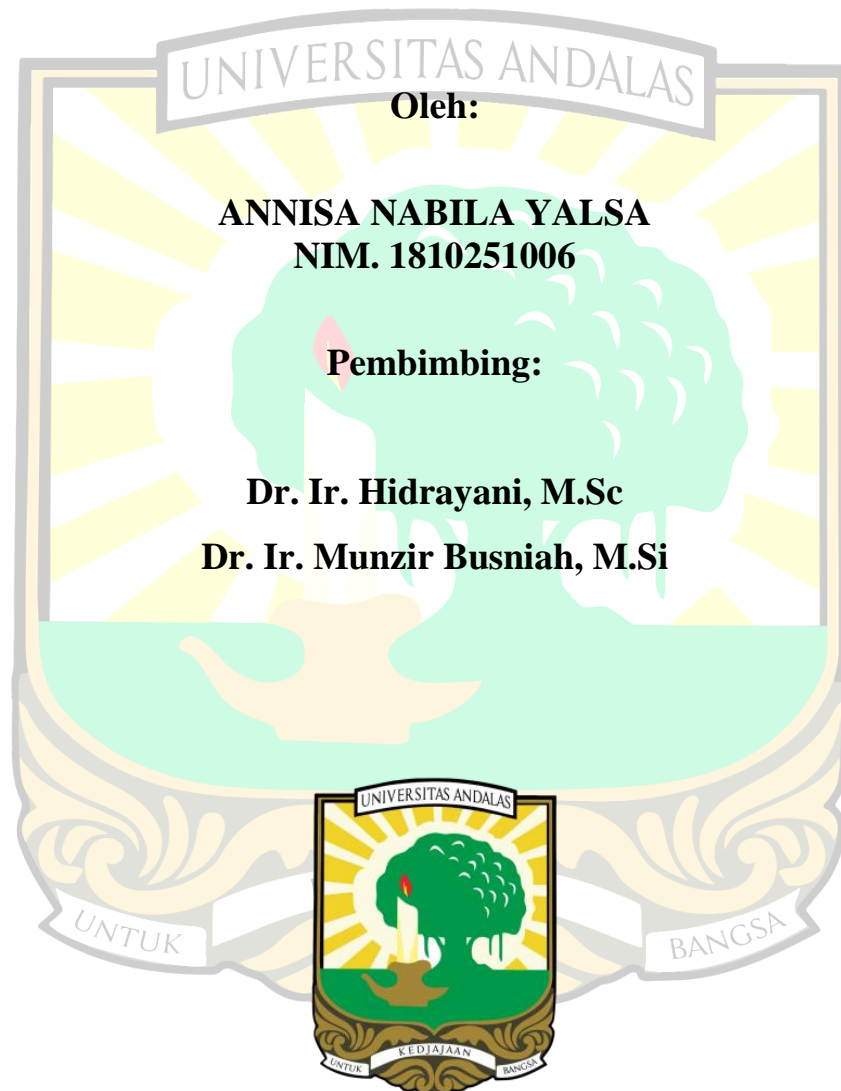


APLIKASI *Beauveria bassiana* (Bals.) Vuill DAN *Bacillus thuringiensis* (Ernst Berliner) UNTUK PENGENDALIAN WERENG BATANG COKLAT (*Nilaparvata lugens* Stal.) DI LAPANGAN

