MEAT QUALITY OF LAMBS FED BABASSU CAKE

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The use of babassu (Orbignya speciosa) cake, which is a by-product of the nut oil extraction process, can be a dietary alternative for feedlot sheep, since it is highly available, inexpensive, easy-to-store and its chemical composition similar that of roughage. Therefore, our objective was to evaluate the quality of meat of lambs that were fed babassu cake with their diet. We used forty-five castrated male sheep of the Santa Inês crossbreed (19.08 ± 2.76 kg), distributed in completely randomized design, with five treatments: 0.0, 12.5, 25.0, 37.5 and 50% (% dry matter) replacement of elephant grass silage with babassu cake (92.04% dry matter, 21.62% crude protein, 8.40% ether extract and 59.34% of neutral detergent fibre corrected for ash and protein). The animals were confined in individual stalls and fed the experimental diets for 77 days. The diets were formulated to meet the average daily weight gain requirements of 200 g.animal⁻¹.day⁻¹, being isoproteic and constituting a ratio of 40% roughage and 60% concentrate (soybean meal, corn meal, calcitic limestone, dicalcium phosphate, urea and mineral mixture). At 32.02 ± 0.76 kg, all the animals were subjected to solid fasting for 16 hours, after which they were slaughtered, eviscerated and were carcasses were cooled in refrigerators at approximately 4ºC for 24 hours. From the Longissimus dorsi muscle (between the 12th and 13th ribs), from each carcass, we got 2.54-cm-thick slices, for analysis of losses by thawing and cooking, sarcomere length by laser diffraction, Warner-Bratzler shear force and myofibrillar fragmentation index. The data were subjected to variance and regression analyses, testing the linear and quadratic models at the significance level (p<0.05). There was no effect (P>0.05) of the inclusion of the babassu cake on the sarcomere length, shear force, losses by thawing and cooking. However, the myofibrillar fragmentation index decreased linearly (P<0.05) on the L. dorsi of animals that were fed babassu cake. The use of babassu cake in up to 50%, replacing the elephant grass silage, has no negative results on the meat quality of lamb.

Keywords: by-product, cooking, feedlot, Longissimus, shear, sheep

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