RESEARCH NOTE

Noteworthy Records of *Ixodes* auritulus Neumann, 1904 (Acari, Ixodida) on Birds from Paraná, Southern Brazil

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The genus Ixodes Latreille (Acari, Ixodida) includes about 231 species distributed in 14 subgenera worldwide (C Clifford et al. 1973 An Ent Soc Am 66: 489-500). Some species can parasite birds or mammals in their different stages, others have been found only on mammals, mainly in their nymphal and adult phases (H Aragão 1936 Mem Inst Oswaldo Cruz 31: 759-843, R Cooley & G Kohls 1945 Nat Inst Hth Bull 184: 1-246). Many Ixodes species are associated with paralyse promotion or pathogenic agent transmission to several animals (A Kocan 1988 Jama 192: 1498-1500, J Butler & H Denmark 1990 Ent Circ 326, F-F Matuschka & A Spielman 1992 Ex Parasitol 74: 151-158).

In Brazil, nine species of *Ixodes* are known: *I. amarali* Fonseca, *I. aragaoi* Fonseca, *I. cooleyi* Aragão & Fonseca, *I. coxaefurcatus* Neumann, *I. didelphidis* Aragão & Fonseca, *I. fuscipes* Koch, *I. loricatus* Neumann, *I. luciae* Sennevet, and *I. schulzei* Aragão & Fonseca (H Aragão & F Fonseca 1961 *Mem Inst Oswaldo Cruz 59:* 115-129).

During bird banding in the municipality of Curitiba, next to the Passauna River, in an Araucaria forest (Araucaria angustifolia) from March to May 1992, autumn months, three specimens of Turdus rufiventris and one specimen of T. albicollis were captured and examined for ecto-

parasites. Four ticks specimens were found. They were removed from the hosts and were preserved in Oudeman's fluid, according to G Krantz (1978 2nd ed. Oregon State University Book Stores, Oregon, 509 pp). The ticks were identified as *I. auritulus* using criteria proposed by M Méndes-Arocha and I Ortiz (1958 Mem C Nat La Salle 51: 196-208). The specimens, two females (F) and two nymphs (N) were deposited in the Parasitological Collection of the Museum of Natural History "Capão da Imbuia" (MHNCI 92, 93-F; MHNCI 93, 94-N).

Although *I. auritulus* is common ectoparasite of birds, including sea birds (Clifford *loc. cit.*), it has been also observed on mammals. E Jones et al. (1972 *B Y Un Sc Bull 17:* 1-40) found larvae and nymphs on wild rodents from Venezuela. J Botelho (personal communication) observed this species on *Dasyprocta fuliginosa* (Rodentia) in Brazil.

The only record for *I. auritulus* in Brazil (Cooley & Kohls *loc. cit.*) is restricted to birds, *Knipolegus nigerrimus, Thamnophilus ruficapillus*, and *T. caerulescens* from Itatiaia Mountains in the State of Rio de Janeiro. It seems that Aragão and Fonseca (1961 *loc. cit.*) omitted mentioning the occurrence of this species, although they were aware of it (H Aragão & F Fonseca 1952 *Mem Inst Oswaldo Cruz 50: 727-728*). In the State of Paraná, there are only records of *I. loricatus* and *I. didelphidis* on mammals (L Guimarães 1945 *Arq Mus Paran 4: 179-190*, S Ribeiro 1966/1967 *An Fac Med Un Fed Paraná 9/10: 7-47*, D Barros & D Baggio 1992 *Mem Inst Oswaldo Cruz 87: 291-296*).

This communication records the first occurrence of *I. auritulus* in Paraná, and probably constitutes the first report on *T. rufiventris* and *T. albicollis*. These two *Turdus* species are not migratory but are well disseminated in Brazil and other South American countries (R Schauensee 1982 Intercollegiate Press, Filadelfia, 498 pp, H Sick 1988 3rd ed. I/II, Brasília, 827 pp). Studies on biology and ecology of *Ixodes* spp. parasiting birds are being carried on so that aspects of their dispersion may be clarified.

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