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Comparative study on the diversity and abundance of mosquito fauna in relation to the anthropogenic activities and the environmental factors in the selected sites in Matara area.

Upeksha Dulmini Manawadu

Supervisor – Dr. H.C.E. Wegiriya, Dept. of Zoology, Univ. of Ruhuna

Matara is a major town situated in the Southern coastal belt of Sri Lanka. In this city the problems of mosquitoes increase day by day and interfere with the normal day to day life. The increase of mosquito population has resulted in some epidemic situations such as epidemic of Filariasis and Dengue in that area. Therefore present study was mainly aimed to identify the mosquito species in the area, to find out how anthropogenic activities and environmental conditions affect to the abundance of mosquito fauna, comparatively in urban and rural sites. Seven mosquito species were identified. Six mosquito larval species were also recorded. Statistically significant differences were not observed in the abundance of mosquito populations in the study sites. However, some higher numbers of mosquitoes were recorded in urban sites. Also the HI (House Index), CI (Container Index) and (BI) Breteau Index somewhat higher in urban sites than that of rural sites. Urban areas provide more preferable, various types of breeding places than the rural sites. So it was the reason for above result. Environmental parameters such as DO, BOD, Salinity, Conductivity, pH, Temperature and Rainfall data of the mosquito breeding places were measured. The relationship between the abundance of mosquito fauna and various environmental parameters varied from site to site, with negative and positive correlations.