

The growth efficiency and carcass characteristics of Dorper sheep treated by corn inclusion as energy into palm kernel cake based-diet

ABSTRACT

This study investigated the effect of energy as partial replacement of a diet based on palm kernel cake (PKC) on the growth performance, nutrient intake, digestibility, carcass quality, and economic cost of Dorper sheep. Twenty-seven Dorper rams (initial body weight 15 ± 0.59 kg) were kept in individual pens and divided randomly into dietary groups consisting of T1: basal diet + 0% corn (control), T2: basal diet + 5% corn, and T3: basal diet + 10% corn. Feed intake was recorded on a daily basis. On day 110, 4 lambs from each group were randomly chosen and transferred into metabolism crates to determine nutrient digestibility and completely randomized design was used. The results showed that high feed intake was in T3 while, the DM, CP, NDF, and ADF digestibility were decreased significantly with the increasing level of corn as an energy source. The carcass cuts were not affected by the dietary treatments. Significant differences were noted in the non-carcass parts (heart, lungs and trachea, defatted kidneys, liver, spleen, and kidney fat) with T3 having the highest value. The feeding cost was slightly increased when PKC was replaced by corn. In conclusion, inclusion of 10% corn as a source of energy in 65.3% PKC as fattening diets had effects on growth BW, ADG, and organs performance on Dorper lambs.

Keyword: Carcass characteristics; Corn; Digestibility; Dorper sheep; Palm kernel cake