

Evaluation of molluscicidal activity of “monkey pepper” (*Piper arboreum* Aubl) in *Biomphalaria* sp. from São Luís and São Bento, Maranhão

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The schistosomiasis mansoni is a parasitic disease caused by helminths trematode of the specie *Schistosoma mansoni*. The contagion of the disease is caused by the contact of the cercaria larvae, eliminated by the transmitting snails, of the genus *Biomphalaria*, with the definitive hosts. The molluscicidal substances are used for the control or elimination of the populations of these molluscs in endemic areas. In this way, the aim of this study was to evaluate the molluscicidal activity of hydroalcoholic extract of leaves of *Piper arboreum* Aubl in *Biomphalaria* sp., from São Luís and São Bento, MA. The leaves of plant in test were collected at São Luís and the exsicata is deposited in the Herbarium Rosa Mochel, of the State University of Maranhão, under notation 4920. The leaves collected for the preparation of the extract obtained a weight of 1060,24g. This leaves were washed, crushed and macerated, for 19 days, in 70% alcohol. After this time, the leaves were submitted to the evaporation process for a removal of the solvent. The snails used in this study were collected in the two cities mentioned, with manual technique and submitted to the process of positivity analysis for *S.mansoni*. All snails collected were negatives for the trematode. The mortality rate of snails submitted to the extract was 3.33 and 10% for São Luís and São Bento, respectively. The snails submitted to the tests showed no alteration to the mobility and feeding criteria, however, an interference was observed in the deposition of the egg masses of São Bento snails when compared to the control, demonstrating a possible way to control the population of schistosomiasis vectors in these localities, due to their high capacity to repopulate the outbreak sites. As for the evaluation of the molluscicidal activity of *Piper arboreum*, it was expected that the extract at 100 ppm presented a mortality rate greater than 50%, based on the premise that much of the Piperaceae family presents excellent results at this concentration and even in concentrations minors. In addition, there were no significant differences in mortality rate between the snails from these municipalities, in view of the knowledge that the snails of São Bento are more resistant than those of Sao Luís, Maranhão.

**Keywords:** Molluscicide. Biocontrol. Piperaceae. Schistosomiasis.