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

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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 leptophylum, Carica papaya, Cymbopogon citratus, Euphorbia cotinofolia, Melia azedarach, Ocimum canum, Ricinus common, and Tagetes erecta) were tested in respect of their influence on the eggs and larvae of Culex quinquifasciatus 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. quinquifasciatus. 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. quinquifasciatus. 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. guinguefasciatus, plant extract, ethanol, acetone, larvae, eggs

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