

**Inventarisasi dan Potensi Kapang Limbah Tandan Kosong Kelapa Sawit  
(TKKS) di Perkebunan Sawit Kecamatan Kinali, Kabupaten Pasaman Barat**

**SKRIPSI SARJANA BIOLOGI**



**JURUSAN BIOLOGI**  
**FAKULTAS MATEMATIKA DAN ILMU PENGETAHUAN ALAM**  
**UNIVERSITAS ANDALAS**  
**PADANG**  
**2017**

## ABSTRAK

Penelitian tentang Inventarisasi dan Potensi Kapang Limbah Tandan Kosong Kelapa Sawit (TKKS) Di Perkebunan Sawit Kecamatan Kinali, Kabupaten Pasaman Barat telah dilaksanakan dari bulan Januari sampai Mei 2017, di Laboratorium Riset Mikrobiologi dan Mikologi, Jurusan Biologi, Fakultas Matematika dan Ilmu Pengetahuan Alam, Universitas Andalas. Penelitian menggunakan metode survey, dengan tiga tahapan yaitu isolasi, identifikasi, pengujian potensi *in vitro*. Sampel dikoleksi secara purposive. Data yang diperoleh dianalisis secara deskriptif dan disajikan dalam tabel dan gambar. Hasil penelitian diperoleh 7 isolat kapang yaitu *Aspergillus vercicolor*, *Aspergillus fumigatus*, *Alternaria alternata*, *Trichoderma harzianum*, *Spirodactylon aureum*, *Fusarium oxysporum*, *Neurospora sitophila*. Secara *in Vitro*, kemampuan selulolitik tertinggi ditunjukkan oleh *Spirodactylon aureum*, lignolitik tertinggi oleh *Alternaria alternata*, dan lipolitik tertinggi oleh *Neurospora sitophila*.

**Kata Kunci :** *Inventarisasi, Kapang, TKKS, Potensi in Vitro*



## ABSTRACT

A study on Inventory and Potentials of Wasted of Palm oil Empty Bunches at Palm Oil Plantation of Kinali, West Pasaman Regency has been done from January to May 2017, in Research Laboratory of Microbiology and Mycology, Biology Department, Faculty of Mathematics and Natural Sciences, Andalas University. The research was done in survey method in three steps namely isolation, identification and potential enzymatic in vitro test of the isolates. The samples were collected purposively. From the results of the study were obtained 7 potentially isolates of mold, they were *Aspergillus vercicolor*, *Aspergillus fumigatus*, *Alternaria alternata*, *Trichoderma harzianum*, *Spirodactylon aureum*, *Fusarium oxysporum*, and *Neurospora sitophila*. After in vitro test, *Spirodactylon aureum* showed the highest of cellulolytics activity, *Alternaria alternata* showed the highest lignolytics activity while the highest activity of lipolytics showed by the *Neurospora sitophila*.

**Kewordy :** *Inventory, Mold, Palm oil Empty Bunches, In vitro Potential*

