

Uji infektivitas dan efektivitas scleroderma spp. pada semai shorea selanica (DC) blume dan Hopea odorata (Roxb)

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Abstrak

UJI INFEKTIVITAS Scleroderma spp. PADA SEMAI Shorea selanica (DC.) Blume DAN Hopea odorata (Roxb.)

ABSTRACT 1

Infection test of Scleroderma geaster, Scleroderma sirmamariense, Scleroderma columnare and Scleroderma sp. to Shorea selanica seedlings has been studied under green house conditions. Those myconhizal lirngi, except Scleroderma sp. were also tested to Hopea odorara seedlings. Root mycorrhizal percentage and formation of mantel and Hartig's net structures were investigated.

The objective of the research was to find out the most infective Scleroderma mycorrhizal iimgi to Shorea selanica and Hopea odorara seedlings.

_ Root structural analysis of 3 months inoculated roots showed that there were mycorrhizal colonization in Shorea selanica and Hopea odoraraia rooting system but mantel and I-Iartig's net structures were not formed yet. These structures were completely fonned 4 months after inoculation. Root structure observation showed that Scleroderma spp. colonized and infected well the root system of Shorea selarzica and Hopea odorara seedlings. The percentage of mycorrhizal roots was 13.75 % to 42.50 % for Shorea selanica seedlings and 14.17 % to 59.17 % for Hopea odorata. Hartig's net structures were formed in between two radially elongated epidermis cells.

PENDAHULUAN

Tanaman meranti (Dqoterocarpaceae) merupakan salah satu pohon hutan tropis yang mutlak rnebutuhkan mikoriza terutama pada tingkat semai (Yasman, 1997). Mikoriza adalah suatu asosiasi yang sepenuhnya simbiosis dan menghasilkan suatu sifat morfologi yang baru dan konsisten dalam proses asosiasinya serta mendatangkan kcuntungan untuk lcedua organisme tersebut (Harley & Smith, 1983). Scleroderma spp. merupakan cendawan elctomikoriza yang sexing ditemukan berasosiasi dengan jenis-jenis tanaman dan famili Dipterocarpaceae, Pinaceae dan Gnetaceae. Sifat khusus dari ektomikoriza adalah adanya struktur mantel yang terbcntuk dad jalinan hifa, yang menetap pada permukaan akar dan Hartig-net yang terdapat di antara sel epidermis dan