

**CORN COBS FERMENTATION TO INCREASE CRUDE PROTEIN AND  
DECREASE CRUDE FIBRE WITH ADDITION OF UREA, MOLASSES,  
AND *Bacillus pumilus***

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**ABSTRACT**

In this study used bacterium *Bacillus pumilus* ML-08 which isolated from cow's rumen, it also do as xylanolytic and cellulolytic bacteria. *Bacillus pumilus* in this study added with the aim to improving nutrition of corn cobs as alternative feed for ruminants, considering the content of nutrients of raw corn cob itself is not good enough because of the high fiber and lower crude protein contented. Processing method done by facultative anaerob fermentation. In this research performed with four kinds of treatment. One control treatment and the other three added with *Bacillus pumilus* with different doses among: 10%, 15, and 20%. with substances of molasses and urea supports as much as 2% and 1% added in each sample. The incubation period was seven days, and after the incubation period ended the samples took for proximate analysis to determine the content of crude protein and crude fiber in each sample. Based on statistical analysis the results shown there were increases of crude protein which significantly different ( $P < 0.05$ ) compared with control treatment and decreases in crude fiber which significantly different ( $P < 0.05$ ) when compared with control treatment. And the best result achieved by the samples with dose of *Bacillus pumilus* added within 15%.

**Key word:** Corn cobs, fermentation, *Bacillus pumilus*, crude protein, crude fibre