

Pemanfaatan Limbah Isi Rumen Sapi Sebagai Salah Satu Bahan Baku Alternatif Pembuatan Biogas (*Waste Utilization Cow Rumen Contents As One Alternative Raw Material Preparation Biogas*)

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ABSTRACT

Biogas is the result of the decomposition of organic material by microorganisms under anaerobic conditions that can produce gases such as methane (CH₄) is flammable under certain circumstances. One potential waste as materials for biogas is cow rumen contents of the stomach. Methanogenetik bacterial content, crude fiber, protein, and other nutrients in the rumen could potentially be used as a substrate material biogas. This study materials to be used are all the rumen contents of the stomach are added water at a ratio of 1,2: 0,8. The raw material substrate cow rumen and water will be included as much as 2/3 of digester with a volume of 50 liters. In this study old gas production process carried out for 40 days. Of the three repetitions using the same materials and treatment gained an average total gas volume of 12.250 ml. At the time of trial flame of biogas can be lit and put out the fire from the burning.

Keywords: Biogas, Cow Rumen, Gas Production.