

Study of ectoparasites associated with wild murid rodents in a selected area in Matara: A preliminary study

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A study of murid rodents was carried out from February to August 2012 in five different habitat types located within Matara area. Objective of the study was to identify the available murid species and their ectoparasitic fauna. Collection of the murids was done using a standardized arrangement of Sherman live traps using two types of bait, namely roasted coconut and dried fish. In 560 sampling occasions, 130 individuals of family muridae were captured. The species were *Rattus rattus kandianus*, (n=95), *Mus mayori mayori* (n=4), *Rattus norvegicus* (n=26), *Bandicota indica indica* (n=3), *Vandeleuria sp* (n=1) and *Millardia sp* (n=1). Among all captured murids, 54 were females and 76 were males. The number of species captured in different sites were, four species in paddy field associated habitat (n=24), three species in town area (n=23), three species in dumping sites (n=22), two species in Kekanadura forest edge (n=30) and all six species in Kekanadura forest (n=31). Ectoparasitic investigations indicated that out of the 130 individuals captured, 62.3% were infested with two types of ectoparasites, namely, mites of the genus *Echinolaelaps*, and nymphal stage of hard tick genus *Ixodes*. The incidence of parasitized rats and mice were 67%, 65%, 36%, 70% and 68% respectively from paddy field (n=16), town area (n=15), dumping sites (n=8), Kekanadura forest edge (n=21) and Kekanadura forest (n=21). Among the infested murids, 78% had mite infestations. In comparison with the non-infested murids, those infested did not show a significant difference in body weight and size. Both sexes of captured murids had an equal probability of being exposed to ectoparasites.

Key words: *Echinolaelaps*, ectoparasites, *Ixodes*, Murid rodents

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