

RESEARCH ARTICLE

Management of root rot disease in French beans (*Phaseolus vulgaris*) by using microbial consortium

■ S. Malathi

SUMMARY

Root rot disease of beans is caused by *Rhizoctonia solani*. Biocontrol agents were tested for their antagonistic activity against root rot pathogen *Rhizoctonia solani*. Among the tested isolates, *Trichoderma viride* recorded the maximum (86.04 %) inhibition on the mycelial growth of pathogen followed by *Pseudomonas fluorescens* which recorded 79.12 per cent inhibition on the mycelial growth. Treatment with (SA+ST with *P. fluorescens* + *T. viride*) + Neem cake was recorded maximum (78.55%) disease reduction in the field condition with the yield of 2654 kg/acre. Combined application of biocontrol agents having ability to reduce root rot disease in French bean and increase the yield significantly.

Key Words : Beans root rot, *Rhizoctonia solani*, *Trichoderma* sp., *Pseudomonas* sp., Biological control

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