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Amblyomma parvum A PARASITE OF *Dasypus kappleri* IN THE STATE OF AMAZONAS, BRAZIL[1]

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ABSTRACT: *Amblyomma parvum* is widespread distributed because of a wide range of animals hosts and has been cited as a parasite of humans and domestic animals. This work reports the occurrence of *A. parvum* on a new host species, *Dasypus kappleri,* and in a new geographical zone, the State of Amazonas. Three male of *Amblyomma parvum* were obtained from a dead long-nosed armadillo (*Dasypus kappleri)* confiscated from a hunter and brought by agents of the Reserva Biológica do Uatumã to the Centro de Preservação e Pesquisa de Mamíferos Aquáticos. Of these three ticks, two were young males (one with a broken hypostome) and one a mature male.

INDEX TERMS: *Amblyomma parvum, Dasypus kappleri,* Hosts, Distribution

Amblyomma parvum PARASITO DE *Dasypus kappleri* NO ESTADO DO AMAZONAS, BRASIL

RESUMO: A partir de um tatu-quinze-quilos (*Dasypus kappleri*), confiscado de um caçador e trazido por agentes da Reserva Biológica do Uatumã para o Centro de Preservação e Pesquisa de Mamíferos Aquáticos (CPPMA), foram obtidos três machos de *Amblyomma parvum*. Destes três carrapatos, dois eram jovens (um com o hipostômio rompido) e um maduro. *Amblyomma parvum* tem sido citado como parasita de humanos, animais domésticos e apresenta uma grande variedade de hospedeiros dentre os animais selvagens, por isso apresenta uma ampla distribuição. Este trabalho registra a ocorrência de *A. parvum* em novo hospedeiro, *Dasypus kappler*i, numa nova zona geográfica, o Estado do Amazonas.

TERMOS PARA INDEXAÇÃO: *Amblyomma parvum, Dasypus kappleri,* Hospedeiros, Distribuição

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The importance of all knowledge about *Amblyomma parvum* Aragão (1908) is in the fact that ticks are vectors of important pathogens (pathogens of the genera: *Babesia, Borrelia, Rickettsia* and *Coxiella)* (PIEKARSKI, 1962), which cause disease in humans and animals. *Amblyomma parvum* parasites wide range of hosts, being them species of wild and domestic animals or humans. In areas with human pressure, the interactions between humans and wild and domestic animals allow a flux of ectoparasites, creating the possibility for the appearance of new diseases and the spread of pathogens to new areas. The studies on hosts, their interactions, as well as their geographical distribution, are important for the knowledge of the dispersal of possible pathogens in populations. *Dasypus kappleri* Krauss, 1892 (great long-nosed armadillo) (NOWAK, 1999) is potentially a reservoir for pathogens (species of the genus Rickettsia) (PIEKARSKI, 1962) and is an animal used as food by other animals and by humans through hunting. The interest in research and wild animal rehabilitation, environmental education and human impact evaluation motivated the trip to the region of Balbina in the state of Amazonas, to collect with the intention of identifying the areas of occurrence of already known ectoparasites and their parasitic associations. This work seeks to register the occurrence of *A. parvum* in a new host species and in a new geographical area.

The inductive work determined the period for parasite collection as being between the 6th of January and the 6th of February of 2002. The samples came from animals already in treatment at the Centro de Preservação e Pesquisa de Mamíferos Aquáticos (CPPMA) in Balbina, Amazonas (01°55'13"'S and 59°28'13"W), brought spontaneously by local population or from confiscations by legal authorities. The armadillo *Dasypus kappleri* was brought in by agents of the Reserva Biológica do Uatumã, confiscated from a poacher, who was hunting in the reserve. The animal was dead and the collection was authorized to be done before the animal was processed by the CPPMA. The collection was done manually, by twisting the ectoparasites over their own longitudinal axis. Next they were fixed in ethanol 70° GL, in a plastic bottle, labeled and put away till the end of the work period. At the end they were transported to the Laboratório de Ixodides, Departamento de Entomologia do Instituto Oswaldo Cruz (FIOCRUZ). The ticks were identified following the dichotomic key of Aragão e Fonseca (1961) and with the use of descriptions by Aragão (1908) and Guglielmone, Mangold e Keirans (1990). The specimens were then photographed and placed in the Coleção Ixodológica of the IOC, under the number 0428.

