Effect of dietary containing different supplemental protein on performance and carcass characteristics in finishing Arabi lambs

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The effects of different dietary supplemental protein sources on performance and carcass characteristics in finishing Arabi lambs were investigated during a 84-day trial using 20 lambs of 3 months age with an average weight of 18.8 ± 1.1 Kg. The supplemental proteins of diets respectively were (1) Soybean meal and poultry by product meal (2) Cottonseed meal and poultry by-product meal. The lambs were allocated to the rations according to a completely randomized design. The diets were formulated according to NRC (1985) based on analyzed compositions of ingredients in nutrition laboratory and were isocaloric (79% TDN) and isonitrogenous (16%CP) and had approximately a similar content of other nutrients. Average dry matter intake (DMI) of lambs fed diets containing the mixture of soybean meal with poultry by-product and cottonseed meal with poultry by product meal during the whole period of experiment were 1.08, 1.12, (Kg/day) respectively. Average daily gain (ADG) and standard deviation of lambs fed diets 1, 2, during the whole period of experiment were 215 ± 30.4, 230.1±57.7, (gr/day) respectively. Feed conversion ratio were 5.09 ± 1.07, 5.11± 1.75, for diets 1, 2 and statistically significant differences (P<0.05) were not found for the Average dry matter intake, average daily gain and feed conversion ratio. In conclusion the economic investigations show that the diet containing cottonseed meal has the best economic efficiency.

Keywords: Soybean and cottonseed meals, Poultry by product, Performance, Arabi lambs

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