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Poster

Study on house dwelling Anopheline species in Batticaloa District, Sri Lanka

Even though the malaria cases are less, vectors which transmit the disease are still present. No proper vector surveys have been carried out in the eastern area of Sri Lanka for more than 30 years, due to the ethnic conflict.

The objective is to study house dwelling Anopheline densities to assess the risk of malaria prior to eliminating malaria, and implementing vector control strategies.

Surveillance was performed from July 2010 to December 2010 in 3 selected areas (i.e. Mandur, Vakanery, and Vakarai) in Batticaloa District. Each area was divided into 4 sub sampling sites attaining a total of 12 sub sites in order to ensure full coverage of the whole district. Hand Catch and Window Trap collections were continued to collect mosquito specimens from 44 randomly selected houses in each sub site (n= 528) on a weekly basis.

Mosquito densities for each collected *Anopheles* species were calculated as density per man hour and density per trap for both Hand Catch and Window Trap Collection respectively. Four species were recorded from Hand Catch (i.e. *An. barbirostris* (0.002), *An. nigerrimus* (0.081), *An. subpictus* (1.813) and *An. vagus* (0.005)). Four species observed from Window Trap Collection (i.e. *An. nigerrimus* (0.067), *An. subpictus* (0.700), *An. vagus* (0.010) and *An. varuna* (0.174)). *An. subpictus*, the secondary vector for Malaria in Sri Lanka was predominant throughout this study.

The presence of some Anopheline mosquitoes which can act as potential malaria vectors may cause malaria epidemics in these areas. Hence, it is essential to continue more surveillance related to Larval and Trap collections to get the entire picture of Vector composition and prevalence in Batticaloa District.

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