The Asian Journal of Animal Science (June & December, 2007), Vol.2 No.1 & 2 : (95-100)

RESPONSE TO MAIDC SUGRAS MILK RATION BY MILCH BUFFALOES

L.M. KARANJKAR, R.A. PATIL, V.S. JADHAV, S.G. NARWADE AND A.A. HANMANTE

ABSTRACT

The experiment, planned with the objectives to (a) study the effect of MAIDC milch ration on milk production, (b) to evaluate its digestibility and (c) study the economics of feeding was undertaken at the University Dairy from 20th March to 18th June, 2003 on 16 lactating buffaloes. Two types of milch rations i.e. the MAIDC and farm concentrates along with required roughage's formed the daily diets of the animals. The mean values of various parameters were tested by Students '*t*' test. The daily milk yield ranged from 3.10 to 4.23 lit in T_1 and T_2 as well. Feeding of homemade concentrate resulted in significant ($P<0.05$) increase (7.41%) in fat content of milk over compounded feed (6.71%). Feeding homemade concentrate resulted in significant ($P< 0.05$) higher FCM Yield (3.85 lit) over compounded concentrate (3.60 lit). The mean DCP values under T_1 and T_2 were 11.41 and 11.58 percent, respectively. The respective TDN values were 67.07 and 78 percent. No significant difference could be recorded from mean DCP values. However, TDN value of compounded feed was significantly ($P<0.05$) superior. It was inferred that both feeds are palatable, nutritious and enhance the milk yield substantially. Farm made concentrate mixture is much better for small farmers because the locally available feed ingredients can be utilized and increase the fat content of milk to 7.41% from 6.56% (initial).

See end of article for authors' affiliations

Correspondence to :
R.A. PATIL
Dept. of Animal Science
College of Agriculture,
NANDED (M.S.) INDIA

Accepted : *October, 2007*

Key words : Milk yield, Buffalo, Compounded, Farm-made, Rations.

Recently Government of Maharashtra has imposed to purchase milch ration manufactured by Maharashtra Agro-Industrial Development Corporation (MAIDC). It is therefore, felt necessary to have qualitative evaluation of such milch ration of MAIDC with the objectives (a) to evaluate the effect of MAIDC milch ration, (b) to evaluate its digestibility and (c) study the economics of feeding in comparison with farm made concentrate mixture.

MATERIALS AND METHODS

The investigation was undertaken at the University Dairy from 20th March to 18th June, 2003 on sixteen lactating buffaloes selected randomly and grouped in two with eight buffaloes each (Table 1). Two milch rations along with required roughage's formed the daily diets of the animals. First was compounded milch ration purchased from the MAIDC and second was homemade (Table 2).

Animals were housed in a tail to tail house with asbestos roof well ventilation and having free access for easy movement, milking, feeding and cleaning. The animals were daily washed with water before milking and offered with clean drinking water thrice and milked twice daily. All the animals were fed ad-lib roughage's and the respective concentrate mixture as per the considering the maintenance need @ 2 Kg. concentrate mixture and production @ 50 per cent of mean daily milk yield.

Observations and Calculations :

Observations were recorded for milk yield and fat per cent. Samples of feed, fodder's and faces were CP, EE, CF and ash (AOAC, 1998). The feed intake and digestibility coefficient of various nutrients were worked out. Economics of feeding was calculated on the basis of prices of ingredients prevailing in the local market.

Statistical Design :

The real difference between the mean value of various parameters studied were tested by subjecting the data to students 't' test under two-tail test for small samples as per Panse and Sukhatme (1985).

RESULTS AND DISCUSSION

Effect on milk yield :

The observation on thirteen weeks experiment:

Mean daily milk yield ranged from 3.10 to 4.23 lit. in T_1 (homemade group) and from 3.105 to 4.234 lit in T_2 (MAIDC Group) treatments indicating that both rations responded equally for milk yield (Table 3). The observations are supported by Gupta and Tripathi (1982) working on effect of various roughage and concentrate rations in determining nutrient digestibility and milk