

Headline **From waste to wealth**
Date **08 Mar 2010**
MediaTitle **The Star**
Section **Metro**
Journalist **N/A**
Frequency **Daily**
Circ / Read **293,375 / 1,026,812**

Language **English**
Page No **M18,19**
Article Size **857 cm²**
Color **Full Color**
ADValue **32,071**
PRValue **96,212**



From waste to wealth

Oil palm trunk can be processed into an alternative raw material for wood-based products

PRIYA MENON

A NEW technological innovation, called the Pops (Parallel Oil Palm Strand) Lumber, is creating waves all over the world as an alternative raw material for various wood-based products.

For many years now, there has been a shortage of wood from natural sources, and any harvesting of wood has to be sustainable to ensure that forests do not suffer.

Over the past seven years, Malaysian scientists have been researching the use of oil palm trunk for plywood, as every year, 10 million oil palms are chopped down as most trees have a life span of only 25 years. The felled trees are either burnt or left to rot.

"The issue with oil palm lumber has always been transportation. Oil palm has 300% more moisture, so it is heavy. Drying it was also a problem," said Forest Research Institute of Malaysia (FRIM) senior research officer Dr Wan Tarmeze Wan Ariffin.

According to FRIM Flagship Project MYScrim director Datuk Dr Marzalina Mansor, the drying of the oil palm trunk could not be rushed.

"If we dry it too fast, it won't be smooth. There are too many processes to look into. Veneer has to be smooth so the layering for plywood can be done with ease," she said.

In July 2007, an idea struck the researchers at FRIM. Instead of drying the trunk into veneer, they decided to crush the wood into strands and glue them back under a certain pressure.

"The best part is that the clients can customise the wood to their requirements. They can

decide on the weight of the wood, its structure and how compact it should be," Dr Wan Tarmeze said.

Many countries have been receptive to this invention, especially at road shows and international conferences. The patented Pops Lumber recently received accolades for its ingenuity, garnering the World International

Property Organisation (Wipo) Best Invention award in Geneva as well as two other awards.

After the success of their patent, the researchers decided to approach agencies and organisations that might be interested in helping to finance the second part of their research – to refine Pops.

The POPScrim is a technique for crushing the material a little more than Pops Lumber, so that it would be more solid, with fewer gaps between the strands.

"We took our patent to 20 agencies under three groups – the users, the manufacturers and the financiers – but everybody wanted us to complete the research and data before they stepped in," Dr Marzalina said.

The users were eager for the end-products comprising furniture, roof beams and interior decorations, while the manufacturers were excited about ordering stocks, but they failed to realise the team needed funding to finish its research.

The team found hope in Blue Mountain Resources Sdn Bhd, which jumped on the bandwagon on recognising the product's potential.

"We are now looking for the right machine to speed up the process as well as a factory to make the raw material," said Blue Mountain Resources chief executive officer Muhammad Ridzuan.

Ridzuan said his company was interested only in producing the raw material, which would be cheaper than rubber wood, adding

that the new Pops would complement the existing raw materials in the industry.

According to him, there are great potential for this product and it will generate greater income for the country.

In fact, many foreign countries had asked his company to start production in their country, he said.

"But we are patriotic, and we want to ensure Malaysia gets the benefits from this. We hope the government will step in and help finance the remaining part of the project," he added.

Headline **From waste to wealth**
Date **08 Mar 2010**
MediaTitle **The Star**
Section **Metro**
Journalist **N/A**
Frequency **Daily**
Circ / Read **293,375 / 1,026,812**

Language **English**
Page No **M18,19**
Article Size **857 cm²**
Color **Full Color**
ADValue **32,071**
PRValue **96,212**

Strong: The furniture made from Pops Lumber is sturdy and customers can customise the raw material to their needs.



Headline **From waste to wealth**
Date **08 Mar 2010**
MediaTitle **The Star**
Section **Metro**
Journalist **N/A**
Frequency **Daily**
Circ / Read **293,375 / 1,026,812**

Language **English**
Page No **M18,19**
Article Size **857 cm²**
Color **Full Color**
ADValue **32,071**
PRValue **96,212**



Dr Wan: The issue with oil palm lumber has always been transportation. Oil palm has 300% moisture so it is very heavy. Drying it was also a problem.

Quality product: Dr Marzalina holding up a block of Pops Lumber that features carving; note that the edges have not been chipped.

Muhammad: We are patriotic, and we want to ensure Malaysia gets the benefits .