
Evaluation of plant growth promotion activity of Fluorescent *Pseudomonas* on Pigeonpea (*Cajanus cajan* (L.) Millsp.)

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In the present investigation twenty four isolates of Fluorescent *pseudomonas* were evaluated with pigeonpea cv. Rajeevlochan for their plant growth promotion activity. Seeds treated with isolate P-233 produced maximum total root length (326.65 cm), total surface area (21.76 cm²), total root volume (0.116 cm³) and maximum number of tips (3448.00) as compared to control. Efficacy of different isolates of *Pseudomonas* for pigeonpea plants varied to induce shoot and root length of pigeonpea plant ranging from 11.4 cm to 17.8 cm and 15.4 cm to 24.4 cm, respectively. Maximum shoot length (17.8 cm) and root length (24.4 cm) were recorded when seeds were treated with P233 as compared to control. Isolates P11 showed highest average fresh shoot weight (0.42g) and dry shoot weight (0.188g). While isolate P143 performed with highest average root fresh weight (0.274g) and dry root weight (0.04g). Plants treated with P233 produced maximum average number of nodulation (20.6) as compared to control.

Key words: Disease, disinfection, inoculum, pathogen, PGPR, rhizobacteria, solarisation, wilt
