

PENGARUH PERLAKUAN AMONIASI UREA PADA BALES JERAMI PADI DENGAN BERAT YANG BERBEDA TERHADAP KECERNAAN *IN VITRO*

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2002/158784/PT/04499

Intisari

Penelitian ini bertujuan untuk mengetahui pengaruh perlakuan amoniasi urea pada berat *bales* yang berbeda terhadap komposisi kimia jerami padi (bahan kering (BK), bahan organik (BO), protein kasar (PK) dan serat kasar (SK)) dan pencernaan *in vitro*. Jerami padi yang digunakan adalah jerami padi varietas IR-64 segar habis panen yang diamoniasi menggunakan urea 5%. Jerami padi dipres dengan berat 15 kg, 25 kg, dan 35 kg lalu diperam selama 3 minggu. Variabel yang diamati meliputi kandungan BK, BO, PK, SK, dan fraksi a, b, dan c. Data yang diperoleh dianalisis dengan *one-way analysis of variance* dan dilanjutkan uji *Duncan's new multiple range test* (DMRT) apabila perlakuan berpengaruh nyata. Hasil penelitian menunjukkan bahwa perbedaan berat *bales* kemudian diamoniasi dengan urea hanya berpengaruh yang nyata ($P < 0,05$) terhadap kandungan PK, yang uji DMRT pada *bales* 15 dan 25 kg kandungan PK berbeda signifikan ($P < 0,05$) dengan *bales* 35 kg (8,41, 8,26 vs 6,42%). Hasil analisis variansi juga menunjukkan pengaruh yang tidak nyata ($P < 0,05$) terhadap fraksi a (-1,1612, -2,9938 dan -0,5558%), fraksi b (35,6876, 49,5007 dan 51,0167%), fraksi c (0,0231, 0,0287 dan 0,0235 %/jam) dan DT (34,53, 46,51, 50,46%). Berdasarkan hasil penelitian dapat disimpulkan bahwa *bales* jerami padi ukuran 15 – 25 kg kemudian diamoniasi dengan urea adalah yang paling efektif, karena dapat meningkatkan kandungan protein kasar meskipun tidak mengubah nilai pencernaan dan komposisi kimia lainnya.

Kata kunci : Jerami padi, Amoniasi urea, Berat *bales*, Komposisi kimia, Pencernaan *In vitro*

THE EFFECT OF UREA AMONIATION TREATMENT AT DIFFERENT WEIGHTS OF RICE STRAW BALES ON IN VITRO DIGESTIBILITY

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Abstract

This research was aimed to determine the effect of urea amoniation on different weights of rice straw bales on chemical composition (dry matter (DM), organic matter (OM), crude protein (CP), and crude fiber (CF)), and also *in vitro* digestibility. Rice straw used was IR-64 variety which freshly harvested then amoniated with 5% urea. Rice straw was pressed in 15, 25, 35 kg of weight and stored for 3 weeks. Variables observed were the contents of DM, OM, CP, CF, and the fraction of a, b, and c. Collected data were analyzed by one-way analysis of variance and then followed by Duncan's new multiple range test (DMRT) if there were any significant effect of treatments. Results of the study showed that different weight of bales treated to urea amoniation only significant affected ($P < 0,05$) the CP value, DMRT was shown on bales 15 kg and 25 kg significant difference ($P < 0,05$) with 35 kg bales (8,41, 8,26 vs 6,42%, respectively). Non significant differences were also found in a fraction (-1,1612, -2,9938 and -0,5558%, respectively), b fraction (35,6876, 49,5007 and 51,0167%, respectively), c fraction (0,0231, 0,0287 and 0,0235 %/h, respectively) dan DT (34,53, 46,51, 50,46%, respectively). Based on the results above, it can be concluded that the effective urea amoniation was found in 15 – 25 kg of rice straw baled, because it able to increase the crude protein value, although did not affect the digestibility value and others chemical composition.

Key words : Rice straw, Urea amoniation, Bales weight, Chemical composition, *In vitro* digestibility