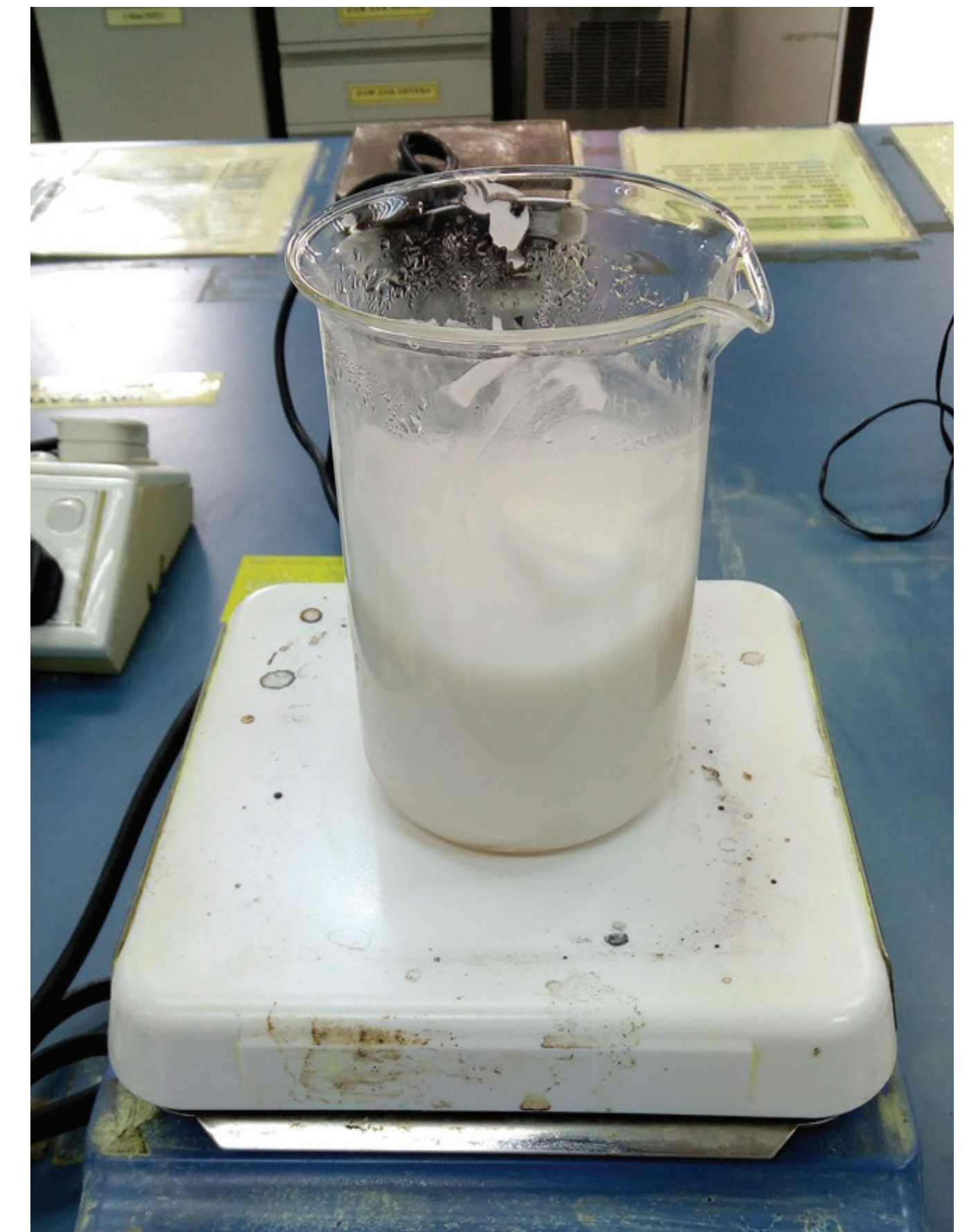


WASTE TO WEALTH : MANUFACTURING OF BIODEGRADABLE FOOD CONTAINER BY UTILIZING COCONUT WASTE

PATENT NO : PI 2021003874



BRIEF TECHNOLOGY

A biodegradable food container product. It is made from coconut fibers. This invention is made from agricultural waste, which can help to save the environment. Besides, this invention is an alternative to plastics, polystyrene, and etc.

PROBLEM STATEMENT & CURRENT ISSUES

The coconut palm (*Cocos nucifera* L.) is described as the "tree of life" with multifarious uses. In Malaysia, coconut is the fourth-most important industrial crop after oil palm, rubber, and paddy in terms of total planted area. It is also one of the oldest agro-based industries. Coir fibre is obtained from the fibrous husk of the coconut from the coconut palm. Nowadays, many people use coconuts for various purposes. However, it caused an abundance of coconut husk waste in coconut industries. Besides that, the government also released a policy that says people need to reduce their use of polystyrene and plastic products in daily life due to environmental factors. Therefore, this invention is a new alternative to plastic and polystyrene by producing biodegradable food containers from coconut husk with a low cost, easy method, and helps to save the environment.

INVENTIVENESS & NOVELTY

1. From waste to wealth product
Invention is made from agricultural waste which is coconut husk. By this, it can help to save the environment.
2. Biodegradable
Invention is biodegradable. Government and international NGOs had released a policy which people need to reduce use of polystyrene and plastic products in daily life due to environmental factor. So, our product is an alternative toward plastics, polystyrene and etc.
3. Cost saving and material easy to be found
Coconut husk is easy to be found and not expensive. The materials used also low cost.

USEFULNESS & APPLICATION

Innovation that have been created have good resilience. It is capable of accommodating quantities of food up to one kilogram.

These innovations are also easily decomposed and help reduce waste generation. Therefore, this innovation is user -friendly which can help reduce environmental pollution.

IMPACT OF THE PRODUCT

- The awareness of society today is increasing on environmental issues and the responsibility to take care of nature. Therefore, this innovation can attract the interest of those who like to use biodegradable materials and further promote public awareness in helping to reduce environmental pollution.
- Economic development by utilizing agricultural waste products – coinciding 'waste to wealth' concept.

MARKET POTENTIAL

Food and Plastics Industry.

TRL : 5 - Validation in real environment



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