EVALUATION OF PHOSPHATE SOLUBILIZING ACTIVITY OF BACTERIA ISOLATED FROM EARTHWORM GUT AND SEAWEED VERMICOMPOST

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ABSTRACT

Five bacterial strains were isolated for primary screening to test the phosphate solubilizing activity from seaweed fed earthworm gut and seaweed vermicompost. The selected three bacteria were tested for phosphate solubilizing activity in Pikovskaya’s broth amended with 250mg of TCP. Among the bacteria, maximum phosphate solubilization was observed in B. licheniformis i.e., 795.3 ±10.5 µg/ml. 16S rRNA sequence of most efficient bacteria, Bacillus licheniformis strain APSAC 04 was deposited in the NCBI Gen bank with the following accession number KY886136 for further retrieval and comparison.

KEYWORDS: Gut Bacteria, Phosphate Solubilization, Bacillus Licheniformis & 16S rRNA Sequencing

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