Effects of extracts from selected plants belonging to Family Meliaceae on *Epilachna vigintioctopunctata* F. (Coleoptera: Coccinellidae)

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The cucurbit beetle *Epilachna vigintioctopunctata* (Fabricius) is a major vegetable pest in Asian countries. Larvae and adults of *E. vigintioctopunctata* make economic damage to *Momordica charantia* (bitter gourd) plants by feeding on the leaves.

Pesticides are often considered as the most potent control technology for *E. vigintioctopunctata,* but the continuous use has lead to serious environmental problems. Now there is a trend to create a worldwide interest and use of age-old traditional botanical pest control agents. Extracts of these plants can be used as natural pesticides since several constituents of their leaves and seeds show marked insect control potential.

Aqueous extracts of leaves and seeds of two plants of Family Meliaceae, *Azadirachta indica* A.Juss (Neem) and *Melia dubia* Linn. (Lunumidella) have been used in the present laboratory investigations. A series of concentrations was tested to study their antifeedent and repellent effects on *E. vigintioctopunctata.*

The feeding activity (consumed leaf area) of the Epilachna beetle larvae was measured by cut and weight method. The repellency was studied by using a two-choice olfactometer and measured by calculating percentage of adults in the untreated area within two and half hours. Effects of Neem seed kernel extracts on the feeding activity of *E. vigintiooctopunctata* were significantly higher than those of leaf extracts. On the other hand, leaf extracts of Lunumidella were more effective compared to its seeds. Comparatively Lunumidela leaf extract was more effective than Neem leaf extracts were as the seed extracts of neem elicited significantly higher activity than the seed extracts of Lunumidella on *Epilachna* beetle. Both Neem seeds and Lunumidella leaf extracts produced marked repellent effects on Epilachna beetle.

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