RINGKASAN

MUTHIA AYU KARTIKA. Penelitian berjudul "Kecernaan Bahan Kering Dan Bahan Organik Pakan Kambing Yang Diberi Bungkil Kedelai Proteksi Menggunakan Cairan Batang Pisang". Tujuan penelitian ini adalah untuk mengkaji pengaruh penambahan taraf cairan batang pisang dengan bungkil kedelai terhadap kecernaan bahan kering dan bahan organik pakan. Penelitian dilaksanakan mulai 04 Desember 2015 sampai 03 Maret 2016 di Laboratorium Ilmu Nutrisi dan Makanan Ternak Fakultas Peternakan Universitas Jenderal Soedirman, Purwokerto.

Materi yang digunakan dalam penelitian adalah cairan rumen kambing Jawa Randu jantan sebanyak 3 ekor yang diambil dari Rumah Potong Hewan Sokaraja segera setelah kambing dipotong. Perlakuan yang diberikan R0 (Kontrol), R1 (200 ml cairan batang pisang / 200 g bungkil kedelai), R2 (400 ml cairan batang pisang / 200 g bungkil kedelai). Penelitian menggunakan metode eksperimental *in vitro* dengan Rancangan Acak Lengkap (RAL) *one way classification*. Peubah yang diukur terdiri dari kecernaan bahan kering (KBK) dan kecernaan bahan organik (KBO) pakan. Data yang diperoleh dianalisis menggunakan analisis ragam dilanjutkan dengan uji *Orthogonal Polynomial*.

Hasil penelitian menunjukkan bahwa proteksi bungkil kedelai menggunakan cairan batang pisang berpengaruh secara kuadrater terhadap kecenaan bahan kering dan bahan organik pakan dengan persamaan $Y = 42,33 – 0,03X + 0,00007X^2$ dengan koefisien determinasi (R^2) = 0,40, titik terendah P (227,27; 38,78) dan $Y = 40,59 – 0,03X + 0,00007X^2$ dengan koefisien determinasi (R^2) = 0,45, titik terendah P (237,63; 36,74). Hasil penelitian menunjukkan bahwa cairan batang pisang dapat dijadikan protektor protein yang terdapat dalam suatu bahan pakan. Berdasarkan hasil penelitian disarankan bahwa untuk mendapatkan pasokan protein yang lebih banyak pada pasca rumen perlu dilakukannya proteksi terhadap bungkil kedelai.

Kata kunci : Cairan batang pisang, Bungkil kedelai, Kecernaan Bahan Kering dan Kecernaan Bahan Organik

SUMMARY

MUTHIA AYU KARTIKA. The study entitled "Dietary Dry Matter and Organic Matter Digestibilities of Goat Feed Fortified With Protected Soybean Meal Using Liquid of Banana Bole". The purpose of this study was to assess the effect of adding the liquid level of banana bole to soybean meal on the dietary dry matter and organic matter digestibility. The research was conducted from December 04th 2015 until March 03rd 2016 at the Laboratory of Nutrition and Feed Sciences, Faculty of Animal Science, Jenderal Soedirman University, Purwokerto.

The material used in this study was rumen liquid of 3 male Java Randu goats, taken immediately after being slaughtered, from Slaughterhouse, Sokaraja. The treatments given were R0 (Control), R1 (200 ml of banana bole liquid / 200 g of soybean meal), R2 (400 ml of banana bole liquid / 200 g of soybean meal). The research used experimental methods by *in vitro* with a completely randomized design (CRD), one-way classification. Variables measured were dietary dry matter digestibility and organic matter digestibility. Data were analyzed using analysis of variance followed by Orthogonal Polynomial test.

The results showed that the protection of soybean meal using liquid of banana bole affected quadratically on the digestibilities of dry matter and organic matter of feed with the equations $Y = 42.33 – 0.03X + 0.00007X^2$, the coefficient of determination was 0.40, the lowest point was P (227.27; 38.78) and $Y = 40.59 – 0.03X + 0.00007X^2$, the coefficient of determination was 0.45, the lowest point was P (237.63; 36.74). The results of the research showed that the liquid of banana bole can be used as a protector of protein contained in a feed materials. Based on the results of the study, it is suggested that to get more protein supplies in the post rumen, the protection of proteins in soybean meal is required.

Keywords: Banana bole liquid, Soybean meal, Digestibility Dry Matter and Organic matter