AMMONIATED BABASSU PINDOBA LEAVES HAY CONSTITUTES ALTERNATIVE FORAGE IN DIETS FOR MAINTENANCE GOATS

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It was evaluated whether the inclusion of ammoniated babassu pindoba hay can substitute the guinea grass hay in diets for maintenance of goats. The experiment was carried out at the DZO/CCA/UFPI, in Teresina, PI, Brazil. The pindoba leaves were ground in a forage chopper to particles with 2 cm and sun-dried for 24 h before ammonization in the ratio 4% urea to DM. The intake and digestibility of isofibrous diets with 0; 33; 66 and 100% of ammoniated babassu pindoba hay in substitution to the guinea grass hay in total diet was evaluated, with roughage:concentrate ratio 70:30. Twenty young male goats of the Anglonubian breed, with mean weight 34.31 ± 10.25 kg, were kept in metabolic cages, fed with rations provided at 8:00 a.m. and 4:00 p.m., with forecast 20% of leftovers. The experiment lasted seven days to adapt the animals to the cages, management and diets, and five days to collect. Leftovers and faeces were collected before each meal and aliquots of 20% were obtained. Daily intake of DM and nutrients was determined by: feed provided - leftovers. Based on the DM, was obtained the CP, EE, ash, NDFap and ADFap corrected for ash and protein, and lignin content. Hemicellulose, cellulose, NFC and TC contents were calculated. DM, CP, EE, OM, NDF, ADF, HEM, CEL, NFC and TC digestibility was determined by total collection: Dig(%)=([Nuting-Nutez]/Nuting)×100. The experiment was in randomized blocks and the data were analyzed in mixed models, with the treatments (diets) considered fixed effect and the blocks (animals) and the residue random effects, by SAS MIXED procedure, and the means were compared by Tukey test. DM and nutrients intake decreased (P<0.05) with the inclusion of babassu pindoba hay in the diets, which may result from the high proportion of fiber in this forage, besides the high lignin contents in the fibrous fraction. DM and nutrients digestibility reduced (P<0.05) with the inclusion of babassu hay in the diet, however, was more than 60%, which is justified by the longer time that the ingested food was exposed to the microbiota of the rumen. The inclusion of babassu pindoba hay ammoniated with 4% urea in diets with roughage:concentrate ratio 70:30 allows to meet the nutritional requirements of young goats in maintenance, despite the reduction in nutrient intake and digestibility.

Keywords: alternative feed, in vivo digestibility, Orbignya phalerata, Panicum maximum