BLOOD PARAMETERS IN THE MORADA NOVA SHEEP: INFLUENCE OF AGE, GENDER AND BODY CONDITION SCORE

Benito Soto-Blanco, Maria Marília Leite Carlos, André Menezes do Vale, Jacinara Hody Gurgel Morais, Dowglish Ferreira Chaves, Débora Andrea Evangelista Façanha Morais, Olivardo Facó

Dept. Animal Sciences, Universidade Federal Rural do Semi-Árido (UFERSA), Mossoró, EMBRAPA - CNPC, Sobral, Brazil

The Morada Nova sheep breed is one of the most important native hair sheep breed from Northeastern Brazil, which are bred for the production of their high quality skin and meat. The present study was aimed at determining the serum biochemical panel and the erythocytogram from the sheep of the Morada Nova breed. Further, it was also aimed at verifying the variations of these parameters promoted by the gender, age, and body condition score. The study was conducted by sampling nine herds; two from Ceará state, five from Rio Grande do Norte state, and two from Paraíba state, Brazil. It used a sample of 249 clinically healthy sheep of the Morada Nova breed. The gender, age, and body condition score were recorded from each animal. Blood samples were collected for determining the serum levels of glucose, cholesterol, triglycerides, urea, creatinine, total proteins, albumin, globulins and thyroxine (T4), the serum activities of aspartate aminotransferase (AST) and alanine aminotransferase (ALT), the number of red blood cells (RBCs), and the packed cell volume (PCV). The obtained results in all sheep were: Glucose - 64.8±1.35 mg/dl; Cholesterol - 68.9±1.91 mg/dl; Triglycerides - 36.1±1.16 mg/dl; Urea - 55.8±1.19 mg/dl; Creatinine - 1.64±0.08 mg/dl; Total proteins - 5.99±0.11 g/dl; Albumin - 3.01±0.05 g/dl; Globulins - 2.78±0.11 g/dl; A/G ratio - 1.57±0.08; AST - 92.8±1.49 U/l; ALT - 30.3±0.63 U/l; Thyroxine - 4.29±0.12 µg/dl; RBC - 10.9±0.36 x10^6/µl; PCV - 32.9±0.27 %; and MCV - 31.7±0.41 fl. It was observed that the evaluated blood parameters from the Morada Nova sheep did not demonstrate any variation from the reference interval established for the species, except for the lower levels of globulins and higher albumin/globulins ratio. However, it was verified that the serum biochemical panel was affected by the gender, age, and body score condition.