Review of: "Antimicrobial Sensitivity of Plant Extracts of Acacia arabica, Prosopis juliflora, Abutilon indicum, and Bryonia laciniosa on Staphylococcus aureus, Pseudomonas aeruginosa, and Escherichia coli"

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Potential competing interests: No potential competing interests to declare.

GENERAL COMMENTS

Your composition of sentences and use of words require improvement to make understanding of the manuscript easier.

“…weighed 50mg/ml of each specie was taken and 50g of powder of each specie was treated with……. line 4 section 2.2

“In the panel of test organisms, a Gram-positive bacterium (*S. aureus*) and two Gram-negative bacteria (*P. aeruginosa, E. coli*) strains were used for antibacterial testing”. . .line 1 section 4. Statements and phrases such as the above are rather incomprehensible.

ABSTRACT

The abstract is poorly written. Abstract should be a clear summary of your study which should briefly indicate your research question, your method, results obtained and your conclusion. I suggest it should be re-written.

INTRODUCTION/BACKGROUND

In the introduction, justification for your study is not clearly stated. In addition, you failed to elucidate the knowledge your study is contributing or adding to scientific field. I suggest the introduction should be re-written and should include only relevant information. For example, Table 1.1 is not necessary.

METHOD AND MATERIALS

1. Relevant materials and equipment used were not clearly stated.
2. Identification and authentication of plant samples by authorized institution was not conducted.
3. Phytochemical analysis is missing in your research.

Research involving bio-activity of plant extracts requires this analysis. Qualitative phytochemical analysis should have been conducted to ascertain and verify the presence of phytochemicals in your plants of interest while the quantity of selected phytochemicals is determined via quantitative phytochemical analysis. This is a major process and it is missing in your study.

1. Identification of the presence of specific bacteria of interest in a study is conducted using selective growth media to ascertain differentiation. These selective growth media were not stated in your study.
2. It was not stated whether the microbial analysis was conducted in replicates.
3. No positive control was used to compare and ascertain the significance of antimicrobial susceptibility test.
4. Line 8 section 2.4 stated "…Further testing for antimicrobial activity was conducted…." This further testing should have been clearly stated since it is part of the methods section.

8. Previous researches where the methods used in your research were utilized before were not mentioned.

The methods section is flawed.

RESULT SECTION

Your result method should provide adequate data from the analyses conducted to answer your research question.

1. No data to support presence of bioactive substances in the plants of interest was stated.
2. Data obtained for susceptibility test is inadequate. The result obtained is not in replicates.
3. No statistical analysis was stated.
4. Figure 3.4 titled "Graphical representation" is confusing and incomprehensible.

The result section is poorly written.

DISCUSSION AND CONCLUSION

Your discussion section should start with re-statement of your study objective. This should be followed by explanation of the results obtained from the analyses conducted to answer your research question. Your discussion section is poorly organized and I suggest it should be re-written.

In a study, the methods section answers the research question while these answers are presented in the results section. The discussion section explains these answers while conclusion drawn from these explanations is presented in the conclusion section. This stage by stage process is lacking in this study. The conclusion of this study is therefore inexplicable.

WEAKNESSES OF THE METHODS DESCRIBED IN THIS STUDY

1. Missing crucial analysis: Omission of phytochemical analysis
2. Omission of statistical analysis
3. Flawed experimental design: Failure to perform analysis in replicates does not bestow credibility on the study in addition to lack of positive control.
4. Failure to state clearly previous researches where the methods conducted in the study were utilized before.

RECOMMENDATION

Reject manuscript based on the following reasons:

1. Missing crucial analyses
2. Flawed experimental design and process
3. Inexplicable conclusion