



Ticks (Acarina: Ixodida) infesting five reptile species in Sri Lanka with sixteen new host records

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The first study on ticks on reptiles of Sri Lanka dates back to Seneviratna (1965) who reported ticks from five reptiles. Later studies were either limited to one reptile (Fernando & Fernando 2012), or captive animals in zoos (Fernando & Randeniya 2009) and household pets (Nathanael *et al.* 2004). According to the current classification (Guglielmone *et al.* 2010), all the tick species previously recorded on reptiles belong to five species of *Amblyomma*: *A. clypeolatum* Neumann, *A. gervaisi* (Lucas), *A. pattoni* (Neumann), *A. trimaculatum* (Lucas) and *A. varanense* (Supino). Some of the species listed by Seneviratna (1965) were either synonyms or invalid in respect to the present classification. For example *Amblyomma laeve* sensu Warburton (1910) is a junior synonym of *A. pattoni* and *A. gervaisii* var. *lucasi* is considered a junior synonym of *A. varanense* (Guglielmone *et al.* 2010; D. Apanaskevich pers. comm.).

For the present study, ticks infesting wild and captive reptiles were collected from eight districts in wet and dry zones in Sri Lanka: Kandalama (Dambulla district), Mihintale (Anuradapura district), Hantana, Kandy, Gampola and Minipe (Kandy district), Bundala and Thissamaharamaya (Hambantota district), Wasgamuwa (Matale district), Nikawaratiya (Kurunegala district), Ampara (Ampara district), and Kolonna (Ratnapura district). Ticks were also collected from injured reptiles brought to the veterinary clinic in the University of Peradeniya. Ticks removed were preserved in 70% ethanol and identified under light microscopy using available keys and literature of Sherif (1928) and Seneviratna (1965).

A total of 203 ticks were collected from 30 individual reptiles belonging to five species: Indian cobra, rock python, Forsten's cat snake, star tortoise, and land monitor (Table 1). Eight tick species in the genera *Amblyomma* and *Haemaphysalis* were recorded with one unidentified *Amblyomma* species (Table 2). Of those, 16 were new host records from Sri Lanka; the genus *Haemaphysalis* had not been recorded on reptiles from Sri Lanka before.

TABLE 1. Tick species on different reptile hosts collected from 8 districts in Sri Lanka. *Naja naja* = Indian cobra; *Python moluruspimbura* = rock python; *Boiga forsteni* = Forsten's cat snake; *Geochelone elegans* = Star tortoise; *Varanus bengalensis* = land monitor; (a = adults, n = nymphs).

Tick species (stage)	Host species and number					Total (30)
	<i>N. naja</i> (10)	<i>B. forsteini</i> (1)	<i>P. morulus</i> (6)	<i>G. elegans</i> (11)	<i>V. bengalensis</i> (2)	
<i>A. testudinarium</i> (a,n)	-	4	4	9	-	17
<i>A. clypeolatum</i> (a)	3	-	21	61	1	86
<i>A. pattoni</i> (a,n)	5	1	1	-	-	9
<i>A. varanense</i> (a)	21	4	9	-	-	34
<i>A. trimaculatum</i> (a)	10	3	5	-	1	19
<i>A. javanense</i> (a)	-	1	27	-	-	28
<i>A. gervaisi</i> (a)	3	-	-	-	-	3
<i>Amblyomma</i> sp. (n)	2	-	4	-	-	4
<i>H. turturis</i> (a)	-	-	1	1	1	3
Total	44	13	72	71	3	203