

Abstract 14 – Paper ID: 056**Bio-management of southern root-knot nematode, *Meloidogyne incognita* in CUCUMBER**

Kshetrimayum Sumita¹, Yaikhom Vivekananda²

¹Department of Plant Pathology, College of Agriculture, CAU, Iroisemba

²Department of Genetics and Plant Breeding, Pandit Deen Dayal Upadhyay Institute of Agricultural Sciences, Utlou

Corresponding author: sumitamayum123@gmail.com

Abstract

Field trials were carried out during *kharif* seasons of 2022–2023 and 2023–2024 to know the efficacy of different bio-agents (Neem cake, *Pseudomonas putida*, *Bacillus megaterium*, *B. amyloliquefaciens* and *Pseudomonas fluorescens*) against southern root-knot nematode, *Meloidogyne incognita* in cucumber. It was revealed that, best treatment was observed in combined application of neem cake @ 1 t/ha + seed treatment with *P. putida* @ 10 g/kg of seed followed by neem cake @ 1 t/ha + seed treatment with *B. amyloliquefaciens* @ 10 g/kg of seed significantly increased the yield and reduced the galls, egg masses as well as final nematode population in soil as compared to untreated control. However, application of Carbofuran @ 33 kg/ha (chemical check) was found to be very effective in reducing the galls, egg masses and soil nematode population.

Keywords: Cucumber, *kharif*, neem cake, *Pseudomonas putida*, *Bacillus megaterium*, *B. amyloliquefaciens*, *Pseudomonas fluorescens*, *M. incognita*, Carbofuran