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Parasitic associations of endemic *Mus mayori* (Sri Lankan spiny rat), in the Kanneliya rainforest, Sri Lanka

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Parasites affect ecological interactions among different host species and may cause serious losses in already small populations of endangered species. Therefore, investigating the disease burden on wildlife is an important aspect of wildlife management and conservation.

A preliminary parasitic survey of a predominant ground-dwelling endemic rodent, *Mus mayori* (Sri Lankan Spiny rat), in the Kanneliya rainforest in Sri Lanka, was carried out during October 2006 to March 2007. The survey was conducted on animals that were trapped in six study plots within the forest. Ecto-parasites were searched on the body, paws and ears of each captured individual and by combing their fur. Faecal matter from trap bags and those discharged during handling were collected to carry out investigations on intestinal parasites.

Of the captured animals 76 % (N = 75) were infected with ecto parasites, of which 24 % carried high parasite loads. Among the ecto parasites encountered were two species of mites and one species each, of lice, ticks and pseudoscorpions. The percentage occurrence (% individuals with a particular ecto parasite) for the two most frequently found ecto parasites were, 76 % for mites and 5 % for lice. Some parasites collected from *M. mayori* were identified as, mites of the genus *Echinolaelaps,* tick of genus *Ornithodorus*, and lice of species *Polyplax serrata.* These ecto parasites are first time records for this endemic host in Sri Lanka.

Examination of feacal matter from 12 animals revealed the presence of four helminth egg types (strongyles type, strongyloides type, ascaris type and cestode type) and some mite eggs. In addition, a nematode larvae was also recorded in the faecal matter of one individual.

This study provided information on parasitic associations of an endemic rainforest rodent in Sri Lanka. These findings could also aid in ascertaining the role of parasitic diseases in regulating small mammal populations in tropical rainforest ecosystems.

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