

# PENAPISAN CENDAWAN ENTOMOPATOGEN ENDOFIT DARI TANAMAN GANDUM (*Triticum aestivum* L.)

## Abstrak

Penelitian tentang penapisan cendawan entomopatogen endofit dari tanaman gandum telah dilaksanakan di Laboratorium. Tujuan penelitian ini adalah untuk mengetahui jenis cendawan entomopatogen endofit yang berasosiasi dengan tanaman gandum. Sampel tanaman gandum di ambil dari daerah Koto Laweh Kabupaten Tanah Datar dan Batu Bagiriak Kabupaten Solok. Penelitian ini menggunakan metode eksplorasi dengan cara mengisolasi cendawan endofit dari batang gandum. Uji patogenesitas isolat cendawan endofit dilakukan terhadap larva *Tenebrio molitor* instar V. Isolat yang bersifat patogen terhadap larva *Tenebrio molitor* instar V dan bersporulasi diidentifikasi secara makroskopis dan mikroskopis serta diamati laju pertumbuhan koloni dan daya kecambah konidia. Berdasarkan hasil identifikasi ditemukan 2 genus cendawan entomopatogen endofit yaitu *Aspergillus* dan *Beauveria*. *Aspergillus* ditemukan di kedua lokasi, sedangkan *Beauveria* ditemukan di Tanah Datar. Hasil penelitian menunjukkan bahwa isolat Tanah Datar 3.1.2 memiliki patogenesitas tertinggi dengan mortalitas larva 97,50% dan  $LT_{50}$  terpendek 2,84 hari. Isolat *Beauveria* memiliki daya kecambah konidia tertinggi yaitu 88,33%.

**Kata kunci** : isolat, cendawan, entomopatogen, endofit, patogenesitas, gandum.

# SCREENING ENDOPHYTIC ENTOMOPATHOGENIC FUNGI FROM WHEAT PLANTS

## Abstract

Screening endophytic entomopathogenic fungi on wheat plants was conducted Laboratory. The objective of research determine species endophytic entomopathogenic fungi associated with wheat plants. Wheat plant samples were taken from Koto Laweh regency Tanah Datar and Batu Bagiriak regency Solok. Endophytic entomopathogenic fungi was isolated from wheat stem. Pathogenec test was conducted by using *Tenebrion molitor* larva instar V. Isolates which were pathogenic against *Tenebrio molitor* larva instar V and had sporulated were identified macroscopically and microscopically. Colony and conidia growths were also observed. The results showed that there were 2 genus of endophytic entomopathogenic fungi, *Aspergillus* and *Beauveria*. *Aspergillus* was found in two locations, while *Beauveria* was found in Tanah Datar only. Tanah Datar isolates 3.1.2 had the highest pathogenecity with larval mortality 97,50% and shortest  $LT_{50}$  2,84 day. *Beauveria* isolate had the highest conidia growths 88,33%.

**Keywords:** isolate, fungi, entomopathogenic, endophytic, Pathogenecity, wheat.