KARAKTERISASI DAN POTENSI *Trichoderma* spp. ASAL TANAMAN PELINDUNG PADA PRODUK BIANG SPORA DAN BIANG ENZIM DALAM PENANGANAN SAMPAH ORGANIK TANAMAN PELINDUNG

TESIS

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ABSTRAK

Karakterisasi dan Potensi *Trichoderma* ssp. Asal Tanaman Pelindung Pada Produk Biang Spora dan Biang Enzim Dalam Penanganan Sampah organik Tanaman Pelindung. Dilakukan dari bulan Januari sampai dengan bulan Agustus 2019 di Laboratorium Mikrobiologi Jurusan Biologi, Fakultas Matematika dan Ilmu Pengetahuan Alam, Universitas Andalas, Padang. Tujuan dari penelitian ini adalah untuk menganalisis karakter dan potensi *Trichoderma* spp. asal sampah tanaman pelindung dan menentukan perbandingan komposisi media terbaik untuk pertumbuhan *Trichoderma* spp., serta menganalisis kemampuan Biang Spora dan Biang Enzim dalam penanganan sampah organik tanaman pelindung. Penelitian ini menggunakan metode eksperimen dengan Rancangan Acak Lengkap (RAL). Hasil penelitian menunjukkan bahwa terdapat lima isolat *Trichoderma* spp. yang memiliki karakter dan potensi yang berbeda. Perlakuan penambahan Biang Enzim secara signifikan mempengaruhi penurunan bobot sampah tanaman pelindungan serta nilai C/N rasio.

Kata kunci: *Trichoderma* spp., Biang spora, Biang enzim, tanaman pelindung

ABSTRACT

Research on Characteristics and Potential of *Trichoderma* spp. Spores Starter and Enzyme Starters Origin of Protected Plants in Handling Organic Waste of Protected Plants. It was carried out from January to August 2019 in the Microbiology Laboratory, Department of Biology, Faculty of Mathematics and Natural Sciences, Andalas University, Padang. The aims of this study was to analyze the characteristics and potential of *Trichoderma* spp. origin of protected plant waste and determine the ratio of the best media composition for *Trichoderma* spp.growth, as well as analyzing the ability of the spores starters and the enzyme starters to handle the organic waste of the protective plants. This study uses an experimental method with a Completely Randomized Design (CRD). The results showed that, there were five isolates of *Trichoderma* spp. which has a different character and potential. The treatment of the addition of Enzyme Starters significantly influenced the reduction in the weight of protected plant waste as well as the C / N ratio value.

Keywods : *Trichoderma* spp, Spores Starter, Enzyme Starter, Protected Plants