DIVERSITY AND DISTRIBUTION OF TERMITES IN A MID COUNTRY TEA ESTATE

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Termites (Isoptera) feed on plant tissues and woody structures and thereby play a major role as decomposers. As pests they cause steady losses to man. About 61 species of termites belonging to 24 genera in 3 families have been recorded from Sri Lanka. Fourteen species of termites have been reported from tea estates in Sri Lanka. Of these, 3 species are recorded as primary pests of tea as they are directly injurious to living tea plants. Eleven others are secondary pests that go into dead and decaying parts of living tea bushes.

This study was conducted to determine the species composition and distribution of termites in the Geragama Tea Estate located in the Mid country Wet zone. Termites were collected from tea bushes, shade trees, wooden structures and areas of the tea estate where termite damage and presence was seen. Eight species of termites belonging to 5 genera and 2 families were recorded from the study area. Of them, 7 species were present in dead and decaying parts of living tea bushes. They are *Nasutitermes ceylonicus*, *Odontotermes ceylonicus*, *O. horni*, *O. redemanni*, *Odontotermes* spl, *Hypotermes obscuriceps* and *Heterotermes* spl. *Dicuspiditermes nemorosus* was the only species that did not attack trees and was recorded from soil and leaf litter. Termites that are considered as injurious to living tea bushes were not recorded from the estate.

A diverse array of habitats and microhabitats of termites were identified in the tea estate. Five species were recorded from tea bushes, soil and leaf litter, while *D. nemorosus* was present only in soil and leaf litter. Three other species were recorded only from tea bushes and their nests. Other microhabitats where termites were present were shade trees, termite mounds, trees nests, decaying and dead trees. *H. obscuriceps* and *O. redemanni* were recorded from mounds. *N. ceylonicus* was found in tea bushes while evidence of its nests on shade trees was also found.

When the distribution of termites in relation to the 13 administrative divisions is considered, *O. honi* and *O. ceylonicus* were found to be the most widely distributed species in the tea estate. *Odontotermes* spl and *Heterotermes* spl showed limited distribution.

Six selected habitats of the tea estate were sampled to determine the diversity and abundance of soil and leaf litter dwelling termites. The habitats were roadside, stream banks; rocky areas, along elevation gradients, around household compounds and in areas having a uniform cover of tea. A total of 5 termite species were recorded from soil and leaf litter. The highest species diversity was recorded from stream bank, while the lowest was around households.