Correlation Between the Presence of Sandflies and Environmental Factors: New Parameters for the Control and Prevention of Leishmaniasis
Baltazar Casagrande, Doctorate, flebalta2012@gmail.com
Raul Borges Guimarães/ Laboratório de Biogeografia e Geografia da Saúde

Introduction: American Cutaneous Leishmaniasis (ACL) and American Visceral Leishmaniasis (AVL) constitute a public health problem in parts of the continents of America, Asia, Europe and Africa. The significance of Leishmaniasis led the World Health Organization (WHO) to include it among the six diseases considered to have top priority in its control programme. Cases of ATL were recorded in every state in Brazilian 2003, according to Health Ministry records. In the period 1998-2011 in the state of São Paulo, a total of 4,722 cases of ATL, were reported and it was autochthonous in more than 320 municipalities. AVL was initially more rurally based in Brazil but, more recently, it has spread to medium and large urban areas. The first case of AVL in a human in São Paulo was recorded in 1999 and, since then, the vector has been spreading and adapting to urban ecotopes, an event that is believed to have started in Araçatuba and is spreading westward in the state of São Paulo. Knowing that control and prevention programmes operated in the state of São Paulo only target surveillance measures around cases of Leishmaniasis, this work proposes measures to support new parameters for control and prevention of Leishmaniasis based on empirical research at Pontal do Paranapanema, specifically the Morro do Diabo State Park in the municipality of Teodoro Sampaio / SP. Methodology and Development: In order to carry out this work it will be necessary to survey the sandflies in the Morro do Diabo State Park. Capture points will be set up near the edges and in the interior of the park. CDC (Center on Disease Control) light traps will be used to capture the insects each fed by 12 volt batteries and a Shannon-type trap fed with a 01 gas lantern with manual suction tube (Castro catcher). GIS and spatial modelling techniques will be used to analyze the data. Final thoughts: As the park is visited by researchers, students and others, as well as by local residents so, following the results of previous researches, the need for constant health monitoring in this area is recommended to prevent the local population and those visiting contracting the disease. Entomological Research should also by carried out constantly to monitor the sand fly population in the area, or new species may appear, so measures should be proposed for the control and prevention and ATL and AVL. Thus, this paper proposes to support geographic measures using GIS and spatial analysis to propose new standards for control and prevention of Leishmaniasis. Key words: Sandflies; Leishmaniasis; environmental factors; health; environment.