Karakteristik Perakaran Semai Merbau (*Intsia Bijuga* Colebr. O.Kuntze) pada Berbagai Tingkat Salinitas dan Komposisi Media Tanam.

INTISARI

Merbau (*Intsia bijuga* Colebr. O K) merupakan salah satu jenis penghasil kayu penting di dunia. Kendala dalam perkecambahan secara alami serta informasi mengenai karakteristik perakaran semai merbau masih belum banyak dilakukan di Indonesia. Diperlukan penelitian untuk mengetahui karakteristik perakaran semai pada kondisi berbagai tingkat salinitas tanah dan komposisi media. Penelitian ini bertujuan untuk mengetahui perkembangan perakaran semai,tinggi dan diameter batang, panjang dan lebar daun, serta biomassa semai.

Penelitian ini dilakukan di rumah kaca dengan mengecambahkan 675 biji merbau pada 25 kombinasi perlakuan kadar garam dan komposisi media tanam. Pengamatan parameter tinggi dilakukan setiap 3 hari sekali selama 60 hari. Pengamatan diameter batang, panjang dan lebar daun serta panjang akar dilakukan pada hari ke 60. Analisis media tanam dilakukan untuk mengetahui kandungan C, N, kadar lengas lapangan, pH, dan elektokonduktivitas. Data dianalisis dengan uji anova dan diuji lanjut dengan metode LSD.

Hasil pengamatan pertumbuhan semai merbau terbaik pada kondisi kadar garam 0 ppt (netral) dan dengan media pasir atau tanah. Tinggi semai merbau pada kondisi garam 0 ppt (netral) adalah 24,02 cm, diameter 3,77 mm, lebar daun 3,08 cm, panjang daun 6,57 cm dan panjang akar 16,87 cm.

Kata kunci: merbau, akar, salinitas, media tanam, pertumbuhan semai

Merbau (*Intsia bijuga* Colebr. O.Kuntze) Seedling Rooting Characteristics in Various Salinity Conditions and Planting Media Compositions.

ABSTRACT

Merbau (*Intsia bijuga* Colebr. O K) considered as one of important timber producer in the world. Problems during its natural germination and information about its rooting caratheristic still not yet done in Indonesia. Research was needed to know the rooting characteristics of seedling in various salinity conditions and planting media compositions. This research aimed to know the development of rooting, seedling height and diameter, leaf size and biomass of merbau seedling.

This research was done by germinating 675 *merbau* seeds in 25 different treatments of salinities and planting media compositions. Height parameter was observed once in 3 days for 60 days of observation. Diameter, leaf size and root length were observed in the 60^{th} day of observation. Planting media were analyzed to know C and N content, soil water content, pH and electroconductivity. Data were analyzed by using annova test and then analyzed further by using LSD.

Result showed that *merbau* seedling grew best in 0 ppt salinities and sand or soil as planting media. Merbau seedling height at 0 ppt salinity was 24.02 cm, diameter 3.77 mm, leaves widht 3.08 cm, leaves length 6.57 cm and root length 16.86 cm.

Key words: *merbau*, roots, salinity, planting media, seedling growth