

CONSTRUINDO SABERES, FORMANDO PESSOAS E TRANSFORMANDO A PRODUÇÃO ANIMAL

MAINTENANCE REQUIREMENTS OF MICROMINERALS FOR HAIR SHEEP

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Microminerals are incorporated in minimal amounts in the formulation of feed for ruminants, so their requirements are usually neglected. The studies on micromineral requirements for hair sheep raised under tropical conditions are scarce or non-existent and the current recommendations are based on the international standards established for wool sheep in temperate regions. This study was carried out to estimate the maintenance requirements of microminerals iron (Fe), zinc (Zn), copper (Cu), cobalt (Co), chromium (Cr) and manganese (Mn) for hair sheep. Thirty-eight Santa Ines lambs (13.0 ± 1.49 kg initial BW and 2 months old; 18 non-castrated and 18 castrated males), and thirty-one Morada Nova lambs (14.5 ± 0.89 kg initial BW and four months old; 16 non-castrated and 15 castrated males) were distributed in a completely randomized study of 3×2 factorial arrangement with three levels of feeding (*ad libitum*, 30% and 60% feed restriction) and two sex classes (non-castrated and castrated males). The remaining lambs were slaughtered when the animals fed *ad libitum* reached an average BW of 28 kg. The initial empty body weight (EBWi) was estimated using the data from the reference group animals. The maintenance requirements were estimated from regressions of mineral retention in the empty body on mineral intake. The genetic group and sex class did not influence the parameters of the equations to estimate the net requirements of maintenance and retention coefficient. The requirements of microminerals for maintenance were 1121.94, 587.22, 132.94, 33.39, 6.71 and 46.96 µg kg⁻¹ of EBW and retention coefficients of 58, 66, 71.57, 52.34, 81.55 and 3.30% for Fe, Zn, Cu, Co, Cr and Mn, respectively. The requirements for Fe, Zn, Cu, Co, Cr and Mn for maintenance increased as body weight increased. The requirements of microminerals for maintenance found in this study were higher than those suggested by international committees. The data from this study establishes the formulation of diets with adequate supply of microminerals for hair sheep.

Keywords: minerals nutrition, morada nova, retention coefficients, santa ines

Promoção e Realização:



Apoio Institucional:



Organização:

