

Title: Conversion of Agricultural Waste (Maize) Into Energy Using Biogas Technology

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The aim of the study was to examine the biogas and methane yield of maize silage, wastes inagricultural point of view and compare it to the biogas productivity of commonly used mixture of maize silageand mixed fodder with water. The experimental study was carried out into 2 parts. Firstly, the batch experimentwas conducted in Mesophilic conditions (35°C), at five different hydraulic retention times (HRT): 6 Days, 11Days, 20 Days, 29 Days and 41 Days. The results revealed that maize silage was generated the highest biogasyield of 537 mL /241 mL at the HRT of 6 days /41 days. Mixed fodder produced the highest biogas yield of421 mL at the HRT of 6th days and the lowest one was 252 mL at the HRT of 20th days. Finally, the methane,carbon dioxide and hydrogen sulphide of biogas produced from maize silage and mixed fodder were analyzedusing a gas chromatography. The results showed that biogas from maize silage precede the gas less than themixed fodder. In the field level experiment proved that from mixed fodder produced gas which would be enoughfor 7 member's family used 3 months for the purpose of their cooking.

Biography

Roksana Aftab has completed her Bachelor of Science at Agriculture at the age of 21 years from Noakhali Science and Technology University and doing her Master's of Science at Plant Patholgy fromSher-e-Bangla Agricultural University at Plant Patholgy,Dhaka-1207,Bangladesh.She is a Member and Assistant Researcher Bangladesh Biogas Development Foundation organization.She has published 1 paper in reputed journals named of American-Eurasian Journal of Agriculture & Environmental Science.

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Session name/ number:
Category: Oral presentation