شبكة المعلومات الجامعية

بسم الله الرحمن الرحيم

شبكة المعلومات الجامعية

التوثيق الالكتروني والميكروفيلم

شبكة المعلومات الجامعية

جامعة عين شمس

التوثيق الالكتروني والميكروفيلم

قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها
علي هذه الأفلام قد أعدت دون أية تغيرات

يجب أن

تحفظ هذه الأفلام بعيدا عن الغبار

في درجة حرارة من ١٥-٢٥ مئوية ورطوبة نسبية من ٢٠-٤٠%

To be Kept away from Dust in Dry Cool place of 15-25- c and relative humidity 20-40%

بعض الوثائق الاصلية تالفة

بالرسالة صفحات لم ترد بالاصل

RELATIONSHIP BETWEEN SOME MINERALS AND RUMEN ACTIVITY

٤٠٢٩

BY

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B.Sc. (Agric.) 1990

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INTRODUCTION

Although minerals are needed only in very small amount in animals feeds, they are very essential for normal health condition, production and metabolic functions of the body.

Mineral deficiencies or imbalances in soil and forage have long been held responsible for low production and reproduction problems of animals. Significant physiological relationships exist among dietary intakes of minerals and the corresponding levels of minerals in the blood plasma.

Administration of minerals for animals by drinking water, mineral lick, mixtures, oral drenching or shot-gun and injection are considered as the most economical methods of supplementation while mineral supplement which incorporated into the fed rations, generally ensures that animals are receiving the required mineral.

The objective of the present study was to through some lights on the effect of adding different sources of mineral mixturs to the ration of on minerals balance, mineral concentration in blood plasma, body weight gain, digestion coefficient of the nutrients and rumen activity of lambs and bucks.

REVIEW OF LITERATURE

1- Mineral concentration in blood plasma

1.1- Macro Minerals.

1.1.1- Calcium and phosphorous

The normal level of Ca in plasma of goats ranged from 10.65 to 11.0 mg/100 ml (Papenheimer et al. 1962). Uenderwood (1966) and Stewart (1990) reported that the normal level of Ca and P in serum of sheep ranged from 4.5-6.5 mg/100 ml, respectively. McDowell and Conrad (1977) stated that the critical level in serum of cattle for Ca<8 and P<4.5 mg/100 ml.

With the supplemented basal diets of growing lambs with 1.79,3.53 or 4.67 gm Ca/Kg DM, plasma Ca concentration was higher for female lambs (2.51 mmol/litre) than the male ones (2.33 mmol/litre) and increased linearly with increasing dietary Ca concentration in diet from 2.31 to 2.52 mmol/ litre (Field et al.1985). Gomaa et al. (1993b) showed that plasma Ca and P concentration of goats ranged from 8.97 to 11.04 and 5.73 to 7.55 mg/100 ml when dietary Ca and P intake ranged from 7.3 to 11.4 and 6 to 10 g/day, respectively. Call et al.(1978), feeding Hereford heifers a phosphorus-deficient diet (.14% "as fed" basis) or high P diet (.14% plus .22% from supplementation, total .36%), they found after 10 days on trial, the phosphorous concentrations in both whole blood (16.0 mg %) and blood serum (8.1 mg%) in the P-cattle were considerably lower than the respective concentrations (19.0 mg %, 11.7 mg %) in the P+ cattle. However, approximately 9 months later, the differences had nearly disappeared, the