

TITLE; EVALUATION OF THE PRESENCE AND CONTAMINATION LEVEL OF *Biomphalaria* spp, BY *Schistosoma mansoni* IN THE PARAÍBA RIVER IN THE MUNICIPALITY OF CAPELA.

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ABSTRACT:

Schistosomiasis Mansoni is an infectious parasitic disease caused by trematodes of the genus *Schistosoma*, which has as intermediate host: the freshwater snail of the genus *Biomphalaria* and as a definitive host, the man. The present study aimed to evaluate the presence and level of contamination of *Biomphalaria*, by Cercarium, of *Schistosoma mansoni* in the Paraíba River of Capela-AL. Seven collection points were selected throughout the region by the coordinates; Latitudes-9.41561,-9.383,-9.38174,-9.37870 and Longitudes 36, 07403,-36.08824,-38.08853,-36.09030, which were denominated by the letters from A to H. In each point the presence of snails was investigated, and they were collected with sieve and tweezers. The snails were placed in a sterile universal collector, packaged in a thermal box and transported to the microbiology laboratory of the Centro Universitário Tiradentes, where they were submitted for analysis. To investigate the presence of cercaria in snails, the method of exposure to artificial light was used, which consists of placing the snails individually in containers with distilled water for 4 hours, maintaining the temperature between 28°C and 30° C. After exposure period, water analysis was performed with the aid of a magnifying glass, where it was possible to observe the Cercarium, then this contaminated water was visualized under a microscope to confirm the contamination. It was also used the technique of crushing snails between slides to detect the presence of Cercarium and sporocysts. The samples were collected from October 2018 to April 2019, during the transition period between the seasons. 145 snails were collected in the analyzed points, with a higher population of snails in the points: F (105 snails), followed by A 4, B 1, C 1, D 8, E 14, G 14, H 12. Of the total number of snails obtained, nine (6.2%) had been contaminated by Cercarium. It is concluded that, in view of the results obtained, there are *Biomphalaria* snails contaminated by the cercarium of *Schistosoma Mansoni* in the region evaluated, and the contamination of the population occurs through the river, which works as a mean of survival. In addition, it is necessary to implement actions aimed at decreasing cases in the region, due to the large concentration of molluscs in water collections.

Keywords: *Biomphalaria*, Schistosomiasis Mansoni, public health.