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## The thermal insulators fabricated from leaves green tea with water hyacinths

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### Abstracts

The purpose was study about the properties of the insulation fibers panels from waste of tea leaves and water hyacinth. it mixed together in 5 ratio 100:0 , 80:20 , 50:50 , 20:80 , 0:100 with compress insulation by machine by 120 kg/square centimeter in 10 minutes product is flat size 400x 400 mm. and thickness is 10 mm. will produce insulation at a density of two conditions is 400 and 800 kg per cubic meter of 5 discs in one state overall summary sheet insulation to produce a total of 10 sheets. the possibility to study the thermal properties compared to standard commercial discs. Physical Properties And mechanical tests according to JIS A 5905-1994.

The results showed Insulation panels made from waste tea leaves with water hyacinth fibers are mixed at 50% is a good type of insulation. This is based on the heat between 0.058 to 0.089 watts per meter degree Celsius. The physical properties testing And mechanical properties The insulation panels from waste tea leaves, water hyacinth fibers with a density of 800Kg / m<sup>3</sup>. That is the best because the disc is a high density. A standard feature of the plate better JIS A 5905-1994. Sheet with low density.

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