

Thesis Title            Repellent Effects of Some Selected Medicinal  
                                 Plant Extracts on Mosquitoes

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### ABSTRACT

Selected medicinal plants having repellent activity were tested against the larval stages and adults of mosquitoes, namely, *Aedes aegypti* Linn. and *Culex quinquefasciatus* Say. Ethanol crude extracts of the stems, branches, leaves, flowers, fruits and roots of *Cymbopogon nardus* Rendle, *Citrus hystrix* DC., *Chrysanthemum indicum* Linn., *Azadirachta indica* var. *siamensis* Valetton, *Ocimum sanctum* Linn., *Alpinia galanga* Swartz and *Acorus calamus* Linn. containing various components of repellent substances were used. The single and mixed solutions of two species of plant crude extracts were mixed with olive oil and musk in the ratio of 20 : 2 : 0.1, respectively. The 0.5 ml of the mixed repellent solutions were applied on the ventral forearms of some volunteers to assess potential repellent efficacy and duration. The results indicated that the single solution of *C. nardus* extract and the mixed solution of *C. nardus* and *C. indicum* extract showed repellent activities for 120 minutes. These extracts also showed larvicidal activities against the afore-mentioned mosquitoes.