

## 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.

## Comments on Title:

The title is clear and specific, providing essential information about the subject matter, including the plant extracts tested, the target microorganisms, and the antimicrobial sensitivity being studied. This clarity is crucial for potential readers to quickly understand the content of the article. Listing the scientific names of the plants (Acacia arabica, Prosopis juliflora, Abutilon indicum, and Bryonia laciniosa) is valuable as it provides precise information about the botanical sources of the extracts. However, it might be helpful to include common names in parentheses after the scientific names to enhance accessibility for a broader audience. The title explicitly mentions the key aspect of the study, which is the antimicrobial sensitivity of these plant extracts. This inclusion ensures that readers interested in this specific topic will be drawn to the article. The title appropriately identifies the three microorganisms under investigation (Staphylococcus aureus, Pseudomonas aeruginosa, and Escherichia coli). This detail helps potential readers, particularly those with a microbiology or infectious diseases focus, identify the relevance of the research. The title is concise and not overly long, which is important for readability and adherence to journal guidelines.

## **Overall Comments:**

- Clarity and Structure: The abstract is well-structured with clear sections for Background, Methods, and Results.
   However, it would be beneficial to add a brief concluding sentence summarizing the main implications or significance of the findings.
- 2. Background: The introduction provides a clear rationale for the study, emphasizing the advantages of biological treatments and green synthesis of antimicrobial agents. However, it would be helpful to mention why Staphylococcus aureus, Pseudomonas aeruginosa, and Escherichia coli were chosen as target microorganisms. Additionally, citing a few key references in this section to support the importance of green synthesis in microbiology would strengthen the argument.
- 3. **Methods:** The Methods section briefly outlines the antimicrobial sensitivity testing process and the use of plant extracts. However, it lacks specific details such as extraction methods, concentrations of plant extracts, and the laboratory techniques used for antimicrobial testing. Providing these details would improve the reproducibility of the



study.

- 4. **Results:** The Results section provides a clear outcome of the antimicrobial sensitivity testing, indicating that the plant extracts have potential antimicrobial activity. However, it would be beneficial to mention the magnitude of the Zone of Inhibition (ZOI) for each plant extract and microorganism tested. Additionally, a brief statement on the limitations of the study, such as the need for further phytochemical analysis, could be included.
- 5. Grammar and Style: The abstract is generally well-written, but there are a few minor grammatical issues. For example, "phytochemicals" should be used consistently instead of "phytochemical," and the phrase "Susceptible, Intermediate, and Slightly Resistant" could be clarified by specifying which microorganism exhibited which level of resistance.
- Concluding Sentence: As mentioned earlier, adding a concluding sentence to summarize the broader implications of
  the findings or potential applications of green-synthesized antimicrobial agents would provide a stronger closure to the
  abstract.

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