

## Evaluation Bio efficacy of botanicals on the management of Coconut mites (*Aceria guerreronis* Keifer)

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The study was conducted to evaluate the bio efficacy of aqueous extract of Neem seeds, Lantana leaf and Tobacco stem at different concentrations (50 g/L, 25 g/L, 12.5 g/L) on the mortality of coconut mites *Aceria guerreronis* Keifer. The experiment was carried out in a Completely Randomized Design (CRD) with 5 replications. The bio efficacy of the selected botanicals was determined based on the mortality of *Aceria* mites.

In this experiment all the tested botanicals significantly ( $p < 0.05$ ) reduced the population of adults and nymphs of *Aceria* mites. However, the performance of Neem at 12.5 g/L and Lantana at 12.5 g/L and 25 g/L were lower in controlling this pest, compared to other treatments. The efficacy of Tobacco at 50 g/L was significantly ( $p < 0.05$ ) superior in controlling coconut mites than other treatments.

Tobacco stem extract applied at the rate of 50 g/L reduced the population of coconut mite by 60 – 65% and hence it may be recommended as a suitable botanical pesticide to reduce mites on coconut.

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