

**ISOLASI JAMUR ENTOMOPATOGEN DARI TANAH DENGAN METODE  
INSECT BAIT DAN MEDIUM SELEKTIF OA+CTAB TERHADAP  
LARVA *Tenebrio molitor* L. (COLEOPTERA: TENEBRIONIDAE)**

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**ABSTRAK**

Insektisida kimia dapat menimbulkan pengaruh negatif terhadap lingkungan sehingga perlu dicari teknologi alternative untuk pengendalian hama dan vector penyakit. Jamur entomopatogen merupakan biopestisida yang mudah didapatkan di alam. Selain didapatkan dari serangga yang terinfeksi, jamur entomopatogen juga dapat diisolasi dari tanah. Penelitian ini bertujuan untuk mengetahui keefektifan penggunaan metode *insect bait* dan medium selektif OA+CTAB serta untuk mengetahui daya patogenisitas jamur entomopatogen yang berhasil diisolasi dari tanah terhadap serangga uji *Tenebrio molitor* L. Penelitian ini menggunakan *T. molitor* pada 20 sampel tanah dari berbagai lokasi sebagai serangga umpan. Serangga mati hasil *insect bait* diseleksi dengan medium selektif OA+CTAB. Uji Postulat Koch dilakukan dengan dua ulangan untuk masing-masing isolat jamur. Setiap ulangan perkelompok perlakuan terdiri dari 30 ekor larva *T. molitor*. Perlakuan diberikan dengan cara meneteskan 10µl sediaan tiap isolat ke integumen larva. Mortalitas larva dicatat setiap hari selama 15 hari setelah perlakuan. Didapatkan 6 isolat jamur yang berhasil diisolasi yakni dari spesies *Metarhizium anisopliae*, *Fusarium solani* dan *Paecilomyces* sp. yang bersifat patogen terhadap *T. molitor*. Untuk mengetahui tingkat patogenisitas setiap isolat perlu dilakukan penelitian lebih lanjut dan diaplikasikan langsung ke serangga hama target.

Kata Kunci: Jamur Entomopatogen, *Insect bait*, Medium Selektif, *Tenebrio molitor* L.

**ISOLATION OF ENTOMOPATHOGENIC FUNGI FROM SOIL USING  
INSECT BAIT METHOD AND SELECTIVE MEDIA OA+CTAB AGAINST  
*Tenebrio molitor* L. (COLEOPTERA: TENEBRIONIDAE) LARVAE**

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**ABSTRACT**

Chemical insecticides can cause negative effects on the environment so alternative technologies need to be sought. Entomopathogenic fungi are biopesticides that are easily available in nature. In addition to being obtained from infected insects, entomopathogenic fungi can also be isolated from the soil. The aims of this study is to determine the effectiveness of the use of the insect bait method and the selective medium OA + CTAB and to determine the pathogenicity of entomopathogenic fungi that successfully isolated from the soil against the *Tenebrio molitor* as the test insect. This study used *T. molitor* in 20 soil samples from various locations as bait insects. Dead insects from the insect bait were selected with OA + CTAB selective medium. Koch's postulates test were carried out with two replications for each fungal isolate. Each replication in the treatment group consisted of 30 *T. molitor* larvae. The treatment was given by dripping 10µl each isolate into the larval integument. Larval mortality was recorded daily for 15 days after treatment. Six isolate of fungi were succesfully recovered from the soil, determined *Metarhizium anisopliae*, *Fusarium solani* and *Paecilomyces* sp. which are pathogenic to *T. molitor*. To determine the level of pathogenicity of each isolate, further research is needed.

Keywords: Entomophatogenic Fungi, Insect bait, Selective Media, *Tenebrio molitor* L.