Author's response to reviews

Title: Antibacterial activity of Thymoquinone, an active principle of Nigella sativa and its potency to prevent bacterial biofilm formation

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Version: 2 Date: 21 March 2011

Author's response to reviews:

Dear Professor,

We look all the comments of the two reviewers in consideration with respect. Here you will found our answers about the two reviewer’s suggestions.

Reviewer's report
Title: Antibacterial activity of Thymoquinone an active principle of Nigella sativa and its potency to prevent bacterial biofilm formation
Version: 1 Date: 10 March 2011
Reviewer: Nazime Mercan
Reviewer's report:

This manuscript discusses the antibacterial activity and its potency to prevent bacterial biofilm formation. The work is reasonably well conducted. The methods well described. The results of the study are not scientifically very strong, but the data obtained from the study are well discussed and, the limitations of the work are clearly stated. The title and abstract are related to work. It can be published.

Reviewer's report
Title: Antibacterial activity of Thymoquinone an active principle of Nigella sativa and its potency to prevent bacterial biofilm formation
Version: 1 Date: 4 March 2011
Reviewer: Ladislav Kokoska
Reviewer's report:

The manuscript contains data on the preventing effect of thymoquinone on bacterial biofilm formation in vitro. In my opinion, it contains interesting results worth of publication, however, rewriting of several parts, implementation of certain data, and correction of several typographical and grammatical errors is needed before its acceptance.
Major Compulsory Revisions

1. Since Nigella sativa is not the objective of the study, the data describing its traditional use, chemistry and biological activity can be eliminated in the Background section and replaced by more detailed data on previously reported antibacterial activity of thymoquinone (e.g. Liu et al. 1996).

This section was modified in the manuscript as recommended.

2. The origin of the bacterial strains tested is not mentioned in the Organisms and chemicals section. Within each category (e.g. Gram-negative bacilli) mentioned in this section, bacteria should be listed in alphabetical order.

- The bacterial strains used in this study were a reference strains grouped in Gram negative bacilli, Gram positive bacilli and Gram positive cocci as presented in organisms and chemicals section.

In Tables 1 and 2, bacteria should also be listed alphabetically.

- All bacteria were listed in alphabetical order.

3. The data on statistics (number of replicates and experiments) should be clearly indicated in sections describing each assay or, if uniform design was used, in Statistical analysis section. From the description of statistical methods and result achieved, it is not clear which particular data have been used for statistical evaluation of biofilm inhibition.

All assay was repeated three times.

4. The first paragraph of the Discussion section, which repeats data from Introduction section, should be excluded. The separation of the Discussion section in to a number of short paragraphs can be eliminated.

This section was modified in the manuscript.

Minor Essential Revisions

1. When Latin name of any organism is mentioned in the text, its abbreviated versions should be used in rest of the manuscript (e.g. N. sativa, S. aureus). The same principle needs to be applied for use of any abbreviations occurring in the text (e.g. thymoquinone, tryptic soy broth, phosphate-buffered saline, minimum inhibitory concentration, minimum bactericidal concentration, or minimum biofilm inhibition concentration).

All the manuscript was revised and corrected.

With exception of Organisms and chemicals section, numbers of strains should be excluded from abbreviated names of bacteria throughout the whole text as well as from Tables 1 and 2.

The number of references strains should be specified because every strain has specific characteristics.

2. Line 238: style of citation “Kokoska et al., (2008)”, it should be corrected and appropriate reference added in the list of references.
This reference was corrected as followed:
This result correlate with Kokoska et al., [28] who reported that Thymoquinone exhibited potent growth-inhibitory effect against Gram-positive bacteria, with MICs ranging from 8 to 64 µg/ml.


3. Line 105: correct “Muller” to “Mueller”
4. References need to be revised according to the changes.
All these recommendation were corrected.

References

Level of interest: An article whose findings are important to those with closely related research interests
Quality of written English: Needs some language corrections before being published
English language was revised as recommended.
Statistical review: Yes, and I have assessed the statistics in my report.
Declaration of competing interests:
I declare that I have no competing interests

Reviewer's report
Title: Antibacterial activity of Thymoquinone an active principle of Nigella sativa and its potency to prevent bacterial biofilm formation
Version: 1 Date: 1 March 2011
Reviewer: Victor Kuete
Reviewer's report:
This is a well-conducted study on the ability of thymoquinone, a well-known antibacterial compound to prevent biofilm formation. Additional data were provided on the activity of this compounds to several bacterial species by the authors.
The work is also well-written, but minor revision will be necessary to have the final acceptable form of the manuscript.
Minor revision:
Title. add coma between ....Thymoquinone and an...[Antivacterial activity of Thymoquinone,an active...... ].
Reference section. Please use symbol["] when using the vernacular plant name in Background section.

Please provided complete author list for references 7, 10, 12,14,19, 25, 27,32. All these recommendation was corrected in the manuscript.

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:
'I declare that I have no competing interests'

Editorial requests
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Competing interests - Please include a ?Competing interests? section between the Conclusions and Authors? contributions. If there are none to declare, please write ?The authors declare that they have no competing interests?.

The authors declare that there are no conflicts of interest.

The questions that are asked of authors are:

Financial competing interests

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Financial competing interests

Ministère Tunisien de l’Enseignement Supérieur, de la Recherche Scientifique” through the “Laboratoire d’Analyses, Traitement et Valorisation des Polluants de l’Environnement et des Produits, Faculté de Pharmacie, rue Avicenne 5000 Monastir (Tunisie).
Authors’ contributions? Please include an Authors’ contributions section after the Competing interests. For the Authors’ contributions we suggest the following kind of format (please use initials to refer to each author’s contribution): AB carried out the molecular genetic studies, participated in the sequence alignment and drafted the manuscript. JY carried out the immunoassays. MT participated in the sequence alignment. ES participated in the design of the study and performed the statistical analysis. FG conceived of the study, and participated in its design and coordination. All authors read and approved the final manuscript.

KC was the primary author of the manuscript, assisted in antimicrobial assay, minimum inhibition concentration determination, antibiofilms assay of Thymoquinone.

BK was the person contributed in antibiofilms assay and helped in the writing of the manuscript.

HJ was the person participated in data acquisition and contributed in writing of the manuscript.

KM designed and planned the study, and participated in the writing of the manuscript.

AB provided funding, supervised the study, and helped to finalize the manuscript.