

A survey of freshwater and terrestrial snails in the Municipality of São Gonçalo, RJ, with emphasis on vectors of human parasites.

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The municipality of São Gonçalo is submitted to large environmental impacts and a great part of the local population has little access to information and does not receive basic sanitation. In addition, the region presents a large movement of people coming in and out of the city every day. These aspects may create conditions for the establishment of several diseases whose mollusks are intermediate hosts of the etiological agents. A survey of freshwater and terrestrial mollusks was carried out in São Gonçalo, RJ, in several environments of the five districts of the city. Species diversity and composition were compared among districts and between freshwater and terrestrial communities. The presence of helminthes of medical and veterinary importance was also examined in the mollusks specimens in order to investigate the occurrence of transmission focus of helminths. Four mollusks samplings were carried out from October 2013 to February 2014. Terrestrial mollusks were collected in plots of 6m<sup>2</sup>. Freshwater snails were sampled along streams, rivers and watercourses during 10 minutes by the same collector. A total of 287 individuals were collected in 32 areas of the following species: *Pomacea* sp. (Ampullariidae), *Melanoides tuberculata* (Thiaridae), *Biomphalaria tenagophila* (Planorbidae), *Physa marmorata* and *Physa acuta* (Physidae) of freshwater environments and *Achatina fulica* (Achatinidae), *Dysopeas muibum* (Subulinidae) and *Bradybaena similaris* (Bradybaenidae) of terrestrial environments. The community of freshwater mollusks was richer and more abundant than the terrestrial community. Mollusks species were found only in districts 1 (Centro), which encompasses an urban area of the center of the Municipality, and 2 (Ipiiba), which covers a more rural area. Among 62 specimens of *A. fulica* collected, eight (13%) were eliminating larvae of the nematode *Angiostrongylus cantonensis*, which is the etiological agent of the eosinophilic meningoencephalitis. The freshwater snails analyzed did not present helminths. The most abundant and most frequent species of mollusks were *B. tenagophila*, *M. tuberculata* and *A. fulica*, the latter two being exotic species. The disturbance and degradation of the natural areas, resulting in silting streams and open sewage near residential areas favors the proliferation of diseases putting at risk the local population health. The high abundance of the mollusks *A. fulica*, which presented larvae of *A. cantonensis*, and *B. tenagophila*, which is the intermediate host of the mansonic schistosomiasis highlights the importance of a continuous monitoring of the molluscan fauna in this region in order to subsidize the control of the helminths in the municipality.

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