

Review Form 3

Journal Name:	South Asian Research Journal of Natural Products
Manuscript Number:	Ms_SARJNP_124909
Title of the Manuscript:	Chemical analysis and biological studies of leaf extracts of <i>Smallanthus sonchifolius</i> (Poepp.) H. Rob. with an in-silico assessment of GC-MS identified compounds
Type of the Article	Original Research Article

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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)
<p>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.</p>	<p>1. Clarity of Research Objective: Felt the research objective could be articulated more clearly. The purpose of the study should be better emphasized in the introduction.</p> <p>Strengths: Your study includes computational analysis and compares several bioactivities that can lead to new research directions, particularly in natural product pharmacology and drug discovery.</p>	
<p>Is the title of the article suitable? (If not please suggest an alternative title)</p>	<p>Improvements: Consider emphasizing the unique aspects of your findings, such as specific compounds that have not been extensively reported. Expanding on the implications of your molecular docking results and bioactivity could further strengthen the paper</p>	
<p>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.</p>	<p>2: Emphasize how your study differs or contributes uniquely to the field would address this?</p>	
<p>Are subsections and structure of the manuscript appropriate?</p>	<p>3. Statistical Analysis and Interpretation: The statistical analysis was not reported, especially regarding significance levels. It provides better explanation.</p>	
<p>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.</p>	<p>4. Results & Discussion: Separation of results and discussion is recommended. This would improve the clarity of the manuscript.</p>	
<p>Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form. =</p>	<p>5. Discussion and Comparison to Existing Literature: The discussion section was perceived as weak, with insufficient comparisons to existing literature. More in-depth analysis of how the results fit within the current body of knowledge is needed. Address the below points in discussion.</p> <p>5.1 Clarify why the aqueous extract had the highest yield. Discuss the correlation between solvent polarity and extract yield in more detail. - Explain the absence of flavonoids in the aqueous extract compared to other solvents.</p> <p>5.2 - Expand on how the high phenolic and flavonoid content relates to antioxidant properties, citing more recent studies. - Compare TPC and TFC values to other similar plant studies to highlight relevance.</p> <p>5.3 Discuss the implications of the methanol extract being less potent than ascorbic acid but still having significant antioxidant potential.</p> <p>5.4 - Clarify why the methanol extract, despite having higher antioxidant activity, showed a less potent α-amylase inhibition compared to the chloroform extract. - Explore how these findings align with other studies on α-amylase inhibition by natural extracts.</p> <p>5.5 Provide a discussion on why the hexane and chloroform extracts exhibited stronger activity against <i>Candida albicans</i> than against bacterial strains.</p> <p>5.6 - Expand on the interpretation of LC50 values with more reference to toxicological benchmarks. - Highlight the potential anticancer implications of the observed toxicity, and suggest future studies to explore this aspect.</p> <p>5.7 - Include a more detailed interpretation of the compounds identified, focusing on their biological relevance. - Compare the abundance of specific compounds to their known pharmacological activities.</p> <p>5.8 - Elaborate on the significance of the protein-ligand interactions in relation to the natural inhibitors. - Provide more context on how the docking scores relate to experimental findings and potential therapeutic implications.</p> <p>6. Mechanistic Insight: deeper insight into the mechanisms of the observed bioactivity. I recommend to provide hypotheses or potential mechanisms for the phytochemicals action.</p> <p>7. Language and Grammar Issues: Reviewer suggests thorough check for grammatical errors.</p> <p>Overall, the article is well-structured and informative, but minor improvements in clarity, conciseness, and</p>	

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Minor REVISION comments		
Is the language/English quality of the article suitable for scholarly communications?		
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?	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	

Reviewer Details:

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