

SOIL NEMATODE FAUNAL DIVERSITY FROM CITRUS ORCHARDS OF PUNJAB, INDIA

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ABSTRACT

Nematodes are most abundant group of multi-cellular animals on earth and virtually inhabit all ecosystems. During this study soil samples were collected from citrus orchards of four districts of Punjab viz; Ludhiana, Bathinda, Hoshiarpur and Ferozepur both in winter and summer. The community analysis of different nematode trophic groups recorded in the soil samples from the selected districts of Punjab was carried out by categorizing them on the morphology of their mouth parts. This survey indicated the occurrence of four types of nematode trophic groups i.e. plant parasitic, bacterivorous, predatory and fungivorous. Plant parasitic nematodes showed 100 per cent absolute frequency as this trophic group was present in all the soil samples, thus this group was found to be pre dominant followed by bacterivorous and predatory nematodes both in winter and summer seasons. Fungivorous nematodes were found in citrus soil collected from Ludhiana district only during winter and no fungivorous nematodes were observed from Bathinda, Hoshiarpur and Ferozepur districts both during summer and winter seasons.

KEYWORDS: Citrus, Diversity, Soil Nematodes, Trophic Groups