

DISCOLORATION OF STAINING FUNGI ON THINNING-TEAK WOOD

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ABSTRACT

To evaluate the level of staining disease and efficacy of wood preservatives, study on the pathogenicity of blue-stain fungi, *Lasiodiplodia theobromae* P-41, *L. theobromae* S-50 and *Cladosporium* sp. to thinning-teak wood from Lop Buri, Kanchanaburi and Sukhothai provinces was carried on to protect the fungi infection in wood surface. Ten replications of wood samples, with mycelium suspension, were inoculated onto wood surface with each fungus and maintained in 7, 15 and 30 days at moist chamber condition. After treatment, the tested wood samples were estimated the growth of fungi visually and recorded the disease scores. The results showed that *L. theobromae* P-41 induced severe discoloration symptom on thinning-teak wood from three locations. Isolate S-50 surface from Lop Buri and Sukhothai produced black-discoloration on teak wood more than that of Kanchanaburi province. However, the third isolate, *Cladosporium* sp. was nonpathogenic in the experiment. The following data were then analyzed by using F-test at the 95% confidence level. Finally, the results performed that fungal isolate P-41 had the highest ability to infect thinning-teak wood from Kanchanaburi, Sukhothai and Lop Buri provinces respectively. The discoloration sign depended on fungi species, incubation time and location. Moreover, the development of blue-stain fungi on wood surface were efficiently inhibited the growth activities by using wood preservatives.

Keywords : Blue-stain fungi//Thinning-teak wood