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POSTER

Prevalence of Anopheline Species in Ampara District, Sri Lanka

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Introduction: Investigating the presence of primary and secondary vectors of malaria in the selected areas where no entomological surveillance was carried out for about 30 years due to ethnic conflict.

Objective: To study prevalence of malaria vector in Ampara District and to assess the risk of malaria in the area.

Method: Surveillance was performed from January 2011 to June 2012 in 4 selected areas (i.e. Panama, Thirukkovil, Mahaoya and Dehiattakandiya) in Ampara District. From each area 4 localities (total 16 localities) were selected for the sample collection in order to ensure full coverage of the District. Cattle Baited Hut Collection (CBHC) and Cattle Baited Net Collection (CBNC) were performed as sample collecting methods on monthly basis throughout the surveillance period.

Results: Mosquito densities for each collected *Anopheles* species were calculated as density per hut or net for CBHT and CBNT respectively. 14 *Anopheles* species were recorded from CBHC with high prevalence for *An. subpictus* (68.58%), *An. nigerrimus* (14.02%) and *An. vagus* (6.73%). 16 *Anopheles* species were recorded from CBNC with high prevalence of *An. nigerrimus* (50.07%), *An. peditaeniatus* (16.12%), *An. pseudojemesi* (9.21%) and *An. subpictus* (7.68%). *An. culicifacies* (primary malaria vector in Sri Lanka) recorded with lesser densities but *An. subpictus*, the secondary vector for malaria in Sri Lanka was predominant throughout this study.

Conclusions: The presence of primary and secondary malaria vectors in the area may cause a malaria epidemic in these areas. Hence, it is essential to study the seasonal prevalence of *Anopheles* species in order to initiate timely controlling measures in Ampara District.

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