

Bio – Composting of Kitchen Waste using Different Microbial Biofertilizer

Gauri Joshi

Student, Sanjivani College of Engineering, Kopargoan, Maharashtra, India

Shruti Khade

Student, Sanjivani College of Engineering, Kopargoan, Maharashtra, India

Shraddha Dighe

Student, Sanjivani College of Engineering, Kopargoan, Maharashtra, India

Ganesh Deshmukh

Student, Sanjivani College of Engineering, Kopargoan, Maharashtra, India

Dr. S. R. Korake

Faculty, Sanjivani College of Engineering, Kopargoan, Maharashtra, India

Abstract

The growing amount of kitchen waste has posed significant environmental challenges in urban areas. This impose a burden on municipal corporation. The purpose of this study is to assess the efficacy of microbial inoculants in accelerating the composting process of kitchen waste. The experiments lasted four weeks and was carried out under carefully controlled temperature and moisture condition. pH, temperature and moisture content were regularly monitored. The result revealed a significant temperature increases and a gradual decrease in moisture indicating active microbial activity. The compost produced was nutrient rich and suitable for agricultural use. The study concludes that microbial inoculants can significantly improve composting rate and quality, providing a sustainable method for organic waste management.

