Population dynamics of anthropophilic mosquitoes during the northeast monsoon season in the malaria epidemic zone of Sri Lanka

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Abstract. Mosquito-borne diseases are a major health problem in Sri Lanka. Human biting mosquitoes were collected during the night (18.00–06.00 hours) at Nikawehera village, in the malaria endemic intermediate rainfall zone of the country. Collections were made at monthly intervals in the period October 1991 to April 1992, which included the main rainy season due to the northeast monsoon (October–January). Thirteen *Anopheles*, eleven *Culex*, three *Aedes*, three *Mansonia* and one *Armigeres* species were identified, including known vectors of malaria, Bancroftian filariasis, Japanese encephalitis and dengue fever. Mosquito human-biting rates were highest in December. The main malaria vector *Anopheles culicifacies* showed peak biting between 18.00 and 23.00 hours whereas the predominant culicines *Culex fuscocephala* and *Cx quinquefasciatus* preferred to bite after midnight. In 1991–92 the prevalence of some species of anophelines at Nikawehera differed markedly from that observed in 1990–91 and the possible reasons are discussed.