

SUPPRESSION OF PLANT PARASITIC NEMATODES IN BERMUDA GRASS USING LIVE AND DEAD ENTOMOPATHOGENIC NEMATODE STEINERNEMA PAKISTANENSE

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Abstract

Efficacy of live or dead (killed) infective stage juveniles of *Steinernema pakistanense* Shahina *et al.*, (2001) against plant parasitic nematodes of Bermuda grass (*Cynodon dactylon L.*) was evaluated in microplot studies during 2007. Both live and dead IJs of *S. pakistanense* were equally found toxic to plant parasitic nematodes of Bermuda grass causing more than 60 % population decline within 15-30 days of inoculation. Significant differences were observed between live and dead IJs treatments on reduction of PPN. The population of *Tylenchorhynchus* and *Helicotylenchus* were significantly decreased as compared to live IJs treatment. The population of *Aphelenchoides* was significantly decreased at 15th and 30th days after both treatments. But the population of *Rotylenchulus* and *Hemicriconemoides* significantly reduced after 30 days of treatment. The remaining genera also considerably decreased after 15 and 30 days in both treatments. Free-living soil nematodes remained unaffected by these treatments. This is the first report of managing population of plant parasitic nematode by live or dead entomopathogenic nematodes in Pakistan.