

Effect Of *Tephrosia purpurea* (Family: Fabaceae) Formulations On Oviposition By The Pulse Beetle *Callosobruchus chinensis* Linn.

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Abstract : Among important insect pests of stored grains, the pulse beetle *Callosobruchus chinensis* Linn. (Coleoptera: Bruchidae) is one such pest causing considerable damage to stored pulses. An effort was made to screen plant *Tephrosia purpurea* (Family: Fabaceae) for its efficacy against the said pest. The pulse beetle *C. chinensis* was raised on green gram *Vigna radiata* in incubators maintained at $28 \pm 2^\circ\text{C}$ and 70% RH. Different formulations using plant parts (root, stem, leaf and fruit) were employed in the form of aqueous suspension, aqueous extract and ether extract and the treatments were made using different dose concentrations, namely 1%, 2.5%, 5% and 10%, besides normal and control. Specific number of adult insects were released in muslin cloth covered beakers containing weighed green gram grains and treated with different dose concentrations (w/v). Observations for the number of eggs laid by the pest insect *C. chinensis* was recorded after three days of treatment and it was observed that in general all the treatments of the plant resulted in significant decrease in the eggs laid (no/pair) by the insect, suggesting that the selected plant has a potential to be used against *C. chinensis*.

Keywords : *Callosobruchus chinensis*, egg laying, *Tephrosia purpurea*, Fabaceae, plant formulations

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