

ABSTRACT

ECTOMYCORRHIZA APPLICATION TO SOME MEDIA GROWTH COMPOSITIONS OF *Shorea leprosula* SEEDLING

by

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Ectomycorrhiza application to some media compositions expected to increased seedling growth of *Shorea leprosula*. This research aims to determine the effect of fungi ektomikoriza *Scleroderma columnare* and composition of the media, and to know the interaction between application of *Scleroderma columnare* and media composition on the growth of meranti tembaga seedlings. The research was conducted in June until November 2011 in Lampung University Greenhouse. The research used Factorial (3x4) in Completely Randomized Design (CRD) with three replications. The first factor was composed of spora volume 0 ml; 5 ml, and 10 ml, while the second factor was the composition of media consisting of soil (100%); soil and cempaka wood sawdust (80%: 20%); soil and cempaka wood sawdust (60 %: 40%); soil and cempaka wood sawdust (40%: 60%). Observed variables were high accretion, diameter accretion, leaf number, root length, root percentage of mycorrhizal, total dry weight, and ratio of crown and root. The resulted of this research was that the inoculation ectomycorrhiza significantly affect plant height increment and the root percentage of mycorrhizal. Media composition significantly affect plant height increment, leaf number, and ratio of crown and root, while the interaction between inoculation ektomikoriza on the composition of the media only gave some real influence on the ratio of crown and root of *Shorea leprosula* seedlings. The best treatment to increased the growth of *Shorea leprosula* seedling was inoculated 5 ml of susupension spora combined with the soil media 100%.

Key words : ectomycorrhiza, *Shorea leprosula*, *Scleroderma columnare*, seedling media.