

Performance of Lambs Fed on Biologically Treated Silages

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Abstract : The aim of this study was to investigate the performance and nutrient digestibility of sheep fed silage of green maize stems (GMSS), silage of sugar cane tops (SCTS), and ½ silage of green maize stems (GMSS)+ ½ silage of sugar cane tops (SCTS) with concentrate feed mixture (CFM) on silage quality, nutrient digestibility, nutritive value, feeding trials, blood serum analysis, carcass characteristics and economic efficiency of growing lambs fed these silages. A feeding trial for 120 days was carried out on twenty four ½ Ossimi x ½ Chios crossbred male lambs of 5 months old and weighing 23.66± 1.69 Kg LBW. Animals were divided into 4 groups (6 lambs each). The experimental groups allotted randomly into four rations, all the experimental groups received 2% CFM of their live body weight and wheat straw as a control (R1), while R2, R3 and R4 included silage of green maize stems GMSS, silage of sugar cane tops (SCTS) and 50% silage of green maize stems (GMSS) +50% silage of sugar can tops (SCTS) *ad-libitum* feed, respectively.

Results indicated that nutrient digestibility of all nutrients and feeding value of rations containing silage significant increased ($P<0.05$) were observed in OMD and DMD in ration (2) compared to the control ration, except the value CPD and CFD. The best result rations of TDN and DCP were recorded with ration (4). The average daily gain were significantly increased with rations 3 and 4, the best feed conversion recorded with ration 4 but other test treatments not effect. Dressing percentage was nearly similar among the studied diets and other carcass traits it were best significantly results with ration 4 in sample, lean, fat weight and eye muscle area. No significant differences were found in blood constituent. Feed conversion and economic efficiency were markedly better with lambs fed 50% (GMSS) +50% (SCTS) feed *ad-libitum* than that of the control group. The lambs meat analysis of CP was increase significantly 22.00 % with ration 3 and 22.17% with ration 4 compared with control (ration 1). It could be concluded that, feeding green corn stem silage, sugar cane top silage and their mixture *ad-libitum* with low level of concentrate feed mixture for growing lambs, resulted in superior nutrition, better daily gain with ration 3 followed by ration 4. Feed conversion and economic efficiency were improved with ration (4). Good carcass characteristics in ration (4) as compared with other groups. It was could be recommended to used silage green maize Stover and sugar cane top silage in ration to improve lambs performance.

Key words: Green maize stems, Sugar cane tops, Silage, Feeding value, Sheep performance, Nutritive value, Carcass characteristics.