

Review Form 3

Journal Name:	Journal of Advances in Biology & Biotechnology
Manuscript Number:	Ms_JABB_126666
Title of the Manuscript:	Broccoli An Underexploited Exotic Vegetable In Nutraceutical Development: A Review
Type of the Article	Review 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>This paper explores broccoli's potential as a nutraceutical. This topic is relevant to both public health and agricultural biotechnology. Given the increasing interest in functional foods and preventive health, this manuscript is timely. It discusses different bioactive compounds found in broccoli like sulforaphane and glucosinolates which pick interest due to their reported anti-cancer, anti-inflammatory, and anti-oxidant properties among their many other health benefits. This could provide a foundation for further studies on this underutilized crop. The paper's focus on advanced extraction techniques and nutraceutical enhancement makes it a strong contribution to nutraceutical research.</p>	
<p>Is the title of the article suitable? (If not please suggest an alternative title)</p>	<p>The current title is informative and effective in capturing the manuscript's focus on broccoli's nutraceutical potential. Consider a more specific title highlighting "health benefits" and "bioactive compounds" for enhanced reader engagement. An alternative title like <i>"Broccoli in Nutraceutical Development: Health Benefits, Bioactive Compounds, and Sustainable Applications"</i> can be used.</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>The abstract gives a good overview of the article but would benefit from reducing the extensive discussion on general wellness trends and instead emphasize on broccoli's bioactive compounds and their specific health benefits along with sustainable extraction methods. For example, include a sentence summarizing the unique bioactive compounds in broccoli and briefly mention the potential applications in health-focused products.</p>	
<p>Are subsections and structure of the manuscript appropriate?</p>	<p>The manuscript is well-structured. Sections are clearly defined and progress logically. Add a "Future Research Directions" section to strengthen the paper by highlighting potential research gaps and applications.</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>The manuscript appears scientifically sound and well-researched. It provides detailed information on broccoli's bioactive compounds and their health benefits. It accurately references recent studies on environmental influences, extraction methods, and breeding techniques. Overall, the manuscript is scientifically sound, with well-documented benefits of broccoli's bioactive compounds, particularly sulforaphane's anticancer and anti-inflammatory properties. The discussions on glucosinolate content under different environmental conditions and innovative extraction techniques are insightful. However, some claims, especially in sections discussing health benefits, would benefit from further referencing to recent studies on glucosinolates. Overall, the scientific foundation is strong, with data-backed discussions that enhance the manuscript's credibility.</p>	
<p>Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form. =</p>	<p>The manuscript includes a comprehensive and recent set of references which help in effectively supporting claims on broccoli's bioactive compounds and nutraceutical potential. But, sections on glucosinolate health benefits could benefit from additional recent studies for enhanced depth. Ensuring consistency in citation formatting will also improve the manuscript's professionalism. Suggested additional references could also include recent publications on microwave-assisted extraction methods.</p>	

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Minor REVISION comments Is the language/English quality of the article suitable for scholarly communications?	The manuscript's language is generally suitable for scholarly communication. Descriptions are clear and appropriate scientific terminologies are used. There are a few minor grammatical errors and awkward phrasings. For example, the Introduction contains repetitive phrasing, such as the phrase "valuable not only for their culinary applications but also for their potential as nutraceuticals," which could be streamlined to avoid redundancy. The section on sulforaphane's mechanism could also be simplified to ensure readability without losing scientific rigor. A thorough proofreading pass is recommended to refine these elements and enhance overall flow.	
Optional/General comments	The manuscript provides a comprehensive review of broccoli's potential as a nutraceutical, with a strong focus on bioactive compounds, environmental influences, and sustainable extraction techniques. These elements are highly relevant given the increasing interest in plant-based health interventions. To further enhance the manuscript, consider summarizing key health benefits in a visual format, such as a table or figure, for quick reference. Additionally, brief sections discussing future research directions and potential applications of broccoli in functional foods or supplements would add valuable perspective. Overall, this is a well-researched and insightful manuscript that could benefit from minor structural and formatting enhancements to maximize clarity and impact.	

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>	

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