CARCASS CHARACTERISTICS OF SHEEP FED WITH DIET ADDED BURITI OIL (MAURITIA FLEXUOSA L.) REPLACING GROUND CORN

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Buriti (Mauritia flexuosa L.) oil is a byproduct that has significant concentrations of lipids and protein. It may be used in ruminant feed as an energy ingredient in total or partial replacement of ground corn. Thus, this study aimed to determine the impact of the inclusion of buriti in the diets of Santa Ines sheep based on carcass characteristics. Forty male sheep uncastrated with an average of 120 days of age with an average body weight of 28.0 ± 1.94 kg were distributed in a completely randomized design. The five treatment diets were 0, 1.2, 2.4, 3.6 and 4.8% total dry matter (DM) of buriti oil replacing ground corn. The sheep received 40% Tifton-85 hay to 60% g/kg concentrate in their diet. Before the experiment, the ingredients and concentrated mixture composed of ground corn, soybean meal, mineral premix, and buriti oil offered twice per day (09.00 and 16.00 h) formulated diets met the NRC (2007) guidelines for an average diary gain (ADG) of 250 g and were balanced to have similar nitrogen content. The animals received water ad libitum. After 12 h of fasting from solids and then weighted (to determine slaughter weight-SW) and slaughtering procedure were realized according to the Federal Inspection Service (S.I.F., Brazil, 2000). The head and feet were removed, and the carcasses were weighed to determine the hot carcass weight (HCW) and hot carcass yield (HCY) through the equation HCY = [HCW/live weight at slaughter (SLW)] × 100. Then, the carcasses were placed in a cold chamber (4°C) for 24 h and weighed for the determination of the cold carcass weight (CCW) and cold carcass yield (CCY) through the equation CCY = [CCW/SLW] × 100. To calculate carcass yield, only carcasses that did not show bleeding when the final weight was measured were used. Polynomial contrasts were used to determine the linear and quadratic effects of the buriti oil inclusion amount. P values less than 0.05 were considered significant. There was a quadratic increase on SLW, HCW, HCY, CCW and CCY with the buriti oil replacing ground corn in maximum inclusion of 1.2% (P≤0.05). Thus, buriti oil replacing ground corn by up to 1.2% DM in the diet of sheep because improve carcass characteristics of sheep.

Keywords: by-product, buriti, palm tree and ruminant