

Packaging Application of Gas Bio into Elpiji Tube with Modification Techniques

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Abstract

Petroleum energy that used for domestic purposes has increased from year to year and give the impact of high demand on kerosene and Liquefied Petroleum Gas in high price for some public communities. The imbalance between poverty and fulfillment of the fuel requires the innovation to create an alternative fuel to substitute Elpiji, which can be useful especially for them who live in rural places and work as a farmer. In this study, We report several stages start from construct the modification reactor, substrate decomposition for produce gas bio until to packaging application of gas bio into Elpiji tube with modification techniques and cooking test measurement. From this research, Our data shows that reactor can be used as an alternative to produce the renewable gas bio by fermentation for 14 days. Gas bio has been applied into Elpiji tube which can be connected directly to gas stove like using Elpiji and a tube of gas bio able to supply that needed for individual per day for cooking 500 mL of water, 0.25 kilograms of rice and 3 eggs.

Keywords : *application, gas bio, Elpiji tube, modification*