

**Effect of Time Interval Application of *Beauveria bassiana* in Controlling
Pests of *Spodoptera frugiperda* on Corn Plants**
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ABSTRACT

Spodoptera frugiperda is a harmful pest on maize. These larvae damage shoots, young leaves or plant growth points. *B. bassiana* is a biological that has been shown to be able to control *S. frugiperda* effectively. This research was carried out in two stages, namely the first stage of research carried out at the Plant Protection Laboratory and the second stage at the Jember State Polytechnic Land. The purpose of the first stage is to determine the reference concentration in the field based on mortality and insecticide efficacy tests. The second stage aims to observe the intensity of attack *S. frugiperda* on corn plants with an interval of 2 days spraying once in block 1 and every 5 days in block 2 as well as observing the weight of cobs and dry shells per sample. The first stage of data analysis used a completely randomized design with 5 treatments and was repeated 6 times. Further test using the Least Significance Different (BNT) 5%. The second stage of data analysis was the intensity of the attack at 2 and 5 days application time interval and the weight of wet and dry shelled cobs using the non-parametric analysis test *Mann Whitney*. Based on the results of further tests, the efficacy of the insecticide *B. bassiana* to control the 3rd instar armyworm was 15ml/L and became the reference concentration in the field. With the application of once every 2 days, the intensity of the attack of *S. frugiperda* before the application of *B. bassiana* was 7% and after the application was 3%. Then with the application of *B. bassiana* every 5 days, the intensity of attacks *S. frugiperda* before the application is 3% and after the application is 1%. The average weight of wet cobs per sample for blocks 1 and 2 were 248 and 237 grams, respectively. The average dry shell weight per sample in block 1 and block 2 was 150.62 and 167 grams, respectively.

Keywords: *Beauveria bassiana*; Application Time Interval ; Corn ; *Spodoptera frugiperda*