

CONSTRUINDO SABERES, FORMANDO PESSOAS E TRANSFORMANDO A PRODUÇÃO ANIMAL

## HAEMOGRAM OF SHEEP FED WITH HAY OF BANANA BY-PRODUCTS DEHYDRATED IN THE SUN OR SHADOW

Lucélia Karoline Gonçalves BARBOSA\*<sup>1</sup>, Sóstenes de Jesus Magalhães MOREIRA<sup>2</sup>, Sarah Silva SANTOS<sup>1</sup>, Marcela Lopes da SILVA<sup>2</sup>, Igor Gabriel Ataíde SAMPAIO<sup>1</sup>, Dalton Diórgenes de ARAÚJO<sup>1</sup>, Neide Judith Faria de OLIVEIRA<sup>1</sup>, Luciana Castro GERASEEV<sup>1</sup>

\*corresponding author: luceliakaroline@gmail.com

<sup>1</sup>Universidade Federal de Minas Gerais, Montes Claros, Minas Gerais, Brasil

<sup>2</sup>Instituto de Ciências Agrárias, Montes Claros, Minas Gerais, Brasil

Banana by-products hay can reduce the costs of ruminants feeding, but possible effects on animal metabolism, physiological responses and blood parameters need to be studied. This study aimed to evaluate the haemogram 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, were collected 4 mL of blood from the jugular vein, with needle and Vacuntainer® tube, after feed fasting of 12 h. The haemogram was performed by flow cytometry method in automated counter, model Bio2900VET, Alere®. The leukocyte differential count was made by identifying the cells with optical microscope. Analysis of variance was made and the averages were compared using the Student-Newman-Keuls test at 5% probability. The average values of erythrocytes, globular volume and hemoglobin levels were similar ( $p>0.05$ ) between the treatments, ranging from 11.345 to 13.790  $\times 10^6$  /mm<sup>3</sup> of blood; 34 to 39% and 11.6 to 13.9 g%, respectively. The mean corpuscular volume, mean corpuscular hemoglobin and mean corpuscular hemoglobin concentration averages ranged between 28.4 to 30,4 fL, 9.9 to 10,6pg and 34 to 35,4 g/dL. These results are within the reference for sheep. The averages were similar ( $p>0.05$ ) between treatments in the white blood cell counting. Total leukocytes averages ranged from 7767 to 13850 by mm<sup>3</sup> of blood. The averages of segmented neutrophils, lymphocytes, monocytes and eosinophils were 3825 to 5663, 3701 to 7918, 65 to 215 and 59 to 135 by mm<sup>3</sup> of blood, respectively. The platelets averages ranged between 559167 to 749167 by mm<sup>3</sup> of blood, being statistically similar to control group. These results are within the specie reference, except for eosinophils, that can be raised by venopunction stress. The sheep hematological variables 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 complete blood cell count.

**Keywords:** *Musa paradisiaca*, nutrition, *Ovis aries*, red blood cell

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