

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.

TITLE: In-Vitro Antibacterial Activity of some *Ganoderma* Species: A Review

The review is not structured properly; you need to approach it with the main idea of writing, as this review seems to be important due to *Ganoderma* species exhibiting enormous therapeutical potential. The reason why you are writing this review should be very elegantly presented. Therefore, you have some suggestions before it is presented before the readers.

Title

- a. The title reflects quite a number of species of *Ganoderma* spp. taken into account for antimicrobial activity. Remove "some" from the title.

Abstract

- a. The rising significance of personal health and wellbeing has spurred scientific interest in research on natural products. Write ".....interest in research on natural products."
- b. "In addition to current treatment approaches, herbal medications may be a safe and effective way to treat infectious infections."-write ".....infectious diseases"
- c. "Numerous phytochemicals that are found naturally in plants, fruits, and vegetables have been discovered to have biological activity and are frequently hailed as being good for human health."

You are writing a review on macrofungal potentiality as an antimicrobial agent; however, in the above line, you are pointing out plants, fruits, and vegetables. Try to highlight or add to this line on microbes as a source of such compounds as well as macrofungal species.

- a. *Ganoderma* has long been used for the management of incessant infectious conditions such as diabetic foot ulcers, pneumonia, and chronic hepatitis.
- b. Write "viz., diabetic foot ulcers, pneumonia, and chronic hepatitis."
- c. While there is little information on *Ganoderma*'s antiviral and antibacterial properties in humans, preliminary (*in vitro* and *in vivo*) research shows that the plant possesses a wide range of these properties. Furthermore, write "However, there is little information ..."
- d. Rewrite the sentence. "While there is little information on *Ganoderma*'s antiviral and antibacterial properties in humans,

preliminary (*in vitro* and *in vivo*) research shows that the plant possesses a wide range of these properties.”

Affiliation

- a. Research Scholar and Head-Delete from the affiliation.

Text

- a. Why have you started with “Diabetic Foot Ulcer” in the introduction? You are writing *on in vitro* antibacterial activity. Start with background on antimicrobial activity and why there is reliance on natural products for these properties. You can write a little bit about AMR.
- b. You can then write about diabetic foot ulcers. Why only diabetic foot ulcers? Try to write about 4-5 diseases with regard to bacterial pathogenesis, origin, and where there is intervention of therapeutics based on natural products, relatively to macrofungal origin.
- c. “*Ganoderma* and its species.” Try to write then about the use of these mushrooms in traditional medicine and modern medicine.
- d. Then you can write about all the biological activities of *Ganoderma* species it possesses. What are the properties it possesses, be it antioxidant, anticancer, anti-inflammatory, etc. You can write a para.
- e. Then you can write about the species.
- f. Again, somewhere in the middle, on Hypoglycemic activity and diabetes. Why? There should be a flow and focus on anti-bacterial activity. If there is a relation, then make a separate heading.
- g. “Antimicrobial activity” you can divide with the plain antibacterial extract of *Ganoderma* and another one with enhanced activity studied using viz., the synthesis of nanoparticles.
- h. You can highlight some literature on strong strains tested with the application of this macrofungal extract or viz., MRSA. What is the response of it against such a superbug?
- i. You can add on certain molecules which are characterized from this macrofungal, having potent antimicrobial activity.
- j. At last, you can write about the mechanism as it is very important in anti-microbial activity. If any literature is found that mentions the mode of action of the *Ganoderma* extract, you can add.