

Temperature Susceptibility for Optimal Biogas Production

Authors : Ujjal Chattaraj, Pbharat Saikumar, Thinley Dorji

Abstract : Earth is going to be a planet where no further life can sustain if people continue to pollute the environment. We need energy and fuels everyday for heating and lighting purposes in our life. It's high time we know this problem and take measures at-least to reduce pollution and take alternative measures for everyday livelihood. Biogas is one of them. It is very essential to define and control the parameters for optimization of biogas production. Biogas plants can be made of different size, but it is very vital to make a biogas which will be cost effective, with greater efficiency (more production) and biogas plants that will sustain for a longer period of time for usage. In this research, experiments were carried out only on cow dung and Chicken manure depending on the substrates people out there (Bhutan) used. The experiment was done within 25 days and was tested for different temperatures and found out which produce more amount. Moreover, it was also statistically tested for their dependency and non-dependency which gave clear idea more on their production.

Keywords : digester, mesophilic temperature, organic manure, statistical analysis, thermophilic temperature, t-test

Conference Title : ICCET 2017 : International Conference on Civil Engineering Technologies

Conference Location : Singapore, Singapore

Conference Dates : January 08-09, 2017