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## TICK VECTORS OF SPOTTED FEVER RICKETTSIA IN SRI LANKA

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Spotted fever is a tick-borne Rickettsial diseases in humans, clinically characterised by rashes that occur all over the body. The tick species belonging to genera of *Amblyomma*, *Dermacentor*, *Ixodus*, *Rhipicephalus*, and *Haemaphysalis* are known to transmit this disease in other countries. However, no studies have been carried out to identify the species of ticks that transmit spotted fever in Sri Lanka. Therefore, the objective of this study was to identify the tick vectors for spotted fever in Sri Lanka.

A total of 70 ticks were collected from Kandy and Mawanella that comprised 50 ticks from 30 wild animals and 20 ticks from 15 dogs. DNA was extracted from each tick according to standard protocols and a nested PCR was conducted to detect the spotted fever group of Rickettsiae by amplifying part of the 17 KDa antigen gene using the primer sequence CAGAGTGCTAGAACAAGG (F), CTTGCCATTGCCCATCAGGTTG (R) at the primary stage and TTCTCAATTCGGTAAGGGC (F) and ATGACCAGTGCTATTTTC (R) at the nested stage. Of the 70 ticks tested, four (5.7%) were positive for DNA belonging to the spotted fever group of Rickettsiae. The positive tick species included a single tick of each of the following: *Amblyomma javanense* (from a pangolin, *Manis crassicaudata*), *A. testudinarium* (from a wild boar, *Sus scrofa*), *A. clypeolatum* (from a tortoise) and *Rhipicephalus sanguineus* (from a dog, *Canis familiaris*).

This study indicates that there is a risk of transmission of spotted fever to humans from wild animals in peri-urban areas by tick bites.