

Use of Treated and Untreated Sunflower Seed Hulls in Fattening Lamb Feeding

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Abstract : This study investigates the nutritional value of both enriched and non-enriched sunflower seed hulls in lamb-fattening diets. Sunflower seed processing for oil production produces a considerable by-product, with 18-25% of the total seed weight comprised of hulls. These hulls are typically regarded as nutritionally limited due to their high fiber and low protein content, but the application of urea enrichment appears to increase their potential as feed. In this experiment, fifty male lambs, aged 7-8 months, were divided into five groups of ten, each receiving one of five diets: 1) a control diet with cereal straw and no hulls; 2) a diet with 10% non-enriched hulls; 3) a diet with 20% non-enriched hulls; 4) a diet with 10% urea-enriched hulls; and 5) a diet with 20% urea-enriched hulls. The feeding trial lasted 90 days, during which metrics such as daily weight gain, dry matter intake, and feed conversion efficiency were recorded. At the end of the trial, three lambs from each group were randomly selected for slaughter, and their carcass characteristics were documented. The results suggest that diets including enriched sunflower hulls led to significantly greater final weights, weight gain, and improved feed conversion efficiency. Economically, using enriched sunflower hulls in fattening diets for lambs reduced the cost per kilogram of live and carcass weight gain compared to diets with non-enriched hulls and cereal straw.

Keywords : sunflower seed hulls, lamb fattening, urea enrichment, feed efficiency

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