

Isolation and Characterization of Extracellular proteases from *Pseudomonas aeruginosa* and *Bacillus subtilis* strains

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ABSTRACT

Protease, a digestive enzyme found in various plant and animal sources has wide array of industrial application for its ability to hydrolyze complex protein molecules. Microorganisms also secrete such protease enzymes which are also used in industrial sector considering their economical value. Here we evaluated the ability of bacteria such as *Bacillus subtilis* and *Pseudomonas aeruginosa* in producing protease and identified that both the bacterial isolates exhibited significant protease activity. Hence, considering their free living nature in the environment and ease of maintenance, these organisms can serve as an effective substitute for the conventional protease producing microorganisms for their use in industrial applications.

Keywords: Protease, *Bacillus subtilis* and *Pseudomonas aeruginosa*