

Literature Review of the Antibacterial Effects of *Salvia Officinalis* L.

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Abstract : Introduction: Antibiotics, widely produced and consumed in large quantities, have proven problematic due to various types of side effects. The development of bacterial resistance to currently available antibiotics has made the search for new antibacterial agents necessary. One alternative strategy to combat antibiotic-resistant bacteria is the use of natural antimicrobial substances such as plant extracts. The objective of this study is to provide an overview of the antibacterial effects of a plant native to the Middle East and Mediterranean regions, *Salvia officinalis* (sage). Materials and Methods: This review article was conducted by searching studies in the PubMed, Scopus, JSTOR, and SpringerLink databases. The search terms were "*Salvia officinalis* L." and "antibacterial effects." Only studies that met our inclusion criteria (in English, antibacterial effects of *Salvia officinalis* L., and primarily dating from 2012 to 2023) were accepted for further review. Results and Discussion: The initial search strategy identified approximately 78 references, with only 13 articles included in this review. The synthesis of the articles revealed that several data sources confirm the antimicrobial effects of *S. officinalis*. Its essential oil and alcoholic extract exhibit strong bactericidal and bacteriostatic effects against both Gram-positive and Gram-negative bacteria. Conclusion: The significant value of the extract, oil, and leaves of *S. officinalis* calls for further studies on the other useful and unknown properties of this multi-purpose plant.

Keywords : *salvia officinalis*, literature review, antibacterial, effects

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