

Abstract

The insecticide susceptibility of both *Aedes albopictus* (AA) and *Aedes aegypti*(AE) collected from Pingtung and Tungkung area as well as the baseline susceptibility in AE were conducted. Low susceptibility of AE strain from central area of Pingtung and Tungkung was detected and not recommended. Following pesticides that include 0.10%Propoxur, 1% Fenitrothion, 0.5%Ethofenprox, 0.75%Permethrin, 0.05%Cyhalothrin, 0.15%Cyfluthrin, and 0.05%Deltamethrin can cause 100% mortality of AA strain from small LiuChu. Pingtung. In addition to 0.1% Propoxur and 1%Fenitrothion, those pesticides can also kill 100% of AA strain from Tungkung area. Both control rates of 0.5% Ethofenprox to the AE strains from Tungkung and small LiuChu are all as low as 1.7%, while it can cause 100% mortality when tested with AA strain from these two area. Thus, 0.5% Ethofenprox is not recommended using in Tungkung and small LiuChu for the control of the vector mosquitoes. The susceptible strain, Bora Bora, was used to predict the baseline of tested chemicals. The predicted LC50 of Deltamethrin, Alphacypermethrin , Cypermethrin are 0.02, 0.03, and 0.04 ppm, respectively.

Keywords : *Aedes aegypti* ; *Aedes albopictus* ; insecticide ; insectide resistance