

PENGARUH SUPLEMENTASI PROTEIN TERPROTEKSI TERHADAP KONSUMSI DAN KECERNAAN NUTRIEN PADA SAPI PERANAKAN ONGOLE JANTAN

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INTISARI

Penelitian ini bertujuan untuk mengetahui pengaruh pemberian suplementasi bahan pakan sumber protein yang diproteksi menggunakan formaldehid atau pemanasan terhadap konsumsi dan pencernaan nutrisi pada sapi Peranakan Ongole jantan. Penelitian ini menggunakan 12 ekor sapi berumur 1,5 - 2 tahun dengan rata-rata bobot badan \pm 274 kg. Ternak ditempatkan secara acak menurut rancangan acak lengkap (RAL). Pakan diberikan berdasarkan pada perhitungan rata-rata 3% dari bobot badan dalam bentuk berat kering (BK). Masing-masing kelompok perlakuan diberikan hijauan sebanyak 35% dan konsentrat 65%. Suplementasi protein diberikan dalam bentuk kedelai afkir dengan kelompok perlakuan 1 tanpa perlakuan proteksi, perlakuan 2 proteksi pemanasan, dan perlakuan 3 proteksi formaldehid. Hasil penelitian menunjukkan pemberian suplementasi pakan terpoteksi tidak memberikan pengaruh yang nyata terhadap konsumsi bahan kering dan bahan organik, namun pada konsumsi protein kasar memberikan perbedaan yang nyata antara perlakuan suplementasi pakan tanpa perlakuan proteksi dengan suplementasi pakan menggunakan proteksi formaldehid. Pencernaan bahan kering dan bahan organik perlakuan suplementasi pakan terproteksi formaldehid lebih tinggi ($P < 0,05$) dibanding suplementasi pakan terproteksi pemanasan. Pencernaan protein kasar suplementasi pakan tanpa perlakuan proteksi lebih tinggi ($P < 0,05$) dibanding suplementasi pakan menggunakan proteksi pemanasan atau formaldehid. Berdasarkan penelitian ini dapat disimpulkan bahwa pemberian suplementasi pakan terproteksi pemanasan meningkatkan konsumsi, namun mengurangi nilai pencernaan, sedangkan pemberian suplementasi pakan terproteksi formaldehid meningkatkan pencernaan, namun menurunkan nilai konsumsi pakan.

Kata kunci: Sapi Peranakan Ongole, Suplementasi protein terproteksi, Konsumsi pakan, Pencernaan pakan.

EFFECT OF SUPPLEMENTATION OF PROTECTED PROTEIN ON CONSUMTION AND NUTRIEN DIGESTIBILITY OF MALE ONGOLE CROSSBREED CATTLE

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ABSTRACT

This study was done to determine the effect of protein supplementation of the feed materials that are protected using formaldehyde or heating on intake and nutrient digestibility in ongole male crossbreed cows. This study used 12 cows aged 1,5 - 2 months with an average body weight \pm 274 kg. Cattle were placed randomly according to completely randomized design (CRD). The feed was given based on dry matter (DM) of 3% of body weight. Each treatment group was given 35% forage and 65% of concentrate. Protein supplement was reject soybean grain protected using 1% of formadehyde, protected with heat protection, or without protection (control). The results showed that supplementation of protected feed did not significantly effect on the intake of dry matter and organic matter, but the intake of crude protein had significant differences between feed supplementation without protection treatment with feed supplementation using formaldehyde protection. Digestibility of dry matter and organic matter feed supplementation protected formaldehyde treatment was higher ($P < 0.05$) than the feed supplementation protected heating. Crude protein digestibility of feed supplementation without protection treatment was higher ($P < 0.05$) than the feed supplementation using heating protection or formaldehyde. Based on this study it can be concluded that supplementation protected feed with heat protection increase the value of feed intake, but reduce the value of digestibility, while supplementation protected feed with formaldehyde increase the value of digestibility, but decrease the value of feed intake.

Key words: Ongole crossbreed cattle, Supplementation of protected protein, Feed intake, Feed digestibility.