

## Abstract

Presently in Bangalore, about 3000 to 3500 tons of flower waste is being generated daily in temples, marriage halls, function halls, markets, residential area at festivals and other processes of this 1800 tons are from temples, 450 tons from function halls, 300 tons are from houses, 450 tons are from markets. Advances in waste management resulted in use of flower waste in perfume industry, biogas production, as fuel, compost by vermin culture. To safeguard the environment, efforts are being made for recycling flower wastes and utilize them in value added applications. In this paper, present status on generating of biogas using flower waste, their application and environmental implication are reported and discussed in details

To determine the characteristic parameter such as pH, alkalinity, acidity, total solids, (BOD)<sub>5</sub>, DO in laboratory. A Prototype digesters of 0.01486 m<sup>3</sup> capacity is used and fed with flower waste. Before introducing cow dung and flower waste a basic study is conducted. cow dung is allowed to undergo primary process of acidogenesis in anaerobic decomposition. Cow dung as inoculum is taken along with flower waste of different composition ranging from 5% to 15% will be introduced in three different digesters. During the methanogenesis process complete digestion of the waste is expected to take place. Once the process is completed the gas accumulated in digester is collected in cylinders and taken for testing to find the percentage of methane present in the stored biogas. Obtained methane is further used for several applications such as cooking, lighting etc. Preliminary results indicate that the process is effective in reducing the pollution potential of the flower waste. The process removes a lot of environmental pollutants as total solids, biochemical oxygen demand (BOD), etc. respectively, along with biogas production Anaerobic digestion is a process by which environmentally hazardous organic wastes from municipal, agricultural and industrial sources may be stabilised. The treatment has many side benefits, most notably the production of methane-rich biogas which can be used to generate electricity and heat.