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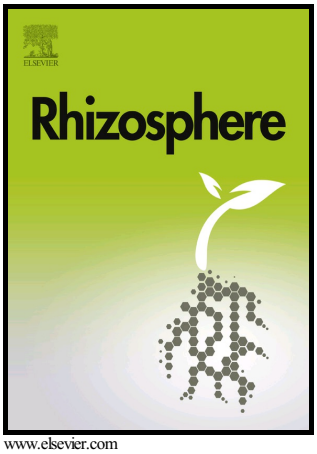

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Abstract

Bacillus cereus PM 43, *Pseudomonas aeruginosa* PM 105 and *Pseudomonas* species PM 112 enhanced plant growth besides induced suppression of brown root rot disease caused by *Fomes lamoensis* in tea plants under nursery and field condition. The experiment were done Completely Randomized Design (CRD) had three set of replication with ten plants in each and the experiments were repeated thrice for recording the data. From the nursery experiment it was revealed that tea saplings (clone TV 1) treated with pathogen and bacterial strain together resulted an enhanced survival of plants as compared to pathogen alone treated plants. On the other hand tea plants treated with bacterial strains alone, enhanced number of new leaves with more chlorophyll, number of lateral branches, shoot height, root length, fresh and dry weight were recorded. The activity of defense related enzymes such as L-phenylalanine ammonia lyase (PAL), peroxidase (POD), polyphenol oxidase (PPO) and total phenol were

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