

# **Preliminary Production of Material Compound from Sago Waste**

**Saiful Bahari Mohd Yusoff**

Institute of Design and Innovation (INDI), Universiti Malaysia Sarawak, Malaysia

**Sinin Hamdan**

Institute of Design and Innovation (INDI), Universiti Malaysia Sarawak, Malaysia

**Kopli Bujang**

Institute of Design and Innovation (INDI), Universiti Malaysia Sarawak, Malaysia

**Yeeni Ayu Rosita Marjani**

Institute of Design and Innovation (INDI), Universiti Malaysia Sarawak, Malaysia

**Zalina Ibrahim**

Faculty of Business and Management, Universiti Teknologi MARA (UiTM) Sarawak, Malaysia

**Mohd Taufik Abdul Jalil**

Politeknik Johor Bharu, Malaysia

**Mohd Noor Rashidi Ahmad**

Politeknik Johor Bharu, Malaysia

## **Abstract**

Sago palm or its scientific name, *Metroxylon sago* Rottb is commonly found in tropical low forests and processed into sago flour. Processing of sago flour will produce sago waste (SW). This excess waste has been found to cause ecosystem imbalance. The research looks into the preliminary process of recycling the sago waste into a new material compound that can be used by any modeler as a substitute in the production of any products that are compatible with the material. The process goes through the filtering stage, drying stage and molding stage using only natural resources as the main ingredients with different level of contents tested. The compound is also tested for its durability as a modeler material. The research shares the results from the process, the end product that can be used for model making and a sample of a product that is produced from the material compound.

**Key Words:** Sago waste (SW), Ecosystem, Binding, Dried sago waste (DSW)