

## EVALUATION OF EXCITO-REPELLENCY SYSTEM FOR TESTING BEHAVIORAL FEEDING RESPONSES OF AEDES AEGYPTI (L.) TO DELTAMETHRIN

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**BACKGROUND:** Understanding the behavioral response of mosquito vectors is important to control. Chemical control is the one of effective method for prevent and reduce disease transmission. Recently, no study have been performed to study on the feeding behavioral responses to insecticide in *Ae. aegypti* strains.

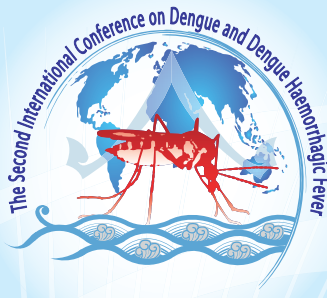
**OBJECTIVE:** The aim of this study was to analyze the response of unfed female mosquitoes either unmated or mated to residue deltamethrin using an excito-repellency system in the presence and absence of live host stimuli.

**METHODS:** Unmated and mated six day-old *Ae. aegypti* females from Kanchanaburi Province were used in this study. The excito-repellency system was used for analyze the response of unfed female mosquitoes in the presence and absence of live host stimuli with different concentrations at  $LC_{50}$ ,  $LC_{75}$  and  $LC_{90}$  of deltamethrin.

**RESULTS:** In contact trial, unmated *Ae. aegypti* showed higher escape rates at  $LC_{90}$  deltamethrin compared to mated and all other concentrations with host attractant. In contrast, mated females exhibited higher escape rate at  $LC_{75}$  without host attractant. In non- contact trial, the higher escape rates was observed at  $LC_{50}$  both with and without host in unmated.

**CONCLUSIONS:** The effect of chemical interfered blood feeding behavior at the higher dose in contact trial. Moreover, we found the insemination status had influenced on blood feeding response of mosquitoes to chemical.





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