

## KONSUMSI DAN KECERNAAN FRAKSI NITROGEN PADA KAMBING KACANG YANG MENDAPAT PAKAN TAMBAHAN BERBAHAN DASAR JERAMI KANGKUNG

Sadhan Andilaou  
18/430700/PT/07855

### INTISARI

Jerami kangkung memiliki potensi sebagai hijauan pakan ternak yang mulai banyak diteliti. Penelitian ini bertujuan untuk mengetahui konsumsi dan pencernaan fraksi nitrogen pada kambing kacang yang mendapat pakan tambahan berbahan dasar jerami kangkung. Kambing Kacang yang digunakan sebanyak 12 ekor kambing betina dengan rerata bobot badan  $25,25 \pm 4$  kg. Penelitian dilakukan secara *in vivo* dengan satu perlakuan dan tiga level dengan empat ulangan pada tiap level. Level P0 = pemberian rumput Raja dengan pakan tambahan jerami kangkung. Level P1 = pemberian rumput Raja dengan pakan tambahan 70% jerami kangkung + 30% bungkil kelapa sawit. Level P2 = pemberian rumput Raja + pakan tambahan 70% jerami kangkung + 30% pakan campuran. Rumput Raja diberikan secara *ad libitum*. Pakan campuran terdiri dari 32,5% *wheat* pollard, 32,5% bungkil kelapa sawit, 17,5% kleci, dan 17,5% gaplek. Hasil penelitian diuji statistik menggunakan aplikasi SPSS versi 25.0 pola searah dan jika hasil menunjukkan perbedaan yang nyata, maka dilanjutkan dengan uji *Duncan's Multiple Range Test* (DMRT). Hasil penelitian menunjukkan bahwa konsumsi fraksi nitrogen protein kasar (PK) dan N-hemiselulosa tertinggi ( $P < 0,05$ ) terdapat pada level P1 dan level P2. Konsumsi fraksi nitrogen *neutral detergent fiber* (N-NDF) dan nitrogen *acid detergent fiber* (N-ADF) tidak berbeda nyata. Pencernaan fraksi nitrogen PK dan N-hemiselulosa tertinggi ( $P < 0,05$ ) terdapat pada level P2. Pencernaan fraksi nitrogen N-ADF tertinggi ( $P < 0,05$ ) terdapat pada level P0. Pencernaan fraksi nitrogen N-NDF tidak berbeda yang nyata. Berdasarkan hasil penelitian dapat disimpulkan bahwa konsumsi dan pencernaan fraksi nitrogen tertinggi terdapat pada pemberian pakan tambahan jerami kangkung ditambah pakan campuran (P2).

(Kata kunci: Jerami kangkung, fraksi nitrogen, N-NDF, N-ADF, N-hemiselulosa)

## CONSUMPTION AND DIGESTIBILITY OF NITROGEN FRACTION IN KACANG GOAT RECEIVING SUPPLEMENTATION OF WATER SPINACH STRAW BASED

Sadhan Andilaou  
18/430700/PT/07855

### ABSTRACT

Water spinach straw has potency as a forage which has been widely studied. The purpose of this study is determine the consumption and digestibility of nitrogen fraction in Kacang goats receiving water spinach straw based supplementary feed. The goats used were 12 ewes with an average body weight of  $25.25 \pm 4$  kg. The study was conducted in vivo with one treatment and three levels with four replications at each level. Level P0 = fed by King grass with supplementation of water spinach straw. Level P1 = fed by King grass with supplementation of 70% water spinach straw + 30% palm kernel meal. Level P2 = fed by King grass with supplementation of 70% water spinach straw + 30% mixed feed. King grass was given on an *ad libitum* basis. Mixed feed consist of 32,5% wheat pollard, 32,5% palm kernel meal, 17,5% soybean hulls, and 17,5% gaplek. The results of the study were statistically evaluated using SPSS version 25.0 with one way analysis of variance and if the results significantly difference, then proceed with the Duncan's Multiple Range Test (DMRT). The results showed that the highest ( $P < 0.05$ ) nitrogen fraction consumption of crude protein (CP) and N-hemicellulose was found in P1 level and P2 level. The nitrogen fraction consumption of nitrogen neutral detergent fiber (N-NDF) and nitrogen acid detergent fiber (N-ADF) was not significantly different. The highest ( $P < 0.05$ ) nitrogen fraction digestibility of CP and N-hemicellulose was found in P2 level. The highest ( $P < 0.05$ ) nitrogen fraction digestibility of N-ADF was found in P0 level. N-NDF digestibility was not significantly difference. Based on the results, it can be concluded that the highest consumption and digestibility of nitrogen fraction was found in the supplementation of water spinach straw and mixed feed (P2).

(Keywords: Water spinach straw, nitrogen fraction, N-NDF, N-ADF, N-hemicellulose).