SKRIPSI



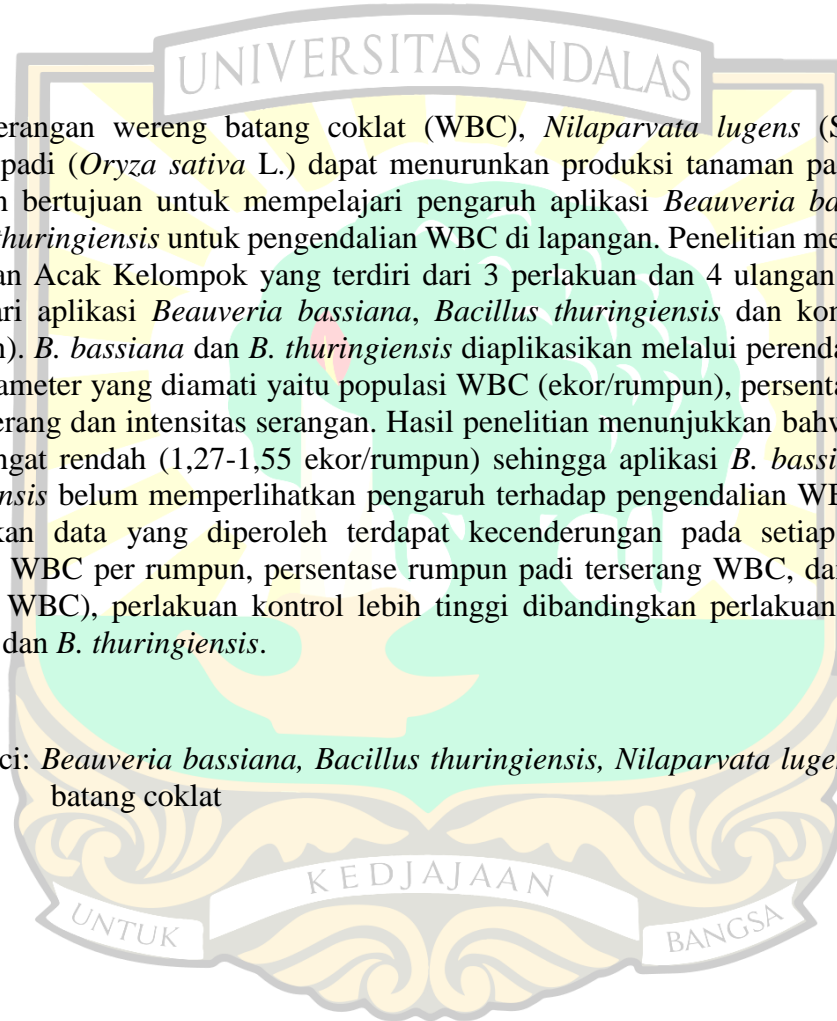
**FAKULTAS PERTANIAN
UNIVERSITAS ANDALAS
PADANG
2024**

APLIKASI *Beauveria bassiana* (Bals.) Vuill DAN *Bacillus thuringiensis* (Ernst Berliner) UNTUK PENGENDALIAN WERENG BATANG COKLAT (*Nilaparvata lugens* Stal.) DI LAPANGAN

ABSTRAK

Serangan wereng batang coklat (WBC), *Nilaparvata lugens* (Stal.), pada tanaman padi (*Oryza sativa* L.) dapat menurunkan produksi tanaman padi 10-50%. Penelitian bertujuan untuk mempelajari pengaruh aplikasi *Beauveria bassiana* dan *Bacillus thuringiensis* untuk pengendalian WBC di lapangan. Penelitian menggunakan Rancangan Acak Kelompok yang terdiri dari 3 perlakuan dan 4 ulangan. Perlakuan terdiri dari aplikasi *Beauveria bassiana*, *Bacillus thuringiensis* dan kontrol (tanpa perlakuan). *B. bassiana* dan *B. thuringiensis* diaplikasikan melalui perendaman benih padi. Parameter yang diamati yaitu populasi WBC (ekor/rumpun), persentase rumpun padi terserang dan intensitas serangan. Hasil penelitian menunjukkan bahwa populasi WBC sangat rendah (1,27-1,55 ekor/rumpun) sehingga aplikasi *B. bassiana* dan *B. thuringiensis* belum memperlihatkan pengaruh terhadap pengendalian WBC. Namun berdasarkan data yang diperoleh terdapat kecenderungan pada setiap parameter (populasi WBC per rumpun, persentase rumpun padi terserang WBC, dan intensitas serangan WBC), perlakuan kontrol lebih tinggi dibandingkan perlakuan dengan *B. bassiana* dan *B. thuringiensis*.

Kata kunci: *Beauveria bassiana*, *Bacillus thuringiensis*, *Nilaparvata lugens*, Wereng batang coklat



APPLICATION OF *Beauveria bassiana* (Bals.) Vuill and *Bacillus thuringiensis* (Ernst Berliner) FOR CONTROL OF BROWN STEM LEAFHOPPER (*Nilaparvata lugens* Stal.) IN THE FIELD

ABSTRACT

Brown Planthopper (BPH), *Nilaparvata lugens* (Stal.) attack on rice plants (*Oryza sativa* L.) can reduce rice production by 10-50%. The research objective to study the effect of *Beauveria bassiana* and *Bacillus thuringiensis* application for was BPH control in the field. The study was conducted in a Randomized Block Design consisting of 3 treatments and 4 replicates. Treatments consisted of *B. bassiana* and *B. thuringiensis* application and control (no treatment). *B. bassiana* and *B. thuringiensis* were applied by soaking the rice seeds. Parameters observed were BPH population (ind/plant), percentage of rice clumps attacked, and damage intensity. The results showed that the population of BPH was very low (1.27-1.55 ind/plant) so that the application of *B. bassiana* and *B. thuringiensis* had not shown any effect on BPH control. However, based on the data obtained, there was a trend in each parameter (BPH population per clump, percentage of rice clumps attacked by BPH, and intensity of BPH attack), the control treatment was higher than the treatment with *B. bassiana* and *B. thuringiensis*.

Keywords: *Brown planthopper, Beauveria bassiana, Bacillus thuringiensis, Nilaparvata lugens*

