

Abstract

PENGARUH PEMBERIAN ZEOLIT BERAMONIUM DAN MINERAL ORGANIK TERHADAP KADAR AMONIA (NH₃) dan VOLATILE FATTY ACID (VFA) CAIRAN RUMEN PADA SAPI PERANAKAN ONGOLE

by

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This watchfulness aims to detect zeolite gift influence beramonium and zeolite beramonium + organic mineral in ration towards degree amonia (NH₃) and volatile fatty acid (VFA) rumen with best influence from treatment towards degree amonia (NH₃) and *volatile fatty acid* (VFA) rumen.

This watchfulness carried out in November - December 2010, at Husbandry Direction stable, Faculty of Agriculture, Lampung University. Watchfulness uses rancangan acak lengkap (RAL) with 3 treatments and 3 repetition times, data that got to cultivated with analysis kind in real standard 5% and or 1% then continued with contrast test orthogonal. Watchfulness execution is done 30 adaptation time days, 2 data taking days. treatment that given R1 (basalt ration); R2 (basalt ration + 3% zeolite beramonium); R3 (basalt ration + 3% zeolite beramonium + 1% organic mineral).

Watchfulness result shows that zeolite use beramonium and organic mineral in ration differ very real ($p < 0,01$) towards degree amonia (NH₃) rumen and volatile fatty acid (VFA) rumen in cow PO. Average degree amonia (NH₃) highest in treatment R3 that is 11,106 mM and bottommost in treatment R1 that is 8,055

mM. Average concentration *volatile fatty acid* (VFA) highest in treatment R3 that is 163,333 mM and bottommost in treatment R1 that is 86,666 mM.

This study aims to determine the effect of zeolites and zeolite ammonium beramonium + organic minerals in the ration on levels of ammonia (NH₃) and volatile fatty acids (VFA) rumen and the best effect of treatment on levels of ammonia (NH₃) and volatile fatty acids (VFA) rumen.

This research has been conducted in November-December 2010, housed in cages Department of Animal Husbandry, Faculty of Agriculture, University of Lampung. Research using completely randomized design (CRD) with 3 treatments and 3 replications, the data obtained is processed by the analysis of real diversity at the level of 5% or 1% and then followed by orthogonal contrast test. Implementation of the study was conducted 30 days adaptation period, two days of data collection. The treatment given is R1 (basal rations); R2 (Rations basal + 3% zeolite beramonium); R3 (basal rations beramonium zeolite + 3% + 1% organic minerals).

The results showed that the use of organic and mineral zeolite beramonium in different rations very significant ($P < 0.01$) on levels of ammonia (NH₃) and volatile Vatty rumen acid (VFA) rumen in cattle PO. Average levels of ammonia (NH₃) is highest

at 11.106 R3 treatment and lowest in the treatment of 8.055 mMR1. the average concentration of volatile fatty acids (VFA) is the highest in the treatment R3 163.333 mM and the lowest in the treatment of R1 86.666 mM.