**Abstract**

Essential oil extracted by steam distillation of Vetiveria zizanioides (L.) Nash (Poaceae) was evaluated for larvicidal and adult repellent activity against the malaria vector Anopheles stephensi (Liston). Median lethal concentrations (LC50) at 24 h post treatment for instars 1-4 were, respectively, 281, 356, 389, and 475 mg/L. The repellency of topically applied vetiveria oil tested at rates of 0.5 mg/cm2, 1 mg/cm2, and 1.5mg/cm2 was 100% for 2, 4, and 5 h, respectively. After 12 h, the level of protection from mosquito bites provided by V. zinzanoides essential oil was 52% at the 0.5 mg/cm2 rate, 62% at the 1 mg/cm2 rate, and 76% at the 1.5 mg/cm2 rate. The results indicate that V.zinzanoides essential oil is larvicidal and repellent to An.stephensi adults and that further study and development of this botanical insecticide as a mosquito control and/or personal protection agent is warranted. From the result it can be concluded the crude extract of V.zinzanoides essential oil was an excellent potential for controlling larvicidal and adult repellent activity against the malaria vector mosquitoes.