

## INTISARI

Seiring berkurangnya luasan hutan di Indonesia untuk memenuhi kebutuhan kayu, secara tidak langsung berdampak pada kelangkaan kayu. Dari pertimbangan di atas, maka banyak dikembangkan alternatif bahan pengganti papan kayu. Diantaranya pengolahan Limbah Cangkang Keong Mas yang banyak kita jumpai di sepanjang pinggir embung Rowo Jombor, Desa Jimbung, Kec. Kali Kotes, Kab. Klaten. Cangkang keong mas dapat dimanfaatkan sebagai bahan baku pembuatan particle board dengan campuran bahan perekat dan limbah serbuk kayu lunak.

Bahan baku cangkang keong emas ini diperoleh dari sisa industri rumahan pembuatan sate keong emas yang cangkangnya dibuang di pinggir tanggul embung Rowo Jombor. Proses pembuatan papan partikel ini yaitu cangkang keong emas dicampur dengan variasi campuran serbuk kayu lunak dan perekat. Masing-masing variasi dari serbuk kayu adalah sebesar 10%, 20%, 30%, 40%, dan 50% terhadap bahan baku cangkang keong. Bahan baku digiling sehingga menjadi partikel-partikel kecil dan bervariasi, lalu dicampur dengan serbuk kayu dengan perbandingan kadar tersebut di atas, lalu dicampur dengan perekat. Kemudian adonan dicetak dan dilakukan pengepresan, dan dilakukan pengondisian selama tujuh hari. Parameter yang diamati meliputi kerapatan, penyerapan terhadap air, keteguhan lentur, dan modulus elastisitas.

Diharapkan dengan adanya penelitian ini dapat membantu mengurangi masalah kurangnya bahan baku kayu, khususnya bahan baku papan.

*Kata kunci : cangkang keong mas, Rowo Jombor, papan partikel, serbuk kayu, perekat.*

## **ABSTRACT**

*Along with the decreasing of forest area in Indonesia to fulfill the needs of wood, indirectly have an impact in rarity of wood. From the reason mentioned above, there are so many substitutional alternative material were developed to make particle board, for example wasted material shell of golden snail on Rowo Jombor, Desa Jimbung, Kec. Kali Kotes, Klaten Sub-province. Shell of golden snail can be used as particle board material, we can mix with another material like resin glue and wooden powder.*

*The Golden Snail shell material were obtained from the wasted material of home industry golden snail satay, that the shells were thrown away being wasted in the side of Rowo Jombor dam. The making process of the particle board is the mixing of golden snail shells with the variations mix of wooden powder and resin glue. Each variation of the wooden powder is 10%, 20%, 30%, 40%, and 50% to the golden snail material. The main materials were milled to produce smaller particles and variability, and the mixed with the wooden powder with the ration mentioned materials were molded and pressed and also were conditioned for seven days. The parameters that were observed including density, the absorption with water, modulus of rupture, and modulus of elasticity.*

*We hope this research can help to solve the problem of decreasing wooden material, especially material for particle board.*

*Key words : Golden Snail Shell, Rowo Jombor, Particle Board, Wooden Powder, Resin Glue.*