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).

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

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.

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

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). 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.

2. Line 238: style of citation “Kokuska et al., (2008)”, it should be corrected and
appropriate reference added in the list of references.


4. References need to be revised according to the changes.

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

**Statistical review:** Yes, and I have assessed the statistics in my report.

**Declaration of competing interests:**

I declare that I have no competing interests