

Diversity of mosquito (Diptera: Culicidae) in Rio Pardo rural settlement, in Presidente Figueiredo Municipality, AM

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Rural Settlements may cause anthropic disturbances in some forest arboviruses cycles, changing ecological aspects of transmission dynamics to vectors and hosts, affecting dwellers. Culicidae insects are important vectors of several pathogenic microorganisms to man, including arbovirus. The aim of this study was to estimate the mosquito abundance, richness and diversity in Rio Pardo rural settlement, located in Presidente Figueiredo Municipality, Amazonas, during the dry and rainy seasons of 2015. Early data from our research group showed that important arboviroses like Mayaro is present in the area. The mosquitoes were collected by human attractiveness and CDC light traps. Three light traps were placed in peridomicile, forest edge and forest environments. The mosquitoes collected were stored in glass vials, and posteriorly identified until specific level. Shannon index was used for data analysis. In total 368 mosquitoes were collected, belonging to 10 genera and 33 species. By CDC light trap 192 Culicidae were collected, 57 (29.69%) of them during the rainy season and 135 (70.31%) in dry season. Using human attractiveness 176 Culicidae were collected in rainy season and none in dry season. The highest number of mosquitoes was collected in peridomicile environment, with 59 individuals, followed by forest edge, with 47 individuals, and forest, with 29. Shannon index to light trap collected mosquitoes were 4.27, and 4.43 for the human attractiveness. Diversity index were 5.25 in rainy season and 4.89 in dry season. Species diversity was 2.20 in peridomicile; 3.08 in forest edge and 3.69 in forest. Although capture was performed over two times, species diversity in Rio Pardo could be considered high. This study would be deeply detailed to identify mosquito species and possible arbovirus that could infected them, aiming to establish entomological surveillance to predict fever outbreaks in residents of the settlement and mosquito vector control activities.

Key words: Amazon, mosquito vectors, arbovirus

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