

**THE DECREASING OF CRUDE FIBER AND THE INCREASING OF
CRUDE PROTEIN CONTENT OF PINEAPPLE PEEL (*Ananas comosus* L.
Merr) WHICH FERMENTED BY CELLULOLYTIC BACTERIA
(*Actinobacillus sp.* ML-08)**

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ABSTRACT

The purpose of this study was to know crude fiber and crude protein content of pineapple peel which fermented by cellulolytic bacteria (*Actinobacillus sp.* ML-08). The experimental design using Complete Random Design (CRD) with five treatments and four replications. Five treatment groups consisted of P0 50 g pineapple peel added 0% *Actinobacillus sp.* ML-08 and 2% molasses; P1 50 g pineapple peel added 5% *Actinobacillus sp.* ML-08 and 2% molasses; P2 50 g pineapple peel added 10% *Actinobacillus sp.* ML-08 and 2% molasses; P3 50 g pineapple peel added 15% *Actinobacillus sp.* ML-08 and 2% molasses; P4 50 g pineapple peel added 20% *Actinobacillus sp.* ML-08 and 2% molasses. Proximate analysis were done after pineapple peel were fermented for seven days. The data were analyzed with Analysis of Variance followed by Duncan's Multiple Range Test. The result showed that the used of *Actinobacillus sp.* ML-08 up to the level of 10% was able to decrease the crude fiber content of pineapple peel significantly from 4.74% (P0) to 4.61% (P2). The used of *Actinobacillus sp.* ML-08 up to the level of 20% (P4) has not been able to increase the crude protein content of pineapple peel significantly.

Key words: pineapple peel, fermented, cellulolytic bacteria, crude fiber, crude protein