

**Review Form 3**

Journal Name:	<a href="#">Asian Plant Research Journal</a>
Manuscript Number:	Ms_APRJ_125017
Title of the Manuscript:	<b>Phytochemical Profiling and Nutraceutical Benefits of Methanol Leaf Extracts from Datura alba ness</b>
Type of the Article	<b>Research</b>

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### PART 1: Review Comments

<b>Compulsory</b> REVISION comments	Reviewer's comment	<b>Author's Feedback</b> (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.	This manuscript is significant for the scientific community as it provides a comprehensive analysis of <i>Datura alba ness</i> , a species that has not been thoroughly characterized despite its traditional medicinal uses. By detailing its nutritional and phytochemical properties, the study contributes valuable data that can enhance the understanding of plant-based therapies and promote further research into herbal medicine. Additionally, the identification of bioactive compounds through rigorous methodologies such as GC-MS supports the potential for developing new therapeutic agents. I appreciate this manuscript for its meticulous approach and its potential to bridge the gap between traditional uses and modern scientific validation, although it would benefit from more exploration of the implications of these findings in clinical settings.	
Is the title of the article suitable? (If not please suggest an alternative title)	The title of the article is suitable as it clearly indicates the focus on the nutritional and phytochemical analysis of <i>Datura alba ness</i> . However, to enhance clarity and specificity, an alternative title could be: <b>"Phytochemical Profiling and Nutritional Evaluation of <i>Datura alba ness</i>: Insights into Its Medicinal Potential"</b> This revision emphasizes both the analytical aspects and the implications for medicinal use, which could attract a broader audience interested in pharmacology and herbal medicine.	
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 generally comprehensive, covering the study's objectives, methods, key findings, and implications. However, to enhance clarity and impact, it could benefit from a few adjustments. First, the main goal could be stated more explicitly at the beginning, such as, "This study aims to investigate the nutritional and phytochemical properties of <i>Datura alba ness</i> ." Additionally, a brief mention of the specific techniques used for the analyses, like proximate analysis, qualitative and quantitative phytochemical assays, and GC-MS would provide better context. In the results section, highlighting the most significant compounds or their potential applications more distinctly would strengthen the findings. Finally, reinforcing the implications of these findings for traditional medicine and potential therapeutic applications in the conclusion will make the abstract more informative for readers. Incorporating these suggestions will improve the overall clarity and utility of the abstract.  For example,  This study investigates the nutritional and phytochemical properties of <i>Datura alba ness</i> , a commonly used medicinal plant in Nigeria. Fresh leaves were subjected to proximate analysis, qualitative and quantitative phytochemical screening, and gas chromatography-mass spectrometry (GC-MS) for detailed characterization. The results revealed a high moisture content (60.4%) and significant levels of crude protein (21.9%) and carbohydrates (7.6%). Phytochemical analysis identified flavonoids (12.62 mg/100g), alkaloids (4.92 mg/100g), and tannins (3.13 mg/100g) as the predominant bioactive compounds, highlighting the plant's potential therapeutic applications. GC-MS analysis detected 29 compounds, with Bis(2-ethylhexyl) phthalate and gamma-sitosterol being the most abundant. These findings support the potential use of <i>Datura alba ness</i> as a valuable supplement in traditional medicine, suggesting its efficacy in addressing oxidative stress, inflammation, and various diseases.	
Are subsections and structure of the manuscript appropriate?	Yes	
Please write a few sentences regarding the scientific correctness of this manuscript. Why do you think that this manuscript is scientifically	The manuscript demonstrates scientific robustness and technical soundness through its systematic approach to the investigation of <i>Datura alba ness</i> . The use of well-established protocols for proximate and phytochemical analyses, along with advanced techniques like GC-	

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robust and technically sound? A minimum of 3-4 sentences may be required for this part.	MS for chemical characterization, underscores the reliability of the data obtained. Furthermore, the comprehensive reporting of both qualitative and quantitative phytochemicals provides a solid foundation for understanding the plant's potential therapeutic applications. The discussion effectively contextualizes the findings within existing literature, indicating a thorough understanding of the subject matter and reinforcing the scientific validity of the research. Overall, the meticulous methodology and detailed results contribute to the manuscript's credibility within the field.	
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form. -	The references provided in the manuscript appear to be sufficient to support the research findings and discussions.	
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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