



Effect of temperature on biogas production from food waste through anaerobic digestion

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Received 1 February 2017; Accepted 7 July 2017

ABSTRACT

An anaerobic digestion process for the treatment of food waste was investigated in laboratory scale batch reactors. The effect of temperature (30°C–60°C) on the biogas production was investigated in the reactors with hydraulic retention time of 30 d. The volumetric yield of biogas was noted at regular intervals using water displacement method. The food wastes used in this experiment were subjected to characterization studies before and after digestion. The experimental results show that the temperature of 50°C produced higher biogas yield compared with other temperatures.

Keywords: Biogas; Food waste; Temperature; Anaerobic digestion

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