ECONOMIC EVALUATION OF THE INCLUSION OF RAW BEAN WASTE IN CONFINED SHEEP DIETS

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The confinement of lambs, besides being an alternative to the seasonality of forage production, can contribute positively to improve the profitability of the agricultural enterprise, as long as the costs with food are controlled. As a strategy to reduce food costs, you can use alternative foods in the animals' diet. For this reason, the objective of this research was to evaluate the economic indicators of the inclusion of raw bean residue (RBR) in the diet of confined sheep. The treatments consisted of four inclusion levels of RBR (0%, 7.5%, 15% and 22.5% of the total diet). Diets were formulated to be isoenergetic and isonitrogenated, and for an average daily gain of 250g day^{-1}. Five uncastrated sheep were used, with initial weight of 22 kg totaling 20 animals. A marginal variation in the feed cost analysis was performed; the other costs were not included because they were not considered differentiation factors. Feed intake did not vary significantly between treatments, with values of 1.30, 1.34, 1.21 and 1.17 kg DM day^{-1} for treatments 0%, 7.5%, 15% and 22.5% of RBR respectively. For the average daily gain, a significant linear effect (y = -0.0026x + 0.2934; R^2 = 0.62) was observed, with mean values of 282, 303, 235, 223 g day^{-1} for treatments 0%, 7.5%, 15% and 22.5% respectively. The daily feed cost per animal varied between treatments, with a higher cost for the diet with 7.5% RBR (R$ 1.57), treatments 0% and 22.5% did not differ among them (R$ 1, 45 and R$ 1.38, respectively), and the 15% treatment was the lowest daily food cost (R$ 1.32). This was due to the lower numerical value of consumption, associated to the lower cost per kg of concentrate. As well as the average daily gain, daily revenue also reduced linearly as RBR was added to the diet (y = -0.0185x + 2.054; R^2 = 0.61), with values of R$ 1.94, R$ 2.12, R$ 1.70 and R$ 1.62 for treatments 0%, 7.5%, 15% and 22.5% respectively. The income minus the cost of food presented quadratic function (y = -0.0009x^2 + 0.0081x + 0.5064; R^2 = 0.94), with values of R$ 0.49, R$ 0.55, R$ 0.38 and R$ 0.23 for treatments 0%, 7.5%, 15% and 22.5% respectively, and maximum point with 4.5% RBR. To maximize profit, RBR should not exceed 4.5% of the diet of confined lambs