

利用木薯皮废料与香蕉塑料废胶和水葫芦制成生物煤块

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摘 要:

		300°C	350°C	400°C	450°C	500°C
45						400°C
	5461 Cal/g			5265 Cal/g		

关键词:

Bio briquettes made from cassava skin waste utilizing banana plastic waste glue and water hyacinth

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Abstract: Cassava peel waste in large quantities can harm the environment. Cassava peel waste can be used as a renewable energy feedstock since it is environmentally friendly biomass converted into bio briquettes for use as an alternative fuel. The advantage of cassava peel can positively impact the environment while also adding value to the cassava peel. Cassava bio briquettes produced with water hyacinth and banana leaf stem were compared in this study. Temperatures of 300°C, 350°C, 400°C, 450°C, and 500°C are used to discover the best conditions for briquettes, with a carbonization time of 45 minutes. Bio briquettes can be made from water hyacinth and banana leaf stalks, according to the analysis. The best results were achieved at 400°C carbonization temperature, with a calorific value of 5461 Cal/g for water hyacinth adhesives and 5265 Cal/g for banana leaf stalk adhesives.

Keywords: bio briquettes; carbonization; water hyacinth; banana leaf stalk

一、引言

10-15

[3]

2004 4.53 SBM

1997

3.85 BBM^[1]

[4]

2005 2025

1000

49

二、材料和方法

[2]

1.

0.22% [5] 17.45% 8-15% 15.20% 0.63% 74.73% 0.5-2% 2 /
UNIDO
[6]
8-15%
50%
10.06-13.14%
82.49-169.78% 35.70-102.30%
0.86-0.87 g/cm³[7]
2.
“ ”

104 110°C

CO CH₄
CO₂ H₂O
950°C
[8] 40%
3. 15% 25%
93% 97%
10-20% 20 g 100 g 4.

[10]

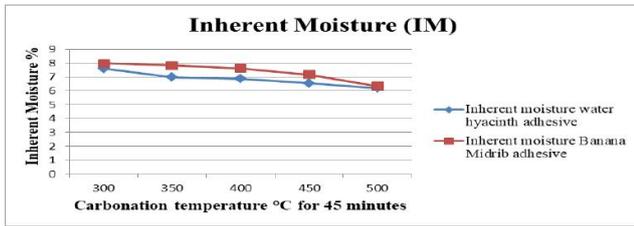
[9]

100

1

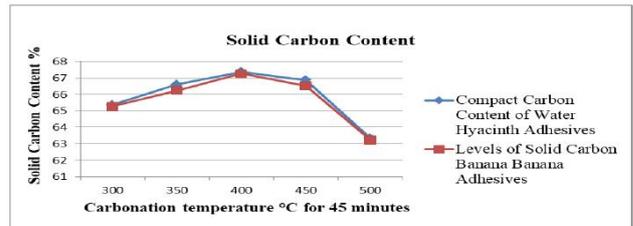
三、结果和讨论

1

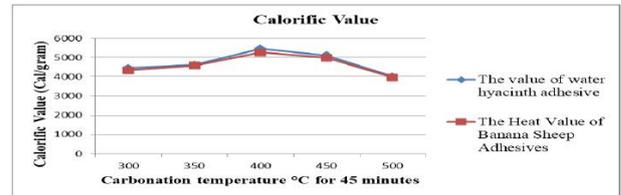


1. (IM)

2

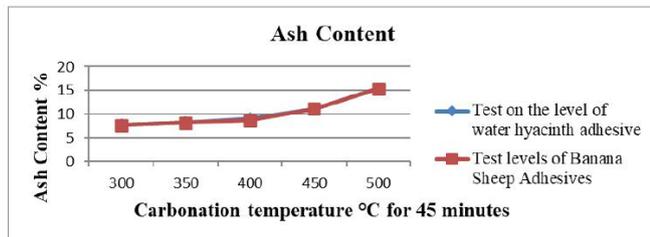


4.



5.

四、结论



2.

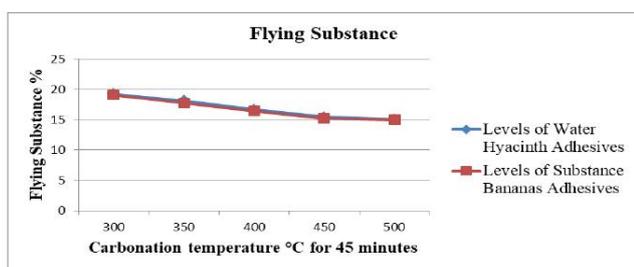
3

400°C

5461 cal/g

500°C

5265 cal/g



3.

4 400°C

500°C

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