

STUDYING THE EFFECT OF FEEDING UREA TREATED SUGARCANE BAGASSE SILAGE WITH DIFFERENT LEVELS ON SHEEP PRODUCTION.

I. DIGESTIBILITY AND GROWTH PERFORMANCE.

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SUMMARY

Four crossbred rams (3/4 Chios x 1/4 Ossimi) had similar age and weights were used in (4x4) Latin square design for digestibility trials. Also, twenty-six growing ewe lambs of the same breed were used for comparative feeding trial. Experimental animals were divided into four similar groups and were fed one of the experimental rations, wheat straw (Control, T1) and sugarcane bagasse silage (SCBS) supplemented with different levels of urea, 0.0 (T2), 1.5 (T3) and 3 % (T4) on DM basis. Average pH and ammonia-N concentrations of SCBS were measured. Live weight of lambs and feed intake were recorded and daily gain was calculated. Ensilage process increased CF and ash content of SCB, whereas urea addition at ensiling time decreased CF and increased CP content. Feeding silage either with or without urea addition increased ($P<0.05$) digestibility of DM, OM, CP, CF and EE, whereas the effect on NFE was not significant. Within silage groups, urea supplementation had only a significant ($P<0.05$) effect on CP digestibility. Average final body weight of growing ewe lambs was higher in T4 group (40.2 kg) than those of T3 (38.6 kg), T2 (37.5 kg) and T1, control group (33.9 kg). Average daily gain was significantly higher ($P<0.05$) in silage groups (T2, T3 and T4) than control one. Average voluntary intake of ewe lambs was higher ($P<0.01$) in SCBS groups than control. In conclusion, Feeding silage either with or without urea increased ($P<0.05$) digestibility of most feed nutrients. Urea supplementation had only a significant effect on CP digestibility. Sugarcane bagasse silage supplemented with different levels (1.5 and 3 % of DM) of urea could improve growth performance of growing lambs.

Keywords: silage, bagasse, urea addition, sheep, digestibility, growth.