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Research paper (3)

Title	Wheat germ meal replaces cottonseed meal at different levels in diets of Ossimi lambs: Impact on growth performance, feed utilization and economic efficiency.
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ABSTRACT

This experiment aimed to evaluate the replacement of cottonseed meal (CSM) with wheat germ meal (WGM) in diets of growing lambs on feed utilization and growth performance. Twenty-eight Ossimi male lambs (38 ± 0.8 kg weight), and 180 ± 5 d were divided randomly into four experimental groups in a complete randomized design for 105 d. Cottonseed meal was replaced with WGM at 0 (WGM0 treatment), 50 (WGM50 treatment), 75 (WGM75 treatment) and 100% (WGM100 treatment). The chemical analysis of the total essential and non-essential amino acids showed an increase at the WGM diet compared to CSM. The replacement of CSM with WGM linearly and quadratically improved ($P < 0.05$) lambs' growth performance and feed conversion. The WGM50 and WGM100 treatments lowered ($P < 0.05$) feed intake and feed conversion, without affecting nutrient digestibility or diets' nutritive. Feeding WGM increased ($P < 0.05$) total protein, albumin, and urea-N concentrations in blood



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of lambs. The WGM100 treatment showed the highest relative percentage of net revenue compared to the other treatments. It is concluded that the complete replacement of CSM with WGM showed positive effects on lambs' performance and economic efficiency.

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