Abundance and Distribution of Mosquitoes in Two Areas of an Educational Institution in the Municipality of Rio Grande, Puerto Rico

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The objective of this research is to verify the mosquito population in an educational institution in the municipality of Río Grande, Puerto Rico, to determine the risk of transmission. Sixteen commercial electric traps to capture mosquitoes were placed in two areas for three weeks. There were placed in an area where was poor hygiene (B) while in the other was not (A). Each week mosquitoes were collected and sent to a vector control unit in Puerto Rico, for counting and identification. A total of 151 mosquitoes were captured and identified and distributed on seven species. A total of 124 mosquitos (82%) were females and 27 (18%) were males. A total of 74% of the captured mosquitoes were in area A, in which 87% of these mosquitoes were found to be female. Meanwhile, 26% were captured in area B, of which 67% were females. Among the most abundant species in this research were: Culex quinquefasciatus (30%), Culex nigripalpus (24%), Aedes aegypti (18%) and Mansonia titillans (13%), which represent 85% of the mosquitoes captured, most of which were found to be females. Of these species, Culex quinquefasciatus (24%) prevailed in area A and Aedes aegypti (14%) dominated in area B. In addition, Culex nigripalpus (20%) remained the second species in area A and Mansonia titillans (7%) in area A. The area A was where the greatest number of mosquitoes were captured. These findings will be useful in the early detection of possible epidemic outbreaks allowing disease mitigation and control.

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