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Isolation of Protease Producing Bacteria from Soil Sediments of Ayiramthengu Mangrove Ecosystem

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Abstract : Alkaline protease is one of the most important enzymes in the biological world. Microbial production of alkaline protease is getting more attention from researchers due to its unique properties and substantial activity. Microorganisms are the most common sources of commercial enzymes due to their physiological and biochemical properties. The study was conducted on Ayiramthenghu mangrove sediments to isolate protease producing bacteria. All the isolates were screened for proteolytic activity on a skim milk agar plate at 37˚C for 48hrs. Protease activities were determined by the formation of a clear zone around the colonies on Skim milk agar medium. The activity of the enzyme was measured by the tyrosine standard curve, and it was found to be 0.186285 U/ml/min.

Keywords : protease, protease assay, skim milk agar medium, mangrove ecosystem
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