

SCIENTIFIC NOTE

First Record of *Amblyomma scalpturatum* Neumann (Acari: Ixodidae) in the States of Paraná and Roraima, Brazil

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ABSTRACT - *Amblyomma scalpturatum* Neumann has been reported in Brazil in the northern (States of Amazonas, Pará and Rondônia) and mid-western regions (States of Mato Grosso and Mato Grosso do Sul). It has been found in association with large and medium sized mammals, as Artiodactyla, Perissodactyla, Xenarthra and Carnivora. In this paper, this tick species is reported for the first time in the Brazilian states of Paraná and Roraima, southern and northern regions, respectively.

KEY WORDS: Geographical distribution, tick

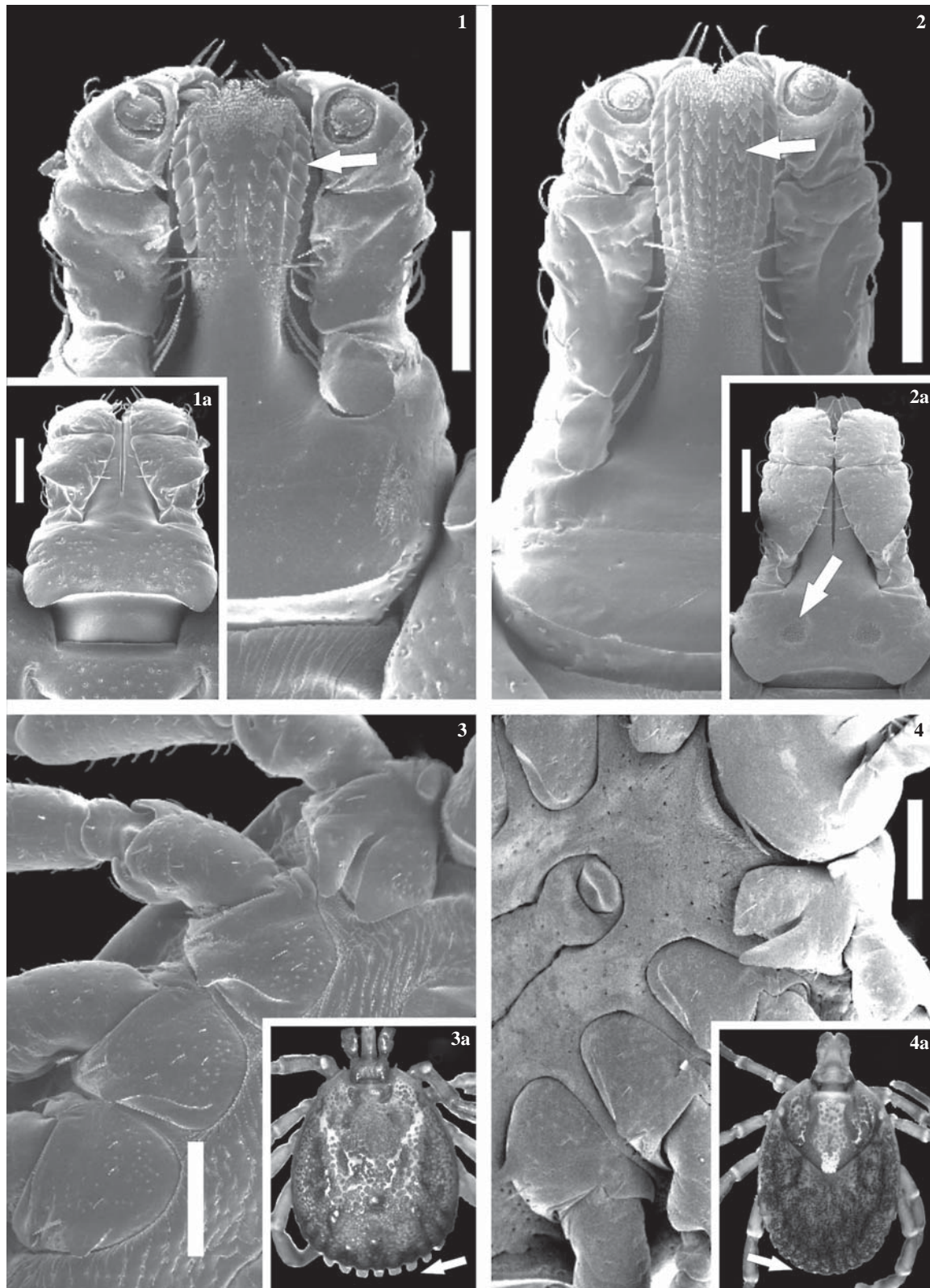
Amblyomma scalpturatum was described by Neumann (1906) from females collected from Brazil and Bolivia. Although this author had reported that the type specimens of *A. scalpturatum* were deposited in the BMNH, Keirans & Hillyard (2001) commented they were not available for reexamination. Currently its geographical distribution is restricted to South America, with records for Bolivia, Brazil, Colombia, Ecuador, Guyana, French Guyana, Peru, Suriname and Venezuela (Guglielmone *et al* 2003, Onofrio *et al* 2006). In Brazil, it has been reported from the northern (States of Amazonas, Pará and Rondônia) and mid-western (States of Mato Grosso and Mato Grosso do Sul) regions (Pereira *et al* 2000, Guimarães *et al* 2001, Labruna *et al* 2005a).

