DIGESTIBILITY OF NUTRIENTS IN SHEEP DIETS WITH DIFFERENT LEVELS OF MANIPUEIRA

José Adelson Santana Neto, Evandro Neves Muniz, Gladston Rafael de Arruda Santos, José Henrique de Albuquerque Rangel, Edivilson Silva Castro Filho

The manipueira is a liquid residue from the process of cassava flour’s production. Their issue in the environment causes serious damage to this, however, their use in ruminant feed, can mitigate such environmental effects, but the effects of this residue in its feed are unknown. It have been aimed to evaluate the digestibility of diets for sheep containing increasing levels of manipueira. The experiment has been done at Embrapa’s Coastal Trays in Frei Paulo-SE. It has been used 32 Santa Inês sheep weighing from 24,76kg. Diets were formulated with 70% of herbage and 30% concentrate. All treatments were composed for Cynodon spp., corn with straw and crushed corn cob and concentrate, differentiating by manipueira’s inclusion on 0; 0.5; 1 e 1.5L/animal/day. For digestibility assay has adopted partial excretas collection, using as external marker LIPE® in capsules of 250mg. LIPE®’s delivery period was 8 days. The LIPE® in the excretas has been analyzed by spectrophotometer. With LIPE®’s quantification has been obtained daily fecal production, then was given the digestibility of dry matter and nutrients. Statistical analysis has been performed by variance analysis and regression’s means, by 5% probability test; data were analyzed by the SAS. The Dry Matter Apparent Digestibility Coefficients (DDM), organic matter (DOM), crude protein (DCP), ether extract (DEE), neutral detergent fiber (DNDF), acid detergent fiber (DADF), total carbohydrates (DCHOT) and non-fibrous carbohydrates (DNFC), did not differ (P>0.05) manipueira’s studied levels. The average value of DDM’s coefficients to diets that included the manipueira has ranged from 76.10 to 76.39%, while the treatment that did not present the manipueira on its composition has presented a higher digestibility to others (78.22). High values of cell wall’s components are correlated negatively with the digestibility of foods, once studied diets did not present divergent values of NDF and FDA, which did not influence the DDM and DOM. The DNDF coefficient values ranged from 32.38% to 34.99%, such values can be considered inferior to those founded in the sheep literature fed by agribusiness sub products. Reduction of digestibility occurred at high levels of NDF (43%). Although the manipueira contain significant levels of starch in its composition, no significant effect has been observed (P>0.05) to DNFC. The apparent digestibility of nutrients has not changed with the increased level of manipueira on diets for lambs.