

**KOLEKSI, ISOLASI DAN SELEKSI FUNGI PELAPUK
DI AREAL HTI PULP MANGIUM DAN EKALIPTUS
[Collecting, isolating and selecting of decaying fungus found
on mangium and eucalypts pulp-plantation forest]**

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ABSTRACT

Types of exploitation wastes found on pulp-plantation forest area are usually trunks, twigs, leaves and wood bark. The natural decomposition process of *Acacia mangium* and *Eucalyptus* sp. wastes was recognized slow, which makes the wastes become potential source that can induce forest fire. In order to accelerate the decomposition process of wastes on plantation forest area, introducing decaying fungus could become an option. This typical decaying fungus is a saprophyte microorganism living widely, especially in area where lignocellulosic material grow, thus it can also be found in plantation forest area. An integrated research activities was carried out to collect, isolate, conserve and select decaying fungus grow naturally in plantation forest area. Based on the appearance of their fruit body, there were about 62 fungi species found on mangium and eucalypts plantation forest areas. Some are *Pycnoporus sanguineus*, *Dacryopinax spathularia*, *Schizophyllum commune*, *Polyporus* sp., and *Trametes* sp. By isolating their mycelium, about 31 isolates were successfully collected. Based on the quality of the enzymatic activity, these 31 isolates can be further grouped into 19 isolates of white rot fungus and 12 isolates of brown rot fungus.

Keywords: exploitation waste, mangium, eucalypts, decaying fungus²

ABSTRAK

Hutan tanaman industri (HTI) pulp menghasilkan limbah pembalakan berupa kayu, ranting, daun/serasah dan kulit kayu. Fungi pelapuk merupakan mikroorganisme saprofit secara alami kosmopolitan, sehingga dapat ditemukan di areal HTI. Oleh karena itu, dalam rangka mempercepat proses perombakan limbah HTI tersebut dan menghasilkan nilai tambah, maka perlu dicari fungi yang mendekomposisi limbah tersebut. Untuk mendapatkan fungi pelapuk tersebut dilakukan koleksi, isolasi, pemeliharaan dan seleksi. Adapun tujuannya untuk mendapatkan informasi teknik koleksi, isolasi, pemeliharaan, dan seleksi, fungi pelapuk yang tumbuh secara alami di areal HTI pulp. Hasil koleksi ditemukan 62 jenis jamur berdasarkan tubuh buah. Beberapa jenis jamur yang sering ditemukan yaitu *Pycnoporus sanguineus*, *Dacryopinax spathularia*, *Schizophyllum commune*, *Polyporus* sp., *Trametes* sp. Sedangkan isolasi miselium, tubuh buah yang tumbuh pada dahan/ranting dan serasah mangium dan ekaliptus didapatkan 31 isolat. Hasil seleksi menggunakan uji aktivitas enzim secara kualitatif didapatkan 19 isolat digolongkan dalam kelompok fungi pelapuk putih dan 12 isolat kemungkinan termasuk kelompok fungi pelapuk coklat.

Kata kunci: limbah pembalakan, mangium, ekaliptus, fungi pelapuk