

3. Title: Feeding habits of mosquitoes of medical importance in Thailand

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During this period efforts were continued at identifying the source of mosquito blood meals by the agar-gel diffusion technique. Material tested by this method included mosquitoes obtained from two sources: (1) Bang Phra, Cholburi Province where studies on mosquito-borne viruses were in progress and (2) Ba Xoai in South Viet Nam where malaria studies were being conducted by a WRAIR Special Forces Team. Saline extracts of gut contents of mosquitoes were initially tested for reaction against anti-cow and anti-buffalo sera. Specimens which gave negative reactions were later tested against a battery of antisera produced in chickens and rabbits against human, monkey, dog, pig, chicken, horse and rat sera.

A total of 2411 mosquitoes representing eight species collected in light traps operated in the vicinity of the Red Cross horse farm at Bang Phra were tested; 37 specimens were non-reactive. Results indicated that all the mosquitoes collected in a light trap operated at a dairy farm adjoining the horse farm had fed almost exclusively on cows or buffaloes, while all those from the horse farm had fed on horses (Table 1).

The Viet Nam material included 56 females of Anopheles vagus. Only ten mosquitoes were engorged while the rest had remnants of previously ingested blood. When this material was tested for reactions against the entire battery of antisera, a single specimen gave positive reaction with anti-cow serum; the rest were non-reactive.