

## **Abstract**

**“Glass cylinder” and “glass house/chamber” were used to test efficacy of commercial insecticides to Dengue vectors, *Aedes aegypti* and *Ae. albopictus*. Later, a standard operation procedure for dengue emergency spray was proposed. The test result from glass cylinders found that in the particle sizes of 10-12 microns without screen plate for 15 seconds, 24 hour mortality after spray were 100% for both species; however, the efficacies of larger particle sizes produced with screen plate for 15 seconds had poor results in some insecticides to *Ae. aegypti*. Efficacy of insecticides from glass chambers depend on spray machines and location of mosquitoes collected. Our conclusion is that insecticide resistance of *Ae. aegypti* in Taiwan is temporary and localized, a simple efficacy evaluation should include in the routine dengue emergency spray procedures and insecticide management should conduct every year to ensure the spray quality.**

**Keywords : *Aedes aegypti* ; *Aedes albopictus* ; Dengue emergency spray**