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**INFLUENCE OF SOME NUTRITIONAL FACTORS ON
PRODUCTIVE PERFORMANCE OF EGYPTIAN BUFFALOES**

BY

NASR EL-SAYED YAHYA MOHAMED ELBORDENY
B. Sc. Agric. (Animal Production), Ain Shams Univ., 1996

A thesis submitted in partial fulfillment

of

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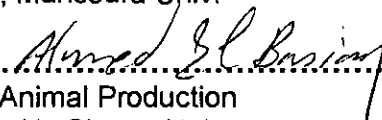
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ABSTRACT

Nasr El-Sayed Yahya Mohamed El-Bordeny. Effect of some nutritional factors on the productive performance of Egyptian buffalo. Unpublished Master of Science thesis, Departement of animal production, Faculty of Agriculture, Ain Shams University, 2000 .

Twenty four lactating buffaloes in their 2nd wk before expected parturition were grouped into 4 feeding treatments, 6 animals each, according to their milk yield in the last preceding lactation and animal weight. The treatments were (1) NRC allowances (2) NRC allowances +10 g YC Yea-Sacc¹⁰²⁶ /head per day (3) Local allowances (4) Local allowances +10 g YC /head per day. The daily ration cover the animal allowances, and consisted of concentrate feed mixture (CFM), dried sugar beet pulp, tapioca, sunflower meal waste: berseem or darawa, rice straw (C:R ratio a bout 65:35 dry matter basis). The treatments extended to 180 days after parturition. The addition of YC to animal diets of the local allowances group results higher ($P>0.05$) values of nutrients digestibility for DM, OM, CP, CF and EE, but higher digestibility ($P<0.05$) due to the supplementation by YC on NFE. Supplementation of YC to animal diets enhance ($P<0.05$) feed conversion for dry matter (DM) and gross starch value (GSV). Supplementation of YC to animal diets showed significant ($P<0.05$) higher milk and FCM4% yield. The animal were fed local allowances and supplemented with YC showed higher ($P>0.05$) milk yield and 4% FCM yields than those recorded with NRC allowances. The treatments had no significant ($P>0.05$) effect on colostrum composition. Experimental animal, which fed Local allowances, showed significantly higher ($P<0.05$) milk fat % than those fed NRC allowances, and also supplementation by YC to buffalo diets showed no significant differences. Supplementation by YC showed a decrease ($P>0.05$) of

milk protein, lactose and SNF % compared to the non-supplemented groups. Also animal which fed local allowances decreased ($P<0.05$) lactose and SNF, but not influenced protein %. Fat, protein, lactose, TS, SNF and Ash yields were significantly ($P<0.05$) higher for groups fed diets supplemented with YC than those non-supplemented. No significant ($P>0.05$) differences observed in fat, protein, lactose, TS, SNF and ash yields due to applying local allowances. Supplementation by YC showed no significant ($P>0.05$) effect on serum TP, Alb., Glo., urea, creatinine concentrations and A: G ratio, but there was significant ($P<0.05$) decrease in serum total lipids. The local allowances showed significant ($P<0.05$) increase of serum TP, Alb., A: G ratio and total lipids, while Glo, urea and creatinine not influenced.

Key words: Allowances, Yeast culture, Lactating buffalo, Nutrients digestibility, Blood serum, Milk yield, Feed conversion.

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