AN AJSS

An Asian Journal of Soil Science

Volume 9 | Issue 1 | June, 2014 | 126-129 | e ISSN–0976–7231 | Open Access | www.researchjournal.co.in

Research Article

Growth promotion of plant by nutrient mobilizing PGPR of salt-affected soil

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Received : 05.04.2014; **Revised :** 16.05.2014; **Accepted :** 25.05.2014

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Summary

Plant growth promoting rhizobacteria (PGPR) are a group of beneficial bacteria that are associated with roots of plants and their rhizosphere. Most of the PGPR have been known for N_2 fixation, IAA Production, Phosphate-solubilisation and Siderophore production. This study was conducted with nine isolates of *Azotobacter,* isolated from salt affected soil. The observation were made on T_1 (Control), T_2 ($N_{1/2}P_{1/2}K$ + KBH_{12A}) and T_3 ($N_{1/2}P_{1/2}K$ + mixed culture of KBH_{12A}, KBH_{18A}, KBA_{2A}, KBA_{13A}, $MMA_{3A,}$ MMA_{14B}, MMA_{19B}, MBA_{8A}, and MBA_{20B}). The experiments on rice were carried in Randomized Block Design (RBD) with three replication. In the present investigation an attempt has been made to ascertain the effect of PGPR in different plant parameter such as impact on shoot and root length, impact on number of tillers and root and impact on flowering.

Key words : Plant growth promoting bacteria, N_2 fixation, IAA production, Phosphate-solubilisation, Siderophore production

How to cite this article : Srivastwa, Pawan Kumar, Verma, Kanhaiyaji and Kumari, Nishi (2014). Growth promotion of plant by nutrient mobilizing PGPR of salt-affected soil. *Asian J. Soil Sci.*, **9**(1): 126-129.