Molluscicidal and feeding deterrent activity of crude plant extracts on Pomacea maculate Perry

ABSTRACT

This study was focused on molluscicidal effect and feeding deterrent activity of saponin from five different plant materials; Andrographis paniculata, Entada spiralis, Ficus deltoidea, Furcraea selloa and Ipomoea batatas. Crude plant extracts were prepared from plant powders using methanol. The crude extracts were then tested on Pomacea maculata using five different concentrations (5, 10, 15, 20 and 25 ppm, respectively) against niclosamide (control). After 72 h of exposure, the highest percentage of mortality of 80% was achieved from 15 ppm of F. selloa. Two analyses were conducted to observe the feeding deterrent activity and after 24 h, both analyses demonstrated the feeding deterrent activity in both crude extracts (F. selloa and E. spiralis) similar in niclosamide.

Keyword: Crude extract; Feeding deterrent; Molluscicidal; Mortality; Saponin