

**EFFICACY OF DUMBCANE (*Dieffenbachia picta* Schott.) STEM EXTRACTS
AGAINST GOLDEN APPLE SNAIL (*Pomacea canaliculata* L.)**

A Project Report

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BACHELOR OF SCIENCE IN AGRICULTURE

By

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ABSTRACT

The study was conducted at the Research and Development Center, College of Agriculture, Resources, and Environmental Sciences, Central Philippine University, Jaro, Iloilo City from November 20, 2018 to March 15, 2019. The study aimed to evaluate the efficacy of dumbcane (*Dieffenbachia picta Schott.*) stem extract against golden apple snail (GAS). This study utilized five experimental treatments namely, three different concentrations of dumbcane stem extracts (20%, 30%, 40%), Synthetic molluscicide as the positive control, and distilled water as the negative control. These were laid out in a completely randomized design with three replications. The results of the study one day after application revealed a comparable GAS mortality of 23.33 to 33.33% in the plots treated with DSE but are significantly lower than those sprayed with synthetic molluscicide. The negative control resulted in zero GAS mortality. The same trend was seen for data taken seven and fourteen days after treatment. Plant height taken 2 and 6 weeks after sowing (WAS) did not differ significantly while at 4 WAS contained a significant number of GAS that resulted in an apparently more cuts in the stem. The height of rice plants in the negative control being the shortest and those in the positive control being the tallest. The response of plants to GAS at two weeks old were rated as 1.0 for the three concentrations and were rated 3.0 in the negative control. Plants at four weeks old were rated 5.0 to 7.0 for the three concentrations and for the untreated plants which means that plants were moderately resistant and susceptible while synthetic molluscicide resulted in 100% mortality having a damage free. Based on the findings of

the study, the effect of DSE was not successful in controlling GAS due to the failure to maintain the water level.