

**Table S2.** Distribution and frequency of cytochrome oxidase subunit II haplotypes identified in the populations of *Amblyomma aureolatum* analyzed from Brazil.

Epidemiological scenario	Populations	Ns	Cytochrome oxidase subunit II Haplotypes (487 bp)																
			h1	h2	h3	h4	h5	h6	h7	h8	h9	h10	h11	h12	h13	h14	h15	h16	h17
Group I	Paraná	16	9			2							1	1	1	1	1		
	Santa Catarina	13	9	1	1	1											1		
	Rio de Janeiro	4					2										2		
	Rio Grande do Sul	10								1	1	1				2	3	1	1
Group II	São Paulo	15		1				2	1							2	9		
	Total	58	18	2	1	3	2	2	1	1	1	1	1	1	1	5	16	1	1
	Frequency (%)	100.00	31.04	3.45	1.72	5.18	3.45	3.45	1.72	1.72	1.72	1.72	1.72	1.72	1.72	8.63	27.60	1.72	1.72

Ns = number of sequences; Group I, populations where there is no evidence of *Amblyomma aureolatum* participation in the Brazilian Spotted Fever scenario; Group II, Only population in which *Amblyomma aureolatum* is a proven vector of *Rickettsia rickettsii*.