ABSTRACT

An ecological study on the mosquito fauna of Sinharaja Forest was carried out during 1984-1986, at study sites situated around the Natural Resources Energy and Science Authority/March for Conservation Field Research Stations within the forest.

Mosquitoes belonging to 34 species from 10 genera were collected during the study. The dominant genus was Culex with 11 species, followed by Aedes with 7 species, Anopheles and Uranotaenia with 4 species each.

The main breeding habitats available for mosquitoes in this unique habitat are phytotelmata and ground water habitats. The phytotelmata consisted of tree holes and pitchers of Nepenthes distillatoria. The ground water habitats consisted of semi-permanent roadside ground pools, seepage marsh pools, rock pools and stream margins.

Four species of mosquitoes were found to inhabit the tree hole phytotelmata, the dominant being Or. flavithorax and Cx. uniformis. The bamboo receptacles used as tree hole surrogates yielded 6 species. The most

prevalent mosquitoes were Tp. affinis, Cx. uniformis, Ae. chrysolineatus and Ar. subalbatus, the last species being absent in natural breeding habitats in the forest. Pitchers of N. distillatoria were occupied by two species of mosquitoes, Tp. dofleini and Ar. magnus, the former being the dominant species. Ground water habitats yielded 21 species, the ground pools being dominated by Anopheles sp. (Aitkenii gp.) and Cx. mimulus, the seepage marsh pools by Anopheles sp. (Aitkenii gp.), Ur. gouldi and Cx. wardi and the rock pools by Ae. macdougalli.

Adult collections by diurnal human bait catches yielded 9 species of mosquitoes, Heizmannia sp. being the most prevalent, and the CDC light trap collections yielded 6 species, with Ur. gouldi being the most frequently collected species.