

The efficacy of the methanol extracts of leaves of Lemongrass- (*Cymbopogon citratus* D.C. Stapf) and Curry leaf- (*Murraya koenigii* Spreng) on cowpea bruchid- (*Callosobruchus maculatus* F.)

The methanol extracts of leaves of lemongrass and curry leaf were evaluated for their insecticidal properties against cowpea seed bruchid - *Callosobruchus maculatus* using residual film exposure and treated seed bioassays. An appropriate dose of each plant was dissolved in acetone and mixed with 50 cowpea seeds separately. The seeds were kept for 10 min. to evaporate the solvents and placed in a glass vial (60 ml) for treated seeds bioassay. The inner surface of a glass vial was treated with the methanol extract of each plant separately and used for the residual film assay. Five pairs of 5-10 h old bruchid were introduced to each treatments and the mortality was observed after 24 h exposure period. In residual film assay, 100 % mortality of bruchid was observed at doses of 22.3×10^{-3} and 40.0×10^{-3} mg of lemongrass and curry leaf extracts respectively. The percentage mortality was about 81 at the dose of 140.0×10^{-3} mg in treated seed bioassay. The oviposition and F1 adult emergence were significantly reduced in appropriate doses. The LC₅₀ values of lemongrass, curry leaf and pirimiphos methyl (Actellic) were, 0.120 g/l and 0.167 g/l and 8.550×10^{-8} g/l respectively. There was no effect of both lemongrass and curry leaf extracts on seed viability. These findings indicate the possibilities of using the methanol extracts of both lemongrass and curry leaf as a bio pesticide to control *C. maculatus* in stored cowpea. The active ingredients of these extracts should be further studied.