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Research Paper (6)

Title **Rocket seed meal (*Eruca sativa*) can replace soybean meal in fattening lamb diets improving performance, protein metabolism, and economic balance.**

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ABSTRACT

The study determined the effects of replacing different levels of soybean meal (SBM) with rocket seed cake (RSC) in diets of growing lambs on feed utilization and growth performance. Twenty-eight male lambs (180 ± 5 d old) were divided into 4 groups in a complete randomized design with repeated measures for 105 d. Soybean meal was replaced with RSC at 0% (RSC0), 25% (RSC25), 50% (RSC50) and 75% (RSC75). The RSC75 group had the lowest final weight, total weight gain and daily weight gain. The RSC25 increased ($P < 0.001$) the intakes of DM, starch value (SV), total digestible nutrients (TDN), digestible energy (DE) and digestible crude protein (DCP) compared to the other diets, while the RSC75 decreased these values. Moreover, the RSC25 decreased ($P < 0.05$) feed conversion of DM compared to other diets. Treatments did not affect nutrient digestibility or diet's nutritive values



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expressed as true SV, TDN, DCP and DE. The RSC linearly increased albumin and urea and lowered the high-density lipoprotein concentrations in lamb's blood. The inclusion of RSC in the diet increased economic efficiency, with the highest relative percentages of net revenue with the RSC25. Overall, RSC can replace SBM at 25% in the diet of growing lambs.

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