

Biological activity of *Rhinacanthus nasutus* (Htaw la batt) and *Millingtonia hortensis* (Akayit) extracts as larvicide against Dengue vector mosquito

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Abstract

Mosquitoes are principle vectors of dengue hemorrhagic fever, malaria and other vector borne diseases, causing death of millions of people every year. Disease transmission can be interrupted by controlling the vectors using various methods. With the development of resistance to conventionally used synthetic insecticide vector management has become very difficult. Plants may be alternative mosquito control agent. In this regards, the present study aimed to evaluate the efficacy of ethanol extract of *Rhinacanthus nasutus* (Htaw la batt) and acetone extract of *Millingtonia hortensis* (Akayit) against immature stages of dengue vectors mosquito *Aedes aegypti*. The root of *R. nasutus* (Htaw la batt) and the leaves of *M. hortensis* (Akayit) were shade dried and extracted with 70% ethanol and acetone, respectively. The larval mortality at different concentration and control was recorded after 24 hours. The mortality data were analysed by probit analysis to determine the lethal concentration. The LC₅₀ value of 70% ethanol extract of *R. nasutus* (Htaw la batt) and acetone extract of *M. hortensis* (Akayit) are 34.9641 ppm (30.4599-39.1706) and 119 ppm (98-137), respectively. The result suggested that both plants have the potential to be used.