Survival and Avoidance Response of the Freshwater Gastropod Melanoides Tuberculatus (Muller) to Different Concentrations of Tobacco Waste.

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Abstract

The Gastropod *Melanoides tuberculatus* plays a significant role in hampering fish larval production in earthen ponds. This study investigated use of tobacco waste to assess behavioural and survival responses of *M. tuberculatus* at different concentrations of tobacco waste solution of 0.25, 0.5, 0.75, 1.0, 1.25, 1.5, 1.75 and 2 g L^{-1}. Mean escape time varied significantly among concentrations ($P < 0.05$). Escape time decreased in 1-, 2- and 3-day-old solutions. Percentage survival decreased significantly with increasing concentrations of tobacco waste solution and exposure time ($P < 0.05$). Concentrations of 1.75 g L^{-1} and 2.0 g L^{-1} had high hazard ratios and low survival rates of gastropods and were the most effective in eradication of *M. tuberculatus*, hence recommended dose for preparing ponds for stocking. We conclude that tobacco waste solution can be used for control of *M. tuberculatus*.

Keywords.

Freshwater, Gastropod, Melanoides ,Tuberculatus, Tobacco Waste.