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 pikovskaya 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, Pseudomonas, Rhizobacteria, Wheat

REFERENCES


