

PHYSIOLOGICAL STUDIES ON MOSQUITOES:

Anopheles tessellatus AND *Culex quinquefasciatus*

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Colonies of *Anopheles tessellatus*, a laboratory vector of falciparum and vivax malaria, and *Culex quinquefasciatus*, the vector of Bancroftian filariasis, are being maintained in the Laboratory.

The epidemiology of malaria, filariasis, and arboviral diseases is closely associated with aspects of mosquito physiology such as fecundity, man-biting frequency, susceptibility to pathogen infection, and longevity. Preliminary investigations have been carried out to determine host preference and effects of bloodmeals from different vertebrates on *A. tessellatus* as well as fecundity and longevity resulting from such bloodmeals. The results of these experiments will be discussed. These data will enable the establishment of protocols for studies on artificially induced immunity to mosquitoes.

Results of the effects of neem extracts (*Azadirachta indica*) on the life cycles of *A. tessellatus* and *C. quinquefasciatus* will also be discussed.