

PENGARUH PENGGUNAAN PAKAN *BLOCK* DENGAN LEVEL TANIN BERBEDA TERHADAP KECERNAAN NUTRIEN SECARA *IN VITRO*

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INTISARI

Penelitian ini bertujuan untuk mengetahui pengaruh penambahan pakan *block* yang mengandung campuran tepung daun sumber tanin terhadap pencernaan pakan didalam rumen, pencernaan pasca rumen dan pencernaan total. Penelitian ini menggunakan campuran tepung daun yaitu daun akasia, mahoni dan nangka. Pakan *block* dibuat menggunakan tiga perlakuan level tanin berbeda yaitu level tanin 0% (*control*), level tanin 2,5% (P1), dan level tanin 5% (P2). Komposisi bahan pakan *block* berupa rumput gajah, campuran tepung daun sumber tanin dan campuran bahan mineral *block* (premix, garam, dan air). Penelitian ini menggunakan fermentasi rumen secara *in vitro* dengan metode *Tilley dan Terry* dilakukan di Laboratorium Biokimia Nutrisi Fakultas Peternakan UGM. Parameter yang diamati yaitu analisis bahan pakan, pencernaan bahan kering, pencernaan bahan organik, pencernaan serat kasar, pencernaan protein. Data yang diperoleh dianalisis statistik menggunakan variansi pola searah. Apabila terdapat perbedaan yang signifikan maka dilanjutkan uji statistik *Duncan's Multiple Range Test* (DMRT). Data hasil penelitian menunjukkan bahwa pakan *block* yang mengandung campuran daun sumber tanin pada level 5% mampu menurunkan pencernaan protein di dalam rumen secara optimal dan meningkatkan pencernaan protein pasca rumen tanpa memberikan pengaruh negatif terhadap pencernaan nutrisi lainnya.

Kata Kunci: tanin, pencernaan, pakan *block*, *In vitro*

EFFECT OF USING BLOCK FEED WITH DIFFERENT TANNIN LEVELS ON IN VITRO NUTRIENT DIGESTIBILITY

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ABSTRACT

This study aimed to determine the effect of adding block feed containing a mixture of leaf flour as a source of tannins on feed digestibility in the rumen, post-rumen digestibility and total digestibility. This study used a mixture of leaf flour, namely acacia leaves, mahogany leaves and jackfruit leaves. Block feed was made using three different tannin level treatments, namely 0% tannin level (control), 2.5% tannin level (P1), and 5% tannin level (P2). The composition of block feed ingredients is Napier grass, a mixture of leaf flour from tannin sources and a mixture of mineral block ingredients (premix, salt, and water). This study used in vitro rumen fermentation using the Tilley and Terry method at the Nutritional Biochemistry Laboratory, Faculty of Animal Science, UGM. The parameters observed were the analysis of feed ingredients, dry matter digestibility, organic matter digestibility, crude fibre digestibility, and protein digestibility. The data obtained were analyzed statistically using one-way pattern variance. If there is a significant effect, it will be tested using Duncan's Multiple Range Test (DMRT) statistical method. The research data showed that block feed containing a mixture of leaf tannins at a level of 5% was able to optimally reduce protein digestibility in the rumen and increase post-rumen protein digestibility without negatively affecting the digestibility of other nutrients.

Keywords: tannins, Digestibility, Block feed, *In vitro*