Review of: "Antimicrobial Ayurveda Crops as Superfoods for Export, Conservation & Farmers' Benefit"

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Potential competing interests: No potential competing interests to declare.

Review of the paper titled: "**Ayurvedic Antibacterial Plants as Export Food, Environmental Protection, and Benefits for Farmers"**

Detailed comments:

1. Abstract Structure: The abstract lacks proper structure.
2. Introduction: The introduction clearly states the aim of the study, focusing on presenting the issue of antimicrobial resistance and the significance for public health, indicating the need to find solutions. The research hypothesis can be inferred from the introduction, suggesting that the use of Ayurvedic herbs as superfoods may be an effective strategy in combating antibiotic resistance and improving public health and farmers' income. However, the research hypothesis is not explicitly formulated in a standard manner. Despite this, the aim of the study is clearly defined, and the introduction leads the reader to understand the topic and the importance of the research.
3. Methodology: The methodology section discusses certain methodological aspects, such as the purpose of a minimal review and limited agricultural research, and describes the research aim, which should be included in the "Introduction" section of the paper, as well as the general approach to data collection. However, detailed information about specific research methods or tools used for data collection is lacking. Therefore, if the author intended to include a detailed description of the research methods, it would be necessary to supplement the text with this information.
4. Results: The "Results" section is thoroughly discussed. A table containing key phytochemical features of four selected plant species, describing their antioxidant potential and health benefits, is presented and discussed. Another table presenting the potential agricultural income from the proposed superfoods is also provided.
5. Discussion: In the "Discussion" section, the research results regarding the antimicrobial properties of individual plant species, as presented in Table 3, are discussed.
6. Conclusion: The research findings are summarized and discussed in the context of the research objectives presented in the introduction. The "Conclusion" section also relates to the results, drawing conclusions and suggesting potential implications for practice and further research. The "Results" section is appropriately discussed and presents key research findings.

Strengths of the paper include:

1. Interdisciplinary Approach: The paper integrates knowledge from various fields such as medicine, agriculture,

economics, and environmental protection, allowing for a holistic view of the antibiotic resistance issue.
2. Analysis of Health and Social Issues: The authors identify significant health risks associated with antibiotic resistance and economic challenges facing farmers, enabling an understanding of the problem from different perspectives.
3. Introduction to the Concept of Superfoods: The paper introduces the concept of superfoods as a potential solution for both human health and sustainable agricultural development, which may be an intriguing proposition for readers.
4. Practical Solution Proposals: The authors present practical suggestions, such as promoting the cultivation of plants with antimicrobial properties as an alternative to rice monoculture, which may bring economic benefits to farmers and contribute to environmental protection.
5. Presentation of Results: The paper presents research findings clearly and understandably, facilitating their comprehension and interpretation.
6. Recommendations for Further Research: Based on the data collected and analyzed, the authors suggest further research directions, which may inspire future scientific work.
7. These strengths help establish the paper as a significant contribution to the fields of public health, agriculture, and environmental protection.

Weaknesses include:

1. Lack of Detailed Description of Research Methods: Although the paper includes a "Materials and Methods" section, there may be a lack of detailed description of the research methods used, which could hinder replication of the study by other scientific teams.
2. Limited Data Representativeness: Data and results may be limited to specific regions, which could restrict the overall utility of the paper, especially concerning recommendations and conclusions.
3. Need for Further Research on the Effectiveness of Superfoods: While the paper suggests potential health benefits of superfoods, there may be insufficient scientific data confirming their effectiveness in practice.
4. Lack of Comprehensive Economic Analysis: The paper mainly focuses on the potential economic benefits for farmers from cultivating superfoods but may lack analysis of their impact on the global food market and economy.
5. Lack of Discussion on Potential Environmental Threats: Although the paper emphasizes the benefits of sustainable agriculture, there may be a lack of analysis of potential negative effects of superfood cultivation on the environment, such as changes in land use or water consumption.
6. Failure to Address Contraindications and Limitations: The paper may not address possible contraindications or limitations associated with the use of superfoods, which could lead to inappropriate promotion of their consumption.

Addressing these potential weaknesses may further enhance the paper and increase its value for readers and the scientific community.