

**VIRULENSI BEBERAPA ISOLAT *Beauveria bassiana* (Bals.)
TERHADAP KEPIK KUBIS *Eurydema pulchrum* (Westw.)
(Hemiptera:Pentatomidae)**

SKRIPSI



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Abstrak

Kepik kubis (*Eurydema pulchrum* Westw.) salah satu hama tanaman kubis. *Eurydema pulchrum* dapat dikendalikan dengan *Beauveria bassiana* (Bals.). Penelitian bertujuan untuk mendapatkan isolat jamur *B. bassiana* yang lebih virulen terhadap *E. pulchrum*. Penelitian telah dilakukan di Laboratorium Pengendalian Hayati Jurusan Hama dan Penyakit Tumbuhan Fakultas Pertanian Universitas Andalas Padang dari bulan Oktober sampai Desember 2017. Penelitian menggunakan rancangan acak lengkap (RAL) dengan 5 perlakuan (kontrol, BbKT2B2.2; BbTD3.1.2; BbKA1.2 dan BbWS) dan 4 ulangan. Masing-masing ulangan terdiri dari 10 ekor nimfa instar IV *E. pulchrum*. Suspensi isolate *B. bassiana* konsentrasi 10^8 konidia/ml diinokulasikan pada nimfa instar IV *E. pulchrum*. Data diperoleh dari hasil pengamatan mortalitas nimfa, persentase imago terbentuk, jumlah telur yang dihasilkan dan masa praoviposisi dan oviposisi. Data tersebut dianalisis menggunakan sidik ragam, apabila berbeda nyata dilanjutkan dengan uji *Least Significant Different* (LSD) pada taraf 5%. Hasil penelitian menunjukkan bahwa isolat *B. bassiana* yang lebih virulen terhadap *E. pulchrum* adalah isolat yang berasal dari walang sangit (BbWS) dengan mortalitas sebesar 82.50% dan nilai LT_{50} selama 4.14 hari. Persentase imago terbentuk 12.50% dan rata-rata telur yang dihasilkan sebanyak 19.75 butir.

Kata Kunci: *Beauveria bassiana*, *Eurydema pulchrum*, Isolat, Virulensi.



**THE VIRULENCE OF ISOLATES *Beuveria bassiana* (Bals.)
AGAINST CABBAGE LADYBUG *Eurydema pulchrum* Westw.
(HEMIPTERA: PENTATOMIDAE)**

Abstract

Cabbage Shield Bug (*Eurydema pulchrum* Westw.) is known as cabbage pests. *E. pulchrum* can be controlled by *Beauveria bassiana* (Bals.). The study aimed to obtain *B. bassiana* fungi isolates which were more virulent to *E. pulchrum*. The research has been conducted in the Biological Control Laboratory, Department of Plant Pests and Diseases, Faculty of Agriculture, Universitas Andalas, Padang from October to December 2017. The study used a completely randomized design (CRD) with five treatments (control, BbKT2B2.2; BbTD3.1.2; BbKA1.2 and BbWS) and 4 replications. Each replication consisted of 10 individuals of *E. pulchrum* 4th instar nymph. Suspension of *B. bassiana* isolate with a concentration of 10^8 conidia/ml was inoculated to *E. pulchrum* nymph. Data obtained from the observation were nymph mortality, the percentage of imago formed, the number of eggs produced and the pre-oviposition and oviposition periods. The data was analyzed using variance if it was significantly different followed by the Least Significant Different (LSD) test at the 5% level. The results showed that the most virulent of *B. bassiana* isolates to *E. pulchrum* were isolates derived from stink bugs (BbWS) with 82.50% mortality and LT₅₀ values for 4.14 days. The percentage of imago formed 12.50% and the average egg produced was 19.75.

Keywords: *Beauveria bassiana*, *Eurydema pulchrum*, isolate, virulence.

