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CO-INOCULATION OF AZOTOBACTER AND PSEUDOMONAS TO IMPROVE GROWTH OF RICE (ORYZA SATIVA)

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ABSTRACT: Several plant growths promoting rhizobacteria are used as biofertilizers. *Azotobacter* and *Pseudomonas* are the free living nitrogen fixer and a plant growth promoting rhizobacteria. They promote the plant growth by producing phytohormon auxin and siederophores. Both found to solubilize insoluble phosphate. In present study *Azotobacter* and *Pseudomonas* alone and in both combination is applied to rice seeds for better growth and effect on the seed germination and plant growth have been recorded. It is observed that co-inoculation of rhizobacteria improves the growth of plant than inoculated alone and also over control. Height of plant is recorded in combine inoculation, in *Azotobacter* and in *Pseudomonas* after 20 days of seed sown. The aim of present study was to promote use of biofertilizer and reduce excessive use of chemical fertilizer.

Key Words: Azotobacter, Pseudomonas, bio-fertilizer, rice.

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