

INSECTICIDAL ACTIVITY OF SOME SRI LANKAN PLANTS

B.M.R. Bandara*, Chandralal M. Hewage*

Veranja Karunaratne*, K.A.N.P. Bandara** and S.Siril A.Wijesundera***

*Dept. of Chemistry, University of Peradeniya

**Central Agricultural Research Institute, Gannoruwa

***Botanic Gardens, Hakgala.

In view of the difficulties associated with the use of conventional pesticides, the search for insecticides which are biodegradable and less prone to induce resistant biotypes of insects has become imperative. Plants are a rich source of natural biodegradable compounds and some of them may have evolved over millions of years for defence against their pests. This study describes the investigation of 62 plant extracts derived from 33 plants for their insecticidal activity.

The test insect Aphis craccivora was cultured on cowpea, Vigna unguiculata (variety: Bushitavo) plants in the laboratory¹. The activity was evaluated using the Potter's spray tower method². The experiment was in Completely Randomized Design with four replicates. In each case, four ml of 4000 ppm emulsion of the plant extract in methanol/water (1:9) was used. Mortality counts were recorded at 24 hours after treatment.

The hot methanol extracts of Cestrum aurantiacum (leaves), Curcuma zedoaria (tubers), Hortonia angustifolia (roots) and the hot hexane extract of Pleiospermium alatum (stem bark) showed significant insecticidal activity (P 0.01) with percentage mortality of 56, 72, 75 and 90 respectively.

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References:

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