

NS.SCI.43

RECORD OF FIVE NEW ENDEMIC SMALL MAMMAL HOSTS FOR FOUR SPECIES OF TICKS AND FLEAS FROM SRI LANKA

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Ticks and fleas are medically important arthropods, which act as vectors for several zoonotic diseases carried by mammals. Thirty three species of ticks and 20 species of fleas are reported from mammals, birds and reptiles in Sri Lanka. However, records of these ectoparasites on small mammals are scanty. Here, we report ticks and fleas infesting muroid rodents (rats, mice and gerbils) and shrews collected from several sites in Sri Lanka.

Ectoparasites were collected during an extensive field survey of small mammals conducted from 2003-2005. Mammals were captured using Sherman and pit fall traps. Ectoparasites were collected using a pair of forceps and by combing. All the species of shrews, rats, mice and gerbils in Sri Lanka except, *Suncus zeylanicus*, *Rattus montanus*, *Madromys blanfordi*, *Bandicota bengalensis* and *B. indica* were included in the study. Of the 149 individuals of small mammals collected, 48 were infested with ticks (66.6%), fleas (20.8%) or both (12.5%). Larval and nymphal stages of four tick species including one unidentified species of *Rhipicephalus* were recorded from ten species of small mammals. Both larvae and nymphs of *Ixodes ceylonensis*, *Rhipicephalus* spp. and nymphs of *Haemaphysalis hystricis* and *Hyalomma brevipunctata* were recorded. Four species of fleas were recorded from five species of small mammals. Both male and female fleas of *Stivalius phoberus*, *Stivalius aporus*, *Lentistivalius ferinus* and male *Nosopsyllus tamilanus* were recorded.

All species of ticks and fleas reported here have been previously recorded from Sri Lanka. However, we report new host species for *I. ceylonensis* (*Crocidura miya*, *Suncus montanus* and *Solisorex pearsoni*), *S. aporus* (*S. montanus* and *Mus fernandoni*), *N. tamilanus* (*S. pearsoni*) and *Rhipicephalus* spp. (*Crocidura hikmiya*, *S. montanus*, *S. pearsoni*, *M. fernandoni*), all of which are endemic mammals. *Nosopsyllus tamilanus* which was not recorded from shrews previously, is reported from the endemic shrew, *Solisorex pearsoni* in this study.

Identity of *Rhipicephalus* spp. is yet to be confirmed. Its larvae were identified as belonging to *R. ramachandrai*, which is not reported from Sri Lanka hitherto. This species, originally described from India are reported from several small mammal species, which are also found in Sri Lanka. The nymphs of *Rhipicephalus* spp. were identified as belonging to *Rhipicephalus haemaphysaloideus* group, which includes *R. haemaphysaloideus*, *R. pillans* and *R. ramachandrai*.