

Effect of Feed on Raw Milk for Fat %, Total Serum Protein and Minerals in Buffalo



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Abstract

The study was carried out to see the effect of feed supplement on milk. The buffalo were divided into Two groups, one group was offered "khuark" as feed supplement for 7 days. Significant increase was observed in milk production.

Keywords: Milk, Supplements, Khurak.

Introduction

The feed supplement "Khurak" was given to treatment group of animal @ 300 gm/day for 7 days. Both (one group is standard and another is experimental) the groups were kept in same management conditions. In present investigation has been done to see the effect of khurak on experimental group. The experiment was conducted in Jabalpur District (M.P.) N.A. Kumar et. al. observed significant increase in serum calcium and iron (2003). Lall et. al. did not found significant effect on blood minerals on supplementation of mineral mixture.

Material and Methods

Six newly parturient milking buffalo was selected for feeding trial. The maximum yield in initial without supplementation was around 7 liters each. The group for 7 days without aiding extra ration.

All milking buffalo were kept on ad-lib feeding chaffed, green maize, green grasses and one kg concentration mixture daily. The milk production was recorded daily morning and evening it was estimated by butyrometer method, Total serum protein and minerals was estimated by the method of Lowry et.al (1957).

Result and Discussion

The chemical composition of feed supplement as given below in Table no. 1. The effect of milk production total serum protein, minerals and fat % level were observed significantly in feed supplement. But the effect of feed supplement in fat % was observed significant effect. There is negative co-relation between fat % and milk production was observed. Increase in milk production decrease in fat % was observed.

P. P Rohila et.al (2007) and Saha and Kumar (2002) observed significant effect of feed supplement on milk production Kumar et.al (2003) observed significant effect of feed additives on milk production and fat%

Result obtained of the experiment on feed supplement is presented on Table -2. The result in milk production, fat %, total serum protein and iron, feed supplement increased the absorption of mineral as well as metabolism of protein, fat due to which milk production increased significantly. These above finding suggest that food is a good supplement for the milch animals.

Table - 1
Chemical Composition of Substract in Feed

| Component | Composition |
|-----------|-------------|
| Protein | 93 mg |
| Iodine | 117.5 mg |
| Calcium | 42 gm |
| Vit A | 42,500 iv |
| Iron | 212 mg |
| Copper | 50 mg |
| Manganese | 250 mg |
| Cobalt | 5.14 mg |
| Sulphur | 4.5 mg |

Table - 2

**Effect of Feed on Milk Production (Mean I SE),
Fat %, Serum Protein, Calcium and Iron**

| Parameters | Control Group | Treatment Group |
|--------------------------|---------------|-----------------|
| Milk production in liter | 7.42+0.114 | 8.014+0.33 |
| Fat % in group | 5.3+0.365 | 9.22+0.0462 |
| Total serum protein g/dl | 6.7+0.463 | 7.11+0.482 |
| Iron mg% | 142+ 3.34 | 142+3.21 |

Conclusion

The milk production, fat %, total serum protein and iron, feed supplement increased the absorption of mineral as well as metabolism of protein, fat due to which milk production increased significantly. There is negative co-relation between fat % and milk production was observed. Increase in milk production decrease in fat % was observed. These above finding suggest that food is a good supplement for the milch animals.

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