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SHORT COMMUNICATION

ABSENCE OF NATURAL INFECTION BY *SCHISTOSOMA MANSONI* IN WILD RODENTS CAPTURED IN ENDEMIC AREAS FOR SCHISTOSOMIASIS IN THE STATE OF ALAGOAS, BRAZIL

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Wild rodents and other small mammals harbouring infection by *Schistosoma mansoni* have been found in several endemic areas for schistosomiasis in Brazil[1-5, 8, 11, 13, 14, 16]. In some of these regions certain rodent species - mainly *Nectomys squamipes*[2] and *Holochilus brasiliensis*[5, 16] - have been stressed as important natural reservoirs of *S.mansoni.*

In some Caribbean Islands, *Rattus rattus* specimens have often been found naturally infected by *S. mansoni*; in addition, *S. mansoni* strains naturally adapted to both human and rodent hosts have been found[6, 7, 15].

In fact, neither the role of non-human vertebrates as *S. mansoni* natural reservoirs, nor the natural maintenance of this trematode without human participation have been consensually accepted by all the epidemiologists who studied this question.

The municipality of Branquinha, 60 km far from Maceió, capital of the State of Alagoas, is located in a region endemic for schistosomiasis, where high rates of human infection have been found[9, 10]. In this region we attempted to determine the prevalence of *S. mansoni* infection in wild rodents caught near human settlements, where schistosomiasis transmission foci for active transmission had been detected[9, 10].

Seventy-four wild rodents belonging to five different species (Table 1) were caught alive in special traps and transported to a local laboratory and, under anesthesia, were submitted to portal perfusion with the aim of recovering *S. mansoni* specimens. Immediately after portal perfusion the liver was sliced, then pressed between two large glass plates, in order to identify *S. mansoni* specimens not recovered by perfusion as well as eggs trapped within the sinusoidal spaces. Simul-

TABLE 1

Wild rodents caught in Branquinha (Alagoas State, Brazil) and examined for natural *S. mansoni* infection

Rodents	Number
Rattus rattus	39
Holochilus brasiliensis	13
Nectomys squamipes	10
Oryzomys sp.	8
Galea spixii	4
Total	74

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taneously, fecal samples from the rodent bowels were examined for *S. mansoni* eggs.

The examined rodents did not present any evidence of *S. mansoni* infection, despite high prevalence rates for human schistosomiasis in the same region. These results suggest that, on the contrary to the situation found in other areas, schistosomiasis transmission in Branquinha depends only on the presence of humans infected by the trematode. Consequently, although in some endemic areas for schistosomiasis in Brazil the infection seems to show a zoonotic behavior as a result of adaptive evolution[12], in Branquinha, *S. mansoni* should still be considered as an anthroponotic infection.

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