solids content followed by the group fed on 25% level of dried sugar beet pulp and finally the control. These differences were significant ($P<0.05$).

7- There was no significant difference between the two groups fed on dried sugar beet pulp concerning fat content of milk which both were higher significantly than the control .

8- There were no significant differences among treatments in solids-not-fat and lactose contents of milk.

9- Total protein content of milk was close for the two groups fed on dried sugar beet pulp but both groups were higher significantly than the control.

10- Ash content of milk of the group fed on 50% level of dried sugar beet pulp was lower significantly than those of the group fed on 25% level of dried sugar beet pulp and the control.

11- There were no significant differences among treatments concerning daily yields of milk fat, protein and lactose. The groups fed on dried sugar beet pulp showed lower milk ash yield than that of the control.

12- There were no significant differences among treatments concerning calving interval and days at first estrus after parturition. The groups fed on dried sugar beet pulp showed significantly lower values of services per conception compared with the control.

13- Total protein, albumin, globulin, A/G ratio, urea, GOT and GPT of blood serum of this study were within the normal ranges reported for buffaloes.

Key words: Beet pulp, Lactating, Buffalo, Milk, Yield, Composition, Ration, Feed efficiency.

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