

ABSTRACT

THE PRODUCTION OF BIOGAS FROM LIQUID WASTE OF TOFU TO STARTERWITH HORSE FECES

by:

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In this research, liquid waste of tofu researched to be processed into biogas which was mixed with horse feces as a starter. This research was aimed to determine the effect of the composition of horse feces and liquid waste of tofu that was used for the production of biogas. The experiments were performed by variation the mixed KK : LCT 50 % : 50 % , KK : LCT 60 % : 40%, KK:LCT 70 %:30 % , KK : LCT 80 % :20 % , the variation in composition of the obtained ratio C/N 19,06 ; 28.06 ; 42.46 ; 73.06. The measurement of biogas volume has been done everyday. The Optimum of biogas production obtained in comparison KK : LCT 60 %:40 % is 19018.4 mL. Methane content measurements performed after purification by absorption using 0.5 M NaOH obtained optimum levels of methane is 69.17 %. While % total solids (TS) obtained for the initial mixture and slurry, respectively for 4.18% and 12,91%,while for % volatile solids (VS) obtained respectively 57,59% and 59,30%.

Keywords : *Biogas, Waste tofu (LCT), horse feces (KK), the ratio of C/N , purification*

