

J.Agric.&Env.Sci.Alex.Univ.,Egypt Vol.8 (1)2009,89-100

UTILIZATION OF CORN STALKS IN RUMINANT FEEDING: 2- EFFECT OF SOURCE OF ENERGY ON UTILIZATION OF TREATED CORN STALKS BY GROWING LAMBS.

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ABSTRACT

Twenty four growing crossbred male lambs, weighing about 22.95 ± 0.57 kg were divided into four similar groups, six lambs of each, to study the effect of replacement of corn with barley grains (0, 33.3, 66.7 and 100 %) in the concentrate feed mixture (CFM,s) when fed with corn stalks treated with urea (5%) plus berseem hay at the ratio of (2:1) on the digestibility coefficients, nutritive values, nitrogen utilization, some blood traits and productive performance of growing lambs. Animal were fed on (CFM,s) at the level of 2.25 % of live body weight plus corn stalks treated with 5 % urea and berseem hay (2:1) *ad libitum*. Results revealed that diet 3 obtained the highest digestibility coefficients of DM, OM, CP, CF, EE and NDF. The differences in TDN values were not significant, while the differences in DCP % and nitrogen balance values were significant . There were no significant differences in the concentrations of total protein, albumin, globulin, creatinine and ALT among the experimental diets at zero time. While, at 3hrs after feeding the differences were significant in the concentration of AST in blood. Average daily gains (ADG) were significant among the four diets , while diet (3) obtained the highest ADG and diet (4) obtained the lowest value. Feed conversion ratio (kg DM, or TDN /kg gain) indicated that group (3) was more efficient than other groups, (2) and (4), with significant differences. This data showed that diet (3) was more efficient followed by diets (1), (2) and (4) at the entire experimental period.

Key word: **Corn stalks, Urea treatment, Ruminants, Growing lambs, Barley and corn grains**