

ABSTRAK

PENGARUH SUPLEMENTASI MINERAL ORGANIK (Cu-Lisinat dan Zn-Lisinat) DAN ASAM AMINO PEMBATA (Metionin) DALAM RANSUM BERBASIS LIMBAH SINGKONG TERHADAP KECERNAAN LEMAK KASAR DAN *TOTAL DIGESTIBLE NUTRIENT* (TDN) PADA KAMBING *CROSS BOER* JANTAN

Oleh

Tegar Rifa Pratama

Penelitian ini bertujuan untuk mengetahui pengaruh suplementasi mineral organik (Cu-Lisinat dan Zn-Lisinat) dan asam amino pembatas (metionin) terhadap pencernaan lemak kasar dan *Total Digestible Nutrient* (TDN) pada kambing *cross Boer* jantan, serta mengetahui perlakuan terbaik dalam ransum terhadap pencernaan lemak kasar dan *Total Digestible Nutrient* (TDN) pada kambing *cross Boer* jantan. Percobaan dilakukan pada 12 ekor kambing *cross Boer* jantan, dengan Rancangan Acak Lengkap (RAL) yang terdiri dari 3 perlakuan dan 4 ulangan. Perlakuan pada penelitian ini yaitu: P0: ransum basal (silase daun singkong, DDGS, pollard, onggok press, bungkil kelapa sawit, premix, dan molasses), P1: ransum basal (P0) + Zn-Lisinat 40 ppm + Cu-Lisinat 10 ppm, dan P2: ransum basal (P0) + Zn-Lisinat 40 ppm + Cu-Lisinat 10 ppm + metionin. Data yang diperoleh dianalisis dengan menggunakan Analisis Ragam (ANOVA), kemudian dilanjutkan dengan uji Beda Nyata Terkecil (BNT) dengan taraf 5%. Peubah yang diamati adalah pencernaan lemak kasar dan nilai TDN. Berdasarkan hasil penelitian yang telah dilakukan dapat disimpulkan bahwa perlakuan suplementasi mineral organik (Cu-Lisinat dan Zn-Lisinat) dan asam amino pembatas (metionin) tidak berpengaruh terhadap pencernaan lemak kasar dan TDN pada kambing *cross Boer* jantan.

Kata Kunci: Kambing *cross Boer*, pencernaan lemak kasar, *Total Digestible Nutrient* (TDN), mineral organik, metionin

ABSTRACT

THE EFFECT OF ORGANIC MINERAL SUPPLEMENTATION (Cu Lysinat and Zn-Lysinat) AND LIMITING AMINO ACIDS (Methionine) IN CASSAVA WASTE-BASED DIETS ON CRUDE FAT DIGESTIBILITY AND TOTAL DIGESTIBLE NUTRIENT (TDN) IN MALE CROSS BOER GOATS

By

Tegar Rifa Pratama

This research aims to determine the effect of organic mineral supplementation (Cu-Lysine and Zn-Lysine) and limiting amino acids (methionine) on crude fat digestibility and Total Digestible Nutrient (TDN) in male cross Boer goats, as well as to determine the best treatment in the ration on crude fat digestibility and Total Digestible Nutrient (TDN) in male Boer cross goats. The experiment was conducted on 12 male Boer cross goats, using a completely randomised design (RAL) consisting of 3 treatments and 4 replicates. The treatments in this study were: P0: basal ration (cassava leaf silage, DDGS, pollard, cassava dregs, palm kernel cake, premix, and molasses), P1: basal ration (P0) + 40 ppm Zn-Lysine + 10 ppm Cu-Lysine, and P2: basal ration (P0) + 40 ppm Zn-Lysine + 10 ppm Cu-Lysine + methionine. The obtained data were analysed using Analysis of Variance (ANOVA), followed by a post-hoc test using the Least Significant Difference (BNT) test at a 5% level. The variables observed were crude fat digestibility and TDN value. The feeding of rations supplemented with organic minerals (Cu-Lysine and Zn-Lysine) and limiting amino acids (methionine) showed no significant effect ($P>0.05$) on crude fat and TDN digestibility. Based on the research results, it can be concluded that supplementation with organic minerals (Cu-Lysine and Zn-Lysine) and limiting amino acids (methionine) had no effect on crude fat and TDN digestibility in male Boer cross goats.

Keywords: Boer cross goat, crude fat digestibility, Total Digestible Nutrient (TDN), organic minerals, methionine