

CONSTRUINDO SABERES, FORMANDO PESSOAS E TRANSFORMANDO A PRODUÇÃO ANIMAL

## BLOOD PARAMETERS OF DEWORMED AND NOT DEWORMED WEANING FOALS

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The foals undergo an intense body development in the first year of life and in this period are more susceptible to infection by different species of helminths. The objective was to evaluate the effects of deworming weaning foals on the blood parameters. On a horse farm in Northern Minas Gerais, were used 14 Mangalarga Marchador weaning foals at six months old, divided into two groups: D and ND. The foals were kept until 9 months of age in two separated paddocks (3.5 animal unit ha<sup>-1</sup>) of *Cynodon nlemfuensis* cv. African Star Grass and receiving pre-dried hay of *Cynodon dactylon* cv. Tifton 85 *ad libitum* and 1.5 kg 100 kg<sup>-1</sup> of body weight (BW) in concentrated. The foals of the Group D were dewormed (0.02 mg kg<sup>-1</sup> BW ivermectin + 2.5 mg kg<sup>-1</sup> BW praziquantel) whenever eggs per gram of feces (EPG) was  $\geq 500$ . Tests of EPG of foals were realized monthly. Were evaluated: Hematocrit; Red Blood Cells; Hemoglobin; Mean Corpuscular Volume (MCV); Medium Corpuscular Hemoglobin (MCH); Medium Corpuscular Hemoglobin Concentration (MCHC); Total serum proteins (T\_Prot); Basophils; Monocytes; Leukocytes; Lymphocytes; Eosinophils; AST: Aspartate Aminotransferase. Fisher test were used for comparison among groups for blood parameters using R statistical program. Group ND was infested mainly by small strongyles (6000 EPG) and group D had a minimal infestation (<50 EPG). The MCH and basophils were significant ( $p < 0.01$ ) for the Shapiro-Wilk normality test and were analyzed by the Mann-Whitney test. Among all blood parameters, only T\_Prot and basophils differed between groups ( $p < 0.05$ ), being higher in the group ND, that could be indicating, respectively, a higher dehydration and more intense immunological processes of group ND than group D, but averages are within of the reference values for equines (T\_Prot: 5.5 to 8.0 g dL<sup>-1</sup>; Basophils: 0 to 100  $\mu\text{L}^{-1}$ ). As regards blood parameters of both groups, hematocrit, red blood cells, hemoglobin, MCV, HCM, CHCM, AST, monocytes and leukocytes there was no difference ( $p > 0.05$ ) between groups, being within equine reference values. Although there was no difference ( $p > 0.05$ ) between groups, lymphocyte and eosinophil levels, defense cells associated with the presence of endoparasites, were above the reference values (Lymphocytes: 700 to 2900  $\mu\text{L}^{-1}$ , eosinophils: 0 to 100  $\mu\text{L}^{-1}$ ) in groups D (Lymphocytes: 5393  $\mu\text{L}^{-1}$ ; eosinophils: 307  $\mu\text{L}^{-1}$ ) and ND (Lymphocytes: 4628  $\mu\text{L}^{-1}$ ; eosinophils: 316  $\mu\text{L}^{-1}$ ). High cyathostomin infestation affected the total serum proteins and basophil levels in weanling foals raised extensively in Northern Minas Gerais.

**Keywords:** growth, digestion, equine, helminths, hemogram

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