

Review Form 3

Journal Name:	Journal of Advances in Biology & Biotechnology
Manuscript Number:	Ms_JABB_121751
Title of the Manuscript:	Bioenergy Potential of Three Fast-Growing Trees: A Pilot Gasification Study for Thermal Applications
Type of the Article	

Review Form 3

PART 1: Review Comments

Compulsory REVISION comments	Reviewer's comment	Author's Feedback (Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
Please write a few sentences regarding the importance of this manuscript for the scientific community. Why do you like (or dislike) this manuscript? A minimum of 3-4 sentences may be required for this part.	The paper treats an interesting and important subject in a comprehensive way. The final conclusions can be looked upon as a first step in using the said short trees for gasification. The work is enriched by investigating the potential of gasifying more than one type of plant.	
Is the title of the article suitable? (If not please suggest an alternative title)	The title of the paper is suitable.	
Is the abstract of the article comprehensive? Do you suggest the addition (or deletion) of some points in this section? Please write your suggestions here.	The abstract is effectively comprehensive, although I have some reservations about the way some units are expressed.	
Are subsections and structure of the manuscript appropriate?	Some parts appearing in the section: Materials and Methods should have been transferred to the introduction section since they deal with basic knowledge about the gasification reactions rather than describing the way the process was conducted. (highlighted in yellow)	
Please write a few sentences regarding the scientific correctness of this manuscript. Why do you think that this manuscript is scientifically robust and technically sound? A minimum of 3-4 sentences may be required for this part.	The aim of the work is clear as it makes use of three short plants to produce syngas. This is a clear example of producing an added value produce from cheap sources. The reasonable properties of the produced gas reveal the possibility of applying that technique on an industrial scale.	
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.	The references while being quite sufficient are not exactly recent: Out of 33 references, less than half of them (15) are from the last ten years. Besides, the first reference in particular lacks details.	
Minor REVISION comments Is the language/English quality of the article suitable for scholarly communications?	1) Kindly abide by the ISO1000 instructions of using mm instead of cm in designating linear dimensions. 2) The calorific value of the syngas produced must be determined experimentally since relying on empirical formulas involve probable errors. Moreover, I found no evidence of the equation: $\Delta H = (12.76 \text{ MJ m}^{-3} \times \text{H}_2\%) + (12.63 \text{ MJ m}^{-3} \times \text{CO } \%) + (39.76 \text{ MJ m}^{-3} \times \text{CH}_4\%)$ in the cited reference [9]. Kindly explain the provenance of that equation. 3) The way some units were written is unacceptable. You don't write MJ m^{-3-1} , but rather MJ m^{-3}	
Optional/General comments		

PART 2:

	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)
Are there ethical issues in this manuscript?	<u>(If yes, Kindly please write down the ethical issues here in details)</u>	

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