

## **Furniture from fibrous waste**

Researchers at Germany's Fraunhofer Institute for Wood Research – Wilhelm Klauditz Institute (WKI) are cooperating with the Malaysian Palm Oil Board to investigate into various means for utilizing fibrous wastes generated during palm oil production. Large volumes of palm waste is generated in Malaysia as it caters to about 50 per cent of the world's palm oil demand. The fibrous wastes include stripped palm fruit stalks, palm leaves and parts of the tree trunk.

WKI researchers started by studying the untreated raw materials. Initial experimental studies showed that the residual materials had the right attributes for being processed into medium-density fibreboard (MDF). Stripped fruit stalks, palm leaves and other residual materials are crushed and then pulped into fibrous material in a thermo-mechanical process. Steam heats the fibres, and then the soft raw material is ground in a refiner. Finally, adhesive is added and the material hot-pressed to obtain the desired density and final solid form of the fibreboard. A pilot plant is planned to be set up in Malaysia, with WKI providing expertise and assistance in establishing and commissioning the plant. *Contact: Fraunhofer Institut für Holzforschung - Wilhelm Klauditz Institut, Bienroder Weg 54 E, Braunschweig 38108, Germany. Tel: +49 (531) 2155 344; Fax: +49 (531) 351 587; E-mail: thole@wki.fhg.de.*

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