

ANAEROBIC TREATMENT OF DAIRY WASTEWATER

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ABSTRACT

This work focuses on the monitoring of study parameters by Anaerobic Digestion of Dairy waste water under controlled conditions. The Dairy Wastewater is taken from Karnataka Milk Federation (KMF). A laboratory scale models of Anaerobic digester of 10L capacity, with gas collecting bottles were setup to treat Dairy waste water. The performance of the reactor in removing Study characteristics as well as Bio gas production were studied, with reference to different Organic Loading Rates of 0.5, 1.0, 1.5, 2.0 kg COD/m³.d. The highest yield of Total Alkalinity produced, Sulphate removal, Chloride removal, Total Solids removal, COD removal and Cumulative Bio gas production are 46.64%, 77.69%, 82.62%, 80.59%, 49.65% and 259mL respectively.

KEY WORDS: Anaerobic Digestion; COD; Organic Loading Rates; Bio gas; Dairy Wastewater