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EFFECT OF TEMPERATURE ON RATE OF DEGRADATION ON ORGANIC SOLID WASTE DIGESTION

R. A. JOSHI AND SHRIKANT J. SHELKE
Civil Engineering Department, V.I.I.T.C.O.E., Pune, India.

Abstract

The study was carried out to find effect of temperature on biodegradable solid waste digestion. Objective of the research was 'Study of control condition for degradation'. Present study shows that high temperature favored fast degradation. Complete degradation of organic solid waste was observed when water and oil at temp 100^0C and 40^0C resp was passed through the tube. The results are expressed in the form of graph and compare with the control. In the case of 100^0C the degradation rate has showed slight increase after 4 days of incubation. It may be due to acclimatization of the microorganisms during degradation. In the case of oil 40^0C the degradation rate has showed fast increase after 4 days of incubation. It may be due to oil has more capacity to heat transfer than water. When loading of organic solid waste is going to degrade in less time than oil has preferred otherwise water is preferred for degradation.

Keywords: Solid waste, Biodegradation, Temperature.