

THE QUALITY OF FERMENTED RICE STRAW WITH DIFFERENT DOSES OF RUMEN FLUID

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ABSTRACT

The aim of the research was to observe the quality (crude protein and crude fiber) of fermented rice straw with different doses of rumen fluid. Weight of each treatment was 5000 gram. Rice straw was main forage to be fermented about 3000 gram each treatment. Rumen fluid (P0 0%, P1 5%, P2 10% and P3 15%) added urea 1%, molasses 3% and water until 40% (2.000 g). Rice straw and rumen fluid then thoroughly mixed, placed in a plastic bag, sealed properly to obtain anaerobic condition and incubated in 7 days. Proximate analysis method had done to obtain the data of crude fiber and crude protein of total feed ingredients then processing data using Analysis of Variant (ANOVA) based on Completely Randomized Design (CRD), followed by Duncan's multiple range to determine which treatment was best compared with other treatments.

Results of the fermented rice straw with rumen fluid were significant differences in the crude protein and crude fiber between treatments ($p < 0.05$). In crude fiber P2 and P3 gave the highest yield that significantly different to the treatment P0 as control, but not significantly different from P1. In the crude protein P1, P2 and P3 were significantly different to the treatment P0 as control. Rumen fluid could decrease crude fiber and increase crude protein in the rice straw, the best treatment was 10-15%.

Key words: *crude fiber, crude protein, in vitro, rice straw, rumen fluid*