## EFFECT OF SULFUR SUPPLEMENTATION ON NUTRIENTS UTILIZATION AND RUMEN MICROBIAL ACTIVITY IN OSSIMI SHEEP

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## ABSTRACT:

The present experiment was conducted to study the effect of sulfur supplementation on nutrients digestibility, feeding values and rumen microbial activity using four Ossimi rams surgically fitted with ruminal fistulae. The experimental design was 4X4 Latin square design. The S levels were 0, 2, 4 and 6g/head/d (R0, R2, R3 and R4, respectively) The results obtained showed that S-supplementation led to increase in the digestion coefficients. Ration 3 showed highly significance effect in digestion coefficient of DM, OM, CP, NFE and EE than the other studied rations. Nutritive value (TDN and DCP) was highly significant for ration 3 (N:S ratio 10:1). VFA production and ammonia-N in the rumen of sheep fed ration 3 was significantly higher than the other rations.

Key words: dietary sulfur, digestibility, microbial activity, Ossimi sheep.

## UTILIZATION OF SOME HYDROPONIC PLANTS IN RABBIT FEEDING

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## ABSTRACT:

This study was carried out to investigate the possibility of using of vegetated fenugreek seeds and /or barley grains on rice straw as a bedding material in growing rabbits diet. A total number of sixty growing New Zealand White (NZW) rabbits at 7- weeks of age (with an average weight  $1138 \pm 32g$ ) randomly divided into 6 equal groups, 10 for each in 2 replicates. Rabbits were fed control diet and 5 experimental diets contained hydroponically sprouted fenugreek seeds(SF) or/ and hydroponically sprouted barley grains(SB) and their mixtures replacing with clover hay. The experimental diets were fed for 10-weeks. The result showed that: rabbits fed D2 and D6 (28%) SF and 28% SB) recorded the highest body weight gain 1370 and 1325g, respectively compared with 1320g for control. Feed intake was the lowest for D3 and D2 which contained 21% and 28% SF, respectively. while D4 (14% of each SF and SB mixture ) was the highest total feed intake. Rabbit fed D2 (28%SF) recorded the better feed conversion followed with D6 (28%SB). The nutritive value as TDN and DCP was improved in D6,D2andD5 respectively,.Nitrogen balance were positive in all diets, D2 and D6 had the highest nitrogen balance value.

*Key words:* Hydroponic, Barley, Fenugreek, Rice straw, Digestibility, Growth performance, rabbits.