DISPERAL OF THE DENGUE VECTOR *Aedes aegypti* WITHIN AND BETWEEN RURAL COMMUNITIES

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Knowledge of mosquito dispersal is critical for vector-borne disease control and prevention strategies and for understanding population structure and pathogen dissemination. We determined *Aedes aegypti* flight range and dispersal patterns from 21 mark-release-recapture experiments conducted over 11 years (1991–2002) in Puerto Rico and Thailand. Dispersal was compared by release location, sex, age, season, and village. For all experiments, the majority of mosquitoes were collected from their release house or adjacent house. Inter-village movement was detected rarely, with a few mosquitoes moving a maximum of 512 meters from one Thai village to the next. Average dispersal distances were similar for males and females and females released indoors versus outdoors. The movement of *Ae. aegypti* was not influenced by season or age, but differed by village. Results demonstrate that adult *Ae. aegypti* disperse relatively short distances, suggesting that people rather than mosquitoes are the primary mode of dengue virus dissemination within and among communities.


AN EXPERIMENTAL STUDY OF THE EFFECT OF TEMPERATURE ON THE BIOLOGY OF *Anopheles* sp. (DIPTERA: CULICIDAE) IN THE LABORATORY

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Other authors have demonstrated that relatively large bodied females (as indicated by longer wing lengths) exhibit higher fitness qualities than do small-bodies females. In this study, the effect of rearing temperature on mosquito body dimensions, fecundity, and larval and adult survival were compared for different temperature regimes. *Anopheles dirus ‘A’* and *An. sawadwongporni* were reared at 23ºC and 30ºC. Body weight at adult emergence and wing length, eggs produced per female, and larval and adult survival were measured. Results from this experiment are presented.

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