

EFFECT OF TEMPERATURE ON LABORATORY REARED *ANOPHELES DIRUS* PEYTON AND HARRISON AND *ANOPHELES SAWADWONGPORNI* RATTANARITHIKUL AND GREEN

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Abstract. Investigations have shown that female mosquitoes with a larger body size (determined by wing length) exhibit higher feeding rates and greater fecundity relative to smaller mosquitoes. In this study, *Anopheles dirus* and *An. sawadwongporni* were reared in the laboratory at two different temperatures (23°C and 30°C). Effects of the rearing temperature on body size, fecundity, and larval development period were examined by measuring wing length, adult body weight at emergence, the number of eggs produced and the length of time from the first to the fourth instar. Rearing temperature had a direct effect on body size, fecundity and larval development period for both species. Mosquitoes of both species reared at 23°C were larger in body size, experienced prolonged development and produced a larger clutch of eggs relative to mosquitoes reared at 30°C. However, there was no temperature effect on egg hatching rate and sex ratio.

Keywords: *Anopheles dirus*, *Anopheles sawadwongporni*, temperature, body size, fecundity

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