

Laboratory evaluation and comparative study of herbal mosquito coils against the filarial vector, *Culex quinquefasciatus* (Diptera: Culicidae)

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ABSTRACT:

Synthetic insecticides employed for the control of insect pests are toxic to man and livestock acting as pollutants to the environment, killing all beneficial insects thereby causing a disturbance to the ecosystem. The use of natural products such as plant essential oils has assumed significance as an important component of insect pest management because of their financial viability and eco-friendly nature. They hold promise as alternatives to chemical insecticides to reduce pesticide load in the environment. A laboratory experiment was conducted to investigate the efficacy of three essential oils -eucalyptus oil, lemon grass oil and thyme oil for the repellent activity against the filarial vector, *Culex quinquefasciatus*. Among the essential oils, Lemon grass oil showed good repellency property when compared to the other two plant oils. Hence, the results of the investigation would indicate a significant potential for lemon grass oil as a possible source of natural products that could be used as an alternative to synthetic insecticides.

Keywords:

Mosquito, *Culex quinquefasciatus*, Repellency, Plant essential oil.