Experimentation on Larvicidal Activities of Acacia auriculiformis Dry Fruit Extracts on Different Life Cycle Stages of Anopheles sp, Culex sp, Chironomus sp and Clogmia sp for Showing Its Potential Ability as a Natural Sewage Treatment Agent

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Experimentation on larvicidal activities of Acacia auriculiformis fruit extracts on different life cycle stages of Anopheles, Culex, Chironomus and Clogmia for showing its potential ability as a larvicide. Untreated drainage and stagnant sewage water are the birthplaces of harmful mosquitoes and flies. To eradicate them in a natural way presently the effects of aqueous and ethanolic fruit flesh extract of Acacia were investigated on eggs, larvae and pupae of Anopheles, Culex, Chironomus and Clogmia which are mostly water-born vectors. Different concentrations of fruit extracts were used during experimental treatment on different life stages of these organisms. Positive control experiments have shown that both the extracts significantly lengthen the overall larval developmental period of all four species while applied in low concentrations. Ethanolic extracts are more effective than aqueous extracts of Acacia. Negative control experiments were done along with field study of natural habitats pH and TDS tolerance range of these larvae for correlation. A preliminary round of experiments showed that higher concentrations of extracts and more time is required to kill larvae of Chironomus sp and Clogmia sp.

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