FIELD PERFORMANCE OF PREVIOUSLY SELECTED ROOT ROT TOLERANT TROPICAL ACACIAS

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Reforestation programs have been established in some countries to anticipate the increase of the global demand for wood. The effort was initiated to sustain the supply of forest products while preserving the natural forests. In line with the policy, areas of industrial plantation forests of fast-growing species in Indonesia, especially acacias and eucalypts, have been increased to meet the ever-increasing demands. Disease infection has occurred since the establishment of the plantation forests. Root rots caused by red root rot (*Ganoderma philippii*) and *Phellinus noxi*us (brown root rot) are among the most economically important diseases on the two fiber trees. Research on field controls of the diseases has focused on certain components of integrated disease management such as inoculum reduction, silviculture practices, application of biological control agents, and tolerant genotypes. We have developed a method of screening for root rot tolerance in acacia seedlings. Using the method, identification of variations in root rot tolerance is possible. Field experiments and commercial plantations indicated that tolerant materials previously selected in the nursery screening had less root rot incidence, paving the way for plant tolerance to be incorporated as the core component of integrated management of the diseases in tropical acacia plantation forests.

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