Toxicity Test Of Amethyst Fruit Extract Against Armyworm Pest Mortality Spodoptera Litura Supervised by: Rudi Wardana, S.Pd. M.Si

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ABSTRACT

Amethyst is one of the plants that can be used as a natural pesticide or often referred to as a vegetabel pesticide, because it contains alkaloid and steroid compounds that can inhibit and stop the growth of insects. The purpose of this study was to determine the effective concentration in controlling Spodoptera litura armyworm pests on soybean plants. This research was conducted from November 2022 to March 2023 at the Jember State Polytechnic. This research was conducted using a completely randomized design with 5 treatments and repeated 5 times. Further test using the least significant difference (LSD) 5%. Based on the analysis that has been carried out, the results show that a 45% concentration of amethyst fruit extract can produce an efficacy value of 80% where this value can be a reference in determining the minimum dose in controlling armyworm pests. The highest pest mortality parameter was found in the treatment containing 60% amethyst fruit extract with an average of 100% mortality, the highest average death rate with a value of 0.40 hours/head was found in the treatment with a concentration of 60% amethyst fruit extract, the percentage The highest reduction in feeding activity was found in the 60% concentration treatment with an average of 29.6%.

Keyword: Spodoptera litura, Toxicity test, amethyst fruit extract