# QUANTIFICATION OF VECTOR DISPERSION FOR LEISHMANIASIS IN A COCOA PRODUCING MUNICIPALITY IN THE STATE OF PARÁ, 2022.

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Leishmaniasis is caused by protozoa of the genus Leishmania and transmitted by small dipterans of the subfamily Phlebotominae, popularly known as the straw mosquito. The objective of the work was to demonstrate, the presence of sand fly species in areas of autochthonous transmission of Cutaneous Leishmaniasis, in addition to assisting integrated actions for Leishmaniasis surveillance. The captures were carried out in strategic locations regarding the presence of the vector, in the homes of cocoa farmers in the region. The methods established for carrying out the collections were: Shannon traps (6:00 pm to 10:00 pm) and CDC traps (6:00 pm to 6:00 am), with a total of 10 points georeferenced. After collection, euthanasia was performed on all the contents of the traps, in addition to the screening of these sandflies. The samples were properly stored in 70% alcohol and after clarification, diaphanization and assembly of species on slides, taxonomy was performed using the dichotomous key of Young, D.G.; Duncan. at the Entomology Laboratory/SESPA. A total of 814 sand flies belonging to the genera Lutzomyia and Psychodopygus were captured. Among them were the following species: Lu. Whitmani, Lu. Furcata, Lu. Migonei, Lu. Choti, Psy. Lainsoni, Lu. Brachypyga and Lu. Nordestina. In this quantity, specimens of males and females of Lu. Whitmani (72%) were obtained, captured inside and outside the home. This species is incriminated as the main vector responsible for transmission in the zoonotic cycle of LT. It is believed that the density of the sand fly fauna in the region presents an important richness of species. This is due to the good climatic conditions for the survival of the species, which require little variable temperature and humidity, the local vegetation is favorable to the reproduction of sand flies, where entire families reside within the cocoa plantations, the so-called “sharecroppers”.

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