

## **PENGARUH PERBEDAAN PROPORSI HIJAUAN DAN KONSENTRAT SUMBER ENERGI DALAM PAKAN KAMBING PERANAKAN ETTAWA TERHADAP KANDUNGAN LEMAK SUSU**

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### **INTISARI**

Penelitian ini bertujuan untuk mengetahui pengaruh perbedaan proporsi hijauan dan konsentrat terhadap kandungan lemak susu kambing Peranakan Ettawa (PE) pada masa laktasi. Penelitian ini menggunakan 12 ekor kambing PE sebagai sampel. Parameter yang diukur adalah konsumsi nutrisi dan kandungan lemak susu. Konsumsi nutrisi pakan dianalisis dengan menggunakan analisis proksimat pakan yang meliputi uji bahan kering (BK), bahan organik (BO), protein kasar (PK), lemak kasar (LK), serat kasar (SK), dan *total digestible nutrient* (TDN). Pengambilan data sampel susu dilakukan setelah satu minggu adaptasi perlakuan. Perlakuan yang diberikan adalah pemberian proporsi antara hijauan dan konsentrat A (30:70), B (50:50), dan C (70:30). Analisis proksimat pakan dan sampel susu dilaksanakan di Laboratorium Ilmu Ternak Perah dan Industri Persusuan, Fakultas Peternakan, Universitas Gadjah Mada. Data yang diperoleh akan dianalisis dengan analisis variansi (ANOVA) menggunakan rancangan acak lengkap pola searah (RAL). Apabila terdapat perbedaan antara rata-rata kelompok maka dilanjutkan dengan uji *Duncan Multiple Range Test* (DMRT). Hasil penelitian menunjukkan perbedaan ( $P < 0,05$ ) konsumsi LK pada perlakuan 30:70, sedangkan konsumsi BK, BO, SK, dan TDN tidak menunjukkan adanya perbedaan. Konsumsi BK, BO, PK, dan LK tertinggi pada perlakuan proporsi 30:70, sedangkan konsumsi SK dan TDN tertinggi pada perlakuan proporsi 70:30. Kandungan lemak tertinggi (5,03%) pada perlakuan proporsi 70:30 dan terendah (4,63%) pada perlakuan proporsi 30:70. Konsumsi nutrisi tertinggi dihasilkan pada kambing PE yang diberikan pakan dengan proporsi hijauan dan konsentrat 30:70 dan tidak berpengaruh terhadap kandungan lemak susu.

**Kata kunci :** Kambing Peranakan Ettawa (PE) laktasi, Hijauan dan konsentrat, Konsumsi pakan, dan Komposisi susu.

## **THE EFFECT OF DIFFERENCE PROPORTION FORAGE AND CONCENTRATE ENERGY RESOURCES ON ETTAWA CROSSBREED FEED TO MILK FAT CONTENT**

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### **ABSTRACT**

The experiment was aimed to determine the effect of different proportion forage and concentrate to milk fat content in Ettawa crossbreed. The experiment consisted of 12 heads Ettawa crossbreed. Parameters observed were feed consumption and milk fat content. Feed consumption was analysed by using proximate analysis consists of dry matter, organic matter, crude protein, extract ether, crude fibre, and total digestible nutrient. Milk fat content was analysed by using Babcock method. Milk fat content data was held a week after adaptation treatment. The treatment used is a balance of forage and concentrates respectively A (30:70), B (50:50), and C (70:30). Proximate analysis and milk fat content held at Laboratory of dairy science and industry, Faculty of Animal Science Universitas Gadjah Mada. Experimental design used was completely randomized design (CRD) with three treatments. if there are difference between the average, then tested with Duncan Multiple Range Test (DMRT). The results showed that balanced of forage and concentrates on goat ration had effect ( $P < 0.05$ ) on extract etter intake in balanced of forage and concentrate 30:70, while dry matter, organic matter, crude protein, crude fiber, and total digestible nutrient hadn't effect. High dry matter intake, organic matter intake, crude protein, and extract etter showed in balanced of forage and concentrates 30:70, while high crude fiber intake and total digestible nutrient showed in balanced of forage and concentrate 70:30. Milk fat contents had no effect from balanced of forage and concentrate, while the density and milk protein content had effect. High milk fat content (5,03%) showed in balanced of forage and concentrate 70:30. Based on the results of the study concluded that the balanced of the forage and concentrate ration had effect for feed consumption and had no effect on milk fat contents.

(Key words: Ettawa crossbreed, forage and concentrates, feed consumption, and milk components).