

Review Form 1.6

Journal Name:	Journal of Pharmaceutical Research International
Manuscript Number:	Ms_JPRI_74354
Title of the Manuscript:	Antimicrobial activity of propolis against Streptococcus mutans compare with chlorhexidine
Type of the Article	Original 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)
<u>Compulsory</u> REVISION comments	<p>The authors have treated an interesting issue, like propolis, but they need to revise their work to be considered for publication!</p> <p>- Starting from the title, the authors are not so clear what kind of propolis they have used, from what country...they need to put also <i>in vitro</i>, because they have work <i>in vitro</i>...they can’t say “compare with chlorhexidine”, because their aim is another one...They aren’t very clear in what they wanted to describe.</p> <p>- In the running title, <i>Streptococcus mutans</i> needs to start with a big letter and in italics.</p> <p>- Abstract: this section must be rewritten after the major revision made by the authors. Here, the English also needs an improvement. Introduction: “bee’s not in this way, but bees”; about the properties of propolis, they need to add “etc...”, because there are many others except the ones mentioned. Methods: what kind of propolis has been tested, from which country, etc...?! There aren’t described the groups tested and the methods used properly (for example MIC), but in general way. Where is the concentration of the microbial strain tested? It is better to express in minutes the hours of autoclave and bacteria exposure. What kind of statistical method has been used for? Results: When you use for the first time a long name, into parenthesis the respective acronym. The last sentence has to be in the past tense and not in the present. Conclusion isn’t clear!</p> <p>1. Introduction: For every bacteria used for the first time, it is necessary to put the long name and near into parenthesis the respective acronym, <i>Streptococcus mutans</i> (<i>S. mutans</i>). In this section you need to mention <i>in vitro</i> and <i>ex vivo</i> studies about the oral pathogens responsible for caries disease. For the second sentence I suggest the respective article for the authors to be focused on [Antibacterial Effects of MicroRepair®BIOMA-Based Toothpaste and Chewing Gum on Orthodontic Elastics Contaminated <i>In Vitro</i> with Saliva from Healthy Donors: A Pilot Study. Appl. Sci. 2020, 10, 6721. https://doi.org/10.3390/app10196721].</p> <p>Also here, the word “bee” needs to be in plural. The authors must describe better the propolis, because is a natural compound with a wide spectrum of properties. Even for propolis, I suggest to the authors this <i>in vitro</i> study, that will help a lot the authors after its study [Propolis Affects <i>Pseudomonas aeruginosa</i> Growth, Biofilm Formation, eDNA Release and Phenazine Production: Potential Involvement of Polyphenols. Microorganisms. 2020 Feb 12;8(2):243. doi: 10.3390/microorganisms8020243.].</p> <p>The introduction should be systematized and describing as needed the products/compounds (chlorhexidine and iodine) tested in this <i>in vitro</i> study. The aim is other and inside the manuscript is described other...It is necessary to be revised.</p> <p>2. Materials and Methods: this section would be better to be organized in subsections in manner to describe step by step the experiment. If this study has been developed in a Microbiology Laboratory, it is necessary to be described with microbiologic terminology and not so superficially. You need to put the city and the state of the Dental College.</p> <p>Propolis where has been taken, its location, rural...it was before elaborated or used in a raw state? If you say different concentrations, you can’t say “50 mm”, but describing the procedure and expressing with its appropriate unit. It is better to express in minutes the hours for the autoclave or bacteria exposure. In methodology doesn’t sound good to mention the results. Where is the division of groups, being that the authors have compared...? For the materials used it is necessary to insert brand, city and state where have been taken for the experiment. The statistical analysis is missing also. Figure 1 isn’t clear and is missing the concentration of <i>S. mutans</i> used for the experiment.</p> <p>3. Results: the legend of figure 2 needs to be rewritten and putting each CFU/mL obtained for each agar plate. In the text you need to mention the long name of CFU and then using only its acronym. How many replicate samples you have tested to take the mean? Tables 1 & 2 aren’t clear...The numbers for the bacteria specie what they mean? Figure 3 need a title and then the</p>	

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	<p>appropriate legend. You can't use two different compounds and expressed in two different ways (g & %). Y axis needs to be named CFU/mL and not as a long name. The last sentence of the figure 3 hasn't sense, isn't so convinced.</p> <p>4. Discussion: the word "<i>in vitro</i>" has to be in italics. Discussion is a big confusion! The authors need to discuss their results and not to describe as an introduction. Some sentences are repetitive with them of the introduction. The last sentence of discussion hasn't sense here...!</p> <p>5. Conclusion: this isn't a conclusion based on scientific data...The authors need to ameliorate this section and the entire manuscript!</p>	
Minor REVISION comments		
Optional/General comments		

PART 2:

	Reviewer's comment	Author's comment <i>(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)</i>
Are there ethical issues in this manuscript?	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	

Reviewer Details:

Name:	Aida Meto
Department, University & Country	University of Bologna, Italy