

**PENGARUH PENAMBAHAN *FERMENTED MOTHER LIQUOR* (FML)
DALAM PAKAN TERHADAP KINERJA
SAPI PERSILANGAN**

Fatin Dwi Kurniawati
20/455741/PT/08421

INTISARI

Fermented Mother Liquor (FML) dapat menjadi salah satu solusi untuk meningkatkan produktivitas sapi potong karena memiliki kandungan nutrisi yang baik dan tersedia melimpah. Penelitian ini bertujuan untuk mengetahui pengaruh penambahan *Fermented Mother Liquor* (FML) pada pakan terhadap kinerja sapi persilangan. Penelitian dilaksanakan di Kandang Kelompok Sapi Sido Makmur yang berada di desa Poncosari, Kecamatan Srandakan, Kabupaten Bantul, D. I. Yogyakarta. Penelitian menggunakan 20 ekor sapi jantan dengan rata-rata bobot badan $350 \pm 35,65$ kg. Sapi dibagi menjadi 4 kelompok perlakuan, yaitu perlakuan kontrol negatif (P1) dengan pemberian pakan basal dan konsentrat protein 13%, perlakuan pemberian pakan basal, konsentrat protein 13% dan FML 500 mL (P2), perlakuan pemberian pakan basal, konsentrat protein 13% dan FML 1000 mL (P3) dan kontrol positif (P4) dengan pemberian pakan basal dan konsentrat protein 16%. Pakan basal yang digunakan yaitu Rumput *Ischaemum rugosum* dan Jerami padi. Setiap perlakuan masing-masing terdiri atas 5 ekor ternak. Periode perlakuan pakan dilakukan selama 3 bulan. Variabel yang diamati meliputi konsumsi nutrisi pakan (BK, BO, SK, dan PK) dan pertambahan bobot badan (PBB). Data yang diperoleh dianalisis dengan menggunakan aplikasi *Statistical Analysis System* (SAS) seri 9.4. Hasil penelitian menunjukkan bahwa pemberian FML tidak memberikan perbedaan ($P > 0,05$) pada konsumsi BK, BO, dan SK, tetapi memberikan meningkatkan konsumsi PK ($P < 0,05$). Penambahan FML sebanyak 500 mL (P2) meningkatkan pertambahan bobot badan sapi persilangan ($P < 0,05$) sebanyak 16,5% dibandingkan dengan sapi tanpa penambahan FML (P1). Berdasarkan hasil penelitian menunjukkan bahwa penambahan FML 500 mL pada pakan dapat memberikan nilai konsumsi dan penambahan bobot badan yang lebih baik pada sapi persilangan.

Kata kunci: *Fermented Mother Liquor* (FML), Konsentrat, Konsumsi Nutrien Pakan, Pertambahan Bobot Badan, Sapi Persilangan

EFFECT OF THE ADDITION OF *FERMENTED MOTHER LIQUOR* (FML) TO THE DIET ON THE PERFORMACE OF CROSSBREED CATTLE

Fatin Dwi Kurniawati
20/455741/PT/08421

ABSTRACT

Fermented Mother Liquor (FML) potentially improve beef cattle performance due to its nutrient content and abundance. This study aimed to investigate the effect of adding FML as feed supplement on the performance of crossbreed cattle. The research was conducted at Sido Makmur Cattle farmer's Group in Poncosari village, Srandakan sub-district, Bantul regency, D.I. Yogyakarta. Twenty crossbreed cattle with an average body weight of 350 ± 35.65 kg as research object were divided into four treatment groups with 5 animals per treatment. Reserch treatment included negative control treatment (P1) with basal diet plus concentrate (CP 13%), animal fed by control group diet plus 500 mL FML (P2), animal fed by control group diet plus 1000 mL FML (P3), and positive control group(P4) fed offered consist of grass and rice straw and concentrate (CP 16%). The basal diet was a combination of *Ischaemum rugosum* grass and rice straw. The study was conducted in vivo for a period of 3 months. The variables observed included feed nutrient consumption (DM, OM, CF, and CP) and body weight gain (BWG). The Statistical Analysis System (SAS) 9.4 series was used to analyze the obtained data. The results indicate that FML did not have a significant effect ($P > 0.05$) on the consumption of BK, BO, and SK, but it did increase the consumption of PK ($P < 0.05$). The addition of FML up to 500 mL (P2) resulted in a 16.5% increase in body weight gain of crossbred cattle ($P < 0.05$) compared to cattle without the addition of FML (P1). The study results indicate that adding 500 mL of FML to feed can improve consumption value and body weight gain in crossbred cattle.

Keywords: *Fermented Mother Liquor* (FML), Concentrate, Feed Nutrient Consumption, Body Weight Gain, Crossbred Cattle