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## Isolation and Cultural Characteristics of Phosphate-Solubilizing Bacteria

Ok-Ryul Song, Se-Hoon Kim, Seung-Jin Lee, Si-Rim Choi, Soo-Yeol Chung<sup>1</sup> and Yong-Lark Choi

Division of Biotechnology, Faculty of Natural Resurces and Life Science, Dong-A Universty.

Department of Food Science and Nutrition, Dongju College, Busan, Korea.<sup>1</sup>

Many microorganisms isolated from soils can solubilize inorganic phosphorus compounds such as rock phosphate. Inorganic P solubilization by microbes has been attributed to processes involving acidification, chelation and exchange reactions in the growth environment. In order to develop the inoculating biofertilizer phosphate—solubilizing bacteria were isolated from cultivated soils using calcium phosphate medium and identified to Aeromonas hydophila DA33, DA57, Pseudomonas cepatia DA71 based on the physiological and biochemical characteristics. These strains showed solubilization in some phosphatic compounds such as hydroxyapatite, tri-calcium phosphate, and aluminium phosphate. The optimum temperature and initial pH to solubilize inorganic phosphate were tested. In the optimum condition phosphate solubilizing activities of isolated strains were quantitatively determined. One of the isolated strain, Aeromonas hydrophila DA57 has a cryptic plasmid.