Effect of Age and Physiological Status on Some Serum Energy Metabolites and Progesterone in Ouled Djellal Breed Ewes in Algeria

Authors: B. Safsaf, M. Tlidjane, B. Mamache, M. A. Dehimi, H. Boukrous, Aly A. Hassan

Abstract : The aim of this study is to determine the effect of age and physiological status on progesterone and energy metabolism of Ouled Djellal (O.D) breed ewes. 40 healthy ewes were divided into two groups, primiparous and multiparous, with 20 ewes in each group. The body weights (BW) (kg) were 46.6 ± 4.20 and 59.2 ± 3.02 , and consuming less 25 to 30% of their basal energetic requirements. The values of serum glucose, triglycerides and cholesterol were lower in pregnant than in non-pregnant ewes. The high to very high significant differences were found during the 15th week of pregnancy for glycaemia and triglyceridemia respectively. Concerning serum progesterone, a very highly significant difference (p < 0.001) was noted in the pregnant group, and the values were higher in MP than in PP. After lambing, the triglyceridemia values were slightly lower in primiparous than in multiparous pregnant ewes. In order to prevent imbalance during critical periods of reproduction, we can use the serum metabolic profile.

Keywords: age, energy metabolites, ouled djellal breed ewes, physiologic status, progesterone

Conference Title: ICASVM 2014: International Conference on Animal Science and Veterinary Medicine

Conference Location: Bangkok, Thailand Conference Dates: December 18-19, 2014