

Pemanfaatan Limbah Kotoran Kuda sebagai Bahan Baku Pembuatan Biogas
(*Utilization of Horse Manure as Raw Material of Biogas Production*)

Eries Hadiano Riswana
Renewable Energy Engineering Program
Engineering Department

ABSTRACT

This study aims to determine the effect of dilution by utilizing the waste of horse manure on the biogas yield and to know the rate of biogas formation and to know the flame from the biogas of horse manure waste. Measurement of biogas volume using legal archimedes and using descriptive statistical data analysis. Based on the results of biogas production study waste horse waste The best last average volume is found in a ratio of 1: 1 with volume 32245 ml and the lowest in the ratio of 1: 1.5 with a volume of 18961.5 ml but only at the end of research, other day berdominan the 1: 2 treatment has the lowest average volume with the last average volume of 20060 ml. It is obtained this research the more dilute the mixture of materials the lower the volume of biogas produced. While the biogas production rate of the three treatments experienced the same increase on the first day of the first measurement and then the next day experienced a constant upsurge until the last day of the research that is the day to 30. The results of the test fire flame horse manure with dilution treatment showed that the biogas contains methane gas , it is characterized by biogas results that can be burned and produce a blue fire color.

Keywords: *Dirt horse, Biogas, Dilution.*