

**PENGARUH KADAR AIR DAN LAMA PERAM DALAM FERMENTASI  
JERAMI JAGUNG DENGAN ADITIF PROBIOTIK-UREA  
TERHADAP DEGRADASI BAHAN KERING DAN BAHAN  
ORGANIK PADA SAPI PERANAKAN ONGOLE**

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**Intisari**

Tujuan dari penelitian ini adalah untuk mengetahui pengaruh kadar air dan lama peram dalam fermentasi jerami jagung dengan aditif probiotik-urea terhadap degradasi (*in sacco*) BK dan BO pada sapi peranakan *Ongole*. Pada penelitian ini digunakan jerami jagung (varietas Arjuna, umur panen 3 bulan) kondisi kering matahari yang difermentasi dengan aditif probiotik-urea (1 : 1) sebanyak 4% BK, dan dua ekor sapi PO betina berfistula di bagian rumennya. Penelitian ini menggunakan rancangan acak lengkap pola faktorial 2 x 4. Faktor pertama adalah kadar air (40 dan 50%) dan faktor ke dua adalah lama peram (0, 14, 21, dan 28 hari), masing-masing dengan empat ulangan. Hasil penelitian menunjukkan bahwa DT BK fermentasi dengan kadar air 40% (39,85%) lebih tinggi ( $P < 0,01$ ) dari 50% (36,91%). DT BK fermentasi dengan lama peram 14 (40,17%), 21 (38,83%), 28 (38,56%) hari lebih tinggi ( $P < 0,01$ ) dari 0 hari (35,56%). DT BO dengan lama peram 14 hari (39,65%) lebih tinggi ( $P < 0,01$ ) dari lama peram 21 (37,42%), 28 (36,49%) dan 0 (34,47%) hari. Interaksi antara kadar air dan lama peram berpengaruh sangat nyata ( $P < 0,01$ ) terhadap fraksi DT BK dan b BO serta berpengaruh nyata ( $P < 0,05$ ) terhadap fraksi b BK. DT tertinggi ( $P < 0,01$ ) dicapai pada lama peram 14 hari dengan kadar air 40% (43,53%) untuk BK dan kadar air 40 dan 50% (41,14 dan 38,16%) untuk BO.

Kata kunci : Jerami Jagung, Fermentasi, Kadar Air, Lama Peram, Probiotik, Urea, Degradasi *In Sacco*

**EFFECT OF WATER CONTENT AND DURATION OF CORN STOVER  
FERMENTATION WITH PROBIOTICS-UREA ADDITIVES ON  
DRY MATTER AND ORGANIC MATTER DEGRADATION  
FOR ONGOLE CROSSBRED CATTLE**

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**Abstract**

The objective of this experiment is to determine the effect of water content and duration of fermented corn stover with probiotics-urea on DM and OM (*in sacco*) degradation for *Ongole* crossbred cattle. Dried corn stover (Arjuna variety, at 3 months age) was fermented with probiotics-urea additives (1 : 1), 4% of dry matter, and two female rumen fistulated *Ongole* crossbred cattle were used in this experiment. A completely randomized design was used and analyzed by a 2 x 4 factorial experiment. The first factor was water content (40 and 50%) and the second factor was duration (0, 14, 21, and 28 days). Each of combination was done with 4 replications respectively. The result of this experiment showed that DT values of fermented corn stover DM with 40% water content (39.85%) was higher (PC0.01) than that 50% (36.91%). DT values of fermented corn stover with 14 (40.17%), 21 (38.83%), 28 (38.56%) days of duration were higher (PC0.01) than that 0 day (34.47%). DT values of fermented corn stover OM with 14 days of duration (39.65%) was higher (PC0.01) than that 21 (37.42%), 28 (36.49%) dan 0 (34.47%) days. Interaction between water content and duration had a very significant effect (PC0.01) on DT values of DM and b values of OM, and significant effect (P<0.05) on b values of DM. The highest (PC0.01) DT values was reached by 14 days of duration, with 40% water content (43.53%) for DM and both of 40 and 50% water content (41.14 and 38.16%) for OM.

Key words: Corn Stover, Fermentation, Water Content, Duration, Probiotics, Urea, *In Sacco* Degradation