## STUDIES ON BIOLOGICAL TREATMENT OF SALT PLANTS: II – FATTENING TRIAL

Abdelhamid, M.A.\*; Afaf M. Fayed\*\*; A.Z. Ghanem\*\*\* and H.G. Helal\*\*

- \* Animal Production Department, Faculty of Agriculture, Al-Mansoura University;
- \*\* Animal Nutrition Department, Desert Research Center, Cairo and
- \*\*\* Soil, Water and Environment Research Institute, Agricultural Research Center, Cairo.

## **ABSTRACT**

Twenty four male Barki growing lambs (5 months age) were used to study the effect of feeding biologically treated halophyte mixtures(mixture 1 consisted of dried Acacia saligna treated with P.florida + dried Tamarix mannifera treated with P.ostriatus; whereas, mixture 2 consisted of dried Acacia saligna treated with P. ostriatus + dried Tamarix mannifera treated with P. florida ) and controlling with berseem hay for 140 days on feed intake, growth rate, feed efficiency, rumen liquor parameters, blood profile and economic efficiency. Lambs fed the control ration hadthe highest body weight with no significant differences among treatments. Lambs fed the control ration had significantly the highest daily gain followed by those fed mixture 1 and those fed mixture 2, respectively. DM intake / Kg BW / day was lower for lambs fed the biological treated mixtures than the control; so, the feed efficiency of the control diet had the lowest value comparing with the control. Roughage cost (LE) and total cost (LE) for the biological treated mixtures were lower than those of the control, reflected that economic efficiency of feeding biological treated mixtures were higher than that of berseem hay. Ruminal values of pH, TVFA's and ammonia-N of lambs fed the control diet were higher than those fed the biological treated mixtures. The hematological parameters reflected nearly similar values with no significant effect of the tested rations. Feeding biologically treated halophytes mixtures to lambs didn't cause any abnormal conditions in liver and kidney functions.

**Key words:** Halophytes – Fungal treatment – Sheep fattening.