

# Production of Mosquitoes Repellents Insecticides (Mosquitoes Coil) using Orange Peels

Mohd Shoeb Abdul Mukhtar<sup>1</sup>, Akash Chafekar<sup>2</sup> Salman Khan<sup>3</sup>, Bilal Sufi<sup>4</sup>

HOD, Department of Pharmacology, New Montfort Institute of Pharmacy, Ashti, Wardha<sup>1</sup>

Students of Final Year, New Montfort Institute of Pharmacy, Ashti, Wardha<sup>2</sup>

Faculty, Kalamprakash College of Pharmacy, Khelda Karanja Lad

HOD, Pharmaceutics Department, New Montfort Institute of Pharmacy, Ashti, Wardha<sup>4</sup>

mohd.shoeb.7588@gmail.com

**Abstract:** *The main objective of the present study was to formulate mosquito repellent insecticide coil using orange peel. In this preparation limonene oil were used as insecticide limonene oil extract were taken than addition of ingredient such as activated charcoal, turmeric, camphor, water, coloring agent and flavoring agent at appropriate quantity, evaluation and characterization were performed for its safe and effective use. Mosquito-borne infections like dengue, malaria, chikungunya, etc. are a nuisance and can cause profound discomfort to people. Due to the objectional side effects and toxicity associated with synthetic pyrethroids, N,N-diethyl-3-methylbenzamide (DEET), N,N-diethyl phenylacetamide (DEPA), and N,N-diethyl benzamide (DEBA) based mosquito repellent products, we developed an essential oil (EO) based mosquito repellent cream (EO-MRC) using clove, citronella and lemongrass oil. Subsequently, a formulation characterization, bio-efficacy, and safety study of EO-MRC were carried out. Expression of Anti-OBP2A and TRPV1 proteins on mosquito head parts were studied by western blotting.*

**Keywords:** mosquito repellent

## REFERENCES

- [1] A Global Brief on Vector-Borne Diseases. WHO 2014. [http://apps.who.int/iris/bitstream/10665/1111008/1/WHO\\_DCO\\_WHD\\_2014.1\\_eng.pdf](http://apps.who.int/iris/bitstream/10665/1111008/1/WHO_DCO_WHD_2014.1_eng.pdf)
- [2] Adeogun A.O., Adewuyi G.O., Etatuvie S... O., Fawehinmi AB., Lawal HO: Bioassay of Herbal Mosquito Repellent Formulated from the Essential Oil of Plants. J Nat prod 2012; 5: 109-115.
- [3] Adeniran OI., Fabiyi E. Natural products from plants as insecticides. J Nat Prod Plant Resour 2012; 2: 322327.
- [4] Adelaja J., (2006). Evaluation of mineral constituents and physico-chemical properties of some oil seed. M.Sc. industrial chemistry thesis, University of Ibadan, Ibadan.
- [5] Akinhanmi, T.F., V.N. Atasi and P.O. Akintokun, 2008. Chemical composition and physicochemical properties of cashew nut (Anacardium occidentale) oil and cashew nut shell liquid. Journal of Agriculture and Food and Environmental Science, 2(1): 1-10.