



SDI Review Form 1.6

Journal Name:	<u>British Journal of Applied Science & Technology</u>
Manuscript Number:	Ms_BJAST_30482
Title of the Manuscript:	POTENTIAL OF MAGNETIC SAND AS CATALYST FOR THE HETEROGENEOUS TRANSESTERIFICATION OF LUFFA (LUFFA CYLINDRICA) SEED OIL TO BIODIESEL
Type of the Article	Original Research Article

General guideline for Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound.

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PART 1: Review Comments

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
Compulsory REVISION comments	1. Luffa oil is known to have high FFA as you correctly mentioned in Line 45 and must be lowered to less than 3% via esterification method (Line 55-56) to enhance high yield of methylester. Therefore it is important to characterise the raw luffa oil in terms of its physiochemical properties before experimentation particularly FFA and H₂O content and state how both were lowered because both parameters affects yield of methylester. 2. Line 62: Replace "bases" with "basis". 3. Line 68: State the quantity of sand collected. 4. Line 74: State the quantity of powder sample used. 5. Line 87: Write the equation as Equation 1. 6. Line 95: State quantity of powder sample.	1. The use of homogeneous catalysts such as NaOH to transesterify oils with high FFA results in the formation of soap which ultimately lowers methylester yield. However, methylester yield is mildly affected by FFA content when heterogeneous catalyst is used because the possibility of soap formation is minimal(Line 59-61). The use of heterogeneous catalyst particularly in this research work informed the uncharacterization of the oil in terms of FFA content. 2. Line 62: correction has been effected 3. Line 68: correction effected 4. Line 74: correction effected 5. Line 87: correction effected 6. Line 95: correction effected in (Line 96)
Minor REVISION comments		
Optional/General comments		