

Ethnobotanical and antimicrobial activities of the *Gossypium* (Cotton) genus: A review

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ABSTRACT

Statement of the Problem:

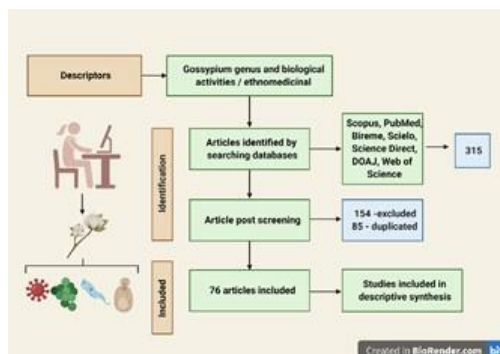
The Malvaceae family, an important group of plants that have the *Gossypium* (cotton) genus has been used in folk medicine to treat microbial diseases and symptoms. Ethnobotanical studies of the Malvaceae family have been published, including studies of species only of the genus *Gossypium* to demonstrate its medicinal use. We conducted this research to respond to this guiding question “Is the *Gossypium* genus used for the treatment of signs and symptoms of infections caused by microorganisms?”. This article aims to understand its ethnobotany expression in communities and scientific elucidation of antimicrobial activities of this genus through literature review.

Methodology & Theoretical Orientation:

The bibliographic survey was carried out from 1999 to 2019 with keywords combinations such as "*Gossypium* + ethnobotanical", "*Gossypium* + medicinal", "*Gossypium* + the biological activity" in scientific databases as Pubmed, Scopus, Web of Science, DOAJ, Scielo, Bireme. Findings: After data analysis, we found that the *Gossypium* genus, specifically *Gossypium hirsutum*, *G. barbadense*, *G. herbaceum*, *G. arboreum* are the species most cited in the treatment of microbial diseases and symptoms in communities all over the world. In light of scientific elucidation of biological activities, the *Gossypium* genus has been used to treat protozoal, bacterial, fungal, and viral diseases.

Conclusion & Significance:

In consideration of biological activities, the *Gossypium* genus has been used to treat bacterial, fungal, and viral diseases with major expression in treating protozoal diseases like malaria. The most cited species in this session was the *Gossypium barbadense*, which is used for viral, bacterial, fungal, and protozoal infections. *Gossypium hirsutum* is used for fungal, bacterial, and protozoal infections. *Gossypium herbaceum* and *G. arboreum* are used for protozoal infections.



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