ABSTRACT

Four laboratory colonies of *Anopheles maculatus* (Theobald, 1901) were established from the progeny of wild-caught females from Phrae, Cholburi, kanchanaburi and Songkla provinces by using the forced mating technique. It was observed that the larval development was compleated within two weeks. The longevity of the adult when reared with 10% sugar solution averaged 22 and 13 days in the female and male, respectively.

Anopheles maculatus preferred to bite man outdoors rather than indoors with ratios of 12:1, 3:1, 2.5:1 and 9:1 for the population from phrae, Cholburi, Kanchanaburi and Songkla Province, respectively. Usually, it preferred to bite animal than man but in South Thailand, the number of mosquitoes which were attracted to human was approximately the same as animals. This mosquito was an early biter with a peak of density at 20.00 - 22.00 hours.

Three presently-recognized subspecies were observed. There were *An.maculatus* var.*willmori*, *An.maculatus* var.*pseudowillmori* and *An.maculatus*. All populations and forms studies were susceptible to malaria parasite with percentages of infection ranging between 65 to 78. The crosses mated between the Thai populations, including on from Malaysia, gave fertile F_1 offspring. All populations and forms were susceptible with the standard WHO test against DDT.

From the results of this work it is suggested that most populations and forms of *An.maculatus* can serve as malaria vectors in all parts of Thailand, particularly in the South.