

**Nocturnal human biting behavior of *Anopheles culicifacies* in a hydro electric power project area situated in a sylvatic environment in the Central Province of Sri Lanka**

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Nocturnal human biting behavior of *Anopheles culicifacies* was studied from January 2006 - March 2007 at the Victoria hydro electric power generation project area in the Central Province of Sri Lanka. Monthly collections of indoor and outdoor, landing and biting, mosquitoes were made from 1700 - 0600 hours (13 hours) using 3 - 4 indoor and 4 -8 outdoor human baits. In each collection, human baits were seated with exposed hands and legs below the knees. Hourly collections of landing and biting mosquitoes on the exposed surfaces of the body using torches and aspirators were made and mosquitoes were identified to species. Data was summarised as the number of *An. culicifacies* collected indoors and outdoors each hour/bait separately. The majority (97.83%) of *An. culicifacies* bit outdoors as compared to indoors. There were monthly variations in the biting habits with the highest

densities being observed from February to April. *An. culicifacies* bit throughout the night with peak biting hours from 2200 - 2400 hours. Previous studies indicated that the peak biting hours were earlier in the evening and the morning. Further studies are required to study the nocturnal human biting behavior of *An. culicifacies* in other areas of Sri Lanka since this information is very important in planning malaria control activities. However, preventive measures directed to protect the outdoor workforce in the Victoria project should be a priority. If space spraying is planned, it should be carried out between 2200 – 2400 hours to cover the peak biting period of *An. culicifacies* in the project area.

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