



HEB

Journal of Hospital Pharmacy

An Official Publication of Bureau for Health & Education Status Upliftment
(Constitutionally Entitled As Health-Education, Bureau)

JOHP

Bio-Pesticides of Plant Origin for Mosquitocidal and Larvicidal Activities

Mragendra Singh *Alias* Mithae Lal Gound¹, Deepak Meshram¹, Madhu Jadia² &
Kapil K. Soni¹

¹Pharmacogenomics Laboratory, Department of Biosciences, Barkatullah University, Bhopal (M.P.) 462026, India.

²Department of Sociology and Social Work, Barkatullah University, Bhopal (M.P.) 462026, India

Address for Correspondence: editorjohp@gmail.com

ABSTRACT

Plants possess several phytochemicals including flavonoids, saponins, tannins, resins, terpenoids, alkaloids, glycosides, volatile oils and so on, which are synthesized by plants for defensive purposes and are basically secondary metabolites that can be used as bio-pesticides for mosquitocidal and larvicidal activities. Moreover, presently available chemical pesticides in the markets containing pyrethrum, allethrin, and temephos, are causing several chronic side effects on non-target organisms including men especially for causing asthma and allergy. Therefore, the present review was aimed to highlight the ethno-botanical use of plant extracts and its volatile oils as bio-pesticides in the management of pest especially for mosquitoes which are causing several diseases including malaria, filaria, dengue, chikungunya and so on.

Key words: mosquitocidal, larvicidal, bio-pesticides, insecticides, secondary metabolites, Phytochemical.