ASSESSMENT OF LIVE BODY WEIGHT, BODY FLUIDS AND CONCENTRATIONS OF SODIUM, POTASSIUM AND ALDOSTERONE IN DRY AND PREGNANT EWES DURING SUMMER AND WINTER

Anas A. Salem1, Zeinab Mousa2, Nasrat AbdelAti1 and Mohammed Hayder2

Abstract:

The aim of this study was to assess live body weight (LBW), percentages of total body fluids (TBF), extracellular fluids (ECF), intracellular fluids (ICF), plasma volume (PV), and concentrations of aldosterone (ALD), sodium (Na) and potassium (K) in dry, early and late pregnant ewes in summer (July-August) and winter (February-March). A total of adult healthy 48 ewes with different physiological statuses (8 dry ewes, 8 early pregnant ewes at 22-35 d of pregnancy, and late pregnant ewes at 144-145 d of pregnancy) were chosen by random way and housed in semi-open pens under the normal environmental conditions, Mallawi Sheep Farm ElMinia Governorate, Upper Egypt. TBW was determined by injecting j.v. 0.5 ml Urea solution/kg LBW, ECF was determined by injecting j.v. 0.25 ml sodium Thiosianate solution (5%) /kg LBW, PV was determined by injecting j.v. Evan's blue solution (0.5%) 0.1 ml/kg LBW, and ICF was calculated by subtract TBW from ECF. Before feed intake, blood samples were collected (6:00 a.m.) from all ewes via j.v. puncture for plasma aldosterone, Na and K determination. Results of this study indicate that LBW and Na concentration of dry and pregnant ewes were greater (P

Keywords:

Body weight, body fluids, Aldosterone, sodium, potassium, season and dry and pregnant ewes

Published In: