

***In Vitro Test of Pluchea indica Leaf Extract on the Mortality
of Leptocorisa oratorius***

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ABSTRACT

*Rice production faces various challenges, one of which is the attack of *Leptocorisa oratorius*. In pest management, farmers tend to rely on chemical insecticides, which leads to the development of resistance. This study aims to determine the effect of botanical insecticides derived from *Pluchea indica* leaf extract on the mortality of *Leptocorisa oratorius* in rice plants. This study was conducted from July to August 2025 at the Bioscience and Plant Protection Laboratory, Jember State Polytechnic. The experiment used a Completely Randomized Design (CRD) Non-Factorial with six treatments and four replications, consisting of a control and *Pluchea indica* leaf extract concentrations of 5%, 10%, 15%, 20%, and 25%. Observational data were analyzed using ANOVA, and if there was a significant effect, further analysis was carried out using the Least Significant Difference (LSD) test at a significance level of 5%. Lethal Concentration values were determined through probit analysis in SPSS based on mortality data. The results showed that botanical insecticides from *Pluchea indica* leaves had a significant effect on rice pest mortality in treatment P5 (25% concentration) with an LC_{95} value of 41.78%*

Keywords: *attact, botanical insecticide, mortality, Pluchea indica.*