

Resistant status of malaria vector *Anopheles minimus s.l.* to some insecticides in Naunghkio township

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Abstract

Malaria is one of the public health problems and *Anopheles minimus* plays a major role of malaria transmission in Myanmar. Vector control mainly depends on insecticide used. The susceptibility of *Anopheles minimus s.l.* to four insecticides in Naunghkio township, Northern Shan State was monitored by using the WHO standard susceptibility test. Two study sites were selected in Naunghkio township. Species identification was conducted by morphological characteristics only. Unknown aged of wild caught blood fed female mosquitoes was exposed to discriminating dosages of insecticides (DDT 4%, Malathion 5%, Deltamethrin 0.05% and Permethrin 0.75%) for one hour exposure period. Knockdown effect was recorded every 10 minutes and mortality scored 24 hours after exposure. Data analysis was conducted by using LdP line software. The results revealed that, 98.8 % mortality was detected when exposed with DDT 4% and 100% mortality was detected in the rest insecticides. Therefore, it can be concluded that *An. minimus s.l.* is still susceptible to DDT4%, Malathion5%, Deltamethrin 0.05% and Permethrin 0.75%.