Title: Biogas Production using Food Waste

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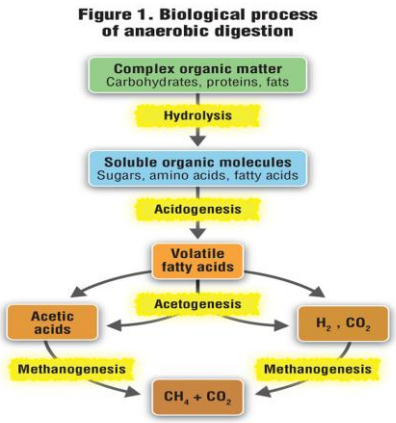
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I. Abstract

The demand for fossil fuel is increasing day by day due to increase in population and it is a big threat to environment. Scientists are working on different renewable sources of energy to fulfill the needs of increasing population. Biogas is an alternate of fossil fuels which is obtained by food waste it contains 30-40% of carbon dioxide, 55-65% of methane, it is better way to reduce the food waste and converting it into valuable product (biogas). Anaerobic thermophilic bacteria are used for degradation of organic matter (food waste) for biogas production. The pH of system is maintained 6.7-7.4 because system is very sensitive to pH for this purpose NaOH is added to maintain pH of system. Environment and temperature of the digester affect anaerobic digestion process. Digester is used to digest the food waste and the temperature is kept between 37^{o}C to 55^{o}C because thermophilic bacteria works efficiently at this temperature ranges. Other parts of the plant are waste storage reservoir, feeding tank, digester, generators and sludge drainage. Food waste is an important component for biogas production as compared to animal dung because food waste contains higher solids and volatile solids (9.3% and 94.9%) content as compared to animal (cow) dung (8.5% and 93.1%). Other environmental benefits are it reduces environmental pollution, desertification and also deforestation. Slurry produced during this process gives valuable organic manure which can be used in farming practices to sustain the soil fertility and also it reduces the erosion on soil. By producing biogas with food waste we can reduce the food waste and also it gives many beneficial products which reduce environmental pollution.

II. Image



III. Reference:

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IV. Biography:

I am Muhammad Zaki Khan student of B.Sc (Hons) Agriculture Major in Food Science and Technology 7th semester from Muhammad Nawaz Shareef University of Agriculture, Multan, Pakistan. This is my first abstract which is going to be published in an international journal. I shall be very thankful to you if you publish this abstract in international journal.

V. Presenting author details



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