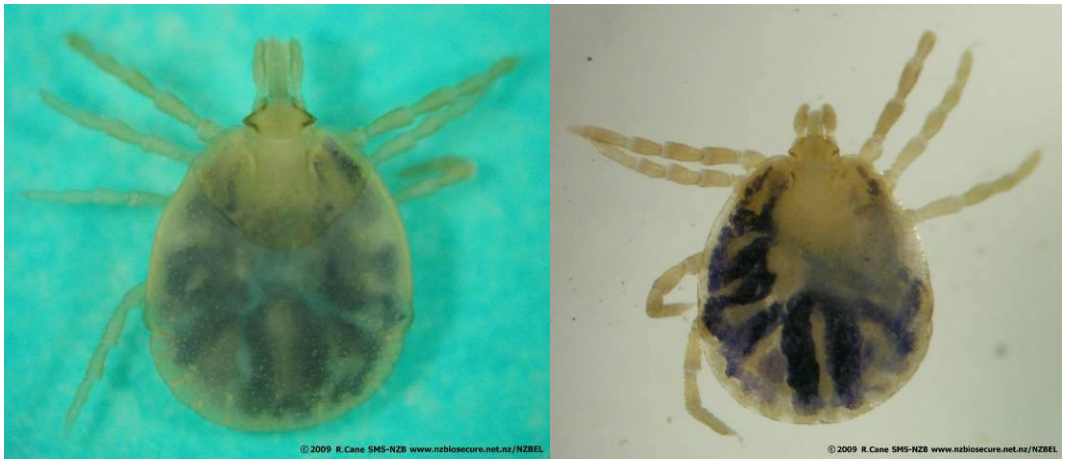
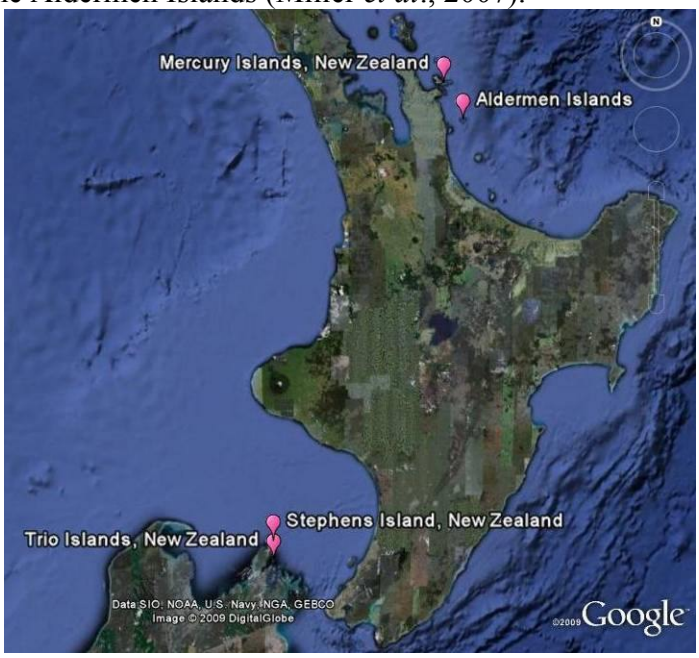
Profile: *Amblyomma sphenodonti* (Dumbleton, 1943)

Common Name: tuatara tick
Family: Ixodidae
Origin: Endemic



Female **Male**

Geographic Distribution: Very restricted geographic distribution, known only from eight offshore islands; Stephen's Island, North Trio and Middle Trio Islands in the Marlborough Sounds, Middle and Green Islands in the Mercury Islands and Ruamahua-nui, Ruamahua-iti and Hongiora Islands in the Aldermen Islands (Miller *et al*., 2007).



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Known Hosts: tuatara (*Sphenodon punctatus*); one report from NZ's largest gecko *Hoplodactylus duvauceli*; one report from the skink *Cyclodina alani* (unidentified but ticks recovered from tuatara on same island and both reptiles occupy petrel burrows) (Heath, 2006).

Disease Association: occasional vector of a haemogregarine that occurs rarely in tuatara (Heath, 1987).

Taxonomy: Holotype male. Type locality: Stephen's Island, Marlborough Sounds, South Island, New Zealand. Collected 1922. Deposited in the NZAC (Dumbleton, 1943).

Klompen *et al.* (2002) recommended five species within the *Aponomma* genus be moved to *Bothriocroton* and the remaining "typical *Aponomma"* to *Amblyomma*, however the status of the "primitive *Aponomma*" including *A. sphenodonti* remains uncertain. At present this move has been accepted (Bisby *et al.,* 2009) however Miller *et al.* (2007) used geographic distribution, genetic diversity and phylogenetic analysis to recommend this species is better situated in its own genus.

Diagnostic Characters:

Anal grooves contouring behind the anus
Festoons present
Eyes absent
Capitulum relatively long in proportion to the rest of the body
2/2 dentition
Scutum is sub-cordiform
Coxae have an external spur

Taxonomic Diagrams:

Dumbleton (1943, 1953 & 1963)

Biology: (ex Heath, 2006)

3-host tick – all stages infesting the tuatara. Off-host period between each stage for moulting or egg incubation. Mating also appears to take place off the host. Is thought to be a nidicolous parasite, inhabiting the host's burrow, however to date ticks have only been collected off the host and not from the burrow or surrounding environment.

Preferential attachment sites on the host include midline of back for entire length including the tail, flanks and in skin folds at the posterior surface of the hind legs. Not found on the ventral surface. Some evidence for changing attachment sites during a single feeding event. Eggs observed to hatch about 55 days post oviposition. One generation per year is possible based on minimum developmental times, two every three years using maximum times observed. Longevity – unfed larvae observed to live at least 177 days, unfed females 405 and males 586.

Seasonality: Collection data ex Dumbleton (1943) and Heath (2006)

Stage	J	F	M	A	M	J	J	A	S	O	N	D
Females	✓	✓	✓			✓	✓		✓	✓	✓	
Males	✓	✓				✓	✓		✓	✓	✓	
Nymphs	✓	✓	✓			✓	✓		✓	✓	✓	
Larvae	✓	✓					✓		✓		✓	

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