**B-54: Insecticidal action of *Annona squamosa* on *Callosobruchus maculatus* F**

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In experiments conducted to find out the insecticidal effect of acetone and

ethanol extracts of *A. squamosa* leaves on *C. maculatus* (IITA), when treated with cowpea seeds, it was found that soaking time, (i.e. 1 min to 1 h) had no effect on egg laying and adult emergence as far as the acetone extract was concerned. With regards to ethanol extract also, there was no effect of soaking time on egg laying. However, with respect to adult emergence by the seeds treated with ethanol extract, higher the soaking period lower the adults/seed. With different concentrations of acetone and ethanol extracts on *C. maculatus*, higher the concentration lower the eggs/seed and adults/seed. There were no adults when cowpea seeds were treated with acetone extract at 12% w/w and above. In comparison with untreated and solvent controls, there were higher number of eggs when seeds were treated with lower concentrations (i.e. 1.5 and 3.0% w/w) of the ethanol extracts.

Acetone as well as ethanol extracts of freeze dried leaves of *A. squamosa* were effective over air dried samples in reducing adult emergence when infested seeds with equal number of eggs were treated with them.

Efficiency of both extracts of *A. squamosa* reduced when the treated cowpea seeds were stored, indicating no effect at 42 days after treatment, as far as the egg laying on seeds treated with ethanol extract was concerned. However, adult emergence was significantly low when treated seeds were stored over the same period for both extracts.