

CONSTRUINDO SABERES, FORMANDO PESSOAS E TRANSFORMANDO A PRODUÇÃO ANIMAL

BANANA BY-PRODUCTS HAY DEHYDRATED IN THE SUN OR SHADOW DO NOT INTERFERE IN PLASMATIC GLUCOSE AND SERUM PROTEINS OF SHEEP

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When alternative ingredients are used in animal diets, the potential effects on animal blood parameters need to be studied. This study aimed to evaluate the plasmatic glucose and in serum total protein, albumin and globulin of sheep fed with banana by-products hay. Were used 30 males, *Santa Inês* crossbreed, with an average weight of 26.5 kg, distributed in three random blocks (n=10), according to body weight. Five treatments were evaluated, which consisted in diets containing 30% of concentrate and 70% of banana by-products hay (pseudostem or leaves) and two methods of drying (sun or shadow), and a control treatment with tifton hay. After 15 days and feed fasting of 12 h, were collected 6mL of blood from the jugular vein, with needle and Vacuntainer® tube, with sodium fluoride and without anticoagulant, to obtain plasma and serum. The glucose was performed by semi automatic enzymatic colorimetric method with an equipment model Bio 200 VET Alere® and commercial kit Bioclin®. Colorimetric method was used for total protein and albumin with biuret reagent and bromocresol green, respectively, both with Bioclin® kits. The globulin was obtained by difference between total protein and albumin. Analysis of variance was made and the averages were compared using the Student-Newman-Keuls test at 5% probability. The average values of plasmatic glucose were 62,62 to 69,58 mg.dL⁻¹; and total protein, albumin and serum globulin were 5,72 to 6,16 g.dL⁻¹, 3,23 to 3,40 g.dL⁻¹ and 2,33 to 2,78 g.dL⁻¹, respectively. Those concentrations were similar (p>0.05) between the treatments and were close to the reference values for the specie, except for serum globulins. Comparing with normality ranges (from 3.5 to 5.70 g.dL⁻¹) the serum globulins averages of this research shows 33 to 52% of decrease. But considering that the average values of treatments were statistically similar with the control group, this reduction could be associated with other intrinsic factors, as breed and age, because the animals were crossbreed and being with four to six months of age. The plasmatic glucose and serum total protein, albumin and globulin of sheep fed with banana by-products dehydrated in the sun or shadow was similar with the control group. The replacement of the roughage by banana pseudostem or leaves hay during 15 days did not cause changes in these blood concentrations.

Keywords: *Musa paradisiaca*, nutrition, *Ovis aries*, serum biochemistry

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