

**Effect of Bioinsecticide on Babandotan Weed (*Ageratum conyzoides* L.) on  
Mortality of Caterpillar Pest on Peanut Plants**  
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**ABSTRACT**

*Yield losses due to armyworm (*Spodoptera litura* F.) attack can reach 80%. In this study, armyworm pest control was carried out using a bioinsecticide for babandotan weed (*Ageratum conyzoides* L.). The purpose of this study was to obtain the right concentration of babandotan weed bioinsecticide (*A. conyzoides* L.) in controlling armyworm pests, and compare the bioinsecticide of babandotan weed (*A. conyzoides* L.) and the chemical pesticide (Deltamethrin 25/g/l) on population and attack intensity of *S. litura* L. pests, and peanut yields. This research was conducted from April to July 2022 at the Perlintan Laboratory and Bioscience Laboratory and Cultivation Land on Jalan Branjangan, Bintoro Village, Petrang District. The research was carried out in two stages, and the first stage was to test the effectiveness of bioinsecticides to determine the reference concentration used in the field. The mortality test used a completely randomized design (CRD) with 6 levels of treatment, namely concentrations of 0%, 10%, 15%, 20%, 30%, and 50%. The second stage of the research was a field test by comparing two treatments, namely the bioinsecticide treatment of babandotan weed (*A. conyzoides* L.) with a concentration of 50% and chemical pesticide treatment (Deltamethrin 25 g/l). Observation variables included attack intensity, armyworm pest population in the field, and weight of fresh pods. The results of the Insecticide Efficacy test showed that the effective concentration of babadotan weed bioinsecticide (*A. conyzoides* L.) against Caterpillar Pest (*S. litura* F.) was 50%. The intensity of attack and Caterpillar Pest (*S. litura* F.) population in the bioinsecticide treatment of babadotan weed (*A. conyzoides* L.) was lower than the chemical pesticide treatment with the active ingredient Delrametrin. The weight of fresh pods in the bioinsecticide of babadotan weed (*A. conyzoides* L.) was higher than that of the chemical pesticide with the active ingredient Deltamethrin.*

**Keywords:** *Peanuts, Babandotan Weed Bioinsecticide, Grayak Caterpillar*