Review Form 1.7

Journal Name:	**Microbiology Research Journal International**
Manuscript Number:	**Ms_MRJI_96635**
Title of the Manuscript:	**Bioactive compounds from Mangosteen fruit peels (Garcinia mangostana L.) and assessment of their antioxidant potential**
Type of the Article	**Research Article**

General guideline for Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty'**, provided the manuscript is scientifically robust and technically sound.
To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

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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)*
Compulsory REVISION comments **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.** **(Apart from above mentioned 6 points, reviewers are free to provide additional suggestions/comments)**	**Yes** **Yes** **Yes** **Yes** **Yes** **Yes**	
Minor REVISION comments **1. Is language/English quality of the article suitable for scholarly communications?**	Yes	
Optional/General comments	This study was done to valorize mangosteen peels as a source of bioactive compounds for the treatment/prevention of cardiometabolic diseases. Peels from washed mature fruits of Garcinia mangostana were dried, crushed, and sieved, and the bioactive compounds were extracted using distilled water and ethanol 70%, and quantified. The antioxidant potential of the different extracts was assessed through their DPPH scavenging activity, iron reducing power, and total antioxidant capacity. Results showed that ethanol at 70% extracted more bioactive compounds compared to water. Total polyphenols content of 57.19 mg GAE/g DM flavonoids of 35.06 mg QE/g DM, alkaloids of 4.49 mg QuiE/g DM, and vitamin C of 1.42 mg/100g DM were obtained from hydroethanolic extract. As expected, the highest percentage of scavenging DPPH radical (85.98%) was recorded with hydroethanolic extract compared to the aqueous one (44.66%). Similar behaviors were noticed with the hydroethanolic extract regarding the iron-reducing capacity and the total antioxidant capacity. Thus, justifying the positive correlations obtained between bioactive compounds and antioxidant activities although significant ($p<0.05$) between alkaloids and DPPH scavenging activity. Mangosteen peels is a 39 good source of bioactive compounds that might be potentially used for food preservation and 40 the management of cardio-metabolic diseases. **Manuscript is very well written. Tables and figures are correlated. Language of the manuscript is good. Recommended for publication in the journal.**	

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?	*(If yes, Kindly please write down the ethical issues here in details)*	

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Reviewer Details:

Name:	**Amit Gupta**
Department, University & Country	**Dr.B R Ambedkar University, India**