UTM
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PINAPLASTIC

FROM PINEAPPLE WASTE INTO DEGRADABLE PLASTIC COMPOSITE

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DESCRIPTION

Bio-composite comprising the steps of extruding a homogeneous mixture of a thermoplastic powder of dried agro based fibers to form pellet in the presence of a dispersing agent at a temperature in between 150°C to 200°C; coating the formed pellet with a liquid mixture

Needs

a) Utilising waste from pineapple canning industry.
b) Melt process able; suitable to be used in
c) conventional plastic processing equipment. Non-toxic materials.
d) Inexpensive renewable raw materials; pineapple waste.

Benefits

a) Low cost and very economical solution.
b) Simple and cheap processing method.
c) Easy technology transfer.
d) Various Application (Fibre Loading).
e) Environmentally friendly.

Application

a) The raw material used in the development of this bio-paper is an agricultural waste which is fully biodegradable, and available abundantly at low cost.

b) In the present invention, the polymeric composition contains a pineapple waste portion which is consumed by microorganism and subsequently left over the synthetic polymer skeleton to be further decomposed by natural element. Hence, the present invention increase and improve the biodegradability of the polymeric composition.

Targeted Market

a) Craft industry
b) Packing industry
c) Agro-based industry

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