

## RINGKASAN

**RIMA SAGITA.** “Kadar Protein Kasar, Serat Kasar dan Bahan Organik Pakan dengan Substitusi Bungkil Kedelai oleh Tepung Daun Waru dalam Konsentrat Ruminansia” dilaksanakan mulai tanggal 18 – 27 Januari 2017 di Laboratorium Ilmu Nutrisi dan Makanan Ternak, Fakultas Peternakan, Universitas Jenderal Soedirman, Purwokerto. Tujuan penelitian ini adalah untuk mengkaji pengaruh substitusi bungkil kedelai oleh tepung daun waru dalam pakan ternak ruminansia terhadap kadar protein kasar, serat kasar dan bahan organik.

Perlakuan yang diuji adalah substitusi bungkil kedelai oleh level tepung daun waru pada pakan ternak ruminansia berturut-turut yaitu 0; 0,1; 0,2; 0,3 dan 0,4 %. Penelitian menggunakan metode eksperimental yang dirancang menggunakan Rancangan Acak Lengkap (RAL) dengan lima perlakuan, masing-masing perlakuan terdiri dari empat ulangan. Peubah yang diamati adalah kadar protein kasar, serat kasar dan bahan organik. Data yang diperoleh dianalisis menggunakan analisis variansi. Uji lanjut yang digunakan adalah Uji *Orthogonal Polynomial*.

Hasil analisis variansi menunjukkan bahwa perlakuan substitusi bungkil kedelai oleh tepung daun waru berpengaruh sangat nyata ( $P < 0.01$ ) terhadap kadar protein kasar, serat kasar dan bahan organik. Rataan kadar protein kasar untuk masing-masing perlakuan adalah 18,79; 17,79; 16,94; 16,65 dan 16,00 %, untuk rata-rata kadar serat kasar adalah 15,53; 16,85; 17,76; 18,10; 18,68% dan rata-rata kadar bahan organik adalah 89,86; 90,38; 91,13; 91,96 dan 92,75 %. Disimpulkan uji lanjut *Orthogonal Polynomial* dapat meningkatkan kadar serat kasar dan bahan organik, serta menurunkan kadar protein kasar.

**Kata kunci** :, substitusi bungkil kedelai, ransum ternak

## SUMMARY

**RIMA SAGITA.** “Crude Protein, Crude Fiber and organic matter of feed with substitution of soy bean meal by *Hibiscus tiliaceus* leaf meal in ruminant concentrate” this study was conducted from 18 -27 January 2017 at Laboratory of Animal Feed and Nutrition Sciences, Faculty of Animal Science, Jenderal Soedirman University, Purwokerto. The aim of this study was to determine the effect of substitution of soy bean meal by *Hibiscus tiliaceus* leaf meal in ruminant concentrate on crude protein, crude fiber and organic matter of feed.

The treatments of this study were substitution of soy bean meal by *Hibiscus tiliaceus* leaf meal on ruminant feed successively at levels of 0, 0.1, 0.2, 0.3 and 0.4% in ruminant concentrate. The method used was experimental method using Completely Randomized Design (CRD) with five kinds of treatment, each treatment consist of four replication. Variables measured were crude protein, crude fiber and organic matter of feed. Data were analyzed by analysis of variance and followed by Orthogonal Polynomial test.

The analysis of variance showed that the treatments affect significantly ( $P<0.01$ ) the crude protein, crude fiber and organic matter of feed. The average of crude protein were 18.79; 17.79; 16.94; 16.65 and 16.00%, the average of crude fiber were 15.53; 16.853; 17.76; 18.10; 18.68% and the average of organic matter were 89.86; 90.38; 91.13; 91.96 and 92.75%. Orthogonal Polynomial test showed that higher level of substitution increased the crude fiber and organic matter, and decreased the crude protein of feed.

**Key words :** substitution of soy bean meal, ruminant ration