ABSTRACT

THE EFFECT OF FERMENTATION DURATION OF *Trametes sp.* ON DRY MATTER CONTENT, ASH CONTENT, CRUDE FIBER CONTENT OF PINEAPPLE LEAVES OF *Smooth cayene* VARIETY

By

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The main problem in developing of ruminant production in Indonesia is the difficulty in fulfilling the availability of feed continually, either the quality or the quantity. The abundant pineapple leaves cause the pineapple leaves are potensial to be feed stuff. However, the crude fiber content is high. Therefore, the pineapple leaves will be fermented by day treatment to reduce the high crude fiber content. This study aimed to determine the effect of the best fermentation duration and to determine the effect of *Trametes sp.* on dry metter, ash content, and crude fiber content of pineapple leaves of *Smooth cayene* variety.

This study was held in the Laboratory of Animal Feed, Department of Animal Husbandry, Faculty of Agriculture, University of Lampung. The treatments were arranged by using Completely Randomized Design (CRD) with four treatments and four replications. The treatment consisted of storage during 0 day, 2 days, 4 days, 6 days. The data of result observation was analyzed by using variance analysis with significant level of 5% and or 1%. The polynomial orthogonal used after the variance analysis showed the significant result.

The result of this study showed that the treatment of storage duration of 0 day, 2 days, 4 days, 6 days were significantly different ($P<1\%$) on dry matter content, ash content, and crude fiber content. The duration of *Trametes sp.* fermentation was significantly different to the content of dry matter, crude fiber, ash. Longer duration of fermentation, more decrease the content of dry matter, crude fiber, and ash. This is according to the regresion equality of dry matter $Y=12,11-0,61x$ ($R^2=0,84$, $r=0,92$), crude fiber content $Y=26,08-1,81x$ ($R^2=0,69$, $r=0,83$), and ash content $Y=7,39-0,47x$ ($R^2=0,73$, $r=0,85$).

Keys word : *Trametes sp.*, the pineapple leaves, dry matter, ash content, crude fiber content