SHORT COMMUNICATION

QUALITATIVE ASSESSMENT OF *PSEUDOMONAS* ISOLATES ASSOCIATED WITH WHEAT RHIZOSPHERE FOR PHOSPHATE SOLUBILIZING ACTIVITY AND SALT TOLERANCE

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Abstract: Plant growth promoting rhizobacteria (PGPR) are known to influence plant growth by various direct or indirect mechanisms. The plant growth promoting attributes *viz*. production of indole-3-acetic acid (IAA), gibberellins, siderophore, and phosphorus solubilization etc. ability of the rhizobacteria are the most common. The Phosphorus Solubilizing bacteria are used as plant growth promoting bacteria (PGPB). In search of phosphorus solubilizing *Pseudomonas* associated with wheat plants grown in various locations of Uttar Pradesh, we have isolated a total of sixteen strains on the kings'B medium and identified as *Pseudomonas* spp. .Phosphorus solubilizing capabilities as demonstrated by the formation of clearing zone on the pikovaskya medium. Out of 16 *Pseudomonas* strains, only 9strains were found able to solubilize phosphorus. All the *Pseudomonas* strains were screened for salt tolerance. Most of the *Pseudomonas* strains shown tolerance up to 8% NaCl concentration. Only 3 *Pseudomonas* strains were able to grow even at 10% NaCl concentration.

Keywords: Phosphate, Pseudumonas, Rhizobacteria, Wheat

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