

**KEMAMPUAN *TRICHODERMA* SPP. UNTUK  
PENGENDALIAN HAYATI JAMUR AKAR PUTIH PADA  
*ACACIA MANGIUM* SECARA *IN VITRO*<sup>\*</sup>**

Oleh :  
S.M. Widyastuti<sup>\*\*</sup>), Sumardi<sup>\*\*</sup>) and N. Hidayati<sup>\*\*</sup>)

**ABSTRACT**

The experiment was aimed to isolate and determine the pathogen of white root rot of *Acacia mangium* Willd., and to select Trichoderma isolates for suppressing the pathogen biologically. *Crotalaria juncea* L. was used as indicator plant in the pathogenicity test. Identification of the pathogen was done by comparing the morphological characteristic of the pathogen with those of the same disease isolated from rubber tree.

The results showed that the pathogen of white root rot disease of *A. mangium* is *Rigidoporus microporus*. Of the 15 Trichoderma isolates showing ability to inhibit the pathogen in vitro, three isolates were found as promising agent for biological control of the pathogen. They were T<sub>27</sub> isolate (*T. harzianum*) from elephant dung, T<sub>7</sub> (*Trichoderma* sp.) from Silva Gama Jambi and T<sub>29</sub> (*Trichoderma* sp.) from PROMOT product.

Additional experiments, including ecobiology studies, formulation of the inoculum, and the compatibility of the biological agents with other method for controlling the disease, are needed before the biological agent can be tested for their ability to control the disease in field condition.

**Key words** : Trichoderma, white root-rot disease, biological control

---

<sup>\*</sup>) This experiment supported by Competitive Research Grand-P4M, Directorate General of Higher Education, No. 75/P2IPT/DPPM/97/PHB VI/1/V/1997.

<sup>\*\*</sup>) Department of Forest Science, Fac. of Forestry, Gadjah Mada University