

Ruminal VFA of Beef Fed Different Protein

Authors : P. Paengkoum, S. C. Chen, S. Paengkoum

Abstract : Six male growing Thai-indigenous beef cattle with body weight (BW) of 154 ± 13.2 kg were randomly assigned in replicated 3×3 Latin square design, and fed with different levels of crude protein (CP) in total mixed ration (TMR) diets. CP levels in diets were 4.3%, 7.3% and 10.3% base on dry matter (DM). Ruminal ammonia nitrogen ($\text{NH}_3\text{-N}$) and blood urea nitrogen (BUN) concentrations increased ($P < 0.01$) with increasing CP levels. Moreover, there is a positive relationship between BUN and ruminal $\text{NH}_3\text{-N}$. Rumen pH, total volatile fatty acid (VFA), molar proportions of acetate, propionate and butyrate were not affected by CP levels ($P > 0.05$).

Keywords : Thai-indigenous beef cattle, crude protein, volatile fatty acid (VFA), total mixed ration (TMR) diets

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