Author’s response to reviews

Title: Avoiding pitfalls in determining antimicrobial activity of plant extracts and publishing the results

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Author’s response to reviews:

Response to comments of the reviewers

Background

Line 12. There is an urgent need to discover new antimicrobial compounds or extracts...please complete with the need. It is not clear why is so urgent.

Response

This has been addressed in the text not the abstract when I wrote: “The chief medical officer in Britain stated that the problem of antimicrobial resistance is a greater threat to humanity than global warming (line 48).”

Line 18. "This may be due to wrong methods that have been used or wrong plants that were investigated"- this is not true. Please check carefully all the food supplements developed after plant extracts investigations.

Response

I cannot address this in the abstract. In any case we are not discussing food supplements but potential new antibiotics based on investigating plant extracts.

Line 19." A lot of energy is wasted by using techniques such as agar diffusion that do not work well with plant extracts."... please provide more data about the number of rejected papers.

Response

I cannot address this in the abstract. I have never counted the papers I have rejected
Line 20, 21. Please provide more results or meta-analysis for this affirmation.

Response

If no record is kept by any journal on the number of papers rejected because agar diffusion was used, it is impossible to do a meta-analysis. I have included some statistics in the text to show how widespread the problem is. (lines 360-361).

Line 22-25 - it is not clear which methods were used.

Response

I have changed the sentence to make it clearer (line 25)

Please rebuild all the abstract section.

Response

I have read the abstract again to make sure that I have covered the most important points.

Please check carefully the author name.

Response

Thank you I have corrected it

page 4 line 35. Some authors (please cite the authors you referred).

I have added an author (lines 157 and 172)

The conclusion section is missing

Response

I have changed the last heading to “Conclusions and recommendations”
Anna Malm (Reviewer 2): This manuscript is valuable review for all people interested in studying antimicrobial activity of plant extracts.

Response

Thank you

I have some comments. Abstract - MIC should be explained in the body of abstract despite of abbreviations.

Response

I have changed it in the abstract (line 25)

I think that the method recommended by you is useful not only for the assessment of antifungal activity of natural compounds but also for antibacterial activity. It should be underlined in abstract.

Response

Good point I have added a sentence line 28

Key words : antimicrobial activity, plant extracts rather than antimicrobial resistance, extractant.

Response

Thank you I have changed it. (line35

Results - 3.1.3 Using resazurin as growth indicator will be better (similarly to other points),

Response

I have added some additional information and an additional reference. (lines 248 and 451)

Figure 2 - description should be corrected.

Response

I have added information to the legend

3.1.4 and 3.1.5 should be combined,

Response

I did not combine but moved a sentence to fit in better with the headings (lines 237, 238)

Line 24,25 should be deleted. Using ATP as growth indicator is described later (line 30, 31).
Response

By moving the two lines, it makes more sense now and does not have to be deleted (lines 237, 238)

Line 51 In EU countries EUCAST recommendations are obligatory. I think that you should mention it.

I have added a sentence line 184