

Prevalence of ticks and tick-borne blood parasites in selected cattle farms in Mirigama veterinary range in Sri Lanka

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Ticks and tick-borne blood parasitic infections are a major problem in livestock management. These infections result weight losses, reduction in growth and dairy production, high cost for drugs and veterinary care. The present study was carried out to identify the prevalence of ticks and tick-borne blood parasites on dairy cattle in three locations namely, Kahambiliyawatta (free range farming), Malingamuwa (semi-intensive farming) and Ullalapola (intensive farming), in Mirigama veterinary range of Gampaha district, Sri Lanka. In studied cattle (n=80), the most abundant tick genus was a hard tick belonging to genus *Boophilus*. The mean tick abundance values were ranked as high (n>15), moderate (5–15) and low (n<5). Tick abundance was high in Kahambiliyawaththa farm (42.2 ± 4.54), moderate in Malingamuwa farm (13.8 ± 0.952) and low in Ullalapola farm (3.6 ± 0.581). There was a significant statistical difference ($\chi^2=15.893$, $p<0.001$) in tick borne blood parasitic infection in cattle among the studied farms. Among the studied cattle, *Theileria sp.* was found in all three study sites and its percentage prevalence was 24% while for *Babesia bigemina*, it was 22% and only recorded in Kahambiliyawaththa and Ullalapola farms. *Ehrlichia bovis* had the lowest prevalence (1%) and found only in Ullalapola farm. The present study reveals that the prevalence of tick-borne blood parasites is different among three selected locations. Further, the severity of the tick infestation on the body of cattle does not reflect the extent of the infection of tick-borne blood parasites in the host.

Key words: Dairy cattle, *Boophilus*, *Theileria*, *Babesia bigemina*, *Ehrlichia bovis*

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