



The nematicidal properties of aqueous extract of ripe *Garcinia cambogia* L. (Family: Clusiaceae) fruits

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The nematicidal properties of aqueous extract of ripe "*Garcinia cambogia*" fruits on one-day old second-stage juveniles (J_2 s) of *Meloidogyne incognita* was tested at the standard concentration (S) {(1:2 (w/v))} and four dilutions, i.e., 20%, 40%, 60% and 80% of S. Sterile distilled water (SDW) was used as untreated controls. The J_2 s in 1 ml SDW were exposed to 1 ml of test extract for 48 hours at the ambient temperature ($30^\circ\text{C}\pm 2$). Significant differences ($P < 0.001$) in mortality of J_2 s between the untreated controls and all the other concentrations of *G. cambogia* extract were found. Moreover, significant differences were recorded among the mortality of J_2 s in five concentrations tested and mortality was dependent on dose rates. Highest J_2 mortality (100%) was detected at 80% S and S, whereas the lowest ($16.41\% \pm 1.36$) was detected at 20% S. Moreover, significant correlation (Correlation coefficient = 0.94; $P < 0.01$) was found between the percentage mortalities of J_2 s and the concentration of the extract. The LC_{50} value was found at 41.90% S. The results showed that *G. cambogia* fruit extract has a nematicidal potential and this property could be used in nematode management systems.

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