

VARIATIONS IN BOD AND COD AT VARIOUS STAGES OF BIOGAS PRODUCTION USING DIFFERENT AGRICULTURAL WASTES

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Abstract: Cow dung along with other agricultural wastes (press mud, poultry litter, kitchen wastes, maize stalks and fruit wastes) were used for the biogas production in lab scale. For each treatment 750 g of substrate and 1500 ml of water was used as inoculum mixture in 3 liters glass bottles. Biological Oxygen Demand (BOD) and Chemical Oxygen Demand (COD) was estimated at various stages of gas production. BOD and COD of the slurry samples was more in the substrates initially before anaerobic digestion but later reduced gradually by the end of gas production which implies the effect of anaerobic digestion on the reduction of BOD and COD and this indirectly leads to the reduction in the environmental pollution.

Keywords: Agricultural wastes, Anaerobic digestion, Biological Oxygen Demand, Chemical Oxygen Demand

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