

ABSTRACT

The golden apple snail (*Pomacea canaliculata* L.) is a major pest in rice cultivation, potentially reducing crop yield significantly. Excessive use of synthetic molluscicides may harm the environment and non-target organisms. This study aims to evaluate the single and combined toxicity (1:1 ratio) of starfruit leaf powder (*Averrhoa bilimbi* L.) and chromolaena leaf powder (*Chromolaena odorata* L.) as botanical molluscicides against golden apple snails. The research was conducted in Paloh Igeuh Village, Dewantara District, North Aceh Regency from November 2024 to March 2025 using a Completely Randomized Design (CRD). Results showed that both single and mixed applications caused mortality in golden apple snails. Chromolaena leaf powder demonstrated higher toxicity compared to starfruit leaf powder. The mixture at a 1:1 ratio showed increased mortality compared to single treatments, indicating a potential synergistic effect of the botanical molluscicides. Based on the combination index, the mixture weak synergistic, and strong synergistic effects.

Keywords: *Averrhoa bilimbi*, *Chromolaena odorata*, botanical molluscicide, *Pomacea canaliculata*