

THE EFFECT OF CATTLE FAECES AND RESTAURANT WASTE USED ON BIOGAS PRODUCTION AND NITROGEN (N) SLURRY CONTAIN

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ABSTRACT*

Restaurant and Food Waste, Fesses are very common and have not been handled optimally, if not managed properly it will cause many problems especially because of the smell. This study aims to utilize restaurant organic waste and fesses as biogas producers and N-slurry levels. The study was conducted on 13 December 2018 - 11 January 2019, starting with mixing materials such as Fesses: Restaurant Waste: and 20% Straw each treatment for an increase in C / N with a ratio (P0) as a control 80:0:20 , (P1) 65:15:20, (P2) 40:40:20 (P3) 0:80:20. This study used a Completely Randomized Design in the same direction with the analysis using Analysis of variance (ANOVA). The results showed that biogas production of control treatment (P0) was 44026.3 m³, (P1) of 14283.7667 m³, (P2) of 21533,9 m³, and (P3) of 8734,867 m³. The treatment for N-sllury content (P3) was 0.221, (P2) was 0.146, (P1) was 0.125, and treatment (P0) was 0.06. The results of the variance are concluded to show that gas production is non-significant. It was concluded that biogas production compared restaurant waste to 80% content could be used to make biogas. The highest gas production is produced by the treatment of dick (P0) and the highest level of N slurry is produced by treatment (P3).

Key words : Biogas, Restaurant Waste, Fesses, Biogas Production, Ratio N Slurry.

*Abstract Thesis of S1 Animal Husbandry, Animal Husbandry Program, Faculty of Agroindustry, University of Mercu Buana Yogyakarta, 2019.