Experiment, Characterization and Applications of Bio-Enzymes Derived from Fruit Waste

Author 1: Chakkati Swayam Raj Yadav[1],

Author 2: Sai Raj Matta[2],

[1]Final year student, Dept. of chemical Engineering, CBIT Hyderabad,

[2] Final year student, Dept. of chemical Engineering, CBIT Hyderabad,

Coordinating author: Dr. B.V.S. Praveen, bvspraveen_chem@cbit.ac.in, +91 97910 74572.

Abstract

This study focuses on the production and analysis of enzyme bio-cleaners derived from the fermentation of fresh fruit wastes, such as Mosambi (Citrus limetta), orange (Citrus sinensis), lemon, and other citrus-containing fruits. The fermentation process, utilizing yeast and a mixture of brown sugar and water, generates natural compounds like proteins, mineral salts, organic acids, alcohol, and enzymes. These enzymes, including cellulase, amylase, and protease, exhibit moderate activity in the fermented broth at various stages of fermentation. The research explores the potential of these enzyme bio-cleaners for household, industrial, and medical applications. The keywords include Fermentation, Citrus limetta, Citrus sinensis, protease, cellulase, and amylase.

Keywords: Fermentation Citrus limetta, citrus sinensis, protease, cellulase, amylase

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