

**PENGARUH POLA PENGGERGAJIAN TERHADAP SIFAT  
PENGERINGAN PAPAN KAYU JATI (*Tectona grandis* Linn.F)  
BERKETEBALAN 2 CM**

Oleh :

<sup>1</sup>Adhitya Tisna P, <sup>2</sup>Sri Nugroho Marsoem  
(05/185312/KT/05643)

**INTISARI**

Hasil hutan rakyat merupakan peluang yang cukup baik untuk menunjang kebutuhan bahan baku industry pengolahan kayu. Kayu jati merupakan jenis kayu dari hutan rakyat yang mempunyai nilai jual tinggi. Kayu jati biasa dipotong dengan pola penggergajian flat sawn dan quarter sawn. Kedua pola penggergajian ini belum diketahui sifat pengeringan kayu dan perbedaannya. Titik kunci dalam keberhasilan pengeringan adalah pemahaman sifat pengeringan kayu. Penelitian kali ini bertujuan mengetahui hubungan pola penggergajian kayu dan posisi aksial batang terhadap sifat pengeringan kayu jati berdasarkan skedul suhu dan kelembaban.

Penyusunan skedul suhu dan kelembaban menggunakan metode Terazawa (1965), yaitu pengeringan selama 72 jam dalam suhu 100<sup>0</sup>C. parameter yang diamati antara lain kadar air awal, cacat retak, koleps, *honeycombing*, berat jenis, dan persen kayu teras,. Skedul suhu dan kelembaban yang didapatkan kemudian diuji dengan menggunakan metode *chi square* untuk mengetahui hubungannya dengan pola penggergajian dan posisi aksial batang. Berdasarkan skedul suhu dan kelembaban, kemudian ditentukan sifat pengeringan kayu jati pada dua macam pola penggergajian dan tiga posisi aksial batang.

Berdasarkan hasil penelitian, kayu jati yang dipotong dengan pola penggergajian flat sawn mendapatkan skedul dengan suhu awal 70<sup>0</sup>C, depresiasi bola basah 7, dan suhu akhir 105<sup>0</sup>C, sedangkan kayu jati yang dipotong dengan pola penggergajian quarter sawn mendapatkan skedul dengan suhu awal 60<sup>0</sup>C, depresiasi bola basah 4, dan suhu akhir 80<sup>0</sup>C. Hasil analisis dengan metode *chi square* menunjukkan pola penggergajian dan posisi aksial pada sortimen quarter sawn berhubungan nyata terhadap penyusunan skedul suhu dan kelembaban. Posisi aksial pada sortimen flat sawn tidak mempunyai hubungan nyata terhadap penyusunan skedul suhu dan kelembaban.

Kata kunci : hutan rakyat, kayu jati, *flat sawn*, *quarter sawn*, posisi aksial, metode Terazawa, skedul suhu dan kelembaban.

<sup>1</sup> : Mahasiswa Jurusan Teknologi Hasil Hutan Fakultas Kehutanan UGM

<sup>2</sup> : Staf Pengajar Teknologi Hasil Hutan Fakultas Kehutanan UGM

**INFLUENCE OF SAWING PATTERN  
TO THE DRYING PROPERTIES OF 2 CM TEAK BOARD  
(*Tectona grandis* Linn.F)**

By :  
<sup>1</sup>Adhitya Tisna P, <sup>2</sup>Sri Nugroho Marsoem  
(05/185312/KT/05643)

**ABSTRACT**

Product from community forest were good enough opportunity to supported the needs of raw materials in wood processing industry. Teak is one of woods from community forest that have a high selling value. Teak wood usually cut by two kind of sawing pattern, flat sawn an quarter sawn. Both of sawing pattern have not discovered yet about the drying properties and the differences between them. The key point in the drying process was the arranging of the schedule in temperature and humidity. The research used to understand the correlation of sawing pattern and axial direction in the teak wood drying properties based on drying schedule.

The arranging of drying schedule used Terazawa method (in 1965), to drying for 72 hours within temperature was 100<sup>0</sup> C. Other parameters that observed were moisture content, checks, collaps, honeycombing, density, and percent of heartwood. Schedule of temperature and humidity were obtained and then tested used chi square method to know the relation of the sawing pattern and axial direction. Based on drying schedule, then can be determined the drying properties of teak wood on two kind of sawing pattern and three axial direction.

Based on this research, flat sawn teak board got the schedule with an initial temperature was 70<sup>0</sup> C, wet bulb depression was 7, and the final temperature was 105<sup>0</sup> C, while the quarter sawn teak board get the schedule with an initial temperature was 60<sup>0</sup> C, wet bulb depression was 4, and the final temperature was 80<sup>0</sup>C. The results of analysis used chi square indicated that sawing pattern and axial direction on quarter sawn teak board have significant correlation to the drying schedule. Axial direction of flat sawn teak board has no significant correlation to the drying schedule

Keywords : community forest, teak, flat sawn, quarter sawn, axial direction, Terazawa method, drying schedule.

<sup>1</sup> : Student of Forest Product Technology Department, Faculty of Forestry, Gadjah Mada University

<sup>2</sup> : Lecture of Forest Product Technology Department, Faculty of Forestry, Gadjah Mada University