

Activity of Some Plant Extracts on the Larvae and Eggs of *Culex quinquefasciatus* in the Laboratory

Authors : A. A. El Maghrbi

Abstract : The control of vectors like mosquitoes based on the application of chemical insecticides but due to its adverse effect on the environment, and development of resistance by most of species of mosquitoes including vectors of important diseases. Ethanol and acetone extracts of nine species of plants (*Allium tuberosum*, *Apium leptophyllum*, *Carica papaya*, *Cymbopogon citratus*, *Euphorbia cotinifolia*, *Melia azedarach*, *Ocimum canum*, *Ricinus common*, and *Tagetes erecta*) were tested in respect of their influence on the eggs and larvae of *Culex quinquefasciatus* in concentration 100, 10 and 1 mg/L. In relation to the survival of larvae, ethanol extract of *O. canum* and acetone extract of *A.tuberosum* in 100 mg/L have larvicide activity against L4 of *Cx. quinquefasciatus*. For hatching of eggs, ethanol and acetone extract of *A.tuberosum* (100 and 10 mg/L) and acetone extract of *C.citratus* (100 mg/L) produced reduction in the number of eggs hatched of *Cx. quinquefasciatus*. Our results indicate that each extract of the plant have potential to control mosquito population and suggest that further studies are needed in this field.

Keywords : *Cx. quinquefasciatus*, plant extract, ethanol, acetone, larvae, eggs

Conference Title : ICBHES 2014 : International Conference on Biological, Health and Environmental Sciences

Conference Location : Istanbul, Türkiye

Conference Dates : November 28-29, 2014