

**Susceptibility of *Aedes aegypti* (Linnaeus, 1762) and *Ae. albopictus* (Skue, 1894) to insecticides (5% malathion, 0.05% deltamethrin, 0.75% permethrin) in selected Mahaaungmye Township, Mandalay City**

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**Abstract**

The level of insecticide susceptibility of mosquitoes is one of the important factors to success mosquito-borne diseases control program. The study was carried out to investigate the susceptibility of *Aedes aegypti* and *Aedes albopictus* to insecticides (5% malathion, 0.05% deltamethrin and 0.75% permethrin), following the WHO susceptibility procedures and conducted in Mahaaungmye Township. The mortality of *Ae. aegypti* was 100% after 24 hours exposure period to 5% malathion. The mortalities of *Ae. aegypti* were 35.23% against 0.05% deltamethrin and 11.42% to permethrin. The study revealed that *Ae. aegypti* from Mahaaungmye was susceptible to malathion but highly resistant to deltamethrin and permethrin. The mortality of *Ae. albopictus* was 100% to insecticides (malathion, deltamethrin and permethrin) in Mahaaungmye. *Aedes albopictus* was still susceptible to insecticides (malathion, deltamethrin and permethrin). This study indicated that malathion is still effective to control *Aedes aegypti* and *Ae. albopictus* adult mosquitoes during DF/DHF outbreaks in the study area. However, synthetic pyrethroid (0.05% deltamethrin and 0.75% permethrin) is not effective for controlling *Ae. aegypti* (The primary vector).

*Key words:* Susceptibility, *Aedes aegypti*, *Aedes albopictus*, malathion, deltamethrin, permethrin