

Nantawan Suwannachote 2010: Movement Patterns of *Aedes aegypti* (L.) (Diptera: Culicidae) Into and Out of the Experimental Huts. Master of Science (Entomology), Major Field: Entomology, Department of Entomology. Thesis Advisor: Associate Professor Somnuk Wongtong, Ph.D. 101 pages.

Mark – release – recapture experiments with *Aedes aegypti* were performed using experimental huts equipped with entrance and exit traps to evaluate the movement patterns of *Aedes aegypti* during a two – year period in Thailand. Results indicated that there was no significant differences in both entry and exit patterns between the two years of observation. Movement into the huts occurred during the early morning period (0600 – 1100 hour) with a peak at 0700 hour in the summer and rainy season and 0900 hour in the winter. In contrast, the exit pattern was observed during the late morning (0900 – 1200 hour) and early afternoon (1200 – 1500 hour), with a peak at 0900 hour in the winter, 1100 hour in the summer and 1400 hour in the rainy season. Multiple regression analysis indicated that movements of *Ae. aegypti* females into and out of the huts were partially influenced by relative humidity and ambient temperature during the day.

Student's signature

Thesis Advisor's signature

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