Adults of *A. scalpturatum* are commonly associated with large mammals (Peridossactyla: Tapiridae), but it is found on Artiodactyla (Tayassuidae, Suidae), Xenarthra (Myrmecophagidae) and Carnivora (Canidae) (Pereira *et al* 2000, Labruna *et al* 2005a). Nymphs and adults of this species were also recorded on humans by Aragão & Fonseca (1961), Guimarães *et al* (2001), Labruna *et al* (2005a,b) and Guglielmone *et al* (2006). According to Labruna *et al* (2004), this species has been found infected with rickettsial species of unknown pathogenicity to humans in Brazil.

In this paper we report for the first time the presence of *A. scalpturatum* in new areas in Brazil. An adult male was collected on a human being in “Parque Estadual Mata dos Godoy”, municipality of Londrina, State of Paraná (southern Brazil). This specimen was deposited in the Acari

Collection of “Instituto Butantan” (log number IBSP 8926). The specimen was previously identified as *Amblyomma oblongoguttatum* Koch (Arzua *et al* 2005), but a re-examination during the present study revealed it to be *A. scalpturatum*. Four adult females and one adult male were collected from vegetation in Alto Alegre municipality, State of Roraima (northern Brazil). They were deposited in the Collection of “Fundação Zoobotânica do Rio Grande do Sul” [log numbers FZB 391 (two females), FZB 1127 (one male) and FZB 1263 (two females)]. Considering that this species is morphologically similar to *Amblyomma incisum* Neumann and *Amblyomma latepunctatum* Tonelli-Rondelli (Labruna *et al* 2005a), representative specimens of *A. scalpturatum* were prepared for scanning electron microscopy following techniques described by Corwin *et al* (1979). Details of gnathosoma and coxae are shown in Figs 1, 1a, 2, 2a, and Figs 3, 4, respectively. Light microscopy photographs of each sex were also presented to show the scutal ornamentation pattern (Figs 3a-4a).

When redescribing *A. scalpturatum*, *A. latepunctatum*, and *A. incisum*, Labruna *et al* (2005a) reported these three species to be sympatric within the Amazon region. Of these species, only *A. incisum* (referred as the south group) was reported to occur in the Atlantic rain forest areas in southern South America; it was commonly collected free in the environment of “Parque Estadual Mata dos Godoy” and in Adrianópolis municipality, State of Paraná (Arzua *et al* 2005). Because *A. scalpturatum* was found in the same place as *A.*



Figs 1-4 *Amblyomma sculpturatum* 1) Gnathosoma of male, ventral view, hypostomal dentition 3/3 (arrowed). 1a) Gnathosoma of male dorsal view. 2) Gnathosoma of female, ventral view, hypostomal dentition 4/4 (arrowed). 2a) Gnathosoma of female, dorsal view, porose areas small and rounded (arrowed). 3) Coxae I-IV of male. 3a) Scutal ornamentation of male, ventral plates not incised in all festoons (arrowed). 4) Coxae I-IV of female. 4a) Scutal ornamentation of female, ventral postero-internal tubercles on festoons slightly visible dorsally (arrowed). Scale bars: 1-4, 400 μ m.

incisum, this record suggests that both tick species are also sympatric in “Parque Estadual Mata dos Godoy”.

This paper represents the first report of *A. scalpturatum* in southern Brazil. In addition, the distribution of this tick in northern Brazil is extended to the state of Roraima.

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