KUALITAS HASIL BAMBU LAMINASI ASAL KABUPATEN TORAJA, SULAWESI SELATAN

Qualities of the Laminated Assembly of Bamboo Procured from Toraja Regency, South Sulawesi

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ABSTRACT

The research aimed to learn the effect of bamboo species and types of poly vinyl acetate (PVAc) glue on physical and mechanical properties of laminated bamboo assembly. Bamboo species were hitam and parring. Meanwhile, PVAc glue types were fox, tiger, and epoxy. Initially, air dry bamboo specimens each measuring 51 cm by 2.5 cm by 0.5 cm were prepared and then used to construct laminated assembly. Afterwards, each of the bamboo specimens was glue-spread on its bonding area with 200 grams of glue per cm(single glueline). A pair of bamboo specimens with the same species was then bonded together into laminated assembly, hydraulically pressed at room temperature for 12 hours, and subsequently conditioned at room temperature as well for one week. It turned out that different PVAc glue types did not significantly affect the physical and mechanical properties of the laminated assembly made up of hitam and parring bamboo species. One the other hand, laminated bamboo assembly bonded together with PVAc glue of epoxy type tended to have greater MOE and glue shear strength than those using the other two PVAc glue types. The greatest gluing eficiency occurred at laminated assembly of parring bamboo with PVAc's epoxy. Peneliti pada Balai Litbang Kehutanan Sulawesi, Makasar Judul : Peningkatan Kualitas Bambu dengan Teknik Laminasi, TA : 2004 Peneliti pada Pusat Litbanbng Hasil Hutan, Bogor

Keywords : Laminated bamboo assembly , bamboo species, PVAc glue types, physical and mechanical properties

ABSTRAK

Penelitian ini bertujuan untuk mempelajari pengaruh jenis bambu dan macam perekat poly vinyl acetate (PVAc) terhadap sifat fisis dan mekanis bambu laminasi. Jenis bambu yang digunakan adalah hitam dan parring. Sedangkan macam perekat PVAc yang digunakan adalah fox, tiger dan epoxy. Bambu laminasi dibuat dengan menggunakan bambu kering udara dengan ukuran 51 x 2.5 x 0.5 cm. Kemudian sampel bambu dilaburi perekat secara merata pada salah satu sisi dengan berat labur 200 gr/m2. Selanjutnya sampel bambu dari jenis yang sama direkat satu sama lain kemudian dikempa pada suhu ruangan dengan menggunakan klem selama 12 jam. Bambu lamina kemudian dikondisikan pada suhu ruangan selama 1 minggu. Hasil penelitian menunjukkan bahwa perbedaan macam perekat berpengaruh tidak nyata terhadap sifat fisis dan mekanis bambu laminasi yang dibuat dari bilah bambu hitam dan bambu parring. Bambu laminasi dengan menggunakan lem epoxy cenderung memiliki nilai MOE dan keteguhan rekat yang lebih baik dibanding lem fox dan lem tiger. Efisiensi perekatan terbesar terjadi pada bambu laminasi parring dengan lem epoxy.

Kata kunci : Bambu laminasi, jenis bambu, macam perekat PVAc, sifat fisis dan mekanis