

Preliminary inventory of the sand fly fauna (Diptera: Phlebotominae) in Itaperuçu municipality, Paraná state: an endemic area of American tegumentary leishmaniasis

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Environmental modifications such as deforestation had modified the natural habitats of phlebotomine sand flies modifying their behaviors and approaching these insects to the peridomiciliary locations. Although 1,002 sand fly species have been described around the world, and 277 species occur in Brazil being 49 (18%) recorded in the state of Paraná (PR). This state has the largest number of cases of American tegumentary leishmaniasis (ATL) when compared with the others of the South region of Brazil. The present study is a preliminary investigation about the sand fly fauna in Itaperuçu municipality (PR), located in the Ribeira Valley, area of ATL cases. This fauna have been evaluated using CDC light traps and Shannon traps totaling, until moment, 8 (eight) months of capture (May-December/ 2016). CDC traps were placed in the peridomicile of 10 residences during 3 (three) consecutive nights, by 12 hours, as recommended by the Program Control of Leishmaniasis of the Ministry of Health of Brazil. Caught in Shannon trap was performed monthly in a total of 3 (three) hours in forested area. Capture effort was of 896 and 24 hours using CDC and Shannon traps, respectively. The caught sand flies were placed in alcohol 70%; mounted in Canada Balsam medium and identified. A total of 1,527 sand flies belong to 6 (six) species: *Nyssomyia neivai* (1,481 specimens), *Psathyromyia pascalei* (16 spp), *Pintomyia fischeri* (12 spp), *Migonemyia migonei* (10 spp), *Evandromyia firmatoi* (5 spp) e *Brumptomyia avellari* (3 spp) were found. The number of females (1,145 spp) was biggest than the males (382 spp.) in a sex rate M/F of 1:3. *Nyssomyia neivai* represents 97% of the species and the others 3%. The first has been incriminated as vector of *Leishmania brasiliensis* in several localities in Brazil. The research will be proceeding for two years being possible to provide data to the Secretary of Sanitary Vigilance to monitoring cases of ATL in the municipality.

Key words: Psychodidae, sand flies, leishmaniasis, faunistic inventory, Paraná state