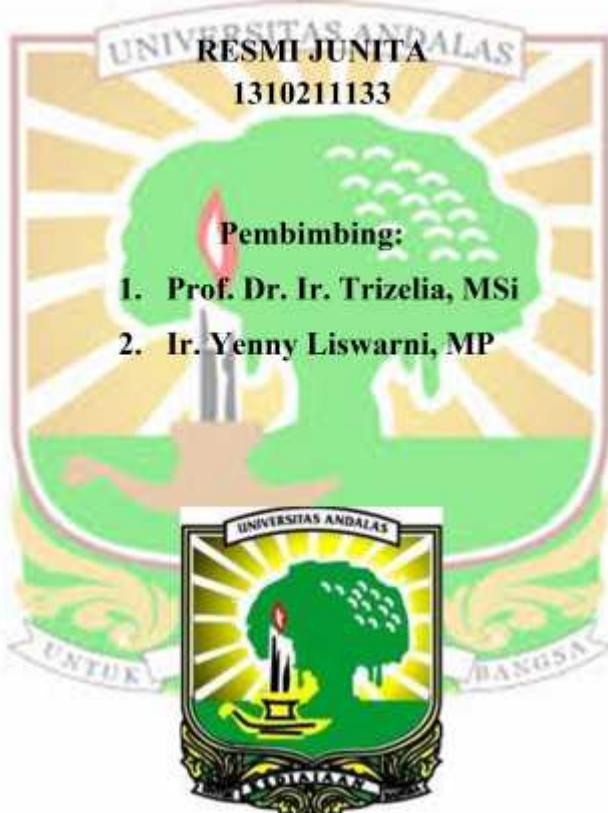


**VIRULENSI BEBERAPA ISOLAT JAMUR *Metarhizium* sp.
TERHADAP KEPIK KUBIS (*Eurydema pulchrum* (Westw.))
(Hemiptera:Pentatomidae)**

SKRIPSI

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VIRULENSI BEBERAPA ISOLAT JAMUR *Metarhizium* sp. TERHADAP KEPIK KUBIS (*Eurydema pulchrum* (Westw.))

(Hemiptera:Pentatomidae)

ABSTRAK

Salah satu hama yang menyerang tanaman kubis-kubisan adalah kepik kubis (*Eurydema pulchrum* (Westw.)). Hama ini dilaporkan menyerang lebih dari 50 spesies tanaman kubis-kubisan dan menyebabkan kerusakan hingga lebih dari 60%. Salah satu pengendalian *E. pulchrum* yang dapat dilakukan adalah penggunaan jamur entomopatogen *Metarhizium* sp. Tujuan penelitian adalah untuk mendapatkan isolat jamur *Metarhizium* sp. yang lebih virulen terhadap *E. pulchrum*. Penelitian ini menggunakan Rancangan Acak Lengkap (RAL) dengan 5 perlakuan (Met3b, MetApKb, MetKtBs, MetcTd dan kontrol) dan 4 ulangan. Masing-masing ulangan terdiri dari 10 ekor nimfa instar IV *E. pulchrum*. Isolat *Metarhizium* sp. diinokulasikan pada nimfa instar IV *E. pulchrum* yang terinfeksi diisolasi kembali dan dimurnikan pada medium SDAY. Data dianalisis menggunakan sidik ragam, apabila berbeda nyata dilanjutkan dengan uji *Least Significant Different* (LSD) pada taraf 5%. Hasil uji virulensi beberapa isolat jamur *Metarhizium* sp. terhadap nimfa instar IV *E. pulchrum* diperoleh isolat Met3b yang lebih virulen dibandingkan isolat lainnya, dengan mortalitas nimfa instar IV sebesar 87,50% dengan LT_{50} 4,45 hari. Isolat Met3b juga menghambat pembentukan imago dan mengurangi jumlah telur yang diletakkan. Masa pra oviposisi imago betina *E. pulchrum* setelah aplikasi *Metarhizium* sp. sedikit lebih panjang (10 hari) dibandingkan kontrol (8 hari). Masa post oviposisi imago betina *E. pulchrum* setelah aplikasi *Metarhizium* sp. lebih pendek (3 hari) dibandingkan kontrol (5 hari). Aplikasi *Metarhizium* sp. pada nimfa instar IV tidak mempengaruhi masa oviposisi imago betina *E. pulchrum* yaitu sama-sama 5 hari.

Kata kunci : virulensi, *Metarhizium* sp, *E. pulchrum*

**VIRULENCE OF SEVERAL ISOLATES of *Metarhizium* sp.
AGAINST LADYBUGS CABBAGE (*Eurydema pulchrum* (Westw.))
(Hemiptera: Pentatomidae)**

ABSTRACT

One of the pests attack cabbage plants are ladybugs cabbage (*Eurydema pulchrum* (Westw.)). This pest is reported to attack more than 50 species of cabbage plants and caused damage more than 60%. One of the control *E. pulchrum* was used of entomopathogenic fungus *Metarhizium* sp. The objective this research was to obtain the isolates of *Metarhizium* sp. which is more virulent to *E. pulchrum*. This research used a Randomized Complete Design with 5 treatment (Met3b, MetApKb, MetKtBs, MetcTd and control) and four replicates. Each replication consists of ten fourth instar nymphs of *E. pulchrum*. The data were analysed using analysis of variance and significant differences were further analysed using Least Significant Different (LSD) test at 5% level. Virulence test of several isolates of *Metarhizium* sp. against fourth instar nymphs. Isolate Met3b had the highest virulence which caused 87.50% mortality of 4nd instar nymphs, with a LT₅₀ of 4.45 days. Isolate Met3b also inhibits the formation of adults and reduce the number of eggs are deposited. Pre-oviposition period of *E. pulchrum* after the application of *Metarhizium* sp. slightly longer (10 days) than control (8 days). Post-oviposition of *E. pulchrum* after the application of *Metarhizium* sp. shorter (3 days) than control (5 days). Application of *Metarhizium* sp. against nymph does not affect the oviposition period of *E. pulchrum*.

Keywords: Virulence, *Metarhizium* sp., *E. pulchrum*