

EFFECT OF THE MAGNETIC WATER ON RUMEN KINETIC IN AWASSI RAMS .

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ABSTRACT

This study was conducted at Animal production department farm\ College Agriculture and Forestry \ Univ. of Mosul. Nine Awassi rams with initial weights of 60-82 kg and 3 years of age, randomly divided into three groups. The first group (control) was given tap water, while the second and third groups were given magnetic water at level 700 and 1400 gauss respectively for 60 days of trail period .Samples were taken at the last week of the trail to study the effect of magnetic water on rumen liquor , growth of microscopic organisms (bacteria and protozoa), rumen PH and ammonia . All groups were fed on the same unified ration during the trial period of day (60 days) roughages and concentrates. The result revealed a significant decreases($p \leq 0.05$) in rumen PH at the level of 1400 gauss , and significant increases in the count of bacteria and protozoa for the behalf of second and third group , with non significant differences in ammonia concentration between the three groups . There were a significant differences($p \leq 0.05$) at the time of samples withdrawn, the highest ammonia concentration was 5.34 mg/100ml of rumen liquor after 2 hours from feeding , and dropped to 1.31 mg/100ml after 4 hours from feeding . the study concluded that the magnetic water had a positive effect on rumen liquor which led to increase the bacteria and protozoa growth which may have a positive reflection on improving meat , and wool productivity in the future.

Key word : magnetic water , rumen liquor , Ruminants .