

Effect of Selected Plant Aqueous Extracts on Controlling of Brown Plant Hopper (*Nilaparvatalugens*), Paddy Bug (*Leptocorisaoratorius*) And Rice Leaf Folder (*Cnaphalocrocismedinalis*)

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Cnaphalocrocismedinalis, *Nilaparvatalugens* and *Leptocorisaoratorius* are major insect pests in rice which cause a considerable loss of annual rice yield. Synthetic pesticides are widely used to manage pest attacks in rice cultivations in Sri Lanka. Compared to the synthetic pesticides, plant based extracts are usually safer to the environment and humans. This study was conducted to test the bio-efficacy of four selected plant extracts viz *Azadirachtaindica* (Neem), *Annonamuricata* (Anona), *Calotropis gigantean* (Wara) and *Lantana camara* (Gadapana) against *Cnaphalocrocismedinalis*, *Nilaparvatalugens* and *Leptocorisaoratorius* and to compare the insecticidal activity of the commonly used synthetic pesticide with plant extracts against the above-mentioned pests. Aqueous extractions of these plant species were made in three concentrations, i.e. 10 g/100 ml, 50 g/100 ml and 100 g/100 ml. Tested synthetic pesticides against *Cnaphalocrocismedinalis*, *Nilaparvatalugens* and *Leptocorisaoratorius* were Tebufenozide (20 ml/10l), Thiamethoxam (5 g/16 l) and Carbosulfan (560 ml/lac) respectively. The experiment was laid out in Complete Randomized Design with fourteen treatments including a control with three replicates for each pest. Ten second instar larvae of *Cnaphalocrocismedinalis*, fifteen adult of *Nilaparvatalugens* and thirty adult of *Leptocorisaoratorius* were taken as experimental units. Bioassay methodology was used. Mortality percentage at 96 hours after application of each extract was recorded. It was concluded that in controlling of *Cnaphalocrocismedinalis*, *Nilaparvatalugens* and *Leptocorisaoratorius*, the most efficient plant extracts were *Annonamuricata* (50 g/100 ml), *Azadirachtaindica* (50 g/100 ml) and *Calotropis gigantean* (10 g/100 ml) respectively.

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