

Review Form 3

Journal Name:	Journal of Advances in Biology & Biotechnology
Manuscript Number:	Ms_JABB_130679
Title of the Manuscript:	Regulatory activity of the aqueous extract of Picralima nitida seeds (Apocynaceae) on the glycemia of normoglycemic and hyperglycemic Wistar rats
Type of the Article	Original Research Article

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PART 1: Comments

	Reviewer's comment	Author's Feedback <i>(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</i>
Please write a few sentences regarding the importance of this manuscript for the scientific community. A minimum of 3-4 sentences may be required for this part.	The antidiabetic potential of <i>Picrolima nitida</i> seeds may be significant, as exhibited in this study using experimental rat models.	The results of the effect of the extract on blood sugar showed that the extract did not cause hypoglycemia or hyperglycemia in normoglycemic rats. As for the effect of the extract on blood sugar in hyperglycemic rats, the extract caused a significant reduction in hyperglycemia induced in rats with glucose.  The antihyperglycemic and antihypoglycemic properties that the seeds of <i>P. nitida</i> highlighted in this work, reveal that the seeds of this plant would be a powerful remedy in the treatment of diabetes thanks to its active ingredients.
Is the title of the article suitable? (If not please suggest an alternative title)	Yes	
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.	Yes	
Is the manuscript scientifically, correct? Please write here.	1. It is important to include that Glibenclamide was used as the standard antidiabetic drug. 2. Discussion includes in incomplete sentences and needs more clarity and explanation with recent references For eg.( Thus , the hypoglycemia and reduction of hyperglycemia observed in rats treated with <i>P. nitida</i> aqueous extract were significantly reduced . nitida plant could be explained either by a stimulation of insulin secretion by the pancreas or by an increase in peripheral glucose utilization in the presence ( Yasodha et al ., 2008).)	Thus, the significant reduction in hyperglycemia in rats treated with the aqueous extract of <i>P. nitida</i> could be explained either by a stimulation of insulin secretion by the pancreas or by an increase in peripheral glucose utilization in the presence (Yasodha et al., 2008).)
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.	No. The current status of prevalence of diabetes has been cited as WHO, 2013. The authors must update the current references in the Introductory section as well as in Discussion.	Diabetes is a chronic and serious metabolic disease caused by insufficient or poor use of insulin by the body (WHO, 2021). According to WHO, the number of people with diabetes has

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	<a href="https://faseb.onlinelibrary.wiley.com/doi/abs/10.1096/fasebj.31.1_supplement.lb562">https://faseb.onlinelibrary.wiley.com/doi/abs/10.1096/fasebj.31.1_supplement.lb562</a> <a href="https://pmc.ncbi.nlm.nih.gov/articles/PMC7604582/#:~:text=Picralima%20nitida%20is%20a%20therapeutic,several%20disease%20conditions%20including%20diabetes">https://pmc.ncbi.nlm.nih.gov/articles/PMC7604582/#:~:text=Picralima%20nitida%20is%20a%20therapeutic,several%20disease%20conditions%20including%20diabetes</a>	increased from 200 million in 1990 to 830 million in 2022 (WHO, 2024). Estimates for 2030 are approximately 4.7% of the world population (Shaw et al., 2010). In the WHO African Region alone, more than 24 million adults live with diabetes. This rate could reach 54 million by 2045 if measures are not taken to address this problem (WHO, 2024). Furthermore, in 2021, studies showed that diabetes was the direct cause of 1.6 million deaths, of which 47% of deaths occurred before the age of 70 years. According to GBDCN studies, more than 530,000 deaths from kidney disease were caused by diabetes. Also, 11% of deaths from cardiovascular diseases are linked to hyperglycemia (GBDCN, 2024). In sub-Saharan countries, although traditional medicine treatments exist, the population continues to turn to plants given the high cost of modern medicine treatments (Konda et al., 2011). In Africa, several medicinal plants have been identified in the treatment of metabolic diseases such as diabetes. It is in this context that picralima nitida, a plant that has very interesting therapeutic and antioxidant properties, was chosen to evaluate its effects on the regulation of blood sugar. The effects of the seeds of the plant are a remedy against malaria and diabetes (Teugwa et al., 2013)
Is the language/English quality of the article suitable for scholarly communications?	Yes.	
Optional/General comments	1. The scientific name <i>Picrolima</i> should begin with a Capital letter. 2. All abbreviations written for the first time should be elaborated.	ok

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?	(If yes, Kindly please write down the ethical issues here in details)	The work required the use of laboratory animals, however the manipulations were carried out in strict compliance with the rules governing ethics under the supervision of Professor OUATTARA-SORO F.S., head of the Reproduction and Development Laboratory of the UFR Bioscience of Felix Houphouet-Boigny University of Cote d'Ivoire.