

Plant growth promoting rhizobacteria that decrease chromium toxicity in *Brassica juncea*

M. Rajkumar, Kui Jae Lee, Wang Hyu Lee and R. Nagendran,
Division of Bioresources Science, College of Agriculture, Chonbuk National University, Jeonju,
South Korea. 561-756
Centre for Environmental Studies, Anna University, Chennai, India. 600025.

Abstract

The aim of the present study is to assess the importance of siderophore producing rhizosphere bacteria on the growth of *Brassica juncea* under chromium stress. *Pseudomonas* sp. (A4) produced an iron chelating substance siderophores in iron deficient medium. Under chromium stress condition *Pseudomonas* sp. (A4) markedly increased the root and shoot length and also biomass of *Brassica juncea* as compared to *Pseudomonas* sp. (A3). This plant growth promotion has been related to the microbial production of siderophore.