

PENGARUH *TOTAL MIXED RATION* BERBASIS KANGKUNG KERING TERHADAP KONSUMSI DAN KECEERNAAN NUTRIEN KAMBING KACANG BETINA

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INTISARI

Total mixed ration (TMR) berbasis kangkung kering dapat menjadi salah satu solusi untuk mengatasi defisiensi nutrisi saat terjadi kekeringan pada musim kemarau di Gunungkidul karena kangkung memiliki kandungan nutrisi yang baik, tersedia melimpah, dan memiliki kemampuan untuk hidup di daerah kering. Penelitian ini memiliki tujuan untuk mengetahui konsumsi dan pencernaan nutrisi pada kambing kacang betina dengan perlakuan pemberian pakan TMR berbasis kangkung kering. Penelitian dilaksanakan di kelompok ternak Wanita Tani Gama Sumber Rejeki, Dusun Wonolagi, Desa Ngler, Kecamatan Playen, Kabupaten Gunungkidul, Provinsi Daerah Istimewa Yogyakarta. Penelitian menggunakan 6 ekor kambing kacang betina berumur 3 – 4 tahun dengan berat badan rata-rata 25.74 ± 3.73 kg. Perlakuan pada penelitian ini terbagi atas 2 kelompok, yaitu perlakuan kontrol (K0) dengan pemberian rumput raja secara *ad libitum* dan perlakuan pakan TMR berbasis kangkung kering (P0). Perlakuan K0 dan P0 masing-masing terdiri atas 3 ekor ternak. Pengamatan konsumsi dan pencernaan dari kambing kacang betina menggunakan metode *in vivo* dengan mengamati variabel meliputi komposisi kimia, konsumsi pakan dan nutrisi, pencernaan nutrisi, serta nutrisi yang tercerna. *In vivo* dilakukan selama 60 hari termasuk dengan periode koleksi selama 15 hari. Sampel pakan dianalisis menggunakan metode analisis proksimat. Analisis data menggunakan *software* personal komputer *Statistical Product and Service Solutions* (SPSS) versi 26.0 secara *independent t-test*. Hasil penelitian menunjukkan bahwa pemberian pakan TMR meningkatkan konsumsi nutrisi dan meningkatkan nutrisi tercerna ($P < 0,05$). Pakan TMR meningkatkan koefisien cerna: BK, BO, LK, BETN, dan TDN ($P < 0,05$). Penambahan TMR berbasis kangkung kering pada kambing kacang betina dapat meningkatkan konsumsi nutrisi, nutrisi tercerna, dan koefisien cerna yang meliputi BK, BO, LK, BETN, dan TDN ($P < 0,05$).

Kata kunci: Kambing kacang betina, kangkung kering, pencernaan nutrisi, konsumsi nutrisi, *total mixed ration*

THE EFFECT OF TOTAL MIXED RATION BASED IN DRY SPINACH ON THE CONSUMPTION AND NUTRIENT DIGESTION OF FEMALE KACANG GOATS

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ABSTRACT

Total mixed ration (TMR) based on dry spinach could potentially be a solution to nutrition deficiency due to drought during the summer season in Gunungkidul. This is because spinach contains plentiful nutritional content, rich in abundance, and has the capability to survive in dry areas. This research aims to investigate the consumption and nutrient digestion in female kacang Goats through additional energy source feed based in dry spinach. This research was conducted in conjunction with the farmer group Wanita Tani Gama Sumber Rejeki, Wonolagi, Ngleri, Playen, Gunungkidul, Daerah Istimewa Yogyakarta. The research included 6 female kacang Goats aged 3 – 4 years old with an average weight of 25.74 +/- 3.73 kg. The execution of this research was divided into 2 groups, the control treatment (K0) which fed basal greens ad libitum, and the feed treatment (P0) in the form of TMR based on dry spinach, respectively. The treatments of K0 and P0 each consisted of 3 Goats. The observations of consumption and digestion from these female kacang Goats used the in vivo method by observing the variables that encapsulated the consumption of feed and nutrients, nutrients digested, and the digestive coefficients of the nutrients. In vivo was done for a duration of 60 days including a 15-day sample collection period. The samples were then analyzed in a lab using the proximate analysis method by observing dry matter (DM or BK), organic matter (OM or BO), crude protein (CP or PK), extract ether (EE or LK), crude fiber (CF or SK), nitrogen free extract (NFE or BETN), and *total digestible nutrients* (TDN). Data analysis was conducted using the personal computer software Statistical Product and Service Solutions (SPSS) version 26.0 using an Independent T-test. The research results showed that providing TMR increased nutrient consumption as well as nutrient digested ($P < 0.05$). According to the research results, feed in the form of TMR based on dry spinach toward female kacang Goats can increase the consumption and digestion of nutrients and digestive coefficients DM, OM, EE, NFE, and TDN ($P < 0.05$).

Keywords: female kacang goats, dry spinach, nutrient digestion, nutrient consumption, total mixed ration