

Sifat-sifat Kualitas Kayu Mindi (*Melia azedarach* L.) Pada Berbagai Umur dan Letak Bagian Kayu dari Kecamatan Kretek Kabupaten Bantul DIY sebagai Bahan Mebel dan Kerajinan

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INTISARI

Beberapa dasawarsa terakhir, industri mebel dan kerajinan kayu di Indonesia mengalami perkembangan yang cepat. Perkembangan ini antara lain disebabkan oleh *demand* atau konsumsi yang meningkat pada produk-produk mebel dan kerajinan kayu. Seiring semakin meningkatnya *demand* pada produk-produk mebel dan kerajinan kayu tersebut, maka kebutuhan bahan baku tidak dapat dicukupi hanya dengan mengambil dari hutan negara saja, tetapi juga dari hutan rakyat. Salah satu jenis tanaman substitusi yang saat ini banyak dikembangkan oleh rakyat adalah mindi (*Melia azedarach* L.). oleh karena itu informasi mengenai sifat-sifat kualitas kayu mindi (*Melia azedarach* L.) terutama sifat pengerjaannya perlu diketahui sebelum digunakan sebagai bahan mebel dan kerajinan. Dengan didapatkan informasi tersebut diharapkan dapat memberikan nilai tambah yang optimal bagi para pengusaha mebel dan kerajinan khususnya di daerah Kretek, Bantul dimana asal kayu mindi ini diteliti. Tujuan penelitian ini adalah mengetahui pengaruh perbedaan umur dan letak bagian kayu serta interaksi keduanya terhadap sifat pengerjaan kayu mindi sebagai bahan mebel dan kerajinan.

Penelitian ini menggunakan dua faktor yaitu umur 15 tahun, 12 tahun dan 9 tahun dan faktor letak bagian kayu (atas, tengah, dan bawah) serta menggunakan rancangan penelitian CRD (*Complete Randomized Design*). Kayu mindi yang telah di potong sesuai ukurannya di uji sesuai parameter. Hasilnya dianalisis secara faktorial untuk dua faktor dan dilanjutkan dengan uji LSD.

Berdasarkan penelitian diperoleh rata-rata cacat penggergajian kayu mindi 8,99% (sangat baik), pengetasan 14,87% (sangat baik), pengampelasan 2,01% (sangat baik), pengeboran 48,39% (sedang), dan pembubutan 40,67% (sedang). Dengan demikian kayu mindi memiliki rata-rata total cacat pengerjaan 22,99% (baik) termasuk kelas pengerjaan II atau III. Perbedaan umur terbukti memberikan perbedaan sangat nyata pada sebagian sifat pengerjaan, yaitu pada penggergajian, pengampelasan dan pembubutan, tetapi tidak pada pengetasan dan pengeboran. Perbedaan letak bagian kayu terbukti memberikan perbedaan sangat nyata pada sebagian sifat pengerjaan, yaitu pada penggergajian, pengetasan, pengampelasan dan pembubutan tetapi tidak pada pengeboran. Dari data pendukung berat jenis rata-rata kayu mindi 0,42 termasuk menengah dan kelas kuat III; penyusutan tangensial 4,76%, radial 3,48% termasuk cukup; rasio T/R sebesar 1,38 termasuk cukup stabil; keteguhan tekan tegak lurus serat 100,31 kg/cm², keteguhan tekan sejajar serat 339,72 kg/cm², dan kekerasan 340,35 kg/cm² termasuk cukup kuat dan keras serta termasuk kelas kuat III. Kayu mindi dengan umur 12 tahun ke atas dengan letak kayu bagian bawah dan tengah dapat digunakan sebagai bahan mebel dan kerajinan. Kayu mindi dengan letak kayu bagian atas bisa disarankan digunakan untuk kerajinan yang tidak memerlukan kekuatan memadai seperti topeng, aneka wayang kayu, aneka souvenir kayu dan mainan anak.

Kata kunci : Mindi, Sifat Kualitas, Kelas Pengerjaan

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The Quality Properties of Mindi Wood (*Melia azedarach* L.) in Various Ages and the Location of the Wood Part from Kretek subdistrict Bantul regency, DIY as the Furniture and Craft Material

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ABSTRACT

Several last decades, furniture and craft industry of wood in Indonesia experienced the fast development. This development in part as a result of by increasing demand or consumption to furniture and wood craft products. Together with increasingly the demand to furniture and craft products, then the requirement for the raw material could not be fulfilled only by taking from the country's forest, but also from the people's forest. One of the kinds of the substitution crop that at this time often was developed by the people was mindi (*Melia azedarach* L.). Because of that information concerning the quality properties of mindi wood (*Melia azedarach* L.) especially the working properties must be known before being used as the furniture and craft materials. By obtained this information hopefully could give an optimal added value for the furniture and craft businessmen, especially in the Kretek, Bantul area where this researched of mindi wood was taken from. The aim of this research was to know the influence of the age difference and the location of the wood part as well as the interaction both of them towards the working properties of mindi wood as the furniture and craft materials.

This research used two factors, the age factor consisted of 15 years, 12 years and 9 years and the location of the wood part factor (upper, middle, and low) which was arranged in the CRD research plan (Complete Randomized Design) with three replicants each. Mindi wood was cut based on the measurement and tested in accordance with the parameter. Results was analysed in a factorial manner for two factors and followed with the LSD test.

Based on the research is obtained on average mindi sawing defect 8,99% (very good), planing 14,87% (very good), sanding 2,01% (very good), drilling 48,39% (medium), and turning 40,67% (medium). Therefore wood mindi had in general the total processing defect 22,99% (good) including the working class II or I-III. The proven age difference had proved that it would give some working properties very real differently on sawing, sanding and turning, but not to the planing and drilling. The difference of the location of the proven wood part had proved that it would give some working properties very real differently on sawing, planing, sanding and turning but not in drilling. The specific gravity in general wood mindi 0,42 including middle group and the mechanical class III; The tangential shrinkage 4,76%, radial shrinkage 3,48% included to enough; T/R ratio 1,38 included stable enough; the pressure strength across to grain 165,97 kg/cm²; the pressure strength perpendicular to grain 339,72 kg/cm²; and the hardness 340,35 kg/cm² included strong enough and hard as well as included to mechanical class III. Mindi wood with age 12 years and more with the location of underside part of a wood could be used as the furniture and craft materials. Mindi wood with the location of upper part of a wood could be suggested was used for handycraft that didn't require adequate strength like masks, various wood puppets, various wooden souvenir and the child's toy

Key words: Mindi, Quality Properties, Working Class

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