

Natural entomopathogenic nematodes (EPNs) are considered as potential biological control agents against soil-borne insect pests. This study was conducted to determine the impact of land use on the distribution, occurrence, and diversity of the entomopathogenic nematode community. Isolation of EPNs was done using the baiting technique, and application of morphological identification methods revealed the presence of the genus *Steinernema*. Land use intensification negatively affected the occurrence and recovery frequency in soils of Embu and Taita districts. The occurrence of EPNs was high in soils from coffee than maize and beans, which had more nematodes than planted forest and Napier grass, followed by natural forest and tea, respectively. PCR-RFLP of the internal transcribed spacer region of the ribosomal (r) DNA of the EPN isolates and digestion of the products by *Alu I* enzyme showed molecular variations among the isolates. The study has demonstrated that the frequency of occurrence and species variation of EPNs is different in various land uses.