

OUTBREAK OF CHIKUNGUNYA FEVER IN THAILAND AND VIRUS DETECTION IN FIELD POPULATION OF VECTOR MOSQUITOES, *Aedes aegypti* (L.) AND *Aedes albopictus* SKUSE (DIPTERA: CULICIDAE)

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Abstract. We investigated chikungunya fever outbreak in the southern part of Thailand. Human plasma specimens obtained from suspected patients and adult wild-caught mosquitoes were detected for chikungunya virus employing reverse transcriptase-polymerase chain reaction technique. Chikungunya virus was detected in about half of the blood specimens whereas a range of 5.5 to 100% relative infection rate was found in both sexes of the vector mosquitoes, *Aedes aegypti* (L.) and *Ae. albopictus* Skuse. The infection rate in *Ae. albopictus* was higher than in *Ae. aegypti*, with relative infection rate in male of both species being higher than in female. The appearance of chikungunya virus in adult male mosquitoes of both species reveals a role of transovarial transmission of the virus in field population of the mosquito vectors. These findings have provided further understanding of the relationship among mosquito vectors, chikungunya virus and epidemiology of chikungunya fever in Thailand.

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