

**Review Form 3**

Journal Name:	<b>South Asian Research Journal of Natural Products</b>
Manuscript Number:	<b>Ms_SARJNP_122775</b>
Title of the Manuscript:	<b>Bioactive Constituents and Assessment of the Antioxidant and Anti-Inflammatory Efficacies of Spondias mombin Leaves</b>
Type of the Article	<b>Original Research Article</b>

## 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)
<p><b>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.</b></p>	<p>1. The data provided in this study is valuable for the scientific community as it offers detailed insights into the phytochemical composition of plant leaf extracts, identified through GC-MS and HPLC analysis.            2. Phytochemical information is crucial for understanding the bioactive compounds that contribute to the plant's therapeutic potential.            3. The study's use of multiple analytical techniques and assays ensures a thorough evaluation of the plant extracts' properties.</p>	
<p><b>Is the title of the article suitable? (If not please suggest an alternative title)</b></p>	<p>The title "Bioactive Constituents and Assessment of the Antioxidant and Anti-Inflammatory Efficacies of Spondias mombin Leaves" is generally suitable as it clearly reflects the content and focus of the article. However, it could be slightly refined for clarity and impact.  <b>Suggested alternative title:</b> "Phytochemical Profiling and Assessment of Antioxidant and Anti-Inflammatory Properties of Spondias mombin Leaf Extracts"</p>	
<p><b>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.</b></p>	<p>The abstract of the article is comprehensive and effectively summarizes the study's key points, including the purpose, methods, main findings, and conclusions. However, the following suggestions could enhance clarity:</p> <p><b>1. The information needs correctness:</b>  <b>Given sentence:</b> "The HPLC methanol extract analysis detected quercetin, kaempferol, naringenin, luteolin (flavonoids) and cholesterol, saponin and maleic acid as the major bioactive phenolic compounds."  <b>Doubt:</b> maleic acid is not a phenolic acid. It is a dicarboxylic acid with no phenolic structure. Phenolic acids typically have a hydroxyl group attached to an aromatic ring.</p> <p><b>2. Repeated 'and' word:</b>  <b>Given sentence:</b> "The HPLC methanol extract analysis detected quercetin, kaempferol, naringenin, luteolin (flavonoids) and cholesterol, saponin and maleic acid as the major bioactive phenolic compounds."  <b>Example:</b> The HPLC methanol extract analysis detected quercetin, kaempferol, naringenin, and luteolin (flavonoids), along with cholesterol, saponin, and maleic acid as the major bioactive phenolic compounds."</p> <p><b>3. Results Emphasis:</b>            Highlight the comparison between the n-hexane and methanol extracts more clearly, emphasizing the superiority of the methanol extract.  <b>Example:</b> "Compared to the n-hexane extract, the methanol extract demonstrated significantly higher levels of total phenolics, flavonoids, and overall antioxidant capacity."</p>	
<p><b>Are subsections and structure of the manuscript appropriate?</b></p>	<p>Yes</p>	
<p><b>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.</b></p>	<p>1. The manuscript is scientifically robust and technically sound, as it provides substantial evidence through instrumental analysis with accompanying graphical data.            2. The use of GC-MS and HPLC for phytochemical analysis, coupled with various assays for assessing antioxidant and anti-inflammatory properties, enhances the reliability of the findings.  <b>However, the manuscript's credibility is somewhat diminished by the absence of details regarding ethical approval for rat use, which is crucial for confirming ethical research practices. Including this information would enhance the manuscript's trustworthiness.</b></p>	
<p><b>Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.</b></p>	<p>Yes</p>	

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<p>Minor REVISION comments</p> <p><b>Is the language/English quality of the article suitable for scholarly communications?</b></p>	<p>The language and English quality of the provided data are generally suitable for scholarly communication but some corrections can make the scholarly communication more effective.</p> <p><b>Example:</b></p> <ol style="list-style-type: none"><li>1. n-hexane leaf extracts of <i>S. mombin</i> and <del>to</del> also evaluate their <i>in vitro</i> antioxidant and <i>in vivo</i> anti-inflammatory efficacies. (page no. 2)</li><li>2. including gonorrhoea, cough, sore throat, fever, cholera, constipation, yaws, <del>and</del> stomach issues, and are also utilized as an intra-partum aid (page no. 2)</li><li>3. Correctness in spelling. Example: 1. Wrong: aluminum trichloride; Correct: aluminium trichloride. (page no.4) 2. Wrong: hepatoprotective; Correct: haepatoprotective. (page no. 15)</li><li>5. Use appropriate articles. Example: 1. 'a' before 'remarkable' in the sentence, "The methanol leaf extract of <i>S. mombin</i> exhibited remarkable anti-inflammatory effect....." (page no.28) 2. 'the' before 'increase' in the sentence, ".....<i>S. mombin</i> has strong anti-inflammatory effect that rises with increase in dosage." (page no.30)</li></ol>	
<p><b>Optional/General</b> comments</p>	<p>The study provides a comprehensive analysis of the chemical constituents and bioactivity of <i>Spondias mombin</i> leaves but needs of evidence of ethical approval for animal use.</p>	

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

### Reviewer Details:

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