

# Review of: "In-Vitro Antibacterial Activity of some Ganoderma Species: A Review"

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**Potential competing interests:** No potential competing interests to declare.

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Drear Dr. Gabri

Peer Review Team, Qeios

The manuscript entitled "*In Vitro* Antibacterial Activity of some Ganoderma Species: A Review" submitted to Qeios, has been reviewed. The comments are included at the bottom of this letter.

Sincerely,

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Comments for authors

1- In the abstract, please mention the sources you consulted and their respective time efficiencies (Google Scholar, PubMed,.. 2010-2023).

2- The structure of the article is very scattered in terms of topic division. It is necessary to maintain content relevance while avoiding repetition.

\*- This review aims to explore the antibacterial properties of Ganoderma species. Therefore, focusing on the effective secondary metabolites, and antibacterial compounds in each species is important.

\*- What was the purpose of referring to diabetic foot ulcers? Please explain the connection first and then provide details about it.

\*- The species of this genus are listed separately in the table. What is the purpose of presenting them separately in the text of the manuscript?

\*- Table 1 is not referenced in the text. Please avoid repeating the contents in the text and the table.

\*- The content related to the antibacterial properties appears to have weak connections and occasional repetition. Please

ensure that the content is cohesive and free from redundancies.

3- It seems that this sentence has not been expressed in the appropriate place."

"According to the World Health Organisation (WHO), medicinal plants would be the best source to obtain a range of medications. Plants include a number of secondary metabolites that have been shown to have antibacterial effects in vitro, including tannins, alkaloids, phenolic compounds and flavonoids [24][25]"

4- It is better to explain at the beginning of the article why medicinal plants, etc are chosen for the treatment of antibacterial infections. Then, discuss Ganoderma species and the reasons for its use, such as its properties used in traditional medicine and its main compounds. Explain the purpose of the study, its novelty, and the need for this review. After that, explain bacterial infections and diabetic foot ulcers and their relationship. After that, discuss the antibacterial properties in detail, compare them, and refer to Table 1 to prevent overcrowding and clarify it.

5- What was the purpose of explaining the extraction method? Are the most important compounds with antibacterial properties prepared in a specific extract and by a specific method? Explain it.

There are many different methods are used to extract different bioactive metabolite from Ganoderma. Some of the methods which we are discussing here, are being used in today's time: Numerous extracts obtained from Ganoderma with varying polarity (from non-polar to polar) have been utilised in scientific studies to explore the wide range of metabolites, including polysaccharides, triterpenoids, and phenols [26], alkaloids etc., present within this fungus. These extracts possess distinct chemical profiles, enabling targeted exploration of specific metabolite classes and their associated biological activities [27].