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PART 1:

Journal Name:	Physical Review & Research International
Manuscript Number:	**MS: 2012 PRRI 2609**
Title of the Manuscript:	**Biodiesel Production from Tigernut (*Cyperus esculentus*) Oil and Characterization of its Blend with Petro-diesel**

General guideline for Peer Review process is available in this link:
(http://www.sciencedomain.org/page.php?id=sdi-general-editorial-policy#Peer-Review-Guideline)

- This form has total 9 parts. Kindly note that you should use all the parts of this review form.

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PART 2: 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	Introduction: Judging from the manuscript, the final goal of the study is to assess the quality of tigernut methyl esters (biodiesel) after blending with petro-diesel. To achieve this, it is necessary to prepare a step of biodiesel production from the tigernut oil. The previous step (acid pre-treatment) should be declared by authors so that the readers can understand regarding the particular oil treatment step prior to transesterification process for the oil with high FFA content. Therefore, the authors are encouraged to correct the objective in the end of introduction section. The fatty acid composition of tigernut oil should be tabulated under material and methods section. More explanations are necessary particularly on B30 and B40 (in terms of viscosity, acid values, ash content and flash point), because those particular terms are out of the standard values. And thus the way to write the units (whole the manuscript) should be consistence as well. Results and Discussion: The authors should include the explanation of transesterification process primarily about the optimal process condition in the section of Results and Discussion.	

	Conclusion: Conclusion does not give correct information regarding the manuscript. The paper has claimed that the tigernut oil is a very good oil for biodiesel production, based on what?. Authors should prepare the conclusion which covers all objectives proposed.	

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Minor REVISION comments	Page 2 line 34-36 : any references? Page 2 line 37 : change 'T' with 't' in the word of 'Tigernut', please be consistence in the whole manuscript Page 2 line 38-39 : put the data into table rather than in the sentence Page 3 line 66 : change the word of 'equipment' with 'engine' Page 3 line 81 : change the word of 'Liter' with 'L' Page 4 line 113 : change the 'KOH' with 'potassium hydroxide' Page 4 line 117 : change the word 'liter' with 'L' Page 5 line 142-143 : please give the examples of oil seed feedstock Page 6 line 155 : please describe more details on the yield of biodiesel which was reported by Itodo et al. and Ibeto et al. and then compared to the yield of biodiesel obtained by authors Page 7 line 156-157 : please explain more details regarding this statement '.....it also favours the single stage transesterification process' Page 7 line 160 : please give the examples of oil Page 8 line 177-178 : replace 'mgKOH/g' with ' mg/KOHg-1', please be consistence	
Optional/General comments	This manuscript investigates production of biodiesel from tigernut (Cyperus esculentus) oil and analysis of biodiesel quality after blending in various volume ratios. In general, this manuscript focuses on the characterization of blended	

	biodiesel . Meanwhile, the mechanism of biodiesel production, particularly the transesterification process is just described shortly in Material and Methods section. Also, as the common understanding, the usage of edible oil as raw material will interfere the food supply chain, but in this matter, the authors have claimed that the use of this edible oil (tigernut oil) does not disturb the food security, because it is not as a main resource of food in the country. Although, the experimental works on production of biodiesel from vegetable oils, especially usage of edible oil as a feedstock is a very common issue presently. But, in terms of the raw material application, the authors could still contribute in developing the biodiesel resources. Based on this situation the main goal of this manuscript is importance. The analytical procedures are sound and the results are reliable. However, there are several lacks in the manuscript that must be solved before acceptance for publication.	

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