

**PENGARUH PENAMBAHAN *HIGH QUALITY FEED SUPPLEMENT*
DAN *MINERAL MIX* TERHADAP KONSUMSI DAN KECERNAAN
NUTRIEN PAKAN PADA SAPI PERSILANGAN
LIMOUSIN-PERANAKAN ONGOLE BETINA**

**Artanti Aristawati
19/442952/PT/08084**

INTISARI

Penelitian ini bertujuan untuk mengetahui pengaruh penambahan *high quality feed supplement* (HQFS) dan *mineral mix* terhadap konsumsi dan pencernaan nutrisi pakan pada sapi Limousin-Peranakan Ongole (LIMPO) betina. Penelitian ini dilakukan dengan metode *in vivo* menggunakan 45 sapi LIMPO betina yang berumur 1,8 sampai 7 tahun dengan rerata bobot badan (BB) $336,63 \pm 38,24$ kg. Perlakuan yang diberikan setiap hari pada penelitian ini yaitu hijauan, hijauan dengan penambahan 1 kg HQFS dan hijauan dengan penambahan 1 kg HQFS + *mineral mix*. *High quality feed supplement* mengandung 13,65% protein kasar (PK) dan 61,38% *total digestible nutrients* (TDN). Ternak dipelihara selama 30 hari dengan memberikan pakan sesuai perlakuan masing-masing. Pemberian pakan dilakukan sebanyak dua kali sehari. Sampel pakan, sisa pakan, dan feses dianalisis proksimat untuk menentukan kadar bahan kering (BK), bahan organik (BO), protein kasar (PK), serat kasar (SK), lemak kasar (LK), bahan ekstrak tanpa nitrogen (BETN), dan TDN. Semua data dianalisis berdasarkan Rancangan Acak Lengkap (RAL) pola searah dan dilanjutkan melalui *Duncan's Multiple Range Test* (DMRT), apabila diperoleh perbedaan yang nyata pada data. Hasil penelitian menunjukkan bahwa penambahan HQFS dan *mineral mix* meningkatkan konsumsi BK, BO, PK, LK, TDN, dan LK tercerna per bobot badan metabolik ($P < 0,05$), tetapi tidak mempengaruhi konsumsi SK, nutrisi tercerna, dan pencernaan pakan ($P > 0,05$). Berdasarkan hasil penelitian dapat diambil kesimpulan bahwa penambahan HQFS dan *mineral mix* meningkatkan konsumsi nutrisi, tetapi tidak meningkatkan pencernaan pakan.

Kata kunci: *High quality feed supplement*, pencernaan pakan, konsumsi pakan, *mineral mix*, sapi Limousin-Peranakan Ongole

THE EFFECT ADDITION OF HIGH QUALITY FEED SUPPLEMENT AND MINERAL MIX ON THE CONSUMPTION AND NUTRIENT DIGESTIBILITY OF LIMOUSIN CROSSBREED COWS

Artanti Aristawati
19/442952/PT/08084

ABSTRACT

This study aimed to determine the effect of the addition of high quality feed supplement (HQFS) and mineral mix on the nutrient consumption and digestibility of Limousin crossbreed cows. The study was conducted using in vivo methods with 45 LIMPO cows aged 1,8 to 7 years with an average body weight of 336.63 ± 38.24 kg. The treatments given daily in this study were forage, forage with the addition of 1 kg HQFS and forage with the addition of 1 kg HQFS + mineral mix. High quality feed supplement contains 13.65% crude protein (CP) and 61.38% total digestible nutrients (TDN). The cows were kept for 30 days and given feed according to their respective treatments. Feeding was done twice a day. Feed samples, refusal feed, and feces were analyzed for chemical composition to determine dry matter (DM), organic matter (OM), crude protein (CP), crude fiber (CF), extract ether (EE), extract without nitrogen (ETN), and TDN content. All data were analyzed based on a Completely Randomized Design (CRD) with a one-way pattern and continued with Duncan's Multiple Range Test (DMRT), if there were significant differences in the data. The study results showed that the addition of HQFS and mineral mix increased the intake of DM, OM, CP, EE, TDN, and digestible EE per metabolic body weight ($P < 0.05$), but did not affect the intake of CF, digestible nutrients, and feed digestibility ($P > 0.05$). Based on the research results, it can be concluded that the addition of HQFS and mineral mix increased nutrient intake, but did not increase feed digestibility.

Keywords: feed consumption, feed digestibility, feed supplement, high quality feed supplement, Limousin-Peranakan Ongole cows, mineral mix