

ABSTRAK

Kayu jati (*tectona grandis*) merupakan jenis kayu yang memiliki nilai ekonomis tinggi dan banyak digunakan oleh masyarakat. Kayu jati masih menjadi kayu paling unggul karena kualitas yang tinggi selain itu kayu jati juga memiliki keunggulan seperti keawetan, kekuatan, maupun keindahan serat pada kayu jati. Masa pakai kayu jati dalam pembuatan *furniture* mampu bertahan hingga 40 tahun. Menurut kementerian lingkungan hidup dan kehutanan total kebutuhan kayu pada tahun 2018 mencapai 48 juta m³, sementara hutan alam hanya mampu menyediakan 40 juta m³. Pengawetan merupakan proses memasukkan bahan yang bersifat racun ke dalam kayu, guna melindunginya dari serangan hama kayu dan tahan terhadap api. Dengan demikian, kayu akan memiliki masa pakai yang lebih lama hingga pada akhirnya akan mengurangi tekanan kebutuhan kayu (Wahyudi 2014). Salah satu metode yang digunakan dalam pengawetan kayu jati yaitu dengan melakukan perendaman. Tujuan dengan dilakukannya perendaman penggunaan bahan ini diharapkan dapat menghambat api dan mempunyai masa pakai yang lebih lama pada *furniture*. Penelitian ini menggunakan desain Rancangan Acak Lengkap (RAL) faktorial 3^k dengan desain faktorial 3² dimana pangkat 2 menunjukkan banyaknya faktor sedangkan 3 menunjukkan banyaknya taraf yang akan memiliki faktor-faktor.

Kata kunci : Kayu Jati, Lama Perendaman, Jenis Bahan, Rancangan Acak Lengkap (RAL) Faktorial.

ABSTRACT

Teak wood (tectona grandis) is a type of wood that has high economic value and is widely used by the community. Teak wood is still the most superior wood because of its high quality besides teak also has advantages such as durability, strength, and beauty of fiber in teak wood. The lifetime of teak in the manufacture of furniture can last up to 40 years. According to the ministry of environment and forestry the total wood demand in 2018 will reach 48 million m³, while natural forests can only provide 40 million m³. Preservation is the process of inserting toxic material into wood, in order to protect it from pests and resist fire. Thus, wood will have a longer service life which will ultimately reduce the pressure on wood demand (Wahyudi 2014). One method used in preserving teak is by soaking. The purpose of soaking the use of this material is expected to inhibit fire and have a longer service life on furniture. This study uses a 3^k Completely Randomized Design (RAL) with a factorial design 3² where rank 2 indicates the number of factors while 3 indicates the number of levels that will have factors.

Keywords: *Teak Wood, Soaking Time, Type of Material, Factorial Completely Randomized Design.*

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