Pak. J. Nematol., 17 (1): 77 – 86, 1999.

EFFECTS OF *PSEUDOMONAS AERUGINOSA* AND CHEMICAL FERTILIZERS ON ROOT-ROT AND ROOT-KNOT DISEASES OF MUNGBEAN

IMRAN A. SIDDIQUI, S. EHTESHAMUL-HAQUE AND A. GHAFFAR

Department of Botany, University of Karachi, Karachi-75270, Pakistan.

Abstract

Use of *Pseudomonas aeruginosa*, a plant growth promoting rhizobacterium (PGPR) alone or in-combination with urea @ 0.15 g/kg soil and or potash @ 0.1 g/kg significantly (p<0.05) reduced root-rot and root-knot infection on mungbean roots. Highest reduction in gall formation was recorded in treatment where *P. aeruginosa* strain IE-6 was used in combination with urea and potash. Root rot infection was found more severe in *Meloidogyne javanica* infested soil than in natural soil. Use of *P. aeruginosa* alone or in-combination with urea and potash enhanced plant growth and number of nodules per plant.