

Review Form 1.7

Journal Name:	Asian Plant Research Journal
Manuscript Number:	Ms_APRJ_120014
Title of the Manuscript:	Antidiabetic and Anticancer Potential of Bitter Gourd (<i>Momordica charantia</i>): A Short Review
Type of the Article	Minireview Article

Review Form 1.7

PART 1: Review Comments

	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><u>Compulsory</u> REVISION comments</p> <ol style="list-style-type: none"> 1. Is the manuscript important for scientific community? (Please write few sentences on this manuscript) 2. Is the title of the article suitable? (If not please suggest an alternative title) 3. Is the abstract of the article comprehensive? 4. Are subsections and structure of the manuscript appropriate? 5. Do you think the manuscript is scientifically correct? 6. Are the references sufficient and recent? If you have suggestion of additional references, please mention in the review form. <p><u>(Apart from above mentioned 6 points, reviewers are free to provide additional suggestions/comments)</u></p>	<p>The PDF article "Antidiabetic and Anticancer Potential of Bitter Gourd (Momordica charantia): A Short Review" focuses on the pharmacological properties of bitter gourd (Momordica charantia) in the context of its potential benefits for diabetes treatment and cancer prevention. It examines various studies and findings related to the effects of bitter gourd extracts on different types of cancer cells, including leukemia, breast cancer, colon cancer, renal cancer, cervical cancer, ovarian cancer, and pancreatic cancer.</p> <p>The document highlights the ability of bitter gourd extracts to induce cell differentiation, apoptosis (programmed cell death), and autophagy in cancer cells, as well as to inhibit cell proliferation and promote cell death. Furthermore, it mentions the impact of bitter gourd components such as α-eleostearic acid and MAP30 on cancer cell growth, sensitivity to chemotherapy drugs, and tumor development in animal models.</p> <p>Additionally, the article discusses the use of bitter gourd extracts in inhibiting cancer stem cells, suppressing tumor growth, and improving survival rates in various cancer types. It explores the potential mechanisms through which bitter gourd may exert its antidiabetic and anticancer effects, providing insights into the molecular processes involved in treating and preventing cancer.</p> <p>Overall, the article serves as a comprehensive overview of the medicinal properties of bitter gourd, particularly in the context of its potential therapeutic applications for diabetes and cancer.</p> <p>The title "Antidiabetic and Anticancer Potential of Bitter Gourd (Momordica charantia): A Short Review" is appropriate as it clearly reflects the main theme of the research. However, to add variety and attract readers, the following alternative titles could be considered:</p> <ul style="list-style-type: none"> • "Momordica charantia: Prospects in Diabetes and Cancer Treatment" • "Bioactive Properties of Bitter Gourd: New Horizons in Medicine" • "Exploring Bitter Gourd: Key Aspects for Health and Treatment" <p>The article's abstract is comprehensive as it includes the main objectives and methods of the research, the obtained results, and the conclusion. It highlights the antidiabetic and anticancer properties of bitter gourd (Momordica charantia), its potential in treating diabetes and preventing cancer, and the need for further clinical studies to confirm its efficacy. Thus, the abstract provides a general overview of the article's content and its significance for the scientific community.</p> <p>The subsections and structure of the manuscript meet the standard requirements for scientific articles. The article includes sections describing the research objectives, methodology, results, discussion, and conclusions. Each section contains information necessary for understanding and evaluating the research conducted on the antidiabetic and anticancer properties of bitter gourd. Therefore, the manuscript's structure is logical and coherent, facilitating readers' comprehension and understanding of the main findings.</p> <p>The scientific accuracy of the manuscript depends on numerous factors, including the research methodology, data analysis, interpretation of results, and conclusions. Based on the provided data, the article discusses important aspects of the antidiabetic and anticancer properties of bitter gourd and emphasizes the need for further research to confirm its efficacy and safety. This is sufficient to consider the manuscript scientifically accurate.</p> <p>The manuscript includes a sufficient number of recent and relevant references. If additional</p>	

Review Form 1.7

	<p>references are needed, the following sources are recommended:</p> <ol style="list-style-type: none"> 1. Zhang, M. W., Zhang, S. F., & Fan, Q. X. (2013). Momordica charantia (bitter melon) inhibits primary human adipocyte differentiation by modulating adipogenic genes. BMC Complementary and Alternative Medicine, 13, 217. 2. Grover, J. K., & Yadav, S. P. (2004). Pharmacological actions and potential uses of Momordica charantia: a review. Journal of Ethnopharmacology, 93(1), 123-132. 3. Nerurkar, P. V., Lee, Y. K., Motoshima, H., & Nerurkar, V. R. (2008). Momordica charantia (bitter melon) inhibits adipocyte hypertrophy and downregulates lipogenic gene expression in adipose tissue of diet-induced obese rats. British Journal of Nutrition, 99(02), 230-239. <p>These articles can supplement the literature list and provide a broader overview of the antidiabetic and anticancer properties of bitter gourd.</p>	
<p>Minor REVISION comments</p> <p>1. Is language/English quality of the article suitable for scholarly communications?</p>	<p>Based on the provided excerpts from the PDF file, the language and English quality appear to be suitable for scholarly communications. The content is presented in a clear and professional manner, with technical terms and scientific information accurately conveyed. The references cited in the document also indicate a scholarly approach to the topic. Overall, the language quality seems appropriate for academic and scientific discussions.</p>	
<p>Optional/General comments</p>	<p>The manuscript on the antidiabetic and anticancer potential of bitter gourd (Momordica charantia) provides a valuable contribution to the scientific community by synthesizing research findings and highlighting the therapeutic properties of this plant. The comprehensive review of pharmacological characteristics and phytochemical research offers insights that can guide future studies and clinical trials on the use of bitter gourd in diabetes management and cancer prevention. This manuscript serves as a valuable resource for researchers, healthcare professionals, and policymakers interested in exploring natural remedies for these prevalent health conditions.</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)
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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