

**Insecticides susceptibility profile of Anophelinemosquitoes in selected areas of
Kyaukme district, Northern Shan State in 2014**

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Abstract

Malaria is one of the public health problems and Anophelines mosquito plays a major role of malaria transmission in Myanmar. Vector control mainly depends on insecticide used. The susceptibility of *Anopheles minimus* and *Anopheles annularisto* four insecticides in Kyaukme District, Northern Shan State was monitored by using the WHO standard susceptibility test. Unknown aged of wild caught blood fed female mosquitoes were 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(log- dosage probit) line software. The results revealed that, all study populations of *Anopheles minimus* was still susceptible to DDT 4%, Malathion 5%, Deltamethrin 0.05% and Permethrin 0.75% from all study population, except Hsipaw population. *Anopheles annularis* from Naunghkio and Hsipaw population showed resistant to DDT 4% and still susceptible to Malathion 5%, Deltamethrin 0.05% and Permethrin 0.075%. Kyaukme population showed susceptible to all test insecticides in the present study. It can be concluded that all study populations are still susceptible to Malathion 5%, Deltamethrin 0.05% and Permethrin 0.075% except DDT 4%.