

Garlic and ginger extracts as feeding deterrents for the giant African snail (*Achatina achatina*): a preliminary study

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African giant snail (*Achatina achatina*) is known as a serious pest of seedlings and leaf vegetables throughout the world including Sri Lanka. Their nocturnal and hiding behavior make them very difficult to be controlled using conventional pest control methods. Present preliminary study aimed to find out the potential use of the extracts of two spices namely garlic and ginger as feeding deterrents for *A. achatina*. Snails hatched from one egg clutch with body weight ranged from 3.3 to 4.9 g were used in the study. They were divided as the control group, garlic-treated group and ginger-treated group using 21 snails. The snails were daily fed with fresh tree spinach leaves (*Talinum paniculatum*) treated with distilled water (control) and either 2.5% aqueous extracts of garlic or ginger. Leaf area was measured by Planimeter before the treatment and one day after feeding. Body weights of experimental snails were recorded in 72 hrs. intervals from June 2018 to October 2018. The results reveals that the snails do not prefer to feed on leaves treated with aqueous extracts of both garlic and ginger and percentage feeding preference for garlic (66.67%) and Ginger (45.0%) was lower than that of the control (78.72%). At the end of the experiment (66th day), mean body weight of snails which fed on garlic treated leaves (3.21 g) was lower compared to the mean body weights of those fed on ginger treated leaves (3.6667 g) and the control (4.6033 g). Findings of the present study indicate the possible use of garlic extract as a feeding deterrent for *A. achatina* and further studies are needed to assess the effects of these extracts at field level.

Keywords: *Achatina achatina*, feeding deterrents, garlic extract, ginger extract

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