

Overview of emerging research of fungi isolated from the Brazilian environment for the biosynthesis of metal nanoparticles

The article went through 3 rounds of review and all 2 reviewers agreed in advance to publish their review reports disclosing all identities.

The authors agreed to disclose the reviewers' reports and their responses to the reviewers' comments.

Disclaimer: The peer review report content is the entire copy of the reviewers' and authors' comments. Typing and punctuation errors are not edited.

ROUND 1

Reviewer A: Anselmo Rodriguez

Recommendation: Revisions Required

Its ok

[Reviewer Files](#)

Reviewer B: Anonymous

Recommendation: Revisions Required

The abstract is clear but lacks specific details about key findings. To improve the abstract, include key findings or conclusions. For example, highlight specific studies where Brazilian fungi successfully synthesized metal nanoparticles and their potential applications. Additionally, provide a summary of the methodologies or main points to give readers a comprehensive understanding at a glance.

There is no graphical abstract provided. Adding a graphical abstract that visually summarizes the main points of your review would be beneficial. This can include a diagram or flowchart that illustrates the process of fungi-mediated nanoparticle synthesis and the potential applications of these nanoparticles.

The manuscript contains occasional grammatical errors and awkward phrasings. To address this, thoroughly proofread the manuscript to correct grammatical errors. Consider seeking the assistance of a professional editor or a native English speaker to improve the clarity and readability of the text. Rewrite awkward sentences for better flow and coherence. For example, instead of "this enormous microbial biodiversity has yet to be reflected in the number of published studies," you could write "the extensive microbial biodiversity of Brazil is not yet adequately represented in the published studies on fungal synthesis of nanoparticles."

The bibliometric analysis section is brief and lacks detailed data. To enhance this section, expand the bibliometric analysis to include more specific data and trends. For example, include the number of publications per year, the most cited studies, and the geographical distribution of research efforts. Use graphs or tables to present this data visually, which will make it easier for readers to understand the trends and significance of the research.

The bibliography is adequate but could be more comprehensive. To improve it, expand the bibliography to include more recent studies and a broader range of sources. This will provide a more comprehensive overview of the field and highlight the latest advancements. Include references to key studies that have significantly contributed to the field of fungal synthesis of nanoparticles.

The manuscript lacks figures and tables that could enhance the presentation of data. To address this, add figures and tables to visually represent data and key findings. For example, include a table summarizing the types of nanoparticles synthesized by different fungal species and their respective applications. Use diagrams to illustrate the synthesis process and the potential mechanisms involved.

Some sections, especially in the introductions to specific genera, contain repetitive information. To improve clarity and conciseness, condense repetitive information. For example, if multiple genera share similar mechanisms or applications, discuss these commonalities in a single section rather than repeating the information for each genus. Focus on unique aspects of each genus to provide a clear and distinct overview without redundancy.

ANSWERS TO ROUND 1

[Author's Files](#)

ROUND 2

Reviewer A: Anselmo Rodriguez

Recommendation: Revisions Required

I had already sent my review to the Editor

Reviewer B: Felipe Arenas

Recommendation: Revisions Required

The abstract has improved significantly, but it still needs to include specific examples of key studies, highlight the main findings, and provide a brief summary of the methodologies used to make it more informative. While the bibliography is adequate, it is recommended to incorporate more recent works, particularly from the past two years, to reflect current advancements in the field and strengthen the review. The bibliometric section presents a valuable analysis; however, it could be enhanced by using more visual and impactful graphs that clearly summarize the observed trends. Additionally, the sections introducing the fungal genera contain repetitive information, and it is suggested to unify common mechanisms or applications into a single section to simplify the text and improve clarity. Lastly, the conclusions are solid, but it would be important to reinforce the future perspectives by emphasizing the potential for international collaboration and the need for sustainable bioprospecting in Brazil.

Overall, the manuscript has significantly improved by incorporating most of the reviewers' suggestions. However, minor adjustments are still recommended, such as optimizing the abstract, improving the quality and clarity of figures and tables, and performing a light revision of the language to correct minor stylistic and grammatical errors. The paper is well-structured and addresses a relevant topic in the field, demonstrating great potential for publication once these small refinements are made.

ANSWERS TO ROUND 2

[Author's Files](#)

ROUND 3

Reviewer A: Anselmo Rodriguez**Recommendation:** Accept Submission

The article is well written and I am in favor of its publication.

Reviewer B: Felipe Arenas**Recommendation:** Accept Submission

All the comments and suggestions have been thoroughly addressed by the authors; therefore, I consider the manuscript ready for publication

ACCEPT SUBMISSION