

A Comparison on Termite Assemblages in Plantations and Semi-evergreen Forest –A Case Study from North Wayanad, Kerala, India

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ABSTRACT: *Within tropical ecosystems, termites as organic decomposers play a key role in modifying the biotic and abiotic environment. This study compares the diversity of termites in habitats that are structurally different and also with varying land use history such as plantations and a semi-evergreen forest, in North Wayanad, Kerala. Belt transect method was used to sample the termites. The study recorded a total of 10 species in 7 genera belong to 4 subfamilies under one family. Termite assemblages and feeding group structure differed significantly among habitats. Two functional groups were recorded namely Type II (fungus growing wood feeders/litter feeders, micro epiphytes) and Type III (organic rich soil feeders/ humus feeders). Fungus growing wood/litter feeders were dominant in plantations whereas organic rich soil/humus feeders were dominant in forest region. Plantations seem to host species such as Odontotermesobesus Rambur, Odontotermesanamallensis Holmgren and Odontotermesyadevi Thakur which are good colonizers, favoured by disturbance and also with the potential of becoming pests. The agreement between the sampled termite assemblages and structural attributes of different habitats advocates termites as good biological indicators of habitat quality.*

Keywords: *Biological indicator, functional group, plantation, termites, semi-evergreen forest*

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