

## KONSUMSI DAN KECERNAAN NUTRIEN KAMBING KACANG DENGAN PENAMBAHAN PAKAN TAMBAHAN SUMBER PROTEIN

Yananto Aryo Wicaksono  
17/409798/PT/07387

### INTISARI

Penelitian ini bertujuan untuk mengetahui pengaruh penambahan pakan sumber protein terhadap konsumsi dan pencernaan nutrisi kambing kacang betina. Penelitian dilaksanakan di Kelompok Wanita Tani Gama Sumber Rejeki Wonolagi, Ngler, Playen, Gunungkidul. Penelitian menggunakan 8 ekor kambing kacang betina umur 2 – 3 tahun dengan berat badan rata-rata 22 kg. Perlakuan terbagi atas 2 kelompok (Po dan Ko), masing-masing kelompok terdiri atas 4 ekor ternak. Perlakuan Po adalah pemberian hijauan secara *ad libitum* dengan penambahan pakan sumber protein. Perlakuan Ko adalah pemberian pakan hijauan secara *ad libitum* tanpa penambahan pakan sumber protein. Fokus penelitian pada pengamatan konsumsi dan pencernaan kambing kacang betina menggunakan metode *in vivo*. Perlakuan pakan berlangsung selama 3 bulan termasuk total koleksi selama 17 hari. Desain penelitian menggunakan *Independent T-test*. Hasil penelitian menunjukkan pemberian pakan sumber protein dapat meningkatkan konsumsi bahan kering (BK), bahan organik (BO), protein kasar (PK), lemak kasar (LK), bahan ekstrak tanpa nitrogen (BETN), dan *total digestible nutrient* (TDN) ( $P < 0,001$ ). Konsumsi nutrisi BK, PK, dan TDN perlakuan Po masing-masing adalah  $44,12 \pm 6,86$ ;  $5,74 \pm 0,86$  dan  $27,55 \pm 4,38$  g/kg/BB<sup>0,75</sup>/hari. Konsumsi nutrisi BK, PK, dan TDN perlakuan Ko masing-masing adalah  $34,87 \pm 2,71$ ;  $2,15 \pm 0,13$  dan  $20,59 \pm 3,08$  g/kg/BB<sup>0,75</sup>/hari. Hasil penelitian penambahan pakan tambahan sumber protein meningkatkan koefisien cerna PK dan LK ( $P < 0,001$ ). Koefisien cerna BK, PK, dan TDN perlakuan Po masing-masing adalah  $59,11 \pm 12,5$ ;  $86,21 \pm 4,48$  dan  $58,56 \pm 12,35\%$ . Koefisien cerna BK, PK, dan TDN perlakuan Ko masing-masing adalah  $68,71 \pm 3,75$ ;  $80,90 \pm 2,66$  dan  $68,21 \pm 4,61\%$ . Berdasarkan hasil penelitian penambahan pakan sumber protein pada kambing kacang betina dapat meningkatkan konsumsi nutrisi dan meningkatkan koefisien cerna protein kasar.

Kata kunci: Kambing kacang, sumber protein, konsumsi nutrisi, pencernaan nutrisi

## **FEED INTAKE AND NUTRIENT DIGESTIBILITY OF KANCANG GOATS WITH ADDITION OF SOURCES FEED PROTEIN**

**Yananto Aryo Wicaksono**  
**17/409798/PT/07387**

### **ABSTRACT**

This study aimed to determine the effect of the addition concentrate feed protein to the consumption and digestibility nutrient of female Kacang goat. The research was conducted in Kelompok Wanita Tani Gama Sumber Rejeki Wonolagi, Ngleri, Playen, Gunungkidul. The study used 8 female Kacang goats aged 2 - 3 years with an average weight of 22 kg. Treatment was divided into 2 groups (Po and Ko), each group consists of 4 goats. Po treatment was fed forage ad libitum with the addition of concentrate feed protein. Ko treatment was fed forage ad libitum without addition of concentrate feed protein. This study focused on the observation of consumption and digestibility nutrient of female Kacang goats using in vivo method. The treatment of feed was done for 3 months including 14 days total collection. The research was designed using a independent T-test. The results showed that feeding concentrate feed protein increased the consumption of dry matter (DM), organic matter (OM), crude protein (CP), ether extract (EE), nitrogen free extract (NFE), and total digestible nutrient (TDN) ( $P < 0.001$ ). Consumption of DM, CP, and TDN of Po treatment were  $44.12 \pm 6.86$ ;  $5.74 \pm 0.86$  and  $27.55 \pm 4.38$  g/kg/ $BB^{0.75}$ /day, respectively. Consumption of DM, CP, and TDN Ko of treatment were  $34.87 \pm 2.71$ ;  $2.15 \pm 0.13$  dan  $20.59 \pm 3.08$  g/kg/ $BB^{0.75}$ /day, respectively. The results of the study that additional concentrate feed protein increased the coefficient of digestibility CP and EE ( $P < 0.001$ ). The coefficients of digestibility of DM, CP, and TDN of Po treatment were  $59.11 \pm 12.5$ ;  $86.21 \pm 4.48$  and  $58.56 \pm 12.35\%$ . The coefficient of digestibility of DM, CP, and TDN of Ko treatment were  $68.71 \pm 3.75$ ;  $80.90 \pm 2.66$  and  $68.21 \pm 4.61\%$ . Based on the results of the study the addition of concentrate feed protein in female Kacang goats can increase nutrient consumption and increase the coefficient of crude protein digestibility.

Key word: Kacang goat, feed protein, feed intake, nutrient digestibility