

**KEMAMPUAN ANTAGONIS BEBERAPA ISOLAT  
*Trichoderma* sp. TERHADAP JAMUR *Phytophthora palmivora*  
Butl. PENYEBAB BUSUK BUAH PADA TANAMAN KAKAO  
(*Theobroma cacao* L.) SECARA *IN VITRO***

**SKRIPSI**

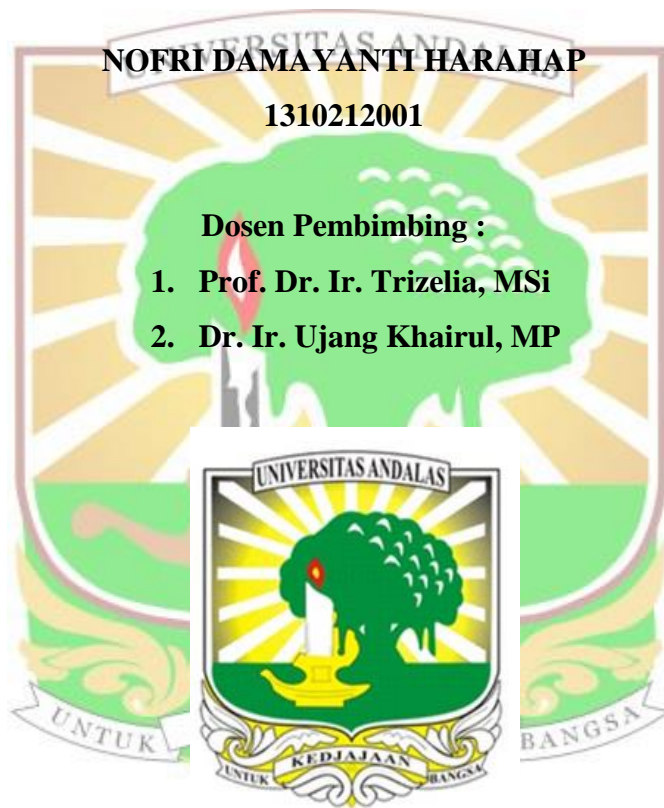
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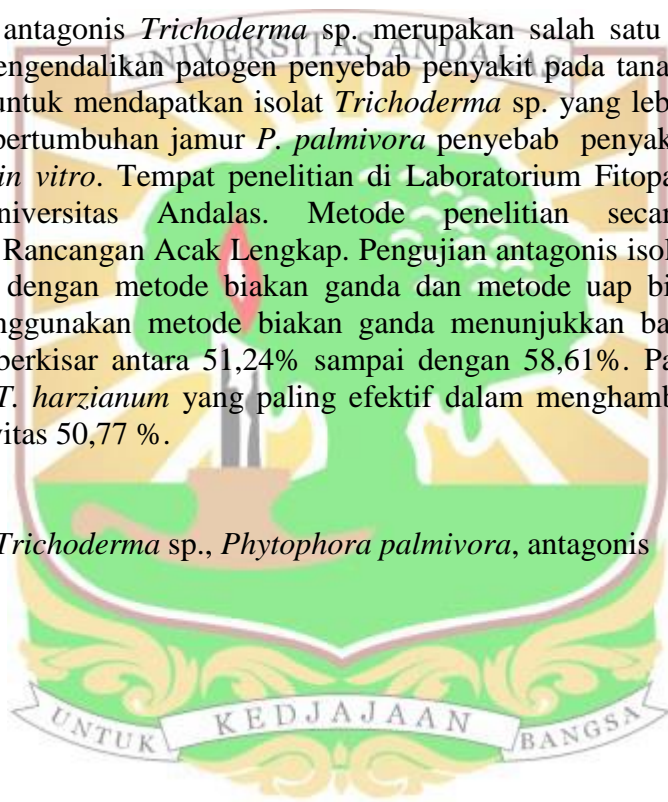
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Abstrak

Jamur antagonis *Trichoderma* sp. merupakan salah satu agen antagonis yang dapat mengendalikan patogen penyebab penyakit pada tanaman. Penelitian ini bertujuan untuk mendapatkan isolat *Trichoderma* sp. yang lebih efektif untuk menghambat pertumbuhan jamur *P. palmivora* penyebab penyakit busuk buah kakao secara *in vitro*. Tempat penelitian di Laboratorium Fitopatologi Fakultas Pertanian Universitas Andalas. Metode penelitian secara eksperimen menggunakan Rancangan Acak Lengkap. Pengujian antagonis isolat *Trichoderma* sp. dilakukan dengan metode biakan ganda dan metode uap biakan. Hasil uji antagonis menggunakan metode biakan ganda menunjukkan bahwa persentase daya hambat berkisar antara 51,24% sampai dengan 58,61%. Pada metode uap biakan isolat *T. harzianum* yang paling efektif dalam menghambat *P. palmivora* dengan efektivitas 50,77 %.

**Kata kunci :** *Trichoderma* sp., *Phytophthora palmivora*, antagonis



**THE ANTAGONISTS ABILITY OF *Trichoderma* sp. ISOLATES AGAINST *Phytophthora palmivora* Butl. CAUSES POD ROT IN COCOA (*Theobroma cacao* L.) IN VITRO**

Abstract

*Trichoderma* sp. is one of the antagonistic biological agents that can control disease-causing pathogens in plants. This study aims to get effectively *Trichoderma* sp. which inhibit the growth of *P. palmivora* fungi causing cocoa pod rot in vitro. This study was conducted in the Phytopathology Laboratory of the Faculty of Agriculture, Universitas Andalas. The research was an experimental experiment using a completely randomized design. Antagonist testing of *Trichoderma* sp. was conducted by a dual culture and culture steam method. The results of the antagonist test using the dual culture method showed that the percentage of inhibition ranged from 51.24 to 58.61%. Isolates of *T. harzianum* in the culture steam method is the most effective isolate in inhibiting *P. palmivora* with 50.77% effectiveness.

**Keywords:** *Trichoderma* sp., *Phytophthora palmivora*, antagonist

