

ABSTRACT

The golden snail (*Pomacea canaliculata*) is the main pest that attacks many rice plants, it can reduce the production and productivity of the plant's yield value. One alternative that can be done is the use of vegetable molluscicides. Utilization of botanical molluscicides in controlling golden snail pests to reduce the negative impacts caused by synthetic molluscicides. Botanical molluscicides can be used singly or in mixed form. This botanical molluscicide is made from the breadfruit plant (*Artocarpus altilis*) and areca nut (*Areca catechu*). The research aims to test the toxicity level of single and mixed breadfruit leaf powder and areca nut seeds on the mortality of golden snail pests. This research was conducted in Ulee Pulo Village, Dewantara District, North Aceh Regency. This study was arranged in a nonfactorial Completely Randomized Design (CRD). Test methods include single and mixed toxicity tests. The results showed that single and mixed applications of breadfruit leaf powder and areca nut powder could cause mortality with varying death rates at each dose. Areca nut seed powder has higher toxicity than breadfruit leaf powder. Application of a mixture of breadfruit leaf powder and areca nut powder gave a higher mortality percentage compared to single applications. Based on the combination index, a mixture of breadfruit leaf powder and areca nut powder with a dose ratio of 1:2 and 2:1 is antagonistic, additive, weak synergistic and strong synergistic.

Keywords: *Areca catechu*, *Artocarpus altilis*, botanical molluscicide, *Pomacea canaliculata*.