

HEMATOLOGICAL PARAMETERS OF EWE LAMBS FED WITH WET OR DRIED CITRUS PULP

PARÂMETROS HEMATOLÓGICOS EM OVELHAS ALIMENTADAS COM POLPA CÍTRICA SECA OU ÚMIDA

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Hematologic parameters are used as an auxiliary method for evaluation and diagnosis of various diseases, such as parasitic infections. Citrus pulp has essential oils in its composition that may combat parasitism. The aim of this study was to evaluate the hematological parameters of animals supplemented with dried citrus pulp or wet citrus pulp silage. The experiment was carried out at Institute of Animal Science (Instituto de Zootecnia-APTA-SAA-SP), from June to August 2012. Twenty-four Santa Inês ewes lambs, with initial live weight around 25 kg, were totally dewormed and, after three negative fecal EPG (egg per gram) determination, were artificially infected with 3500 larvae of *Haemonchus contortus*. After 21 days, EPG was performed and the animals divided into three uniform groups of 8 animals / treatments according to their live weight and fecal EPG. The animals were placed in individual suspended slatted floor pens for 42 days and fed with corn silage and supplemented with 1% (on DM basis) of corn grain (T1 - control) or dried citrus pulp (T2) or wet citrus pulp silage (T3). Diets were kept isoproteic (11% CP) by supplementation with soybean meal. Blood samples were taken every 14 days for analysis of packed cell volume (PCV), hemoglobin (Hb) and erythrocyte count (Ery). Analysis of variance was performed with transformations of data (log X +10) and the means compared by Tukey test at 5% probability by SAS. The mean Hb and Ery were 9.8 ± 1.55 , 10.49 ± 1.40 (T 1), 9.03 ± 1.49 , 9.78 ± 1.60 (T 2) and 9.55 ± 1.22 , 10.02 ± 1.22 (T 3), statistically similar ($P > 0.05$) and are within the normal range for the species. In relation to PCV, the control group (29.50 ± 3.89) was higher ($P < 0.05$) than dried citrus pulp (27.03 ± 3.40), but the PCV for treatment with wet citrus pulp silage (28.50 ± 3.56) was similar ($P > 0.05$) to the other two treatments. The orange wet citrus pulp silage does not affect the hematological parameters, but the dried citrus pulp leads, indirectly, to a decrease in packed cell volume values.

Key words: citrus pulp, *Haemonchus contortus*, hematology, sheep.