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## Mosquitoes Coil (Insecticides Repellants) Production using Orange Peels

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**Abstract:** The primary goal of this project was to create an insecticide coil that repels mosquitoes using orange peel. This preparation used limonene oil as an insecticide. After extracting the limonene oil and adding ingredients like water, camphor, turmeric, activated charcoal, and flavoring and coloring agents in the right amounts, it was evaluated and characterized to ensure that it could be used safely. Infections spread by mosquitoes, such as dengue, malaria, chikungunya, etc., are bothersome and can seriously injure humans. We created an essential oil (EO) based mosquito repellent cream (EO-MRC) using clove, citronella, and lemongrass oil in response to the unfavorable side effects and toxicity linked to synthetic pyrethroids, N,N-diethyl-3-methylbenzamide (DEET), N,N-diethyl phenylacetamide (DEPA), and N,N-di ethyl benzamide (DEBA) based mosquito repellent products. Following that, a formulation characterisation, safety, and bio-efficacy investigation were conducted for EO-MRC. Western blotting was used to examine the expression of TRPV1 and Anti-OBP2A proteins on mosquito head sections.

Keywords: mosquitoes

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