

**LAVICIDAL ACTIVITY OF MEDICINAL PLANT EXTRACTS AGAINST
MOSQUITOES LARVA OF *CULEX PIFIENS* IN SAMMANTHURAI,
EASTERN PROVINCE OF SRI LANKA**

V. Sujarajini

*Dept of Biological Sciences, Faculty of Applied Sciences,
South Eastern University of Sri Lanka
vsujarajini@fas.seu.ac.lk*

Thousands of people are becoming victims of mosquito borne diseases such as malaria, dengue, chikenguniya, brain encephalitis, yellow fever, hemorrhagic fever, filaria and arbovirolosis in the world. Based on encouraging research on the use of extracts of medicinal plants in control of agricultural pests, this study aims to investigate the potential usefulness of medicinal plant extracts from Adathoda (*Justice adathoda*), kadpooravalli (*Anisochilus garnosus*), shoe flower (*Hibiscus rosacianencis*) and Gliricidia (*Gliricidia sepium*) in mosquito control. This is the first time these species of plants are considered as a control measure for *Culex pipiens*. The medicinal plants were collected from the outskirts of South Eastern University of Sri Lanka, Sammanthurai, Eastern province. Plant materials were extracted in water. 50 mosquito larvae were put in each plant extract for 24 hrs, 36 hrs, 48 hrs and 72 hrs. The mortality rate of *Culex pipiens* was higher in *Justice adathoda* extract than in *Anisochilus garnosus*, *Hibiscus rosacianencis* and *Gliricidia sepium*. The mortality rate of mosquitoes was significantly different with time and in different extracts ($P < 0.05$). This study is only a preliminary investigation but promising results can be obtained if chemical analysis of the above medicinal plants together with LD_{50} value of each plant extract against the *Culex pipiens* and effect of histopathology of the mosquito larva can be carried out.

Keywords: Justice adathoda, Anisochilus garnosus, Hibiscus rosacianencis, Gliricidia sepium, Culex pipiens