

**PENGARUH LAMA PERAM DAN KADAR AIR KLOBOT JAGUNG  
PADA PENGGUNAAN INOKULUM TERHADAP DEGRADASI  
IN SACCO BAHAN KERING DAN BAHAN ORGANIK**

Siti Nur Rohmah  
95/104183/PT/03257

2000

**INTISARI**

Penelitian ini bertujuan untuk mengetahui pengaruh lama pemeraman dan kadar air fermentasi *klobot jagung* terhadap degradasi bahan kering dan bahan organik. *Klobot jagung* varietas *Arjuna* dicacah dan dikeringkan, air yang digunakan untuk melarutkan urea dan inokulum (Starbio®) sejumlah 4% dari bahan fermentasi dengan perbandingan 1:1 dibuat pada kondisi 40% dan 50%. Pemeraman pada kondisi tertutup, lama peram 14 dan 21 hari dengan dua ulangan tiap perlakuan. Kadar air fermentasi 40% dan 50% sebagai faktor pertama dan lama peram 14 dan 21 hari sebagai faktor kedua. Sampel diuji degradasinya di dalam rumen sapi peranakan Onggole betina *berfistula* dengan metode *in sacco*. Lama inkubasi adalah 0, 4, 8, 16, 24, 48, dan 72 jam dengan empat ulangan tiap waktu inkubasi. Nilai degradasi teori (DT) dianalisis dengan analisis variansi CRD pola faktorial 2 x 2. Degradasi teori BK *klobot jagung* fermentasi pada kadar air 40 dan 50% terdapat perbedaan sangat nyata ( $P < 0,01$ ) (69,40 vs 65,44). Pengaruh lama peram menunjukkan perbedaan nyata ( $P < 0,05$ ) pada fraksi c BK (4,16 vs 3,16). Nilai DT BO *klobot jagung* fermentasi kadar air 40 dan 50% berbeda sangat nyata ( $P < 0,01$ ) (70,28 vs 66,60), fraksi c berbeda nyata ( $P < 0,05$ ) (3,75 vs 4,62) dan lama peram berbeda nyata ( $P < 0,05$ ) (66,92 vs 69,96) fraksi DT dan (4,49 vs 3,74) fraksi c. Disimpulkan bahwa fermentasi menggunakan *klobot jagung* dengan kadar air 40% dan lama peram 21 hari meningkatkan pencernaan *in sacco*, namun tidak terdapat interaksi positif pada perlakuan tersebut.

Kata kunci : *Klobot jagung*, Fermentasi, Lama peram,  
Kadar air, Degradasi *in sacco*

## THE EFFECT OF DURATION AND WATER CONTENT OF FERMENTED CORN HUSKS ON DRY MATTER AND ORGANIC MATTER *IN SACCO* DEGRADATION

Siti Nur Rohmah  
95/104183/PT/03257

2000

### ABSTRACT

This research was conducted to investigate the effect of duration and water content of fermented corn husks on dry matter and organic matter *in sacco* degradation. Husks corn of *Arjuna* variety were chopped and dry to acquire final water concentrations of 40% and 50% after being added urea and inoculum with ratio 1:1 as much as 4%. On anaerobic-condition fermentation, duration of fermentation were 14 and 21 days with two replications for each treatment. The water concentration of the fermentation were 40% and 50% as the first factor and duration fermentation 14 and 21 days as the second factor. Sample were incubated in the rumen fistulated cows of Ongole Crossbred, using the *in sacco* method. Samples were incubated for 0, 4, 8, 16, 24, 48 and 72 hours, using four replications for each period of incubation. The theoretical degradation values (TD) were analyzed by variancy analysis using CRD of factorial design 2x2. The theoretical degradation DM corn husks fermentation in water concentration were 40% and 50% was significantly ( $P < 0.01$ ) higher (69.41 vs 65.44). TD OM corn husks fermentation was significantly ( $P < 0.01$ ) higher (70.28 vs 66.60) and duration of fermentation was significantly ( $P < 0.05$ ) higher (66.92 vs 69.96). It can be concluded that probiotic corn husks fermentation with water concentration 40% and duration of fermentation 21 days can increase in *sacco* digestibility.

Key Word : Corn Husks, Fermentation, Duration of fermentation, Water Concentration, *In Sacco* Degradation