Research Data Archive, Center for Disease Control, The Executive Yuan, R.O.C. Readme file Project Title: A Study of <u>Aedes aegypti</u> Chemical Control Technology Project Number:DOH97-DC-2007 Executing Institute: Centers for Disease Control Principal Investigator(P.I.): Wei-Tai Hsia P.I. Position Title: Research & Diagnostic Center P.I. Institute: Associate Researcher

Abstract:

Spray insecticide with two-fluid nozzles to simulate kinds of sprayers, resulted that the formulation will not affect the number and size of the droplet, while the ingredient and nozzle caliber would.

Droplet drift and sedimentation time will vary in different height according to the type of sprayers so are the number and size of the droplet. Power sprayer's droplets have the shortest suspension and the fastest sedimentation time, while the Foggers and ULV sprayers have the longest suspension and the slowest sedimentation time. The threshold time for residents return home after insecticide sprayed would be best for 3.5 hours to prevent chemical pollution.

Keyword: droplet size \ drift \ control efficiency \ sprayer \ atomization \ Aedes aegypti