

Biogas Production from Food Scraps of Rajamangala University of Technology Srivijaya.

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Abstract

The objectives of this study aims to produce biogas for using as a renewable energy instead of liquid petroleum gas (LPG), reduce the food scrap in the RMUTSV food center and evaluate the appropriate ratio between food scrap and cow manure for biogas production. From the biogas fermentation experiment, in a ratio of 1:1, 1:2, 1:3 and 1:4 with a paddle for mixing to produce biogas for 24 days at room temperature, the volume of fermentation tank was 200 liters and the volume of biogas storage tank was 180 liters. It was found that the rate of biogas production accumulation with a ratio of food scrap and cow manure 1:1, 1:2, 1:3 and 1:4 were 0.074, 0.075, 0.077 and 0.090 respectively. The ratio of 1:4 was producing a high volume of biogas which was 0.090 m³.

Keywords: Biogas, Food Scraps, Biogas Production.

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