Three male *Amblyomma parvum* were obtained, two intact individuals: one a young male, the other, a mature male; the third individual, a young male, with a broken hypostome.

Amblyomma parvum has been cited as a parasite of humans (GUGLIELMONE;

MANGOLD; VIÑABAL, 1991; BOERO, 1945), domestic animals such as: bovines *(Bos indicus)* (BOERO, 1944, 1945; FAIRCHILD, 1943; FAIRCHILD et al., 1966), equines *(Equus caballus)* (BOERO, 1945; ARAGÃO, 1908, 1936; FONSECA, 1957/58; FLOCH; FAURAN,1958), dogs *(Canis.familiaris)* (ARAGÃO, 1908, 1936; FONSECA, 1957/58; FLOCH; FAURAN, 1958) and cats *(Felis catus)* (FAIRCHILD; KOHLS; TIPTON, 1966). Its occurrence in wild animals lists a wide range of host species: a) Reptilia: *Boa constrictor occidentalis* (Argentine boa) and *Testudo chilensis* (chaco tortoise) (BOERO, 1944); b) Rodentia: rodent (FLOCH; FAURAN, 1958), wild rat, *Hydrochaeris hydrochaeris* (capybara) and *Kerodon rupestris* (rock cavy) (ARAGÃO, 1908, 1936; FONSECA, 1957/58) and *Sigmodon hispidus* (Hispid rat) (DUNN, 1923); c) Artiodactyla: Cervidae: *Mazama sp.* (brocket deer) (ARAGÃO, 1908, 1936; FONSECA, 1957/58), *Mazama americana* (red brocket deer) (FLOCH; FAURAN, 1958), *Mazama gouazoubira* (gray brocket deer) (PEREIRA et al., 2000) e *Odocoileus virginianus* (white-tailed deer) (FONSECA, 1957/58); d) Perissodactyla: *Tapirus terrestris* (South American tapir) (ARAGÃO, 1908, 1936; FONSECA, 1957/58); e) Carnivora: Felidae: *Panthera onca* (jaguar) and *Felis concolor* (puma) (ARAGÃO, 1908, 1936; FONSECA, 1957/58); Mustelidae: *Galictis vittata (= Grison vittata brasiliensis)* (greater grison) (FONSECA, 1957/58); Procionidae: *Nasua nasua* (coati) (PEREIRA et al., 2000); Canidae: *Urocyon cinereoargenteus* (grey fox) (FAIRCHILD; KOHLS; TIPTON, 1966); f) Chiroptera (bats) (CAMICAS et al., 1998); g) Xenarthra: Bradipodidae: *Bradypus sp.* (three-toed sloths,) (FAIRCHILD; KOHLS; TIPTON,1966); Myrmecophagidae: *Tamandua tetradactyla* (southern tamandua) (FAIRCHILD; KOHLS; TIPTON, 1966), and Dasypodidae: *Dasypus novemcinctus* (nine-banded armadillo) (ARAGÃO, 1938; DIAZ-UNGRIA, 1957). We register new host, *Dasypus kappleri* (great long-nosed armadillo), whose geographical distribution includes Surinam, eastern Colombia and Venezuela, in the region south of the Orinoco River and extending southward through the Amazon Basin. The areas of occurrence cited for *Amblyomma parvum* are: in Central America: Guatemala (FAIRCHILD; KOHLS; TIPTON, 1966) and Panama (FAIRCHILD, 1943; FAIRCHILD; KOHLS; TIPTON, 1966; DUNN, 1923); in South America: Venezuela (DIAZ-UNGRÍA, 1957), French Guiana (FLOCH; FAURAN, 1958), Argentina (GUGLIELMONE; MANGOLD; VIÑABAL, 1991; BOERO, 1944, 1945; ARAGÃO, 1938) and Brazil: in the states of Mato Grosso do Sul (PEREIRA et al., 2000), Minas Gerais, Bahia, Piauí (FAIRCHILD; KOHLS; TIPTON, 1966; ARAGÃO, 1908, 1936; FONSECA, 1957/58) and now in the State of Amazonas. The possible occurrence of *Amblyomma parvum* throughout the entire geographical distribution of *Dasypus kappleri* is a path for future studies.

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