

**KARAKTERISTIK KAYU MUDA PADA MANGIUM (*Acacia mangium*
Willd.) DAN KUALITAS PENGERINGANNYA**
**(Characteristics of Juvenile Wood in Mangium (*Acacia mangium* Willd.) and Its
Drying Qualities)**

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ABSTRACT

Recently, the availability of wood species from natural forests has run limited and scarce. Consequently, fulfilling public demand of wood is met in part by woods from plantation forest. The problem with the plantation forest is that its woods contain relatively high juvenile wood portions due to the felling or harvesting at relatively younger tree ages (with shorter rotation) than those from natural forest trees. In wood processing the presence of juvenile wood often causes problems with its corresponding products such as defects after drying thereby lowering their qualities. As the relevance, this experiment dealt with characteristics (e.g. anatomy features) and drying qualities of wood with high juvenile wood content. Wood species used in this experiment was 22-year old mangium (*Acacia mangium* Willd.). The results revealed that the percentage of juvenile wood in mangium as obtained through regression equation was 50% ($R^2 = 70\%$) with particular characteristics such as short fibers, end surface defects, honeycombs and collapses after drying. Therefore, it is suggested that great care should be taken in processing and uses, particularly during the drying by implementing mild schedules (i.e. staged temperature changes).

Key words: Plantation forest,, juvenile wood, mangium wood, drying, wood defect.

ABSTRAK

Jenis kayu yang berasal dari hutan alam saat ini semakin berkurang, sebagai gantinya untuk memenuhi kebutuhan kayu masyarakat, sebagian kayu dipenuhi dari hutan tanaman. Masalahnya, kayu yang berasal dari hutan tanaman relatif mempunyai umur atau berdaur tebang lebih muda dari hutan alam sehingga kandungan kayu muda (juvenile wood)nya relatif tinggi. Dalam pengolahan kayu, adanya kayu muda dalam balok sering menimbulkan masalah diantaranya timbul cacat dalam proses pengeringan sehingga kualitas kayu menurun. Oleh karena itu dalam penelitian ini diteliti karakteristik kayu muda yang meliputi sifat anatomi, dan kualitas pengeringan. Kayu yang digunakan adalah mangium yang berumur 22 tahun. Hasil penelitian menunjukkan bahwa persentase kandungan kayu muda pada mangium yang diduga melalui persamaan regresi sekitar 50% ($R^2 = 70\%$) dengan karakteristik serat yang pendek, cacat permukaan, pecah dalam (honeycomb) dan perubahan bentuk (collapse) setelah proses pengeringan. Disarankan dalam proses pengolahan dan penggunaannya dilakukan secara hati-hati terutama pada waktu pengeringan sebaiknya mengikuti prosedur teknik pengeringan temperatur bertahap (bagan lunak).

Kata kunci: Hutan tanaman, kayu muda, kayu mangium, pengeringan, cacat kayu